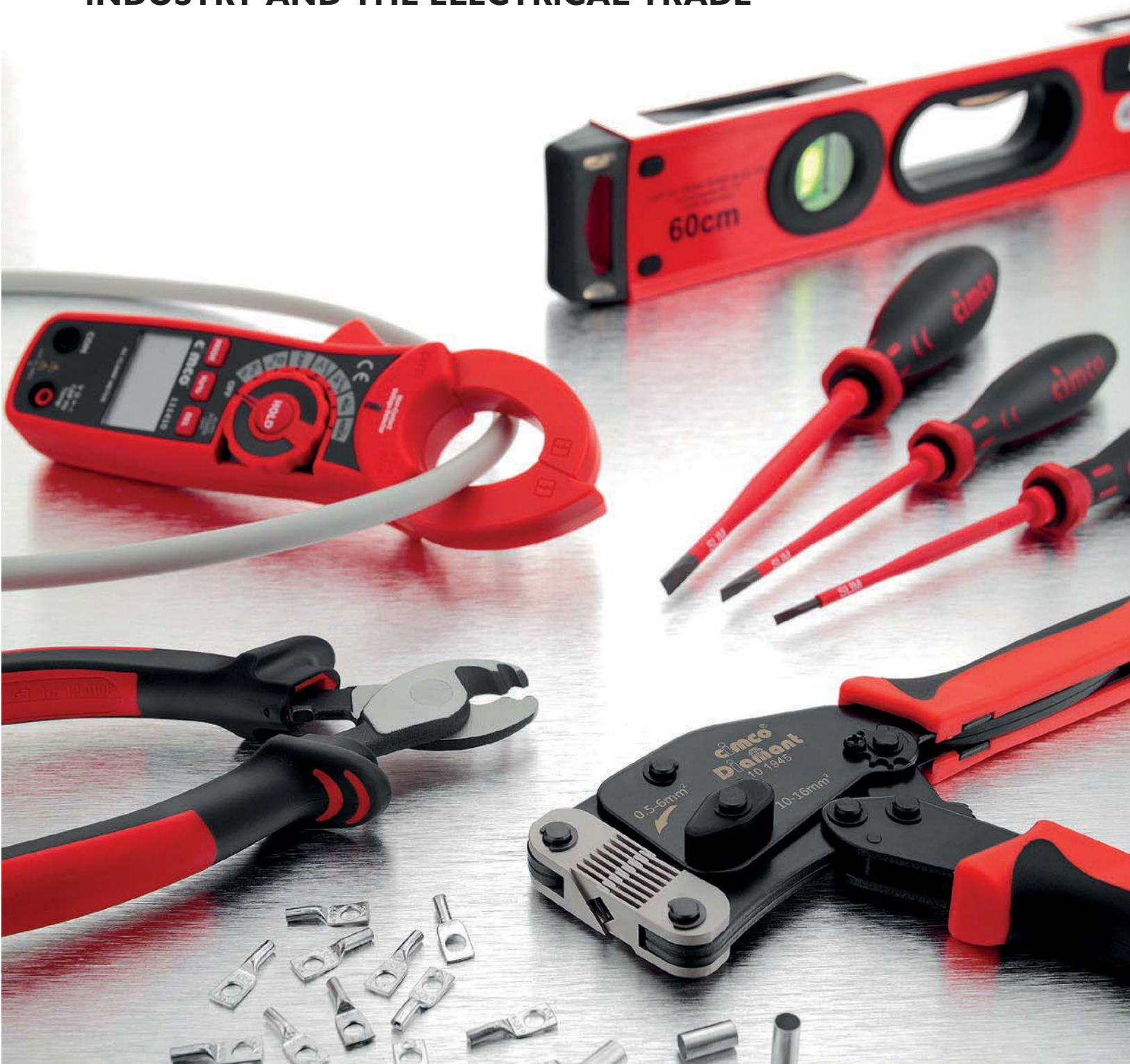


**cimco**<sup>®</sup>  
W E R K Z E U G F A B R I K

**2019  
2020**

**THE COMPLETE RANGE OF TOOLS FOR  
INDUSTRY AND THE ELECTRICAL TRADE**



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Administration



Logistics centre



### Available for you worldwide

CIMCO is represented internationally by associated companies or renowned commercial agencies (see last page). Foreign markets are supported with all means of modern merchandising that are tailor-made to the special features of the local country.






### Company profile

CIMCO tool factory was founded in Remscheid in 1827 and can still be found today at this traditional stronghold of the European tool industry. Right from the start, the family-run company has always remained true to its philosophy of making tools which meet the highest possible requirements of professionals. This requires the use of the best possible materials, professional workmanship and quality control as well as the continuous adjustment to individual customer needs and new technological challenges. This has allowed the company to successfully develop from a once regionally active plier factory to a manufacturer and distributor of high quality manual tools with international acclaim.

### Memberships

Among others, CIMCO is a member of the following organisations:

- ZVEI:** • Zentralverband Elektrotechnik und Elektroindustrie e. V., Frankfurt a. M.
-  • Fachverband Elektrotechnische Handwerke NRW, Dortmund
-  • ISD Interseroh
-  • Fachverband Werkzeugindustrie e. V., Remscheid





# Product quality



## Tested safety

A great number of electricians in trade and industry place their trust in quality tools from CIMCO every day. For this reason, safety tools play an important role in the company's own production. Internally developed production techniques are used here to manufacture special protective insulation.

## Sophisticated quality control

The safety of CIMCO tools can be relied on at all times. For example, all insulated tools are individually tested in a water bath at 10,000 volts according to the valid directives. CIMCO has completely automated this testing process by deploying an industrial robot, probably the only manufacturer to do so worldwide.



## Permanent innovations

Constant optimisation and expansion of our product range by useful innovations is a permanent feature of our business strategy. CIMCO is thus always one step ahead of the changing demands of the market!

Terms such as flexibility and mobility are increasingly important in trade and electrical engineering professions and demand corresponding implementation in the development of tools. That is why all CIMCO products are manufactured for a wide range of applications and can be adapted to many different situations.

## One-stop-shopping thanks to the enormous product range

Do you know of a larger range of hand tools for the electrical industry? We don't! This catalogue offers electrical wholesalers everything from a single source, including all specialities, special sizes and latest products at a glance. It dispenses with the need for a large number of individual suppliers and helps to reduce your processing costs for purchasing, incoming goods, warehousing and accounting.



Product quality

# Marketing

## Sales displays - stock, salesperson and business card



"Buying by seeing" - our products are mostly bought in the cash-and-carry store of the specialist trade. Attractive product presentation guarantees sales success!

Thanks to decades of experience, CIMCO can provide tailor-made presentation aids to specialist dealers. With open sales walls, high-quality glass showcases or complete shop-in-shop-systems in the customer's corporate design, CIMCO offers plenty of optically appealing and verifiably promotional possibilities for clear stocking and presentation of the range.

This involves no risk for our dealer customers: all displays are delivered free of charge (under reservation of title) and specially trained CIMCO sales promoters handle delivery, set-up and stocking.



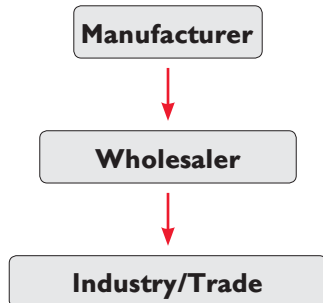
## Success by sales promotions

CIMCO is known for continual strong-selling and high-yield sales promotions. New products, special price offers and so called "add-on-promotions" are shown on leaflets which the wholesaler can request free of charge in any desired amount printed with his logo and address. This enables the wholesaler to generate more turnover without much of his own effort.



Marketing

# Sales & Service



## Clear sales channels

CIMCO-Werkzeugfabrik has always been committed to the three-step sales channel "manufacturer/specialist wholesaler/user". In our sales policy you will not find direct sales to the industry or trade, or supply in retail, such as DIY-markets. Customer loyalty is our prime principle.

## There for you in person - on site

An extensive network of dedicated sales personnel provide personal support to wholesalers and users of our tools on location. Whether at product training or application workshops, counter days or hundreds of regional specialist and in-house trade fairs every year: your CIMCO sales team is always nearby and will support you with expert advice and active sales support. You can find a list of all representatives on the last page.



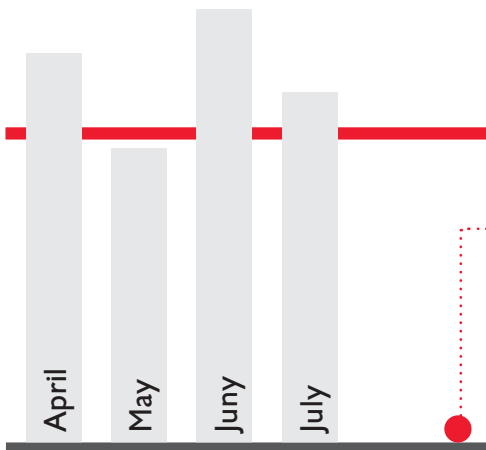
## Counter displays

No work, no risk - that is the success formula for counter sales increase! With our counter displays, we offer you as a wholesaler the option of periodically presenting new tool features and innovations directly to your cash and carry customers at the counter.

It is proven that our customers on average increase their "counter sales" by between 20% and 40%. Our sales employees will gladly provide you with information on our current new features and the presentation options they offer.

Sales & Service

# Logistics



## Delivery reliability

On average, 97.5% of all catalogue products are permanently available from stock at CIMCO. Consistent use of our comprehensive logistics controlling system has allowed us to further improve on our delivery rate.

## For the sake of the environment

All CIMCO sales and delivery packaging are reusable or recyclable thanks to the easily separable materials. CIMCO has already been working with disposal companies such as ISD Interseroh for years.



## Rapid order processing

Delivery of a customer's order is normally effected in less than 36 hours from receipt of the order. Thanks to efficient logistics partners, every CIMCO customer receives the required goods within 3 to 4 days and, in urgent cases - if the order reaches CIMCO before 10:00 a.m., delivery may even be made on the next working day.

# Logistics



# Logistics

## Customised logistics services

Special customer requirements, such as reusable transport systems, scheduled domestic and foreign delivery dates, delivery tracking via the internet or special packaging requirements are no problem for us - we'll sort it!



## If it's really urgent!

The wholesaler is normally unable to stock tools in exceptional sizes and special tools. However, it is exactly these specialties which are particularly urgent when they are required. CIMCO arranges drop shipments to the user or the building site - all over Germany!

Logistics



# TOOL CASE

Integrated tool insertion slots to hold tools professionally.



External hinges integrated in the frame.



Two gas struts for easy opening of the case.



Removable tool boards for more flexibility.



Profile grid in case bottom to keep the inserts firmly in place.

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## Overview of CIMCO case types

The tool and case ranges extend from apprentice cases in four versions through five different fitters cases up to numerous electric master cases. All case models are offered with a wide variety of contents. Naturally, each case is also available without internal contents to allow any existing to be provided with a professional storage option.

Special contents with 1000 Volt tools for working on live parts are also offered by CIMCO as well as contents for data network technology.



**Metro**  
Article no. 17 0073, page 13



**Champion**  
Article no. 17 0930, page 14



**Klassik**  
Article no. 17 0075, page 18



**Bomber**  
Article no. 17 0076, page 20



**Perfekt**  
Article no. 17 5075, page 22



**DIAMANT**  
Article no. 17 8015, page 24



Image video  
DIAMANT master case



**Gigant**  
Article no. 17 0090, page 27



Design	Weight	External dim L/W/H	Incl. dim L/W/H1/H2/H	PU	Article no.
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### Metro Tool Case



Reasonably priced, absolutely professional hardshell tool case, specifications: shell made of ABS material, surrounding aluminium frame with 2 integrated lockable clamp locks, carrying capacity up to 15 kg, 2 tool boards with a total of 26 tool pockets, document clipboard 400 mm wide, bottom shell can be individually subdivided incl. separators, lid support and hinges made of metal, plastic bottom-slider.

Case empty	4400 g	405/490/190 mm	350/460/105/70/175 mm	1	17 0073
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### Metro tool assortment

Metro Tool Case				1	17 0073	
1000 V Telephone pliers with straight jaws 200 mm DIN ISO 5745				1	10 0216	
1000 V diagonal pliers 160 mm, DIN ISO 5749 B				1	10 0574	
Super 4 wire stripper				1	10 0760	
Voltage tester 100-250 V AC 3.0/60 mm				1	11 1280	
1000 V slot-head screwdriver 185 mm, DIN EN 60900, 3.0 x 0.5 mm				1	11 7702	
1000 V slot-head screwdriver 185 mm, DIN EN 60900, 4.0 x 0.8 mm				1	11 7704	
1000 V slot-head screwdriver 220 mm, DIN EN 60900, 5.5 x 1.0 mm				1	11 7705	
1000 V screwdriver PH 1, 80 mm, DIN 7438				1	11 7731	
1000 V screwdriver PH 2, 100 mm, DIN 7438				1	11 7732	
1000 V screwdriver PZ 1, 100 mm, DIN 7438				1	11 7741	
1000 V screwdriver PZ 2, 100 mm, DIN 7438				1	11 7742	
Cable shears DUOCUT 160 mm with two-stage cutting area				1	12 0108	
Cable stripping knife with hook-shaped blade, 8 - 28 mm ø				1	12 1010	
Case equipped	6700 g	405/490/190 mm		1	17 0175	

## HARDSHELL TOOL CASES

1

Design	Weight	External dim L/W/H	Intl. dim L/W/H1/H2/H	PU	Article no.
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### Champion tool case












































































Pro hardshell case with outstanding cost effectiveness! Broad aluminium frame for high stability, case shells made of extremely impact and drop-resistant polypropylene, extra spacious bottom shell with various partitions for useful division into small boxes, 3 tool boards with numerous pockets of different sizes for storing all kinds of hand tools securely, 3 metal hinges with snap-in locking hold the case securely open without additional braces, comfort carrying handle with soft rubber insert, 2 robust lockable snap locks, nameplate.

Case empty	5200 g	380/485/220 mm	350/470/120/90/210 mm	1	17 0930
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### Champion tool assortment

Champion master case				1	17 0930	
1000 V Telephone pliers with straight jaws 200 mm DIN ISO 5745				1	10 0216	
1000 V Telephone pliers with bent jaws 200 mm, DIN ISO 5745				1	10 0238	
1000 V diagonal pliers 160 mm, DIN ISO 5749 B				1	10 0574	
Super 4 wire stripper				1	10 0760	
Electronic diagonal pliers up to 3.1 mm ø, 21°, 132 mm				1	10 1040	
Water pump pliers DIN ISO 8976 with handle sleeves, 250 mm				1	10 1224	
Crimping plier system click 'n' crimp electrical engineering				1	10 6000	
Ball-end hex key set, 7 pieces, size 2.5 - 10, pocket-sized holder				1	11 0596	
Voltage tester 100-250 V AC, 3.0/60 mm				1	11 1280	
Precision screwdriver, slot-head screwdriver white 2.0 x 0.4 x 60 mm				1	11 1864	
1000 V slot-head screwdriver 185 mm, DIN EN 60900, 3.0 x 0.5 mm				1	11 7702	
1000 V slot-head screwdriver 185 mm, DIN EN 60900, 4.0 x 0.8 mm				1	11 7704	
1000 V slot-head screwdriver 220 mm, DIN EN 60900, 5.5 x 1.0 mm				1	11 7705	
1000 V screwdriver PH 1, 80 mm, DIN 7438				1	11 7731	
1000 V screwdriver PH 2, 100 mm, DIN 7438				1	11 7732	
1000 V screwdriver PZ 1, 100 mm, DIN 7438				1	11 7741	
1000 V screwdriver PZ 2, 100 mm, DIN 7438				1	11 7742	
Cable shears DUOCUT, 160 mm with two-stage cutting area				1	12 0108	
PROFI pocket saw with universal blade				1	12 0490	
Cable stripping knife with hook-shaped blade 8 - 28 mm ø				1	12 1010	
1000 V safety cable stripping knife, straight strong blade 50 mm				1	12 1042	
Cable stripping knife system 4 - 70				1	12 2016	
Case equipped	7910 g	380/485/220 mm		1	17 0312	














Design	Weight	External dim L/W/H	Intl. dim L/W/H1/H2/H	PU	Article no.																																																																																																																																																																																																																																																																																				
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text-align: center;">9</td> </tr> <tr> <td>Super 4 wire stripper</td> <td></td> <td></td> <td></td> <td>1</td> <td>10 0760</td> <td></td> <td style="background-color: #cccccc; text-align: center;">10</td> </tr> <tr> <td>Electronic diagonal pliers 120 mm, oval-round head, diagonal with blade protector</td> <td></td> <td></td> <td></td> <td>1</td> <td>10 0802</td> <td></td> <td style="background-color: #cccccc; text-align: center;">11</td> </tr> <tr> <td>Electronics needle nose pliers 150 mm, bent blade, smooth jaws, tip 2.5 x 1.5 mm</td> <td></td> <td></td> <td></td> <td>1</td> <td>10 0816</td> <td></td> <td style="background-color: #cccccc; text-align: center;">12</td> </tr> <tr> <td>Tweezers, 120 mm</td> <td></td> <td></td> <td></td> <td>1</td> <td>10 3016</td> <td></td> <td style="background-color: #cccccc; text-align: center;">13</td> </tr> <tr> <td>Crimping plier system click 'n' crimp data network technology</td> <td></td> <td></td> <td></td> <td>1</td> <td>10 6009</td> <td></td> <td style="background-color: #cccccc; text-align: center;">14</td> </tr> <tr> <td>Voltage tester 100-250 V AC 3.0/60 mm</td> <td></td> <td></td> <td></td> <td>1</td> <td>11 1280</td> <td></td> <td style="background-color: #cccccc; text-align: center;">15</td> </tr> <tr> <td>Precision slot-head screwdriver white 2.0 x 0.4 x 60 mm</td> <td></td> <td></td> <td></td> <td>1</td> <td>11 1864</td> <td></td> <td style="background-color: #cccccc; text-align: center;">16</td> </tr> <tr> <td>Precision slot-head screwdriver white 2.5 x 0.4 x 75 mm</td> <td></td> <td></td> <td></td> <td>1</td> <td>11 1865</td> <td></td> <td style="background-color: #cccccc; text-align: center;">17</td> </tr> <tr> <td>Precision slot-head screwdriver white 4.0 x 8 x 150 mm</td> <td></td> <td></td> <td></td> <td>1</td> <td>11 1870</td> <td></td> <td style="background-color: #cccccc; text-align: center;">18</td> </tr> <tr> <td>Precision crosshead screwdriver, light blue PH 0 x 60 mm</td> <td></td> <td></td> <td></td> <td>1</td> <td>11 1877</td> <td></td> <td style="background-color: #cccccc; text-align: center;">19</td> </tr> <tr> <td>Precision crosshead screwdriver, light blue PH 0 x 80 mm</td> <td></td> <td></td> <td></td> <td>1</td> <td>11 1880</td> <td></td> <td style="background-color: #cccccc; text-align: center;">20</td> </tr> <tr> <td>Universal switch cabinet key made of die-cast zinc</td> <td></td> <td></td> <td></td> <td>1</td> <td>11 2894</td> <td></td> <td style="background-color: #cccccc; text-align: center;">21</td> </tr> <tr> <td>1000 V insulated slot-head screwdriver 160 mm, DIN EN 60900, 2.5 x 0.4 mm</td> <td></td> <td></td> <td></td> <td>1</td> <td>11 7701</td> <td></td> <td style="background-color: #cccccc; text-align: center;">22</td> </tr> <tr> <td>1000 V slot-head screwdriver 185 mm, DIN EN 60900, 3.0 x 0.5 mm</td> <td></td> <td></td> <td></td> <td>1</td> <td>11 7702</td> <td></td> <td style="background-color: #cccccc; text-align: center;">23</td> </tr> <tr> <td>1000 V slot-head screwdriver 185 mm, DIN EN 60900, 4.0 x 0.8 mm</td> <td></td> <td></td> <td></td> <td>1</td> <td>11 7704</td> <td></td> <td style="background-color: #cccccc; text-align: center;">24</td> </tr> <tr> <td>1000 V slot-head screwdriver 220 mm, DIN EN 60900, 5.5 x 1.0 mm</td> <td></td> <td></td> <td></td> <td>1</td> <td>11 7705</td> <td></td> <td style="background-color: #cccccc; text-align: center;">25</td> </tr> <tr> <td>1000 V slot-head screwdriver 245 mm, DIN EN 60900, 6.5 x 1.2 mm</td> <td></td> <td></td> <td></td> <td>1</td> <td>11 7706</td> <td></td> <td style="background-color: #cccccc; text-align: center;">26</td> </tr> <tr> <td>1000 V screwdriver PH 1, 80 mm, DIN 7438</td> <td></td> <td></td> <td></td> <td>1</td> <td>11 7731</td> <td></td> <td style="background-color: #cccccc; text-align: center;">27</td> </tr> <tr> <td>1000 V screwdriver PH 2, 100 mm, DIN 7438</td> <td></td> <td></td> <td></td> <td>1</td> <td>11 7732</td> <td></td> <td style="background-color: #cccccc; text-align: center;">28</td> </tr> <tr> <td>Insertion tool LSA-Plus terminals model Economy AWG 24-20</td> <td></td> <td></td> <td></td> <td>1</td> <td>11 8017</td> <td></td> <td style="background-color: #cccccc; text-align: center;">29</td> </tr> <tr> <td>Coaxi cable sheath stripper for cables from 4.8 - 7.5 mm ø</td> <td></td> <td></td> <td></td> <td>1</td> <td>12 0027</td> <td></td> <td style="background-color: #cccccc; text-align: center;">30</td> </tr> <tr> <td>Precision insulation stripper PWS-Plus, red press button, 0.25 - 0.80 mm ø, AWG 30 - 20</td> <td></td> <td></td> <td></td> <td>1</td> <td>12 0033</td> <td></td> <td style="background-color: #cccccc; text-align: center;">31</td> </tr> <tr> <td>Insulation stripper PC-Strip, 5 - 13 mm ø cables, 0.2 - 4.0 mm<sup>2</sup> conductors</td> <td></td> <td></td> <td></td> <td>1</td> <td>12 0034</td> <td></td> <td style="background-color: #cccccc; text-align: center;">32</td> </tr> <tr> <td>Universal shears 190 mm, hardness HRC 56 to 58</td> <td></td> <td></td> <td></td> <td>1</td> <td>12 0122</td> <td></td> <td style="background-color: #cccccc; text-align: center;">33</td> </tr> <tr> <td>Telephone shears with serrated blade, bright nickel plated, size 130 mm</td> <td></td> <td></td> <td></td> <td>1</td> <td>12 0222</td> <td></td> <td style="background-color: #cccccc; text-align: center;">34</td> </tr> <tr> <td>PUK pocket saws with solid, lacquered wooden haft</td> <td></td> <td></td> <td></td> <td>1</td> <td>12 0502</td> <td></td> <td style="background-color: #cccccc; text-align: center;">35</td> </tr> <tr> <td>Cable stripping knife with hook-shaped blade 8 - 28 mm ø</td> <td></td> <td></td> <td></td> <td>1</td> <td>12 1010</td> <td></td> <td style="background-color: #cccccc; text-align: center;">36</td> </tr> <tr> <td><b>Case equipped</b></td> <td><b>8000 g</b></td> <td><b>380/485/220 mm</b></td> <td></td> <td><b>1</b></td> <td><b>17 0310</b></td> <td></td> <td style="background-color: #cccccc; text-align: center;">37</td> </tr> </tbody> </table>						Champion master case				1	17 0930		5	1000 V Telephone pliers with straight jaws 200 mm DIN ISO 5745				1	10 0216		6	1000 V Telephone pliers with bent jaws 200 mm, DIN ISO 5745				1	10 0238		7	1000 V combination pliers 180 mm, DIN ISO 5746				1	10 0336		8	1000 V diagonal pliers 160 mm, DIN ISO 5749 B				1	10 0574		9	Super 4 wire stripper				1	10 0760		10	Electronic diagonal pliers 120 mm, oval-round head, diagonal with blade protector				1	10 0802		11	Electronics needle nose pliers 150 mm, bent blade, smooth jaws, tip 2.5 x 1.5 mm				1	10 0816		12	Tweezers, 120 mm				1	10 3016		13	Crimping plier system click 'n' crimp data network technology				1	10 6009		14	Voltage tester 100-250 V AC 3.0/60 mm				1	11 1280		15	Precision slot-head screwdriver white 2.0 x 0.4 x 60 mm				1	11 1864		16	Precision slot-head screwdriver white 2.5 x 0.4 x 75 mm				1	11 1865		17	Precision slot-head screwdriver white 4.0 x 8 x 150 mm				1	11 1870		18	Precision crosshead screwdriver, light blue PH 0 x 60 mm				1	11 1877		19	Precision crosshead screwdriver, light blue PH 0 x 80 mm				1	11 1880		20	Universal switch cabinet key made of die-cast zinc				1	11 2894		21	1000 V insulated slot-head screwdriver 160 mm, DIN EN 60900, 2.5 x 0.4 mm				1	11 7701		22	1000 V slot-head screwdriver 185 mm, DIN EN 60900, 3.0 x 0.5 mm				1	11 7702		23	1000 V slot-head screwdriver 185 mm, DIN EN 60900, 4.0 x 0.8 mm				1	11 7704		24	1000 V slot-head screwdriver 220 mm, DIN EN 60900, 5.5 x 1.0 mm				1	11 7705		25	1000 V slot-head screwdriver 245 mm, DIN EN 60900, 6.5 x 1.2 mm				1	11 7706		26	1000 V screwdriver PH 1, 80 mm, DIN 7438				1	11 7731		27	1000 V screwdriver PH 2, 100 mm, DIN 7438				1	11 7732		28	Insertion tool LSA-Plus terminals model Economy AWG 24-20				1	11 8017		29	Coaxi cable sheath stripper for cables from 4.8 - 7.5 mm ø				1	12 0027		30	Precision insulation stripper PWS-Plus, red press button, 0.25 - 0.80 mm ø, AWG 30 - 20				1	12 0033		31	Insulation stripper PC-Strip, 5 - 13 mm ø cables, 0.2 - 4.0 mm <sup>2</sup> conductors				1	12 0034		32	Universal shears 190 mm, hardness HRC 56 to 58				1	12 0122		33	Telephone shears with serrated blade, bright nickel plated, size 130 mm				1	12 0222		34	PUK pocket saws with solid, lacquered wooden haft				1	12 0502		35	Cable stripping knife with hook-shaped blade 8 - 28 mm ø				1	12 1010		36	<b>Case equipped</b>	<b>8000 g</b>	<b>380/485/220 mm</b>		<b>1</b>	<b>17 0310</b>		37
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Design	Weight	External dim L/W/H	Intl. dim L/W/H1/H2/H	PU	Article no.
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### Champion tool assortment “Montage Profi”

Champion master case				1	17 0930	
1000 V Telephone pliers with straight jaws 200 mm DIN ISO 5745				1	10 0216	
1000 V diagonal pliers 160 mm, DIN ISO 5749 B				1	10 0574	
Super 4 wire stripper				1	10 0760	
Ball-end hex key set, 7 pieces, size 2.5 - 10, pocket-sized holder				1	11 0596	
Voltage tester 100-250 V AC 3.0/60 mm				1	11 1280	
Universal switch cabinet key made of die-cast zinc				1	11 2894	
Bit case 10 pieces with star-shaped holder for bits and universal holders				1	11 4604	
1000 V slot-head screwdriver 160 mm, DIN EN 60900, 2.5 x 0.4 mm				1	11 7701	
1000 V slot-head screwdriver 185 mm, DIN EN 60900, 3.0 x 0.5 mm				1	11 7702	
1000 V slot-head screwdriver 185 mm, DIN EN 60900, 4.0 x 0.8 mm				1	11 7704	
1000 V slot-head screwdriver 220 mm, DIN EN 60900, 5.5 x 1.0 mm				1	11 7705	
1000 V screwdriver PZ 1, 100 mm, DIN 7438				1	11 7741	
1000 V screwdriver PZ 2, 100 mm, DIN 7438				1	11 7742	
Cable stripping knife with hook-shaped blade 8 - 28 mm ø				1	12 1010	
Cable pulling cord plastic 10 m, approx. 130 mm long, tensile strength 900N				1	14 0054	
<b>Case equipped</b>	<b>8450 g</b>	<b>380/485/220 mm</b>		<b>1</b>	<b>17 5230</b>	



Design	Weight	External dim L/W/H	Incl. dim L/W/H1/H2/H	PU	Article no.
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### Champion tool case - rolling case



Professional hardshell case (same as CIMCO article no. 17 0930) with integrated roller system and 4-fold telescopic handle for high mobility and comfort. The extra wide rollers on the outer shell of the case prevent it tipping over. Broad aluminium frame for high stability, shells made of extremely impact and drop-resistant polypropylene, extra spacious bottom shell with various partitions for individual division into small boxes, 3 tool boards with numerous pockets of different sizes for secure storage of hand tools of all kinds, 3 metal hinges with snap-in locking and two additional interior braces hold the case securely open, comfort carrying handle with soft rubber insert, 2 robust lockable snap locks, nameplate.

Case empty	6850 g	375/485/250 mm	350/470/135/90/225 mm	1	17 0932
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### Champion tool assortment - rolling case

CHAMPION master case rolling case	1	17 0932	
1000 V Telephone pliers with bent jaws 200 mm, DIN ISO 5745	1	10 0238	
Screw pliers, 160 mm	1	10 0352	
1000 V diagonal pliers 200 mm, DIN ISO 5749 B	1	10 0528	
Automatic wire stripper Power Strip, length 170 mm	1	10 0770	
Electronic diagonal pliers up to 1.3 mm ø, 21°, 132 mm	1	10 1040	
Crimping plier system click 'n' crimp, electrical engineering	1	10 6000	
Universal switch cabinet key made of die-cast zinc	1	11 2894	
1000 V slot-head screwdriver 185 mm, DIN EN 60900, 3.0 x 0.5 mm	1	11 7702	
1000 V slot-head screwdriver 185 mm, DIN EN 60900, 4.0 x 0.8 mm	1	11 7704	
1000 V slot-head screwdriver 220 mm, DIN EN 60900, 5.5 x 1.0 mm	1	11 7705	
1000 V screwdriver PZ 1, 100 mm, DIN 7438	1	11 7741	
1000 V screwdriver PZ 2, 100 mm, DIN 7438	1	11 7742	
Special screwdrivers with combination profile PZ FL 1 x 80 mm	1	11 7751	
Special screwdrivers with combination profile PZ FL 2 x 100 mm	1	11 7752	
1000 V screwdriver TORX® 155 mm, T 10 x 60 mm	1	11 7910	
1000 V screwdriver TORX® 170 mm, T 15 x 75 mm	1	11 7915	
1000 V screwdriver TORX® 195 mm, T 20 x 100 mm	1	11 7920	
1000 V screwdriver TORX® 195 mm, T 25 x 100 mm	1	11 7925	
ALLROUNDER cable sheath stripper	1	12 0009	
Cable shears 180 mm	1	12 0116	
Locator Box	1	12 9009	
Professional spirit level 250 mm	1	21 1528	
Case equipped	9800 g	375/485/250 mm	1 17 0601

## HARDSHELL TOOL CASES

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Design	Weight	External dim L/W/H	Intl. dim L/W/H1/H2/H	PU	Article no.
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### Tool case Klassik



Professional hardshell case made of impact-resistant 3 mm thick ABS plastic, outer bottom shell with 4 stable feet, surrounding aluminium frame, fasteners on the sides to attach a shoulder strap (CIMCO Article No. 17 0275), 3 removable tool boards with rubberised tool insertion straps and a document compartment, bottom shell with individually adjustable dividers for measuring tools, small parts, tools, etc., 2 key-operated locks.

Case empty	6000 g	425/505/230 mm	350/440/105/80/185 mm	1	17 0075
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### Klassik tool assortment

KLASSIK Master case black				1	17 0075	
1000 V Telephone pliers with straight jaws 200 mm DIN ISO 5745				1	10 0216	
1000 V Telephone pliers with bent jaws 200 mm, DIN ISO 5745				1	10 0238	
1000 V diagonal pliers 160 mm, DIN ISO 5749 B				1	10 0574	
Super 4 wire stripper				1	10 0760	
Electronic diagonal pliers up to 1.3 mm ø, 21°, 132 mm				1	10 1040	
Water pump pliers DIN ISO 8976 with handle sleeves, 250 mm				1	10 1224	
Crimping plier system click 'n' crimp, electrical engineering				1	10 6000	
Ball-end hex key set, 7 pieces, size 2.5 - 10, pocket-sized holder				1	11 0596	
Voltage tester 100-250 V AC 3.0/60 mm				1	11 1280	
Precision screwdriver, slot-head screwdriver white 2.0 x 0.4 x 60 mm				1	11 1864	
1000 V slot-head screwdriver 185 mm, DIN EN 60900, 3.0 x 0.5 mm				1	11 7702	
1000 V slot-head screwdriver 185 mm, DIN EN 60900, 4.0 x 0.8 mm				1	11 7704	
1000 V slot-head screwdriver 220 mm, DIN EN 60900, 5.5 x 1.0 mm				1	11 7705	
1000 V screwdriver PH 1, 80 mm, DIN 7438				1	11 7731	
1000 V screwdriver PH 2, 100 mm, DIN 7438				1	11 7732	
1000 V screwdriver PZ 1, 100 mm, DIN 7438				1	11 7741	
1000 V screwdriver PZ 2, 100 mm, DIN 7438				1	11 7742	
Cable shears DUOCUT 160 mm, with two-stage cutting area				1	12 0108	
Pocket saw PROFIL, 150 mm span width				1	12 0490	
1000 V safety cable stripping knife, straight strong blade 50 mm				1	12 1042	
Cable stripping knife system 4 - 70				1	12 2016	
Case equipped	7945 g	425/505/230 mm		1	17 0331	

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Design	Weight	External dim L/W/H	Incl. dim L/W/H1/H2/H	PU	Article no.
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## Accessories for tool case Klassik

### Tool board set

3 tool boards with rubberised tool insertion slots and a document compartment, incl. quick release for quick exchange.



	1460 g			1	17 0375
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### Shoulder strap

40 mm wide, with shoulder pad (hook & loop attachment), 2 plastic holders to attach to the tool case, infinitely adjustable between 75 and 135 cm



	120 g			1	17 0275
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## Klassik tool assortment



KLASSIK Master case black				1	17 0075	
1000 V Telephone pliers with straight jaws 200 mm DIN ISO 5745				1	10 0216	
1000 V diagonal pliers 160 mm, DIN ISO 5749 B				1	10 0574	
Varnish stripper for wires ø 0.6 mm (AWG 22)				1	10 0712	
Super 4 wire stripper				1	10 0760	
Electronic diagonal pliers up to 1.3 mm ø, 21°, 132 mm				1	10 1040	
Micro electronic needle nose pliers with bent jaws				1	10 1076	
Tweezers, 120 mm				1	10 3016	
Offset screwdriver DIN 5200, for slot-head screws, 100 x 5.0 x 0.65 mm				1	11 0620	
Offset screwdriver DIN 5200, for crosshead screws, PH 1 / PH 2 x 100 mm				1	11 0630	
Screw-holding screwdriver insulated, for slot-head screws 4 x 0.8 x 125 mm				1	11 0784	
Voltage tester 100-250 V AC, 3.0/60 mm				1	11 1280	
Control mirror				1	11 1600	
Combi pick-up tool total length 700 mm ; (usable depth 600 mm)				1	11 1650	
Precision slot-head screwdriver white 2.0 x 0.4 x 60 mm				1	11 1864	
Hexagon socket wrench 210 mm, DIN 3125, size 5.5 x 125 mm				1	11 7205	
Hexagon socket wrench 220 mm, DIN 3125, size 7 x 125 mm				1	11 7207	
Hexagon socket wrench 220 mm, DIN 3125, size 8 x 125 mm				1	11 7208	
Hexagon socket wrench 220 mm, DIN 3125, size 10 x 125 mm				1	11 7210	
1000 V slot-head screwdriver 185 mm, DIN EN 60900, 3.0 x 0.5 mm				1	11 7702	
1000 V slot-head screwdriver 185 mm, DIN EN 60900, 4.0 x 0.8 mm				1	11 7704	
1000 V slot-head screwdriver 220 mm, DIN EN 60900, 5.5 x 1.0 mm				1	11 7705	
1000 V screwdriver PH 1, 80 mm, DIN 7438				1	11 7731	
1000 V screwdriver PH 2, 100 mm, DIN 7438				1	11 7732	
1000 V screwdriver PZ 1, 100 mm, DIN 7438				1	11 7741	
1000 V screwdriver PZ 2, 100 mm, DIN 7438				1	11 7742	
Cable shears DUOCUT, 160 mm with two-stage cutting area				1	12 0108	
Universal shears 190 mm, hardness HRC 56 to 58				1	12 0122	
1000 V safety cable stripping knife, straight strong blade 50 mm				1	12 1042	
Cable stripping knife system 4 - 70				1	12 2016	
<b>Case equipped</b>	<b>7150 g</b>	<b>425/505/230 mm</b>		<b>1</b>	<b>17 6410</b>	

## HARDSHELL TOOL CASES

Design	Weight	External dim L/W/H	Intl. dim L/W/H1/H2/H	PU	Article no.
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### Tool case Bomber



Double-walled hardshell case made of impact-resistant and shock-proof polyethylene plastic. Extremely durable, virtually indestructible. Resistant to high and low temperatures and also to many chemicals. With 2 tool boards, 2 lockable clamp locks, document compartment, adjustable partitions in bottom of case.

Case empty	5500 g	360/475/205 mm	315/430/80/70/150 mm	1	17 0076
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### Bomber tool assortment

Bomber Master Case				1	17 0076	
1000 V Telephone pliers with straight jaws 200 mm DIN ISO 5745				1	10 0216	
1000 V Telephone pliers with bent jaws 200 mm, DIN ISO 5745				1	10 0238	
1000 V diagonal pliers 160 mm, DIN ISO 5749 B				1	10 0574	
Super 4 wire stripper				1	10 0760	
Electronic diagonal pliers up to 1.3 mm ø, 21°, 132 mm				1	10 1040	
Water pump pliers DIN ISO 8976 with handle sleeves 250 mm				1	10 1224	
Crimping plier system click 'n' crimp, electrical engineering				1	10 6000	
Ball-end hex key set, 7 pieces, size 2.5 - 10, pocket-sized holder				1	11 0596	
Voltage tester 100-250 V AC 3.0/60 mm				1	11 1280	
Precision screwdriver, slot-head screwdriver white 2.0 x 0.4 x 60 mm				1	11 1864	
1000 V slot-head screwdriver 185 mm, DIN EN 60900, 3.0 x 0.5 mm				1	11 7702	
1000 V slot-head screwdriver 185 mm, DIN EN 60900, 4.0 x 0.8 mm				1	11 7704	
1000 V slot-head screwdriver 220 mm, DIN EN 60900, 5.5 x 1.0 mm				1	11 7705	
1000 V screwdriver PH 1, 80 mm, DIN 7438				1	11 7731	
1000 V screwdriver PH 2, 100 mm, DIN 7438				1	11 7732	
1000 V screwdriver PZ 1, 100 mm, DIN 7438				1	11 7741	
1000 V screwdriver PZ 2, 100 mm, DIN 7438				1	11 7742	
Cable shears DUOCUT, 160 mm with two-stage cutting area				1	12 0108	
Pocket saw PROFIL, 150 mm span width				1	12 0490	
1000 V safety cable stripping knife, straight strong blade 50 mm				1	12 1042	
Cable stripping knife system 4 - 70				1	12 2016	
<b>Case equipped</b>	<b>8350 g</b>	<b>360/475/205 mm</b>		<b>1</b>	<b>17 0376</b>	



Design	Weight	External dim L/W/H	Intl. dim L/W/H1/H2/H	PU	Article no.
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### Tool case Bomber MEGA-WHEEL



Double-walled shells of impact-resistant and unbreakable polyethylene, highly temperature and chemical resistant, 80 mm deep bottom shell with separating walls for flexible interior division according to individual needs, 2 removable boards with innovative, patented FLEXIPOUCH pockets for storing tools and small parts, spacious two-part document compartment, metal cover holder stable on both sides, 2 large rollers (ø 98 mm!) with ball bearings for more stability and robustness, 4 rubber bottom-sliders and appropriate recesses on the case cover make the case securely stackable. The telescopic handle is discretely integrated into the bottom shell and does not get in the way during normal case transport.

The handle can be extended to an ergonomically comfortable 115 cm. Solid handle for a secure grip, 2 strong keylocks.

Case empty	Weight 8000 g	410/550/245 mm	370/475/110/75/185 mm	1	17 0074
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### Tool assortment Bomber MEGA-WHEEL

Mega-Wheel Master Case				1	17 0074	
1000 V Telephone pliers with straight jaws 200 mm, DIN ISO 5745, single joint				1	10 0216	
1000 V Telephone pliers with bent jaws 200 mm, DIN ISO 5745, single joint				1	10 0238	
1000 V diagonal pliers 160 mm, DIN ISO 5749 B, single joint				1	10 0574	
Super 4 wire stripper				1	10 0760	
Electronic diagonal pliers up to 1.3 mm ø, 21°, 132 mm				1	10 1040	
Water pump pliers DIN ISO 8976 with handle sleeves 250 mm				1	10 1224	
Crimping plier system click 'n' crimp, electrical engineering				1	10 6000	
Ball-end hex key set 7 pieces, size 2.5 - 10, pocket-sized holder				1	11 0596	
Voltage tester 100-250 V AC 3.0/60 mm				1	11 1280	
Precision slot-head screwdriver white 2.0 x 0.4 x 60 mm				1	11 1864	
1000 V slot-head screwdriver 185 mm, DIN EN 60900, 3.0 x 0.5 mm				1	11 7702	
1000 V slot-head screwdriver 185 mm, DIN EN 60900, 4.0 x 0.8 mm				1	11 7704	
1000 V slot-head screwdriver 220 mm, DIN EN 60900, 5.5 x 1.0 mm				1	11 7705	
1000 V screwdriver PH 1, 80 mm, DIN 7438				1	11 7731	
1000 V screwdriver PH 2, 100 mm, DIN 7438				1	11 7732	
1000 V screwdriver PZ 1, 100 mm, DIN 7438				1	11 7741	
1000 V screwdriver PZ 2, 100 mm, DIN 7438				1	11 7742	
Cable shears DUOCUT, 160 mm with two-stage cutting area				1	12 0108	
Pocket saw PROFI, 150 mm span width				1	12 0490	
1000 V safety cable stripping knife, straight strong blade 50 mm				1	12 1042	
Cable stripping knife system 4 - 70				1	12 2016	
Case equipped	10 800 g	410/550/245 mm		1	17 0374	

## HARDSHELL TOOL CASES

1

Design	Weight	External dim L/W/H	Intl. dim L/W/H1/H2/H	PU	Article no.
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### Tool case Perfekt



The elegant, strong, robust hardshell case with 3 tool boards = 4 push-in brackets and one document compartment. Bottom shell with grid layout and separators for reliable placement of measuring tools and small parts. The HIGHLIGHT: The tool boards with a sensational clamp effect. Small and large tools can be inserted without much organisation and will be held safely in place. Also during transport and even if case is upside down.

Case empty	4900 g	355/485/180 mm	305/455/100/65/165 mm	1	17 5075
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

















### Tool assortment Perfekt



Master case Perfekt black				1	17 5075	
1000 V Telephone pliers with straight jaws 200 mm DIN ISO 5745				1	10 0216	
1000 V Telephone pliers with bent jaws 200 mm, DIN ISO 5745				1	10 0238	
1000 V diagonal pliers 160 mm, DIN ISO 5749 B				1	10 0574	
Super 4 wire stripper				1	10 0760	
Electronic diagonal pliers up to 1.3 mm ø, 21°, 132 mm				1	10 1040	
Water pump pliers DIN ISO 8976 with handle sleeves 250 mm				1	10 1224	
Crimping plier system click 'n' crimp, electrical engineering				1	10 6000	
Ball-end hex key set 7 pieces, size 2.5 - 10, pocket-sized holder				1	11 0596	
Voltage tester 100-250 V AC 3.0/60 mm				1	11 1280	
Precision slot-head screwdriver white 2.0 x 0.4 x 60 mm				1	11 1864	
1000 V slot-head screwdriver 185 mm, DIN EN 60900, 3.0 x 0.5 mm				1	11 7702	
1000 V slot-head screwdriver 185 mm, DIN EN 60900, 4.0 x 0.8 mm				1	11 7704	
1000 V slot-head screwdriver 220 mm, DIN EN 60900, 5.5 x 1.0 mm				1	11 7705	
1000 V screwdriver PH 1, 80 mm, DIN 7438				1	11 7731	
1000 V screwdriver PH 2, 100 mm, DIN 7438				1	11 7732	
1000 V screwdriver PZ 1, 100 mm, DIN 7438				1	11 7741	
1000 V screwdriver PZ 2, 100 mm, DIN 7438				1	11 7742	
Cable shears DUOCUT, 160 mm with two-stage cutting area				1	12 0108	
Pocket saw PROFIL, 150 mm span width				1	12 0490	
1000 V safety cable stripping knife, straight strong blade 50 mm				1	12 1042	
Cable stripping knife system				1	12 2016	
<b>Case equipped</b>	<b>7765 g</b>	<b>355/483/180 mm</b>		<b>1</b>	<b>17 5331</b>	

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Design	Weight	External dim L/W/H	Intl. dim L/W/H1/H2/H	PU	Article no.	
						
<b>Tool assortment Perfekt Plus</b>						
Master case Perfekt black				1	17 5075	
1000 V Telephone pliers with straight jaws 200 mm DIN ISO 5745				1	10 0216	
1000 V diagonal pliers 160 mm, DIN ISO 5749 B				1	10 0574	
Varnish stripper for wires ø 0.6 mm (AWG 22)				1	10 0712	
Super 4 wire stripper				1	10 0760	
Electronic diagonal pliers up to 1.3 mm ø, 21°, 132 mm				1	10 1040	
Micro electronic needle nose pliers with bent jaws				1	10 1076	
Tweezers, 120 mm				1	10 3016	
Offset screwdriver DIN 5200, for slot-head screws, 100 x 5.0 x 0.65 mm				1	11 0620	
Offset screwdriver DIN 5200, for crosshead screws, PH 1 / PH 2 x 100 mm				1	11 0630	
Screw-holding screwdriver insulated, for slot-head screws 4 x 0.8 x 125 mm				1	11 0784	
Voltage tester 100-250 V AC, 3.0/60 mm				1	11 1280	
Control mirror				1	11 1600	
Combi pick-up tool, total length 700 mm (usable depth 600 mm)				1	11 1650	
Precision slot-head screwdriver white 2.0 x 0.4 x 60 mm				1	11 1864	
Hexagon socket wrench 210 mm, DIN 3125, size 5.5 x 125 mm				1	11 7205	
Hexagon socket wrench 220 mm, DIN 3125, size 7 x 125 mm				1	11 7207	
Hexagon socket wrench 220 mm, DIN 3125, size 8 x 125 mm				1	11 7208	
Hexagon socket wrench 220 mm, DIN 3125, size 10 x 125 mm				1	11 7210	
1000 V slot-head screwdriver 185 mm, DIN EN 60900, 3.0 x 0.5 mm				1	11 7702	
1000 V slot-head screwdriver 185 mm, DIN EN 60900, 4.0 x 0.8 mm				1	11 7704	
1000 V slot-head screwdriver 220 mm, DIN EN 60900, 5.5 x 1.0 mm				1	11 7705	
1000 V screwdriver PH 1, 80 mm, DIN 7438				1	11 7731	
1000 V screwdriver PH 2, 100 mm, DIN 7438				1	11 7732	
1000 V screwdriver PZ 1, 100 mm, DIN 7438				1	11 7741	
1000 V screwdriver PZ 2, 100 mm, DIN 7438				1	11 7742	
Cable shears DUOCUT, 160 mm with two-stage cutting area				1	12 0108	
Universal shears 190 mm, hardness HRC 56 to 58				1	12 0122	
1000 V safety cable stripping knife, straight strong blade 50 mm				1	12 1042	
Cable stripping knife system 4 - 70				1	12 2016	
<b>Case equipped</b>	<b>7350 g</b>	<b>355/485/180 mm</b>		<b>1</b>	<b>17 5410</b>	

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## HARDSHELL TOOL CASES

1

Design	Weight	External dim L/W/H	Intl. dim L/W/H1/H2/H	PU	Article no.
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### Toolbox DIAMANT



### DIAMANT 25

Carrying capacity up to 25 kg, two removable tool boards with rubberised tool insertion straps and a document compartment with integrated tool insertion slots in the base plate, supply includes 5 raaco Carry-Lite 55 inserts for safe storage of small parts and accessories. Case shell without additional aluminium frame.

Case empty	5300 g	375/488/210 mm	290/415/50/90/140 mm	1	17 8015
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### DIAMANT 35

Contains a tool board with tool insertion slots and a tool board with tool insertion straps in the lid, but with a carrying capacity of up to 35 kg. Case shells have an additional aluminium frame for absolute torsional stiffness.

Case empty, black	6400 g	430/498/235 mm	340/420/50/100/150 mm	1	17 8077
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### Tool assortment DIAMANT 35

Tool case DIAMANT 35, black				1	17 8077	
1000 V Telephone pliers with straight jaws 200 mm DIN ISO 5745				1	10 0216	
1000 V Telephone pliers with bent jaws 200 mm, DIN ISO 5745				1	10 0238	
1000 V diagonal pliers 160 mm, DIN ISO 5749 B				1	10 0574	
Super 4 wire stripper				1	10 0760	
Electronic diagonal pliers up to 1.3 mm ø, 21°, 132 mm				1	10 1040	
Water pump pliers DIN ISO 8976 with handle sleeves 250 mm				1	10 1224	
Crimping plier system click 'n' crimp, electrical engineering				1	10 6000	
Ball-end hex key set 7 pieces, size 2.5 - 10, pocket-sized holder				1	11 0596	
Voltage tester 100-250 V AC 3.0/60 mm				1	11 1280	
Precision slot-head screwdriver white 2.0 x 0.4 x 60 mm				1	11 1864	
1000 V slot-head screwdriver 185 mm, DIN EN 60900, 3.0 x 0.5 mm				1	11 7702	
1000 V slot-head screwdriver 185 mm, DIN EN 60900, 4.0 x 0.8 mm				1	11 7704	
1000 V slot-head screwdriver 220 mm, DIN EN 60900, 5.5 x 1.0 mm				1	11 7705	
1000 V screwdriver PH 1, 80 mm, DIN 7438				1	11 7731	
1000 V screwdriver PH 2, 100 mm, DIN 7438				1	11 7732	
1000 V screwdriver PZ 1, 100 mm, DIN 7438				1	11 7741	
1000 V screwdriver PZ 2, 100 mm, DIN 7438				1	11 7742	
Cable shears DUOCUT, 160 mm with two-stage cutting area				1	12 0108	
Pocket saw PROFIL, 150 mm span width				1	12 0490	
1000 V safety cable stripping knife, straight strong blade 50 mm				1	12 1042	
Cable stripping knife system 4 - 70				1	12 2016	
Case equipped	9250 g	430/498/235 mm		1	17 0431	

### DIAMANT 35

Contains a tool board with tool insertion slots and a tool board with tool insertion straps in the lid, but with a carrying capacity of up to 35 kg. Case shells have an additional aluminium frame for absolute torsional stiffness.

Case empty, red	6400 g	430/498/235 mm	340/420/50/100/150 mm	1	17 8076
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Design	Weight	External dim L/W/H	Incl. dim L/W/H1/H2/H	PU	Article no.
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### DIAMANT 45

corresponds to CIMCO article no. 17 8077, but with carrying capacity of up 45 kg.  
Case shells have two additional aluminium frames for absolute torsional stiffness.



black

Case empty, black	6800 g	430/498/235 mm	340/420/50/100/150 mm	1	17 8177
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### Tool assortment DIAMANT 45



Tool case DIAMANT 45, black				1	17 8177	
1000 V Telephone pliers with straight jaws 200 mm DIN ISO 5745				1	10 0216	
1000 V Telephone pliers with bent jaws 200 mm, DIN ISO 5745				1	10 0238	
1000 V diagonal pliers 160 mm, DIN ISO 5749 B				1	10 0574	
Super 4 wire stripper				1	10 0760	
Electronic diagonal pliers up to 1.3 mm ø, 21°, 132 mm				1	10 1040	
Water pump pliers DIN ISO 8976 with handle sleeves 250 mm				1	10 1224	
Crimping plier system click 'n' crimp, electrical engineering				1	10 6000	
Ball-end hex key set, 7 pieces, size 2.5 - 10, pocket-sized holder				1	11 0596	
Voltage tester 100-250 V AC 3.0/60 mm				1	11 1280	
Precision slot-head screwdriver white 2.0 x 0.4 x 60 mm				1	11 1864	
1000 V slot-head screwdriver 185 mm, DIN EN 60900, 3.0 x 0.5 mm				1	11 7702	
1000 V slot-head screwdriver 185 mm, DIN EN 60900, 4.0 x 0.8 mm				1	11 7704	
1000 V slot-head screwdriver 220 mm, DIN EN 60900, 5.5 x 1.0 mm				1	11 7705	
1000 V screwdriver PH 1, 80 mm, DIN 7438				1	11 7731	
1000 V screwdriver PH 2, 100 mm, DIN 7438				1	11 7732	
1000 V screwdriver PZ 1, 100 mm, DIN 7438				1	11 7741	
1000 V screwdriver PZ 2, 100 mm, DIN 7438				1	11 7742	
Cable shears DUOCUT, 160 mm with two-stage cutting area				1	12 0108	
Pocket saw PROFI, 150 mm span width				1	12 0490	
1000 V safety cable stripping knife, straight strong blade 50 mm				1	12 1042	
Cable stripping knife system 4 - 70				1	12 2016	
Case equipped	9450 g	430/498/235 mm		1	17 5431	

### Toolbox DIAMANT accessories

Dividers for optimal division within the bottom shell, longitudinal dividers



for DIAMANT 25	280 x 19 x 46 longitudinal dividers			1 Pair	17 8180
for DIAMANT 35/45	330 x 19 x 46 longitudinal dividers			1 Pair	17 8182

Cross dividers for optimal division within the bottom shell, cross dividers

for DIAMANT 25/35/45	430 x 19 x 46 cross dividers			1 Pair	17 8184
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## HARDSHELL TOOL CASES

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Design	Weight	External dim L/W/H	Incl. dim L/W/H1/H2/H	PU	Article no.
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### DIAMANT 45

corresponds to CIMCO article no. 17 8077, but with carrying capacity of up to 45 kg. Case shells have two additional aluminium frames for absolute torsional stiffness.



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Case empty, red	6800 g	430/498/235 mm	340/420/50/100/150 mm	1	17 8176
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### Tool assortment DIAMANT 45

Tool case DIAMANT 45, red

1000 V plastic flat nose pliers, 200 mm

1000 V Telephone pliers with straight jaws, DIN ISO 5745, 200 mm

1000 V Telephone pliers with bent jaws, DIN ISO 5745, 200 mm

1000 V Combination pliers, DIN ISO 5746, 185 mm with flat jaws

1000 V high-leverage diagonal cutting pliers, DIN ISO 5749, 200 mm, soft and hard wires

1000 V Wire stripper with adjusting screw 160 mm, for conductors 0.75 - 6 mm<sup>2</sup>

1000 V Offset screwdriver size 5, DIN EN 60900/VDE 0680 Part 2

1000 V Offset screwdriver size 6, DIN EN 60900/VDE 0680 Part 2

Voltage tester up to 690 V, LED display

1000 V socket wrench insert size 10, DIN 7448, 1/2 inch square socket

1000 V socket wrench insert size 11, DIN 7448, 1/2 inch square socket

1000 V socket wrench insert size 13, DIN 7448, 1/2 inch square socket

1000 V socket wrench insert size 14, DIN 7448, 1/2 inch square socket

1000 V socket wrench insert size 17, DIN 7448, 1/2 inch square socket

1000 V socket wrench insert size 19, DIN 7448, 1/2 inch square socket

1000 V reversible ratchet, DIN 7449, 1/2 inch

1000 V T-handle, 1/2 inch

1000 V open-ended spanner size 10, 105 mm, DIN 7446, 15° cranked

1000 V open-ended spanner size 13, 132 mm, DIN 7446, 15° cranked

1000 V open-ended spanner size 17, 160 mm, DIN 7446, 15° cranked

1000 V open-ended spanner size 19, 170 mm, DIN 7446, 15° cranked

1000 V open-ended spanner size 22, 195 mm, DIN 7446, 15° cranked

1000 V slot-head screwdriver 160 mm, DIN EN 60900, 2.5 x 0.4 mm

1000 V slot-head screwdriver 185 mm, DIN EN 60900, 4.0 x 0.8 mm

1000 V slot-head screwdriver 245 mm, DIN EN 60900, 6.5 x 1.2 mm

1000 V slot-head screwdriver 285 mm, DIN EN 60900, 8.0 x 1.2 mm

1000 V screwdriver PH 1, 7438 mm, 80 mm

1000 V screwdriver PH 2, 7438 mm, 100 mm

1000 V nut driver 220 mm, DIN 7445 5.5 x 125 mm

1000 V nut driver 235 mm, DIN 7445 7.0 x 125 mm

1000 V nut driver 235 mm, DIN 7445 8.0 x 125 mm

1000 V nut driver 235 mm, DIN 7445 10.0 x 125 mm

1000 V One-hand cable shears 160 mm for cables up to 16 mm

1000 V safety cable stripping knife, straight strong blade, blade length 50 mm

1000 V protection slip-on snout, size 1, holder 10 mm max. diameter

1000 V protection slip-on snout, size 2, holder 10 mm max. diameter

1000 V protection slip-on snout, size 3, holder 10 mm max. diameter

Plastic clip

Electrical safety gloves 1000 V, size 10, length 410 mm, material thickness 1.0

Insulating tape universal, DIN EN 60454, colour red, 25 mm x 25 mm

Case equipped	13000 g	430/498/235 mm		1	17 5370
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Design	Weight	External dim L/W/H	Intl. dim L/W/H1/H2/H	PU	Article no.
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### Toolbox DIAMANT 45 with trolley function



corresponds to CIMCO article no. 17 8177, including 4-stage extendable trolley system for the greatest possible mobility. Extension height of 110 cm with two stable castors. Case shells have two additional aluminium frames for absolute torsional stiffness.

Case empty	8100 g	440/498/270 mm	340/420/50/100/150 mm	1	17 8178
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### Gigant S tool case

Dust- and waterproof tool case according to IP 67, stackable, break and shock-proof. Resistant to acids and temperatures of 33°C/+90°C. Fitted with a document compartment, an ergonomic two-component handle and folding closures for optional padlocking. To compensate for positive pressure, the case was equipped with a hand valve. The O seal ring which runs around the periphery of the lid protects the contents of this very durable and rugged case.



Case empty	6500 g	445/345/190 mm		1	17 0092
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Clip fasteners on the side and 2 on the front protect the case up to IP 67.



8 options around the handle areas. Can be used with padlocks to secure the case

Manual valve for pressure compensation, name plate can only be changed when case is open



The trolley handle can be locked in both the lower and the upper position



### Gigant trolley tool case set

The case originally designed for the military is especially suitable for punishing everyday use. It protects its contents from water and dust, is air-tight, acid-resistant, pressure-resistant, shock-proof and almost indestructible. The acid-resistant bolts in the hinge and lock area, together with the integrated rubber seal, provide the case with an IP 67 protection rating. In addition to that, the case is secured with 4 locks and in 8 positions around the handle areas, it is protected with shackle locks to prevent unauthorised removal of tools. Plastic supports on the case provide increased stability. To compensate for positive pressure, the case is equipped with a hand valve. The name plate can only be replaced when the case is open. The extremely wide and strong handles (3 pieces) with a particularly pleasant feel make it easier to carry or roll along with the additional trolley function which can be secured by locking the handles in place. The case is fitted with 2 tool boards in the upper shell of the case (lid) and two more tool boards in the lower shell of the case. The lower tool board in the bottom shell is lying in a stable position on partitions and the individual small parts sections thanks to additional reinforcement at the edge. The second tool board in the bottom shell is secured spaced at a 50 mm distance to the lower one on 4 metal brackets.

Case empty	14500 g	490/630/300 mm	380/500/180/50/230 mm	1	17 0090
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## Apprentice case Light

Robust hard shell tool case for professional use in an attractive two-colour design. With two interchangeable tilt closures and two reinforced metal folding hinges as lid supports. The opening angle is greater than 90°. Two tool boards made of lightweight plastic with sewn-on insert pockets offer a multitude of spaces to hold manual tools. The spacious document compartment is integrated in the upper tool board. The bottom shell with three dividers is provided for storing measuring tools, small parts, tools etc.



### Tool equipment:

#### Pliers

- VDE telephone pliers with straight jaws, 200 mm
- VDE diagonal pliers, 160 mm

#### Slot-head screwdriver

- 3.0 x 0.5 x 100 mm
- 4.0 x 0.8 x 100 mm
- 5.5 x 1.0 x 125 mm

#### Crosshead screwdriver

- Phillips PH 1 x 80 mm
- Phillips PH 2 x 100 mm

#### Crosshead screwdriver

- Pozidriv PZ 1 x 80 mm
- Pozidriv PZ 2 x 100 mm

#### Stripping tools

- Cable stripping knife with hook-shaped blade for cables from 8 - 28 mm ø
- Wire stripper SUPER 4 from 0.5 to 4 mm

#### Other quality tools

- Cable shears DUOCUT
- VDE voltage tester
- Safety cable stripping knife, 1000 V
- PUK pocket saws 150 mm span width
- Cross peen hammer as per DIN 1041, 300 g
- Painter's spatula, width 40 mm
- Plaster cup made of soft rubber ø 125 mm
- Water brush
- Wooden folding ruler, two metres, mm marking on both sides
- Switch cabinet spirit level 230 mm, torpedo shaped, horizontal, vertical and 45° bubble level
- Carpenter's pencil, black, 240 mm

- Size: L x W x H: 340 x 430 x 160 mm
- Weight: empty 3,000 g, full of tools 6,250 g

Article no. 17 2004

## ECO apprentice case

Robust tool case made of impact-resistant plastic with sturdy aluminium frame with two robust lockable snap locks. The deep-drawn bottom shell provides numerous sub-division options. The removable bottom cover panel is equipped on one side with tool bags. The removable tool board with document compartment and a large number of tool pockets can store numerous tools.



### Tool equipment:

#### Pliers

- VDE telephone pliers with straight jaws, 200 mm
- VDE diagonal pliers, 160 mm

#### Slot-head screwdriver

- 3.0 x 0.5 x 100 mm
- 4.0 x 0.8 x 100 mm
- 5.5 x 1.0 x 125 mm

#### Crosshead screwdriver

- Phillips PH 1 x 80 mm
- Phillips PH 2 x 100 mm

#### Crosshead screwdriver

- Pozidriv PZ 1 x 80 mm
- Pozidriv PZ 2 x 100 mm

#### Stripping tools

- Cable stripping knife with hook-shaped blade for cables from 8 - 28 mm ø
- Wire stripper SUPER 4 from 0.5 to 4 mm

#### Other quality tools

- Cable shears DUOCUT
- VDE voltage tester
- Safety cable stripping knife, 1000 V
- PUK pocket saws 150 mm span width
- Cross peen hammer as per DIN 1041, 300 g
- Painter's spatula, width 40 mm
- Plaster cup made of soft rubber, ø 125 mm
- Water brush
- Wooden folding ruler, two metres, mm marking on both sides
- Switch cabinet spirit level 230 mm, torpedo shaped, horizontal, vertical and 45° bubble level
- Carpenter's pencil, black, 240 mm

- Size: L x W x H: 395 x 455 x 205 mm
- Weight: empty 3,450 g, full of tools 6,750 g

Article no. 17 0500



++ Special offer cases +++ Special offer cases +++ Special offer cases +++ Special offer cases +++ Special offer cases +++ Special offer cases ++

## Leather apprentice case

Spacious tool case made of strong cowhide. All outer edges are reinforced with aluminium edges. The metal bottom tray is galvanised and riveted, the base and lid extra reinforced.

The front wall folds down with a document compartment on the front. The rear, front and side wall holding straps provide plenty of tool storage.



### Tool equipment:

#### Pliers

- VDE telephone pliers with straight jaws, 200 mm
- VDE diagonal pliers, 160 mm

#### Slot-head screwdriver

- 3.0 x 0.5 x 100 mm
- 4.0 x 0.8 x 100 mm
- 5.5 x 1.0 x 125 mm

#### Crosshead screwdriver

- Phillips PH 1 x 80 mm
- Phillips PH 2 x 100 mm

#### Crosshead screwdriver

- Pozidriv PZ 1 x 80 mm
- Pozidriv PZ 2 x 100 mm

#### Stripping tools

- Cable stripping knife with hook-shaped blade for cables from 8 - 28 mm Ø
- Wire stripper SUPER 4 from 0.5 to 4 mm

#### Other quality tools

- Cable shears DUOCUT
- VDE voltage tester
- Safety cable stripping knife, 1000 V
- PUK pocket saws 150 mm span width
- Cross peen hammer as per DIN 1041, 300 g
- Painter's spatula, width 40 mm
- Plaster cup made of soft rubber, Ø 125 mm
- Water brush
- Wooden folding ruler, two metres, mm marking on both sides
- Switch cabinet spirit level 230 mm, torpedo shaped, horizontal, vertical and 45° bubble level
- Carpenter's pencil, black, 240 mm

- Size: L x W x H: 290 x 435 x 200 mm
- Weight: empty 2,750 g, full of tools 5,600 g

Article no. 17 0300

## INDUSTRY technician's case

Robust tool case made of impact-resistant plastic with sturdy aluminium frame with two robust lockable snap locks. The deep-drawn bottom shell provides numerous sub-division options. The removable bottom cover panel is equipped on one side with tool bags. The removable tool board with document compartment and a large number of tool pockets can store numerous tools.



### Tool equipment:

#### Pliers

- VDE telephone pliers with bent jaws, 200 mm
- Screw pliers, 160 mm
- VDE high-leverage diagonal cutting pliers, 200 mm
- Electronic diagonal pliers

#### Slot-head screwdriver

- 3.0 x 0.5 x 100 mm
- 4.0 x 0.8 x 100 mm
- 5.5 x 1.0 x 125 mm

#### Special screwdriver with combi-profile

- PZ FL1 x 80 mm
- PZ FL 2 x 100 mm

#### Crosshead screwdriver

- Pozidriv PZ 1 x 80 mm
- Pozidriv PZ 2 x 100 mm

#### TORX® screwdrivers

- T 10
- T 15
- T 20
- T 25

#### Stripping tools

- Cable stripper ALLROUNDER
- Power Strip for round cables

#### Other quality tools

- Cable shears, 180 mm
- Switch cabinet key
- Professional spirit level 250 mm
- Click 'n' Crimp electrical engineering
- Locator Box for 12 0009 and 12 0005

- Size: L x W x H: 395 x 455 x 205 mm
- Weight: empty 3,450 g, full of tools 6,500 g

Article no. 17 0603



# TOOL BAGS

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Tool bags in strong cowhide with galvanised riveted metal bottom tray.



Easy opening, low space requirement and improved tool removal.



Complete overview of all tools and maximum accessibility.



Safe storage of electricians safety gloves and NH safety handle with reinforced dividing walls in the centre section.



Fixing tools with foam insert.



## Tool bags

**1** Tool bags were manufactured long before tool cases and can be seen as the origin of tool transport. For good reasons, leather bags match their reputation of being almost indestructible given the right care. The simplicity of their structure, together with the selected high-quality materials and the many years of craftsmanship experience guarantee this. In addition, the more flexible materials are well suited to hard everyday use.

Bags are characterised by easy opening, a lower space requirement with a complete overview of the tools located in the tool bag. Not only is the VDE cowhide bag specially designed for maximum access, but it has a foam insert in the bottom as well as additional compartments for an NH safety handle or electrician's protective gloves.

### Overview of bag types



**Leather case**  
 Artikelnr. 17 6028, Seite 33



**Tool bag VDE**  
 Artikelnr. 17 0078, Seite 34



**Tool bag textil/woven fabric**  
 Artikelnr. 17 0940, Seite 35



**Tool backpack**  
 Artikelnr. 17 0430, Seite 35



**Industrial electrician tool bag S**  
 Artikelnr. 17 6000, Seite 36



Design	Weight	External dim. L/W/H	Internal dim. L/W/H1/H2/H	PU	Article no.
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### Tool bag leather



With galvanised, riveted sheet metal bottom trough, folding down front panel, front and back walls, bottom, lid and extra-reinforced side parts, solid carrying handle, 2 key-operated locks, key locks at the side, bottom-sliders, lateral loops for shoulder strap, inner surfaces with numerous tool pockets and adjustable loops, outer edges additionally reinforced with aluminium corners and with folding rear wall, removable centre wall and document front pouch.

	5300 g	375/500/245 mm	340/475/85/80/165 mm	1	17 6028
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### Tool assortment tool bag leather

Tool bag leather, black				1	17 6028	
1000 V telephone pliers with straight jaws 200 mm DIN ISO 5745				1	10 0216	
1000 V telephone pliers with bent jaws 200 mm DIN ISO 5745				1	10 0238	
1000 V diagonal pliers 160 mm DIN ISO 5749 B				1	10 0574	
Wire strippers Super 4				1	10 0760	
Electronic diagonal pliers up to 1.3 mm ø, 21°, 132 mm				1	10 1040	
Water pump pliers DIN ISO 8976 with handle sleeves 250 mm				1	10 1224	
Crimping plier system click 'n' crimp, electrical engineering				1	10 6000	
Ball-end hex key set 7 pieces, size 2.5 - 10, pocket-sized holder				1	11 0596	
Voltage tester 100-250 V AC 3.0/60 mm				1	11 1280	
Precision screwdriver, slot-head screwdriver white 2.0 x 0.4 x 60 mm				1	11 1864	
1000 V slot-head screwdriver DIN EN 60900 3.0 x 0.5 mm 185 mm				1	11 7702	
1000 V slot-head screwdriver DIN EN 60900 4.0 x 0.8 mm 185 mm				1	11 7704	
1000 V slot-head screwdriver DIN EN 60900 5.5 x 1.0 mm 220 mm				1	11 7705	
1000 V Screwdriver crosshead 80 mm PH 1 DIN 7438				1	11 7731	
1000 V Screwdriver crosshead 100 mm PH 2 DIN 7438				1	11 7732	
1000 V Screwdriver crosshead 80 mm PZ 1				1	11 7741	
1000 V Screwdriver crosshead 100 mm PZ 2				1	11 7742	
Cable shears DUOCUT, 160 mm with two-stage cutting area				1	12 0108	
Pocket saw PROFIL, 150 mm span width				1	12 0490	
1000 V Safety cable stripping knife, straight strong blade, blade length 50 mm				1	12 1042	
Cable stripping knife system 4- 70				1	12 2016	
	6700 g	375/500/245 mm		1	17 6350	

## TOOL BAGS

Design	Weight	External dim. L/W/H	Internal dim. L/W/H1/H2/H	PU	Article no.
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### Tool bag VDE

Double stitched



Electricians's protective gloves protected by reinforced dividing walls in the middle section

Aluminium edges for case strengthening

Specially for safety tools and safety devices, all outer edges reinforced with aluminium corners. Side parts, front and back wall, bottom and cover with extra reinforcement, front and back wall can be unfolded to a 90° angle. Lockable key locks, lateral closures, heavy cleat carrying handle, numerous tool pockets, document compartment, lateral loops for shoulder strap, floor studs, foam inserts with recesses for spanner sockets. Particularly safe storage of electricians safety gloves and NH safety handle with two reinforced dividing walls.

	5300 g	380/480/220 mm	325/445/60/65/60/200 mm	1	17 0078
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### Tool assortment tool bag VDE

Tool bag VDE, signal red				1	17 0078	
1000 V plastic flat nose pliers, 200 mm				1	10 0796	
1000 V Telephone pliers with straight jaws 200 mm, DIN ISO 5745				1	10 8778	
1000 V Telephone pliers with bent jaws 200 mm, DIN ISO 5745				1	10 8780	
1000 V Combination pliers with flat jaws 185 mm, DIN ISO 5746				1	10 8782	
1000 V high-leverage diagonal cutting pliers 200 mm, DIN ISO 5749, soft and hard wires				1	10 8784	
1000 V Wire stripper with adjusting screw 160 mm, for conductors 0.75 - 6 mm <sup>2</sup>				1	10 8790	
1000 V Offset screwdriver size 5, DIN EN 60900/VDE 0680 Part 2				1	11 0804	
1000 V Offset screwdriver size 6, DIN EN 60900/VDE 0680 Part 2				1	11 0806	
Voltage tester up to 690 V, LED display				1	11 1432	
1000 V socket wrench insert DIN 7448, size 10, 1/2 inch square socket				1	11 2600	
1000 V socket wrench insert DIN 7448, size 11, 1/2 inch square socket				1	11 2602	
1000 V socket wrench insert DIN 7448, size 13, 1/2 inch square socket				1	11 2606	
1000 V socket wrench insert DIN 7448, size 14, 1/2 inch square socket				1	11 2608	
1000 V socket wrench insert DIN 7448, size 17, 1/2 inch square socket				1	11 2610	
1000 V socket wrench insert DIN 7448, size 19, 1/2 inch square socket				1	11 2612	
1000 V Reversible ratchet, 1/2 inch				1	11 2628	
1000 V T-handle, 1/2 inch				1	11 2650	
1000 V Open-ended spanner size 10 105 mm, DIN 7446, 15° cranked				1	11 2708	
1000 V Open-ended spanner size 13 132 mm, DIN 7446, 15° cranked				1	11 2714	
1000 V Open-ended spanner size 17 160 mm, DIN 7446, 15° cranked				1	11 2720	
1000 V Open-ended spanner size 19 170 mm, DIN 7446, 15° cranked				1	11 2722	
1000 V Open-ended spanner size 22 195 mm, DIN 7446, 15° cranked				1	11 2724	
1000 V slot-head screwdriver DIN EN 60900 2.5 x 0.4 mm 160 mm				1	11 7701	
1000 V slot-head screwdriver DIN EN 60900 4.0 x 0.8 mm 185 mm				1	11 7704	
1000 V slot-head screwdriver DIN EN 60900 6.5 x 1.2 mm 245 mm				1	11 7706	
1000 V slot-head screwdriver DIN EN 60900 8.0 x 1.2 mm 285 mm				1	11 7708	
1000 V Screwdriver crosshead 80 mm PH 1 DIN 7438				1	11 7731	
1000 V Screwdriver crosshead 100 mm PH 2 DIN 7438				1	11 7732	
1000 V nut driver 220 mm DIN 7445 5.5 x 125 mm				1	11 7805	
1000 V nut driver 235 mm DIN 7445 7.0 x 125 mm				1	11 7807	
1000 V nut driver 235 mm DIN 7445 8.0 x 125 mm				1	11 7808	
1000 V nut driver 235 mm DIN 7445 10.0 x 125 mm				1	11 7810	
1000 V One-hand cable shears 160 mm for cables up to 16 mm				1	12 0206	
1000 V Safety cable stripping knife, straight strong blade, blade length 50 mm				1	12 1042	
1000 V protection slip-on snout size 1 holder 10 mm max. diameter				5	14 0166	
1000 V protection slip-on snout size 2 holder 10 mm max. diameter				5	14 0168	
1000 V protection slip-on snout size 3 holder 10 mm max. diameter				5	14 0170	
Plastic clip				2	14 0180	
1000 V Electrical safety gloves, size 10, length 410 mm, material thickness 1.0				1	14 0214	
Insulating tape universal DIN EN 60454, colour red 25 mm x 25 m				1	16 0145	
	13 500 g	380/480/220 mm		1	17 0378	

Design	Weight	External dim. L/W/H	Internal dim. L/W/H1/H2/H	PU	Article no.
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### Tool bag textil/woven fabric



Made of hard-wearing plastic fabric, bag cover with additional reinforcement, for even distribution of the load, 4 strong plastic floor sliders make sure it is stable, the water and dirt resistant plastic coating on the bottom makes it easy to clean, additional elastic straps on the lid, numerous tool insertion straps, trolley holder and business card holder on the back, practical tool segments to flexibly hold tools on the middle wall, lateral loops for the shoulder straps (included in the scope of delivery).  
Opening function 30° and 90° (side walls).

	4200 g	400/470/270 mm		1	17 0940
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### Tool backpack



Backpack for tool transport and storage, special configuration diversity and high-quality workmanship for professional use: plastic back shell with comfort-padding, adjustable, padded shoulder straps, adjustable lap belt, document compartment on the front, numerous pockets, holding straps and removable inner pockets for tools, small parts, documents etc., carrying handle, 4 strong bottom sliders, will carry up to 15 kg in weight.

	2300 g	440/340/180 mm		1	17 0430
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### Tool assortment backpack

Tool backpack				1	17 0430	
1000 V telephone pliers with straight jaws 200 mm, DIN ISO 5745				1	10 0216	
1000 V diagonal pliers 160 mm, DIN ISO 5749 B				1	10 0574	
Wire strippers Super 4				1	10 0760	
Voltage tester 100-250 V AC 3.0/60 mm				1	11 1280	
1000 V slot-head screwdriver DIN EN 60900 3.0 x 0.5 mm 185 mm				1	11 7702	
1000 V slot-head screwdriver DIN EN 60900 4.0 x 0.8 mm 185 mm				1	11 7704	
1000 V slot-head screwdriver DIN EN 60900 5.5 x 1.0 mm 220 mm				1	11 7705	
1000 V Screwdriver crosshead 80 mm test voltage PH 1 DIN 7438				1	11 7731	
1000 V Screwdriver crosshead 100 mm PH 2 DIN 7438				1	11 7732	
1000 V Screwdriver crosshead 80 mm PZ 1				1	11 7741	
1000 V Screwdriver crosshead 100 mm PZ 2				1	11 7742	
Cable shears DUOCUT 160 mm, with two-stage cutting area				1	12 0108	
Cable stripping knife with hook-shaped blade, 8 - 28 mm ø				1	12 1010	
	3400 g	440/340/180 mm		1	17 0420	

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Design	External dim. L/W/H	Internal dim. L/W/H1/H2/H	PU	Article no.
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### Industrial electrician tool bag S

Made of durable cowhide, extra robust, front, middle and back panel with 17 pockets with usual internal division, transparent clamping compartment in lid, removable carrying strap, with robust key lock.

1200 g	270/250/165 mm	250/225/ - /140/140 mm	1	17 6000
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### Industrial electrician tool bag L

With 2 key locks, extra reinforced bottom and side parts, inner surfaces with leather loops.

920 g	190/370/125 mm	175/330/ - /115/115 mm	1	17 0004
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### Shoulder strap

Shoulder pad and 2 spring hooks, for tool bags.

length adjustable up to 1500 mm			1	17 0060
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### Tool backpack trolley

made of wear-resistant and tear-resistant synthetic fabric. With integrated trolley, protective cover for the wheels, 2 padded carrying belts and a handle. The backpack trolley has a padded laptop compartment and a total of 30 different tool holders (15 pockets and 15 rubber straps). In addition, the backpack has 2 fastening straps and 4 outside pockets (2 with zips). The tool boards can be used as needed and they can be easily exchanged or removed with swivel fasteners, will carry up to 15 kg in weight.

4300 g	500 x 380 x 200 mm		1	17 0440
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### Storage bag for laptop computers and accessories

Functional and very lightweight carrier bag with numerous compartments for documents, business cards, mobile phone and accessories, 2 special padded inner compartments for laptop and additional equipment, i.e. printer, removable pocket for power supply etc., fixed with Velcro fastener, made of durable black polyester / Koskin fabric.

1250 g	410 x 130 x 340 mm		1	17 5150
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### Roll-up tool case

made of plastic with a fabric backing, with leather strap closure

12 compartments	530 x 320 mm		1	17 0142
20 compartments	760 x 320 mm		1	17 0144



### Tool box

made of steel sheets, painted inside and outside, five-piece set, lockable (shackle lock accessory)

5 compartments	540 x 200 x 200 mm		1	17 0212
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### Brass locks

brass block body, hardened steel shackle, with 2 keys

Größe	Shackle	Shackle Width	Shackle Height		
mm	ø mm	mm	mm		
40	6	20	19	1	17 0252



### Tool belt bag

made of thick, hard-wearing, smooth cowhide, 1 insulating tape roll holder, 5 outside pockets, 1 hammer loop, weight 550 g

	230 x 100 x 230 mm		1	17 0705
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### Cowhide belt

	1200 x 40 mm		1	17 0780
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## The flexible bag-system for the professions of today and tomorrow!

WORK-Line is more than a complete set of tool bags! Understand WORK-Line as a new organisation system for your work: a combination of carefully considered storage and transport bags, which adapt themselves to your individual needs in different working situations! All elements of WORK-Line are functional and convenient, due to the flexible combination options of the all-purpose bags you also obtain maximum flexibility that corresponds to your changing requirements! All WORK-Line products are made of the wear-resistant and tear-resistant, lightweight and special weatherproof synthetic fabric polyester 600 D in a modern two-colour design. The bags and accessories are visually accentuated with reflector ribbon from 3M.

All articles depicted are delivered without content.

### Overview of bag types



**Mobile phone pocket**  
Article no. 17 5102, page 38



**Electrician belt bag**  
Article no. 17 5112, page 38



**Tool strap bag**  
Article no. 17 5114, page 38



**Tool-document bag**  
Article no. 17 5130, page 39



**Electrician-shoulder bag**  
Article no. 17 5134, page 41



**Tool bag-S**  
Article no. 17 3136, page 41



**Tool bag-L**  
Article no. 17 3138, page 41



**Tool-shoulder bag-L**  
Article no. 17 3142, page 41



**Tool-shoulder bag-S**  
Article no. 17 3140, page 41



**Tool-shoulder bag-Strong**  
Article no. 17 3144, page 41

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Weight	External dim. L/W/H	PU	Article no.
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### Padded belt

60 mm wide, continuously variable width from 84 to 116 cm, large snap lock for fast one-hand operation.

130 g		1	17 0782
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### Mobile phone bag

Bag especially for mobile phones or for glasses, measuring instruments and other sensitive small devices, specially padded, hook & loop fastening, 2 pencil holders, universal-metal-clip for fixing to belts and bags of all kinds.

70 g	80/35/120 mm	1	17 5102
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### Cordless screwdriver bag

Belt holster for inserting all popular common battery screwdrivers, transport securing device with securing band with hook & loop attachment, 4 pockets for accessories such as drill, bits, pencil, etc., particularly sturdy design with padding, reinforced material and seams, belt loops.

120 g	180 x 340 mm	1	17 5104
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### Bit pocket

Foldable bag for screw-bits and accessories, holders for 12 bits, 5 drills and one bit-holder, hook & loop fastening, universal metal clip for attaching to belts and bags of all kinds.

120 g	130/20/180 mm	1	17 5106
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### Small inventory bag

Pocket for diverse tools and utensils such as notepad, measuring tape etc., particularly suitable for storing screws and nails thanks to the robust padding. Compartment can be secured using a nylon fabric and rubber closure. Pencil holder, universal metal clip for attaching to belts and bags of all kinds.

130 g	170/90/160 mm	1	17 5108
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### Small universal bag

Bag for tools and utensils, 3 pockets, snap ring for keys, measuring tape etc., hook & loop fastening, universal metal clip for attaching to belts and bags of all kinds.

120 g	105/60/170 mm	1	17 5110
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### Electrician belt bag

Tool belt bag with numerous functional details, 1 large and 2 small pockets, 6 different sized elastic fastening straps for screwdrivers, drills etc., large reinforced elastic holder for hammer, pliers etc., metal chain and holder for several rolls of insulating tape, made of strengthened special fabric, belt loop.

350 g	280/50/285 mm	1	17 5112
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### Tool strap bag

With numerous functional details in reinforced special fabric, 2 spacious inner compartments, small inner compartment with hook & loop fastening, 6 elastic holders for writing utensils, drills, screwdrivers etc, zipped compartment at the front, bag lid closable with hook & loop fastener and/or 2 zips (one-hand operation), integrated size-adjustable apron with 3 additional pockets, integrated belt with continuously variable width of up to 160 cm with large snap lock for convenient one-hand operation, belt can also be used as shoulder strap, so that the body bag changes into a shoulder bag.

750 g	300/95/210 mm	1	17 5114
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Weight	External dimensions L/W/H	PU	Article no.
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### Tool vest

Greater freedom isn't possible! Tools always close at hand and both hands are free! Numerous functional equipment details for professional use: padded pocket for mobile phones, glasses etc., with hook & loop fixing band and elastic holder for writing utensils, 2 breast-pockets with hook & loop fastening, 1 of which is foldable with 4 inner pockets, 2 large padded waist bags for diverse tools, 1 with hook & loop fastening flap, 8 small elastic holders for writing utensils, drills screwdrivers etc., zip chest pocket for business cards, pocket with window, i.e. for name tag, rivet-reinforced wide holder for hammer, pliers etc., large back pocket with 2 zips for small parts and documents, accessible from the left and right, comfortable padded shoulder straps, vest in standard size, individually adjustable width.

1000 g	480 x 660 mm	1	17 5120
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
### Tool and document bag

Tool bag for service technicians, perfect for smaller maintenance and installation work, 3 pockets for business cards, 2 elastic holders for mobile phone, measuring tape, small tools etc., 18 pockets of different size for tools of any kind, 4 ring binders for catalogues and other documents. Removable clipboard with the following features: clipboard up to max. DIN A-4 papers, elastic pen-holder, 9 elastic holders of different size for writing utensils, screwdrivers, small tools etc., zippered bag for small utensils. DIN A 4 document compartment on the front with hook & loop fastener on the front, 2 carrying handles.















1300 g	385/70/290 mm	1	17 5130
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### Tool assortment and document bag

Tool and document bag for service technician	1	17 5130	
1000 V Telephone pliers with straight jaws 200 mm, DIN ISO 5745	1	10 8778	
1000 V Combination pliers with flat jaws 185 mm	1	10 8782	
1000 V high-leverage diagonal cutting pliers 200 mm, soft and hard wires	1	10 8784	
1000 V Wire stripper adjusting screw 160 mm, for conductors 0.75 - 6 mm <sup>2</sup>	1	10 8790	
1000 V slot-head screwdriver 2.5 x 0.4 mm 160 mm	1	11 7701	
1000 V slot-head screwdriver 4.0 x 0.8 mm 185 mm	1	11 7704	
1000 V slot-head screwdriver 6.5 x 1.2 mm 245 mm	1	11 7706	
1000 V slot-head screwdriver 8.0 x 1.2 mm 285 mm	1	11 7708	
1000 V Screwdriver crosshead 80 mm PH 1	1	11 7731	
1000 V Screwdriver crosshead 100 mm PH 2	1	11 7732	
1000 V Safety cable stripping knife, straight strong blade, blade length 50 mm	1	12 1042	
<b>2360 g</b>	<b>385/70/290 mm</b>	<b>1</b>	<b>17 0360</b>



Tool and document bag for service technician	1	17 5130	
1000 V telephone pliers with straight jaws 200 mm, DIN ISO 5745	1	10 0216	
1000 V diagonal pliers 160 mm, DIN ISO 5749 B	1	10 0574	
Super 4 wire stripper	1	10 0760	
Voltage tester 100-250 V AC 3.0/60 mm	1	11 1280	
1000 V slot-head screwdriver 3.0 x 0.5 mm 185 mm	1	11 7702	
1000 V slot-head screwdriver 4.0 x 0.8 mm 185 mm	1	11 7704	
1000 V slot-head screwdriver 5.5 x 1.0 mm 220 mm	1	11 7705	
1000 V Screwdriver crosshead 80 mm PH 1	1	11 7731	
1000 V Screwdriver crosshead 100 mm PH 2	1	11 7732	
1000 V Screwdriver crosshead 80 mm PZ 1	1	11 7741	
1000 V Screwdriver crosshead 100 mm PZ 2	1	11 7742	
Cable shears DUOCUT 160 mm, with two-stage cutting area	1	12 0108	
Cable stripping knife with hook-shaped blade, 8 - 28 mm ø	1	12 1010	
<b>3550 g</b>	<b>385/70/290 mm</b>	<b>1</b>	<b>17 0996</b>



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Weight

External dim. L/W/H

PU

Article no.



## Tool, document and laptop bag

The top model of WORK-Line: tool case, briefcase and laptop computer case, all in one!

Completely folding tool bag with zip, 9 tool pockets of different size, 15 different elastic holders for small tools, screwdrivers, writing utensils etc., integrated laptop computer bag suitable for all common laptop computers includes separately removable equipment bag for power supply, mouse etc., large document compartment with zip and varyingly large pockets and holders for writing utensils, business cards etc., bag for mobile phone and additional inner zip bag, small external document bag, rubberised carrying handle, detachable, extremely adjustable carrying strap with shoulder pad.

130 g

400/130/320 mm

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17 5132

## Tool assortment document and laptop bag

Tool, document and laptop bag	1	17 5132	
1000 V telephone pliers 200 mm with straight jaws, DIN ISO 5745	1	10 0216	
1000 V telephone pliers with bent jaws, DIN ISO 5745	1	10 0238	
1000 V diagonal pliers 160 mm, DIN ISO 5749 B	1	10 0574	
Super 4 wire stripper	1	10 0760	
Electronic diagonal pliers 120 mm, oval-round head, diagonal with blade protector	1	10 0802	
Electronics needle nose pliers, bent blade, smooth jaws, tip 2.5 x 1.5, 150 mm	1	10 0816	
Tweezers, 120 mm	1	10 3016	
Voltage tester 100-250 V AC 3.0/60 mm	1	11 1280	
Precision screwdriver, slot-head screwdriver white 2.0 x 0.4 x 60 mm	1	11 1864	
Precision screwdriver, slot-head screwdriver white 2.5 x 0.4 x 75 mm	1	11 1865	
Precision screwdriver, slot-head screwdriver white 4.0 x 0.8 x 150 mm	1	11 1870	
Precision crosshead screwdriver, light blue PH 0 x 60 mm	1	11 1877	
Precision crosshead screwdriver, light blue PH 1 x 80 mm	1	11 1880	
Universal switch cabinet key made of die-cast zinc	1	11 2894	
1000 V slot-head screwdriver 2.5 x 0.4 mm 160 mm	1	11 7701	
1000 V slot-head screwdriver 3.0 x 0.5 mm 185 mm	1	11 7702	
1000 V slot-head screwdriver 4.0 x 0.8 mm 185 mm	1	11 7704	
1000 V slot-head screwdriver 5.5 x 1.0 mm 220 mm	1	11 7705	
1000 V Screwdriver crosshead 80 mm PH 1	1	11 7731	
1000 V Screwdriver crosshead 100 mm PH 2	1	11 7732	
Coaxi cable sheath stripper for cables from 4.8 - 7.5 mm diameter	1	12 0027	
Precision insulation stripper PVS-PLUS, red press button, 0.25 - 0.80 mm ø, AWG 30 - 20	1	12 0033	
Universal shears 190 mm, hardness HRC 56 to 58	1	12 0122	
Telephone shears with serrated blade, bright nickel plated, size 130 mm	1	12 0222	
<b>6700 g</b>	<b>405/490/190 mm</b>	<b>1</b>	<b>17 3310</b>

Weight	External dimensions L/W/H	PU	Article no.
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### Electrician shoulder bag

Professional storage bag with flexible clipping system for holding all types of tools.  
2 removable tool boards, shoulder strap, 2 side pockets, padded carrying handle. Includes two small organiser boxes.

1300 g	200/300/100 mm	1	17 5134
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### Tool bag S

Polyester textile tool bag with EVA foam padding and zip closure. With adjustable shoulder strap with very robust carabiner hook. 3 padded external pockets and 2 carrying handles. A front pocket for small parts and one main compartment with multiple internal pockets and space for large tools. Bottom section in injection moulded plastic for excellent sturdiness and as a protection against moisture.

1300 g	410/300/230 mm	1	17 3136
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NEW

### Tool bag L

Polyester textile tool bag with EVA foam padding and zip closure. With adjustable shoulder strap with very robust carabiner hook. 3 padded external pockets and 2 carrying handles. A front pocket for small parts and one main compartment with multiple internal pockets and space for large tools. Bottom section in injection moulded plastic for excellent sturdiness and as a protection against moisture.

1800 g	515/300/210 mm	1	17 3138
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NEW

### Tool bag-shoulder S

Polyester textile tool bag with zip closure. With adjustable shoulder strap with very robust carabiner hook. Multiple external insert pockets and 2 side pockets. Main compartment with top pocket for documents and with multiple internal pockets for large tools. Bottom section in injection moulded plastic for excellent sturdiness and as a protection against moisture.

1200 g	410/260/230 mm	1	17 3140
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NEW

### Tool bag-shoulder L

Polyester textile tool bag with zip closure. With adjustable shoulder strap with very robust carabiner hook. Multiple external insert pockets and 2 side pockets. Main compartment with top pocket for documents and with multiple internal pockets for large tools. Bottom section in injection moulded plastic for excellent sturdiness and as a protection against moisture.

1400 g	410/320/230 mm	1	17 3142
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NEW

### Tool bag-shoulder Strong

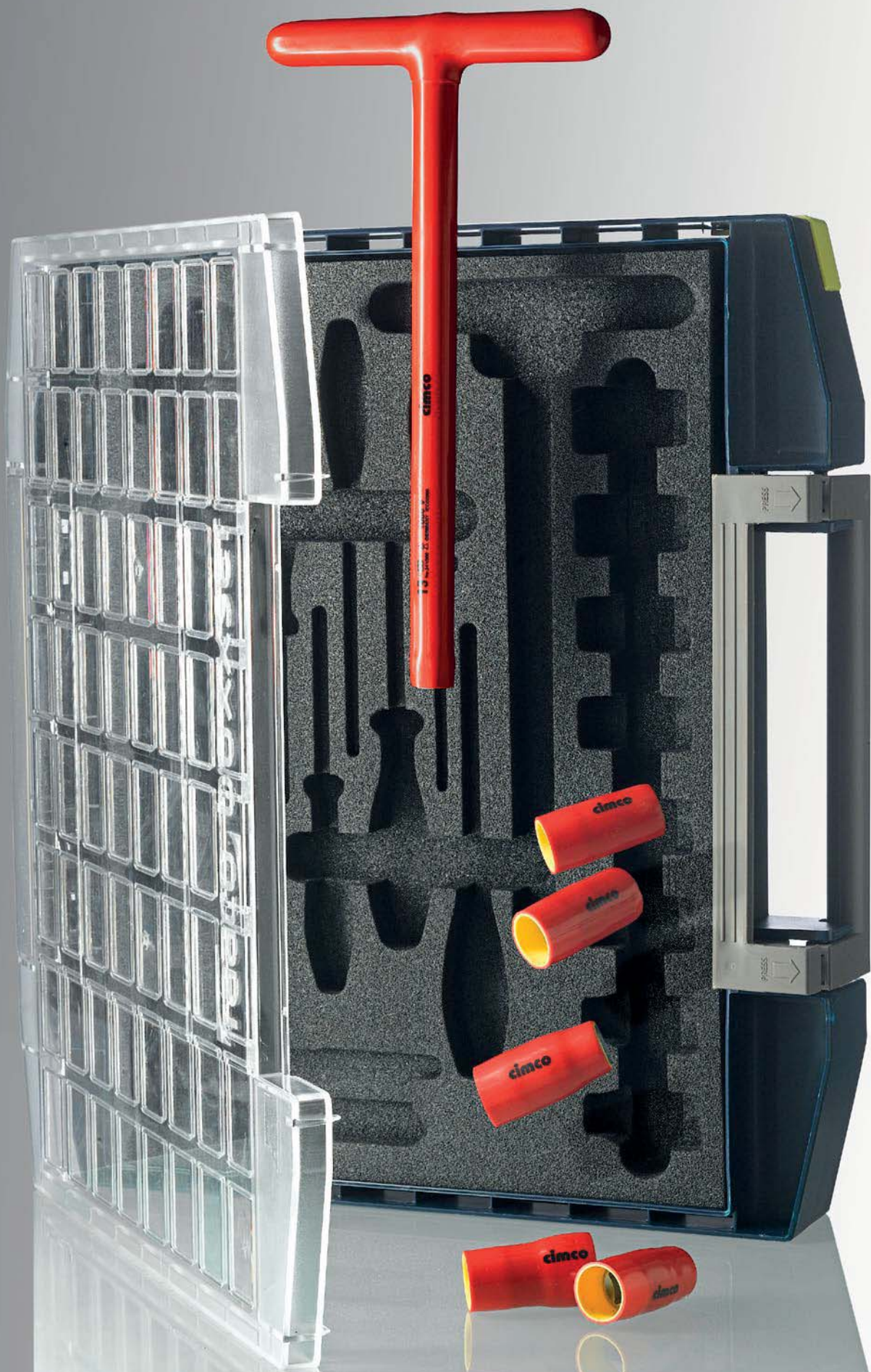
Reinforced polyester textile tool bag with adjustable carrying strap. Side walls in double-walled impact-resistant plastic. Removable tool board with PSS system (two-sided insert rails). Practical polyester cover with hook & loop closure. With 5 integrated sliding bases. Multiple pockets for tools in the outside section.

2700 g	350/250/370 mm	1	17 3144
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NEW





# STORAGE AND TRANSPORT SYSTEMS

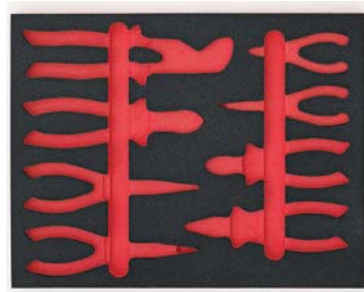
Tools organised according to area of application (screwdrivers, pliers, screwing tools etc.)



All foam inserts are half the size of a drawer for individual arrangement.



Quite simple: [www.cimco.de](http://www.cimco.de) leads you directly to the virtual ITSS configurator. The 2D smartphone scan enables the use of your specific tools. Online calculation and order confirmation ensure reliable cost transparency before production.



Two-colour design provides a quick overview of missing tools. Foam modules can also be ordered individually.



Non-slip grip thanks to high clamping force and precise fit.

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Design	Size L x W x H	PU	Article no.
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**raaco COMPACT**

Transport and storage case made of highly impact-resistant polypropylene, making it lightweight and extremely wear-resistant (no dents and cracks, chemically resistant), can also be used as a step thanks to its extraordinary stability, has removable tool carrier that can hold the variable CARRY-LITE 55/boxxser 55 programme inserts, double bail handle with integrated locking system prevents case from opening unintentionally, 2 side carrying handles (COMPACT 37 upwards)



**COMPACT 20**

With 6 inserts, without dividing walls, without drawers, no option of fitting carrying strap and castors, weight 1.9 kg

	474 x 239 x 190 mm	1	41 7173
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**COMPACT 27**

With 6 inserts, without dividing walls, with 2 drawers, no option of fitting carrying strap and castors, weight 2.6 kg

	474 x 239 x 248 mm	1	41 7180
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**COMPACT 37**

With 7 inserts, 3 dividing walls for individual subdivision of interior, without drawers, with option of fitting carrying strap and castors, weight 3.7 kg

	540 x 296 x 230 mm	1	41 7197
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**COMPACT 47**

With 7 inserts, 3 dividing walls for individual subdivision of interior, with 2 drawers, with option of fitting carrying strap and castors, weight 4.6 kg

	540 x 296 x 292 mm	1	41 7203
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**COMPACT 62**

With 10 inserts, 1 dividing wall for individual subdivision of interior, with 4 drawers, with option of fitting carrying strap and castors, weight 7.1 kg

	621 x 311 x 322 mm	1	41 7227
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**Carrying strap for COMPACT**

For COMPACT models 37, 47 and 62, attach by simply clipping onto special hooks on the case, length continuously adjustable from 0.9 to 1.6 m, weight only 150 g



		1	41 4059
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**Set of castors for COMPACT**

4 swivelling castors, 2 with locking device, for COMPACT models 37, 47 and 62, simple to install by inserting into bottom of case, weight (set) 600 g



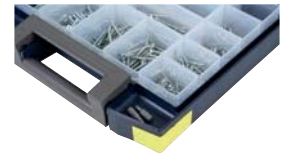
		1	41 3656
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Design	Size L x W x H	PU	Article no.
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### raaco boxxser – Set case

The boxxser series consists of 6 case variants in 2 different heights, made of shock-resistant and unbreakable polycarbonate lid on a polypropylene double-wall construction, profile grid in lid and base secure the case contents during transport, two fixed dividers (next to the handle) provide space for storing small parts or accessories. The integrated profile guides on the base protect and secure the set case when stacked. Handle with integrated locking mechanism prevents the case from coming open when carried.



### raaco boxxser 80

incl. 3 labelling clips (yellow, green, grey)

Type (grid dimensions L x W - inserts)	Dimensions (mm)		
boxxser 80 (5 x 10- 0)	421 x 361 x 78	1	43 4255
boxxser 80 (5 x 10-14)	421 x 361 x 78	1	43 4262
boxxser 80 (5 x 10-20)	421 x 361 x 78	1	43 4279
boxxser 80 (5 x 10-25)	421 x 361 x 78	1	43 4286
boxxser 80 (8 x 8- 0)	465 x 401 x 78	1	43 4224
boxxser 80 (8 x 8-18)	465 x 401 x 78	1	43 4231
boxxser 80 (8 x 8-20)	465 x 401 x 78	1	43 4248



### raaco boxxser 55

incl. 3 labelling clips (yellow, green, grey)

Type (grid dimensions L x W - inserts)	Dimensions (mm)		
boxxser 55 (4 x 4- 0)	241 x 225 x 55	1	43 4385
boxxser 55 (4 x 4- 9)	241 x 225 x 55	1	43 4392
boxxser 55 (4 x 4-11)	241 x 225 x 55	1	43 4408
boxxser 55 (5 x 5- 0)	298 x 284 x 55	1	43 4354
boxxser 55 (5 x 5-13)	298 x 284 x 55	1	43 4361
boxxser 55 (5 x 5-15)	298 x 284 x 55	1	43 4378
boxxser 55 (6 x 6- 0)	354 x 323 x 55	1	43 4323
boxxser 55 (6 x 6-12)	354 x 323 x 55	1	43 4347
boxxser 55 (6 x 6-14)	354 x 323 x 55	1	43 4330
boxxser 55 (5 x 10- 0)	421 x 361 x 55	1	43 4293
boxxser 55 (5 x 10-25)	421 x 361 x 55	1	43 4309
boxxser 55 (5 x 10-45)	421 x 361 x 55	1	43 4316



### HANDYBOX for raaco boxxser

Sturdy, handy transport device that holds up to 4 boxxser 55 4x4 or 5x5 set cases as drawers, carrying handle, transport locking mechanism prevents the set cases from sliding out unintentionally.

Dimensions: 342 x 290 x 247 mm

for boxxser 55, 4 x 4, incl. 4 x 43 4392	1	43 7942
Empty	1	43 7935

Dimensions: 342 x 347 x 305 mm

for boxxser 55, 5 x 5, incl. 4 x 43 4378	1	43 7966
Empty	1	43 7959



### Foam insert for raaco boxxser

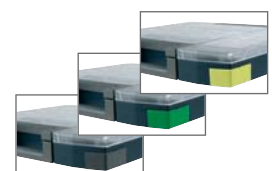
pre-perforated, for simple individual division (20 mm cubes)

	393 x 273 x 20 mm	1	43 4583
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### Labelling clips for raaco boxxser

4x grey	1	43 4453
4x yellow	1	43 4446
4x green	1	43 4460



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Design	Size L x W x H	PU	Article no.
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### CARRY-LITE service case

Lightweight storage and carrying case with a flexible design, interior partitioning can be varied at any time with transparent storage compartments in many different sizes, lower shell of case made of polypropylene, case lid made of clear, transparent polycarbonate, lid with U-profiles for non-slip storage of materials and loose inserts, ergonomic carrying handle, two strong slide locks, stackable, can also be set up on edge.

### CARRY-LITE 150

Service case, height 150 mm, 413 mm long, 330 mm wide. Interior division can only be individually designed using dividing walls, not with inserts.

with 8 dividing walls = 9 individual compartments	1	41 8958
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### CARRY-LITE 80

Service case, height 80 mm, length 413 mm, width 330 mm, grid layout 10 lengthwise x 5 wide

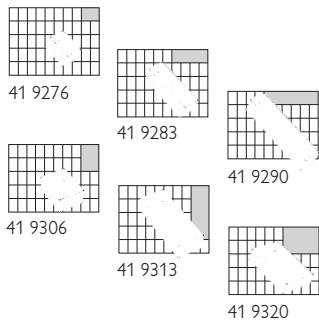
empty, without inserts		1	41 7494
with 15 inserts	5 x 80 BA8-1, 10 x 80 BA7-1	1	41 8774
with 20 inserts	15 x 80 BA8-1, 5 x 80 BA7-1	1	41 8743



### CARRY-LITE 55

Service case, height 55 mm, length 413 mm, width 330 mm, grid layout 10 lengthwise x 5 wide

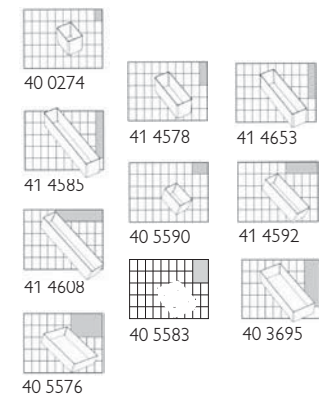
empty, without inserts		1	41 7500
with 25 inserts	25 x 55 A8-1	1	41 9207
with 25 inserts	10 x 55 A9-1, 5 x 55 A7-1, 10 x 55 A8-1	1	41 9191



### Inserts for CARRY-LITE 80 and raaco boxer 80

Height 69 mm

Type	Grid dim. lengthwise	Grid dim. wide	Length mm	Width mm		
80 BA8-1	1	2	55	79	1	41 9276
80 BA8-2	1	4	55	157	1	41 9283
80 BA8-3	1	6	55	235	1	41 9290
80 BA7-1	2	2	109	79	1	41 9306
80 BA7-2	4	2	218	79	1	41 9313
80 BA6-1	2	4	109	157	1	41 9320



### Inserts for CARRY-LITE 55 and raaco boxer 55

Height 47 mm, precise fit also for drawers and tool holders for raaco COMPACT, the PSC vario models and the 250-3 cabinet drawer.

Type	Grid dim. lengthwise	Grid dim. wide	Length mm	Width mm		
55 A9-1	1	1	55	39	1	40 0274
55 A9-2	2	1	109	39	1	41 4578
55 A9-3	3	1	163	39	1	41 4653
55 A9-4	4	1	218	39	1	41 4585
55 A8-1	1	2	55	79	1	40 5590
55 A8-2	1	4	55	157	1	41 4592
55 A8-3	1	6	55	235	1	41 4608
55 A7-1	2	2	109	79	1	40 5583
55 A7-2	4	2	218	79	1	40 3695
55 A6-1	2	4	157	109	1	40 5576

### Safe box for CARRY-LITE

High-quality storage system for CARRY-LITE service cases, made of blue lacquered steel sheet, telescopic runners mounted on ball bearings, lockable, length 451 mm, width 330 mm, height 403 mm, weight (empty) 15 kg. Delivery includes CARRY-LITE service case

Safe box 150 incl. 2 x 41 8958	1 Set	43 4569
Safe box 80 incl. 3 x 41 8774	1 Set	43 3067
Safe box 55 incl. 2 x 41 9207 and 2 x 41 9191	1 Set	43 4576





Design	Size L x W x H	PU	Article no.
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## Transporter box for CARRY-LITE

Made of durable plastic, for holding up to 3 CARRY-LITE 80 or 4 CARRY-LITE 55, with 2 or 3 insertable intermediate bottoms, incl. shoulder strap, weight (empty) 2910 g

incl. 2 x 41 8774 and 1 x 41 8743	562 x 361 x 250 mm	1 Set	40 4883
incl. 2 x 41 9207 and 2 x 41 9191	562 x 361 x 250 mm	1 Set	40 8188



## PSC set cases

Inexpensive transport and storage case for small parts, with fixed or variable interior dividers or without any interior dividers, made of hard-wearing polypropylene, strong slide locks with ratcheting, stackable, can also be set up on edge

### PSC fix

Set cases with fixed interior division.

Type	Small cmpt.	Weight (kg)	Dimensions (mm)		
fix-9	9	0.30	240 x 195 x 43	1	41 5384
fix-12	12	0.14	175 x 145 x 32	1	41 2857
fix-15	15	0.73	338 x 260 x 57	1	41 5407
fix-18	18	0.34	240 x 195 x 43	1	40 9963
fix-32	32	0.82	338 x 260 x 57	1	41 5414



### PSC vario

Set cases with variable inner compartment through the use of inserts of the CARRY-LITE 55 series (grid layout: 8 lengthwise x 4 wide / PSC vario 240: 4 lengthwise x 4 wide), case lid with U-profiles for non-slip storage of materials and loose inserts. With ergonomic carrying handle (not PSC vario 240).

Type	Small cmpt.	Weight (kg)	Dimensions (mm)		
vario 240	none (empty)	0.25	241 x 195 x 56	1	41 1898
vario 340	none (empty)	0.59	338 x 261 x 57	1	41 2970
vario 15	15	0.90	338 x 261 x 57	1	41 2987
vario 17	17	0.89	338 x 261 x 57	1	40 8423



### PSC vario XL

Set cases with variable interior division for CARRY-LITE 80 series inserts

Type	Small cmpt.	Weight (kg)	Dimensions (mm)		
vario XL	none (empty)	0.60	338 x 261 x 78	1	43 0899



## HANDYBOX for PSC set cases

Sturdy, handy transport device for holding up to 4 PSC set cases 57 mm high and 338 mm long as drawers, carrying handle, transport safeguard against the PSC set cases sliding out unintentionally, connection fittings for non-slip mounting of several boxes next to each other, also suitable for wall mounting. Weight (empty): 1.81 kg, dimensions: 376 x 265 x 310 mm

incl. 2 x 41 2987 and 2 x 40 8423	1 Set	41 2004
Empty	1	40 1943



## SUPERCLIPS workshop system

Comprehensive system of different hooks, holders and mounting brackets for storing tools, components, electrical devices and accessories in the workshop. Clips can be easily installed and relocated at any time by simply inserting them in the special perforated panel in order to meet individual needs.







Can also be ideally combined with raaco storage bins and the TRD tool rack. High-quality material for continuous use in a professional environment.

### SUPERCLIP 1

Straight universal hook with angular holding end, e.g. for screwdrivers

Type					
1-30	Pack of 5	47 x 27 x 60 mm	1	41 0709	
1-60	Pack of 5	79 x 27 x 60 mm	1	41 0716	



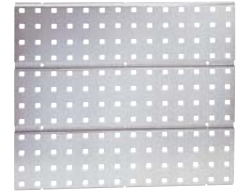
	Design	Size L x W x H	PU	Article no.
1				
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3	<b>SUPERCLIP 2</b> Double-hook holder with angular holding ends, hook length 60 mm, e.g. for files			
	Type			
	2-60	Pack of 3	79 x 27 x 60 mm	1 41 0747
4				
5	<b>SUPERCLIP 3</b> Straight universal hook with upright holding end, e.g. for ring spanners			
	Type			
	3-75	Pack of 5	93 x 27 x 60 mm	1 41 0778
6				
7	<b>SUPERCLIP 4</b> Double-hook holder with vertical holding ends, hook length 50 mm, e.g. for hammers			
	Type			
	4-50	Pack of 3	79 x 50 x 60 mm	1 41 0792
8				
9	<b>SUPERCLIP 5</b> Eye hook holder, e.g. for pliers			
	Type			
	5-17	Pack of 3	53 x 45 x 60, eye 45 x 17 mm	1 41 0808
	5-20	Pack of 3	61 x 62 x 60, eye 62 x 20 mm	1 41 0815
10				
11	<b>SUPERCLIP 6</b> Rounded spring clip, open at front, e.g. for screwdrivers			
	Type			
	6-12	Pack of 6	37 x 27 x 60, ø 12 mm	1 41 0631
	6-18	Pack of 6	46 x 27 x 60, ø 18 mm	1 41 0648
	6-24	Pack of 6	56 x 33 x 60, ø 24 mm	1 41 0655
12				
13	<b>SUPERCLIP 9</b> Universal storage box, e.g. for small parts of all kinds			
	Type			
	9		108 x 83 x 58 mm	1 40 4562
14				
15	<b>SUPERCLIP 10</b> Rounded holder, e.g. for drilling machines, cordless screwdrivers, heat guns, cable coils, etc			
	Type			
	10	Pack of 4	93 x 27 x 60 mm	1 40 8928
16				
17	<b>SUPERCLIP 11</b> Spanner holder, for up to 8 spanners of different sizes			
	Type			
	11		145 x 237 x 45 mm	1 41 4165
18				
19	<b>SUPERCLIP 12</b> Drill holder, for 22 twist drills from 1 mm to 13 mm diameter			
	Type			
	12		94 x 77 x 65 mm	1 41 4172
20				
21	<b>raaco FIX</b> Patented tool holding system, suitable for holding tools of all kinds, e.g. screwdrivers, pliers, files, tweezers, shears, spanners, measuring tools, etc.			
	SMALL		242 x 38 x 100 mm	1 42 5833
	LARGE		242 x 38 x 140 mm	1 42 5840
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Design	Size L x W x H	PU	Article no.	
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### Perforated panels for SUPERCLIPS

Made of strong, galvanised steel sheet, for holding all raaco SUPERCLIPS, for mounting on the wall (fixing with dowels/screws) or on the TRD tool rack

	520 x 440 x 11 mm	1	41 8347	
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### TRD tool rack for SUPERCLIPS

Strong stand made of steel sheet for holding up to 6 perforated panels (CIMCO article no. 41 8347) for SUPERCLIPS or up to 6 slotted wall panels for raaco storage bins (CIMCO article no. 41 8330), delivery incl. 6 perforated panels (CIMCO article no. 41 8347), without clips, handles and castors, weight 23.5 kg

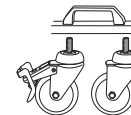
TRD	570 x 570 x 1600 mm	1	40 9666	
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### Castor and handle set for TRD tool rack

4 rubber rollers, 2 with brakes, and 2 screw-on handles turn the tool rack into a portable tool board, ideal for workshops and in manufacturing, weight of the set 1.8 kg

		1	41 2369	
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### raaco Storage cabinets

For free-standing installation, wall mounting (suspension holes for screws) and mounting on turntables for storage cabinets (see pages 50+51), cabinet frame made from dark blue lacquered steel sheet, drawers made from wear-resistant, transparent polypropylene, with stop rim to prevent drawers from sliding out unintentionally, possibility to subdivide into small compartments with additional dividing walls, front surface for the attachment of labels

### Storage cabinet series 150

Cabinet depth 150 mm, height 552 mm, width 306 mm, maximum load 40 kg

CABINET 60-00

fitted with 60 drawers type 150-0, weight 5.12 kg

		1	40 8065	
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CABINET 48-01

fitted with 48 drawers type 150-1, weight 5.11 kg

		1	40 7341	
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CABINET 24-02

fitted with 24 drawers type 150-2, weight 4.58 kg

		1	40 7303	
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CABINET 08-03

fitted with 8 drawers type 150-3, weight 4.19 kg

		1	40 7297	
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Design	Size L x W x H	PU	Article no.
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### Storage cabinet series 150

Cabinet depth 150 mm, height 552 mm, width 306 mm, maximum load 40 kg

CABINET 16-04

fitted with 16 drawers type 150-4, weight 4.29 kg

1	40 9215
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CABINET 40-123

fitted with 36 drawers type 150-1, 3 drawers type 150-2, 1 drawer type 150-3, weight 4.93 kg

1	40 7242
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### Drawers for cabinet series 150

150-0	150 x 55 x 41 mm	1	40 8980
150-1	150 x 67 x 41 mm	1	40 4692
150-2	150 x 91 x 64 mm	1	40 4715
150-3	150 x 279 x 64 mm	1	40 4708
150-4	150 x 139 x 64 mm	1	40 9178

### Drawer dividers for cabinet series 150

for 150-0	31 x 52 x 2 mm	1	40 1981
for 150-1	31 x 64 x 2 mm	1	40 1998
for 150-2	50 x 87 x 2 mm	1	40 2032
for 150-3 /-4	50 x 134 x 2 mm	1	40 2049

### Drawer labels for cabinet series 150

White, interchangeable, individually inscribable, coated with dirt-repellent, wear-resistant plastic

for 150-0	10 x 52 x 1 mm	1	40 9024
for 150-1	10 x 64 x 1 mm	1	40 7761
for 150-2	18 x 87 x 1 mm	1	40 7778
for 150-3	18 x 275 x 1 mm	1	40 7785
for 150-4	18 x 135 x 1 mm	1	40 9017

### Turntable for storage cabinet series 150

For holding up to 12 series 150 cabinets, maximum load-bearing capacity 480 kg, can be turned on maintenance-free roller bearings, weight without cabinets 12.5 kg, delivery without storage cabinets

1760 x 680 x 680 mm	1	40 3732
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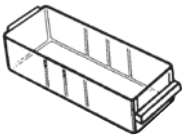
### Storage cabinet series 250

Cabinet depth 250 mm, height 435 mm, width 357 mm, maximum load 40 kg

CABINET 24-1

fitted with 24 drawers type 250-1, weight 6.9 kg

1	40 9048
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Design	Size L x W x H	PU	Article no.
CABINET 8-2 fitted with 8 drawers type 250-2, weight 6.0 kg		1	40 8560

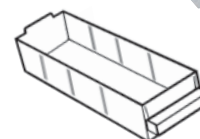


CABINET 6-3 fitted with 6 drawers type 250-3, weight 7.2 kg		1	40 8577
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### Drawers for cabinet series 250

250-1	58 x 80 x 250 mm	1	40 7273
250-2	92 x 159 x 250 mm	1	40 7259
250-3	57 x 320 x 250 mm	1	40 3114



### Drawer dividers for cabinet series 250

for 250-1	Pack of 36	46 x 75 x 3 mm	1	40 6757
for 250-2	Pack of 36	80 x 154 x 3 mm	1	40 6764



### Drawer labels for cabinet series 250

White, interchangeable, self-adhesive, individually inscribable, coated with dirt-repellent, wear-resistant plastic

for 250-1	Pack of 24	15 x 75 x 1 mm	1	40 7792
for 250-2	Pack of 8	32 x 155 x 1 mm	1	40 7815
for 250-3	Pack of 8	15 x 315 x 1 mm	1	40 7822



### Turntable for storage cabinet series 250

For holding up to 12 series 250 cabinets, maximum load-bearing capacity 600 kg, can be turned on maintenance-free roller bearings, weight without cabinets 22.3 kg, delivery without storage cabinets

	1600 x 880 x 880 mm	1	40 2582
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### raaco Storage bins

Open storage bins made of impact-resistant polypropylene, for free-standing installation, stacking, attaching to wall panels and mounting on turntable (not bin 5), with conveniently shaped handle and front surface for attaching labels

Bin	Load (kg)	Height x Width x Depth	PU	Article no.
Bin 1	5	50 x 125 x 133 mm	1	43 6631
Bin 2	5	75 x 125 x 173 mm	1	40 3404
Bin 3	5	101 x 125 x 228 mm	1	41 8354
Bin 4	10	126 x 125 x 300 mm	1	41 6398
Bin 5	15	200 x 256 x 365 mm	1	43 6679



### Wall panels for raaco storage bins

Panels made of galvanised steel sheet for holding raaco TRD tool rack for SUPERCLIPS (CIMCO article no. 40 9666, see page 49), with 4 vertical rows, each with 12 slots = 48 slots for bins, weight 1.475 kg

	520 x 440 x 11 mm	1	41 8330
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Design	Size L x W x H	PU	Article no.
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### Turntable for **raaco** storage bins

Rotating workshop and storage stand for holding up to 148 storage bins (depending on the sizes of the selected bins). With 6 vertical rows x 48 slots = 288 slots for bins. Ideal configuration e.g.

48x bin 1, 32x bin 2 and 24x bin 3 (= 104 bins)

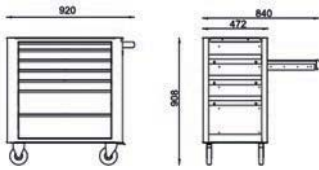
48x bin 1, 64x bin 2 (= 112 bins)

32x bin 2, 24x bin 3 and 16x bin 4 (= 72 bins)

48x bin 4

Fast access to all bins due to rotating capability of the tower, thanks to highly resilient roller bearings, maximum load 450kg, weight 27 kg

	Load (kg)	Height x Width x Depth		
Tower empty	450	1600 x 655 x 655 mm	1	40 2780



### Workshop trolley, empty

- Extremely robust and strong
- Simple, convenient handling
- Rounded contours and manufactured according to national safety standards
- A ribbed rubber mat protects the top level
- 100% pull-out drawers, mounted on telescopic runners and lined with oil-resistant rubber mats
- With central locking
- 8 side compartments for storing tools and auxiliary equipment, 6 of which are movable
- Two fixed and two movable oil-resistant rubber wheels ø 125 mm (one of which with locking brake)
- Surface coating: powder coating RAL 3020
- Fitted with 7 drawers (interior dimensions: 640 x 417 mm)
  - 1 drawer: 665 x 445 x 50 mm
  - 4 drawers: 665 x 445 x 70 mm
  - 2 drawers: 665 x 445 x 168 mm
- Maximum load per drawer: 30 kg
- Total carrying weight maximum 280 kg
- Dead weight: 74 kg



Trolley empty		1	17 7500
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### Workshop trolley, including tools

All tools in customised foam inserts for a structured, secure storage of your tools:

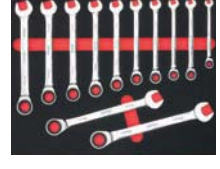
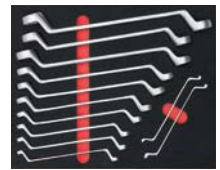
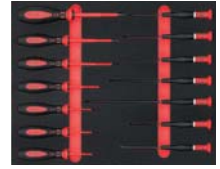
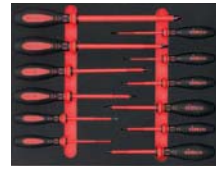
- Ten preconfigured ITSS foam inserts including tools
- Tools organised according to area of application (screwdrivers, pliers, screwing tools etc.)
- All foam inserts are half the size of a drawer for individual arrangement
- Non-slip retention thanks to high clamping force and precise fit
- Two-colour design enables a quick overview of missing tools
- Foam modules can also be ordered individually

Trolley equipped		1	17 7502
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Configure your own individual foam insert! Very easy, with the ITSS foam configurator at [www.cimco.de](http://www.cimco.de).

Design	Size L x W x H	PU	Article no.	
<b>Hard foam inserts</b>				
<b>Screwdrivers</b>				
equipped with 12 diamond Drei-Ve screwdrivers, CIMCO article no. 11 7701, 11 7702, 11 7703, 11 7704, 11 7705, 11 7706, 11 7708, 11 7710, 11 7741, 11 7742, 11 7751, 11 7752				
		1	17 7510	
<b>Screwdrivers/electronic</b>				
equipped with 14 diamond Drei-Ve TORX® and electronic screwdrivers CIMCO article no. 11 7908, 11 7909, 11 7910, 11 7915, 11 7920, 11 7925, 11 7930, 11 1864, 11 1865, 11 1866, 11 1868, 11 1870, 11 1877, 11 1880				
		1	17 7512	
<b>Ring spanners</b>				
equipped with 12 ring spanners CIMCO article no. 11 2330, 11 2332, 11 2334, 11 2338, 11 2344, 11 2348, 11 2352, 11 2356, 11 2358, 11 2362, 11 2364, 11 2368				
		1	17 7516	
<b>Measuring and screwing tools</b>				
equipped with 9 measuring and screwing tools CIMCO article no. 11 0596, 11 0598, 11 0604, 11 0290, 11 0294, 11 0120, 21 1442, 21 0065, 11 1282				
		1	17 7508	
<b>Crimping tools</b>				
equipped with 5 crimping pliers for wire end ferrules CIMCO article no. 10 4190, 10 4192, 10 4194, 10 4200, 10 4202				
		1	17 7520	
<b>Pliers</b>				
equipped with 8 diamond-Plus pliers CIMCO article no. 10 0574, 10 0216, 10 0336, 10 1224, 10 0816, 10 0528, 10 0238, 10 0802				
		1	17 7504	
<b>Striking tools</b>				
equipped with 6 striking tools CIMCO article no. 13 0582, 13 1053, 13 0354, 13 0358, 13 0022, 13 0210				
		1	17 7506	
<b>Open-ended-ring spanners</b>				
equipped with 12 ratchet ring- and open-end spanners CIMCO article no. 11 2508, 11 2509, 11 2510, 11 2511, 11 2512, 11 2513, 11 2514, 11 2515, 11 2516, 11 2517, 11 2518, 11 2519				
		1	17 7518	
<b>Stripping tools</b>				
equipped with 9 tools CIMCO article no. 12 0028, 12 0023, 12 1027, 10 0686, 12 0030, 12 0515, 12 0081, 20 8500, 14 0205				
		1	17 7514	
<b>Foam empty</b>				
Configured foam with a large recess for storing small parts, sets, etc.				
		1	09 7618	



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# PLIERS

## Unrivalled cutting performance

Blades closing exactly. Favourable transmission ratio for low expenditure of force when cutting. Induction hardened precision blades (approx. 64 HRC) for all wires, even piano wire.



## Smooth opening and closing

Virtually clearance-free joint for smooth and uniform opening and closing over the entire operating range.



## Optimised lever ratios

Ease of operation and handy handle design, which enable energy-saving and ergonomic working for the hand.



**Diamant**  
PLUS

The range of pliers that is exclusively „Made in Germany“ undergoes a series of unrivalled future-oriented, robot-supported production processes.

**10**  
JAHRE GARANTIE **10-Jahre-Haltbarkeitsgarantie**

**WAS DIESE GARANTIE BEDEUTET:**  
 Die 10-Jahre-Haltbarkeitsgarantie ist eine Garantie für die Lebensdauer der Werkzeuge. Sie ist an die Einhaltung bestimmter Nutzungsbedingungen gebunden. Die Garantie ist nicht übertragbar und kann durch Missbrauch, Verschleiß oder falsche Anwendung erloschen. Für weitere Details siehe die vollständigen Garantiebedingungen.

**WAS DIESE GARANTIE NICHT BEDEUTET:**  
 Die Garantie deckt nicht die Reparatur von Verschleißteilen ab, die durch normale Nutzung entstehen. Sie ist keine Versicherung gegen Diebstahl oder Beschädigung durch Dritte. Die Garantie ist an die Registrierung des Produkts bei CIMCO gebunden.

**WICHTIGE BEDINGUNGEN:**  
 Die Garantie ist nur für Produkte gültig, die von CIMCO hergestellt wurden. Sie ist an die Einhaltung der in der Bedienungsanleitung enthaltenen Anweisungen gebunden. Die Garantie ist nicht übertragbar und kann durch Missbrauch, Verschleiß oder falsche Anwendung erloschen.

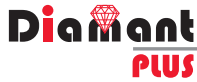
**WAS SIE BEI EINER REKLAMATION ERWARTEN KÖNNEN:**  
 Bei Nachweis eines Defekts werden wir Sie mit einem Ersatzprodukt oder einer Reparatur versehen. Die Ersatzlieferung erfolgt innerhalb von 14 Tagen nach Eingang der Reklamation. Die Reparatur wird kostenlos durchgeführt.

**WIE SIE DIE GARANTIE ANFORDERN:**  
 Bitte wenden Sie sich an Ihren lokalen CIMCO-Vertriebspartner oder direkt an CIMCO. Bitte bereiten Sie das Produkt und die Kaufbelege für die Reklamation vor.

## 10 year durability guarantee

on all Diamant-Plus pliers. If defects in the material or processing can be proven, we will provide you with a replacement free of charge! Please ask for the exact guarantee terms at your local CIMCO dealer or from CIMCO directly.

	Design	Size mm	PU	Article no.
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### - Safety pliers with 1000 V protective insulation

Optimised lever ratios, ease of operation and user-friendly grip design that permit energy-saving and ergonomic working for the hand, manufactured using the most suitable high alloy tool steels, hardened completely in oil, all blades are additionally induction hardened, surfaces are polished to a high-sheen and are meticulously chrome-plated.

#### Description of the symbols

	Energised work		with cutting bevel		Flat nose pliers		Wire type soft		Wire type Piano
	VDE/GS tested		With slight cutting bevel		Flat-round pliers		Wire type medium-hard		Wire type rope
	Cutting hardness in HRC		Single joint		Round nose pliers		Wire type hard		Wire type Cu-cable
	Ridged gripping surfaces		Lap joint						
	Gripping surfaces ridged at an angle		Box joint						

- Set the adjusting screw to the desired conductor cross section to be stripped by turning it (left / right).
- Secure the adjusting screw using the counter nut.
- Insert the cable.
- Close the pliers by exerting pressure and strip off the plastic sheathing.



#### 1000 V protective insulation according to VDE

Pliers of the Diamant-Plus series conform to the current standards of IEC 900, IEC 60900 and VDE 0682/Part 201 (excluding engineers pliers). These strict safety directives prescribe 10 different quality checks for the insulation protection of all pliers. Besides the type examination, the independent testing body of the VDE also regularly carries out inspections of the production and the storage. Each individual set of pliers is tested in a water bath for disruptive discharges and flashovers at a testing voltage of 10,000 Volt AC. As a result, we guarantee that safety has been tested on all pieces.



The range of pliers that is exclusively „Made in Germany“ undergoes a series of unrivalled future-oriented, robot-supported production processes. The work sequences are implemented with the aid of robots, from forging to grinding and polishing, right through to the dielectric strength testing of the insulating material coating in order to ensure a consistent standard of quality. Ergonomic design handle sleeves in a modern 2-component design made of premium plastic with excellent properties. Superb grip thanks to non-slip, non-adhesive surface when dealing with wet conditions and dirt. Excellent skin-tolerance, insulation during extreme temperatures, electrical shocks and vibrations. Resistance against perspiration, salt water, oil, many chemicals and UV radiation.

#### Heavy duty diagonal pliers

according to DIN ISO 5749 A, lap joint, with induction hardened precision blade (approx. 64 HRC), for all wires, also for piano wire, made of electric steel



	145 (5.5")	1	10 0524
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#### 1000 V Heavy duty diagonal pliers



	160 (6")	1	10 0526
	200 (8")	1	10 0528



#### Diagonal pliers

according to DIN ISO 5749 B, single joint with induction hardened precision blade (approx. 64 HRC), for all wires, also for piano wire, made from electric steel



	130 (5")	1	10 0570
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#### 1000 V diagonal pliers



	145 (5,5")	1	10 0572
	160 (6")	1	10 0574
	180 (7")	1	10 0577



Design	Size mm	PU	Article no.
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### 1000 V stripping diagonal pliers

Single joint, with induction hardened precision blade (approx. 64 HRC) for hard, medium hard and soft wire, in addition with two stripping functions for solid and stranded conductors 1.5 mm<sup>2</sup> and 2.5 mm<sup>2</sup>



	160 (6")	1	10 0652
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### Diagonal sealing pliers

Single joint with induction hardened precision blades (approx. 64 HRC), for all wires, also for piano wire, made from electric steel, with 8 mm ø punches



	160 (6")	1	10 0030
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loose punch 8 mm ø 1 10 1732

### 1000 V heavy duty end cutter

according to DIN ISO 5748, lap joint, with induction hardened precision blades (approx. 64 HRC), for all wires, also including piano wire, made from electric steel



	200 (8")	1	10 0402
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### 1000 V combination pliers

according to DIN ISO 5746, single joint, with induction hardened precision blades (approx. 64 HRC), for all wires, also including piano wire, made from special tool steel, with slightly conical, ridged gripping surfaces and ridged opening (burner hole)



	160 (6")	1	10 0334
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	180 (7")	1	10 0336
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	200 (8")	1	10 0338
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### 1000 V wire stripper

Single joint, with adjusting screw for setting the desired wire- or stranded wire diameter, for solid and stranded conductors up to 5 mm ø or 0.75 mm<sup>2</sup> to 6 mm<sup>2</sup>, with internal opening spring



	160 (6")	1	10 0686
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### 1000 V telephone pliers with straight jaws

according to DIN ISO 5745, single joint, with induction hardened precision blades (approx. 60 HRC), long, flat-round jaws (needle nose pliers), ridged gripping surfaces and ridged opening (burner hole), with blades for hard and soft wire



	145 (5,5")	1	10 0212
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	160 (6")	1	10 0214
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	200 (8")	1	10 0216
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### 1000 V telephone pliers with bent jaws

according to DIN ISO 5745, single joint, 45° angled jaws, with induction hardened precision blades (approx. 60 HRC), long, flat-round jaws (needle nose pliers), ridged gripping surfaces and ridged opening (burner hole), with blades for hard and soft wire



	160 (6")	1	10 0236
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	200 (8")	1	10 0238
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### 1000 V flat nose pliers (long flat nose pliers)

according to DIN ISO 5745, single joint, long, flat jaws, jaw length 50 mm, ridged gripping surfaces



	160 (6")	1	10 0024
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Design	Size mm	PU	Article no.
<b>1000 V round nose pliers (long flat nose pliers)</b>			
according to DIN ISO 5745, single joint, long, round jaws, jaw length 50 mm, finely ridged gripping surfaces			
	160 (6")	1	10 0062



**Engineering pliers**

without VDE-tested 1000 Volt protective insulation,  
with precision box joint for clearance-free, particularly durable guidance, jaw length 75 mm,  
gripping surfaces with fine angled cut



straight, flat-round jaws	190 (7.5")	1	10 0082
flat-round jaws, 45° angled	190 (7.5")	1	10 0086



straight, flat-wide jaws	190 (7.5")	1	10 0090
flat-wide jaws, 45° angled	190 (7.5")	1	10 0094



**Water pump pliers**

according to DIN ISO 8976, with box joint, self-clamping on the workpiece,  
with ridged opening (burner hole), made from chrome-vanadium steel



without handle sleeves	250 (10")	1	10 1222
with handle sleeves	250 (10")	1	10 1224

**1000 V pliers set, 4-piece**

Heavy duty diagonal pliers	200 (8")		10 0528
Telephone pliers with straight jaws	200 (8")		10 0216
Combination pliers	180 (7")		10 0336
Wire stripper	160 (6")		10 0686



		1	10 4020
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**Pliers set, 3-piece**

Water pump pliers	250 (10")		10 1224
Telephone pliers with bent jaws	200 (8")		10 0238
Diagonal pliers	160 (6")		10 0574

		1	10 4022
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**1000 V diagonal pliers Diamant**

according to DIN ISO 5749

**Cutting performance:** A special blade geometry, optimised hand power transmission and most suitable material quality ensure astonishingly low cutting forces on all types of cables and conductors.

**Surface coating:** Thanks to new technological possibilities, the diagonal pliers are given a double primer coat as well as a more refined surface coating that ensures a high level of wear resistance and improved corrosion protection.

**Handle sleeves:** Ergonomically designed handle sleeves in a modern two-component design made of premium plastic with excellent tactile properties, VDE-certified insulation protection up to 1000 Volt AC according to DIN EN 60900:2004.

	160	1	10 0000
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**Screw pliers**

The patented 2-component screw pliers that have been awarded the Design Prize is the ideal problem solver for embedded, dirty or corrosion-damaged screws. The special head shape of the pliers securely surrounds the screw head, thus loosening the screws which can no longer be removed with conventional tools. Single joint with arched, vertically ridged gripping surfaces, for all self-tapping or metric screws from M1 – M3

	130	1	10 0350
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Single joint, with induction hardened precision blade (approx. 58 HRC), for hard, medium-hard and soft wire. Arched, horizontally and vertically ridged gripping surfaces, for all self-tapping or metric screws from M2 - M6

	160	1	10 0352
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Image video  
problems solvers



Design	Size mm	PU	Article no.
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The range of pliers that is exclusively „Made in Germany“ undergoes a series of unrivalled future-oriented, robot-supported production processes. The work sequences are carried out with the aid of robots, from forging to grinding and polishing, right through to the dielectric strength testing of the insulation material coating, in order to ensure a consistent standard of quality. Handles with two-colour plastic dip insulation for optimum safety. In the event of damage to the outer red insulation layer, the lower orange plastic insulation that is now visible indicates that 100 % safety in accordance with the safety standards can no longer be guaranteed.

**Diamant**  
**PLUS**

### 1000 V heavy duty diagonal pliers

according to DIN ISO 5749 A, lap joint,  
with induction hardened precision blade  
(approx. 64 HRC), for all types of wire, also including piano wire, made of electric steel



	160 (6")	1	10 8789
	200 (8")	1	10 8784



### 1000 V diagonal pliers

according to DIN ISO 5749 B, single joint  
with induction hardened precision blade  
(approx. 64 HRC), for all types of wire, including piano wire, made from electric steel



	145 (5.5")	1	10 8785
	160 (6")	1	10 8786
	180 (7")	1	10 8787



	250 (10")	1	10 8788
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### 1000 V stripping diagonal pliers

Single joint, with induction hardened  
precision blade (approx. 64 HRC) for hard,  
medium-hard and soft wire, in addition with two stripping functions for solid and stranded conductors  
1.5 mm<sup>2</sup> and 2.5 mm<sup>2</sup>



	160 (6")	1	10 8792
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### 1000 V heavy duty end cutter

according to DIN ISO 5748, lap joint,  
with induction hardened precision blade  
(approx. 64 HRC), for all types of wire, also including piano wire, made of electric steel



	200 (8")	1	10 8795
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### 1000 V flat nose pliers (long flat nose pliers)

according to DIN ISO 5745, single joint,  
Long, flat jaws, jaw length 50 mm, ridged gripping surfaces



	160 (6")	1	10 8771
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### 1000 V round nose pliers (long flat nose pliers)

according to DIN ISO 5745, single joint,  
Long, round jaws, jaw length 50 mm, finely ridged gripping surfaces



	160 (6")	1	10 8773
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### 1000 V telephone pliers with straight jaws

according to DIN ISO 5745, single joint,  
with induction hardened precision blade  
(approx. 60 HRC), long, flat-round jaws (needle nose pliers), ridged gripping surfaces and ridged opening  
(burner hole), with blades for hard and soft wire



	160 (6")	1	10 8779
	200 (8")	1	10 8778





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Design	Size mm	PU	Article no.
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### 1000 V telephone pliers with bent jaws

according to DIN ISO 5745, single joint, jaws at a 45° angle, with induction hardened precision blade (approx. 60 HRC), long, flat-round jaws (needle nose pliers), ridged gripping surfaces and ridged opening (burner hole), with blades for hard and soft wire



160 (6")	1	10 8777
200 (8")	1	10 8780



### 1000 V combination pliers

according to DIN ISO 5746, single joint, with induction hardened precision blade (approx. 64 HRC), for all wires, also including piano wire, made from special tool steel with slightly conical, ridged gripping surfaces and ridged opening (burner hole)



160 (6")	1	10 8781
180 (7")	1	10 8782
200 (8")	1	10 8783



### 1000 V Water pump pliers

according to DIN ISO 8976, with box joint, self-clamping on the workpiece, with ridged opening (burner hole), made from chrome-vanadium steel



250 (10")	1	10 8724
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### 1000 V wire stripper

Single joint, with adjusting screw for setting to the desired wire- or strand diameter, for solid and stranded conductors up to 5 mm ø or 0.75 mm<sup>2</sup> to 6 mm<sup>2</sup>, with internal opening spring



160 (6")	1	10 8790
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### 1000 V Safety pliers set, 4-piece

Double dip-coated handles

Telephone pliers, straight	200 (8")	10 8778
Combination pliers	180 (7")	10 8782
Heavy duty diagonal pliers	200 (8")	10 8784
Wire stripper	160 (6")	10 8790
	1	10 8002



### 1000 V plastic telephone pliers

made of impact-resistant, fibre-glass reinforced plastic with 2-component handles, ridged gripping surfaces and narrow tips, robust design, can be used at temperatures as low as -40 °C

180	1	10 0790
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### 1000 V plastic grip pliers

made of impact-resistant, glass fibre reinforced plastic with 2-component handles, gripping zone with 8 openings for different cable diameters, without blades, robust design, can be used at temperatures as low as -40 °C

180	1	10 0792
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### 1000 V Plastic combination pliers

made of impact-resistant, fibre-glass reinforced plastic with 2-component handles, with blade inserts made of special steel, extra-long blades for flexible conductors with diameters of up to 12 mm as well as medium-hard wire, gripping zone with 3 openings for different cable diameters, robust design, can be used at temperatures as low as -40 °C

190	1	10 0794
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### 1000 V plastic cable cutter

made of impact-resistant, fibre-glass reinforced plastic with 2-component handles, with blade inserts made of special steel, for flexible Al and Cu conductors with diameters of up to 15 mm, excellent cutting performance, robust design, can be used at temperatures as low as -40 °C




170	1	12 0790
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Design		Size mm	PU	Article no.	
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## Precision electronic pliers with box joint, drop-forged design

High-precision design made of special steel, easily self-opening thanks to double leaf springs, excellent durability, finely ground surfaces with ergonomically-designed 2-component handle sleeves (in ESD or 1000 V design on request)

### Electronic diagonal pliers

Oval-round head, diagonal, with side face		120	1	10 0802	
Oval-round head, diagonal, without side face		120	1	10 0804	
Pointed head, flat, with side face		120	1	10 0806	
Pointed head, flat, without side face		120	1	10 0808	

### Electronic end cutter

with wide blade and side face		120	1	10 0810	
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### Electronic diagonal end cutter with stripping function




ø 1.0 mm = 0.8 mm<sup>2</sup>

with wide blade, without side face, angle 37°		120	1	10 0824	
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### Electronic diagonal end cutter

Short blade, without side face, angle 30°		120	1	10 0826	
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### Electronic needle nose pliers with blade

Straight shape, tip 2.5 x 1.5 mm		130	1	10 0812	
Straight shape, tip 2.5 x 1.5 mm		150	1	10 0814	
Bent shape, tip 2.5 x 1.5 mm		150	1	10 0816	

### Electronic flat nose pliers

Smooth wide jaws 2.0 x 3.5 mm		130	1	10 0818	
Smooth narrow jaws 2.0 x 1.0 mm		130	1	10 0820	

### Electronic round nose pliers

Short shape, smooth jaws

Tip 1.5 mm ø		130	1	10 0822	
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### Electronic pliers set, 3-piece

Diagonal pliers		120		10 0802	
Needle nose pliers		150		10 0816	
Flat nose pliers		130		10 0818	
			1	10 4032	



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	Design	Size mm	PU	Article no.
	<b>Case-hardened 3 mm-flat tool steel design</b>			
	Precision ground cutting edges, self-opening thanks to smooth spiral spring, finely burnished, with elastic 2-component plastic handles (except electronic heavy duty diagonal pliers, CIMCO Article no. 10 1054 and 10 1055)			
	<b>Micro electronic diagonal pliers</b>			
	without side face			
	Setting	Soft wires		
	angle	up to ø mm		
	21°	0.8		118 1 10 1030
	with fine tips			
	21°	1.0		129 1 10 1038
	<b>Electronic diagonal pliers</b>			
	without side face			
	Setting	Soft wires	Hard wires	
	angle	up to ø mm	up to ø mm	
	21°	1.3		 132 1 10 1040
	without side face			
	48°	1.3		130 1 10 1044
	reinforced design, with side face, blades also suitable for steel wire			
	21°	2.0	0.6	 140 1 10 1046
	reinforced design, without side face			
	21°	1.3		 132 1 10 1048
	with reinforced blade, without side face			
	21°	1.0		 132 1 10 1050
	with reinforced blade, with side face			
	21°	1.0		 132 1 10 1051
	strong design, without side face			
	21°	2.0		 131 1 10 1052
	<b>Electronic heavy duty diagonal pliers</b>			
	without side face, with 1-component ergonomic handle sleeves			
	Setting	Soft wires		
	angle	up to ø mm		
	20°	2.5		148 1 10 1054
	with side face			
	20°	2.5		148 1 10 1055
	<b>Micro electronic needle nose pliers</b>			
	Bent jaws, smooth, 1 mm wide			
				152 1 10 1076
	Straight jaws, ridged, 1.2 mm wide			
				152 1 10 1082
	<b>Electronic flat nose pliers</b>			
	Straight jaws, ridged, 3 mm wide			
				140 1 10 1096
	<b>Electronic pliers set, 3-piece</b>			
	Diagonal pliers	132		10 1040
	Needle nose pliers, bent	140		10 1076
	Flat nose pliers	150		10 1096
			1	10 4030

Design	Size mm	PU	Article no.
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## Tweezers

### Technical tweezers

made of steel,

straight, pointed shape, without serration	120	1	10 3012
bent, pointed shape, fine serration	120	1	10 3016
bent, pointed shape, fine serration	155	1	10 3018

### College tweezers

made of steel, with guiding pins

bent, pointed-round shape, fine serration	155	1	10 3042
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### Crossed tweezers

made of steel, with copper jaws for heat dissipation

straight, narrow-round shape	160	1	10 3062
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### Insulated tweezers

straight, pointed shape	130	1	10 3110
bent, pointed shape	150	1	10 3112
straight, flat-round shape	145	1	10 3114

### 1000 V Tweezers

with 2-layer safety insulation and anti-slip protection, tested according to DIN EN 60900

  1000 V straight, flat-round shape	145	1	10 3232
  1000 V bent, flat-pointed shape	145	1	10 3240

### Control mirror

Mirror ø 30 mm	275	1	11 1600
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### Combi pick-up tool

with additional integrated 500 g ring magnet. Black, plastic-coated bendable shaft (returns to the original position after bending) complete with a Ø 6 mm (externally Ø 7 mm) pick-up tool and anodised sleeve measuring Ø 15 mm. Aluminium actuation handle with Ø 32 mm counterholder, Ø 24 mm actuation pushbutton and integrated return spring.

Total length 700 mm (usable depth 600 mm)	700	1	11 1650
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### Flexible pick-up tool

Bendable shaft Ø 6 mm (does not return to the original position after bending).

Pick-up tool design complete with return spring on the actuation pushbutton. Aluminium actuation handle with Ø 20 mm counterholder, Ø 16 mm actuation pushbutton.

Total length 540 mm (usable depth 450 mm)	540	1	11 1652
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### Flexible magnetic pick-up tool

Mini magnetic pick-up tool with ø 4 mm neodymium magnet, on flexible, plastic-coated wire shaft, for recovering metal items from small and tight spaces

Adhesive force 270 g	400	1	11 1654
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### Telescopic magnetic pick-up tool ø 6 mm

in pocket format complete with attachment clip, extendable from 125 mm to 630 mm (total length) and a tensile force of 500 g.

7 mm head diameter, chrome-plated design

	125	1	11 1622
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Design	Size mm	PU	Article no.
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### Sealing pliers and accessories

#### Diagonal sealing pliers

Single joint with induction hardened precision blade (approx. 64 HRC), for all types of wire, also including piano wire, made of electric steel with 8 mm  $\varnothing$  punches



	160 mm (6")	1	10 0030
loose punch	8 mm $\varnothing$	1	10 1732

#### Sealing pliers



Punch $\varnothing$ mm	Holder $\varnothing$ mm			
8	4	125	1	10 1690
9	4	145	1	10 1692
10	5	165	1	10 1694
12	5	220	1	10 1698



loose punch $\varnothing$ mm	Holder $\varnothing$ mm			
8	4		1	10 1700
9	4		1	10 1702
10	5		1	10 1704
12	5		1	10 1708

#### Sealing pliers



without strap lock, 8 mm $\varnothing$	105	1	10 1720
with strap lock, 8 mm $\varnothing$	105	1	10 1722
Loose punch, 8 mm $\varnothing$		1	10 1724

#### Engravings for seal punches



up to 3 letters		1	10 1733
every additional letter		1	10 1734
every border		1	10 1735
Special engravings			

#### Lead seals



$\varnothing$ mm		Height mm		
8	approx. 850 items	4	1 kg	14 0750
9	approx. 600 items	4	1 kg	14 0752
10	approx. 400 items	5	1 kg	14 0754
12	approx. 300 items	5	1 kg	14 0758

#### Wire lead seals

with moulded wire coil, 200 mm in length



$\varnothing$ mm				
8	approx. 450 items		1 kg	14 0760
10	approx. 260 items		1 kg	14 0762
12	approx. 150 items		1 kg	14 0764

#### Plastic seals



$\varnothing$ mm				
8	orange		1000	14 0738
9	grey		1000	14 0740
10	orange		1000	14 0742
12	grey		1000	14 0744

#### Plastic-coated seal wire



Iron wire	$\varnothing$ mm			
Coil: 100 m, white	0.5 x 0.6	1	14 0778	
Coil: 100 m, blue	0.5 x 0.6	1	14 0779	



Design	Size mm	PU	Article no.
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## Seal wire

galvanised steel wire, rustproof

	ø mm		
Coil: 1/2 kg = approx. 115 m	0.5 x 0.5	1	14 0768
Coil: 1 kg = approx. 230 m	0.5 x 0.5	1	14 0770
Coil: 1/2 kg = approx. 190 m	0.5 x 0.3	1	14 0772
Coil: 1 kg = approx. 380 m	0.5 x 0.3	1	14 0774



## Sealing pliers set

consisting of diagonal sealing pliers (CIMCO article no. 10 0030) incl. punch pair, 1000 plastic seals orange, CIMCO article no. 14 0738, 100 m plastic-coated seal wire, white (CIMCO article no. 14 0778), in stable plastic box

		1	10 1730
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## Circlip pliers (Seeger pliers)

For the damage-free fitting and removal of circlips or snap rings on shafts and in boreholes, made of chrome-vanadium steel, polished chrome-plated, with PVC handle sleeves, cylindrical plier tips.

Shape	for circlips mm ø		
acc. to DIN 5254 A for external circlips, straight jaws			
A 3 (A 0)	3 - 10	140	1 10 1410
A 10 (A 1)	10 - 25	140	1 10 1412
A 19 (A 2)	19 - 60	180	1 10 1414
A 40 (A 3)	40 - 100	225	1 10 1416
A 85 (A 4)	85 - 165	310	1 10 1418



acc. to DIN 5254 B for external circlips, 90° angled jaws			
B 3 (A 01)	3 - 10	130	1 10 1430
B 10 (A 11)	10 - 25	130	1 10 1432
B 19 (A 21)	19 - 60	170	1 10 1434
B 40 (A 31)	40 - 100	210	1 10 1436
B 85 (A 41)	85 - 165	310	1 10 1438



acc. to DIN 5256 C for internal circlips, straight jaws			
straight jaws			
C 3 (J 0)	3 - 10	140	1 10 1450
C 8 (J 1)	8 - 25	140	1 10 1452
C 19 (J 2)	19 - 60	180	1 10 1454
C 40 (J 3)	40 - 100	225	1 10 1456
C 85 (J 4)	85 - 165	290	1 10 1458



acc. to DIN 5256 D for internal circlips, 90° angled jaws			
90° angled jaws			
D 3 (J 01)	3 - 10	130	1 10 1470
D 8 (J 11)	8 - 25	130	1 10 1472
D 19 (J 21)	19 - 60	170	1 10 1474
D 40 (J 31)	40 - 100	210	1 10 1476
D 85 (J 41)	85 - 165	290	1 10 1478



## Lever pressure pliers (locking pliers)

Ideal for holding and fixing of workpieces for welding, soldering, cutting and finishing. Jaws made of chrome vanadium steel, with release lever and wire cutter

Span width mm			
0 - 35	185	1	10 1300
0 - 50	250	1	10 1302
0 - 65	300	1	10 1304



PLIERS

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Design	Size mm	PU	Article no.
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**Bolt cutters**

Robust bolt cutter in a compact design. Blades and pipehead made of special drop-forged steel. Reduced separating force thanks to ideal geometry and cutting performance up to 48 HRC. With ergonomic 2-component handles and precise, adjustable blades.

	460	1	10 0450
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**Pincers (nippers)**

according to DIN ISO 9243, with PVC handle sleeves

	200	1	10 1524
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**Rabitz pliers (mechanic's pliers)**

according to DIN ISO 9242, with PVC handle sleeves

	220	1	10 1540
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**Revolving punch pliers**

Forged steel, with brass pressure piece and 6 interchangeable hole punches (CIMCO article no. 10 1552 up to 10 1558)

2 - 2.5 - 3 - 3.5 - 4 - 5 mm ø	230	1	10 1550
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Made of steel sheet, with brass pressure piece

2 - 2.5 - 3 - 3.5 - 4 - 4.5 mm ø	220	1	10 1562
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**Notching pliers**

Special tool for the fast and neat cutting out from plastic sheets (e.g. cable ducts)

Cutting depth 30 mm	Cutting width 15 mm	180	1	10 1640
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**Control pliers**

For paper perforations and for thin plastics, e.g. for the simple marking of stickers, before they are detached from the backing material. Opening depth 30 mm

Round recess 3 mm ø	120	1	10 1650
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**Special recesses for control pliers**

round recess up to max. 5 mm ø as well as special shapes up to 3 mm in height, e.g.

Please specify special recess when ordering:



Design	Size mm	PU	Article no.
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### PICCOLO folding pliers

made of chrome vanadium steel, with single joint, jaw width 22 mm

Jaw shape

straight	180	1	10 2080
45°	180	1	10 2082



### Folding pliers

made of chrome vanadium steel, with single joint, PVC-coated handles

#### Straight folding pliers

Working head 40 mm	240	1	10 2060
Working head 60 mm	260	1	10 2062
Working head 80 mm	300	1	10 2063



#### 45° folding pliers

Working head 40 mm	240	1	10 2064
Working head 60 mm	260	1	10 2066
Working head 80 mm	300	1	10 2067



#### 90° folding pliers

Working head 40 mm	240	1	10 2057
Working head 60 mm	260	1	10 2058
Working head 80 mm	300	1	10 2059

#### Flat nose pliers, straight

Working head 12 mm, with cut	250	1	10 2068
Working head 12 mm, without cut	250	1	10 2069

#### Flat nose pliers 45°

Working head 12 mm, without cut	250	1	10 2072
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#### Round nose pliers

Working head 7 mm, with cut	250	1	10 2070
Working head 7 mm, without cut	250	1	10 2071







# SCREWDRIVER, ELECTRONIC SCREWDRIVER

## Reduced insulation

For optimum accessibility of recessed screws with the SLIM blade version.



## Screw system marking

The handle end of the screwdrivers is marked with a symbol for the screw system and size. This allows the user to pick out the "right" tool at a glance (an advantage in your tool bag for example).



## Blade

The specially hardened and high-alloy steel guarantees a long service life.

Due to the machined blade tips, we guarantee maximum fitting precision of all VDE types in the screw head.




All insulated 3K screwdrivers are not only VDE/GS approved, they also fulfil the new, enhanced IEC 60900 standard without compromise. This specifies, among other things, an individual item test in a water bath with a testing voltage of 10,000 V.

A slim quick rotation zone with good grip allows particularly precise, sensitive work.

	Blade size (W x H x L mm)	Total length mm	PU	Article no.
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**Insulated screwdrivers according to IEC 60900, classification VDE 0682, Part 201. Individually tested in a water bath with a testing voltage of 10,000 V.**

**Slot-head screwdriver**

according to DIN EN 60900; VDE 0682 - 201 - 01; DIN ISO 2380

2.5 x 0.4	75	160	1	11 7701
3.0 x 0.5	100	185	1	11 7702
3.5 x 0.6	100	185	1	11 7703
4.0 x 0.8	100	185	1	11 7704
5.5 x 1.0	125	220	1	11 7705
6.5 x 1.2	150	245	1	11 7706
8.0 x 1.2	175	285	1	11 7708
10.0 x 1.6	200	310	1	11 7710

**Phillips cross-head screwdrivers**

according to DIN EN 60900; VDE 0682 - 201 - 01; DIN ISO 8764

PH 0	60	145	1	11 7730
PH 1	80	165	1	11 7731
PH 2	100	195	1	11 7732
PH 3	150	260	1	11 7733

**Pozidriv cross-head screwdrivers**

according to DIN EN 60900; VDE 0682 - 201 - 01; DIN ISO 8764

PZ 0	60	145	1	11 7740
PZ 1	80	165	1	11 7741
PZ 2	100	195	1	11 7742
PZ 3	150	260	1	11 7743

**Special screwdrivers with combination profile**

according to DIN EN 60900; VDE 0682 - 201 - 01

for combined slot-head/crosshead screws in electrical equipment, e.g. terminal blocks

PZ FL 1	80	165	1	11 7751
PZ FL 2	100	195	1	11 7752
Set PZ FL 1 and PZ FL 2 (CIMCO article no. 11 7751 and 11 7752)			1	11 7750
PH FL 1	80	165	1	11 7757
PH FL 2	100	195	1	11 7758

**Hex key (Allen wrench)**

according to DIN EN 60900; VDE 0682 - 201 - 01

Size 3	75	160	1	11 7823
Size 4	75	160	1	11 7824
Size 5	75	170	1	11 7825
Size 6	100	195	1	11 7826
Size 8	100	210	1	11 7828

**TORX® screwdrivers**

according to DIN EN 60900; VDE 0682 - 201 - 01



















T 8	60	145	1	11 7908
T 9	60	145	1	11 7909
T 10	60	155	1	11 7910
T 15	75	170	1	11 7915
T 20	100	195	1	11 7920
T 25	100	195	1	11 7925
T 30	100	210	1	11 7930



  



**Nut drivers**



according to DIN EN 60900; VDE 0682 - 201 - 01

Size 5.5	125	220	1	11 7805
Size 6	125	220	1	11 7806
Size 7	125	235	1	11 7807
Size 8	125	235	1	11 7808
Size 9	125	235	1	11 7809
Size 10	125	235	1	11 7810
Size 11	125	235	1	11 7811
Size 13	125	235	1	11 7813

Blade size (W x H x L mm)	Total length mm	PU	Article no.	
<b>Electrician screwdriver set, 7 piece</b>				
VDE electrician screwdrivers for slot-head screws				
2.5 x 0.4 x 75			11 7701	
3.0 x 0.5 x 100			11 7702	
4.0 x 0.8 x 100			11 7704	
5.5 x 1.0 x 125			11 7705	
VDE cross-head screwdriver				
PH 1 x 80			11 7731	
PH 2 x 100			11 7732	
VDE voltage tester (250 V AC)			11 1280	
		1	11 7800	
<b>Electrician screwdriver set, 7 piece</b>				
VDE electrician screwdrivers for slot-head screws				
2.5 x 0.4 x 75			11 7701	
3.0 x 0.5 x 100			11 7702	
4.0 x 0.8 x 100			11 7704	
5.5 x 1.0 x 125			11 7705	
VDE cross-head screwdriver				
PZ 1 x 80			11 7741	
PZ 2 x 100			11 7742	
VDE voltage tester (250 V AC)			11 1280	
		1	11 7802	
<b>Slot-head screwdriver set, 5-piece</b>				
VDE electrician screwdrivers for slot-head screws				
2.5 x 0.4 x 75			11 7701	
3.5 x 0.6 x 100			11 7703	
4.0 x 0.8 x 100			11 7704	
5.5 x 1.0 x 125			11 7705	
6.5 x 1.2 x 150			11 7706	
		1	11 7700	
<b>Cross-head screwdriver set, 6-piece</b>				
VDE crosshead screwdriver				
PH 1 x 80			11 7731	
PH 2 x 100			11 7732	
PH 3 x 150			11 7733	
PZ 1 x 80			11 7741	
PZ 2 x 100			11 7742	
PZ 3 x 150			11 7743	
		1	11 7745	
<b>Hex key (Allen wrench) set, 5-piece</b>				
VDE hex key				
Size 3 x 75			11 7823	
Size 4 x 75			11 7824	
Size 5 x 75			11 7825	
Size 6 x 100			11 7826	
Size 8 x 100			11 7828	
		1	11 7820	
<b>TORX® screwdriver set, 5-piece</b>				
VDE TORX® screwdriver				
T 8 x 60			11 7908	
T 10 x 60			11 7910	
T 15 x 75			11 7915	
T 20 x 100			11 7920	
T 25 x 100			11 7925	
		1	11 7900	

	Blade size (W x H x L mm)	Total length mm	PU	Article no.
 	<b>Nut driver set, 5-piece</b>			
	VDE nut driver			
	Size 5.5 x 125			11 7805
	Size 7 x 125			11 7807
	Size 8 x 125			11 7808
Size 10 x 125			11 7810	
Size 13 x 125			11 7813	
			1	11 7801






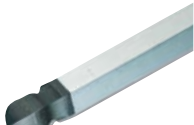






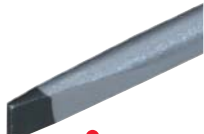
 	<b>VDE screwdriver set ELEKTRO-MEGA-DRIVE, 13-piece</b>			
	VDE electrician screwdrivers for slot-head screws			
	2.5 x 0.4 x 75			11 7701
	3.0 x 0.5 x 100			11 7702
	4.0 x 0.8 x 100			11 7704
	5.5 x 1.0 x 125			11 7705
	VDE crosshead screwdriver			
	PH 1 x 80			11 7731
	PH 2 x 100			11 7732
	PZ 1 x 80			11 7741
	PZ 2 x 100			11 7742
	VDE TORX® screwdriver			
	T 10			11 7910
T 15			11 7915	
T 20			11 7920	
T 25			11 7925	
VDE voltage tester (250 V AC)			11 1280	
			1	11 7000

 	<b>VDE SLIM screwdriver set, 5-piece</b>			
	For optimal accessibility of recessed screws			
	VDE electrician screwdriver for slot-head screws			
	3.0 x 0.5 x 100 mm			
	4.0 x 0.8 x 100 mm			
5.5 x 1.0 x 125 mm				
VDE cross-head screwdriver				
PZ 1 x 80 mm				
PZ 2 x 100 mm				
			1	11 7850

<b>Non-insulated workshop screwdriver with bare, matt chrome-plated blade</b>				
according to ISO 2380				
3.5 x 0.6 x 75	160	1	11 7103	
4.0 x 0.8 x 100	185	1	11 7104	
5.5 x 1.0 x 125	220	1	11 7105	
6.5 x 1.2 x 150	245	1	11 7106	
8.0 x 1.2 x 150	260	1	11 7107	
8.0 x 1.6 x 175	285	1	11 7108	
10.0 x 1.6 x 200	310	1	11 7110	

<b>Electrician screwdriver</b>				
2.5 x 0.4 x 75	160	1	11 7121	
3.0 x 0.5 x 100	185	1	11 7122	
3.5 x 0.6 x 100	185	1	11 7123	
4.0 x 0.8 x 100	185	1	11 7124	
5.5 x 1.0 x 125	220	1	11 7125	
5.5 x 1.0 x 200	295	1	11 7126	



Blade size (W x H x L mm)	Total length mm	PU	Article no.	
<b>Phillips cross-head screwdriver</b>				
according to DIN ISO 8764				
PH 0 x 60	145	1	11 7130	
PH 1 x 80	165	1	11 7131	
PH 2 x 100	195	1	11 7132	
PH 3 x 150	260	1	11 7133	
<b>Pozidriv cross-head screwdriver</b>				
according to DIN ISO 8764 - 1				
PZ 0 x 60	145	1	11 7140	
PZ 1 x 80	165	1	11 7141	
PZ 2 x 100	195	1	11 7142	
PZ 3 x 150	260	1	11 7143	
<b>TORX® screwdriver with bore (tamper resistant)</b>				
T 6 x 60 (without bore)	135	1	11 7306	
T 7 x 60	135	1	11 7307	
T 8 x 60	145	1	11 7308	
T 9 x 60	145	1	11 7309	
T 10 x 80	175	1	11 7310	
T 15 x 80	175	1	11 7315	
T 20 x 100	195	1	11 7320	
T 25 x 100	195	1	11 7325	
T 30 x 115	225	1	11 7330	
T 40 x 115	225	1	11 7340	
<b>Ball-end hex key (Allen wrench)</b>				
according to DIN 5265				
Size 3 x 100	185	1	11 7223	
Size 4 x 100	185	1	11 7224	
Size 5 x 100	195	1	11 7225	
Size 6 x 125	220	1	11 7226	
Size 8 x 150	260	1	11 7228	
<b>Hexagon nut driver</b>				
according to DIN 3125				
Size 5 x 125	210	1	11 7204	
Size 5.5 x 125	210	1	11 7205	
Size 6 x 125	210	1	11 7206	
Size 7 x 125	220	1	11 7207	
Size 8 x 125	220	1	11 7208	
Size 9 x 125	220	1	11 7209	
Size 10 x 125	220	1	11 7210	
Size 11 x 125	235	1	11 7211	
Size 13 x 125	235	1	11 7213	
Size 14 x 125	235	1	11 7214	
Size 17 x 125	235	1	11 7217	
<b>Stubby screwdrivers</b>				
with 2-component handle, for slot-head screws				
5.5 x 1.0 x 38	95	1	11 0290	
6.5 x 1.2 x 38	95	1	11 0294	
<b>Phillips cross-head screwdriver</b>				
with 2-component handle, for Phillips crosshead screws				
PH 1 x 38	95	1	11 0120	
PH 2 x 38	95	1	11 0122	
<b>Slot-head screwdriver</b>				
according to DIN ISO 2380, long design				
5.5 x 1.0 x 300	410	1	11 7112	

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Blade size (W x H x L mm)	Total length mm	PU	Article no.
<b>Phillips cross-head screwdriver</b> 			
according to DIN ISO 8764, long design			
PH 1 x 300	400	1	11 7114
PH 2 x 300	410	1	11 7116
<b>Screwdriver set, 3-piece</b>  			
Slot-head screwdriver			
5.5 x 1.0 x 300			11 7112
Crosshead screwdriver			
PH 1 x 300			11 7114
PH 2 x 300			11 7116
		1	11 7102
<b>Screwdriver set, 6-piece</b>  			
Electrician screwdriver			
2.5 x 0.4 x 75			11 7121
4.0 x 0.8 x 100			11 7124
Workshop screwdriver			
5.5 x 1.0 x 125			11 7105
6.5 x 1.2 x 150			11 7106
Crosshead screwdriver			
PH 1 x 80			11 7131
PH 2 x 100			11 7132
		1	11 7100
<b>Slot-head screwdriver set, 6-piece</b> 			
Electrician screwdriver			
2.5 x 0.4 x 75			11 7121
3.5 x 0.6 x 100			11 7123
4.0 x 0.8 x 100			11 7124
Workshop screwdriver			
5.5 x 1.0 x 125			11 7105
6.5 x 1.2 x 150			11 7106
8.0 x 1.2 x 150			11 7107
		1	11 7101
<b>Crosshead screwdriver set, 6-piece</b>  			
Phillips			
PH 1 x 80			11 7131
PH 2 x 100			11 7132
PH 3 x 150			11 7133
Pozidriv			
PZ 1 x 80			11 7141
PZ 2 x 100			11 7142
PZ 3 x 150			11 7143
		1	11 7145
<b>TORX® screwdriver set with bore, 5-piece</b> 			
T 8 x 60			11 7308
T 10 x 80			11 7310
T 15 x 80			11 7315
T 20 x 100			11 7320
T 25 x 100			11 7325
		1	11 7300

Blade size (W x H x L mm)	Total length mm	PU	Article no.
<b>Ball-end hex key (Allen wrench) set</b>			
<b>5-piece</b>			
Size 3 x 100			11 7223
Size 4 x 100			11 7224
Size 5 x 100			11 7225
Size 6 x 125			11 7226
Size 8 x 150			11 7228
		1	11 7220



<b>Nut driver set, 5-piece</b>			
Size 5.5 x 125			11 7205
Size 7 x 125			11 7207
Size 8 x 125			11 7208
Size 10 x 125			11 7210
Size 13 x 125			11 7213
		1	11 7200



<b>Insulated screw-holding screwdriver</b>			
Blades made of chrome vanadium steel, with impact-resistant plastic haft and holding device for slot-head screws			
3 x 0.5 x 100	185	1	11 0782
4 x 0.8 x 125	215	1	11 0784
5 x 1.0 x 150	250	1	11 0786
6 x 1.2 x 175	275	1	11 0788



for Phillips crosshead screws			
PH 0 x 125	215	1	11 0790
PH 1 x 150	250	1	11 0792
PH 2 x 175	275	1	11 0794



<b>Screw-holding screwdriver set, 5-piece</b>			
Slot-head screwdriver			
3 x 0.5 x 100			11 0782
4 x 0.8 x 125			11 0784
5 x 1.0 x 150			11 0786
Phillips cross-head screwdrivers			
PH 0 x 125			11 0790
PH 1 x 150			11 0792
		1	11 0796



<b>Workshop screwdriver VSM STANDARD</b>			
with two-component handles and black blade tips covered with a tube			
3.5 x 0.5 x 90 (size 1)	180	1	11 7511
4.0 x 0.6 x 100 (size 2)	190	1	11 7512
5.5 x 0.8 x 120 (size 3)	220	1	11 7513
6.5 x 1.0 x 140 (size 4)	250	1	11 7514
8.0 x 1.2 x 160 (size 5)	270	1	11 7515



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Blade size (W x H x L mm)	Total length mm	PU	Article no.
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**Precision watchmaker screwdriver set, 6-piece**

in steel sheet case, screwdrivers with nickel-plated brass handle, one each of 1 - 1.5 - 1.8 - 2.3 - 2.9 - 3.6 mm blade width

		1	11 1810
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**Offset screwdriver**

according to DIN 5200, made of chrome vanadium steel, nickel-plated for slot-head screws

5.0 x 0.65 x 100		1	11 0620
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for Phillips crosshead screws

PH 1 + PH 2 x 100		1	11 0630
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**Awls**

made of chrome vanadium steel, with large, impact-resistant plastic haft for the required pressure and rotating movement.

ø mm	L mm	Shape	PU	Article no.
6	100	○ (punch)	1	11 0480
6	100	□ (reamer)	1	11 0482

**Precision screwdriver (electronic screwdriver)**

The optimum tools especially for smallest screws in electronic and electrical components, radio and stereo systems, telephone systems and all communication technology connections, for precision mechanics, electronics, model making and similar fine-sensory work, blades made of special steel, colour-coding ring for marking the screw system



Slot-head screwdriver (colour code white)

1.0 x 0.18 x 40	140	1	11 1860
1.2 x 0.25 x 40	140	1	11 1861
1.8 x 0.30 x 60	160	1	11 1863
2.0 x 0.40 x 60	160	1	11 1864
2.5 x 0.40 x 75	175	1	11 1865
3.0 x 0.50 x 75	175	1	11 1866
3.5 x 0.60 x 100	200	1	11 1868
4.0 x 0.80 x 100	200	1	11 1869
4.0 x 0.80 x 150	250	1	11 1870

Phillips cross-head screwdriver (colour code light blue)

PH 000 x 40	140	1	11 1875
PH 00 x 40	140	1	11 1876
PH 0 x 60	160	1	11 1877
PH 1 x 80	180	1	11 1880
PH 1 x 150	250	1	11 1881

TORX® screwdriver (colour code light green)

T 5 x 50	150	1	11 1889
T 6 x 50	150	1	11 1890
T 7 x 50	150	1	11 1891
T 8 x 60	160	1	11 1892
T 9 x 60	160	1	11 1893
T 10 x 80	180	1	11 1894
T 15 x 80	180	1	11 1895

Hex key (Allen wrench, colour code yellow)

Size 0.7 x 40	140	1	11 1910
Size 0.9 x 40	140	1	11 1911
Size 1.3 x 40	140	1	11 1912
Size 1.5 x 50	150	1	11 1913
Size 2.0 x 50	150	1	11 1914
Size 2.5 x 60	160	1	11 1915
Size 3.0 x 60	160	1	11 1916

Blade size (W x H x L mm)	Total length mm	PU	Article no.
<b>Electronic screwdriver set, 7-piece</b>			
for slot-head screws			
1.0 x 0.18 x 40	140		11 1860
1.2 x 0.25 x 40	140		11 1861
1.8 x 0.3 x 60	160		11 1863
2.0 x 0.4 x 60	160		11 1864
2.5 x 0.4 x 75	175		11 1865
3.5 x 0.6 x 100	200		11 1868
4.0 x 0.8 x 150	250		11 1870
		1	11 1898



<b>Electronic screwdriver set, 7-piece</b>			
for Phillips crosshead screws			
PH 000 x 40	140		11 1875
PH 00 x 40	140		11 1876
PH 0 x 60	160		11 1877
PH 1 x 80	180		11 1880
PH 1 x 150	250		11 1881
for Pozidriv crosshead screws			
PZ 0 x 60	160		11 1886
PZ 1 x 80	180		11 1887
		1	11 1909



<b>Electronic screwdriver set, 7-piece</b>			
for slot-head screws			
2.0 x 0.4 x 60	160		11 1864
2.5 x 0.4 x 75	175		11 1865
3.0 x 0.5 x 75	175		11 1866
3.5 x 0.6 x 100	200		11 1868
4.0 x 0.8 x 150	250		11 1870
for Phillips cross-head screws			
PH 0 x 60	160		11 1877
PH 1 x 80	180		11 1880
		1	11 1901



<b>Electronic screwdriver set, 7-piece</b>			
for TORX® screws			
T 5 x 50	150		11 1889
T 6 x 50	150		11 1890
T 7 x 50	150		11 1891
T 8 x 60	160		11 1892
T 9 x 60	160		11 1893
T 10 x 80	180		11 1894
T 15 x 80	180		11 1895
		1	11 1903



<b>Electronic hex key (Allen wrench) set, 7-piece</b>			
for hex socket screws			
Size 0.7 x 40	140		11 1910
Size 0.9 x 40	140		11 1911
Size 1.3 x 40	140		11 1912
Size 1.5 x 50	150		11 1913
Size 2.0 x 50	150		11 1914
Size 2.5 x 60	160		11 1915
Size 3.0 x 60	160		11 1916
		1	11 1920



<b>Electronic safety screwdriver set, 7-piece</b>			
according to IEC 60900, blade, insulation and handle are inseparably connected to each other, individually tested in water bath with a testing voltage of 10,000 V.			
for slot-head screws			
1.5 x 0.3 x 40	140		11 2000
1.8 x 0.3 x 60	160		11 2002
2.0 x 0.4 x 60	160		11 2004
2.5 x 0.4 x 75	175		11 2006
3.0 x 0.5 x 75	175		11 2008
for Phillips cross-head screws			
PH 00 x 40	140		11 2020
PH 0 x 60	160		11 2022
		1	11 2050





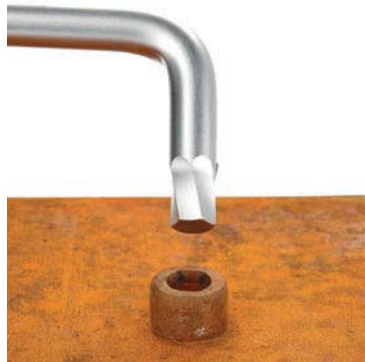


# SCREWING TOOLS

The right tool for every task: With the twelve-point socket every conventional screw is released in no time.



Thanks to the special helical key shape on the head end, the SPECIAL hex key will grip even on seriously damaged hex socket screws and will loosen them without requiring any great effort.



Small, handy and perfect for out and about: The new nut driver bit case with 37 inserts provides all common sizes in a robust aluminium cassette.



Ideally suited for work in tight spaces: The ratchet-ring and open-ended spanner are available in a set with altogether 16 pieces.



For all common switch cabinets, sub-distribution boards, street lamps etc. - the SuBMaster excels due to its variety of possible uses.

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Blade size (W x H x L mm)	Total length mm	PU	Article no.
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**BITFLEX bits**

The damping zone (only for bits of 25 mm in length) between drive and working tip minimises the excessive power peaks which previously lead to high wear and destructive ejection forces. The FLEX-Zone significantly increases the service life of the BITFLEX in comparison with conventional standard bits.

All bits with 1/4" hex drive,

**STANDARD**

according to DIN 3128, single bits for Phillips crosshead screws

PH 1	25	1	11 4511
PH 1	90	1	11 4508
PH 2	25	1	11 4512
PH 2	90	1	11 4509
PH 3	25	1	11 4513
PH 3	90	1	11 4510

Single bits for Pozidriv crosshead screws

PZ 1	25	1	11 4515
PZ 1	90	1	11 4518
PZ 2	25	1	11 4516
PZ 2	90	1	11 4519
PZ 3	25	1	11 4517
PZ 3	90	1	11 4520

Single bits for slot-head screws, without FLEX-Zone

4.0 x 0.5	25	1	11 4551
5.5 x 0.8	25	1	11 4555
6.5 x 1.2	25	1	11 4559

Single bits for TORX® screws with bore (tamper resistant), without FLEX-Zone

T 10	25	1	11 4970
T 10	90	1	11 4573
T 15	25	1	11 4971
T 15	90	1	11 4574
T 20	25	1	11 4972
T 20	90	1	11 4575
T 25	25	1	11 4973
T 25	90	1	11 4576

**Module bits**

for combined slot-head/crosshead screws in electrical equipment, e.g. terminal blocks

PZ FL 1	70	1	11 4941
PZ FL 2	70	1	11 4942

**TIN**

TIN, this is the abbreviation for titanium nitrite. This special coating contributes to the already excellent BITFLEX values by improving the service life.

Single bits for Phillips crosshead screws

PH 1	25	1	11 4521
PH 2	25	1	11 4522
PH 3	25	1	11 4523

Single bits for Pozidriv crosshead screws

PZ 1	25	1	11 4525
PZ 2	25	1	11 4526
PZ 3	25	1	11 4527



Blade size (W x H x L mm)	Total length mm	PU	Article no.
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### Magnetic holder

according to DIN 3126, for 1/4" bit drive; with permanent magnet

60		1	11 4505
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### Ball-end magnetic bit holder

with pivoting angle up to 20°, 1/4" x 90 mm,

for screwing applications in deep corners or other tight places. With torque-stable stainless steel casing, hardened, blasted and bronzed. Sliding casing that releases the pivoting function is plated in matt chrome and has a colour ring. Hex ball-end joint made of chrome vanadium steel, stainless steel casing  $\varnothing$  12.0 x 32 mm

90 x 17 mm		1	11 4502
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### Nut driver bit holder

Can be used as a nut driver adapter or a bit holder by simple sliding the sleeve (also possible when fixed in the jaw chuck of the cordless screwdriver). Tool holder for both 1/4" external hex socket and square socket. Dimensions L x W x D: 70 x 13 x 13 mm

		1	11 4504
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### T-handle magnetic bit holder

in modern two-component design, for 1/4" bits of all lengths

	85 x 95	1	11 4500
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### Bit case, 10-piece set

Case cap with star-shaped holder for bits and universal holders

for slot-head screws

4 - 5.5 - 7 mm width

for Phillips cross-head screws

PH 1 - PH 2 - PH 3

for Pozidriv crosshead screws

PZ 1 - PZ 2 - PZ 3

		1	11 4604
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### Bit case, 10-piece set

Ergonomically shaped bit case, fits perfectly comfortable in the hand, with switchover ratchet function integrated in the casing, magnetic bit holder stored captive in the plastic casing.

Scope of delivery:

- One bit each 1/4", 25 mm long:
  - for slot-head screws 2.5 - 3 - 4 - 5.5
  - for Phillips cross-head screws PH 2
  - for Pozidriv crosshead screws PZ 2
  - for TORX®-screws T 15 - T 20
- Magnetic bit holder 60 mm

		1	11 4594
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### COMFORT bit set, 11-piece set

In an impact-resistant plastic box with a practical opening mechanism to provide quick access to individual bits and magnetic bit holders

Magnetic holder 60 mm for 1/4" bit drive

for Phillips crosshead screws PH 1, PH 2

for Pozidriv cross-head screws PZ 1, PZ 2

for TORX® size T 15, T 20, T 25, T 30

for slot-head screws 0.8 mm, 1.0 mm

11-piece		1	11 4590
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Blade size (W x H x L mm)	Total length mm	PU	Article no.
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### COMFORT bit set, 32-piece set



Magnetic holder 90 mm for 1/4" bit drive  
 Magnetic holder with quick-fit coupling 60 mm for 1/4" bit drive  
 for TORX® size T 10, 2x T 15, 2x T 20, T 25, T 30  
 for TORX® with bore size T 10, 2x T 15, 2x T 20, T 25, T 30  
 for cross-head screws Phillips PH 1, 3x PH 2, PH 3  
 for cross-head screws Pozidriv PZ 1, 3x PZ 2, PZ 3  
 for hex socket 4.0 mm, 5.0 mm, 6.0 mm  
 for slot-head screws 0.8 mm, 1.0 mm, 1.2 mm



32-piece		1	11 4592
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### Bit set ELEKTRO TOP, 21-piece



In a practical transport and storage case, includes 1 universal bit holder with permanent magnet 60 mm length, 20 bits 90 mm long  
 Cross-head Phillips PH 1, PH 2, PH 3  
 Cross-head Pozidriv PZ 1, PZ 2, PZ 3  
 TORX® size T 10 - T 15 - T 20 - T 25



		1	11 4602
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### SPECIAL bit set, 33-piece



Bit set for unscrewing safety screws.  
 Contents: 1 each of magnetic holder 60 mm for 1/4"-bit drive  
 Bits TORX® with bore (tamper resistant) T 8 - T 10 - T 15 - T 20 - T 25 - T 27 - T 30 - T 35 - T 40  
 Hex bits with bore (tamper resistant) 2 - 2.5 - 3 - 4 - 5 - 6 mm,  
 5/64" - 3/32" - 7/64" - 1/8" - 9/64" - 9/32"  
 Slot bits with recess (spanner) 4 - 6 - 8 - 10 mm  
 Tri-wing bits TW 1 - TW 2 - TW 3 - TW 4  
 Torq-Set bits TS 6 - TS 8 - TS 10



		1	11 4599
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### "Long safety bits" set, 50-piece



For working on screws of all types, especially safety screws and special screws. Thanks to extended length of 75 mm excellent for working in tight spaces which are hard to access, with standard hex receiver 1/4" for cordless screwdriver and manual operation, made of chrome vanadium steel, stored neatly and securely in an impact-resistant plastic case (195 x 135 x 38 mm). Contains one each of the following screw bits:

- Slot 4 mm - 5 mm - 6 mm
- Slot with recess (spanner) 4 mm - 6 mm - 8 mm - 10 mm
- Cross-head Phillips PH 1 - PH 2
- Pozidriv cross-head PZ 1 - PZ 2
- Square socket (Robertson) size 1 - size 2
- Hex socket (Allen) 4 mm - 5 mm - 6 mm
- Hex socket (Allen) with bore (tamper resistant) 2 mm - 2.5 mm - 3 mm - 4 mm - 5 mm - 6 mm
- Universal bit holder, with 1/4" hex receiver and permanent magnet, length 60 mm
- TORX® T 10 - T 15 - T 20 - T 25 - T 30
- TORX® with bore (tamper resistant) T 8 TR - T 10 TR - T 15 TR - T 20 TR - T 25 TR - T 27 TR - T 30 TR - T 35 - T 40 TR
- TORQ SET TS 6 - TS 8 - TS 10
- TRI-WING TW 1 - TW 2 - TW 3 - TW 4
- Clamp bits / CLUTCH C 1 - C 2 - C 3
- XZN polygon size 5 - size 6 - size 8



		1	11 4606
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Blade size (W x H x L mm)	Total length mm	PU	Article no.
		1	11 0604

### Hex key set, 9-piece

With key sizes 1.5 - 2 - 2.5 - 3 - 4 - 5 - 6 - 8 - 10 mm, with extra long blade with ball end, made of fully hardened S2 special steel, polished, hard chrome-plated surface, rounded edges, in a practical plastic holder for adding to a tool bag or mounting on the wall



### SPECIAL Hex key set, 9-piece

With key sizes 1.5 - 2 - 2.5 - 3 - 4 - 5 - 6 - 8 - 10 mm, with extra long blade with ball-end, made of fully hardened S2 special steel, polished, hard chrome-plated surface, in a practical plastic holder with a belt clip. Special feature: With the help of the special key shape, it is even possible to undo damaged (rounded) hex socket screws (not at the ball end).

		1	11 0606
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### T-handle screwdriver set, 8-piece

For applying significantly more force than with conventional screwdrivers. With double-sided drive for hex socket screws (Allen screws). Voluminous, edge-free handle in 2-component technology with soft rubber insert, blades made of tempered S2 special steel, chrome-plated, with ball-end on longer blade, black satined, including a practical storage stand for on the workbench or mounting on the wall.

One key each of 2 - 2.5 - 3 - 4 - 5 - 6 - 8 - 10 mm

		1	11 0520
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### Hex key sets, 8-piece

on key ring, according to DIN 911, made of chrome vanadium steel

Size 2 - Size 2.5 - Size 3 - Size 4 - Size 5 - Size 6 - Size 8 - Size 10	1	11 0592
5/64" - 3/32" - 1/8" - 5/32" - 3/16" - 7/32" - 1/4" - 5/16"	1	11 0594



### Ball-end hex key set, 7-piece

in a pocket-sized holder

Size 2.5 - Size 3 - Size 4 - Size 5 - Size 6 - Size 8 - Size 10	1	11 0596
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### TORX® key set, 8-piece

in a pocket-sized holder

T 9 - T 10 - T 15 - T 20 - T 25 - T 27 - T 30 - T 40	1	11 0598
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### Socket wrench set, 33-piece

1/4" square drive, hex sockets made of chrome vanadium steel, plated with polished chrome, in a metal case. Reversible ratchet with PosiLock holding mechanism, slide handle, 50 mm and 150 mm extensions, holder, cardan joint, sockets/bits: hexagon socket wrench sizes 4 to 14 mm, hex socket (Allen) 3 to 6 mm, slot-head screwdriver 0.5 x 4 - 0.6 x 4.5 - 0.8 x 5.5  
Crosshead screwdriver PH 1 - PH 2 - PH 3 - PZ 1 - PZ 2 - PZ 3  
TORX® screwdriver T 10 - T 15 - T 20



280 x 130 x 90 mm	1	11 3104
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	Blade size (W x H x L mm)	Total length mm	PU	Article no.
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15			1	11 3152

**Socket wrench set, 52-piece**

In a robust metal case, tools made of chrome vanadium steel, high-gloss polished and chrome-plated.

Content:

1/4" socket wrench system

One of each of the following:

Hex sockets 4 - 4.5 - 5 - 6 - 7 - 8 - 9 - 10 - 11 - 13 mm

Ratchet with plastic handle, reversible for clockwise/counterclockwise rotation, with ball stop and quick release button that prevents sockets from being released accidentally, with 36-step ratcheting (pivoting angle 10°)

115 mm T-handle with sliding head

Extension 75 mm

Cardan joint 35 mm

Holder for 1/4" hex bits



1/2" socket wrench system

One of each of the following:

Hex sockets 10 - 11 - 12 - 13 - 14 - 15 - 17 - 19 - 22 - 24 - 27 - 30 - 32 mm

Hexagon socket wrench insert 21 mm, with rubber clamp (spark plug wrench)

Ratchet with plastic handle, reversible for clockwise/counterclockwise rotation, with ball stop and quick release button that prevents sockets from being released accidentally, with 36-step ratcheting (pivoting angle 10°)

295 mm T-handle with sliding head

Extensions 125 and 250 mm

Cardan joint 65 mm



Screw bit system 1/4" hex drive

One of each of the following:

Ratchet screwdriver, clockwise/counterclockwise rotation or locking in middle position, 180 mm

Standard bits in plastic holders:

Slot-head screwdriver 0.5 x 4 mm, 0.8 x 5.5 mm, 1.2 x 7 mm

Cross-head screwdriver PH 1, PH 2, PH 3

Hex socket screw key (Allen) 3 - 4 - 5 - 6 - 7 - 8 mm

1/4" Square drive with ball stop

Additional tools: One each of hex socket L-key 1.5 - 2 - 2.5 mm



**Bit and socket wrench set, 28-piece**

In attractive, compact, two-coloured plastic box, nut driver and drive ratchet made of chrome vanadium steel, specially hardened, high-gloss polished and hard chrome-plated.

Contains one of each of the following:

Twelve-point sockets with 1/4" square drive: 4 - 4.5 - 5 - 5.5 - 6 - 7 - 8 - 9 - 10 - 11 - 12 - 13 - 14 mm

Mini ratchet with reverser and quick release 1/4" square drive,

Screw bits made of S2 special steel, 25 mm long; one bit each

for slot-head screws 4 - 5 - 6 mm

for Phillips crosshead screws PH 1 - PH 2 - PH 3

for Pozidriv crosshead screws PZ 1 - PZ 2 - PZ 3

for hex socket (Allen) screws 4 - 5 - 6 mm

Bit holder with quick-release, 55 mm long, for manual and machine operation

Adapter from 1/4" square drive (e.g. ratchet) to 1/4" hex drive (e.g. for screw bits), 25 mm long



			1	11 3154
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**Nut driver bit case, 16-piece set**

In strong aluminium case, reversible ratchet with hex socket drive, hex bit inserts and square nut driver inserts, adapter for holding socket wrench inserts, made of chrome vanadium steel, polished chrome-plated

Scope of delivery:

- One bit each 1/4", 25 mm long:
  - for slot-head screws 3 - 5 - 6 mm
  - for Phillips crosshead screws PH 1 - PH2 - PH 3
  - for hex socket 3 - 4 - 5 mm

- Mini reversible ratchet:
  - 1/4" adapter for holding nut drivers
  - Size 7, 8, 10, 11 and 13 mm

**NEW**



			1	11 3156
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Blade size (W x H x L mm)	Total length mm	PU	Article no.
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### Nut driver bit case, 37-piece set

In strong aluminium case, bit holder with quick release, hex bit inserts made from chrome vanadium steel, polished chrome-plated, adapter for holding socket wrench inserts.

Scope of delivery:

- One bit each 1/4", 25 mm long:
  - for slot-head screws 4 - 4.5 - 5 - 5.5 - 6 - 6.5 - 7 mm
  - for Phillips crosshead screws PH 1 and PH 3
  - for crosshead screws PZ 1 and PZ 3
  - for hex socket 3 - 4 - 5 - 6 mm
  - for TORX® T10 - T15 - T20 - T25 - T27 - T30 - T40
  - for TORX® with bore (tamper proof) T10 - T15 - T20 - T25 - T27 - T30 - T40
- Three bits each 1/4", 25 mm long:
  - for Phillips crosshead screws PH 2
  - for crosshead screws PZ 2
- Bit holder with quick release, 65 mm long
- 1/4" adapter for holding nut driver



		1	11 3158
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### SPECIAL socket wrench set, 7-piece

with key sizes 8 - 10 - 11 - 13 - 15 - 17 mm

Contains one of each of the following:

Hex sockets with 3/8"-square drive and drive T-handle made from chrome vanadium steel, specially hardened, polished to a high gloss and hard chrome-plated.

Special feature: With the help of the special key shape, it is even possible to undo damaged (rounded) hexagon head screws.



		1	11 3160
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### Ratchet-ring and open-end spanner set, 12-piece

Wrench size across flats in set: 8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 mm (CIMCO article no. 11 2508 to 11 2519), supplied in a robust, spacious roll-up tool case.

		1	11 2505
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### Ratchet-ring and open-end spanner set, 16-piece

Made of chrome vanadium steel, highly polished and chrome-plated, ratchet with fine gearing (72 teeth = only 5° pivoting angle), ideally suited for work in tight spaces.

Contents: Open-ended and ratchet ring spanner (size 10, 11, 13 and 17), bits for Phillips / Pozidriv crosshead screws PH 1 - PH 2 - PZ 1 - PZ 2

Bits for slot-head screws 4 - 5.5 - 6.5 mm width, bits for hexagon head screws size 5 - size 6, 10 mm bit adapter, 1/4" square adapter

		1	11 2434
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### Ratchet-ring and open-end spanner

For loosening or quickly tightening screws and nuts in one operation with ratchet mechanism without having to reposition the ring-ratchet. At one end an open-end or fork spanner with 15° offset, at the other end a ring spanner of the same size with integrated ratchet mechanism with particular advantages: Ratchet with fine gearing: 72 teeth = minimal pivoting angle only 5°. Turn to the left and right by simply turning the key and not with a cumbersome switch lever which often changes position unintentionally. The overall height of the wrenches is very flat, despite the ratchet. Consequently the tools are particularly useful in tight spaces. 12-point ring with flank drive, i.e., the drive no longer takes place via the edges of the screw head but on the flanks, whereby a significantly higher power transmission is achieved and the edges of the screw heads and nuts are spared. Made from drop-forged chrome vanadium steel, tempered, polished to a high sheen, nickel-plated and hard chrome-plated. Extremely high torque transmission, DIN requirements are exceeded.

Wrench size across flats

8 mm	1	11 2508
9 mm	1	11 2509
10 mm	1	11 2510
11 mm	1	11 2511
12 mm	1	11 2512
13 mm	1	11 2513
14 mm	1	11 2514
15 mm	1	11 2515
16 mm	1	11 2516
17 mm	1	11 2517
18 mm	1	11 2518
19 mm	1	11 2519



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Blade size (W x H x L mm)	Total length mm	PU	Article no.
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**Double open-ended spanner sets**

according to DIN 3110 and ISO 3318, jaw position 15°, made of chrome vanadium steel, bright chrome-plated  
8-piece 6 x 7, 8 x 9, 10 x 11, 12 x 13, 14 x 15, 16 x 17, 18 x 19, 20 x 22 mm, with plastic clip



		1	11 2310
12-piece 6 x 7, 8 x 9, 10 x 11, 12 x 13, 14 x 15, 16 x 17, 18 x 19, 20 x 22, 21 x 23, 24 x 27, 25 x 28, 30 x 32 mm		1	11 2312

**Double open-ended spanner, individual**



	6 x 7 mm	1	11 2200
	8 x 9 mm	1	11 2202
	10 x 11 mm	1	11 2204
	10 x 13 mm	1	11 2206
	12 x 13 mm	1	11 2208
	13 x 14 mm	1	11 2210
	13 x 17 mm	1	11 2212
	14 x 15 mm	1	11 2214
	16 x 17 mm	1	11 2218
	17 x 19 mm	1	11 2220
	18 x 19 mm	1	11 2222
	20 x 22 mm	1	11 2226
	21 x 23 mm	1	11 2228
	24 x 27 mm	1	11 2232
	25 x 28 mm	1	11 2234
	30 x 32 mm	1	11 2238

**12-point ring spanner sets**

according to DIN 838 and ISO 3318, deep-offset (75°), made of chrome vanadium steel, bright chrome-plated,  
8-piece 6 x 7, 8 x 9, 10 x 11, 12 x 13, 14 x 15, 16 x 17, 18 x 19, 20 x 22 mm



		1	11 2430
12-piece 6 x 7, 8 x 9, 10 x 11, 12 x 13, 14 x 15, 16 x 17, 18 x 19, 20 x 22, 21 x 23, 24 x 27, 25 x 28, 30 x 32 mm		1	11 2432

**12-point ring spanners, individual**



	6 x 7 mm	1	11 2330
	8 x 9 mm	1	11 2332
	10 x 11 mm	1	11 2334
	10 x 13 mm	1	11 2336
	12 x 13 mm	1	11 2338
	14 x 15 mm	1	11 2344
	16 x 17 mm	1	11 2348
	17 x 19 mm	1	11 2350
	18 x 19 mm	1	11 2352
	20 x 22 mm	1	11 2356
	21 x 23 mm	1	11 2358
	24 x 27 mm	1	11 2362
	25 x 28 mm	1	11 2364
	30 x 32 mm	1	11 2368

**Combination spanner set, 17-piece**

according to DIN 3113 A and ISO 3318, made of chrome vanadium steel, bright chrome-plated



Size 6 to Size 22, in 1 mm increments		1	11 2500
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Blade size (W x H x L mm)	Total length mm	PU	Article no.
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### Combination spanners, individual

	6 mm	1	11 2450
	7 mm	1	11 2452
	8 mm	1	11 2454
	9 mm	1	11 2456
	10 mm	1	11 2458
	11 mm	1	11 2460
	12 mm	1	11 2462
	13 mm	1	11 2464
	14 mm	1	11 2466
	15 mm	1	11 2468
	16 mm	1	11 2470
	17 mm	1	11 2472
	18 mm	1	11 2474
	19 mm	1	11 2476
	20 mm	1	11 2478
	21 mm	1	11 2480
	22 mm	1	11 2482
	24 mm	1	11 2484
	27 mm	1	11 2486
	30 mm	1	11 2488
	32 mm	1	11 2490



### Adjustable spanners

according to DIN 3117 A, forged from steel, chrome-plated, handle PVC coated, to allow simple work to be carried out quickly and flexibly.

Size 19	160 mm	1	11 2800
Size 24	210 mm	1	11 2802
Size 29	260 mm	1	11 2804



### Ratchet tool and inserts for screwed cable glands

Patented, professional tool system for time-saving, non-slipping and comfortable assembly of screwed cable glands, outstanding performance even in very constricted working areas (minimum pivoting angle only 10°) and while working with screwed cable glands with inserted cable, no damage to screw connections, different jaw sizes for plastic and metal screw connections, ratchet and sockets made of special precision-manufactured steel, loading capacity at least 20 Nm

### Torque wrench

Releasing torque wrench with holder for interchangeable push-on tools, adjustable via QuickSelect fast adjustment (safety locking device), viewing window indicator with Nm and ft.lb or in.lb, 2-component handle. Additional loading after release or loading against the functional direction, e.g. with screws that are seized, does not affect the release mechanism as it is protected against such damage. Indicator deviation  $\pm 3\%$ . Size of tool holder in mm, with manoscope (square socket) 9 x 12 mm. Supply includes operating instructions and factory calibration certificate.

Can only be used in combination with CIMCO article no. 11 5114, 11 5116 and 11 5100

Scale range: 2-20 Nm / 20-180 in.lb

Scale increments: 1 Nm/ 10 in.lb

Fine scale increments: 0.2 Nm

Weight 740 g		1	11 5110
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Scale range: 10-50 Nm / 7-37 ft.lb

Scale increments: 5 Nm/ 1 ft.lb

Fine scale increments: 0.25 Nm

Weight 831 g		1	11 5112
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### Ratchet adapter

Made of chrome vanadium steel, reversible, 60 teeth, suitable for torque wrench with 9 x 12 square holder.

Connection between torque wrench and ratchet adapter is secured by a spring-loaded retaining pin. When used with CIMCO torque wrench, article no. 11 5110 and 11 5112, no gauge correction needed on the torque wrench.

Can only be used in combination with CIMCO article no. 11 5110 and 11 5112.

1/2"		1	11 5114
3/8"		1	11 5116





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Blade size (W x H x L mm)	Total length mm	PU	Article no.
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### Open ring-ratchet

Slotted ratchet head with removable plastic handle, wrench size across flats size 20 to hold all the following sockets, simple rotation to turn to left and right, which makes it suitable for tightening and loosening screwed cable glands.

Can also be used in combination with CIMCO article no. 11 5110 and 11 5112.

		1	11 5100
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### Sockets for screwed cable gland ratchet

With size 20 holder, slotted version (other dimensions available upon request, minimum order 100 pieces) for screw connections

(observe manufacturer dim.)	Size		
M 12	14	1	11 5014
M 12	15	1	11 5015
M 12, M 16	17	1	11 5017
M 12, M 16	19	1	11 5019
M 12, M 16	20	1	11 5020
M 16, M 20	22	1	11 5022
M 16, M 20	24	1	11 5024
M 20, M 25	27	1	11 5027
M 20, M 25	30	1	11 5030



### Set of ratchets and sockets for screwed cable glands

Set in impact-resistant plastic transport and storage case, consisting of 2-piece open ring-ratchet, CIMCO article no. 11 5100 and 9 sockets (CIMCO article no. 11 5014 to 11 5030) for all common plastic and metal screwed cable glands of various manufacturers up to M 25

11-piece	14 - 30	1	11 5000
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### Universal wrench for screwed cable glands

For tightening and loosening screwed cable glands of all kinds, automatic continuously adjustable jaw size, ratchet-like function with 60° pivoting angle, handy and convenient even in constricted working areas, with fixed setting for continuous work with the same screw connection sizes, bronzed metal surfaces, with two-component plastic handles

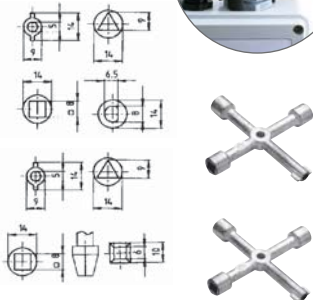
For wrench size across flats mm	Length mm	Weight g		
Size 13 – 23	180	180	1	11 5040
Size 24 – 36	200	220	1	11 5042
2-piece set, size 13 – 23 and size 24 – 36			1	11 5045



### Mast key

made of die cast zinc (GD-Zn), 90 x 90 mm

with half-moon	1	11 2882
with square drive bit	1	11 2883



### Triangle nut driver

according to DIN 22417, with movable handle, galvanised, length 70 mm

For screws	Edge length (inner dimension)		
M 3	6 mm	1	11 2900
M 4	7 mm	1	11 2902
M 5	9 mm	1	11 2904
M 6	11 mm	1	11 2906
M 8	13 mm	1	11 2908
M 10	16.5 mm	1	11 2910
M 12	18 mm	1	11 2912



Blade size (W x H x L mm)	Total length mm	PU	Article no.
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### Multi-Key

A completely new system - every switch cabinet key or mast key can be assembled individually. Choose from among 13 different closures. All parts made of robust precision cast steel. The interchangeable sockets are held captive by a neodymium magnet.

### Multi-Key set

Complete cross-key set (CIMCO article no. 11 2783), all sockets (CIMCO article no. 11 2784 to 11 2797), in a plastic storage case

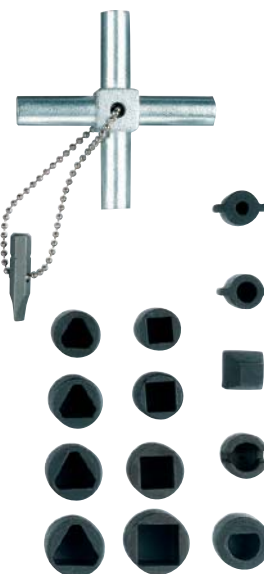
		1	11 2798
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### Cross-key

with 4 x 1/4" holder. Arms round (9 mm ø). With long chain and screwdriver bit 7 mm.

		1	11 2783
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### Sockets

for Multi-Key system

Square socket	6	1	11 2784
	7	1	11 2785
	8	1	11 2786
	10	1	11 2787
Triangular socket	7	1	11 2788
	8	1	11 2790
	9	1	11 2791
	10	1	11 2792
Square drive bit	6 - 10	1	11 2795
Two-way key bit	3	1	11 2793
	5	1	11 2794
Half-moon		1	11 2797
DB standard		1	11 2796

### Switch cabinet key made of die-cast zinc

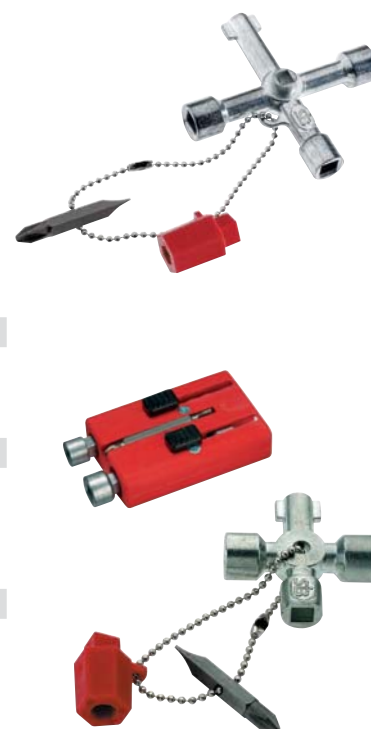
for all common switch cabinets. Small dimensions, low weight. With an adapter for 1/4" bits, with square key for radiator bleed valves and reversible bit for:

- slot-head screws 1.0 x 7.0 mm
- PH2 crosshead screws
- 7 - 8 mm 6 mm 5 mm
- 9 mm 3 - 5 mm

Universal switch cabinet key		1	11 2894
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Switch cabinet key case		1	11 2898
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Switch cabinet key "Mini"		1	11 2891
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Blade size (W x H x L mm)	Total length mm	PU	Article no.
<b>SuBMaster</b>			
for all common switch cabinets, sub-distribution boards, street lamps, etc. Eight different bits can be brought into position by means of a double turning mechanism. An attached 5.0 mm square is especially suitable for venting radiator valves. With adapter for 1/4" bits, design with karabiner chain. Magnetic plug connection for square 9-10 mm. Weight 200 g			
5 mm	6 mm	7-8 mm	9-10 mm
7 mm	8-9 mm	10-11 mm	3-5 mm
6 mm			
96 x 92		1	11 2992



<b>SuBMaster BAU</b>			
Universal key for all locks with profile cylinder bore, also for all common technical closures. With a 4-fold turning mechanism, eight different switch cabinet locking mechanisms can be moved into position. Additionally with 5 mm square on the body. The top of the square is connected magnetically with the SuBMaster and can be easily released. With strong chain and snap hook.			
5 mm	6 mm	7-8 mm	9-10 mm
7 mm	8-9 mm	10-11 mm	3-5 mm
6 mm	5-9 mm		
		1	11 2990



<b>SuBMaster KOMPAKT</b>			
Universal key for all common switch cabinets, sub-distribution boards, street lamps, etc. In a practical trouser pocket format (dimensions: 97 x 25 mm) with clip. With a double turning mechanism, four different closures can be brought into position. In addition there is a 5 mm square and a 1/4" bit-holder incl. magnet in the body for 7-8 mm square.			
5 mm	6 mm	7-8 mm	9 mm
3-5 mm	1/4" Bit holder		
		1	11 2988



<b>Special DB switch cabinet key</b>			
Design as with universal switch cabinet key (CIMCO article no. 11 2894), but instead of 6 mm square, with closure for Daimler-Benz standard			
		1	11 2895





<b>PROFI KEY universal key</b>			
Made of die-cast zinc, with chain, adapter for 1/4" bits and reversible bit for:			
slot-head screws 1.0 x 7.0 mm			
PH 2 crosshead screws			
5 mm	7 mm	8 mm	9 mm
6 - 9 mm			
(e.g. radiator bleeding valves)			
Ideal for heating, air conditioning, ventilation and in new building sector.			
		1	11 2922

Blade size (W x H x L mm)	Total length mm	PU	Article no.
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### New construction key

Solid metal key made of annealed cast iron, with a variety of possible uses in buildings, especially new buildings.

 Square socket 6, 7 and 8 mm, 
  square drive bit 6 – 10 mm for doors and windows without fittings, 
 Allen key 3 mm for set screws on door handles, spigots for closing and opening profile cylinder lock holders (17 mm ø), depth gauge for built-in locks 22 to 75 mm, cap lifter (bottle opener)



	195	1	11 2890
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### SuBKey ELEKTRO

for all common switch cabinets. By means of a double turning mechanism, four different switch cabinet keys can be brought into position. A universal 1/4" bit holder makes it possible to use all commercially available bits. A neodymium permanent magnet securely holds the bits in the holder. Weight: approx. 120 g.

Bit for:

Phillips crosshead screws PH 2 




	155	1	11 2994
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### SuBKey BAU

For all common technical closures, also for door and window fittings, with new step-shaped square drive bit. By means of a double turning mechanism, 3 different keys can be brought into position.

A 5.0 mm square attached to the pin is especially suitable for bleeding radiator valves. By means of a universal 1/4" bit holder, all commercially available bits can be used. A neodymium-permanent magnet securely holds the bits in the holder. Weight 110 g

Bit for:

Phillips crosshead screws PH 2 



	145	1	11 2998
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### Wrench for set screws for fuses

Diazed, with lacquered wooden haft, suitable for all sizes

	175	1	14 0100
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### Wrench for set screws for fuses and for contact screws

Diazed, combined, re-insert to use for set screws 2 - 63 A, haft made of insulation material

	105	1	14 0102
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# MEASURING AND TESTING INSTRUMENTS

Whether measuring temperature, current or voltage testing – the right measuring tool can facilitate the everyday work.



If one wants to perform several measuring tasks at the same time, there are so-called digital multimeters, which are available in two new designs.



Apart from the usual multimeter functions, the ammeter allows non-contact current measurement. Thanks to the clamp sensor, it is no longer necessary to disconnect the power circuit for the measurement.



Precise measurement results in the shortest possible time with the digital tape measure.



The digital laser distance measuring instrument offers ergonomic technology and a very good price-performance ratio.

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Design	Size mm	PU	Article no.
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**GS AC/DC voltage tester up to 690 V with LED and LCD display**

- Automatic polarity detection
- Display: 1 LCD 3 digits, 12 LEDs (+12 V, -12 V, 24 V, 50 V, 120 V, 230 V, 400 V, 690 V)
- Continuity test with visual and acoustic display
- Integrated single-pole testing
- Impact-resistant modern housing
- Bright LED display
- Quick single lever testing at earthed contact sockets
- Test probe protection
- Single-pole test, continuity test
- TÜV / GS certified
- Weight: 180 g
- Incl. 2 batteries 1.5 V AAA, LR03
- Cable length: 1.2 m
- Overvoltage category CAT III / IV
- Tested in accordance with EN 61010, EN 61243-3:2010
- Power consumption < 3.5 mA
- Protection class: IP 64
- Measurement category: CAT IV 600 V, CAT III 1000 V
- Single-pole test > 90 – 690 V AC
- Frequency range AC 40 - 400 Hz
- Voltage range 12 - 690 V AC/DC
- Integrated torch
- ELV, rotating field L/R

240 x 65 x 19	1	11 1429
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**GS AC/DC voltage tester up to 690 V with LED display**

- Automatic polarity detection
- Display: 12 LEDs (+12 V, -12 V, 24 V, 50 V, 120 V, 230 V, 400 V, 690 V)
- Continuity test with visual and acoustic display
- Integrated single-pole testing
- Impact-resistant modern housing
- Bright LED display
- Quick single lever testing at earthed contact sockets
- Test probe protection
- Single-pole test, continuity test
- TÜV / GS certified
- Weight: 170 g
- Incl. 2 batteries 1.5 V AAA, LR03
- Cable length: 1.2 m
- Overvoltage category CAT III / IV
- Tested in accordance with EN 61010, EN 61243-3:2010
- Power consumption < 3.5 mA
- Protection class: IP 64
- Measur. category: CAT IV 600 V, CAT III 1000 V
- Single-pole test > 90 – 690 V AC
- Frequency range AC, 40 - 400 Hz
- Voltage range 12 - 690 V AC/DC
- Integrated torch
- ELV, rotating field L/R

240 x 65 x 19	1	11 1432
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**GS AC/DC voltage tester up to 690 V**

- Automatic polarity detection
- Display: 11 LEDs (+12 V, -12 V, 24 V, 50 V, 120 V, 230 V, 400 V, 690 V)
- Continuity test with visual and acoustic display
- Integrated single-pole testing
- Impact-resistant modern housing
- Bright LED display
- Quick single lever testing at earthed contact sockets
- Test probe protection
- Single-pole test, continuity test
- TÜV / GS certified
- Weight: 130 g
- Incl. 2 batteries 1.5 V AAA, LR03
- Cable length: 1.2 m
- Overvoltage category CAT III / IV
- Tested in accordance with EN 61010, EN 61243-3:2010
- Power consumption < 3.5 mA
- Visual and acoustic diode test
- Protection class: IP 54
- Measurement category: CAT III 600 V, CAT IV 300 V
- Single-pole test > 100 – 690 V AC
- Frequency range: AC 0 - 65 Hz
- Voltage range 12 - 690 V AC/DC
- ELV

205 x 67 x 27	1	11 1434
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Design	Size mm	PU	Article no.
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**GS AC/DC voltage tester up to 690 V**

- Automatic polarity detection
- Quick single lever testing at earthed contact sockets
- Test probe protection
- Display: 8 LEDs (+12 V, -12 V, 24 V, 50 V, 120 V, 230 V, 400 V, 690 V)
- Power consumption < 3.5 mA at 690 V AC L-PE
- Tested in accordance with EN 61243-3:2010, IEC 61010-1
- CE-certified
- Weight: 115 g
- Bright LED display
- Impact-resistant modern housing
- Nominal voltages: 12 - 690 V AC/DC
- Frequency range: AC 0 - 65 Hz
- Measurement category: CAT III 600 V, CAT IV 300 V
- Protection class: IP 64
- Cable length: 1.2 m
- Works without batteries



	205 x 55 x 21	1	11 1436
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**GS Continuity and circuit tester Dutest**

- With additional torch function (continuous light)
- Two-stage range indicator: 0 - 900 Ω/0 - 90 kΩ
- Visual by means of diode display (LED)
- High-resistance measuring range: 0 - 90 kΩ
- Protection class: IP 40
- LED and buzzer
- Low-resistance measuring range: 0 - 900 Ω
- With external voltage protection
- Tested and certified in accordance with VDE 0403



		1	11 1435
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**Continuity tester**

- For resistance, semi-conductor, polarity and capacitor test (0.01 to 1000 µF)
- Resistance range 0 to 500 kΩ
- External voltage display > 50 V
- Power supply 1 battery 9 V IEC 6LR61
- With acoustic and visual display with resistance-dependent pitch
- Test current approx. 2.2 mA
- Dielectric strength up to 600 V
- Weight: 230 g



	100 x 50 x 25	1	11 1400
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**Digital Multimeter**

- Safety according to DIN VDE 0411, EN 61010, IEC 61010, CAT III 600 V
- Visual (LED) and acoustic continuity test
- Device complies with the directive (2002/96/EC) WEEE
- Shock- and impact-proof due to
- 3<sup>3</sup>/<sub>4</sub>-digit digital display with 4000 digits
- Voltage, current and resistance measurement
- Temperature, capacity and frequency measurement
- Automatic measurement range selection
- Protective sleeve included as standard



	155 x 75 x 33	1	11 1404
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Design	Size mm	PU	Article no.
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### Digital Multimeter

**NEW**



**Highlights**

- CAT III 600 V
- 2000 counts
- Manual range
- Non-contact voltage testing
- DC current measurement range
- Temperature measurement
- Torch function and display lighting
- 600 V high capacity fuses

**Scope of delivery**

- Test leads
- K-type thermo sensor
- 9 V battery
- User manual

**Features**

- Diode test
- Acoustic continuity test
- Non-contact AC voltage tester
- Hold function
- Low-Batt display
- Sturdy housing with soft rubber protection

		1	11 1406
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### Digital Multimeter

**NEW**



**Highlights**

- CAT III 600 V
- 2000 counts
- Measurement jack display
- Manual range
- For professional use, in household and hobby

**Scope of delivery**

- Test leads
- 9 V battery
- User manual

**Features**

- Standard measurement ranges V/DC, V/AC, A/DC, A/AC
- Resistance
- Diode test
- Acoustic continuity test
- Battery test for 1.5 and 9 V batteries
- Impedance switching
- Low-Batt display
- Digit height 19 mm
- Sturdy housing with soft rubber protection

		1	11 1408
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### Clip-on adapter



can be used in combination with any digital multimeter with a range of 200 mV/2 V alternating current to carry out current measurements. The connection is made directly at the 4 mm input jack on the multimeter.

- Measurement range: 0 A to 300 A at 1.5% ± 2 A
- Conversion 1 A AC corresponds to 1 mV
- Operating temperature: 0 °C to 50 °C
- Width of opening max. 28 mm

		1	11 1414
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### AC mini ammeter

**NEW**



**Highlights**

- CAT III 600 V
- AC current measurement (AVG) up to 400 A
- Non-contact voltage tester

**Scope of delivery**

- 2 micro batteries (type AAA)
- Bag
- Safety test leads
- Thermal probe
- K-type measurement adapter
- User manual

**Features**

- Data-Hold
- Auto-Power-Off function
- Voltage, frequency, temperature, capacity and resistance measurement function
- Diode test and acoustic continuity test
- Non-contact voltage tester (NCV)

		1	11 1410
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Design	Size mm	PU	Article no.
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### AC/DC-TrueRMS ammeter

**Highlights**

- CAT II 600 V, CAT III 300 V
- AC/DC current measurement
- Multimeter functions
- TrueRMS true effective value measurement

**Scope of delivery**

- 2 safety test leads
- Batteries
- Bag
- User manual

**Features**

- Measurement functions: AC/DC current (range: 2 A, 20 A, 100 A), AC/DC voltage, resistance, capacity
- Acoustic continuity test
- Diode test
- Data-Hold
- Autorange in the voltage and resistance measurement range
- Display lighting can also be switched on
- DC zero setting function
- Auto-Power-Off function
- Low-Batt display
- One-hand operation possible
- Integrated non-contact AC voltage tester (NCV)



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### AC/DC mini ammeter

**Highlights**

- CAT III 600 V
- AC/DC current measurement (AVG) up to 400 A
- Non-contact voltage tester

**Scope of delivery**

- 2 micro batteries (type AAA)
- Bag
- Safety test leads
- Thermal probe
- K-type measurement adapter
- User manual

**Features**

- Data-Hold
- Auto-Power-Off function
- Voltage, frequency, temperature, capacity and resistance measurement function
- Diode test and acoustic continuity test
- Non-contact voltage tester (NCV)
- ZERO function



		1	11 1412
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### Test probes

- With 4 mm safety plug-in technique in accordance with DIN VDE 0411 / EN 61010 / IEC 61010
- Measurement circuit category CAT III / 1000 volts with 2 mm tips made of stainless steel, length 102 mm
- Short design, Current carrying capacity up to 16 A



2-piece set grey / red and grey / black		1	11 1474
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### Crocodile clip set

- With 4 mm safety plug-in technique in accordance with DIN VDE 0411 / EN 61010 / IEC 61010
- Measurement circuit category CAT III / 1000 Volt
- Opening approx. 21 mm
- Current carrying capacity up to 16 A



grey / red and grey / black		1	11 1480
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Design	Size mm	PU	Article no.
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### Test lead set, 6 pieces



Contains: 1 item each of  
 Test lead 1 m red  
 Test lead 1 m black  
 Crocodile clip grey / red  
 Crocodile clip grey / black  
 Test probe, grey / black  
 Test probe, grey / red

		1	11 1485
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### Non-contact voltage tester Voltfix and Magno-Voltfix



- Reliably displays voltages from 12 V AC
- Two selectable voltage ranges/sensitivity levels
- The white tip forms a bright, all-round signal display
- Acoustic display via integrated tone generator
- Automatic time-controlled switch-off
- Splash-water-protected, robust housing
- Slim, insulated measuring sensor suitable for EU, UK and US electrical sockets
- Measurement category CAT IV 1000 V
- Integrated torch
- Suitable for aircraft information systems up to 400 Hz
- Electric fields are displayed in red
- On/Off switch with visual display
- Battery monitoring with visual warning

Voltfix voltage tester	1	11 1460
Magno-Voltfix voltage tester (incl. magnetic field detection)	1	11 1465

### Cable detective



Test instrument for mains copper cables, for discovering connection faults in customised data cables and complete installations. All coaxial connections with BNC/TNC connectors, USB cables and all UTP/STP cabling with 6 or 8 pin modular plugs can be checked in seconds for wire breaks, pin assignment and short circuits, both for individual conductors and for shielding. With visual (LED) and acoustic error signals. The "Cable Detective" reduces the tedious, fraught and expensive search for cable faults to a minimum. Even longer cables laid up to 200 m can be tested by a single person. In a practical belt bag, for 9-Volt E-block battery, with comprehensive operating instructions.

	145 x 86 x 26	1	11 1440
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### Voltage tester

with clear transparent, impact-resistant plastic haft, VDE tested



W mm	L mm	Test. range Volt			
3.0	65	120 - 250 AC	140	1	11 1280
3.5	100	120 - 250 AC	190	1	11 1288

### Voltage tester Drei-Ve

The new voltage tester from CIMCO simply sits better in the hand due to the innovative triangular handle. The Drei-Ve voltage tester has an ergonomically shaped triangular handle in transparent, impact-resistant plastic. The curved vertical contour allows the best possible contact pressure and the appropriately shaped holding clip on the handle will secure it to a shirt or overall pocket. The voltage tester is manufactured to meet the latest DIN standards and VDE/GS tested.



W mm	L mm	Test. range Volt			
3.0	65	150 - 250 AC	155	1	11 1282

Design	Size mm	PU	Article no.
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### Voltage tester

with clear, transparent, impact-resistance plastic haft in DIY pouch (not licensed for Germany)

W mm	L mm	Test. range Volt	Size mm	PU	Article no.
3	45	100 - 500 AC	125	1	11 1320



### Voltage tester

with retractable screwdriver blade

W mm	L mm	Test. range Volt	Size mm	PU	Article no.
4	25	150 - 250 AC	140	1	11 1300



### Voltage tester EURO

with surrounding anti-slip protection t

W mm	L mm	Test. range Volt	Size mm	PU	Article no.
3.5	14	125 - 250 AC	190	1	11 1290



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# CABLE SPOOLING AND CABLE PULLING AIDS

The cable pull system for professionals: Kati® Blitz 2.0. Due to the new guide tip, the flexible guide head 2.0 with improved bending properties, it is now possible to pass through particularly small curve radii in empty conduits.



The innovative guide minimises the risk of breaking when winding up the rod.



Thanks to the crank function, one saves up to 30 % of the time when winding up and unwinding the rod.



The Kati® Blitz compact with 30 m rod length in the Special Edition: Black housing and red rod!



The CIMCO PowerDrive enables the motor-supported feed or retraction of an existing cable pulling system.

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	Design	Size mm	PU	Article no.
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## Cable spooling and unwinding devices

### Cable coil dispenser

Manufactured from powder-coated steel tubing, for winding goods such as all types of cables as well as flexible empty conduits, for horizontal and vertical winding and unwinding of cable coils with a minimum inner diameter of 110 mm and maximum outer diameter of 300 mm, quickly adjustable to different coil diameters thanks to self-locking guides, complete with 3 anti-slip rubber feet, carrying handle and quick winding crank handle, load-bearing capacity up to 70 kg



The simultaneous unwinding and pulling of multiple conductors is made easier if multiple limitation discs (CIMCO article no. 14 2742) are used on the cable coil dispenser.



The hand-held cable length measuring tool can be mounted onto the cable coil dispenser without any problems whatsoever. Simply pull off the plastic handle on the cable coil dispenser. Push on the measuring tool and fix with a hexagon socket screw.

H x W x L mm			
570 x 460 x 400	1	14 2740	

### Cable drum unroller TROMMELFIX

Extremely robust cable drum unroller made from powder-coated steel sheet complete with carrying handle and four height-adjustable, anti-slip rubber feet, flat loading ramp, with two bearer rollers and lateral drum guides



#### TROMMELFIX 200

Maximum load-bearing capacity of 200 kg, maximum drum diameter of 700 mm, maximum drum width of 530 mm, bearer roller distance can be varied as desired by simply re-hanging the rollers (200, 300 and 400 mm), weight 15.7 kg

120 x 600 x 635	1	14 2750	
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#### TROMMELFIX 200 ULTRA

Lightweight design with a weight saving of 6 kg. Made of powder-coated steel sheet, flat loading ramp, integrated drum guide in the bearer rollers, convenient winding and unwinding of cable drums thanks to the new drum brake (unwinding brake) in the front drum axle, max. drum width: 530 mm, load-bearing capacity up to 200 kg, weight: 9.4 kg

70 x 580 x 660	1	14 2756	
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Product video  
TROMMELFIX 200 ULTRA

#### TROMMELFIX 700

Load-bearing capacity of up to 700 kg, maximum drum diameter of 1000 mm, maximum drum width of 730 mm, bearer roller distance can be varied as desired by simply re-hanging the rollers (200, 300, 400 and 500 mm), weight 26 kg

160 x 750 x 780	1	14 2752	
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### Transport set for cable drum unroller TROMMELFIX 200

Useful addition for mobile use of the cable drum unroller 200 kg (CIMCO article no. 14 2750).

Set consisting of: 4 screw-on castors (2 of which can be swivelled, 2 with locking brake); hand rod assembly that can be plugged together for pushing and pulling even a loaded cable drum unroller including holder for hand-held cable length measuring tool CIMCO article no. 14 2745; stable loading ramp made from grooved steel sheet, which prevents the slipping of heavy drums, complete with 4 anti-slip rubber feet and carrying handle; 2 screw-on holders for the connection of cable drum unroller and hand rod assembly; installation instructions. The set can be assembled very quickly and can also be utilised as a retrofit set for older CIMCO cable drum unrollers.



1	14 2754		
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### KATIMEX® Dispenser for disposable cable drums

For cable drums with a max. diameter of 800 mm and maximum weight of 200 kg, particularly advantageous when dealing with damaged cable drums, ideally suitable for the simple winding, unwinding and re-winding of small cable and wire cross-sections thanks to a second upper axle. Collapsible and therefore more convenient and provides space-saving transportation in the vehicle.

Dispenser basic unit	980 x 800 x 200	1	14 2730
Second upper axle		1	14 2732





Design	Size mm	PU	Article no.
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### Aluminium runner

With a load-bearing capacity of up to 300 kg, for cable drums of any width, with flat loading ramp and non-slip rubber feet, variable bearer roller distance (250 mm, 330 mm, 410 mm).

With plastic rollers, without locking (unwinding brake)	1 Pair	14 2698
Aluminium rollers for 14 2698 with 2 axles and screw fittings	1 Pair	14 2704
With aluminium rollers and manual drum brake (unwinding brake)	1 Pair	14 2706

With a load-bearing capacity of up to 1000 kg, for cable drums of any width; aluminium body, with repositionable rollers.

220 x 140 x 1000	1 Pair	14 2702
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### Hand-held cable length measuring tool

Measuring device for fast and precise determination of cable lengths, further area of application for all types of cables and similar wound products measuring between 4 and 35 mm in diameter, automatic cable size adjustment via leaf clamp, branded German counter with excellent measuring accuracy, measurement range from 0 to 9999.9 m, zero position via the reset toggle switch, rubberised aluminium measuring wheel, screw-off handle for mobile use on construction sites, in the warehouse, workshop etc., with holder shaft for stationary use in combination with all CIMCO TROMMELFIX dispensing aids and the CIMCO connection frame, can also be mounted on the cable coil dispenser (CIMCO article no. 14 2740)

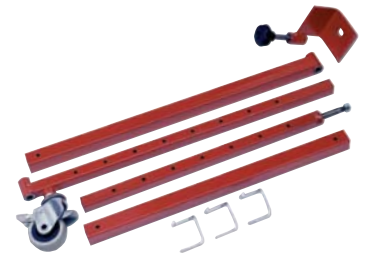
Rubberised aluminium measuring wheel	4 - 35 mm ø	1	14 2744
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### Connection frame for hand-held cable length measuring tool

The hand-held cable length measuring tool is fixed to the CIMCO Trommelfix 200 and Trommelfix 700 cable drum unroller using the connection frame. As a result, the measuring tool becomes a stationary facility for cutting to size on standard cable drums. Can be adjusted to many positions in both height and length and can also be swivelled via the lockable rollers, ensuring that it can be adapted to all individual working and space situations, assembly is completed within a few seconds by simply plugging it together, ideal for all cable drum warehouses when it comes to wholesale and retail as well as on construction sites, weight only 3.5 kg

		1	14 2748
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### Cable drum spindle hoist

For cable drums with a maximum diameter of 1600 mm, lifting height greater than 100 mm, capacity of 4000 kg per pair, construction height of 640 mm, floor space 400 x 200 mm, weight 13.2 kg

		1	14 2320
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### Hydraulic cable drum hoist

With hand pump, three-fold height adjustment, for cable drums with a maximum diameter of 1600 mm, lifting height of 100 mm, capacity of 4000 kg per pair, overall height of between 620 and 960 mm, floor space 400 x 200 mm, weight 16.3 kg

		1	14 2322
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### Cable drum hoist

Finely graduated height adjustment of the axle bearing shells via notches, for cable drums with a maximum diameter of 1600 mm, lifting height of 60 mm, capacity of 2000 kg per pair, overall height of 900 mm, floor space 630 x 310 mm, weight 14 kg

Design left		1	14 2323
Design right		1	14 2324



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Design	Size mm	PU	Article no.
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### € Cable drum hoist HYDROKAT

Hydraulic cable drum hoist, mobile, can be easily positioned by one person working on the cable drum, safe load loading thanks to double columns, 7-step or 13-step height adjustment of the axle bearing shells via notches, lifting height of 150 mm, capacity of 10,000 kg per pair, floor space 540 x 340 mm

for cable drums with diameter	Overall height	Weight			
700 mm to 2200 mm	1070 mm	53 kg	1	14 2326	
700 mm to 3200 mm	1635 mm	69 kg	1	14 2328	



### € Cable drum hoist HYDROKAT

Design with mounted axle bearing shells, for low-friction unwinding of cable drums, protects the drum axles and the axle bearing shells. Utilisation only in combination with adjusting rings.

for cable drums with diameter	Overall height	Weight			
800 mm to 2200 mm	1070 mm	53 kg	1	14 7026	
800 mm to 3200 mm	1635 mm	69 kg	1	14 7027	
Adjusting ring for axle diameter 51 mm			1	14 7028	
Adjusting ring for axle diameter 76 mm			1	14 7029	



### € Mini cable drum hoist HYDROKAT

Hydraulic cable drum hoist, for smaller drum diameters, safe load loading thanks to double columns, capacity of up to 4,000 kg per pair, four-fold height-adjustable axle bearing shell, lifting height of 100 mm, floor space 400 x 200 mm

with diameter	Overall height	Weight			
500 mm to 1100 mm	735 mm	18 kg	1	14 2325	

### Drum axles

made from heavy galvanised tubular steel



Capacity	Length	Axle ø	Weight		
3000 kg	1500 mm	51 mm	18 kg	1	14 2330
8000 kg	1850 mm	76 mm	41 kg	1	14 2331
8000 kg	2200 mm	76 mm	45 kg	1	14 2332

### Drum axle shells

made from galvanised steel



for axle diameter 51 mm	0.8 kg	1	14 2335
for axle diameter 76 mm	1.2 kg	1	14 2336



### Cable laying aids for tray ends and straight sections TAXIMAX

Prevention of cable damage when dealing with tray ends with sharp edges. Can also be used in the event of overcrowding of the cable trays. No further technician is required, even when dealing with longer routes! Galvanised, metal design complete with ball bearing-mounted aluminium rollers on both sides. With lateral elongated holes for the fastening of cable ties to the trays (if already occupied with cables). Max. cable diameter 70 mm.

Adjustable for different rung and lattice distances	1	14 2760
With chamfered sheet metal	1	14 2762



### Cable laying aid for TAXIFIX tray offset

Prevention of cable damage on sharp corners. Can also be used in the event of overcrowding of the cable trays. No further technician is required, even when dealing with longer routes! Metal design (red, powder-coated) with four aluminium rollers, arrangement of the rollers in cable shape (curved) and locking system for the loading and removal of cables, retainer for screwing onto the tray. Max. cable diameter 75 mm.

Metal case, 2 dispensing aids, 2 screw retainers	1	14 2764
Metal case, 4 dispensing aids, 4 screw retainers	1	14 2766
XL additional retainer	Width 100 mm	1 14 2768

Design	Size mm	PU	Article no.
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## Cable pulling aids

### Plastic winding rods

Made from stretched monofilament, with solid steel end pieces and additional lead spring, approx. 130 mm in length, cable lugs on both ends, material  $\varnothing$  4 mm, tensile strength 900 N

	5 m	1	14 0052
	10 m	1	14 0054
	15 m	1	14 0056
	20 m	1	14 0058
	25 m	1	14 0060
	30 m	1	14 0062



### Crimping pliers for the repair of plastic winding rod

Compound leverage crimping pliers with automatic ratchet mechanism and square profile crimping inserts, for the repair of CIMCO plastic winding rods with 4 mm  $\varnothing$ .

	220	1	10 6114
End piece/lug for plastic rod		1	14 0065
Lead spring for plastic rod		1	14 0067
Coupling for plastic rod		1	14 0069



### Crimping pliers set for plastic rods

in **Traco** – PSC vario-240 component boxes, with crimping pliers CIMCO article no. 10 6114.

Contents: 10 lead springs pre-fitted with coupling piece, 10 end pieces

31-piece	240 x 190 x 60 mm	1	10 6314
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### Winding spirals EFLEX

Made from fourfold-rolled steel wire spirals, with solid steel end pieces,  $\varnothing$  4 mm shafts, tensile strength 500 N

	5 m	1	14 0040
	10 m	1	14 0042
	15 m	1	14 0044
	20 m	1	14 0046
	25 m	1	14 0048
	30 m	1	14 0050



### Steel winding rods

with 2 winding lugs, high-frequency welded, rod thickness 3.5 x 0.5 mm, tensile strength 900 N

	10 m	1	14 0004
	15 m	1	14 0006
	20 m	1	14 0008
	25 m	1	14 0010



### Cable pilot set

Cable guiding heads for directly inserting many common cables into short empty conduit routes.

Set consisting of small cable pilot (for coaxial cables, NYM 3 x 1.5 mm<sup>2</sup> etc.)

and large cable pilot (for cables NYM 3 x 2.5 mm<sup>2</sup> - 5 x 1.5 mm<sup>2</sup> - 5 x 2.5 mm<sup>2</sup> etc.)

		1	14 2188
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### Cable guiding heads for domestic connection cables

Simply screw on to the cable end and push the cable directly into the short empty conduits (approx. 10 to 20 m), no damage caused to cables that have already been laid, no deployment of laborious underground cable laying systems required, made from solid aluminium

for cables up to 22 mm $\varnothing$		1	14 2182
for cables from 20 to 30 mm $\varnothing$		1	14 2184
for cables from 30 to 50 mm $\varnothing$		1	14 2186

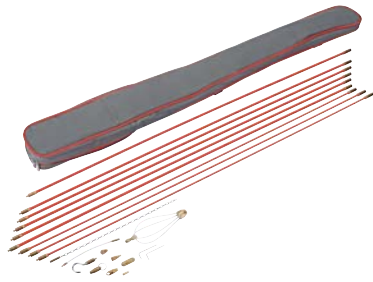


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	Design		PU	Article no.	
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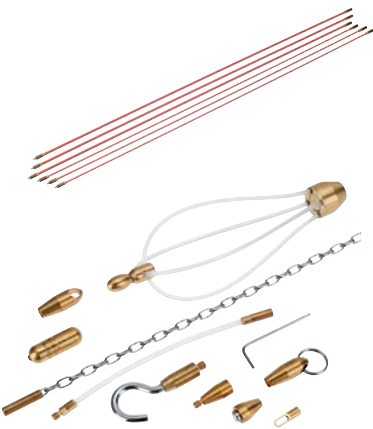
### Fibre glass push rod set

The perfect solution for laying cables in suspended ceilings or confined spaces.  
 With an M5 inside or outside threaded sleeve at the end of the push rod for an optional extension.  
 Including LED viewing probe for sufficient light and a sliding attachment for obstacles.  
 Supplied in a practical bag with attachment option (e.g. on ladders).  
 Also without available cable ducts, empty conduits or other cable runs.



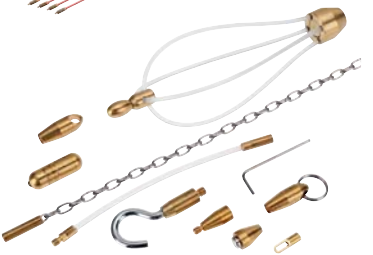
- 3 push rods ø 6 mm, length 1 m
- 7 push rods ø 8 mm, length 1 m
- 1 sliding attachment
- 1 LED lamp
- 1 hook
- 1 chain
- 1 magnet
- 1 adapter from M 6 to M 5
- 1 guide head with ring
- 1 guide head
- 1 draw head
- 1 flex rod 15 cm
- 1 accessories bag

<b>21-piece</b>			<b>1</b>	<b>14 6270</b>	
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- Push rod extension set:
- 3 push rods ø 6 mm, length 1 m
  - 3 push rods ø 8 mm, length 1 m

<b>6-piece</b>			<b>1</b>	<b>14 6271</b>	
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- Push rod accessory set:
- 1 sliding attachment
  - 1 LED lamp
  - 1 hook
  - 1 chain
  - 1 magnet
  - 1 adapter from M 6 to M 5
  - 1 guide head with ring
  - 1 guide head
  - 1 draw head
  - 1 flex rod 15 cm

<b>10-piece</b>			<b>1</b>	<b>14 6292</b>	
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Design	Size m	PU	Article no.	
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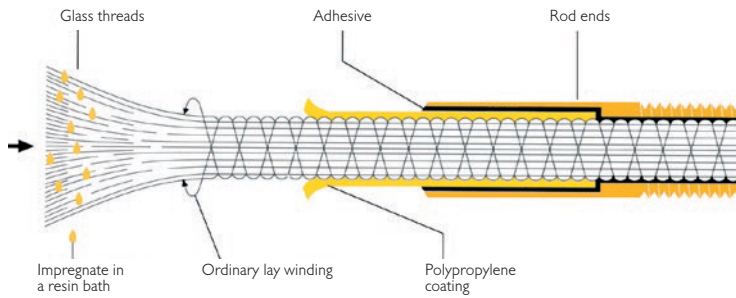
## Rational cable winding devices for professional electricians

### Polykat® – The fibreglass rod

Polykat® fibreglass rods are the basic elements of all cable pulling systems from Katimex®. The combination of extreme bending strength and maximum thrust stability provides the rod with the characteristics of a flexible rod. As a result, extremely small bending radii are possible and narrow pipe bends can be passed through easily. The smooth plastic coating has excellent sliding properties and reduces the friction resistance to a minimum. It is distinguished by high wear resistance. The high elasticity of Polykat® fibreglass rods enables the construction of unrivalled small, compact and handy devices.



Image video  
Cable pull systems



	Kati® Blitz	Kati® Blitz 2.0	Kabelmax®	Kabeljet®	Röhreanaal®	
Fibreglass rod diameter	3.0 mm		4.5 mm	7.2 mm	9.0 mm	11.0 mm
Minimum bending radius	50 mm with rod end 2.0 from 30 mm		100 mm	160 mm	200 mm	250 mm
Rod tensile strength	5.0 kN		10.3 kN	28.0 kN	40.0 kN	65.0 kN
Tested tensile strength of the rod - sleeve connection	1,0 kN		1,5 kN	7,5 kN	10,0 kN	15,0 kN
Sleeve - rod fastening	glued			glued and pinned		
Common empty conduit diameter to nominal diameter	30 mm		60 mm	80 mm	100 mm	250 mm
Maximum winding lengths up to	50 m		80 m	120 m	150 m	500 m
Thread of the rod ends and connecting sleeves	M 5			M 12		
Typical fields of application				Signal system construction (traffic lights), street lighting, underground and telecommunications cabling	Underground line construction, telecommunication and energy cabling	

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**KATI Blitz Ortung** <sup>2in1</sup> - Comfortable cable winding

Same cable winding device as with the Kati® Blitz but with additional detection function via common cable detectors. Targeted location and tracking of the pipe path or blocked places. With reliable Polykat® fibreglass profile in impact-resistant housing. No moving external parts and interchangeable slip ring transmitters. With integrated accessory set and special gripping aid Kati® Grip, each set contains 1 guide head 7 - 10 mm ø, 3 rod ends and 2 rod ends 2.0 on the rod, 3 connecting sleeves, 5 cable lugs, 1 cable draw grip 6 - 9 mm ø, 1 fibreglass fix adhesive (3 g bottle).

Detection	30 m	1	14 2034
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**KATI Blitzcompact** - Comfortable cable winding

With integrated accessory set and special gripping aid Kati® Grip, each set contains 1 guide head 7 - 10 mm ø, 3 rod ends and 2 rod ends 2.0 on the rod, 3 connecting sleeves, 5 cable lugs, 1 cable draw grip 6 - 9 mm ø, 1 fibreglass fix adhesive (3 g bottle).

	20 m	1	14 2020
	30 m	1	14 2024
	50 m	1	14 2028



**KATI Blitz Ortung** <sup>2in1</sup> - 2.0 Comfortable cable winding

Same cable winding device as with the Kati® Blitz 2.0, but with additional detection function (connection at the front). Internal, protected slip ring transmitter. Targeted location and tracking of the pipe path or blocked places. With reliable Polykat® fibreglass profile in impact-resistant housing. With integrated accessory set, in each case with 2 guide heads 7 and 10 mm ø, 2 rod ends 2.0 and 2 rod ends 2.0 on the rod, 3 connecting sleeves, 5 cable lugs, 1 cable draw grip 6 - 9 mm ø, 1 fibreglass fix adhesive (3 g bottle).

	30 m	1	14 4630
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**KATI Blitzcompact** - 2.0 Comfortable cable winding

with crank function for winding the rod into the housing, improved service cover and wear-resistant tie outlet. With integrated accessory set, in each case with 2 guide heads 7 and 10 mm ø, 2 rod ends 2.0 and 2 rod ends 2.0 on the rod, 3 connecting sleeves, 5 cable lugs, 1 cable draw grip 6 - 9 mm ø, 1 fibreglass fix adhesive (3 g bottle).

	20 m	1	14 1620
	30 m	1	14 1630
without crank function	50 m	1	14 1650



**KATI Blitz** - EASY GRIP

For the energy-saving and fatigue-free insertion of a 3 mm fibreglass rod into empty conduits. The transfer of force takes place by means of a two-jaw clamping system with form-fitting connection to the fibreglass rod. Max. thrust power: 20 kg

		1	14 2180
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**PowerDrive cable pull system**

For lightning-fast transportation of fibreglass rods (Ø 3.0 mm) in confined spaces, even in places which are difficult to access. Drive takes place by means of a commercially available cordless screwdriver with 1/4" hex drive. For trouble-free operation, we recommend the use of the cable pull products of the Kati® Blitz series and the guide heads.

		1	14 2360
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Product video  
PowerDrive  
cable pull system

**KATI Blitz** - Replacement bar

For Kati® Blitz compact and Kati® Blitz 2.0, with 2 rod ends 2.0

	20 m	1	14 2120
	30 m	1	14 2122
	50 m	1	14 2124



**KATI Blitz Ortung** - Replacement bar

For Kati® Blitz detection 2.0 with 2 rod ends 2.0

Detection	30 m	1	14 2035
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Design	Size mm	PU	Article no.
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### Flexible guide head 2.0

Due to its conical shape, the flexible guide head 2.0 offers optimum transmission of the bending forces in the fibreglass profile when passing through tight bends. The guide head is not subject to material fatigue, as with e.g. a spring guide head. Together with the new rod ends 2.0, it forms the optimum tool for passing through very tight bends. Bend radii of 30 mm are feasible.

Head ø

7 mm	1	14 1072
10 mm	1	14 1073
13 mm	1	14 1074

### Flexible guide head 2.0 set

7, 10, 13 mm	1	14 1078
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### Guide head

Brass, with M 5 inside thread, suitable for all lengths as well as for all Kabelmax®-devices

Head ø

7 mm	1	14 2130
10 mm	1	14 2132
13 mm	1	14 2134

### Guide head set

Each with 1 guide head

7, 10, 13 mm	1	14 2140
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### Rod ends 2.0

Brass, with M 5 outside thread and plastic sheath, suitable for all lengths

	1	14 1070
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### Cable lug

Brass, with M 5 inside thread, suitable for all lengths as well as for all Kabelmax®-devices

	1	14 2144
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### Connecting sleeve

Brass, suitable for all lengths

	1	14 2146
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### Cable draw grip

With swivel, inside thread M 5

for cables 6 - 9 mm ø	1	14 2152
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### KATI Blitz Service Set 2.0

Set of accessories and replacement parts for all Kati® Blitz products, consisting of

3 Rod ends 2.0		14 1070
5 Cable lugs		14 2144
3 Connecting sleeves		14 2146
1 Glass fibre special adhesive		14 2192
12-piece	1	14 1080



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**NEW**



Design	Size	PU	Article no.
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**Kati® Blitz Mini**

Kati® Blitz Mini has been developed especially to meet the growing demands for subsequent fibre optic cable installations in existing, already occupied empty conduits.

There, where conventional pulling devices are no longer adequate, with a glass fibre profile of only 1.2 mm in diameter, the Kati® Blitz Mini shows its full potential. In particular the subsequent laying of fibre optic cables is simplified with the Kati® Blitz Mini, or is often only possible and therefore makes it the ideal helper when pulling fibre optic cables into buildings. Besides the small diameter, the specially developed Polykat Mini fibreglass profile distinguishes itself through high rod strength and thrust stability, as well as a very small bending radius of 15 mm. Together with the Flexible guide head Mini, whose special contour enables the passage through tight places and bends, and a low-friction guide tube, which guides and protects the rod, the push-in procedure into an occupied empty conduit takes place quickly and simply by hand. In addition the guide tube protects against breakages when pulling the rod back.

Supplied accessories:

5 flexible guide heads M 2.5 with inside thread, 7 rod ends M 2.5 with outside thread, 1 guide tube 2.5 m with securing sleeve, 1 insulating tape 15 mm for fixing the fibre optic cable to the flexible guide head, 1 sanding pad 50 x 50 mm, 1 special adhesive 3 g

Product advantages at a glance:

- Flexible guide head Mini: special contour for passing through tight spaces and bends.
- Rotating rod cassette: by rotating the cassette the rod is pushed into the empty conduit.
- Axle bearing cassette: high reset force of the Polykat Mini supports the automatic run-out of the rod.
- Guide tube: Protects and guides the profile when pushing in, when pulling back the risk of rod breakages is reduced considerably.
- Grip plate with rod stop: Prevents the automatic run-out of the rod in the idle state.

Rod length	Tensile strength		
15 m	1.3 kN	1	14 2060
25 m	1.3 kN	1	14 2062
35 m	1.3 kN	1	14 2064

**NEW**



**Kati® Blitz Mini accessories**

**Replacement rod**

Coiled in cassette, 2 rod ends with outside thread M 2.5 and 1 Flexible guide head Mini, rod length

15 m		1	14 2066
25 m		1	14 2068
35 m		1	14 2070

**NEW**



**Service set**

10 Mini rod ends, 1 special adhesive 3 g, 1 sanding pad 50 x 50 mm, 1 insulating tape 15 mm

13-piece		1	14 2072
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**NEW**



**Flexible guide head**

with inside thread M 2.5

5-piece set		1	14 2074
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**NEW**



**Guide tube 2.5 m**

Low-friction tube with securing sleeve, fitted on tube

		1	14 2076
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**NEW**



**Rod end**

Brass, with M 2.5 outside thread

		1	14 2078
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Design	Size m	PU	Article no.
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### Kati® Twist

The new wear-resistant polyester ties are characterised by their high thrust stability and the low frictional resistance (up to 60% lower than conventional plastic or steel ties) in empty conduits

- Extremely good bending and sliding properties
- Maximum tensile load on rod ends (M5): 200 kg
- Reparable in the event of a rod breakage (press-on rod ends)
- Tensile strength/rod: 4.0 kN
- All accessories of Kati® Blitz and Kabelmax® are compatible

ø 4.5 mm	Length 15 m	1	14 2540
ø 4.5 mm	Length 25 m	1	14 2545
ø 5.2 mm	Length 20 m	1	14 2555
ø 5.2 mm	Length 40 m	1	14 2556
ø 6.0 mm	Length 40 m	1	14 2565



### Steel winder Kati® Twist

Including 1 spring guide head ø 10 mm, 1 brass draw head with lug ø 6 mm (thread M5), 2 brass rod ends (thread M5)

ø 4.5 mm	Length 25 m	1	14 2541
ø 5.2 mm	Length 20 m	1	14 2550
ø 5.2 mm	Length 40 m	1	14 2551
ø 6.0 mm	Length 40 m	1	14 2560



### Kati® Twist repair set

3 press-on rod ends (crimp shape 16 mm<sup>2</sup>)

ø 4.5 mm	1	14 1249
ø 5.2 mm	1	14 1251
ø 6.0 mm	1	14 1252



### Kabelmax® – The professional class underground cable pulling system

For the problem-free pulling of cables into empty or occupied cable ducts or pipes with ø of up to 60 mm. Cable pulling device for underground ducts complete with 4.5 mm ø glass fibre profile, 2 M 5 rod ends, 11 mm ø pulling eye with 6 mm ø cable lug

ECONOMY design	40 m	1	14 1796
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5 M5 rod ends, 11 mm ø pulling eye, 2 6 mm ø cable lugs, 3 connecting sleeves, special adhesive 3 g and service bag

Steel tube frame with ball bearing-mounted aluminium winch	60 m	1	14 1802
Steel tube frame with ball bearing-mounted aluminium winch	80 m	1	14 1806



### Kabelmax® replacement rod

4.5 mm ø glass fibre profile, M 5 rod ends attached at both ends, 1x 11 mm ø pulling eye complete with 1x 6 mm ø cable lug

	40 m	1	14 1808
	60 m	1	14 1812
	80 m	1	14 1816



### Rod end

Brass, with M 5 outside thread

	1	14 1842
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### Pulling eye

Brass, 11 mm ø with M 5 inside thread and 6 mm ø cable lug

	1	14 1844
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Design	Size m	PU	Article no.
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### Connecting sleeve

Brass



		1	14 1846
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### Service set for Kabelmax®

consisting of 5 rod ends, 3 connecting sleeves, 1 guide head with lug and 1 bottle of special adhesive.  
Weight approx. 45 g



		1	14 2163
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### Cable draw grips made from galvanised steel wire

For domestic installation, with cable lug woven into the loop, M 5 inside thread, suitable for all Kati® Blitz and Kabelmax® devices

for cable ø mm



	4 - 6	1	14 2500
	6 - 9	1	14 2498
	9 - 12	1	14 2501
	12 - 15	1	14 2502
	15 - 19	1	14 2503
	19 - 25	1	14 2504
	25 - 31	1	14 2505

### Cordless drill drive for Kati® Blitz and Kabelmax®

Through the connection to a standard battery-powered drill already available on the construction site, the drive for the cable pulling devices Kati® Blitz and Kabelmax® enables the comfortable, motorised insertion of the glass fibre rods into empty conduits and underground ducts. The advantages of insertion at the push of a button can be seen when cabling longer routes. The speed can be regulated individually. Weight only 270 g.



Drive for Kati® Blitz		1	14 2350
Drive for Kabelmax®		1	14 2352

### Kabeljet® – The variable cable pulling system

Galvanised, collapsible steel tube frame complete with 7.2 mm ø fibreglass rod, 2x M 12 rod ends, 25 mm ø pulling eye, shackle with pin, 1 connecting sleeve and 4 clamping sleeves, 1 special adhesive 20 g and service bag



	40 m	1	14 2220
	60 m	1	14 2221
	80 m	1	14 2222
	100 m	1	14 2223
	120 m	1	14 2224

### Kabeljet® replacement rod

7.2 mm ø fibreglass rod, two M 12 rod ends, 25 mm ø pulling eye, shackle



	40 m	1	14 2225
	60 m	1	14 2226
	80 m	1	14 2227
	100 m	1	14 2228
	120 m	1	14 2229

### Rod end

Brass, with M 12 outside thread



		1	14 2230
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### Connecting sleeve

Brass, for 7.2 mm ø fibreglass rod



		1	14 2231
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Design	Size m	PU	Article no.	
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### Pipe eel® - The cable pulling system for underground cabling

Galvanised steel tube frame, mobile on rollers, ball bearing mounted winch with integrated parking brake, complete with fibreglass rod, 2x M 12 rod ends, 25 mm ø pulling eye, shackle, 1 connecting sleeve and 4 clamping sleeves, 1 special adhesive 20 g and service bag

Rod thickness ø	Winch ø	Length m		
9 mm	750 mm	40	1	14 2240
		60	1	14 2241
		80	1	14 2242
		100	1	14 2243
		120	1	14 2244
11 mm	1000 mm	150	1	14 2245
		150	1	14 2250
		200	1	14 2251
		250	1	14 2252
		300	1	14 2253

Rod lengths up to 500 m and rods with positioning function on request.

### Pipe eel® replacement rod

Two M 12 rod ends, 25 mm ø pulling eye, shackle

Rod thickness ø	Length m		
9 mm	40	1	14 2270
	60	1	14 2271
	80	1	14 2272
	100	1	14 2273
	120	1	14 2274
11 mm	150	1	14 2279
	150	1	14 2275
	200	1	14 2276
	250	1	14 2277
	300	1	14 2278

### Rod ends

Brass, M 12 outside thread

for 9 mm ø rod	1	14 2285
for 11 mm ø rod	1	14 2286

### Connecting sleeves

Brass

for 9 mm ø rod	1	14 2290
for 11 mm ø rod	1	14 2291

### Length measuring device for pipe eel®

for quickly and simply determining lengths on underground pipe trays. Pipe blockages, fractures and other defects can be accurately located. No more annoying re-measurements, pacing off or marking and all of this with a significantly higher measuring accuracy. The device can be effortlessly retrofitted to all standard pulling devices.

120 mm x 115 mm x 110 mm	1	14 2310
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### Accessories for Kabeljet® and Pipe Eel®

#### Pulling eye

Aluminium, 25 mm ø, length 60 mm, M 12 inside thread

	1	14 2280
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Design	Size mm	PU	Article no.
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### Guide head

Aluminium, 40 mm ø, length 80 mm, M 12 inside thread

		1	14 2281
with cable lug, 18 mm		1	14 3208

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### Shackle

Shape according to DIN 82101, galvanised, maximum capacity 4 kN

Pin diameter 10 mm		1	14 2292
Pin diameter 12 mm		1	14 1494

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### Connecting pin

For coupling multiple fibreglass rods together, galvanised steel, two M 12 connecting threads

		1	14 2293
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### Twist compensation pin

With double stainless steel axial bearings, for connecting draw grip and shackle

Outer ø	Max. tensile load	Length		
16 mm	3.3 kN	64 mm	1	14 7183
22 mm	10.0 kN	86 mm	1	14 7174
25 mm	15.6 kN	98 mm	1	14 7175

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### Service sets for Kabeljet® and Pipe Eel®

Each consisting of 2 rod ends, 1 connecting sleeve, 2 clamping sleeves and 20 g bottle of special adhesive. Weight approx. 150 g

for Kabeljet with 7.2 mm rod diameter		1	14 2160
for Pipe Eel with 9 mm rod diameter		1	14 2161
for Pipe Eel with 11 mm rod diameter		1	14 2162

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Further accessories such as twist compensation pin, pipe cleaning and duct brushes or gathering devices can be supplied on request.

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### Cable draw grips made from galvanised steel wire

for underground cabling, with 1 crimped cable loop

	for cable ø mm		
	10 - 20	1	14 2506
	20 - 30	1	14 2507
	30 - 40	1	14 2508
	40 - 50	1	14 2509
	50 - 65	1	14 2510
	65 - 80	1	14 2511

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for underground cabling, with 2 crimped cable loops

	for cable ø mm		
	10 - 20	1	14 2520
	20 - 30	1	14 2521
	30 - 40	1	14 2522
	40 - 50	1	14 2523
	50 - 65	1	14 2524

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Design	PU	Article no.
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### Special design cable draw grips

Various special cable draw grips for specific applications, such as those listed below, can be supplied at short notice:

- Larger dimensions
- Cable draw grips with lateral loop
- Separated cable draw grips
- Multiple draw grips, e.g. for the simultaneous pulling of three single-conductor power cables into a common protective pipe
- Kevlar-reinforced plastic draw grips (non-conducting, anti-magnetic)
- Multi-stage, highly-flexible cable draw grips for fibre optic cables
- Draw grips for overhead line construction
- Cable draw grips made from stainless steel stranded wires

Please request the desired cable draw grips.



### Rope and cable connection grips

For the fast creation of a non-positive connection between two cables or ropes. They are used where existing cables or ropes are to be replaced by new ones, e.g. the exchange of aged underground cables, pulling of new ropes into cranes. Hand-woven from galvanised steel wire strands, average effective braided length 1200 mm.

Cable ø mm	practical breaking load	max. laying tensile force	PU	Article no.
8 – 16	15 kN	7.5 kN	1	14 2301
10 – 20	19 kN	9.4 kN	1	14 2302
20 – 30	55 kN	27.4 kN	1	14 2303
30 – 40	55 kN	27.4 kN	1	14 2304

### Cable and rope guidance products

A comprehensive set of laying tools for cable or rope guidance in ditches and shafts (e.g. deflection and corner pulleys, cable protection and shaft guidance curves, cable introduction bushes) can be supplied at short notice. Please request the desired cable and rope guides.

### Shaft cover lifter

Made from galvanised steel, weight 0.6 kg

	320 mm x 155 mm	1	14 2300
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### Special Kati® Grip handle

for the quick and secure pulling of all pulling wires measuring between 3 and 6 mm in ø (flat steel, helical wire, plastic and fibreglass wires)

		1	14 2190
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### Special fibreglass adhesive

for Kati® Blitz and Kabelmax®

3 g		1	14 2192
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for Kabeljet® and Pipe Eel®, viscous

20 g		1	14 2193
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### GLIT® cable lubricant

Improved formula with significantly better sliding properties. Glit® eliminates up to 90% of the friction that is generated when inserting power cables, telephone cables, coaxial cables and fibre optic cables. For inserting all types of pulling rods. Simply apply to the Kati® Blitz and Kabelmax® guide heads and insert. Pumpable, silicone-free, skin-compatible, non-flammable.

Tube 200 ml	0.2 kg	1	14 2194
Bucket 1 Litre	1.1 kg	1	14 2195
Bucket 5 Litres	5.2 kg	1	14 2196
Bucket 10 Litres	10.4 kg	1	14 2197



### Silicone spray

An ideal lubricant, protective agent, maintenance agent and separating agent, makes the winding of cables easier, protects electric contacts against moisture, protects rubber, plastic and metal parts. Only handle when in a de-energised state.

400 ml		1	15 1004
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# SHEARS

For cutting stranded conductors, suitable cable shears should be used. These will ensure exact cutting without deformation.



The CIMCO DUOCUT cable shears made of forged steel provide the user with an extremely sharp blade which also features two cutting zones!



Small blade for single conductors up to max. 4 mm ø, large blade for sheathed cables up to max. 10 mm ø.



Also suitable for cutting lengthways.



VDE marking in the handle.

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Design	Size mm	PU	Article no.
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**DUOCUT cable shears**

Innovative cable shears for copper and aluminium cables with multi-component VDE case. Particularly suitable for exact cutting of cables without deformation. The handles of the shears can be opened up to 140°, consequently a longitudinal cut is possible. VDE/GS approved, according to IEC 60900 and VDE 0682 / part 201. Weight: 175 g.

**Highlight:**

The two-stage cutting zone:

1. Large blade for sheathed cables up to max. 10 mm ø
2. Small blade for single conductors up to max. 4 mm ø

160	1	12 0108
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**DUOCUT 12 cable shears**

Innovative cable shears for copper and aluminium cables with multi-component VDE case. Particularly suitable for exact cutting of cables without deformation. The handles of the shears can be opened up to 140°, consequently a longitudinal cut is possible. VDE/GS approved, according to IEC 60900 and VDE 0682 / part 201. Weight: 300 g.

**Highlight:**

The two-stage cutting zone:

1. Large blade for sheathed cables up to max. 12 mm ø
2. Small blade for single conductors up to max. 4 mm ø

200	1	12 0112
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**VDE cable shears**

For copper and aluminium cables, very good cutting performance, made from case-hardened 5 mm flat tool steel, precision ground cutting edges, finely bronzed, 2-component plastic handle sleeves, with special blade

for fine-wire cables up to ø 18 mm

- VDE / GS approved
- According to IEC 60900 and VDE 0682 / part 201
- Product conforms to the current Product Safety Act (ProdSG)

for cable ø	solid mm <sup>2</sup>	flexible mm <sup>2</sup>			
18 mm	16	50	180	1	12 0114

**Cable shears**

For copper and aluminium cables, excellent cutting performance, made from case-hardened 5 mm flat tool steel, precision ground cutting edges, finely bronzed, 2-component plastic handle sleeves, with special blade for fine-wire cables up to ø 18 mm

for cable ø	solid mm <sup>2</sup>	flexible mm <sup>2</sup>			
18 mm	16	50	180	1	12 0116

**One-hand cable shears**

For copper and aluminium cables, excellent cutting performance, smooth cut with no deformation, die-forged, precision ground, adjustable screw joint, 2-component plastic handle sleeves

for cable ø	solid mm <sup>2</sup>	flexible mm <sup>2</sup>			
16 mm	16	50	160	1	12 0104

**1000 V one-hand cable shears**

For copper and aluminium cables, excellent cutting performance, smooth cut without deformation with double dip-coated special insulation

for cable ø	solid mm <sup>2</sup>	flexible mm <sup>2</sup>			
16 mm	16	50	160	1	12 0206

**One-hand cable shears**

for copper and aluminium cables, excellent cutting performance, smooth cut without deformation, die-forged, precision ground, adjustable screw joint, 2-component plastic handle sleeves

for cable ø	solid mm <sup>2</sup>	flexible mm <sup>2</sup>			
25 mm	25	70	200	1	12 0100

**NEW**

Product video  
DUOCUT cable shears

**NEW****NEW**

Design	Size mm	VE	Article no.
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### 1000 V one-hand cable shears

For copper and aluminium cables, excellent cutting performance, smooth cut without deformation with double dip-coated special insulation



for cable ø	solid mm <sup>2</sup>	flexible mm <sup>2</sup>	Size mm	VE	Article no.
25 mm	25	70	200	1	12 0202



### Cable cutter for steel cables

One hand actuation due to optimal handle design, 2-component handles, blade hardness 60 – 62 HRC, suitable for cutting flexible steel cables up to ø 5 mm

Size mm	185	VE	1	Article no.	12 0146
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### Insulation stripping cable shears

Universal cable shears for copper and aluminium cables. For multi-core, solid conductors up to 16 mm<sup>2</sup>. Insulation stripping function with adjusting screw for setting to the desired wire or strand diameter from 0.5 to 2.0 mm (special zone on the cutting head). This tool is suitable for sheath stripping 4 – 16 mm (in the cutting zone) and for exact cutting of cables. With single-dip coating.



Size mm	160	VE	1	Article no.	12 0242
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### Cable shears

Universal cable shears for copper, aluminium and coaxial cables. The tool is suitable for the exact cutting of cables, handles with single-dip coating.



12 mm ø or 70 mm <sup>2</sup>	240	VE	1	Article no.	12 0330
20 mm ø or 95 mm <sup>2</sup>	235	VE	1	Article no.	12 0340



### Cable shears

Universal cable shears for copper, aluminium and coaxial cables. The tool is suitable for sheath stripping, insulation stripping (special zone on the cutting head) and for the exact cutting of cables, handles with single-dip coating.



10 mm ø or 50 mm <sup>2</sup>	160	VE	1	Article no.	12 0332
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### Cable shears

Universal cable shears for copper, aluminium and coaxial cables. This tool is suitable for precision cutting of cables. Additional blade for cutting steel wires, handles with single-dip coating.



12 mm ø	180	VE	1	Article no.	12 0334
16 mm ø	220	VE	1	Article no.	12 0336



### Cable shears

Universal cable shears for copper, aluminium and coaxial cables. This tool is suitable for precision cutting of cables, one-handed operation even for larger cable diameters thanks to a slot in the riveting area of the shank, handles with single-dip coating.



for cable ø	cross section mm <sup>2</sup>	Size mm	VE	Article no.
20 mm	95	250	1	12 0338



### Cable shears

With lever transmission and interchangeable cutter heads, PVC-covered tubular steel shanks

for cable ø	cross section mm <sup>2</sup>	Size mm	VE	Article no.
26 mm	120	600	1	12 0150



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Design	Size mm	PU	Article no.
<b>Cable shears</b>			
with interchangeable cutter heads			
for cable ø	cross section mm <sup>2</sup>		
26 mm	120	1	12 0147
42 mm	300	1	12 0151
65 mm	400	1	12 0157

### Cable cutter

- With ratchet action
- One-handed operation thanks to optimum lever transmission and step-by-step cutting
- Release possibility in all cutting positions
- All parts made from high-strength special steel
- Cutting edges and stressed parts tempered or hardened, bronzed surface
- Ergonomically shaped soft handles
- For copper and aluminium cables, single and multiple conductor

for cable ø	solid mm <sup>2</sup>	multi-wire mm <sup>2</sup>			
32 mm	1 x 150	4 x 35	250	1	12 0180
62 mm	1 x 500	4 x 185	310	1	12 0185

### 1000 V cable cutter

- With ratchet action
- One-handed operation thanks to optimum lever transmission and step-by-step cutting
- Release possibility in all cutting positions
- All parts made from high-strength special steel
- Cutting edges and stressed parts tempered or hardened, bronzed surface
- With double dip-coated special insulation
- For copper and aluminium cables, single-, multiple- and flexible conductors

for cable ø	solid mm <sup>2</sup>	multi-wire mm <sup>2</sup>			
32 mm	1 x 150	4 x 35	250	1	12 0182

### Cable cutter

- With ratchet action
- Two-handed operation thanks to optimum lever transmission and step-by-step cutting
- Release possibility in all cutting positions
- All parts made from high-strength special steel
- Cutting edges and stressed parts tempered or hardened, bronzed surface
- Ergonomically shaped soft handles
- For copper and aluminium cables, single and multiple conductor

for cable ø					
100 mm			820	1	12 0172

### One-hand ratchet cable cutter

For crush-free cutting of cables with a maximum outside diameter of 45 mm. Suitable for copper and aluminium cables, not suitable for steel wire, steel reinforced cables and hard-drawn copper conductors. Neat cut thanks to sharp, specially hardened blades, effortless one-handed use possible despite compact shape and thanks to ratchet mechanism with needle bearing eccentric transmission and ergonomic handles with narrow opening width. However, the handles are long enough to allow the second hand to be used in support during load peaks. Weight only 980 g. Movable blade, fully swivelling and unlockable in every position, handles locked via rotary knob (lock symbol), easy opening of the cutting blade by means of safety catch lockable in the open position.

Max. cutting performance

Cu (copper)	max. ø	45 mm
	Multi-wire	300 mm <sup>2</sup> / 600 MCM
	Sector-shaped conductor	3 x 70 SM
Al (aluminium)	max. ø	45 mm
	Multi-wire	400 mm <sup>2</sup> / 800 MCM
	Sector-shaped conductor	4 x 70 SE

		1	12 0168
Replacement pivot blade		1	12 9168



Image video  
Cable shears

Design	Size mm	VE	Article no.
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## One-hand ratchet cable cutter

Max. cutting performance

Cu (copper)	max. $\varnothing$	60 mm
	Multi-wire	400 mm <sup>2</sup> / 800 MCM
	Sector-shaped conductor	4 x 150 SM
Al (aluminium)	max. $\varnothing$	60 mm
	Multi-wire	400 mm <sup>2</sup> / 800 MCM
	Sector-shaped conductor	4 x 185 SE



		1	12 0178
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## Battery-operated cutting tools

General product features of CIMCO battery-operated hydraulic tools:

- Fast feed thanks to double piston hydraulics (advantage: shortening of cutting time due to fast bridging of the no-load stroke)
- Automatic pressure limit
- Quick stop (advantage: no running-on of the hydraulics - consequently no unwanted damage)
- Motor shutdown and automatic return after completed crimping (advantage: clear indication of the end of crimping process)
- Electronic control and monitoring of the pressing process (advantage: errors minimised through monitoring)
- Manual return
- Multi-function electronics with sleep mode for maintenance display and battery monitoring (advantage: longer service life for all components)
- Mini-USB port enables connection to all common PC systems for the purpose of service and monitoring
- The latest in battery technology! Lithium-ion technology without self-discharge and with low weight!
- Service and monitoring software for all common PC systems

## Hydraulic battery-operated cutter up to 45 mm diameter

Suitable for cutting aluminium and copper cables, as well as aluminium-steel cables up to a diameter of 45 mm.

Features: fold-out cutting head, can be rotated through 270°

Scope of delivery: Basic tool in case, charger, 2 rechargeable batteries, analysis software, mini-USB cable

Weight with case 14,500 g, weight without case 6,100 g

Cutting range	Cutting force	Operating pressure		
max. 45 mm $\varnothing$	60 kN	700 bar (70MPa)	1	10 5706



## Hydraulic battery-operated cutter up to 50 mm diameter

Suitable for cutting aluminium and copper cables up to a diameter of 50 mm.

Features: fold-out cutting head, can be rotated through 270°

Scope of delivery: Basic tool in case, charger, 2 rechargeable batteries, analysis software, mini-USB cable

Weight with case 14,050 g, weight without case 5,250 g

Cutting range	Cutting force	Operating pressure		
max. 50 mm $\varnothing$	60 kN	700 bar (70MPa)	1	10 5708



## Hydraulic battery-operated cutter up to 85 mm diameter

Suitable for cutting aluminium and copper cables up to a diameter of 85 mm.

Features: fold-out cutting head, can be rotated through 270°

Scope of delivery: Basic tool in case, battery charger, 2 rechargeable batteries, analysis software, mini-USB cable

Weight with case 15,750 g, weight without case 7,650 g

Cutting range	Cutting force	Operating pressure		
max. 85 mm $\varnothing$	70 kN	700 bar (70MPa)	1	10 5710



## Cable shears

Blades made from 3 mm non-rusting stainless steel, handles made from impact-resistant plastic, hardness HRC 50 to 54, self-locking nut and washer made from VA, safety lock, opens automatically with spring, suitable for left and right-handed use. For cutting cables and conductors up to 10 mm in diameter, insulation, wood, rope and other materials.

		165	1	12 0110
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SHEARS

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Design	Size mm	PU	Article no.
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**Universal shears**



Blades made from non-rusting stainless steel, handles made from impact-resistant plastic, hardness HRC 56 to 58, one blade finely serrated, self-locking nut and washer made from VA, safety lock, self-opening with spring, suitable for left and right-handed use, Blade length 42 mm. For cutting wire, cables, sheet metal, paper, cardboard, plastics, wood, leather and other materials.

	145	1	12 0120
	190	1	12 0122

**Electrician scissors**



Blades made from non-rusting VA-vanadium-molybdenum alloy, one blade finely serrated, glass-fibre reinforced impact-resistant 2-component plastic handles, total length 140 mm, blade length 47 mm. For cutting and insulation stripping of conductors and cables up to 22 mm in diameter, for cutting insulation tape, cable ties and other materials.

	140	1	12 0130
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**Electrician scissors with holster**



- Ergonomic two-component handle with glass fibre reinforcement
- Blades made of stainless steel HRC 56 AISI 420, 4 mm with serrated edge
- Length 155 mm, with 26 mm blades
- For cutting and stripping insulation from cables with diameters of up to 16 mm (50 mm<sup>2</sup>)
- Plastic holster for easy attachment to a belt or bag
- Weight of shears: 87 g
- Holster weight: 16 g
- Sheath length: 133 mm

		1	12 0126
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**Electrician scissors**



- Handle made of two-component material with fibreglass reinforcement; joint reinforced to avoid loosening
- Blades made of stainless steel 52/54 HRC, 3 mm with serrated edge
- Length 145 mm, with a blade length of 35 mm
- For cutting and stripping insulation from cables with a diameter of up to 8 mm (25 mm<sup>2</sup>)
- Weight: 80 g

		1	12 0132
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**Ergonomic electrician scissors**



- Grip with innovative design to reduce cutting forces, two-component material with fibreglass reinforcement
- Blades made of stainless steel 52/54 HRC, 3 mm with micro-serrated edge
- Length 155 mm, with a blade length of 40 mm
- Weight: 61 g

		1	12 0134
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**Electrician scissors with crimp insert**



- Hand grip made of two-component material with fibreglass reinforcement; all-round coating prevents slipping during the cutting process
- Reinforced joint; prevents loosening of the joint
- Blades made of stainless steel 52/54 HRC, 3 mm with serrated edge
- Length 162 mm, with a blade length of 42 mm
- For cutting and stripping insulation from cables with a diameter of up to 8 mm (25 mm<sup>2</sup>) with the straight edge and a cross section of up to 70 mm<sup>2</sup> (fine wire) with the round edge
- Crimp insert for wire end ferrules for cross sections of 1 to 6 mm<sup>2</sup>; Crimp insert made of stainless steel
- Weight: 100 g

		1	12 0144
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Design	Size mm	VE	Article no.
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## Telephone scissors

with wire cutter, bright nickel plated

with smooth cutting edge	130	1	12 0220
with serrated cutting edge	130	1	12 0222



## Crown scissors

Bright nickel plated, with serrated cutting edge, for the thinnest wires

	115	12	12 0230
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## Universal shears (paper, wallpaper and household scissors)

Stainless steel blades, ergonomically shaped handles in modern 2-component technology with soft rubber insert

	220	1	12 0128
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## Multi-purpose shears for plastics

Practical set, consisting of quality shears and 5 interchangeable cutting inserts, in impact-proof, handy plastic case, essential for almost all craft work in electrical and sanitary installation. Not suitable for cutting halogen-free materials.

**Contents:** **Multi-purpose shears** for quick, non-crushing cutting work on plastic, rubber and wooden parts and on ribbon cables (except hard metals), solid precision cutting blade (cutting length 57 mm) made of case-hardened tool steel (> 52 HRC), can be sharpened, special cutting geometry for very light cut, eccentrically placed pivot point for oblique shearing makes tedious deburring superfluous, with opening spring and locking device, ergonomically shaped plastic handles with anti-slip protection. 5 different cutting inserts in lightweight metal, can be changed in seconds: **flat-straight insert** (pre-mounted in the shears) for general cutting work on flat materials such as plastic profiles, ribbon cables, cable ducts, skirting boards etc., **mitre insert** with try square and markings for angle cuts at 45° - 60° - 75° - 90° - 105° - 120°, **profile insert at 90°** for cutting box profiles up to 25 x 45 mm, e.g. small cable and cable routing ducts, and also for hard or thick-walled plastic tubes and hoses up to 25 mm diameter, **round profile insert 16 / 19 mm** each with one round guide 16 mm ( $\frac{3}{8}$ " )- and one 19 mm ( $\frac{3}{4}$ " ) diameter respectively, plus round profile insert 25 mm with a **round guide 25 mm** (1") diameter, ideal for burr-free cutting of flexible and hard plastic tubes and hoses. Not suitable for halogen-free materials.

		1	12 0210
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Replacement parts:

Flat-straight		1	12 0211
Mitre insert		1	12 0212
Round profile 16/19 mm ø		1	12 0213
Round profile 25 mm ø		1	12 0214
Profile insert 90°		1	12 0215
Replacement blade		1	12 0216



## Multi-purpose shears for plastic pipes and hoses

Shears as CIMCO article no. 12 0210, with pre-mounted cutting insert CIMCO article no. 12 0213, for cutting round profiles with a diameter of 16 mm ( $\frac{3}{8}$ " ) and 19 mm ( $\frac{3}{4}$ " ), in particular hard and flexible plastic tubes (corrugated tubes).

		1	12 0290
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## Plastic shears with adjustable stop

Shears as in the set (CIMCO article no. 12 0210), but with adjustable stop angle for convenient mitre cuts, locking positions at 45°, 60°, 75°, 90°, 105°, 120° and 135°, 2-component handles.

		1	12 0208
Replacement blade		1	12 0216





# WIRE STRIPPING TOOLS

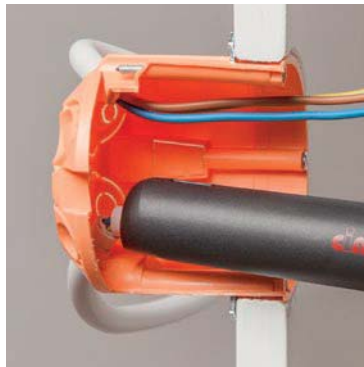
The CIMCO inside-socket sheath stripper wand is perfectly suited for working in device sockets and junction boxes.



The ergonomic, anti-slip 2-component handle zone provides a secure hold. The four-blade layout reduces the force required and increases precision.



The tool length selected to suit deep device sockets offers the user particular convenience: Working in front of the device socket is easy and the cable can be stripped without any problems.



Fingers are kept well away from the sharp edges of the socket opening...



...and the handle zone with soft components allows enough force to be transferred to the tip of the tool.

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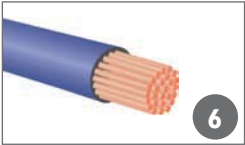
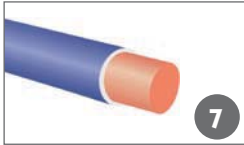



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Design	Size mm	PU	Article no.
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### Description of the symbols

Cable symbols with the respective main fields of application are assigned to the wire stripping tools. The field of application can by all means include multiple cable and line types; in order to facilitate selection, however, only the respective main application is identified.

				
AS interface cable	Cat data line	Coaxial cable for audio, video and TV connection (antenna line), coaxial cable for networking	Data lines; network cables; sensor and actuator lines; shielded and unshielded	Flat cable with several conductors for fixed installation e.g. NYIF-J
				
Single conductor	Solid single conductor	Lines for fixed installation; lines with multiple conductors for fixed laying; flexible cable; moisture-proof cable e.g. NYM, NYY, NHXMH halogen-free	Solar, power lines	Connection and control lines, e.g. Ölflex®

## Section 1 – Manual cable sheath strippers / insulation strippers

Insulation stripping tools with which the process of cutting and splitting the insulation is primarily performed manually.

### 1.1 Universal application: Single conductors, installation cables, underground cables

#### Universal cable sheath cutter

for removing all insulation layers from cables from 25 mm ø, e.g., lead sheath, rubber, PE and PVC adjustable cutting depth of 0.5 – 5 mm, suitable for longitudinal and round cuts, interchangeable blade

> 25 mm ø	1	12 0002
Replacement blade	1	12 0003

#### KABIFIX cable sheath stripper

for longitudinal and round cuts. Suitable for slitting and stripping cables from 6 to 28 ø, also for cutting PVC pipes, interchangeable blade

6 – 28 mm ø	1	12 0030
Replacement blade	1	12 0032

#### KAIMAN cable sheath stripper

specially designed for moisture-proof cable to 7 x 1.5 mm<sup>2</sup> or 5 x 2.5 mm<sup>2</sup>, extremely well suited for work in switch and junction boxes. Robust, hard chrome-plated design with anti-slip protection and interchangeable blade; adjusting screw enables continuously adjustable cutting depth.

Insulation stripping of longer sheath sections can be carried out by leading the conductor through the hole in the handle area. With rotational direction marking for cable round cut.

6 – 13 mm Ø	1	10 0765
Replacement blade	1	10 0766

#### ROTAX 29 cable sheath stripper

professional cable sheath stripper for round cut, longitudinal cut, and spiral cut; for cable from 4.5 to 29 mm diameter. Due to the unique spiral cut, even difficult to process insulation types (e.g., rubber, butyl) can be easily removed. Adjustable cutting depth, especially stable plastic housing and extra sharp, interchangeable blade.

4.5 – 29 mm Ø	140	1	12 0036
Replacement blade		1	12 0038



Design	Size mm	PU	Article no.
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### MULTISTRIPPER cable sheath stripper

for processing all round cables from 8 to 13 mm  $\varnothing$ .  
 Sheath stripping: round and longitudinal cut, as well as flush stripping in difficult to reach places such as ceiling and wall areas, in distributors and junction boxes.  
 Insulation stripping: flexible and solid conductors 0.5 – 0.75 – 1.5 – 2.5 – 4 – 6 mm<sup>2</sup>  
 Cutting: solid conductors to 4 mm<sup>2</sup>, flexible conductors to 6 mm<sup>2</sup>



8 – 13 mm $\varnothing$		1	12 0021
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### »»JOKARI<sup>original</sup> Inside-socket sheath stripper wand

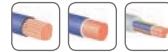
for all common cables of 8 – 13 mm  $\varnothing$ .  
 • Titanium nitride coated blades guarantee the longest possible service life and extremely good sliding properties  
 • Secure hold thanks to ergonomic, anti-slip 2-component handle zone  
 • Four-blade layout reduces force required and increases precision  
 • Inscription panel makes it easier to personalise the sheath stripper  
 • Length scale  
 • TÜV/GS tested



8 – 13 mm $\varnothing$		1	12 2027
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### »»JOKARI<sup>original</sup> Super sheath stripper

With round and longitudinal cutter, insulation stripping mechanism and foldaway additional blade  
 Sheath stripping: cable of 8 – 13 mm  $\varnothing$ , e.g.: 7 x 1.5 mm<sup>2</sup> or 5 x 2.5 mm<sup>2</sup>  
 Insulation stripping: 0.2 – 0.3 – 0.8 – 1.5 – 2.5 – 4 mm<sup>2</sup>



TiN

8 – 13 mm $\varnothing$		1	12 0025
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### »»JOKARI<sup>original</sup> Universal cable sheath stripper

for all common cables of 8 – 13 mm  $\varnothing$ .  
 Especially suitable for work in places that are difficult to access



TiN

8 – 13 mm $\varnothing$		1	12 0028
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### »»JOKARI<sup>original</sup> Sheath stripper for flat cables

for all common flat and oval cables up to a width of 12 mm, insulation stripping for conductors and flexible stranded wires 0.75 – 1.5 – 2.5 mm<sup>2</sup>



max. 12 mm		1	12 0029
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### »»JOKARI<sup>original</sup> All-rounder cable sheath stripper

for all common round cables incl. cables for fixed installation, moisture-proof, industrial, energy, telephone, solar, sensor, YMzK, halogen-free, data, coax, Cat (5,6,7), RG58/59, video cable as well as ribbon cable for installations. An insulation stripper for stripping the sheath off ribbon and round cables, for DIY, trade or industrial applications. Area to be stripped: common round cables with a PVC sheath, rubber, or hard plastic sheath 4 - 15 mm  $\varnothing$  such as NYM 3 x 1.5 mm<sup>2</sup> or 5 x 2.5 mm<sup>2</sup>, installation ribbon cable up to 15 mm width, flexible conductors 1.5 – 50 mm<sup>2</sup>. Long stretches of cable can be stripped using a longitudinal cut. Repositionable length stop for left and right handed people with a parking position for free conductor bypass for any length of stripping, structured, anti-slip surfaces, TÜV/GS certified. Stripping a cable with varying wall thickness of the sheath makes it difficult for any user not to damage the inner conductors because the cut depth of the blade and the contact pressure of the hand cannot be precisely controlled.



4 – 15 mm $\varnothing$	130	1	12 0009
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### »»JOKARI<sup>original</sup> Cable sheath stripper Uni-Plus

for sheath stripping round cables between 8 – 13 mm  $\varnothing$ , insulation stripping various types of cable, e.g. NYM 3 x 1.5 mm<sup>2</sup> to 5 x 2.5 mm<sup>2</sup>, it is not necessary to adjust the blade to the cutting depth, housing made of high quality, wear-resistant polyamide, with insulation stripping device for conductors and stranded wires 1.5 mm<sup>2</sup> and 2.5 mm<sup>2</sup>, with two-way length stop (ideal for right and left-handed people), with attachment device at the end of the handle, TÜV / GS certified



8 – 13 mm $\varnothing$	130	1	12 0005
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»JOKARI<sup>original</sup> **Locator box for 12 0009 and 12 0005**

with the locator system, the user can equip their Allrounder sheath stripper CIMCO article no. 12 0009 or also UNI-Plus CIMCO article no. 12 0005 with a force and height limiter (locator). After defining the blade spacing by precisely setting the locator to the wall thickness of the cable, the depth at which the blade can penetrate the cable sheath is limited. This significantly speeds up insulation stripping on type of cable which appear frequently. By adjusting the locator, the blade spacing on the Allrounder sheath stripper can be precisely set from 4.0 to 11.9 mm diameter. The locator box can easily be stored in the tool handle and equipped with an Allen key as an accessory. The different colours of the locators provide the option to reserve set locators for selected types of cable which appear frequently. The locator system allows cut injuries caused by sharp blades to be avoided and allows a specified level of process safety to be attained in cable processing.

		1	12 9009	
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**DUOSTRIPPER wire stripping tool**

Sheath and insulation stripping with one tool.  
Sheath stripping: for all common round cables of 4 – 28 mm Ø.  
Insulation stripping: automatic adjustment to conductor cross sections of 0.5 – 6 mm<sup>2</sup>



4 – 28 mm Ø		1	12 0048	
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**Varnish stripper**

for wires of Ø mm

0.5 (AWG 24)	125	1	10 0710
0.6 (AWG 22)	125	1	10 0712



**1.2 Application for coaxial cables**

»JOKARI<sup>original</sup> **Cable sheath stripper COAXI**

for all common cables of 4.8 – 7.5 mm Ø, especially suited for coaxial cable (antenna cable), incl. Socket wrench SW 11 (CIMCO-Article no. 12 2127)



4.8 – 7.5 mm Ø		1	12 0027	
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with length scaling

4.8 – 7.5 mm Ø		1	12 1027	
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»JOKARI<sup>original</sup> **Nut driver size 11 - accessory**

made of highly rigid fibre glass reinforced plastic, to fasten F-connectors (HEX 11), for retrofitting the cable sheath stripper COAXI (CIMCO-Article no. 12 0027)

		1	12 2127	
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**ECONOMY coaxial cable stripping tool**

for coaxial cable, esp. RG 58, RG 59, RG 62, RG 6; adjustable blade cutting depth, 3 interchangeable blades, select from cutting distances of 8 mm, 6 mm and 4 mm

	110	1	12 0098	
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**CUT AND STRIP cable sheath stripper**

incremental trimming and stripping of sheaths and insulation of all common coaxial cables as well as of many flexible cables, integrated cable cutter up to 6 mm<sup>2</sup>, for all common cables 4.8 – 7.5 mm Ø

4.8 – 7.5 mm Ø		1	12 0026	
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**1.3 Application for network cables / fibre optic cables**

»JOKARI<sup>original</sup> **PC-STRIP insulation stripper**

Special wire stripping tool for data and control lines, communication lines, system cables, etc.  
Sheath stripping: cable of 5 - 13 mm Ø  
Insulation stripping: conductors of 0.2 - 4.0 mm<sup>2</sup> or AWG 26 - 11



5 – 13 mm Ø		1	12 0034	
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Design	Size mm	PU	Article no.
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»»JOKARI<sup>original</sup> **PC-CAT insulation stripper**



Special wire stripping tool for PVC-insulated data communication and control lines (e.g., CAT 5, CAT 6 or CAT 7 cable, twisted pair cable), sheath stripping for cables 4.5 to 10 mm ø and 0.2, 0.3 and 0.8 mm<sup>2</sup>

4.5 – 10 mm Ø	1	12 0017
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for PVC-insulated data cables (e.g., CAT 5, CAT 6 or CAT 7 cable, twisted pair cable) with a ø of 4.5 to 10 mm. It is not necessary to adjust the cutting depth to the respective diameter as the special blade position perfectly strips the outer insulation and the metal foil shield can then also be scored and removed. The insulation stripping blades are equipped with a premium titanium nitrate coating for precise cuts. TÜV/GS-tested.



4.5 – 10 mm Ø	1	12 0015
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»»JOKARI<sup>original</sup> **Sheath strippers for power and safety cables**

for all common short-circuit-proof and short-to-ground-proof, flame-resistant, halogen-free lines (NSGAFÖU, VER H07RN-F, ignition cable), no cutting depth adjustment required, with integrated length stop



for conductor cross sect.	length stop		
1.5 mm <sup>2</sup>	8 mm	1	12 0022
2.5 mm <sup>2</sup> to 6 mm <sup>2</sup>	10 mm	1	12 0023
10 mm <sup>2</sup> to 16 mm <sup>2</sup>	12 mm	1	12 0024



»»JOKARI<sup>original</sup> **Sheath stripper and stripping tool for rubberised AS-interface cable**



for quick and precise sheath and insulation stripping from two-conductor actuator sensor interface (AS-i) cable with rubberised profiled outer insulation up to a width of 12 mm. The cutting blades are designed for the special cable shape. No adjustment of the cutting depth required, individual blades on the side for stripping the insulation from both internal conductors (1.5 mm<sup>2</sup>).

125	1	12 0019
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»»JOKARI<sup>original</sup> **CAN-STRIP cable sheath stripper**

Sheath stripper for Data Bus Twisted Pair cables and WF cables. Working range 3.3 to 3.6 mm ø.



3.3 – 3.6 mm Ø	100	1	12 0007
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**Universal insulation stripper DATA STRIP for data cable**

for trimming and stripping sheaths and insulation from round and flat cables, shielded and unshielded cables, adjustable cutting depth, 3 interchangeable blades, for cables from 2 to 10 mm ø



2 – 10 mm ø	110	1	12 0092
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**LWL wire stripper**

Precision insulation stripper with 3 stripping stations for primary coating, secondary coating and outer sheath of fibre optic cables; pre-set cutting depth, is however continuously adjustable, locking mechanism, ergonomic 2-component handles

1	12 1104
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**1.4 Multiple application, also for crimping wire end ferrules**

**DUOCRIMP multi-function tool**



for cutting off and stripping insulation from conductors and stranded wires, as well as for crimping non-insulated and insulated wire end ferrules.

Working range of diagonal pliers	flexible	up to 6 mm <sup>2</sup>
	solid	up to 4 mm <sup>2</sup>
Working range insulation stripper		up to 6 mm <sup>2</sup>
Crimping areas		0.5 – 2.5 mm <sup>2</sup>
		4 – 6 mm <sup>2</sup>
160	1	10 0720



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Design	Size mm	PU	Article no.
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## Chapter 2 - Automatic wire strippers

Insulation stripping tools where the process of stripping and removing the insulation is primarily performed automatically by the mechanical function of the tool.

### 2.1 Universal application: Single conductors, installation cables, underground cables

#### POWER STRIP



wire stripper that automatically adjusts itself to the conductor cross section, suitable for several common cables. Also suitable for problematic insulation, such as silicone insulation or outer sheaths made of PVC or flexible rubber cable (e.g. 3 x 0.75 mm<sup>2</sup>). Optical length measurement 8 mm to 24 mm or 5/16" to 1" for continuously consistent stripping lengths for volume work with wire end ferrules and cable lugs. Optimal force transmission and a window to push the cable through provide up to 20 cm of insulation stripping depending on the cable type. The special sensor system adjusts itself automatically to the respective conductor cross section and protects the interior conductors from damage. A fine 5-fold pressure setting to various cable types and diameters is possible. With integrated, easily accessible diagonal pliers for flexible and solid copper conductors of up to 3 mm ø. Ergonomic pistol grip for fatigue-free work, weight only 200 g.

Designed for round cable of 0.5 to 16 mm<sup>2</sup> (AWG 20 to AWG 6)

0.5 – 16 mm <sup>2</sup>	170	1	10 0770
Replacement blade		1	10 0773

Designed for 2 and 3-conductor flat cable from 0.75 to 2.5 mm<sup>2</sup> and maximum widths up to 12 mm



max. 12 mm	170	1	10 0771
Replacement blade		1	10 0772

#### MAXIM 6 automatic wire stripper



for finely wired and solid conductors with PVC insulation. For round, oval and flat cables of 0.2 - 6 mm<sup>2</sup>. Stripping length with stop can be set from 4 to 18 mm for volume work. No damage to the conductors due to special, self-adjusting, interchangeable segmented blades. Automatic opening of the gripping device after insulation stripping. Integrated high-performance wire cutter. Especially ergonomic, energy-saving design. Weight 198 g

0.2 – 6 mm <sup>2</sup>		1	10 0736
Replacement blade		1	10 0737

#### »JOKARI original EASYSTRIP wire stripper



Automatic stripping tool for Al and Cu wires of 0.5 – 6 mm<sup>2</sup> (AWG 20 to AWG 10), integrated diagonal pliers for Cu wires to 2.8 mm ø, especially light and ergonomic. Weight 160 g.

0.5 – 6 mm <sup>2</sup>	180	1	10 0755
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#### Automatic wire stripper



for flexible stranded wires and solid conductors of 0.08 - 6 mm<sup>2</sup>. Automatic adjustment. Adjustable stripping length from 4 - 18 mm. With wire cutter

0.08 – 6 mm <sup>2</sup>		1	10 0730
Replacement blade		1	10 0731

#### MINIM automatic wire stripper



for solid and flexible conductors and stranded wires with PVC insulation, working range 0.08 – 2.5 mm<sup>2</sup>, automatic setting to conductor cross-section, interchangeable blade, adjustable length stop for stripping length from 3 to 15 mm, integrated wire cutter (solid up to 1.5 mm<sup>2</sup>, flexible up to 2.5 mm<sup>2</sup>), particularly ergonomic "Pistols" design, weight 260 g.

0.08 – 2.5 mm <sup>2</sup>		1	10 0738
Replacement blade		1	10 0739

#### Automatic wire stripper



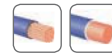
for flexible stranded wires and solid conductors of 0.08 to 1 mm<sup>2</sup>. Automatic adjustment. Adjustable stripping length from 2.5 - 7 mm. With wire cutter

0.08 – 1 mm <sup>2</sup>	135	1	10 0732
Replacement blade		1	10 0733



Design	Size mm	PU	Article no.
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**»JOKARI<sup>original</sup> Automatic wire stripper**



wire stripper that automatically adjusts itself to the conductor cross section, for solid and flexible conductors and stranded wires from 0.2 mm<sup>2</sup> to 6 mm<sup>2</sup> (AWG 24 to AWG 10), suitable for standard insulation (e.g. of PVC), integrated wire cutter for copper and aluminium wires up to 2.5 mm<sup>2</sup>, with adjustable length stop from 6 to 18 mm for volume work, especially ergonomic due to handy pistol shape, handle with soft plastic insert. Interchangeable blade weight 150 g

0.2 – 6 mm <sup>2</sup>		1	10 0775
Replacement blade		1	10 0777



**»JOKARI<sup>original</sup> SUPER 4 PLUS wire stripper**



for flexible stranded wires and solid conductors, suitable for almost all insulation types. In an ergonomic pistol shape with adjustable length stop of 6.0 to 15.0 mm. Automatic adjustment to cross sections of 0.2 mm to 6.0 mm using a special sensor system. Stable, easily accessible side cutter for wires to 2.5 mm<sup>2</sup>.

0.2 – 6 mm <sup>2</sup>	160	1	10 0780
Replacement blade		1	10 0764



**Automatic wire stripper SAFETY-STRIP**

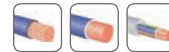


for flexible stranded wires and solid conductors of 0.2 to 6 mm<sup>2</sup>, with protective insulation up to 1000 volts, tested according to DIN EN 60 900, automatic adjustment to the conductor cross section, integrated length stop and closer for transport and storage

1000 V 0.2 – 6 mm <sup>2</sup>		1	10 0762
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**»JOKARI<sup>original</sup> MAXISTRIP wire stripper**



for quick and problem-free insulation stripping of flexible stranded wires and solid conductors of 6 - 16 mm<sup>2</sup>. Automatic adjustment to conductor cross section, damage to conductor is eliminated. With optical length stop 15 - 18 - 20 mm. Weight 120 g.

6 – 16 mm <sup>2</sup>	180	1	10 0744
Replacement blade		1	10 0745



**»JOKARI<sup>original</sup> Ribbon cable pliers**



automatic wire stripper suitable for PVC insulated ribbon cable up to a max. width of 12 mm and 0.75 x 2.5 mm<sup>2</sup>, cross-section, optical length stop up to 20 mm, not necessary to adjust the pliers, length to be stripped can be freely selected.

max. 12 mm		1	10 0724
Replacement blade		1	10 0726



**2.2 Application for sensor lines**

**»JOKARI<sup>original</sup> SENSOR SPEZIAL automatic wire stripper**



wire stripper developed especially for halogen-free PUR and PVC cables, removes the outer sheath without damaging the inner conductors or the braid. Due to the absence of a length stop, cables can be stripped to any desired length. Automatic adjustment and special blade geometry ensure secure insulation stripping for the following cable types:

Halogen-free sensor/actuator cables with PUR or PVC outer sheath, 3 to 8-conductor cable construction, shielded or unshielded (e.g. 3 x 0.34 mm<sup>2</sup> unshielded to 8 x 0.25 mm<sup>2</sup> shielded), round cable ø: 4.4 to 7 mm.

4.4 – 7 mm ø	165	1	10 0746
Replacement blade		1	10 0743



**»JOKARI<sup>original</sup> SENSOR MINI wire stripper**



designed for processing sensor cables with a new type of blade, precise distance of PVC- / PUR- cable sheaths from 3.2 mm Ø upwards without damaging the conductors or the braid.

The sensor system for the pliers automatically adjusts to the various cable diameters. Stripping the insulation off cables, e.g. to connect sensor / actuator distributor boxes, bus couplers, and plug connectors is quick and easy to do. Suitable for: PUR halogen-free sensor / actuator cables, highly flexible TPE-U cables, PUR cables, PUR / PVC cables, PVC cables, multi-core cable constructions as well as shielded and unshielded cables, round cables 3.2 - 4.4 mm ø. Weight: 126 g

3.2 – 4.4 mm ø	165	1	10 0747
Replacement blade		1	10 0753



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Design	Size mm	PU	Article no.
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### 2.3 Application for problematic insulations, such as rubber, silicone, TPE, Teflon, etc.

#### »JOKARI<sup>original</sup> HIGHSTRIP wire stripper



for quick and absolutely precise stripping of even problematic insulation stripping, such as Teflon, PVC, rubber, TPE, silicone, THHN, THWN, PMMA, fibre optic cables with PE sheath, e.g. 0.5 – 0.75 – 1.5 – 2.5 – 4 mm<sup>2</sup>. Damage to the conductor or stranded wires is eliminated, weight 100 g.

0.5 – 4 mm <sup>2</sup>	160	1	10 0740
Replacement blade		1	10 0741



### 2.4 Application for solar lines

#### Automatic wire stripper



for all common solar cables of 1.5 mm<sup>2</sup> to 6 mm<sup>2</sup> that are used in the photovoltaic sector. Due to the precise, fine, 5-fold adjustment, stripping even the multi-layered insulation of solar cables is no problem. Optical length measurement of 8 to 24 mm, <sup>5</sup>/<sub>16</sub>" to 1" for continuously consistent stripping lengths. With integrated, easily accessible diagonal pliers for cable of up to 3 mm ø. Ergonomic pistol grip for fatigue-free work. Weight 240 g

1.5 – 6 mm <sup>2</sup>		1	10 0774
Replacement blade		1	10 0779

### 2.5 Application for AS-interface cables

#### »JOKARI<sup>original</sup> Sheath strippers for AS-interface cable with TPE or PUR insulation



for quick and precise sheath stripping from two-conductor actuator sensor interface (AS-i) cable with profiled outer insulation made of TPE (thermoplastic elastomer) or PUR (polyurethane) up to a width of 12 mm. Special blade contour that adjusts to the cable profile, no cutting depth adjustment required, not possible to damage inner conductors. Fibre glass reinforced tool body, interchangeable blade, specially ground and hardened, weight only 120 g

	160	1	10 0748
Replacement blade		1	10 0749

### 2.6 Application for cable sheath sections

#### »JOKARI<sup>original</sup> OUTLET SPECIAL wire stripper



suites for round cables (e.g., NYM 3 x 1.5 mm<sup>2</sup>, 3 x 2.5 mm<sup>2</sup>, 5 x 1.5 mm<sup>2</sup>) or shielded lines. Particularly suitable for use in confined working conditions. A 55 or 20 mm wide cable opening is created at any point in the cable in three steps; cutting depth 1.2 mm. Compatible with OBO cable laying system.



longitudinal cut



Round cut to the left and right of the longitudinal cut through 1/4 rotational movement of pliers



Image video  
Insulation stripping in new dimensions

up to 55 mm	175	1	10 0752
up to 20 mm	175	1	10 0751



Design		Size mm	PU	Article no.	
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## 2.7 Multiple application, also for crimping wire end ferrules

### »JOKARI<sup>original</sup> QUADRO wire stripper - The pliers with 4 functions

for efficient and precise processing of insulated wire end ferrules in strip form from 0.5 – 2.5 mm<sup>2</sup>

Functions:

1. **Cutting**  
for wires and stranded wires up to 2.5 mm<sup>2</sup>
2. **Insulation stripping**  
working range 0.5 - 2.5 mm<sup>2</sup>
3. **Twisting**  
no fanning out of the wires means safe feed-in of the conductor into the wire end ferrule.
4. **Crimping**  
flawless crimping of 0.5 - 2.5 mm<sup>2</sup> by appropriate trapezoidal crimping.



QUADRO case complete		1	10 0728	
QUADRO changer magazine		1	10 0727	
QUADRO pliers with storage	180	1	10 0725	

For strip goods, see page 307 in chapter 21.

## Chapter 3 - Precision insulation stripper

Stripping tools which are primarily operated mechanically and are suitable for small and miniature cable and line dimensions thanks to pre-defined grids.

### 3.1 Range with adjustable working range

#### »JOKARI<sup>original</sup> Precision insulation stripper PWS-PLUS



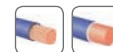
ideal for applications in electronics, computer technology, telecommunications, data communications, model building, etc. Adjustable stripping range from 0.25 to 1.00 mm Ø, adjustable length stop up to 15 mm and cutting mechanism for wires up to 0.8 mm Ø. Especially suitable for stripping conductors with outer insulation of PVC, Teflon®, KYNAR®, TEFZEL® and MYLAR®.

	Working range	AWG		
grey push button	0.12 – 0.4 mm Ø	36 – 26	1	12 0097
red push button	0.25 – 0.80 mm Ø	30 – 20	1	12 0033
blue push button	0.30 – 1.00 mm Ø	28 – 18	1	12 0031
Replacement blade			1	12 0099



### 3.2 Range with fixed working range

#### »JOKARI<sup>original</sup> SWS-PLUS mini-precision insulation stripper



lightweight and convenient mini-precision stripping tool for stripping the sheath off conductors and stranded wires. Suitable for conductors with outer insulation of PVC, Teflon®, KYNAR®, TEFZEL®, and MYLAR®. For applications in electronics, computer and networking technology, alarm and bell systems, wire wrapping, telecommunications, data communication, model construction. Particularly helpful for assembly workstations as the working range can be precisely set firmly at a particular cable diameter avoiding any damage to the corresponding workpieces.

mm Ø	AWG		
0.12	36	1	12 0091
0.16	34	1	12 0093
0.20	32	1	12 0095
0.25	30	1	12 0083
0.30	28	1	12 0084
0.40	26	1	12 0085
0.50	24	1	12 0086
0.60	22	1	12 0087
0.80	20	1	12 0088
1.00	18	1	12 0089



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Design	Size mm	PU	Article no.
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### 3.3 ESD range (electrostatic discharges)

#### »JOKARI<sup>original</sup> ESD-PLUS mini-precision insulation stripper



lightweight and convenient mini-precision stripping tool for stripping the sheath off conductors and stranded wires. Tool housing made of electrostatically discharging material. Especially suitable for conductors with outer insulation of PVC, Teflon®, KYNAR®, TEFZEL® and MYLAR®. For applications where electrostatic discharge could damage the components.



mm ø	AWG		
0.12 - 0.40	36 - 26	1	12 0035
0.25 - 0.80	30 - 20	1	12 0037
0.30 - 1.00	28 - 18	1	12 0039

### Chapter 4 - Cable stripping knife

Cable stripping knife with one or more functions.

#### Automatic cable stripping knife

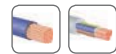
Cable stripping knife, time-tested through millions of uses, for round and longitudinal cuts, individually screw-adjustable cutting depth that eliminates damage to the inner conductors. Handle shells of wear-resistant polyamide. Both the tips of the inner cable stripping knives and the cutting edges of the attached clamping blades are coated with titanium nitrite. At approx 500 °C, the cutting blade is vapour coated with titanium nitrite in a vacuum chamber according to the PVD process. Excellent gliding qualities and high resistance to wear and abrasion are achieved through the reduced surface area structure and the extremely high level of hardness. TiN-coated blades can be used with significantly higher durability and cutting performance.



Product video  
Cable stripping knife



#### »JOKARI<sup>original</sup> Cable stripping knife



Design with changeable blades and TiN-coated safety blade. Two-component tool with improved ergonomics for better control during the stripping process and safe operation.

Blade system very easy to exchange without using tools; blade size as delivered for cable diameter 8 – 28 mm.

Adjustable and scalable inner blade for longitudinal and round cut.

Protected hooked blade with adjustable depth; automatic protection mechanism in order to avoid unintentional slipping and cut injuries.

**TiN**

8 – 28 mm ø		1	12 2016
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Exchangeable hook blades for 12 2016

4 – 16 mm ø		1	12 2020
8 – 28 mm ø		1	12 2021
27 – 35 mm ø		1	12 2022
35 – 50 mm ø		1	12 2023
50 – 70 mm ø		1	12 2024

Replacement parts

Hook blade, TiN-coated		1	12 2025
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#### Replacement blade (inner blade)

for all automatic cable stripping knives

**TiN**

		1	12 0020
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#### »JOKARI<sup>original</sup> Cable stripping knife



Two-component tool with non-slip, soft grip insert and thumb grip for optimal handling.

**TiN**

with hooked blade

8 – 28 mm ø		1	12 0010
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with straight blade

8 – 28 mm ø		1	12 0011
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Design	Size mm	PU	Article no.
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»»JOKARI<sup>original</sup> **Cable stripping knife without blade**

for slitting open and stripping sheaths from moisture-proof cables, 2-component tool with non-slip, soft grip insert and thumb grip for optimal hold.



4 – 16 mm ø		1	12 0012
8 – 28 mm ø		1	12 0014
28 - 35 mm ø		1	12 0016
35 - 50 mm ø		1	12 0018
50 - 70 mm ø		1	12 0013



»»JOKARI<sup>original</sup> **Cable stripping knife**

Standard design with enlarged adjusting screw. with hooked blade



8 - 28 mm ø		1	12 1010
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with straight blade

8 - 28 mm ø		1	12 1011
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»»JOKARI<sup>original</sup> **Cable stripping knife without blade**

Standard design with enlarged adjusting screw. for slitting open and stripping sheaths from moisture-proof cables.



4 – 16 mm ø		1	12 1012
8 – 28 mm ø		1	12 1014



»»JOKARI<sup>original</sup> **Cable stripping knife without blade**

fully insulated, all individual parts except for inner knife made of plastic, for stripping sheaths from all conventional cables, with enlarged adjusting screw.



8 – 28 mm ø		1	12 0008
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**Protective cap**

Replacement protective cap for all automatic cable stripping knives with a blade.

		1	12 1020
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**SAFETY STRIPPER automatic cable stripping knife**

Cable stripping knife with self-rotating blade for round and longitudinal cuts, for cable from 4 to 28 mm ø ( $\frac{5}{32}$ " to 1  $\frac{1}{8}$ " ). An adjustment screw enables the cutting depth to be individually adjusted. Handle shells of wear resistant, fibre glass reinforced polyamide. Hooked blade foldaway and lockable.



4 – 28 mm ø		1	12 0006
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**SAFETY STRIPPER PLUS automatic cable stripping knife**

Cable stripping knife with self-rotating blade for round and longitudinal cuts, for cable from 4 to 28 mm ø ( $\frac{5}{32}$ " to 1  $\frac{1}{8}$ " ). An adjustment screw enables the cutting depth to be individually adjusted. Handle shells of wear resistant, fibre glass reinforced polyamide. Insulation stripping (0.5 – 0.8 – 1.5 – 2.5 – 4.0 – 6.0 mm<sup>2</sup>) via folding mechanism on handle end.



4 – 28 mm ø		1	12 0004
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Design	Size mm	PU	Article no.
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### Cable stripping knife - shears set, 2 piece

#### Cable stripping knife

Blade design with reinforced blade back and lightly serrated front cutting edge. The additional cutting edge in the front area of the main cutting edge, together with the metal guide shoe on the blade guard, allows you to make secure longitudinal cable cuts. The foldaway blade guard with integrated stripper for cable of 0.5 – 6 mm<sup>2</sup> (AWG 20 – 10) can also be used as counter pressure on the cable for round cuts to a diameter of 50 mm. Total length 170 mm, blade length 45 mm.

#### Electrician scissors

one-sided micro-serrated cutting edge, fibre glass reinforced, impact-resistant, 2-component plastic handle, total length 140 mm, cutting edge length 47 mm. For cutting and stripping insulation from conductors and cables to a diameter of 22 mm, for cutting insulating tape, cable ties and other materials.

#### Tool holder

light plastic holder for knives and shears with belt receiver. The knife can also be secured by means of a locking mechanism



2 piece	180	1	12 0218
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### 1000 V Safety cable stripping knife

with insulated blade back and blade guard that folds away into the shaft, interchangeable blade

Blade length 50 mm	1	12 0064
Interchangeable blade	1	12 0066



### 1000 V Safety cable stripping knife

Cable stripping knife especially suitable for working with insulation on large cables, with strong, straight blade of stainless steel, blade length approx. 50 mm. 1000 volt insulating handle with large anti-slip protection in modern 2-component technology (polypropylene with soft rubber insert) for working comfortably and securely even in wet, cold or hot conditions. With blade protection cover.

	1	12 1042
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### 1000 V Cable stripping knife

with hooked blade and shuttle

Blade length 40 mm	1	12 0046
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### 1000 V Cable stripping knife

with strong, straight blade

Blade length 50 mm	1	12 0042
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### 1000 V Cable stripping knife

with straight blade and insulated blade back

Blade length 50 mm	1	12 0043
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### 1000 V Stripping knife

with hooked cutting edge

Blade length 35 mm	1	12 0044
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### 1000 V Cable paper knife

with especially sharp blade

Blade length 50 mm	1	12 0045
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Design	Size mm	PU	Article no.
<b>Cable stripping knife</b>			
Haft of a single piece, impact-resistant plastic. Blade with round and triangular scraper			
1 piece		1	12 0050
with wooden shells, blade with scraper			
1 piece		1	12 0052
with wooden shells, blade, and reamer			
2 piece		1	12 0054
with wooden shells, blade, reamer, and screwdriver			
3 piece		1	12 0056
with plastic shell, 2 blades, reamer and screwdriver			
4 piece		1	12 0058
<b>Cable stripping or lead knife</b>			
with wooden haft and fixed blade			
1 piece		1	12 0060
<b>Safety knife</b>			
made of die cast zinc, for trapezoidal blades 60 x 19 x 65 mm, blade can be changed without tools (interlock system), with blade storage			
	175	1	12 0062
Replacement blades for 12 0062		10	12 0063
<b>Universal knife</b>			
made of die cast zinc, stainless steel blade guide, blade feeder with locking system with rubber insert			
18 mm	170	1	12 0078
Replacement blade for 12 0078		10	12 0079
lightweight plastic design, with adjustable foldaway blade (breakaway blade, 9 mm)			
ECONOMY	135	1	12 0080
2-component, professional design	135	1	12 0081
Replacement blades for 12 0080 / 12 0081		1	12 0082
<b>Cutter knife</b>			
particularly sharp and low-wear cutter knife, specially coated blades.			
Ergonomic 2-component handle with soft plastic, blade advance with automatic lock, 2 additional blade strips in the handle			
		1	12 0900



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# SAWS, PIPE CUTTERS

With the handy pistol shape of the SUPER pipe cutter, pipes which are already laid can be easily shortened. With minimum force, the...



...versatile blade is guided through the material to be cut. It provides precise right angle cuts without burrs or deformation.



The patented and particularly high performance pipe cutter with ratchet mechanism means it is no longer necessary to completely rotate the pipe to be cut.



The innovative metal saw bow with 2-component plastic handle is made in ultra-lightweight design and...



...provides space for a number of replacement saw blades in the metal frame.

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Design	Size mm	PU	Article no.
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**PUK pocket saws Vario**

innovative small saw bow of 10 x 5 mm flat steel, high-gloss zinc plating, with ergonomic, glass fibre reinforced plastic handle, blade tension via embedded knurled screw. 65 mm high sawing space. In two different lengths, each with universal saw blade.

3



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Vario 150	Weight 165 g	260	1	12 0515
Vario 200	Weight 177 g	310	1	12 0520

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**PUK pocket saws**

Span width 150 mm, with metal cutting saw blade

6



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with adjustable polished wooden haft	1	12 0500
with solid, lacquered wooden haft	1	12 0502

8

**PROFI pocket saw**

with universal blade

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Span width 150 mm	1	12 0490
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**1000 V saw bow**

fully insulated



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Span width 150 mm	250	1	12 0700
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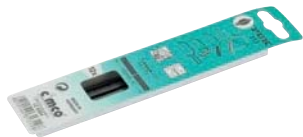
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**Bulk saw blades**

according to DIN 6494 Form C, 150 mm length, 6 mm width, 0.4 mm thickness

Wood cutting saw blade for hard and soft woods, chipboard and hardboard, soft plastic, etc.

14



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Tooth pitch 1.8 mm (14 teeth per inch)	150	1	12 0504
as above but for Vario 200	200	1	12 0505

16

Universal saw blade for steel, aluminium, nonferrous metals, fibre glass, plastic conduit and pipes, mineral, Rigips and fibre-cement slabs

17



18

Tooth pitch 1.0 mm (25 teeth per inch)	150	1	12 0506
as above but for Vario 200	200	1	12 0507

19

Metal cutting blade for all metals, non-ferrous metals (copper), stainless steel, special alloys, Plexiglas® and plastics

20



Tooth pitch 0.8 mm (32 teeth per inch)	150	1	12 0512
as above but for Vario 200	200	1	12 0513

21

**Saw blade set**

according to DIN 6494 Form C, 150 mm length, 6 mm width, 0.4 mm thickness. Contents: Each contains 3 universal saw blades (tooth pitch 1.0 mm (25 teeth per inch)), metal cutting saw blades (tooth pitch 0.8 mm (32 teeth per inch)), fine metal cutting saw blade for especially fine, burr-free cuts even in very thin sheets (tooth pitch 0.5 mm (50 teeth per inch)), wood cutting saw blade (tooth pitch 1.8 mm (14 teeth per inch))

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1	12 0508
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Design	Size mm	PU	Article no.
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### Metal saw bow

innovative metal saw bow with 2-component plastic handle in ultra-lightweight design. Ergonomic saw line, fibre glass reinforced, total length 400 mm, suitable for a wide range of tool cases (bottom shell), integrated key and blade magazine, powder-coated, PUK bi-metal saw blade 300 mm, 24 teeth/inch

		1	12 0530
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### Metal saw bow

especially light and simultaneously very stable metal cutting saw for 300 mm saw blades. Made of die cast aluminium in an ergonomic design, with soft rubber inserts in the handle and front grip. High cutting precision of the blade in straight and 40 degree position due to captive locking pins. Blade can be tensioned up to 800 N by turn-lock fastener in the handle. Delivery incl. a bi-metal cutting saw blade.

Span width 300 mm	Weight 650 g	1	12 0602
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### Metal saw bow

Hacksaw with innovative quick release on the two-component handle for single-sided saw blades DIN 6494 Form A. With improved grip due to nonslip plastic and additional front slide protection, glossy chrome-plated, with captive locking pins.

Span width 300 mm	520	1	12 0600
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### Metal saw bow

adjustable, made of right-angle steel tubing, material thickness 16 x 10 mm, red powder coating, with attachment pin

Span width 300 mm		1	12 0607
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### 1000 V saw bow

fully insulated hacksaw with innovative quick release on the handle for single-sided saw blades DIN 6494 Form A. With improved grip due to nonslip plastic and reduced weight.

Span width 300 mm	Weight 785 g	520	1	12 0702
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### Metal cutting saw blade

according to DIN 6494 Form A, single-sided

Material	Dimensions mm	Teeth per inch		
HSS-CO	300 x 13 x 0.65	24	1	12 0608

Form B, double sided

Material	Dimensions mm	Teeth per inch		
WS	300 x 25 x 0.8	24	1	12 0614



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Design

Size mm

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Article no.

**Pipe cutter**

With the handy pistol shape, already laid pipes can be quickly and easily shortened. Pumping movements release the ratchet mechanism and the strong interchangeable blade is pushed through the material to be cut with minimal effort. The blade symmetry provides precise right angle cuts without burrs or deformation.

Area of application:

- Hard and soft plastics
- Rubber hoses
- Isoflex pipes
- Hard and soft plastic PVC pipes

**SUPER pipe cutter**

new, reinforced design

Working range 6 - 35 mm ø	1	12 0410
Replacement blade	1	12 0412

**MAXI pipe cutter**

with adjustment-lever for modification of cut-opening



Working range 6 - 42 mm ø	1	12 0420
Replacement blade	1	12 0422

**MINI plastic pipe shears**

made of die cast magnesium, for cutting plastic and composite pipes up to a diameter of 35 mm.

Optimum power transmission, with quick change system for changing blades simply and easily. Automatic blade retraction. Blade of PTFE-coated INOX steel with long service life (made in Solingen).

Extremely light and compact, only 270 g.



35 mm ø / 1 3/8"	220	1	12 0416
Replacement blade		1	12 0417

**Plastic pipe cutter PROFI**

made of die cast magnesium, for cutting plastic and composite pipes up to a diameter of 42 mm.

Optimum power transmission thanks to ratchet mechanism with progressive, gear driven blade feed with 2-component handle. Blade retraction via one-hand quick retraction mechanism. With quick change system for replacing blades quickly and easily. Blade of PTFE-coated INOX steel with long service life (made in Solingen).



42 mm ø / 1 5/8"	240	1	12 0418
Replacement blade		1	12 0419

**Universal pipe cutter**

with 2 interchangeable knives for insulation and hard PVC pipes and for soft plastic and rubber hoses



Pipe outer ø max. 29 mm	200	1	12 0450
Bulk knives			
for hard PVC		1	12 0452
for soft pipes		1	12 0453

**Corrugated pipe cutter**

for cutting and trimming corrugated plastic tubes (flex tubes) and plastic shield tubes up to 42 mm ø in the electrical, plumbing and heating fields, simply rotate the tool to safely cut at the outer diameter without damaging the interior pipe, with two interchangeable cutting inserts, weight only 45 g



Working range to 42 mm ø	110	1	12 0430
Replacement cutting inserts		1 pair	12 0432



Design	Size mm	PU	Article no.
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### Ratchet pipe cutter

innovative pipe cutter with a worldwide patent. Ratchet mechanism allows you to cut a pipe without having to completely rotate the pipe to be cut. Especially suitable for work in restricted working spaces (e.g., pipes installed in corners or on walls). One-hand operation. Especially high performance. Thanks to special cutting wheel and double roller guides (speed, durability). Integrated deburrer for clean edges on the cut pipes. Easily interchangeable cutting wheel. One replacement cutting wheel is contained in the scope of delivery.

Weight 400 g. For plastic, copper, aluminium, and similar pipes.

For outer pipe diameters ranging from 12 to 35 mm ( $1/4''$  to  $1\ 3/8''$ ).



	175 x 38 x 68	1	12 0480
Replacement cutting wheel		1	12 0481

### Hole and disc cutter

for manual operation, with scale, for rubber, leather, plastic, etc., two knives also provide ring cutouts

400 mm $\varnothing$		1	12 0834
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### Hole punch for trapezoidal sheets

for trapezoidal sheets up to 1.2 mm thick and for a cutting width up to 100 mm. Depth stop adjustable from 35 mm – 105 mm. Tempered punching die fitted with formed ejection springs.

with hole diameter 10 mm	700	1	10 1570
Punching die with ejection springs		1	10 1571



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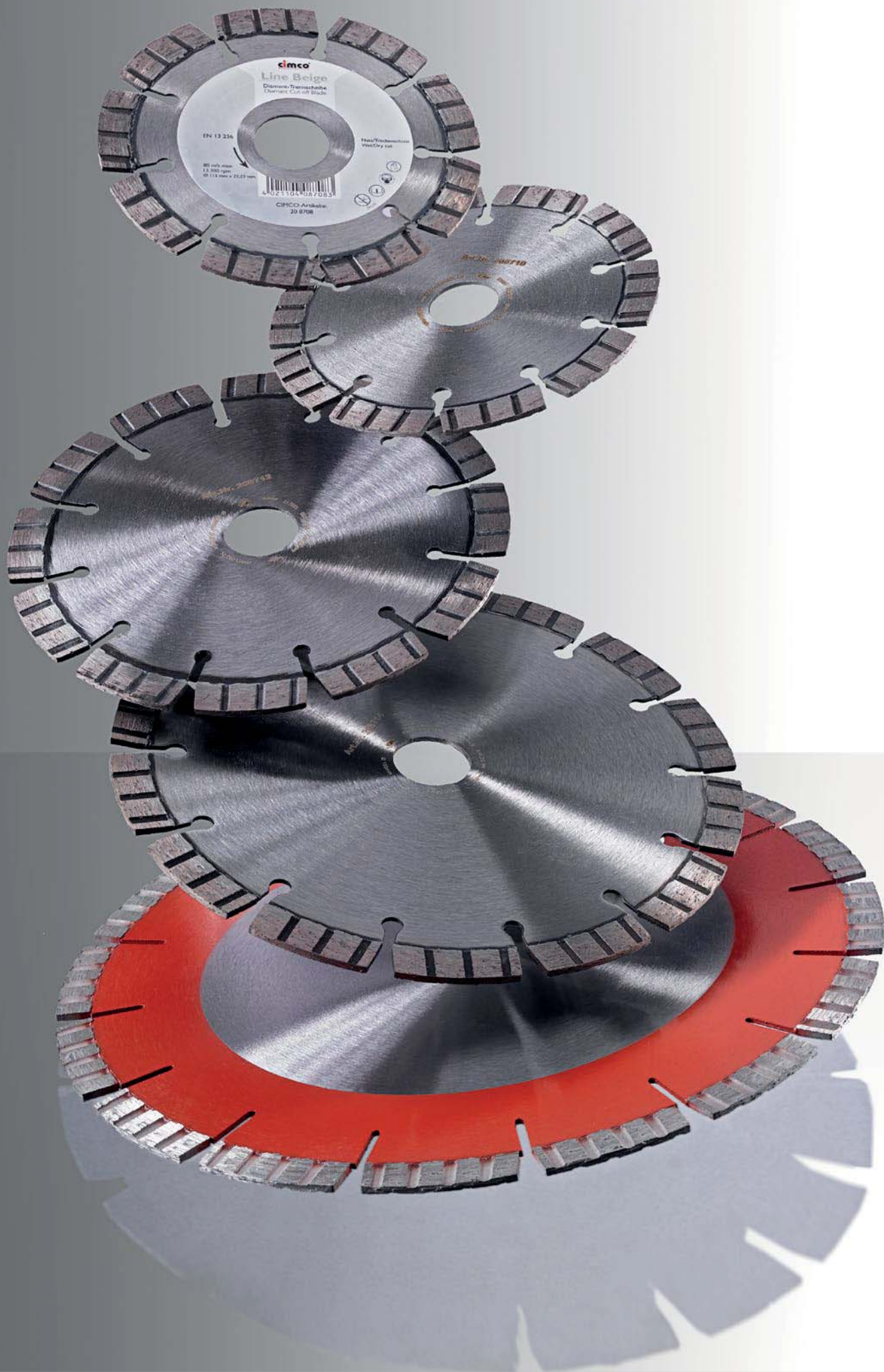
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# DRILLS, HOLE SAWS, DIAMOND TOOLS

Materials used today are required to be highly energy efficient. They not only need to provide a high level of thermal insulation, be breathable and flame-resistant, but must also be resistant to mould and provide excellent sound insulation. This increases the demands made of the tools to be used.



And that is precisely where we come into play! We have compiled a product range of diamond tools which meets both the requirements of modern materials (e.g. concrete, quality C 20/25, C 25/30) and also those of the used in older buildings (e.g. natural stone).



The diamond segments in our cutting discs and core bits are just one of the advantages you will find in these professional tools which allow the user to attain first class results when carrying out the work required.



The segments attached to the steel blade or support consist of diamonds and their adhesive agent (metal powder). This compound needs to be coordinated with the particular features of the materials to be processed.



Depending on the type, the segments are laser welded or sintered onto the body. As is well known, diamonds are one of the hardest materials around and they do the actual work when cutting or drilling.

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Design	PU	Article no.
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**Twist drill**

according to DIN 338/HSS Type N, short cylindrical, right-hand cutting, roll-forged design



ø mm	Total length	Spiral length	PU	Article no.
1.0	34	12	1	20 0314
1.5	40	18	1	20 0324
2.0	49	24	1	20 0334
2.4	57	30	1	20 0342
2.5	57	30	1	20 0344
2.8	61	33	1	20 0350
3.0	61	33	1	20 0354
3.1	65	36	1	20 0356
3.2	65	36	1	20 0358
3.3	65	36	1	20 0360
3.5	70	39	1	20 0364
4.0	75	43	1	20 0373
4.1	75	43	1	20 0374
4.2	75	43	1	20 0375
4.5	80	47	1	20 0379
4.8	86	52	1	20 0383
5.0	86	52	1	20 0385
5.1	86	52	1	20 0386
5.2	86	52	1	20 0387
5.5	93	57	1	20 0391
6.0	93	57	1	20 0397
6.5	101	63	1	20 0403
6.8	109	69	1	20 0407
7.0	109	69	1	20 0409
7.5	109	69	1	20 0415
8.0	117	75	1	20 0421
8.5	117	75	1	20 0427
9.0	125	81	1	20 0433
9.5	125	81	1	20 0439
10.0	133	87	1	20 0445
10.2	133	87	1	20 0447
10.5	133	87	1	20 0451
11.0	142	94	1	20 0457
11.5	142	94	1	20 0463
12.0	151	101	1	20 0469
12.5	151	101	1	20 0472
13.0	151	101	1	20 0476



**Twist drill sets**

according to DIN 338, in highly-stable plastic cartridge with clamping bar for each drill

pieces	ø mm	increasing by mm	PU	Article no.
Roll-milled drill, HSS				
19	1 – 10	0.5	1	20 1352
25	1 – 13	0.5	1	20 1354



pieces	ø mm	increasing by mm	PU	Article no.
Profile-ground drill, HSS, uncoated design				
19	1 – 10	0.5	1	20 1358
25	1 – 13	0.5	1	20 1360



**Twist drill set**

in round plastic box, roll-milled drill, HSS, according to DIN 338

pieces	ø mm	increasing by mm	PU	Article no.
19	1 – 10	0.5	1	20 1320

**Twist drill workshop cabinet**

in metal cartridge, roll-milled drill, HSS, according to DIN 338, 170 pieces, increasing by 0.5 mm

10 units each of sizes 1.0 – 8.0 mm & 5 units each of sizes 8.5 – 10.0 mm	1	20 1340
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Design		PU	Article no.		
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### Stone and concrete drill

with hard metal blades and cylindrical shaft, ideal for use in cordless drills, optimised for constantly recurring applications in masonry

ø mm	Total length	Spiral length			
4	75	40	1	20 1604	
5	90	50	1	20 1610	
6	100	60	1	20 1614	
	150	90	1	20 1702	
	400	275	1	20 1752	
7	100	55	1	20 1618	
8	120	75	1	20 1622	
	400	275	1	20 1758	
	600	350	1	20 1854	
10	150	90	1	20 1630	
	400	275	1	20 1760	
12	150	85	1	20 1634	
	400	275	1	20 1762	
14	150	90	1	20 1638	
	600	500	1	20 1862	



### Stone and concrete drill set, 7 pieces

for hammer drills and cordless screwdrivers. With round shaft and four-spiral conveying helix for a rapid transportation of the drilling dust. Hard metal tips, premium soldering. In a practical plastic box.

Drill ø x length mm

4 x 75 / 5 x 90 / 6 x 100 / 6 x 100 / 8 x 120 / 10 x 120 / 12 x 150 mm	1	20 1380	
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### PROFI SDS-Plus hammer drill

with hard metal blades, high drilling speed thanks to the wide Twinmax helix, the user is protected by the vibration-optimised drilling behaviour, certified by the German Masonry Drill Bit Testing Association (PGM) in accordance with the requirements as set out by the German Institute for Building Technology (DIBt), suitable for all machines with SDS-plus-holders, made in Germany

ø mm	Total length	Spiral length			
5	110	50	1	20 8302	
	160	100	1	20 8304	
6	110	50	1	20 8308	
	160	100	1	20 8310	
7	110	50	1	20 8316	
	160	100	1	20 8318	
8	110	50	1	20 8320	
	160	100	1	20 8322	
	210	150	1	20 8324	
10	110	50	1	20 8328	
	160	100	1	20 8330	
	210	150	1	20 8332	
	310	250	1	20 8334	
12	460	400	1	20 8336	
	260	200	1	20 8341	
	160	100	1	20 8342	
	210	150	1	20 8343	
	310	250	1	20 8344	
	450	400	1	20 8346	
14	600	550	1	20 8348	
	160	100	1	20 8354	
	200	150	1	20 8355	
	300	250	1	20 8356	
15	450	400	1	20 8357	
	250	200	1	20 8360	
	160	100	1	20 8362	
16	200	150	1	20 8364	
	300	250	1	20 8365	
	450	400	1	20 8366	



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Design	PU	Article no.
∅ mm	Total length	Spiral length
18	600	550
	200	150
	450	400
19	450	400
20	200	150
	450	400
22	250	200
	450	400
24	250	200
25	300	250



Further sizes on request.

### SDS-Plus hammer drill set, 7 pieces

equipped with drills from our 20 8300 ff. range, supplied in a stable plastic cartridge.

Drill ∅ x length mm

5 x 110 / 6 x 110 / 6 x 160 / 8 x 110 / 8 x 160 / 10 x 160 / 12 x 160	1	20 1395
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### SDS-Plus hammer drill CIMCO

with hard metal blades, for all concrete and stone applications (concrete, aerated concrete/YTONG, sand-lime brick masonry, stone), certified by the German Masonry Drill Bit Testing Association (PGM) in accordance with the requirements as set out by the German Institute for Building Technology (DIBt), suitable for all machines with SDS plus holders

∅ mm	Total length	Spiral length	PU	Article no.
5	110	50	1	20 8602
	160	100	1	20 8604
5.5	110	50	1	20 8605
	160	100	1	20 8606
6	110	50	1	20 8608
	160	100	1	20 8610
6.5	110	50	1	20 8616
	160	100	1	20 8618
8	110	50	1	20 8620
	160	100	1	20 8622
	210	150	1	20 8624
10	110	50	1	20 8628
	160	100	1	20 8630
	210	150	1	20 8632
	310	250	1	20 8634
	450	400	1	20 8636
12	160	100	1	20 8642
	210	150	1	20 8643
	310	250	1	20 8644
	450	400	1	20 8646
	600	550	1	20 8648
14	160	100	1	20 8654
	210	150	1	20 8655
	310	250	1	20 8656
	450	400	1	20 8657
16	160	100	1	20 8662
	210	150	1	20 8664
	450	400	1	20 8666
	600	550	1	20 8668
18	210	150	1	20 8672
	450	400	1	20 8673
20	210	150	1	20 8680
	450	400	1	20 8682
22	310	250	1	20 8684
	450	400	1	20 8686
25	310	250	1	20 8690



Further sizes on request.

Design	PU	Article no.
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### TripleX SDS-Plus hammer drill

three-winged hard metal blades with a wave-like head design and laterally reinforced blade geometry make the TripleX permanently strong in the hardest concrete. Also suitable for stone, aerated concrete, sand-lime brick masonry. An innovative, the TripleX owes its extreme service life and powerful drilling behaviour to its very wide hard metal design of the drilling head. The embedded hard metal head complete with curved shape is created using a novel production process, enabling it to withstand the highest of forces. Thanks to its three wide spirals in combination with the three hard metal blades, ideal drilling dust removal is ensured without the drilling dust being blown out. Also remains steady in the event of reinforcement being struck.

The TripleX is certified by the German Masonry Drill Bit Testing Association (PGM) in accordance with the requirements as set out by the German Institute for Building Technology (DIBt).

ø mm	Total length	Spiral length	PU	Article no.
5	110	50	1	20 8400
5	160	100	1	20 8402
5.5	110	50	1	20 8404
5.5	160	100	1	20 8406
6	110	50	1	20 8408
6	160	100	1	20 8410
6	210	150	1	20 8412
6	260	200	1	20 8414
6.5	110	50	1	20 8416
6.5	160	100	1	20 8418
6.5	210	150	1	20 8420
7	160	100	1	20 8422
7	210	150	1	20 8424
8	110	50	1	20 8426
8	160	100	1	20 8428
8	210	150	1	20 8430
8	260	200	1	20 8432
8	310	250	1	20 8434
8	450	400	1	20 8436
10	110	50	1	20 8438
10	160	100	1	20 8440
10	210	150	1	20 8442
10	260	200	1	20 8444
10	310	250	1	20 8446
10	450	400	1	20 8448
10	600	550	1	20 8450
12	160	100	1	20 8452
12	210	150	1	20 8454
12	260	200	1	20 8456
12	310	250	1	20 8458
12	450	400	1	20 8460
12	600	550	1	20 8462
14	160	110	1	20 8464
14	200	150	1	20 8466
14	250	200	1	20 8468
14	300	250	1	20 8470
14	450	400	1	20 8472
14	600	550	1	20 8474
16	200	150	1	20 8476
16	260	200	1	20 8478
16	300	250	1	20 8480
16	450	400	1	20 8482
16	600	550	1	20 8484



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Design	PU	Article no.
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### SDS-MAX hammer drill

with hard metal blades, 12 - 15 mm  $\varnothing$  = 2 blades, from 16 mm in  $\varnothing$  = 4 blades, with SDS-MAX holder system, suitable for all machines with SDS-MAX holders.

$\varnothing$ mm	Total length	Spiral length		
12	340	200	1	20 8100
	540	400	1	20 8102
	740	600	1	20 8104
14	340	200	1	20 8106
	540	400	1	20 8108
15	340	200	1	20 8110
	540	400	1	20 8112
16	340	200	1	20 8114
	540	400	1	20 8116
18	340	200	1	20 8118
	540	400	1	20 8120
20	320	200	1	20 8122
	520	400	1	20 8124
	920	800	1	20 8126
22	320	200	1	20 8128
	520	400	1	20 8130
	920	800	1	20 8132
24	320	200	1	20 8134
	520	400	1	20 8136
25	320	200	1	20 8138
	520	400	1	20 8140
	920	800	1	20 8142
28	320	200	1	20 8144
	520	400	1	20 8146
30	320	200	1	20 8150
	520	400	1	20 8152
32	320	200	1	20 8154
	520	400	1	20 8156
	920	800	1	20 8158
35	320	200	1	20 8160
	520	400	1	20 8162
	720	600	1	20 8164
38	320	200	1	20 8166
	520	400	1	20 8168
40	320	200	1	20 8170
	520	400	1	20 8172
	920	800	1	20 8174

### Multi-purpose drills

with hard metal blades and cylindrical shaft. The ideal universal drill for a variety of materials used during construction. A slight hammer action may be used when drilling in masonry and stone.

$\varnothing$ mm	Total length	Spiral length		
4	85	45	1	20 1880
5	95	50	1	20 1882
6	100	60	1	20 1884
7	150	110	1	20 1886
8	120	80	1	20 1888
10	120	80	1	20 1890
12	150	90	1	20 1892

Design	Size mm	PU	Article no.
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### SDS-Plus chisel

#### Pointed chisel

for the laying of lines, for all types of chiselling / demolition works as well as breakthrough works.

11 mm, round	250	1	20 8002
14 mm, square	250	1	20 8004

#### Flat chisel

for selective breaking actions, all types of chiselling / demolition works and breakthrough works.

20 mm	250	1	20 8010
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#### Spade chisel

for the large-scale universal removal of material.

40 mm	250	1	20 8006
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#### Gouge

for cutting narrow channels into concrete and masonry.

22 mm	250	1	20 8020
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#### Tile chisel

for the removal of tiles.

40 mm	250	1	20 8012
75 mm	165	1	20 8000

#### Winged chisel

for the stemming, cutting and pulling of channels with a depth restriction.

22 mm	250	1	20 8008
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#### Groove chisel

for removing and cleaning grooves and masonry.

25 mm	250	1	20 8014
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#### HM groove chisel

for removing and cleaning grooves and masonry with an extra-long service life.

32 mm	125	1	20 8016
32 mm	200	1	20 8018

### SDS-Max chisel

#### Pointed chisel

for the laying of lines, for all types of chiselling/demolition works as well as breakthrough works.

	280	1	20 8030
	400	1	20 8032
	600	1	20 8034

#### Flat chisel

for selective breaking actions, all types of chiselling/demolition works and breakthrough works.

25 mm	280	1	20 8036
25 mm	400	1	20 8038
25 mm	600	1	20 8040



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Design	Size mm	PU	Article no.
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**Spade chisel**  
for the large-scale universal removal of material.

50 mm	400	1	20 8042
80 mm	300	1	20 8044
115 mm	350	1	20 8060



**Channel chisel**  
for the pulling, stemming and cutting of channels.

32 mm	300	1	20 8046
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**Gouge**  
for cutting narrow channels into concrete and masonry.

26 mm	300	1	20 8050
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**Toothed chisel**  
for restoring grooves and masonry.

32 mm	300	1	20 8052
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**Mortar chisel**  
for removing and cleaning joints in masonry and mortar.

10 mm	300	1	20 8054
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**Tile chisel**  
for the removal of tiles.

50 mm	300	1	20 8056
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**Winged chisel**  
for the stemming, cutting and pulling of channels with a depth restriction.

35 mm	380	1	20 8058
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**Hammer core bit**  
the 6 accurately ground blades soldered with silver achieve excellent durability, even when dealing with hard materials. The hardened steel body with M 16 internal thread and the optimised concentricity is ideally suited for concrete, stone, masonry, clinker brick, tiles, and lightweight construction materials. Holder shaft in hexagonal or SDS-PLUS version. Low-wear hard metal teeth with slot soldering ensure maximum stability. With interchangeable centring drill bits for light hammer-action use (material dependent), precise incorporation of switch/distribution boxes.



	Drilling ø mm		
Hammer core bits in hexagonal version	68	1	20 7311
	80 (82)	1	20 7315



Hammer core bits with SDS-Plus	68	1	20 7321
	80 (82)	1	20 7325



Centring drill bit	9 (8)	1	20 7340
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Hexagonal holder shaft	Size 12 100	1	20 7330
SDS-Plus holder shaft	110	1	20 7334





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Design	Size mm	PU	Article no.
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### Sheet taper drill

for burr-free processing of thin materials up to 2 mm, manufactured from HSS

Drilling range

ø mm	Shaft ø mm	Size	Length mm		
3 – 9.1	6		60	1	20 1294
3 – 11.2	6		60	1	20 1295
3 – 14.0	6	0	60	1	20 1280
8 – 20.0	8	1	62	1	20 1282
16 – 30.0	10	2	72	1	20 1284
25 – 40.0	12	3	83	1	20 1286



### Sheet taper drill set

in sheet steel cassette, with drilling paste

1 each of the following CIMCO article no. 20 1280, 20 1282, 20 1284	1	20 1300
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### Aerial drill

made of HSS

Drilling range

ø mm	Shaft ø mm	Size	Length mm		
9.5 – 22.5	8	1	80	1	20 1290
4.0 – 30.5	10	2	100	1	20 1293



### Milling drill

made of premium-quality HSS for excellent performance and high durability, ground milling teeth and deep-ground flutes for drilling, milling, cutting, rasping and filing wood, chipboard, plastics, aluminium, other non-ferrous metals, steel sheets, plasterboard.

ø mm	Length mm		
6.35 (1/4")	94	1	20 1298



### 90° countersink bit

manufactured from HSS, 3 blades, with axial and radial back taper, 1/4" shaft, according to DIN 3126

ø mm	for M	Length mm		
6.3	3	31	1	20 1982
8.3	4	31	1	20 1983
10.4	5	34	1	20 1984
12.4	6	35	1	20 1985
16.5	8	38	1	20 1986
20.5	10	42	1	20 1987



### 90° countersink bit set

6 pieces, in sheet steel cassette

1 piece each of countersink bit 6.3 – 20.5 mm ø	1	20 1989
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### Combi thread taps

drilling – thread cutting – deburring in a single work stage, made of HSS, suitable for steel and non-ferrous metals, for material thicknesses up to 1 x diameter

M 3	1	20 7372
M 4	1	20 7373
M 5	1	20 7374
M 6	1	20 7375
M 8	1	20 7376
M 10	1	20 7377



Design	Size mm	PU	Article no.
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### Combi thread tap set

for core hole drilling, thread cutting and deburring in a single work stage, with 1/4" hexagonal shaft. This product is used in processing steel, non-ferrous metals, and plastics. Particularly useful for assembly work and small batches, supplied in a practical plastic box.

1 piece each of M 3 - 4 - 5 - 6 - 8 - 10	1	20 7360
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### HSS thread tap bits

in metal cartridge, with thread taps according to DIN 352 for metric standard threads, 3 piece sets with roughing tap, middle tap and finish tap, 1 set each in sizes M 3 - 4 - 5 - 6 - 8 - 10 - 12

	1	20 3920
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additionally with HSS twist drills (core hole drills)

2.5 - 3.3 - 4.2 - 5 - 6.8 - 8.5 - 10.2 mm ø	1	20 3924
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### Hand thread tap DIN 352/HSS

for metric ISO thread according to DIN 13 (6 H tolerance), 3 piece set: roughing tap - middle tap - finish tap

Thread	Angle mm	Shaft ø mm	Total length mm		
M 1	0.25	2.5	32	1	20 2100
M 2	0.40	2.8	40	1	20 2110
M 2.2	0.45	2.8	40	1	20 2112
M 2.5	0.45	2.8	40	1	20 2114
M 3	0.45	2.8	40	1	20 2116
M 3.5	0.60	4.0	45	1	20 2118
M 4	0.70	4.5	45	1	20 2120
M 5	0.80	6.0	50	1	20 2123
M 6	1.00	6.0	50	1	20 2124
M 7	1.00	6.0	40	1	20 2125
M 8	1.25	6.0	56	1	20 2126
M 9	1.25	7.0	63	1	20 2127
M 10	1.50	7.0	70	1	20 2128
M 11	1.50	8.0	70	1	20 2129
M 12	1.75	9.0	75	1	20 2130



### DIRECT TAP HSS thread tap

DIN 352/B cutting thread tap with spiral point, for metric standard thread, supplied in a plastic cartridge

1 unit each of thread tap size M 3 - 4 - 5 - 6 - 8 - 10 - 12

1 unit each of HSS twist drill (core hole drill) in sizes 2.5 - 3.3 - 4.2 - 5.0 - 6.8 - 8.5 - 10.2 mm

1 tap wrench, size 1 1/2 (for M 1 - M 12 thread tap)

	1	20 3070
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### DIRECT TAP HSS thread tap

with exposed teeth, dimensions according to DIN 352, for metric ISO thread according to DIN 13

Thread	Angle mm	Shaft ø mm	Total length mm		
M 3	0.50	3.5	40	1	20 3050
M 4	0.70	4.5	45	1	20 3051
M 5	0.80	6.0	50	1	20 3052
M 6	1.00	6.0	50	1	20 3053
M 8	1.25	7.0	56	1	20 3054
M 10	1.50	7.0	70	1	20 3055
M 12	1.75	9.0	75	1	20 3060



### Tool holder

with ratchet for clockwise and anti-clockwise rotation, chrome plated

Clamping range mm	for thread taps DIN	ISO			
2.6 - 5.5	M 3 - 10	M 3 - 6	85	1	20 7170
4.6 - 8	M 5 - 12	M 6 - 12	110	1	20 7172



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Design		PU	Article no.
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### Adjustable tap wrenches DIN 1814

for thread taps according to DIN 352



Size	□ mm	For thread tap metr. M	Wwth.	Wwth. Pipe G		
0	2.1 – 4.9	1 – 8	1/16 – 1/4	-	1	20 7150
1	2.1 – 5.5	1 – 10	1/16 – 3/8	-	1	20 7151
1 1/2	2.1 – 7	1 – 12	1/16 – 1/2	-	1	20 7152
2	3.8 – 7	4 – 12	3/16 – 1/2	3/8 – 1/4	1	20 7153
3	4.9 – 12	5 – 21	1/4 – 3/4	1/8 – 3/8	1	20 7154
4	5.5 – 16	9 – 27	3/8 – 1	1/8 – 3/4	1	20 7155

### HSS thread cutting tool bit

for metric standard threads



Supplied in metal cartridge, with thread taps according to DIN 352, 3 pieces in sizes M 3 – 4 – 5 – 6 – 8 – 10 – 12, threading die according to DIN 223 M 3 – 4 – 5 – 6 – 8 – 10 – 12, thread gauge, threading die holder mm 20 x 5 – 20 x 7 – 25 x 9 – 30 x 11 – 38 x 14 tap wrench size 1 - size 2

		1	20 3930
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### Nipple threading die

with guidance, threading die and interchangeable thread tap



M 10 + M 13	1	14 1000
M 10 x 1 mm	1	14 1002
M 13 x 1 mm	1	14 1004

### Threading die DIN 223

pre-slit, for metric ISO threads according to DIN 13 (6 G tolerance)



Thread	Angle mm	Outer ø mm	Height mm		
M 2	0.40	16	5	1	20 3610
M 2.2	0.45	16	5	1	20 3612
M 2.5	0.45	16	5	1	20 3614
M 3	0.50	20	5	1	20 3616
M 3.5	0.60	20	5	1	20 3618
M 4	0.70	20	5	1	20 3620
M 5	0.80	20	7	1	20 3623
M 6	1.00	20	7	1	20 3624
M 7	1.00	25	9	1	20 3625
M 8	1.25	25	9	1	20 3626
M 9	1.25	25	9	1	20 3627
M 10	1.50	30	11	1	20 3628
M 11	1.50	30	11	1	20 3629
M 12	1.75	38	14	1	20 3630

### Threading die holder DIN 225

for DIN 223 threaded dies



Size	For thread metr. M	Wwth.	Length mm		
0	1-2-6	1/16 – 3/32	16 x 5	1	20 7200
1	3 – 4	1/8 – 5/32	20 x 5	1	20 7201
2	4.5 – 6	3/16 – 1/4	20 x 7	1	20 7202
3	7 – 9	5/16	25 x 9	1	20 7203
4	10 – 11	3/8 – 7/16	30 x 11	1	20 7204
5	12 – 14	1/2 – 9/16	38 x 14	1	20 7206

further thread taps, threading dies and tool holders available upon request.

Design	Size mm	PU	Article no.
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## Thread cutting tools for screwed cable glands

### Thread tap

for metric screwed cable glands, also in plastic, not in VA stainless steel

	Total length	Thread length		
M 12 x 1.5	70	24	1	14 0850
M 16 x 1.5	74	26	1	14 0852
M 20 x 1.5	80	28	1	14 0854
M 25 x 1.5	93	33	1	14 0856
M 32 x 1.5	105	38	1	14 0858
M 40 x 1.5	105	38	1	14 0860
M 50 x 1.5	120	40	1	14 0862
M 63 x 1.5	120	40	1	14 0864

for pipe PG (steel conduit) according to DIN 40430 PG

PG 7	70	24	1	14 0970
PG 9	74	26	1	14 0972
PG 11	76	26	1	14 0974
PG 13.5	80	28	1	14 0976
PG 16	85	30	1	14 0978
PG 21	93	33	1	14 0980
PG 29	105	38	1	14 0982
PG 36	110	40	1	14 0984
PG 42	120	40	1	14 0986
PG 48	120	40	1	14 0988



### Adjustable tap wrenches

for thread taps

M	Inch	PG		
5 - 20	1/4" - 3/4"	7 - 21	1	14 1020
27 - 64	1/2" - 2 1/2"	11 - 48	1	14 1022



### Screw dies

to the clip housing

for metric screwed cable glands

	Blade quantity	L x W x H mm		
M 12 x 1.5	4	47 x 47 x 14	1	14 0889
M 16 x 1.5	4	47 x 47 x 14	1	14 0890
M 20 x 1.5	4	47 x 47 x 14	1	14 0891
M 25 x 1.5	6	47 x 47 x 14	1	14 0892
M 32 x 1.5	6	71 x 71 x 19	1	14 0893
M 40 x 1.5	6	71 x 71 x 19	1	14 0894
M 50 x 1.5	8	100 x 100 x 20	1	14 0895
M 63 x 1.5	8	100 x 100 x 20	1	14 0896

for pipe PG (steel conduit) according to DIN 40430 PG

PG 7	4	47 x 47 x 14	1	14 0910
PG 9	4	47 x 47 x 14	1	14 0912
PG 11	4	47 x 47 x 14	1	14 0914
PG 13.5	4	47 x 47 x 14	1	14 0916
PG 16	4	47 x 47 x 14	1	14 0918
PG 21	6	47 x 47 x 14	1	14 0920
PG 29	7	71 x 71 x 19	1	14 0922
PG 36	8	71 x 71 x 19	1	14 0924
PG 42	8	100 x 100 x 20	1	14 0926
PG 48	10	100 x 100 x 20	1	14 0928





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Design	PU	Article no.
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### Guides

to the clip housing  
for metric screwed cable glands



M 12	1	14 0869
M 16	1	14 0870
M 20	1	14 0871
M 25	1	14 0872
M 32	1	14 0873
M 40	1	14 0874
M 50	1	14 0875
M 63	1	14 0876

for pipe PG

PG 7	1	14 0930
PG 9	1	14 0932
PG 11	1	14 0934
PG 13.5	1	14 0936
PG 16	1	14 0938
PG 29	1	14 0940
PG 42	1	14 0942

### Clip housing for steel conduit thread

manufactured from malleable cast iron, with steel tube arms, without accessories



M 12 – 25 / PG 7 – 21	1	14 0900
M 32 – 40 / PG 29 – 36	1	14 0902
M 50 – 63	1	14 0884
PG 42 – 48	1	14 0904

### Complete clips for steel conduit thread

with screw dies and guidance



M 16 – 25	1	14 0886
M 32 – 40	1	14 0887
M 50 – 63	1	14 0888
PG 9 – 21	1	14 0950
PG 29 – 36	1	14 0952

with adjustable guide (guide rings not required)

M 12 – M 25	1	14 0966
M 32 – M 40	1	14 0968
PG 7 – 21	1	14 0960
PG 29 – 36	1	14 0964

### Step thread tap for metric screwed cable glands

Step thread tap manufactured from the most suitable oil-hardened tool steel for the most common metric screwed cable glands. Suitable for working with plastic and metal as well as stainless steel, between 5 and 6 threads per step, drive using hexagonal shaft (e.g. using a ring spanner, open-end spanner, or nut driver). Approximately 85% of all screwed cable glands are covered with the M 12 – M 32 drill (CIMCO article no. 20 1240), with both of the other drills, in total approximately 90 % of all screwed cable glands are covered. Compared to many single thread taps, the step thread taps offer a cost saving of up to 25%.



For screwed cable glands	Length	Size Hex		
M 12 – 16 – 20 – 25 – 32	80	13	1	20 1240
M 12 – 16 – 20	55	10	1	20 1242
M 25 – 32 – 40	55	13	1	20 1244

Design	Size mm	PU	Article no.
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### Step drill and thread tap set for screwed cable glands

compact set for drilling core holes and through-holes, as well as for the thread cutting of metric screwed cable glands according to DIN EN 60 423, supplied in a handy plastic carrying case. Set consisting of 1 HSS step drill for burr-free drilling and reaming, double-edged, with solid centring point and 13 laser-marked drilling steps for through-holes and core holes for screwed glands measuring between M 12 and M 32, 12 mm ø holder shaft with 3 driver carriers to protect against the drill bit from slipping in the chuck, 5 HSS cutting thread taps (direct taps) sorted for ISO fine thread M 12 x 1.5 – M 16 x 1.5 – M 20 x 1.5 – M 25 x 1.5 – M 32 x 1.5, 45 mm long design, with hexagonal drive shaft (10 or 13 mm) for single-handed work even on areas difficult to access, actuation using a nut driver (groove and ratchet), but also using fork spanners and ring spanners.

6 piece		1	20 1250
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### Nozzle reamer bit

12 nozzle reamers (tapered) and holders, supplied in plastic box

0.60; 0.65; 0.70; 0.75; 0.80; 0.90; 1.0; 1.10; 1.30; 1.50; 1.70; 1.90 mm ø		1	20 4815
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### Diamond cutting discs

- According to EN 13236
- Dry and wet cutting
- Suitable for all standard angle grinders and wall chasers (holder ø 22.2 mm)
- With key holes for cooling
- High-performance diamond segments made of diamond grit bond

#### Line Blue diamond cutting discs

with sinter-fused diamond segments, steel blade hardness: 28 HRC

suitable for: concrete products (soft), paving stone, composite stone, masonry brick

Height mm	Segment length mm	Quantity	ø mm		
7	38	8	115	1	20 8700
7	37	9	125	1	20 8702
7	34	14	180	1	20 8704
7	39	16	230	1	20 8706

#### Line Beige diamond cutting discs

with laser-fused diamond segments, steel blade hardness: 38 HRC

suitable for: concrete products (soft/medium), kerbstone, paving stone, composite stone, masonry brick, roof tiles (soft), hollow concrete block, tiles (hard), sand-lime brick (hard), sandstone (hard), clinker brick (medium-hard), cast iron pipe (ductile)

Height mm	Segment length mm	Quantity	ø mm		
10	31.5	9	115	1	20 8708
10	31.5	10	125	1	20 8710
10	31.5	12	150	1	20 8712
10	33	14	180	1	20 8714
10	38	16	230	1	20 8716

#### Line Silver diamond cutting discs

with sinter-fused diamond segments, steel blade hardness: 28 HRC

suitable for: concrete products (soft), paving stone, roof tiles (soft), hollow concrete block, masonry brick tiles (soft), sand-lime brick (soft abrasive), fireclay (soft), plaster, aerated concrete, fibre cement, and screed

Height mm	Segment length mm	Quantity	ø mm		
8	53	6	115	1	20 8718
8	58	6	125	1	20 8720
8	58	7	135	1	20 8722
8	58	7	135	1	20 8724*
8	53	8	150	1	20 8726
8	64	8	180	1	20 8728
8	76	10	230	1	20 8732

\*Holder: ø 30 mm



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Design	Size mm	PU	Article no.
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### Line White diamond cutting discs

with laser-fused diamond segments, steel blade hardness: 38 HRC

Suitable for: concrete products (soft/medium-hard), kerbstone, paving stone, composite stone, roof tiles (medium-hard/soft), hollow concrete block, masonry brick, tiles (soft/hard), sand-lime brick (hard) and clinker brick (medium-hard)



Height mm	Segment length mm	Quantity	ø mm		
7	31.5	9	115	1	20 8734
7	31.5	10	125	1	20 8736
7	33	14	180	1	20 8738
7	38.5	16	230	1	20 8740

### Line Green diamond cutting discs

with laser-fused diamond segments, steel blade hardness: 38 HRC

Suitable for: concrete products (medium-hard/hard), reinforced concrete, exposed aggregate concrete, kerbstone, paving stone, composite stone, roof tiles (medium-hard), hollow concrete block, masonry brick, tiles (hard), sand-lime brick (hard/high-density), Quadro block, sandstone (hard), clinker brick (hard/medium-hard), cast iron pipe (ductile), fireclay (soft), basalt and natural stone



Height mm	Segment length mm	Quantity	ø mm		
10	31.5	9	115	1	20 8742
10	31.5	10	125	1	20 8744
10	31.5	12	150	1	20 8746
10	33	14	180	1	20 8748
10	40	16	230	1	20 8750

### Line Red diamond cutting discs

with laser-fused diamond segments, steel blade hardness: 38 HRC

Suitable for: concrete products (medium-hard/hard), reinforced concrete, exposed aggregate concrete, kerbstone, paving stone, composite stone, roof tiles (medium-hard/soft), masonry brick, sand-lime brick (soft abrasive/hard), Quadro block, clinker brick (medium-hard)



Height mm	Segment length mm	Quantity	ø mm		
10	31.5	9	115	1	20 8752
10	31.5	10	125	1	20 8754
10	31.5	11	140	1	20 8756
10	33	12	150	1	20 8758
10	33	14	180	1	20 8760
10	38.5	16	230	1	20 8762

### Line Black diamond cutting discs

with laser-fused diamond segments, steel blade hardness: 38 HRC

Suitable for: sand-lime brick (soft/abrasive), sandstone (abrasive), plaster, aerated concrete and screed



Height mm	Segment length mm	Quantity	ø mm		
7	31.5	9	115	1	20 7980
7	31.5	10	125	1	20 7982
7	31.5	12	150	1	20 7984
7	33	14	180	1	20 7986
7	38.5	16	230	1	20 7988

### Wall chaser 150

a parallel grip position, a short and compact design, as well as the ability to mill close to the edge are essential features that facilitate work with this wall chaser. Features: suction hose lock, milling depth adjustment (without tools), spindle lock for easy disc replacement, short distance to the guard, the ability to work close to the edge (up to 15 mm), slot widths can be changed in 1 mm increments, enclosed hood, easy removal of debris, sliding cut, electronic soft start, temperature and overload shutdown function, 35 mm ø connecting piece for direct connection to industrial vacuum cleaners.

Specifications:

- Power consumption: 2,300 W
- Nominal speed: 4300 rpm
- Disc diameter: 150 mm
- Slot depth: 45 mm
- Weight: 5.8 kg
- Nominal voltage: 230 V ~
- Idling speed: 7500 rpm
- Disc holder: 22.2 mm
- Max. slot width: 46 mm



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Design	Size mm	PU	Article no.
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### Wall chaser 180

allows you to work quickly even in the hardest materials. It is the ideal tool for installers to run larger cable ducts and conduits underneath plaster. With a suction hose lock, milling depth adjustment (without tools), spindle lock for easy disc replacement, slim design, short distance to the guard, the ability to work up to 15 mm close to the edge, slot widths can be changed in 1 mm increments, enclosed hood, easy removal of debris, sliding cut, electronic soft start, temperature and overload shutdown function, 35 mm ø connecting piece for direct connection to industrial vacuum cleaners

Specifications:

- Power consumption: 2,300 W
- Nominal speed: 2300 rpm
- Disc diameter: 180 mm
- Slot depth: 60 mm
- Weight: 7.5 kg
- Nominal voltage: 230 V ~
- Idling speed: 3100 rpm
- Disc holder: 22.2 mm
- Max. slot width: 46 mm

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### Vacuum device 25

despite its small container, the vacuum device is able to hold large amounts of water and dust. The vibrating mechanism cleans the filters before a dust cloud develops, thereby enabling you to work without a filter bag. With electromagnetic filter vibration, increased service life of the filter cartridges, additional manual vibration possible, device socket with automatic switch-on and switch-on delay for connected power tools, two polyester filter cartridges – durable and washable, filter surface 8600 cm<sup>2</sup> – high constant suction, with practical storage, self-supporting, wheels with parking brake, water detection with sensor switch-off function – automatic shut down when max. water level is detected, filter protection, electronically controlled soft start, electronically controlled overrun, visual display of the suction power

Specifications:

- Power consumption: 1,400 W
- Frequency: 50 - 60 Hz
- Max. negative pressure: 248 mbar
- Dust volume (net): 20 l
- Weight: 12.7 kg
- Nominal voltage: 230 V ~
- Max. airflow: 61 l/s
- Container volume: 25 l
- Dimensions (L x W x H): 420 x 410 x 580 mm

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### Corundum cutting discs

- According to EN 12413
- Suitable for all standard angle grinders (holder ø 22.2 mm)
- Dry cut

### Corundum cutting discs, steel

Universal cutting disc

suitable for: steel, pipes, structural steel, mild steel, solid materials, metal sheeting etc.

Thickness mm	Design	ø mm		
2.5	offset	115	1	20 8900
2.5	offset	125	1	20 8902
2.5	straight	230	1	20 8904



### Corundum cutting discs, Inox

Inox cutting disc

High cutting speed, clean cut surfaces, virtually no burrs, little cutting waste

suitable for: sheet steel (including car body pressing), profiles, pipes and stainless steel

Thickness mm	Design	ø mm		
1.2	straight	115	1	20 8910
1.2	straight	125	1	20 8912
2.0	straight	230	1	20 8914



### Corundum cutting discs, stone

Universal cutting disc

suitable for: natural and synthetic stone, concrete, exposed aggregate concrete, tiles, etc.

Thickness mm	Design	ø mm		
2.5	offset	115	1	20 8920
2.5	offset	125	1	20 8922
3.0	straight	230	1	20 8924




Design	Size mm	PU	Article no.
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### Zircon corundum serrated washer

for dry grinding, especially for surface machining, hard and tough abrasive grain allows extremely good removal of material, suitable for: steel (stainless), hardened steel, tough non-ferrous metal and cast steel

Thickness mm	Design	ø mm	PU	Article no.
60 grain	offset 	125	1	20 8930

### Cased drill

Safety cased drill bit made of chrome-vanadium steel for wood, lightweight boards, plasterboards, not suitable for concrete and stone.



ø mm	ø mm	PU	Article no.
6	400	1	20 6306
	600	1	20 6346
8	400	1	20 6308
	600	1	20 6348
10	400	1	20 6310
	600	1	20 6350
12	400	1	20 6312
	600	1	20 6352
14	400	1	20 6314
	600	1	20 6354
16	400	1	20 6316
	600	1	20 6356
18	400	1	20 6318
	600	1	20 6358
20	400	1	20 6320
	600	1	20 6360
22	400	1	20 6322
	600	1	20 6362
24	400	1	20 6324
	600	1	20 6364
25	400	1	20 6325
	600	1	20 6365
26	400	1	20 6326
	600	1	20 6366
28	400	1	20 6328
	600	1	20 6368
30	400	1	20 6330
	600	1	20 6370

### Hole saws manufactured from HSS bi-metal with Vario serration

The variable tooth pitch (4 – 6 teeth per inch) ensures vibration-free drilling. Hole saws with holder thread, from 32 mm ø additional driver holes. For rational drilling of steel, cast iron, stainless steel, copper, non-ferrous metals, hard and soft wood, Rigips boards and other materials. Saw length 50 mm, max. drilling depth 40 mm, M 16 holder thread.

For holder shafts (CIMCO article no. 20 7580 and 20 7588).



ø mm	ø mm	PU	Article no.
14	32	1	20 7414
	42	1	20 7416
16	32	1	20 7417
	42	1	20 7419
17	32	1	20 7420
	42	1	20 7421
19	32	1	20 7422
	42	1	20 7424
20	32	1	20 7425
	42	1	20 7427
21	32	1	20 7427
	42	1	20 7429
22	32	1	20 7429
	42	1	20 7430
24	32	1	20 7430
	42	1	20 7430



Design	Size mm	PU	Article no.
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### Hole saws manufactured from HSS bi-metal with Vario serration

The variable tooth pitch (4 – 6 teeth per inch) ensures vibration-free drilling. Hole saws with holder thread, from 32 mm ø additional driver holes. For rational drilling of steel, cast iron, stainless steel, copper, non-ferrous metals, hard and soft wood, Rigips boards and other materials. Saw length 50 mm, max. drilling depth 40 mm, M 16 holder thread.

For holder shafts (CIMCO article no. 20 7580 and 20 7588).

ø mm

32		1	20 7432
35		1	20 7435
37		1	20 7437
38		1	20 7438
40		1	20 7440
41		1	20 7441
43		1	20 7443
44		1	20 7444
45		1	20 7445
46		1	20 7446
48		1	20 7448
50		1	20 7450
51		1	20 7451
52		1	20 7452
54		1	20 7454
55		1	20 7455
57		1	20 7457
59		1	20 7459
60		1	20 7460
64		1	20 7464
65		1	20 7465
67		1	20 7467
68		1	20 7468
70		1	20 7470
73		1	20 7473
75		1	20 7475
76		1	20 7476
79		1	20 7479
83		1	20 7483
86		1	20 7486
89		1	20 7489
92		1	20 7492
95		1	20 7495
98		1	20 7498
100		1	20 7500
102		1	20 7502
105		1	20 7505
111		1	20 7511
114		1	20 7514
121		1	20 7521
127		1	20 7527
140		1	20 7540
146		1	20 7546
152		1	20 7552



### Hole saws for switch boxes

complete with holder shaft (CIMCO article no. 20 7584), guide drill bit (CIMCO article no. 20 7590) and push-out spring (CIMCO article no. 20 7596)

	68	1	20 7562
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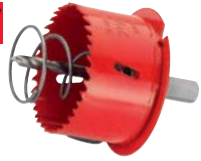
additionally with edge countersink (CIMCO article no. 20 7598)

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**NEW**



Design	Size mm	PU	Article no.
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**Hole saw ø 68 mm**

with integrated edge countersink, hexagonal holder and push-out spring.

- HSS bi-metal with Vario serration
- 11 mm hexagonal holder without driver
- Centring drill bit 105 mm, ø 6 mm
- Push-out spring

for wood and Rigips	68	1	20 7564
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**Holder shafts**

complete with guide drill bit, CIMCO article no. 20 7590 and external thread, suitable for all HSS bi-metal hole saws 9.5 mm Hex, without driver

for hole saws 14 – 30 mm ø		1	20 7580
for hole saws 32 – 152 mm ø		1	20 7581

11 mm hexagonal, with driver

for hole saws 32 – 152 mm ø		1	20 7584
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11 mm hexagonal, with driver and and internal counternut

for hole saws 32 – 152 mm ø		1	20 7586
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SDS holder, without driver

for hole saws 14 – 30 mm ø		1	20 7588
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SDS holder, with driver

for hole saws 32 – 152 mm ø		1	20 7589
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**HSS guide drill**

for holder shafts CIMCO article no. 20 7580, 20 7581, 20 7584, 20 7586, 20 7588 and 20 7589

6.35 mm ø – 70 mm long		1	20 7590
6.35 mm ø – 115 mm long		1	20 7592

**Push-out spring**

suitable from 52 mm ø

		1	20 7596
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**Edge countersink**

for HSS bi-metal hole saws with 68 mm ø, with two specially-hardened cutting teeth

		1	20 7598
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**HSS bi-metal – hole saw sets**

**ELEKTRO-TOP with edge countersink**

- Contents: One hole saw each in sizes 35 mm, 68 mm, 75 mm ø
- Edge countersink for 68 mm ø, with two specially-hardened cutting teeth
- Holder shaft with two driver pins CIMCO-Article no. 20 7584
- HSS guide drill bit, 6.35 mm ø, length 70 mm
- Push-out spring (for all saws from 52 mm ø)
- Comprehensive drilling instructions, supplied in impact-resistant plastic box

		1	20 7400
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Design	Size mm	PU	Article no.
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### ELEKTRO METRIC

with 6 hole saws for drilling through-holes for metric screwed cable glands  
Holder shafts with HSS guide drill, (CIMCO article no. 20 7580 and 20 7584)

Hole saws ø mm			
20			20 7420
25			20 7425
32			20 7432
40			20 7440
50			20 7450
64			20 7464
		1	20 7573



### Socket cutter

hole saw with metal body, 6 mm ø holder shaft, induction-hardened saw tips, cutting depth 19 mm  
7 saw attachments 25 (1") - 32 (1 1/4") - 38 (1 1/2") - 44 (1 3/4") - 51 (2") - 57 (2 1/4") - 63 (2 1/2") mm ø

for wood and Rigips		1	12 0882
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### Hard metal hole saws

for the rational drilling of:  
Rigips boards, Ytong stone, aerated concrete, wood, chipboard, plywood, hard cardboard, PVC,  
plastic coated boards, glass fibre boards  
Saw length: 66 mm, max. drilling depth: 58 mm, M 16 holder thread

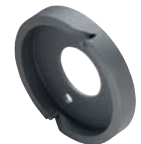
ø mm			
35		1	20 7714
68		1	20 7728
71		1	20 7730
74		1	20 7732



### Hard metal edge countersink

with 2 teeth  
for hard metal hole saws 68 mm ø

		1	20 7750
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### Holder shafts

without guide drill, with M 16 holder thread

cylindrical Holder 13 mm ø, 3 driver carriers	70	1	20 7760
SDS holder system	70	1	20 7764



### Guide drill

hard metal-equipped

8 mm ø	100	1	20 7770
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### Hard metal hole saw

68 mm ø, with edge countersink, holder shaft and HM guide drill bit

with holder shaft 13 mm ø (CIMCO article no. 20 7760)		1	20 7740
with SDS holder shaft (CIMCO article no. 20 7764)		1	20 7744



### Hard metal hole saw set, 7 piece

in steel sheet case, 3 hole saws, edge countersinks for 68 mm ø, 13 mm ø  
holder shaft, 1 each of HSS and hard metal guide drill

Hole saws ø mm			
35, 68, 74		1	20 7700



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Design	Size mm	PU	Article no.
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### Diamond core drill bit

laser-welded diamond studs, for dry cutting, no regrinding required, excellent drilling capacity and high durability. Drilling without hammer-action in general masonry, stone and concrete, Quadro stone, sand-lime brick M 16 holder thread, total length 80 mm, maximum drilling depth 70 mm.

Diamond stud quantity (segments)

6	ø 68	1	20 7380
10	ø 82	1	20 7382

### Holder shaft

for diamond core drill bit, M 16 holder thread

Shaft size 12 (hexagonal)	1	20 7384
SDS holder system	1	20 7385

### Hard metal centring drill

for shaft (CIMCO article no. 20 7384)	9 mm ø x 120 mm	1	20 7386
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### Diamond core drill bit

complete with holder shaft and HM centring drill bit with holder shaft (CIMCO article no. 20 7384)

Hexagonal size 12	ø 68	1	20 7378
	ø 82	1	20 7379

with holder shaft (CIMCO article no. 20 7385)

SDS holder system	ø 68	1	20 7388
	ø 82	1	20 7389

### Diamond core bits

- Dry and wet cutting
- Suitable for all standard Diamant dry drills (holder M 16) speed recommendation approx. 2,000 rpm
- Designed with diagonal slotting for cooling (dust removal)
- High-performance diamond segments made of diamond grit bond

### Diamond core bits 65, red

Working length: 65 mm

with laser-fused diamond segments made of diamond grit bond

Suitable for: hollow concrete block, masonry brick, tiles (soft), sand-lime brick (soft abrasive/hard), plaster and aerated concrete

Height mm	Segment length mm	Quantity	ø mm		
8	24	3	68	1	20 8770
8	24	4	82	1	20 8772

### Diamond core bits 65, silver

Working length: 65 mm, with laser-fused diamond segments made of diamond grit bond

Suitable for: concrete products (soft), hollow concrete block, masonry brick, tiles (soft), sand-lime brick (soft abrasive/hard/high density), plaster and aerated concrete

Height mm	Segment length mm	Quantity	ø mm		
8	24	3	68	1	20 8774
8	24	4	82	1	20 8776

### Diamond core bits 65, blue

Working length: 65 mm, with laser-fused diamond segments made of diamond grit bond

Suitable for: concrete products (medium-hard), reinforced concrete, hollow concrete block, masonry brick, tiles (hard), sand-lime brick (soft abrasive/hard/high density), quadro block, sand stone (hard), clinker brick (medium-hard), plaster, and aerated concrete

Height mm	Segment length mm	Quantity	ø mm		
8	24	3	68	1	20 8778
8	24	4	82	1	20 8780

Design	Size mm	PU	Article no.
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### Diamond core bits 65, black

Working length: 65 mm,  
with laser-fused diamond segments made of diamond grit bond  
Suitable for: sand-lime brick (soft/abrasive), sandstone (abrasive), plaster and aerated concrete

Height mm	Segment length mm	Quantity	ø mm		
8	24	3	68	1	20 8782
8	24	4	82	1	20 8784

### Holder shaft 65

for working length: 65 mm  
Steel design, including ejector drift

Hex		1	20 8836
SDS		1	20 8838

### Centring drill (tapered) 65

for working length: 65 mm and for extensions with a conical holder shaft

Total length 120 mm		1	20 8834
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### Diamond core bits

- Dry and wet cutting
- Suitable for all standard diamond dry drills (holder M 16)  
speed recommendation approx. 2,000 rpm.
- Designed with head slotting for cooling (dust removal)
- High-performance diamond segments made of diamond grit bond

### Diamond core bits 90, red

Working length: 90 mm, with laser-fused diamond segments made of diamond grit bond  
Suitable for: hollow concrete block, masonry brick, tiles (soft), sand-lime brick (soft abrasive/hard), plaster and aerated concrete

Height mm	Segment length mm	Quantity	ø mm		
8	24	3	68	1	20 8790
8	24	4	82	1	20 8792

### Diamond core bits 90, silver

Working length: 90 mm,  
with laser-fused diamond segments made of diamond grit bond  
Suitable for: concrete products (soft), hollow concrete block, masonry brick, tiles (soft),  
sand-lime brick (soft abrasive/hard/high density), plaster and aerated concrete

Height mm	Segment length mm	Quantity	ø mm		
8	24	3	68	1	20 8794
8	24	4	82	1	20 8796

### Diamond core bits 90, black

Working length: 90 mm,  
with laser-fused diamond segments made of diamond grit bond  
Suitable for: sand-lime brick (soft/abrasive), sandstone (abrasive), plaster and aerated concrete

Height mm	Segment length mm	Quantity	ø mm		
8	24	3	68	1	20 8798
8	24	4	82	1	20 8800

### Diamond core bits 90 ruby

Working length: 90 mm, with laser-fused diamond segments made of diamond grit bond  
Suitable for: concrete products (medium-hard), reinforced concrete, hollow concrete block, masonry brick, tiles (hard), sand-lime brick (soft abrasive/hard/high density), quadro block, sandstone (hard), plaster and aerated concrete

Height mm	Segment length mm	Quantity	ø mm		
8	24	3	68	1	20 8802
8	24	4	82	1	20 8804



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Design	Size mm	PU	Article no.
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**Holder shaft 90**

for working length: 90 mm  
steel design, including ejector drift

Hex		1	20 8836
SDS		1	20 8838

**Centring drill (tapered) 90**

for working length: 90 mm and for extensions with a conical holder shaft

Total length 140 mm		1	20 8844
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**Hard metal core bits 60 dry wall**

Working length: 60 mm,  
with hard metal segments welded on, core bit holder M 16  
Suitable for: plywood, plastics (PVC), Fermacell, wood-core plywood, chipboard and GRP

Height mm	Segment length mm	Quantity	ø mm		
8	2.5	5	68	1	20 8786
8	2.5	5	82	1	20 8788

**Holder shaft 60**

for working length: 60 mm, including Allen key

Hex		1	20 8850
SDS		1	20 8852

**60 centring drill**

for working length: 68 mm and for extensions with a cylindrical holder shaft and locking surface

Total length 112 mm		1	20 8854
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**Diamond core bits 150 Universal**

Working length: 150 mm  
with laser-fused diamond segments made of diamond grit bond  
Suitable for: concrete products (medium-hard), exposed aggregate concrete, kerbstone, paving stone, composite stone, roof tiles (medium-hard), hollow concrete block, masonry brick, tiles (soft/hard), sand-lime brick (soft abrasive/hard/high density), Quadro block, sand stone (hard), clinker brick (medium-hard), plaster, aerated concrete, and screed

Height mm	Segment length mm	Quantity	ø mm		
7	24	3	32	1	20 8810
7	24	3	42	1	20 8812
7	24	4	52	1	20 8814
7	24	4	72	1	20 8816
7	24	4	82	1	20 8818
7	24	5	112	1	20 8820
7	24	6	132	1	20 8822
7	24	7	152	1	20 8824
7	24	7	182	1	20 8826

**Holder shaft 150**

for working length: 150 mm, useable length: 200 mm  
Steel design, including centring drill bit and ejector drift

Hex		1	20 8830
SDS		1	20 8832

**Centring drill (conical) 150**

for working length: 150 mm

		1	20 8833
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**Dust vacuum for diamond core bits**

for core bits (holder M 16), with head slot, suitable for tool types with a connecting thread M 18

		1	20 8846
Centring point for dust vacuum		1	20 8848
Centring drill for dust vacuum		1	20 8840



Design	Size mm	PU	Article no.
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### Diamond dry drill

The ideal tool for recessing sockets up to 82 mm, for outlet sockets and junction boxes, dimensionally accurate with minimum time required, also suitable for hard materials such as sand-lime brick, masonry, and clinker brick (dry). With mechanical safety clutch, electronic soft start, overload shutdown and temperature monitoring function, additional hand grip – variable adjustment using the clamping collar, locking knob with protection against unintentional locking

**Specifications:**

- Power consumption: 1,300 W
- Nominal voltage: 230 V ~
- Nominal speed: 0 – 2000 rpm
- Max. drilling diameter: 32 – 82 mm
- Idling speed: 3400 rpm
- Tool holder: M 18 external
- Clamping collar diameter: 46 mm
- Weight: 3.4 kg

		1	11 0008
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### Diamond dry drill, soft hammer-action

Dry drilling in diameters up to 90 mm in particularly hard material, e.g. high density sand-lime brick, armoured concrete and other abrasive materials.

With high operating speed, powerful motor, electronic soft start, temperature and overload shutdown function, gear mechanism with switchable soft hammer-action function, mechanical safety clutch, additional hand grip – variable adjustment using clamping collar.

**Specifications:**

- Power consumption: 1,800 W
- Nominal voltage: 230 V ~
- Nominal speed: 0 – 2,050 rpm
- Max. drilling diameter: 90 mm
- Idling speed: 3000 rpm
- Tool holder: M 18 external
- Clamping collar diameter: 53 mm
- Hammer frequency: 41,000 blows/min
- Weight: 5.9 kg

		1	11 0010
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### Vacuum device 25

Despite its small container, the vacuum device is able to take up large amounts of water and dust. The vibrating mechanism cleans the filters before a dust cloud develops, thereby enabling you to work without a filter bag. With electromagnetic filter vibration, increased service life of the filter cartridges, additional manual vibration possible, device socket with automatic switch-on and switch-on delay for connected power tools, two polyester filter cartridges – durable and washable, filter surface 8600 cm – high constant suction, with practical storage, self-supporting, wheels with parking brake, water detection with sensor switch-off function – automatic shut down when max. water level is detected, filter protection, electronically controlled soft start, electronically controlled overrun, visual display of the suction power

**Specifications:**

- Power consumption: 1,400 W
- Nominal voltage: 230 V ~
- Frequency: 50 - 60 Hz
- Max. airflow: 61 l/s
- Max. negative pressure: 248 mbar
- Container volume: 25 l
- Dust volume (net): 20 l
- Dimensions (L x W x H): 420 x 410 x 580 mm
- Weight: 12.7 kg

		1	11 0016
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### Holder shafts - dry drills

Steel design, with tool holder M 18 or resp. 5/8" or R 1/2"

including SDS centring drill bit	M 18 x 2.5 / M 16	1	20 8858
including cylindrical centring drill bit	5/8" / M 16	1	20 8860
including cylindrical centring drill bit	R 1/2" / M 16	1	20 8862
including centring drill bit (hook function)	M 18 x 2.5 / M 16	1	20 8856



### Universal deburrer

for all deburring work on drill holes as well as on straight, convex and concave edges (e.g. pipe inner and outer edges), aluminium handle, interchangeable, hardened blade

		1	20 8500
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### Jigsaw blades manufactured from CrV steel

self-service packaged, for wood, plastic up to 60 mm

for AEG - Bosch - Metabo - tools		5	20 8506
for Black + Decker - Skil - Fein - tools		5	20 8507

### Jigsaw blades manufactured from HSS bi-metal

self-service packaged, for soft steel, aluminium, non-ferrous metal, stainless steel metal up to 4 mm

for AEG - Bosch - Metabo - tools		5	20 8522
for Black + Decker - Skil - Fein - tools		5	20 8523



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Design	Size mm	PU	Article no.
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### Workshop file set, 5 pieces

with cross cut, cut 2 (medium-fine), length 200 mm, with wooden haft, suitable for metal as well as wood and plastic

one of each		1	20 6806
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### Workshop files

according to DIN 7261, without grip

Shape A, flat hand



Cut 1	150	1	20 6502
	200	1	20 6503
	250	1	20 6504
	300	1	20 6505
Cut 2	150	1	20 6512
	200	1	20 6513
	250	1	20 6514
	300	1	20 6515
Cut 3	150	1	20 6522
	200	1	20 6523
	250	1	20 6524
	300	1	20 6525

Shape C, triangular

Cut 1	150	1	20 6532
	200	1	20 6533
	250	1	20 6534
	300	1	20 6535
Cut 2	150	1	20 6542
	200	1	20 6543
	250	1	20 6544
	300	1	20 6545
Cut 3	150	1	20 6552
	200	1	20 6553
	250	1	20 6554
	300	1	20 6555

Shape D, square

Cut 1	150	1	20 6561
	200	1	20 6562
	250	1	20 6563
	300	1	20 6564
Cut 2	150	1	20 6571
	200	1	20 6572
	250	1	20 6573
	300	1	20 6574
Cut 3	150	1	20 6581
	200	1	20 6582
	250	1	20 6583
	300	1	20 6584

Shape E, semi-circular


Cut 1	150	1	20 6592
	200	1	20 6593
	250	1	20 6594
	300	1	20 6595
Cut 2	150	1	20 6602
	200	1	20 6603
	250	1	20 6604
	300	1	20 6605
Cut 3	150	1	20 6612
	200	1	20 6613
	250	1	20 6614
	300	1	20 6615



Design	Size mm	PU	Article no.
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### Workshop files

according to DIN 7261, without grip

Shape F, round 

Cut 1	150	1	20 6622
	200	1	20 6623
	250	1	20 6624
	300	1	20 6625
Cut 2	150	1	20 6632
	200	1	20 6633
	250	1	20 6634
Cut 3	150	1	20 6642
	200	1	20 6643
	250	1	20 6644
	300	1	20 6645

### Rasps

without grip

Cut 1	250	1	20 6701
Cut 2	250	1	20 6711

### File grips

according to DIN ISO 395, manufactured from beech wood

for files mm

up to 100	80	20	20 6850
up to 175	100	20	20 6852
up to 300	120	20	20 6854
up to 350	140	20	20 6856
from 350	160	20	20 6857

### Key file set, 6 files

with wooden haft, according to DIN 7283, shape A to F, length 100 mm

in plastic case		10	20 6750
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### File brush

for the cleaning of wood and metal files. With stable beech wood carrier and steel edging.

Working surface 115 mm x 40 mm	250	12	14 1325
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### Contact file set, 6-pieces

in DIY snatch bag

Length 160 mm		1	20 6760
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### Contact brush

contact brush or spark plug brush with 0.15 mm ø curved brass edging and stable beech wood handles.

Double-row	100	12	14 1320
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# SCREW PUNCHERS, PLATE PUNCHERS

## First class

100 % Made in Germany!  
All tools made of particularly tough special steel for a long working life.



## Well planned

Special cutting geometry for light first cut and speedy punching.  
Little force required due to tapered, relieved blades. Die with crosshairs for improved positioning.



## Innovative

DIAMANT/ DIAMANT-VA round punchers split the scrap piece into three parts. Shaped punches with lateral ejectors for the scrap part.



## Practical

For manual and hydraulic use. All tools and accessory parts can be ordered individually – no packaged units.



All punching tools are 100% compatible with the systems of other manufacturers. Special punches can be produced at short notice if dimensions are provided.

Design	Size mm	PU	Article no.
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### DIAMANT screw puncher

innovative splitting punch with three cutting tips: punched waste is split into three parts.  
 Suitable for: steel sheets (ST 37), plastic and aluminium. Operation: manual and hydraulic  
 Design: with punch, die, tension bolt with ball bearing (encapsulated)

Nominal size	Nominal size	Hole ø	Bolt	Pre-drill ø	Max. material		
PG	metric	mm	Size mm	mm	thickness mm		
	12	12.5	6.0 x 40.0	6.5	1.5	1	13 2500
	16	16.2	9.5 x 50.0	10.0	2.0	1	13 2502
13	20	20.4	9.5 x 50.0	10.0	2.0	1	13 2504
	25	25.4	9.5 x 50.0	10.0	2.0	1	13 2506
	32	32.5	19.0 x 55.0	20.4*	3.0	1	13 2508
	40	40.5	19.0 x 75.0	20.4*	3.0	1	13 2510
	50	50.5	19.0 x 75.0	20.4*	3.0	1	13 2512
	63	63.5	19.0 x 75.0	20.4*	3.0	1	13 2514

\* 1. Pre-drill: ø 10.0 mm 2. Pre-punch: ø 20.4 mm

Nominal size	Nominal size	Hole ø	Bolt	Pre-drill ø	Max. material		
PG	metric	mm	Size mm	mm	thickness mm		
9		15.2	9.5 x 50.0	10.0	2.0	1	13 2518
		18.6	9.5 x 50.0	10.0	2.0	1	13 2520
13	20	20.4	9.5 x 50.0	10.0	2.0	1	13 2504
		22.5	9.5 x 50.0	10.0	2.0	1	13 2524
		28.3	9.5 x 50.0	10.0	2.0	1	13 2526
		37.0	19.0 x 55.0	20.4*	3.0	1	13 2528
		47.0	19.0 x 75.0	20.4*	3.0	1	13 2530
		54.0	19.0 x 75.0	20.4*	3.0	1	13 2532
		60.0	19.0 x 75.0	20.4*	3.0	1	13 2534

\* 1. Pre-drill: ø 10.0 mm 2. Pre-punch: ø 20.4 mm

Nominal size	Hole ø	Bolt	Pre-drill ø	Max. material		
Inches	mm	Size mm	mm	thickness mm		
1-7/32"	30.5	9.5 x 50.0	10.0	2.0	1	13 2536

### DIAMANT screw puncher accessories

for bolt size 6.0 mm x 40 mm Size mm

Tension bolt with ball bearing	6.0 x 40	1	13 5010
Hydraulic bolt, complete	19.0 / 6.0	1	13 5012
Punch (with 6.0 mm thread)	12.5	1	13 2542
Die (for 6.0 mm bolt)	12.5	1	13 2544

for bolt size 9.5 mm x 50 mm

Tension bolt with ball bearing	9.5 x 50	1	13 5000
Hydraulic bolt	19.0 / 9.5	1	13 5002
Punch (with 9.5 mm thread)	15.2	1	13 2550
	16.2	1	13 2552
	18.6	1	13 2554
	20.4	1	13 2556
	22.5	1	13 2558
	25.4	1	13 2560
	28.3	1	13 2562
	30.5	1	13 2564
Die (for 9.5 mm bolt)	15.2	1	13 2566
	16.2	1	13 2568
	18.6	1	13 2570
	20.4	1	13 2572
	22.5	1	13 2574
	25.4	1	13 2576
	28.3	1	13 2578
	30.5	1	13 2580



Design	Size mm	PU	Article no.
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## DIAMANT screw puncher accessories

for bolt size 19 mm x 55 mm

Tension bolt with ball bearing	19.0 x 55.0	1	13 5004
Hydraulic bolt	19.0 x 120.0	1	13 5006
Punch (with 19 mm thread)	32.5	1	13 2586
	37.0	1	13 2588
Die (for 19 mm bolt)	32.5	1	13 2590
	37.0	1	13 2592

for bolt size 19 mm x 75 mm

Tension bolt with ball bearing	19.0 x 75	1	13 5008
Hydraulic bolt	19.0 x 120	1	13 5006
Punch (with 19 mm thread)	40.5	1	13 2598
	47.0	1	13 2600
	50.5	1	13 2602
	54.0	1	13 2604
	60.0	1	13 2606
	63.5	1	13 2608
Die (for 19 mm bolt)	40.5	1	13 2610
	47.0	1	13 2612
	50.5	1	13 2614
	54.0	1	13 2616
	60.0	1	13 2618
	63.5	1	13 2620



## DIAMANT screw puncher – VA

Innovative splitting punch with three cutting tips: punched waste is split into three parts.

Suitable for: stainless steel (VA), steel sheets (ST 37), plastic and aluminium. Operation: manual and hydraulic (we recommend the use of a hydraulic unit). Design: with splitting punch, die, without tension bolt

Nominal size	Nominal size	Hole ø	Bolt	Pre-drill ø	Max. material		
PG	metric	mm	Size mm	mm	thickness mm		
	16	16.2	11.1 x 60.0	11.5	2.5	1	13 2700
13	20	20.4	11.1 x 60.0	11.5	2.5	1	13 2702
	25	25.4	11.1 x 60.0	11.5	2.5	1	13 2704
	32	32.5	19.0 x 55.0	20.4*	3.5	1	13 2706
	40	40.5	19.0 x 75.0	20.4*	3.5	1	13 2708
	50	50.5	19.0 x 75.0	20.4*	3.5	1	13 2710
	63	63.5	19.0 x 75.0	20.4*	3.5	1	13 2712

\* 1. Pre-drill: ø 11.5 mm 2. Pre-punch: ø 20.4 mm

Nominal size	Nominal size	Hole ø	Bolt	Pre-drill ø	Max. material		
PG	metric	mm	Size mm	mm	thickness mm		
9		15.2	11.1 x 60.0	11.5	2.5	1	13 2714
11		18.6	11.1 x 60.0	11.5	2.5	1	13 2716
13	20	20.4	11.1 x 60.0	11.5	2.5	1	13 2702
16		22.5	11.1 x 60.0	11.5	2.5	1	13 2720
21		28.3	19.0 x 55.0	20.4*	3.5	1	13 2722
29		37.0	19.0 x 55.0	20.4*	3.5	1	13 2724
36		47.0	19.0 x 75.0	20.4*	3.5	1	13 2726
42		54.0	19.0 x 75.0	20.4*	3.5	1	13 2728
48		60.0	19.0 x 75.0	20.4*	3.5	1	13 2730

\* 1. Pre-drill: ø 11.5 mm 2. Pre-punch: ø 20.4 mm

Nominal size	Nominal size	Hole ø	Bolt	Pre-drill ø	Max. material		
PG	metric	mm	Size mm	mm	thickness mm		
1-7 / 32"		30.5	19 x 55	20.4*	3.5	1	13 2732

\* 1. Pre-drill: ø 11.5 mm 2. Pre-punch: ø 20.4 mm



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Design	Size mm	PU	Article no.
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### DIAMANT screw puncher accessories – VA

for bolt size 11.1 mm x 60 mm



Tension bolt with ball bearing	11.1 x 60.0	1	13 5014
Hydraulic bolt, complete	19.0 / 11.1	1	13 5016
Punch (with 11.1 mm thread)	15.2	1	13 2734
	16.2	1	13 2736
	18.6	1	13 2738
	20.4	1	13 2740
	22.5	1	13 2742
	25.4	1	13 2744
Die (for 11.1 mm bolt)	15.2	1	13 2746
	16.2	1	13 2748
	18.6	1	13 2750
	20.4	1	13 2752
	22.5	1	13 2754
	25.4	1	13 2756

for bolt size 19 mm x 55 mm



Tension bolt with ball bearing	19.0 x 55.0	1	13 5004
Hydraulic bolt	19.0 x 120.0	1	13 5006
Punch (with 19 mm thread)	28.3	1	13 2758
	30.5	1	13 2760
	32.5	1	13 2762
	37.0	1	13 2764
Die (for 19 mm bolt)	28.3	1	13 2766
	30.5	1	13 2768
	32.5	1	13 2770
	37.0	1	13 2772

for bolt size 19 mm x 75 mm



Tension bolt with ball bearing	19.0 x 75.0	1	13 5008
Hydraulic bolt	19.0 x 120.0	1	13 5006
Punch (with 19 mm thread)	40.5	1	13 2774
	47.0	1	13 2776
	50.5	1	13 2778
	54.0	1	13 2780
	60.0	1	13 2782
	63.5	1	13 2784
Die (for 19 mm bolt)	40.5	1	13 2786
	47.0	1	13 2788
	50.5	1	13 2790
	54.0	1	13 2792
	60.0	1	13 2794
	63.5	1	13 2796

### Round screw puncher BASIC

Suitable for: steel sheets (ST 37), plastic, and aluminium.

Operation: manual and hydraulic, punched waste is punched out in a single piece

Design: includes punch, die, and tension bolt with ball bearing (encapsulated)



Nominal size	Nominal size	Hole ø	Bolt	Pre-drill ø	Max. material			
PG	metric	mm	Size mm	mm	thickness mm			
	16	16.2	9.5 x 50.0	10.0	2.0	1	13 2300	
13	20	20.4	9.5 x 50.0	10.0	2.0	1	13 2302	
	25	25.4	9.5 x 50.0	10.0	2.0	1	13 2304	
	32	32.5	9.5 x 50.0	10.0	2.0	1	13 2306	
	40	40.5	19.0 x 55.0	20.4*	3.0	1	13 2308	
	50	50.5	19.0 x 75.0	20.4*	3.0	1	13 2310	
	63	63.5	19.0 x 75.0	20.4*	3.0	1	13 2312	

\* 1. Pre-drill: ø 10.0 mm 2. Pre-punch: ø 20.4 mm

Design	Size mm	PU	Article no.
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## Round screw puncher BASIC

Nominal size	Nominal size	Hole $\varnothing$	Bolt	Pre-drill $\varnothing$	Max. material		
PG	metric	mm	Size mm	mm	thickness mm		
9		15.2	9.5 x 50.0	10.0	2.0	1	13 2318
11		18.6	9.5 x 50.0	10.0	2.0	1	13 2320
13	20	20.4	9.5 x 50.0	10.0	2.0	1	13 2302
16		22.5	9.5 x 50.0	10.0	2.0	1	13 2324
21		28.3	9.5 x 50.0	10.0	2.0	1	13 2326
29		37.0	19.0 x 55.0	20.4*	3.0	1	13 2328
36		47.0	19.0 x 75.0	20.4*	3.0	1	13 2330
42		54.0	19.0 x 75.0	20.4*	3.0	1	13 2332
48		60.0	19.0 x 75.0	20.4*	3.0	1	13 2334

\* 1. Pre-drill:  $\varnothing$  10.0 mm 2. Pre-punch:  $\varnothing$  20.4 mm

Nominal size	Hole $\varnothing$	Bolt	Pre-drill $\varnothing$	Max. material		
Inches	mm	Size mm	mm	thickness mm		
1-7 / 32"	30.5	9.5 x 50.0	10.0	2.0	1	13 2336
	68.0	19.0 x 75.0	20.4*	3.0	1	13 2338
2-3 / 4"	70.0	19.0 x 75.0	20.4*	3.0	1	13 2340
3"	76.2	19.0 x 75.0	20.4*	3.0	1	13 2342
3-1 / 8"	80.0	19.0 x 75.0	20.4*	3.0	1	13 2344
	82.0	19.0 x 75.0	20.4*	3.0	1	13 2346

\* 1. Pre-drill:  $\varnothing$  10.0 mm 2. Pre-punch:  $\varnothing$  20.4 mm

## BASIC screw puncher accessories

for bolt size 9.5 mm x 50 mm

Tension bolt with ball bearing	9.5 x 50.0	1	13 5000
Hydraulic bolt	19.0 / 9.5	1	13 5002
Punch (with 9.5 mm thread)	15.2	1	13 2354
	16.2	1	13 2356
	18.6	1	13 2358
	20.4	1	13 2360
	22.5	1	13 2362
	25.4	1	13 2364
	28.3	1	13 2366
	30.5	1	13 2368
	32.5	1	13 2370
Die (for 9.5 mm bolt)	15.2	1	13 2374
	16.2	1	13 2376
	18.6	1	13 2378
	20.4	1	13 2380
	22.5	1	13 2382
	25.4	1	13 2384
	28.3	1	13 2386
	30.5	1	13 2388
	32.5	1	13 2390

for bolt size 19 mm x 55 mm

Tension bolt with ball bearing	19.0 x 55.0	1	13 5004
Hydraulic bolt	19.0 x 120.0	1	13 5006
Punch (with 19 mm thread)	37.0	1	13 2396
	40.5	1	13 2398
Die (for 19 mm bolt)	37.0	1	13 2400
	40.5	1	13 2402



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Design	Size mm	PU	Article no.
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### BASIC screw puncher accessories



for bolt size 19 mm x 75 mm

Tension bolt with ball bearing	19.0 x 75.0	1	13 5008
Hydraulic bolt	19.0 x 120.0	1	13 5006
Punch (with 19 mm thread)	47.0	1	13 2408
	50.5	1	13 2410
	54.0	1	13 2412
	60.0	1	13 2414
	63.5	1	13 2416
	68.0	1	13 2418
	70.0	1	13 2420
	76.2	1	13 2424
	80.0	1	13 2426
	82.0	1	13 2428
Die (for 19 mm bolt)	47.0	1	13 2430
	50.5	1	13 2432
	54.0	1	13 2434
	60.0	1	13 2436
	63.5	1	13 2438
	68.0	1	13 2440
	70.0	1	13 2442
	76.2	1	13 2446
	80.0	1	13 2448
	82.0	1	13 2450

### DIAMANT screw puncher sets

As an option with five or seven different sizes.

Suitable for: steel sheets (ST 37), plastic and aluminium. Operation: manual and hydraulic

Design: consists of splitting punches and dies. Storage: in practical, strong plastic case



Design	Nominal size	max. material thickness	PU	Article no.
	metric mm	mm		
	16	2.0	1	13 3000
	20	2.0		
	25	2.0		
	32	2.0		
	40	3.0		
5 piece				
	16	2.0	1	13 3002
	20	2.0		
	25	2.0		
	32	2.0		
	40	3.0		
	50	3.0		
	63	3.0		
7 piece				

Additional equipment: tension bolt with ball bearing (encapsulated), pre-drill and assembly paste



Design	Nominal size	max. material thickness	PU	Article no.
	metric mm	mm		
	12	1.5	1	13 3008
	16	2.0		
	20	2.0		
	25	2.0		
	32	2.0		
	40	3.0		
	11 piece			
	16	2.0	1	13 3010
	20	2.0		
	25	2.0		
	32	2.0		
	40	3.0		
	50	3.0		
	63	3.0		
13 piece				

Design	Size mm	PU	Article no.
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### DIAMANT screw puncher sets

12-piece screw puncher sets including hand-held punch and accessories. As an option, with straight hand-held punch or 90° angled hand-held punch.

Suitable for: steel sheets (ST 37), plastic and aluminium. Operation: hydraulic  
 Design: consists of five splitting punches and dies; hydraulic bolts (2 pieces), pre-drill and spacer sleeve set (3-piece). Storage: in practical, strong plastic case  
 Contains straight hydraulic hand-held punch

Design	Nominal size		max. material thickness	
	metric mm	mm		
	16		2.0	
	20		2.0	
	25		2.0	
	32		2.0	
	40		3.0	
12-piece			1	13 3012



Contains 90° angled hand-held punch, can be rotated 360°

Design	Nominal size		max. material thickness	
	metric mm	mm		
	16		2.0	
	20		2.0	
	25		2.0	
	32		2.0	
	40		3.0	
12-piece			1	13 3014



### 12-piece screw puncher set accessories

Individual parts

Hydraulic bolt, complete	19.0 / 9.5	1	13 5002
Hydraulic bolt	19.0 x 120.0	1	13 5006
Spacer sleeve set (3-piece)		1	13 5072
Pre-drill	10.0	1	13 4026



### DIAMANT screw puncher sets – VA

Screw puncher sets consisting of splitting punches and dies: options for five or seven different sizes.

Suitable for: stainless steel (VA), steel sheets (ST 37), plastic and aluminium. Operation: manual and hydraulic (we recommend the use of a hydraulic unit)

Design: consists of splitting punches and dies. Storage: in practical, strong plastic case

Design	Nominal size		max. material thickness	
	metric mm	mm		
	16		2.5	
	20		2.5	
	25		2.5	
	32		3.5	
	40		3.5	
5-piece			1	13 3004



	16		2.5	
	20		2.5	
	25		2.5	
	32		3.5	
	40		3.5	
	50		3.5	
	63		3.5	
7 piece			1	13 3006



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Design	Size mm	PU	Article no.
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### DIAMANT screw puncher sets – VA

12-piece screw puncher sets including hand-held punch and accessories. As an option, with straight hand-held punch or 90° angled hand-held punch.

Suitable for: stainless steel (VA), steel sheets (ST 37), plastic and aluminium. Operation: hydraulic  
Design: consists of five splitting punches and dies; hydraulic bolts (2 pieces), pre-drill and spacer sleeve set (3-piece). Storage: in practical, strong plastic case

Contains straight hydraulic hand-held punch

Design	Nominal size	max. material thickness	PU	Article no.
	metric mm	mm		
	16	2.5	1	13 3016
	20	2.5		
	25	2.5		
	32	3.5		
	40	3.5		
12-piece				

Contains hydraulic 90° angled hand-held punch, can be rotated 360°

Design	Nominal size	max. material thickness	PU	Article no.
	metric mm	mm		
	16	2.5	1	13 3018
	20	2.5		
	25	2.5		
	32	3.5		
	40	3.5		
12-piece				

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### 12-piece screw puncher set accessories

Individual parts				
Hydraulic bolt, complete	19.0 / 11.1	1	13 5016	
Hydraulic bolt	19.0 x 120.0	1	13 5006	
Spacer sleeve set (3-piece)		1	13 5072	
Pre-drill	11.5	1	13 4030	



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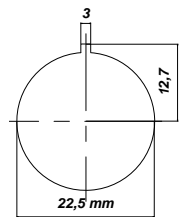
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### Round and groove screw puncher

Patented die: with lateral scrap part ejector. Hole punching design with 3 mm stud; for anti-rotation locking of pushbuttons and switches. Suitable for: steel sheet (ST 37), plastic and aluminium. Operation: manual and hydraulic  
Design: with punch, die, tension bolt with ball bearing (encapsulated), counter nut and adapter for hydraulic operation. Storage: in a practical, strong plastic case



Nominal size ø	Pre-drill ø	max. material thickness	PU	Article no.
	mm	mm		
22.5 mm with 3 mm stud	14.0	2.0	1	13 2800

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### Round and groove screw puncher accessories

Individual parts				
Tension bolt with ball bearing		1	13 5018	
Counter nut		1	13 5020	
Screw-down nut		1	13 5022	
Adapter for hydraulics		1	13 5024	
Punch	22.5 - 3.2 - 25.4	1	13 2802	
Die	22.5 - 3.2 - 25.4	1	13 2804	



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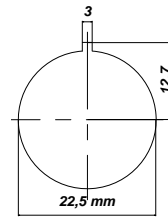
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Design	Size mm	PU	Article no.
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### Round and groove screw puncher VA

With lateral ejector for the scrap part, supplied in a plastic case, suitable for hydraulic operation, stainless steel sheets (VA) and steel sheets (ST 37). Hole punch design with stud. For anti-rotation locking of pushbuttons and switches.



Nominal size ø	Pre-drill ø	max. material thickness	PU	Article no.
	mm	mm		
22.5 mm with 3 mm stud	14.0	2.0	1	13 2801

### Round and groove screw puncher VA accessories

Tension bolt with ball bearing			1	13 5018
Counter nut			1	13 5020
Screw-down nut			1	13 5022
Adapter for hydraulics			1	13 5024
Punch		22.5 - 3.2 - 25.4	1	13 2803
Die		22.5 - 3.2 - 25.4	1	13 2804

### Rectangular screw puncher

Patented die: with lateral scrap part ejector.

Suitable for: steel sheets (ST 37), plastic and aluminium. Operation: manual and hydraulic

Design: with punch, die, tension bolt with ball bearing (encapsulated), counter nut and adapter for hydraulic operation. Storage: in a practical, strong plastic case

Nominal size ø	Pre-drill ø	max. material thickness	PU	Article no.
	mm	mm		
17.0 x 19.0	14.0	2.0	1	13 2806
21.8 x 25.8	17.0	2.0	1	13 2808
22.0 x 30.0	17.0	2.0	1	13 2810
22.0 x 42.0	17.0	2.0	1	13 2811
25.0 x 50.0	17.0	2.0	1	13 2812



### Rectangular screw puncher accessories

Individual parts				
Tension bolt with ball bearing			1	13 5028
Counter nut			1	13 5020
Screw-down nut			1	13 5022
Adapter for hydraulics			1	13 5024
Punch		17.0 x 19.0	1	13 2818
Die		17.0 x 19.0	1	13 2828



### Rectangular screw puncher accessories

Individual parts				
Tension bolt with ball bearing			1	13 5021
Counter nut			1	13 5020
Screw-down nut			1	13 5030
Adapter for hydraulics			1	13 5032
Punch		21.8 x 25.8	1	13 2820
Punch		22.0 x 30.0	1	13 2822
Punch		22.0 x 42.0	1	13 2824
Die		21.8 x 25.8	1	13 2830
Die		22.0 x 30.0	1	13 2832
Die		22.0 x 42.0	1	13 2834
Counter nut			1	13 5046
Punch		25.0 x 50.0	1	13 2826
Die		25.0 x 50.0	1	13 2836



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Design	Size mm	PU	Article no.
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### Rectangular screw puncher

Patented die: with lateral scrap part ejector.  
 Suitable for: steel sheets (ST 37), plastic and aluminium. Operation: hydraulic  
 Design: with punch, die, hydraulic bolt and counter nut  
 Storage: in a practical, strong plastic case



Nominal size $\phi$	Pre-drill $\phi$	max. material thickness		
	mm	mm		
45.0 x 92.0	24.0	2.0	1	13 2813
46.0 x 92.0	24.0	2.0	1	13 2814
68.0 x 138.0	30.0*	3.0	1	13 2816

\*Only in combination with CIMCO article no. 13 4022 or adapter 13 5088

### Rectangular screw puncher accessories

Individual parts				
Hydraulic bolt			1	13 5034
Counter nut			1	13 5036
Punch	45.0 x 92.0		1	13 2837
Punch	46.0 x 92.0		1	13 2838
Die	45.0 x 92.0		1	13 2841
Die	46.0 x 92.0		1	13 2842
Hydraulic bolt			1	13 5038
Counter nut			1	13 5040
Punch	68.0 x 138.0		1	13 2840
Die	68.0 x 138.0		1	13 2844



### Square screw puncher

Patented die: with lateral scrap part ejector.  
 Suitable for: steel sheets (ST 37), plastic and aluminium. Operation: manual and hydraulic  
 Design: with punch, die, tension bolt with ball bearing (encapsulated), counter nut and adapter for hydraulic operation. Storage: in a practical, strong plastic case



Nominal size $\phi$	Pre-drill $\phi$	max. material thickness		
	mm	mm		
12.7 x 12.7	10.0	1.75	1	13 2846
15.8 x 15.8	10.0	1.75	1	13 2848
19.0 x 19.0	14.0	2.00	1	13 2850
22.2 x 22.2	14.0	2.00	1	13 2852
24.0 x 24.0	14.0	2.00	1	13 2854
25.4 x 25.4	17.0	2.00	1	13 2856

### Square screw puncher accessories

Individual parts				
Tension bolt with ball bearing			1	13 5042
Counter nut			1	13 5044
Screw-down nut			1	13 5022
Adapter for hydraulics			1	13 5024
Punch	12.7 x 12.7		1	13 2872
Punch	15.8 x 15.8		1	13 2874
Die	12.7 x 12.7		1	13 2884
Die	15.8 x 15.8		1	13 2886
Tension bolt with ball bearing			1	13 5028
Counter nut			1	13 5020
Screw-down nut			1	13 5022
Adapter for hydraulics			1	13 5024
Punch	19.0 x 19.0		1	13 2876
Punch	22.2 x 22.2		1	13 2878
Punch	24.0 x 24.0		1	13 2880
Die	19.0 x 19.0		1	13 2888
Die	22.2 x 22.2		1	13 2890
Die	24.0 x 24.0		1	13 2892





Design	Size mm	PU	Article no.
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## Square screw puncher accessories

Tension bolt with ball bearing		1	13 5021
Counter nut		1	13 5020
Screw-down nut		1	13 5030
Adapter for hydraulics		1	13 5032
Punch	25.4 x 25.4	1	13 2882
Die	25.4 x 25.4	1	13 2894



## Square screw puncher

Patented die: with lateral scrap part ejector.

Suitable for: steel sheets (ST 37), plastic and aluminium. Operation: hydraulic. Design: with punch, die, hydraulic bolt and counter nut. Storage: in a practical, strong plastic case

Nominal size $\phi$	Pre-drill $\phi$ mm	max. material thickness mm		
			PU	Article no.
45.5 x 45.5	20.0	3.0	1	13 2858
46.0 x 46.0	20.0	3.0	1	13 2860
50.8 x 50.8	24.0	3.0	1	13 2862
68.0 x 68.0	24.0	3.0	1	13 2864
92.0 x 92.0	30.0*	3.0	1	13 2866
125.0 x 125.0	30.0*	3.0	1	13 2868
138.0 x 138.0	30.0*	3.0	1	13 2870

\*Only in combination with CIMCO article no. 13 4022 or adapter 13 5088



## Square screw puncher accessories

Individual parts				
Hydraulic bolt		1	13 5048	
Counter nut		1	13 5050	
Punch	45.5 x 45.5	1	13 2896	
Punch	46.0 x 46.0	1	13 2898	
Die	45.5 x 45.5	1	13 2910	
Die	46.0 x 46.0	1	13 2912	
Hydraulic bolt		1	13 5034	
Counter nut		1	13 5050	
Punch	50.8 x 50.8	1	13 2900	
Die	50.8 x 50.8	1	13 2914	
Hydraulic bolt		1	13 5034	
Counter nut		1	13 5036	
Punch	68.0 x 68.0	1	13 2902	
Die	68.0 x 68.0	1	13 2916	
Hydraulic bolt		1	13 5038	
Counter nut		1	13 5036	
Punch	92.0 x 92.0	1	13 2904	
Die	92.0 x 92.0	1	13 2918	
Hydraulic bolt		1	13 5038	
Counter nut		1	13 5054	
Punch	125.0 x 125.0	1	13 2906	
Punch	138.0 x 138.0	1	13 2908	
Die	125.0 x 125.0	1	13 2920	
Die	138.0 x 138.0	1	13 2922	



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Design	Size mm	PU	Article no.
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### Square screw puncher - VA

Patented die: with lateral scrap part ejector.

Suitable for: stainless steel (VA steel) and steel sheets (ST 37). Operation: hydraulic. Design: with punch, die, hydraulic bolt and counter nut. Storage: in a practical, strong plastic case



Nominal size $\phi$	Pre-drill $\phi$	max. material thickness		
	mm	mm		
46.0 x 46.0	20.0	2.0	1	13 2861
68.0 x 68.0	24.0	2.0	1	13 2865
92.0 x 92.0	30.0*	2.0	1	13 2867

\*Only in combination with CIMCO article no. 13 4022 or adapter 13 5088

### Square screw puncher VA accessories

Individual parts

Hydraulic bolt			1	13 5048
Counter nut			1	13 5050
Punch	46.0 x 46.0		1	13 2899
Die	46.0 x 46.0		1	13 2912
Hydraulic bolt			1	13 5034
Counter nut			1	13 5036
Punch	68.0 x 68.0		1	13 2903
Die	68.0 x 68.0		1	13 2916
Hydraulic bolt			1	13 5038
Counter nut			1	13 5036
Punch	92.0 x 92.0		1	13 2905
Die	92.0 x 92.0		1	13 2918

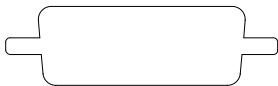


### Screw puncher Sub-Min-D

Patented die: with lateral scrap part ejector. Suitable for: steel sheets (ST 37) and stainless steel (VA steel).

Operation: manual and hydraulic. Design: for multiple plug-in connectors, with punch, die, tension bolt, counter nut, screw-down nut with ball bearing (encapsulated) and adapter for hydraulic operation

Storage: in a practical, strong plastic case



Number of pins	Nominal size	Pre-drill	max. matl thickness mm		
	mm	mm	ST 37 / VA		
9	19.8 x 11.3	10.0	2.00 / 1.50	1	13 2924
15	28.2 x 11.3	10.0	2.00 / 1.50	1	13 2926
25	41.9 x 11.3	10.0	1.75 / 1.25	1	13 2928
37	58.4 x 11.3	10.0	1.75 / 1.25	1	13 2930
50	55.7 x 13.9	10.0	1.65 / 1.00	1	13 2932

### Sub-Min-D screw punch accessories

Individual parts

Tension bolt			1	13 5056
Counter nut			1	13 5058
Screw-down nut			1	13 5022
Adapter/hydraulics			1	13 5024
Punch	20.0 x 11.9		1	13 2934
Die	20.0 x 11.9		1	13 2944
Tension bolt			1	13 5056
Counter nut			1	13 5060
Screw-down nut			1	13 5022
Adapter/hydraulics			1	13 5024
Punch	28.6 x 11.9		1	13 2936
Die	28.6 x 11.9		1	13 2946



Design	Size mm	PU	Article no.
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## Sub-Min-D screw punch accessories

Individual parts

Tension bolt		1	13 5056
Counter nut		1	13 5062
Screw-down nut		1	13 5022
Adapter/hydraulics		1	13 5024
Punch	42.0 x 11.9	1	13 2938
Die	42.0 x 11.9	1	13 2948

Tension bolt		1	13 5056
Counter nut		1	13 5064
Screw-down nut		1	13 5022
Adapter/hydraulics		1	13 5024
Punch	58.3 x 11.9	1	13 2940
Die	58.3 x 11.9	1	13 2950

Tension bolt		1	13 5056
Counter nut		1	13 5066
Screw-down nut		1	13 5022
Adapter/hydraulics		1	13 5024
Punch	55.9 x 14.7	1	13 2942
Die	55.9 x 14.7	1	13 2952



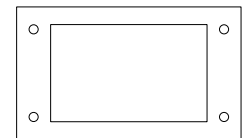
## Special screw puncher for heavy-duty plug-in connectors

Patented die: with lateral scrap part ejector. Drilling position is marked out by the die using centre punches: centre punches can be exchanged or wound back using 2.5 mm hex keys.

There is therefore no need to mark out the centre marking. Suitable for: steel sheets (ST 37), plastic and aluminium.

Operation: hydraulic. Design: with punch, die, hydraulic bolt and counter nut.

Storage: in practical, strong plastic case



Number of pins	Nominal size	Pre-drill mm	max. matl thickness mm	PU	Article no.
	mm				
6	52.0 x 36.0	24.0	2.0	1	13 2954
10	65.0 x 36.0	24.0	2.0	1	13 2956
16	86.0 x 36.0	24.0	2.0	1	13 2958
24	112.0 x 36.0	24.0	2.0	1	13 2960



## Special screw puncher accessories

Individual parts

Hydraulic bolt		1	13 5034
Counter nut		1	13 5050
Punch	52.0 x 36.0	1	13 2962
Die	52.0 x 36.0	1	13 2970

Hydraulic bolt		1	13 5034
Counter nut		1	13 5050
Punch	65.0 x 36.0	1	13 2964
Die	65.0 x 36.0	1	13 2972

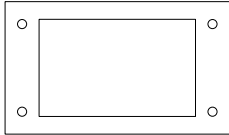
Hydraulic bolt		1	13 5034
Counter nut		1	13 5050
Punch	86.0 x 36.0	1	13 2966
Die	86.0 x 36.0	1	13 2974

Hydraulic bolt		1	13 5034
Counter nut		1	13 5070
Punch	112.0 x 36.0	1	13 2968
Die	112.0 x 36.0	1	13 2976



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Design	Size mm	PU	Article no.
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### Special screw puncher VA for heavy-duty plug-in connectors

Patented die: with lateral scrap part ejector. Drilling position is marked out by the die using centre punches: centre punches can be exchanged or wound back using 2.5 mm hex keys. There is therefore no need to mark out the centre marking. Suitable for: stainless steel (VA steel) and steel sheets (ST 37). Operation: hydraulic.

Design: with punch, die, hydraulic bolt and counter nut.

Storage: in a practical, strong plastic case



Number of pins	Nominal size mm	Pre-drill mm	max. material thickness mm		PU	Article no.
			ST 37 / VA			
6	52.0 x 36.0	24.0	2.0	2.0	1	13 2980
10	65.0 x 36.0	24.0	2.0	2.0	1	13 2982
16	86.0 x 36.0	24.0	2.0	2.0	1	13 2984
24	112.0 x 36.0	24.0	2.0	2.0	1	13 2986

### Special screw puncher VA accessories

Hydraulic bolt			1	13 5034
Counter nut			1	13 5050
Punch		52.0 x 36.0	1	13 2990
Die		52.0 x 36.0	1	13 2970



Hydraulic bolt			1	13 5034
Counter nut			1	13 5070
Punch		65.0 x 36.0	1	13 2992
Die		65.0 x 36.0	1	13 2972

Hydraulic bolt			1	13 5034
Counter nut			1	13 5050
Punch		86.0 x 36.0	1	13 2994
Die		86.0 x 36.0	1	13 2974

Hydraulic bolt			1	13 5034
Counter nut			1	13 5070
Punch		112.0 x 36.0	1	13 2996
Die		112.0 x 36.0	1	13 2976



Image video  
Hole punching technology

### Hydraulic battery-operated punch

practical hand-held hydraulic tool with high performance rechargeable 18 V battery, for round, rectangular and square punching in control cabinets and plant construction. With pressure relief valve, high-power drive motor, high tensile strength aluminium head, weight including battery only 3.7 kg, ergonomically designed two-component handle, rechargeable battery packs can be inserted from either of two sides:



battery insertion from front ensures a stable position



battery insertion from back for space-saving operation



- Punching force: 70 kN with pressure relief valve
- Battery: charging time: 45 minutes after full discharge
- Battery charger: will charge all rechargeable 18 – 28 V batteries, compatible with NiCD, NiMH and Li-Ion batteries,
- Automatic temperature monitoring, charge condition on LED display
- Supplied in a strong plastic case: battery operated hand-held hydraulic unit, two 18 V rechargeable batteries, 18 – 28 V battery charger, two hydraulic bolts, spacer sleeve set (3-piece), pre-drill 11.0 mm, operating instructions

Hydraulic battery-operated punch with accessories			1	13 4012
Rechargeable battery			1	13 4014

Design	Size mm	PU	Article no.
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### Hydraulic hand-held punches

Practical hand-held punch for round, rectangular and square punching in control cabinets and plant construction. Pressure relief valve provides safety function: pressure switched off automatically at 650 bar. Made of high tensile strength aluminium (saving approx. 40% in weight), ergonomic handle – springs back by itself, one-handed operation means easier positioning of the die in the crosshairs. Punching force: 75 kN operating pressure max: 650 bar.

Hydraulic hand-held punch – straight design (1.6 kg)	1	13 4016
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Hydraulic hand-held punch – angled 90°, can be rotated 360° (1.9 kg)	1	13 4018
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### Hydraulic punch with hand pump

Ideal in restricted spaces, for round, rectangular and square punching in control cabinets and plant construction. Punching force: 75 kN with pressure relief valve. Operating pressure max: 650 bar. Weight: 2.0 kg. Supplied in strong plastic case: hydraulic punch with hand pump, hydraulic cylinder, hydraulic 600 mm hose, two hydraulic bolts, spacer sleeve set (3-piece), HSS pre-drill 11.0 mm

Hydraulic punch with hand pump	1	13 4020
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### Hydraulic punch with foot pump

Ideal in restricted spaces, for round, rectangular and square punching in control cabinets and plant construction. Keep both hands free for exact positioning and punching: splayed support stand ensures tip-proof operation. Punching force: 75 kN with pressure relief valve. Operating pressure max: 700 bar<sup>3</sup>. Tank volume: 270 cm. Usable oil volume: 210 cm. Flow rate: 1.7 cm per piston stroke. Supplied in a strong plastic case: foot pump, hydraulic cylinder with quick-fitting coupling, hydraulic hose 2.8 m, two hydraulic bolts, spacer sleeve set (5 pieces), pre-drill 11.0 mm

Hydraulic punch with foot pump	1	13 4022
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### Hydraulic cylinder

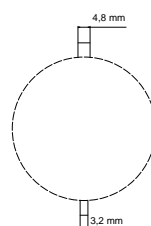
For all electric, foot and hand-operated pumps with quick-fitting coupling and a maximum output pressure of 700 bar. Compact construction, for punching round, rectangular and square holes as well as special shapes in stainless steel and steel sheets ST 37 (control cabinets and plant construction). Hydraulic cylinder with quick-fitting coupling (up to 115 kN), high tensile strength aluminium body, suitable for tension bolts with UNF-thread, ø 19.0 mm, drip-free coupling and uncoupling, easy operation, with dust protector cap, supplied in a plastic case.

	1	13 4023
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### Keyway pliers

quickly and easily punches keyways in 2.0 mm steel sheets (ST 37), dispenses with time-consuming filing of grooves for anti-rotational locking, keyways possible in 3.2 mm and 4.8 mm size, interchangeable keyway punch, long operating life as punch and die are made of hardened tool steel, easy punching thanks to strong leverage transfer, weight 1.3 kg



Keyway pliers	1	13 4000
Replacement punches in 3.2 mm and 4.8 mm	1	13 4002

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Design	Size mm	PU	Article no.
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### Nibbler

Pre-punched round holes can easily and economically be converted to square or rectangular holes. Particularly recommended for producing unusual dimensions (special shapes).

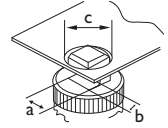


Round to rectangular

Round to square

Material thickness: max. 2.0 mm ST 37

Dimensions:	a	b	c	Pre-punch
ASN 15	15.0	6.5	21.5	21.5 mm ø
ASN 20	20.0	9.0	28.5	28.5 mm ø



Nibbler ASN15	1	13 4004
Nibbler ASN20	1	13 4006
Replacement punch ASN15	1	13 4008
Replacement punch ASN20	1	13 4010

### Quick release nut

For shaped punch with thread shape UNF 19 mm, used as replacement for normal counter nut saving approx. 75% time in comparison to screw version. For quickly locking and unlocking on the thread, however screwing it on or off normally is ensured despite this even if it jams. The quick release nut is pushed onto the thread of the tension bolt and then when it touches the stamp, is latched onto lid. Pushing the lid back releases this latching on again.

Quick release nut without tension bolt	1	13 5026
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### Screw puncher centring ring

Made of plastic. Ideal aid for tension bolts or hydraulic bolts in screw puncher systems.

For use in oversized drill holes, for example in control cabinets to centre tension bolts (screw puncher).

The centring ring can be used with all known screw puncher designs that split the scrap part, - including products from other manufacturers! Suitable for puncher systems that split into 2 or 3 pieces. The ring size 3 is suitable for 19 mm connecting bolts (UNF3/4-16) both in manual and also in hydraulic operation.

The ring in size 3 can be used for a hole diameter of 28 mm in the sheet to be processed.

The smallest hole diameter in which the ring will still link tool and workpiece is 20.4 mm.

	10	13 5080
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### Individual parts for manual operation

Bolts for steel sheets ST 37

Tension bolt with ball bearing (encapsulated)	6.0 x 40.0	1	13 5010
Tension bolt with ball bearing (encapsulated)	9.5 x 50.0	1	13 5000

Bolts for stainless steel and steel sheets ST 37

Tension bolt with ball bearing (encapsulated)	19.0 x 55.0	1	13 5004
Tension bolt with ball bearing (encapsulated)	19.0 x 75.0	1	13 5008
Tension bolt with ball bearing	11.1 x 60.0	1	13 5014

### Individual parts for hydraulic operation

Bolts for steel sheets ST 37

Hydraulic bolt, complete	19.0 / 9.5	1	13 5002
Hydraulic bolt 13 5002	9.5 x 75.0	1	13 5074
Adapter for hydraulic bolt 13 5002	19.0 x 38.0 (Inside: 9.5)	1	13 5024
Hydraulic bolt	19.0 x 120.0	1	13 5006

Bolts for stainless steel

Hydraulic bolt, complete	19.0 / 11.1	1	13 5016
Hydraulic bolt 13 5016	11.1 x 75.0	1	13 5076
Adapter for hydraulic bolt 13 5016	19.0 x 38.0 (Inside: 11.1)	1	13 5078
Hydraulic bolt	19.0 x 120.0	1	13 5006

Spacer sleeve set (3-piece)	1	13 5072
Hydraulic oil	1 Litre	13 4024

Design	Size mm	PU	Article no.
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### Spacer sleeve set

when using tension bolts size 30.0 mm and above,  
a set contains: tension bolt A0, long, spacer, two countersunk screws hex socket M 6 x 30,  
two countersunk screws hex socket M 6 x 35



		1	13 5088
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### General accessories

Pre-drill	10.0	1	13 4026
Pre-drill	11.0	1	13 4028
Pre-drill	11.5	1	13 4030
Step drill, holder shaft 10 mm ø	M12, M16, M20, M25, M32, M40	1	13 4032
Assembly paste	120 g	1	13 4034



### Special step drill for screw punching

HSS step drill for burr-free drilling of through-holes for screw puncher tension bolts M 8 (3/8") – M 10 (7/16") – M 12 – M 16 – 3/4" – M 20 in material up to 4 mm thick. Suitable for use in hand and box column drills, total of 9 drill steps, holder shaft (ø 10 mm) with 3 driver carriers prevents slipping in the chuck.



		1	20 1212
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### Cable duct cutter

for cutting burr-free lengths without waste, for plastic conduits and covers, low force required for cutting, foldable, sprung blade protection, fastening lugs for workbench mounting, width of cutting blades up to 125 mm, laser engraved length stop up to 1000 mm



		1	13 4036
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### DIN profile cutter and punching tool

for cutting burr-free lengths without waste, for copper mounting rails, reduced force needed with reinforced eccentric, laser-engraved length stop up to 1000 mm, hand operation for length cutting and punching in lengthways and crossways mode

Profile equipment: TS 35x15 – TS 35x7.5 – TS 15x5.5 – E-Cu 10x3.0 – C 15x34	13 4038
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Profile equipment: TS 35x15 – TS 35x7.5 – TS 15x5.5 – E-Cu 10x3.0 – G 15x32	13 4040
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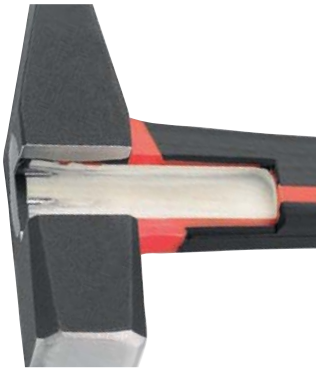
TS 35 x 15 	TS 35 x 7,5 	TS 15 x 5,5 	E-Cu 10 x 3,0 	C-Profil 15 x 34 C-Profil 3415 	G-Profil 15 x 32 3- Profil EN 70615 
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# HAMMERS, CHISELS, SPATULAS

## Head

Mechanical blocking of the hammer head with a steel wedge, sealed with synthetic resin.



Side made of fibre glass reinforced plastic, coated with a comfortable anti-slip handle.



## Shaft

Security shaft made of 3 components:  
Core made of thick-walled aluminium tube in high strength alloy, coated with chemically resistant and waterproof polyamide.



The whole chisel range is made of chrome vanadium steel and stands for top quality.



It is really easy to spread plaster, render, and mortar on the desired surface, making it smooth.

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Design	Size mm	PU	Article no.
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**GS 3-component club hammer and cross peen hammer**

Mechanical blocking of the hammer head with a steel wedge, sealed with synthetic resin. Peen and cross sanded. Security shaft made of 3 components with ergonomically shaped handle: Core made of fibre glass reinforced plastic, coated with a comfortable anti-slip and anti-vibration handle - the additional rubberised handle surface provides a secure grip even with wet or oily hands.

**GS Cross peen hammer**

according to DIN 1041/1193



Hammer weight g			
300		1	13 0403
500		1	13 0405
1000		1	13 0410

**GS Club hammer**

according to DIN 6475/1193



Hammer weight g			
800		1	13 0708
1000		1	13 0710
1250		1	13 0712
1500		1	13 0715

**GS Safety cross peen hammer**

Dimensions and finish certified according to GS. DIN 1041/1193.

With protective shaft collar and additional nylon protective shaft sleeve. With double curved hickory shaft, hammer head double secured by tapered collar and synthetic resin seal.



Hammer weight g			
200		1	13 0580
300		1	13 0582
400		1	13 0584
500		1	13 0586
1000		1	13 0592

**GS Safety club hammer**

according to DIN 6475/1193, other processing as above



Hammer weight g			
1000		1	13 0600
1250		1	13 0602
1500		1	13 0604

**GS Cross peen hammer**

according to DIN 1041/1193, GS certified, with polished, curved hickory shaft, hammer head secured by ring wedge.



Hammer weight g			
300		1	13 0804
500		1	13 0808

**GS Club hammer**

according to DIN 6475/1193, GS certified, with polished, curved hickory shaft, hammer head secured by ring wedge.



Hammer weight g			
1000		1	13 0880
1250		1	13 0882

**Plastic hammer**

with interchangeable Cellidor inserts, for hammering out and flattening metal sheets and frames or for use with sensitive surfaces (paint, enamel, galvanisation, chrome-plating)



Head 35 mm ø		1	13 1053
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Design	Size mm	PU	Article no.
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### Electrician's chisel

made of chrome vanadium steel

Blade width mm	Steel thickness mm	Size mm	PU	Article no.
10	8	250	1	13 0006
12	8	250	1	13 0008
15	10	250	1	13 0010



### Stone chisel

according to DIN 7254 A, made of chrome vanadium air-hardening steel

Blade width mm	Steel thickness mm	Size mm	PU	Article no.
26	20 x 12	250	1	13 0022
29	23 x 13	300	1	13 0024



### Octagonal stone chisel

according to DIN 7254 B, made of chrome vanadium air-hardening steel

Blade width mm	Steel thickness mm	Size mm	PU	Article no.
23	16	250	1	13 0032
26	18	300	1	13 0034



### Octagonal pointed chisel

according to DIN 7256, made of chrome vanadium air-hardening steel

Steel thickness mm	Size mm	PU	Article no.
16	250	1	13 0052
18	300	1	13 0054



### Octagonal slot chisel

made of chrome vanadium air-hardening steel

Blade width mm	Steel thickness mm	Size mm	PU	Article no.
30	18	240	1	13 0070



### Pointed punch

for centring drill holes, according to DIN 7250, octagonal, made of chrome vanadium air-hardening steel

Steel thickness mm	Size mm	PU	Article no.
10	120	1	13 0210



### Drift punch set with pointed punch, 6-piece

made of chrome vanadium air hardened steel, length 120 mm, in plastic container, for cutting through sheet metal and thin metals, pin punching and driving in nails

1 each of the following: 1 - 2 - 3 - 4 - 5 mm ø, pointed punch 120 x 10 mm

120	1	13 0354
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### Pin punch set, 6-piece

made of chrome vanadium steel, length 150 mm, in plastic container, for punching out pins, dowel pins, and clips from drill holes

1 each of the following: 3 - 4 - 5 - 6 - 7 - 8 mm ø

150	1	13 0358
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Design	Size mm	PU	Article no.
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### Nail setter

made of chromium molybdenum vanadium air-hardening steel, completely hardened and head tempered.  
For setting steel nails with a cylindrical shaft and thread (holder M6)

3



M 6	170	1	13 0075
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### Hand protection for nail setter

5



		1	13 0076
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6

### Bevelled edge chisel

according to DIN 5139, with side bevel, polished wooden haft and blade protection

7

8



Blade width mm			
10	245	1	13 0524
15	260	1	13 0530
20	270	1	13 0534
22	275	1	13 0536
26	275	1	13 0538

10

### Painter's spatula

made of steel, ground blade, with oval wooden haft

11

12



Width mm			
25	185	1	13 1322
40	185	1	13 1324
50	205	1	13 1326
60	205	1	13 1328

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### Double spatula

plastic covered handle

15



Width mm			
20	225	1	13 1404

16

17

### Plasterer's spatula

according to DIN 6441 C, with painted wooden haft

18



Width mm			
60		1	13 1420
70		1	13 1422

19

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### Plaster pan

made of sheet steel, hot-dip galvanised, with polished wooden haft

21



Height 75 mm	ø 180 mm	1	14 0302
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### Plaster cup

made of soft rubber

23



Height 90 mm	ø 125 mm	1	14 0306
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### Water brush

pure bristles

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	ø 24 mm	1	14 0310
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Design	Size mm	PU	Article no.
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**Chalk line roller**

with push-system, storage space for serrated hooks and belt clip, body made of metal, cord length 15 m, including 60 g coloured powder

		1	14 0320
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Coloured powder, grease and oil-free, in plastic bottle

blue	100 g	1	14 0322
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# MEASURING TOOLS

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The new CIMCO spirit levels with a digital display...



...are impressive with their ability to quickly and accurately measure the angle.



The laser pointer aligns the inclination of the spirit level to a point at a distance up to 50 m away.



A large number of smart new features as well as perfect finishing ensure ergonomic handling, non-tiring work and perfect alignment.



The measured values are easy to read on the digital display and are exceptionally precise: 0.1° max. deviation in normal and vertical position; 0.2° in other positions.



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Design	Size mm	PU	Article no.
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### Electrician's safety spirit levels

made of non-conducting, non-warping plastic, with 1 horizontal and 1 vertical bubble level

400 mm	24 x 52 mm	1	21 1435
800 mm	24 x 52 mm	1	21 1437



with three levels (1 x horizontal, 1 x vertical, 1 x 45°), made of non-conductive, distortion-free plastic with ergonomic recessed grips and a patented level housing

600 mm	32 x 58 mm	1	21 1536
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### Switch cabinet spirit level

torpedo-shaped, with three levels which are easy to read (1 x horizontal, 1 x vertical, 1 x 45°), a magnetic V-ledge for pipes or cables as well as robust rubber end caps

230 mm	18 x 38 mm	1	21 1540
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### Switch cabinet spirit level

with Plumb Site® Dual-View™ level, made of non-conductive plastic with a robust aluminium rail and integrated magnetic ledge, three levels (1 x horizontal, 1 x vertical, 1 x 45°)

250 mm	16 x 55 mm	1	21 1542
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### Measurement and marking spirit level

made of aluminium, in a stable, triangular design, two inserted levels (horizontal, vertical), two slide markers, mm and cm scale, as well as zero point and central point indicators, slider with blade guide for cutting paper, removable nail gripper to remove nails from walls. The 2 adjustable sliders have been set into the aluminium profile to enable more precise display of drill holes in horizontal or vertical arrangement. Ideal as a marking template for setting switch boxes.

600 mm	28 x 40 mm	1	21 1550
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### Electrician's spirit level

with four fixed marker point at 71 mm intervals which keep to a precise switch or socket distance, with two levels (horizontal, vertical), with a milled surface and shock-absorbing end caps.

470 mm	20 x 50 mm	1	21 1552
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### Mini spirit level

Box section made of aluminium, with shock-resistant plastic level, certified accuracy, shock-resistant end caps. Practical for any tool belt and small pockets.

100 mm	20 x 50 mm	1	21 1556
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### Lightweight metal spirit level

with Plumb Site® Dual-View™ level. Two levels (horizontal, vertical) with a milled surface and shock-absorbing end caps.

400 mm	20 x 50 mm	1	21 1520
600 mm	20 x 50 mm	1	21 1522
800 mm	20 x 50 mm	1	21 1523
1000 mm	20 x 50 mm	1	21 1524

with two magnets

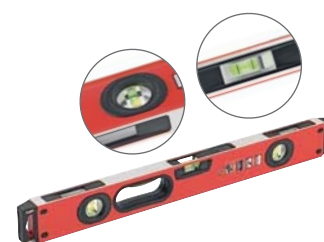
600 mm	20 x 50 mm	1	21 1526
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Design	Size mm	PU	Article no.
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### Professional lightweight metal spirit level

Computer-optimised profile (COP), two integrated acrylic vertical levels with Plumb-Site® Dual-View™, a larger horizontal level, with finely milled surfaces on both sides, ergonomic grips with patented Ergo Grip™ anti-slip function, polypropylene and TPR end caps with air sprung PVC shock absorbers.  
Accuracy: 0.5 mm / m

600 mm	31 x 67 mm	1	21 1530
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### Professional switch cabinet spirit level

made of cast aluminium, heavy-duty version, with Plumb Site® Dual-View™ level, three solid acrylic glass levels, with two magnets. Accuracy: 0.5 mm / m

250 mm	19 x 45 mm	1	21 1528
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### Folding spirit level

Ideal 3D spirit level for measuring and aligning pipes, columns, cables etc. precisely, in several dimensions at the same time. Catches every 15°, four magnets to attach to metallic surfaces as well as a rubber band for non-magnetic surfaces.

	190 x 132 x 32 mm	1	21 1554
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### Professional digital magnetic spirit level

- Plumb-Site® Dual-View™ level, acrylic glass block levels, Ergo Grip™ handles, shock-resistant end caps
- LCD display at a 45° angle with backlighting, does not turn when the spirit level is turned
- HOLD function
- MODE function degree/percent/angle
- Re-calibration function and "False Zero"
- Memory recall for up to 9 measurements
- 9V-battery with charge display
- Two finely milled measurements surfaces with rare earth magnets
- Length: 60 cm, weight: 686 g

		1	21 1532
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### Professional digital magnetic spirit level with laser pointer

- Plumb-Site® Dual-View™ level, acrylic glass block levels, shock-resistant end caps
- LCD display at a 45° angle with backlighting, does not turn when the spirit level is turned
- HOLD function
- MODE function degree/percent/angle
- Re-calibration function and "False Zero"
- Memory recall for up to 9 measurements
- 9V-battery with charge display
- Two finely milled measurements surfaces with rare earth magnets
- Laser pointers align the angle of the spirit level to a remote point up to 50 m away
- 1/4" thread in bottom of housing to easily mount it on a tripod
- Length: 60 cm, weight: 740 g

		1	21 1534
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Imagevideo spirit levels

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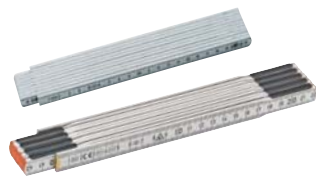


Design	Size mm	PU	Article no.
<b>Digital tape measure</b> With new laser technology. Allows a professional user to quickly attain precise measurement results. Simple, intuitive operation. Max. distance in inside spaces: up to approx. 100 m. Max. distance outside: up to approx. 10 m. Measures the shortest distance to the target with dynamic (continuous) measurement. Backlit LCD display. Range, surface and volume measurement. Indirect measurement using Pythagoras. Option of three reference points. Extended memory function. Shock-resistant plastic. 1/4" thread for attachment to a tripod. Accuracy: 1.5 mm per 70 m. Laser class: II. Battery: 9 V block (included in scope of delivery). Bluetooth connection and communication	105 x 32 x 60 mm	1	21 1560

NEW



Design	Size mm	PU	Article no.
<b>Digital laser rangefinder</b> <b>Highlights</b> • Measurement range (typically) from 0.05 – 20 m • Measurement accuracy (typically, standard deviation) from ± 2 mm, plus a value of 0.05 mm/m <b>Features</b> • For use indoors • Simple, intuitive operation • Smallest display unit 1 mm • Laser class 2 • Laser type wave length 620 – 670 nm, max. output power 1 mW • Laser switches off automatically after 20 seconds • Device switches off automatically after 5 minutes • More than 5000 individual measurements per battery service life • Operating temperature -10 ~ +40°C • Storage temperature -20 ~ +60°C • 2 x 1.5 V AAA batteries included in the scope of delivery		1	21 1562



Design	Size mm	PU	Article no.
<b>Folding ruler</b> 10 sections, length 2 m, mm divisions on both sides; Class III			
Made of fibre glass, highly elastic, non-conductive		1	21 0008
Made of wood, with steel spring		1	21 0004



Design	Size mm	PU	Article no.
<b>Pocket tape measure (metal tape measure)</b> made of 19 mm wide spring band steel, enamelled yellow, in metric scale, easy running automatic measure return with strong stop key, unbreakable ABS housing in modern 2-component design with ergonomic soft rubber insert, with carrying clip			
	5 m	6	21 0065



Design	Size mm	PU	Article no.
<b>Fibre glass tape measure</b> 13 mm wide, yellow, kink-proof unbreakable fibre glass tape measure, metric scale on one side (metres and centimetres), EC type approval, accuracy class II, with plastic end hook, in closed round capsule of impact-resistant plastic, with crank			
	20 m	1	21 0104
	30 m	1	21 0106



Design	Size mm	PU	Article no.
<b>Cable or wire gauge</b> according to Swiss standard (Dätwyler)			
made of nylon	95 x 35 x 3 mm	1	14 0120

Design	Size mm	PU	Article no.
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### Electronic digital pocket slide caliper

for measuring length, depth, external and internal diameter, rust-free, hardened finish, large LCD display, adjustable zero setting, conversion mm – inch, automatic display switch-off, with thumb roll for fine adjustment and fixing screw, includes batteries and instructions, in black plastic case

	Reading mm	Reading Inch		
150 mm / 6"	1/100	1/2000"	1	21 0300



### Precision pocket slide caliper

made of stainless steel, completely hardened, with measuring probes, depth measurement and thread table, jaw length 47 mm, with torque fixing, in plastic pouch

	Measurement range mm	Reading mm	Reading Inch		
matt chrome-plated	150	1/20	1/128"	1	21 0202



### Marking gauge

made of steel, flat design, mm division

	Measurement range mm	Reading mm		
	0 – 200	1/10	1	21 2000
	0 – 250	1/10	1	21 2002



### Bow compass

with square legs and box joint, tips hardened

Radius max. 235 mm	200 mm	1	21 2062
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### Scriber with hard metal tip

hard metal tip can be exchanged and retracted

	150 mm	1	21 2100
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loose hard metal tip

		1	21 2102
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### Scriber with steel tips

corded holder, hardened tips can be screwed out, with straight and 90° angled tip

	240 mm	1	21 2140
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### Cellugraph universal pencil

will write on all smooth surfaces (glass, tiles, metal etc.) and on foil and film, wipeable

black	240 mm	1	21 2168
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### Carpenter's pencil

for marking wood, metal, and rubber

black	240 mm	1	21 2170
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Design	Size mm	PU	Article no.
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### Sharpener

for carpenter's pencils with oval (European) and flat oval shape, also for marking chalks

∅ mm			
10 – 15		1	21 2179

### Marking chalk

12 mm hexagonal, 115 mm long, hard, robust chalks for marking wood, metal, stone, cardboard, tiles, paper or similar



red		1	21 2172
yellow		1	21 2173
blue		1	21 2176

### Chalk holder

with push-button chalk advance, octagonal, in black impact-proof polystyrene with metal pressure mechanism, for chalks with 11 mm or 12 mm ∅.



	115 mm	1	21 2180
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### Deep hole marker I – Graphite / Red / Yellow

for marking, marking out and lettering even in places that are hard to access, will write on almost all materials even on dusty, rough and oily surfaces, can be wiped off with a damp cloth on smooth surfaces

The leads are protected by a stainless steel tube and advanced by a pressure mechanism. The practical storage case also serves as a sharpener.



Marker with graphite lead B2 (universal writer)		1	21 2150
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Replacement leads



Pack of 12 replacement leads graphite B2		1	21 2152
Pack of 12 replacement leads (3 x red, 3 x yellow, 6 x graphite)		1	21 2154

### Deep hole marker – Ink

for marking, marking out and lettering even in places that are hard to access, will mark and write on all surfaces (plastics, metals, stone, wood and glass), waterproof, quick-drying ink

robust, patented stainless steel telescopic tip, practical protective case with special clip for easy handling and one-handed use, line width 1 mm



black		1	21 2182
blue		1	21 2184
red		1	21 2186



Design	Size mm	PU	Article no.
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## Deep hole marker II – Graphite / Red / Yellow

for marking, marking out and lettering even in places that are hard to access will write on almost all materials even on dusty, rough and oily surfaces, can be wiped off with a damp cloth on smooth surfaces

The leads are protected by a stainless steel tube and advanced by a pressure mechanism. The practical storage case also serves as a sharpener.

Marker with graphite lead B2 (universal writer)	1	21 2151
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### Replacement leads

Pack of 10 replacement leads graphite B2	1	21 2153
Pack of 8 replacement leads (2 x red, 2 x yellow, 4 x graphite)	1	21 2155
Pack of 10 replacement leads red	1	21 2157
Pack of 10 replacement leads yellow	1	21 2159

## Marking spray

for coloured freehand and stencil markings, based on chalk (non-permanent), environmentally friendly, free of toxic substances, solvents and CFC propellant gases, water hazard class 0, will adhere even in wet conditions to different surfaces such as concrete, asphalt, masonry, wood, metal, plastic, grass (among others), approved by Deutsche Telekom.

red	400 ml	1	21 2190
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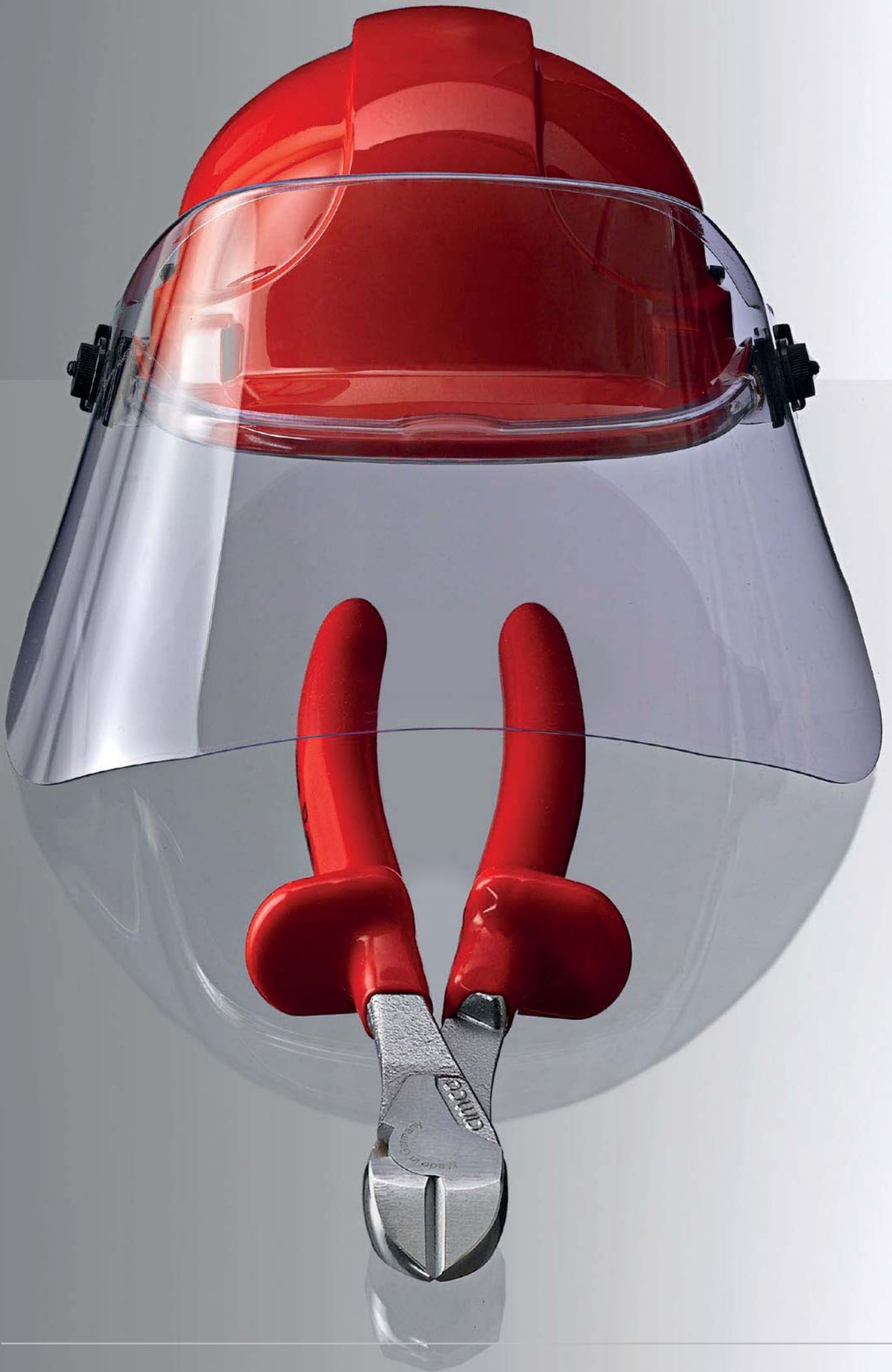
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# INSULATED SAFETY TOOLS, PERSONAL PROTECTIVE EQUIPMENT (PPE)

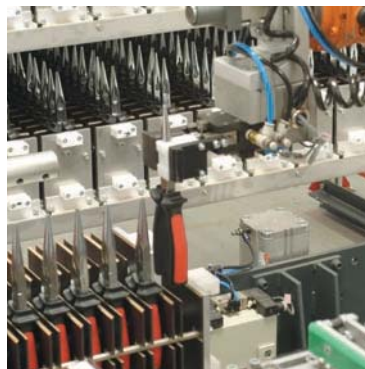
In various working environments you may be exposed to different health and safety hazards which may range from minor to potentially fatal.



For your personal protection, you should always carry the appropriate equipment.



CIMCO tools with handles with two-colour plastic dip insulation provide optimum safety. If the outer insulation layer is damaged, the orange layer underneath indicates that the protection against possible hazards is no longer 100% guaranteed.



With the aid of specially designed robots...



...CIMCO safety tools are tested for voltage resistance, to ensure consistent quality.

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	Design	Size mm	PU	Article no.
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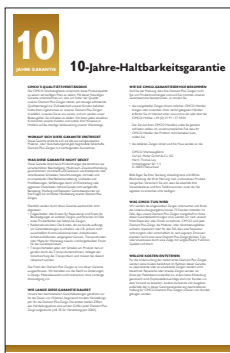
## - Safety pliers with 1000 V protective insulation

Optimised lever ratios, ease of operation and user-friendly grip design that permit energy-saving and ergonomic working for the hand, manufactured using the most suitable high alloy tool steels, hardened completely in oil, all blades are additionally induction hardened, surfaces are polished to a high-sheen and are meticulously chrome-plated.

### Description of the symbols

	Energised work		with cutting bevel		Flat nose pliers		Wire type soft		Wire type Piano
	VDE/GS tested		With slight cutting bevel		Flat-round pliers		Wire type medium-hard		Wire type rope
	Cutting hardness in HRC		Single joint		Round nose pliers		Wire type hard		Wire type Cu-cable
	Ridged gripping surfaces		Lap joint						
	Gripping surfaces ridged at an angle		Box joint						

- Set the adjusting screw to the desired conductor cross section to be stripped by turning it (left / right).
- Secure the adjusting screw using the counter nut.
- Insert the cable.
- Close the pliers by exerting pressure and strip off the plastic sheathing.



### 10 year durability guarantee

on all Diamant-Plus pliers. If defects in the material or processing can be proven, we will provide you with a replacement free of charge! Please ask for the exact guarantee terms at your local CIMCO dealer or from CIMCO directly.

### 1000 V protective insulation according to VDE

The pliers belonging to the Diamant-Plus range correspond to the current standards of IEC 900, IEC 60900 and VDE 0682/Part 201 (excluding engineers pliers). These strict safety rules stipulate 10 different quality checks for the insulation protection of all pliers. In addition to the type examination, the independent testing body of VDE also regularly performs production and storage inspections. Each individual set of pliers is tested in a water bath for disruptive discharges and flashovers at a testing voltage of 10,000 Volt AC. As a result, we guarantee that safety has been tested on all pieces.



The range of pliers that is exclusively "Made in Germany" undergoes a range of unrivalled trend-setting and robot-supported production processes. The work sequences are carried out with the aid of robots, from forging to grinding and polishing, right through to the dielectric strength testing of the insulation material coating, in order to ensure a consistent standard of quality. Ergonomic design handle sleeves in a modern 2-component design made of premium plastic with excellent tactile properties. Superb grip thanks to non-slip, non-adhesive surface when dealing with wet conditions and dirt. Excellent skin-tolerance, insulation during extreme temperatures, electrical shocks and vibrations. Resistance against sweat, salt water, oil, many chemicals and UV radiation.

### 1000 V heavy duty diagonal pliers



	160 (6")	1	10 0526
	200 (8")	1	10 0528

### 1000 V diagonal pliers



	145 (5.5")	1	10 0572
	160 (6")	1	10 0574
	180 (7")	1	10 0577

### 1000 V stripping diagonal pliers



Single joint with induction hardened precision blade, (approx. 64 HRC), for hard, medium-hard and soft wire, with two additional stripping functions for solid and multi-wire conductors measuring 1.5 mm<sup>2</sup> and 2.5 mm<sup>2</sup>



	160 (6")	1	10 0652
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Design	Size mm	PU	Article no.
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### 1000 V heavy duty end cutter

according to DIN ISO 5748, lap joint,  
with induction hardened precision blades  
(approx. 64 HRC), for all wires, also including piano wire, made from electric steel



	200 (8")	1	10 0402
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### 1000 V combination pliers

according to DIN ISO 5746, single joint,  
with induction hardened precision blades (approx. 64 HRC), for all wires, also including piano wire, made from special tool steel, with slightly conical, ridged gripping surfaces and ridged opening (burner hole)



	160 (6")	1	10 0334
	180 (7")	1	10 0336
	200 (8")	1	10 0338



### 1000 V wire stripper

Single joint, with adjusting screw  
for setting the desired wire- or stranded wire diameter, for solid and stranded conductors up to 5 mm ø or 0.75 mm<sup>2</sup> to 6 mm<sup>2</sup>, with internal opening spring



	160 (6")	1	10 0686
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### 1000 V telephone pliers with straight jaws

according to DIN ISO 5745, single joint, with induction hardened precision blade (approx. 60 HRC),  
long, flat-round jaws (needle nose pliers), ridged gripping surfaces and ridged opening (burner hole), with blades for hard and soft wire



	160 (6")	1	10 0214
	200 (8")	1	10 0216



### 1000 V telephone pliers with bent jaws

according to DIN ISO 5745, single joint,  
45° angled jaws, with induction hardened precision blades (approx. 60 HRC), long, flat-round jaws (needle nose pliers), ridged gripping surfaces and ridged opening (burner hole), with blades for hard and soft wire



	160 (6")	1	10 0236
	200 (8")	1	10 0238



### 1000 V flat nose pliers (long flat nose pliers)

according to DIN ISO 5745, single joint,  
long, flat jaws, jaw length 50 mm, ridged gripping surfaces



	160 (6")	1	10 0024
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### 1000 V round nose pliers (long flat nose pliers)

according to DIN ISO 5745, single joint,  
long, round jaws, jaw length 50 mm, finely ridged gripping surfaces



	160 (6")	1	10 0062
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### 1000 V plier assortment, 4 piece

Heavy duty diagonal pliers	200 (8")		10 0528
Telephone pliers with straight jaws	200 (8")		10 0216
Combination pliers	180 (7")		10 0336
Wire stripper	160 (6")		10 0686
		1	10 4020





Design	Size mm	PU	Article no.
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The range of pliers that is exclusively "Made in Germany" undergoes a series of unrivalled future-oriented, robot-supported production processes. The work sequences are implemented with the aid of robots, from forging to grinding and polishing, right through to the dielectric strength testing of the insulating coating in order to ensure a consistent standard of quality. Handles with two-colour plastic dip insulation for optimum safety. In the event of damage to the outer red insulation layer, the lower orange plastic insulation that is now visible indicates that 100 % safety in accordance with the safety standards can no longer be guaranteed.

### 1000 V heavy duty diagonal pliers

according to DIN ISO 5749 A, lap joint, with induction hardened precision blade (approx. 64 HRC), for all types of wire, also including piano wire, made of electric steel



160 (6")	1	10 8789
200 (8")	1	10 8784

### 1000 V diagonal pliers

according to DIN ISO 5749 B, single joint, with induction hardened precision blade (approx. 64 HRC), for all types of wire, also including piano wire, made of electric steel



145 (5.5")	1	10 8785
160 (6")	1	10 8786
180 (7")	1	10 8787



250 (10")	1	10 8788
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### 1000 V stripping diagonal pliers

Single joint, with induction hardened precision blade (approx. 64 HRC) for hard, medium-hard and soft wire, in addition with two stripping functions for solid and stranded conductors 1.5 mm<sup>2</sup> and 2.5 mm<sup>2</sup>



160 (6")	1	10 8792
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### 1000 V heavy duty end cutter

according to DIN ISO 5748, lap joint, with induction hardened precision blade (approx. 64 HRC), for all types of wire, also including piano wire, made of electric steel



200 (8")	1	10 8795
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### 1000 V flat nose pliers (long flat nose pliers)

according to DIN ISO 5745, single joint, long, flat jaws, jaw length 50 mm, ridged gripping surfaces



160 (6")	1	10 8771
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### 1000 V round nose pliers (long flat nose pliers)

according to DIN ISO 5745, single joint, long, round jaws, jaw length 50 mm, fine ridged gripping surfaces



160 (6")	1	10 8773
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### 1000 V telephone pliers with straight jaws

according to DIN ISO 5745, single joint, with induction hardened precision blades approx. 60 HRC, long, flat-round jaws (needle nose pliers), ridged gripping surfaces and ridged opening (burner hole), with blades for hard and soft wire



160 (6")	1	10 8779
200 (8")	1	10 8778

Design	Size mm	PU	Article no.
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### 1000 V telephone pliers with bent jaws

according to DIN ISO 5745, single joint,  
jaws at a 45° angle, with induction hardened  
precision blade (approx. 60 HRC), long, flat-round jaws (needle nose pliers), ridged gripping surfaces and ridged opening (burner hole), with blades for hard and soft wire



	160 (6")	1	10 8777
	200 (8")	1	10 8780



### 1000 V combination pliers

according to DIN ISO 5746, single joint,  
with induction hardened precision blade (approx. 64 HRC), for all wires, also including piano wire, made from special tool steel with slightly conical, ridged gripping surfaces and ridged opening (burner hole)



	160 (6")	1	10 8781
	180 (7")	1	10 8782
	200 (8")	1	10 8783



### 1000 V water pump pliers

according to DIN ISO 8976, with box joint,  
self-clamping on the tool, with serrated opening (burner hole), made of chrome-vanadium steel



	250 (10")	1	10 8724
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### 1000 V wire stripper

single joint with adjusting screw  
for setting the desired wire or stranded wire diameter, for solid and multi-wire conductors up to 5 mm ø or 0.75 mm² to 6 mm², with internal opening spring



	160 (6")	1	10 8790
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### 1000 V safety plier set, 4-pieces

Double dip-coated handles

Telephone pliers, straight	200 (8")		10 8778
Combination pliers	180 (7")		10 8782
Heavy duty diagonal pliers	200 (8")		10 8784
Wire stripper	160 (6")		10 8790
		1	10 8002



### 1000 V diagonal pliers **Diamant**

according to DIN ISO 5749

**Cutting performance:** A special blade geometry, optimised hand power transmission and most suitable material quality ensure astonishingly low cutting forces on all types of cables and conductors.

**Surface coating:** Thanks to new technological possibilities, the diagonal pliers are given a double primer coat as well as a more refined surface coating that ensures a high level of wear resistance and improved corrosion protection.

**Handle sleeves:** Ergonomic design handle sleeves in a modern two-component design made of premium plastic with excellent tactile properties, VDE-certified insulation protection up to 1000 Volt AC according to DIN EN 60900:2004.

	160	1	10 0000
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### 1000 V plastic telephone pliers

made of impact-resistant, fibre-glass reinforced plastic with 2-component handles, ridged gripping surfaces and narrow tips, robust design, can be used at temperatures as low as -40 °C

	180	1	10 0790
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Design	Size mm	PU	Article no.
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**1000 V plastic grip pliers**

made of impact-resistant, glass fibre reinforced plastic with 2-component handles, gripping zone with 8 openings for different cable diameters, without blades, robust design, can be used at temperatures as low as -40 °C

	180	1	10 0792
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**1000 V plastic combination pliers**

made of impact-resistant, fibre-glass reinforced plastic with 2-component handles, with blade inserts made of special steel, extra-long blades for flexible conductors with diameters of up to 12 mm as well as medium-hard wire, gripping zone with 3 openings for different cable diameters, robust design, can be used at temperatures as low as -40 °C

	190	1	10 0794
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**1000 V plastic cable cutter**

made of impact-resistant, fibre-glass reinforced plastic with 2-component handles, with blade inserts made of special steel, for flexible Al and Cu conductors with diameters of up to 15 mm, excellent cutting performance, robust design, can be used at temperatures as low as -40 °C

	170	1	12 0790
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**1000 V plastic flat nose pliers**

especially suitable for meter installation

	200	1	10 0796
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**Insulated tweezers**



straight, pointed shape	130	1	10 3110
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bent, pointed shape	150	1	10 3112
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straight, flat-round shape	145	1	10 3114
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**1000 V insulated tweezers**

with 2-layer safety insulation and anti-slip protection, tested according to DIN EN 60900



straight, flat-round shape	145	1	10 3232
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bent, flat-pointed shape	145	1	10 3240
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**1000 V**

**Insulated screwdrivers according to IEC 60900, classification VDE 0682, part 201. Individually tested in a water bath with a testing voltage of 10,000 V.**

**Electrician screwdriver**

according to DIN EN 60900; VDE 0682 - 201 - 01; DIN ISO 2380



2.5 x 0.4	75	160	1	11 7701
3.0 x 0.5	100	185	1	11 7702
3.5 x 0.6	100	185	1	11 7703
4.0 x 0.8	100	185	1	11 7704
5.5 x 1.0	125	220	1	11 7705
6.5 x 1.2	150	245	1	11 7706
8.0 x 1.2	175	285	1	11 7708
10.0 x 1.6	200	310	1	11 7710



Design	Size mm	PU	Article no.
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### Phillips cross-head screwdrivers

according to DIN EN 60900; VDE 0682 - 201 - 01; DIN ISO 8764

PH 0	60	145	1	11 7730
PH 1	80	165	1	11 7731
PH 2	100	195	1	11 7732
PH 3	150	260	1	11 7733



### Pozidriv cross-head screwdrivers

according to DIN EN 60900; VDE 0682 - 201 - 01; DIN ISO 8764

PZ 0	60	145	1	11 7740
PZ 1	80	165	1	11 7741
PZ 2	100	195	1	11 7742
PZ 3	150	260	1	11 7743



### Special screwdrivers with combination profile

according to DIN EN 60900; VDE 0682 - 201 - 01,

for combined slot-head/crosshead screws in electrical equipment, e.g. terminal blocks

PZ FL 1	80	165	1	11 7751
PZ FL 2	100	195	1	11 7752
Set PZ FL 1 and PZ FL 2 (CIMCO article no. 11 7751 and 11 7752)			1	11 7750
PH FL 1	80	165	1	11 7757
PH FL 2	100	195	1	11 7758



### Hex key (Allen wrench)

according to DIN EN 60900; VDE 0682 - 201 - 01

Size 3	75	160	1	11 7823
Size 4	75	160	1	11 7824
Size 5	75	170	1	11 7825
Size 6	100	195	1	11 7826
Size 8	100	210	1	11 7828



### TORX® screwdrivers

according to DIN EN 60900, VDE 0682-201-01

T 8	60	145	1	11 7908
T 9	60	145	1	11 7909
T 10	60	155	1	11 7910
T 15	75	170	1	11 7915
T 20	100	195	1	11 7920
T 25	100	195	1	11 7925
T 30	100	210	1	11 7930





### Nut drivers

according to DIN EN 60900, VDE 0682-201-01

Size 5.5	125	220	1	11 7805
Size 6	125	220	1	11 7806
Size 7	125	235	1	11 7807
Size 8	125	235	1	11 7808
Size 9	125	235	1	11 7809
Size 10	125	235	1	11 7810
Size 11	125	235	1	11 7811
Size 13	125	235	1	11 7813



	Design	Size mm	PU	Article no.
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2	 <b>1000 V</b>			
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**Screwdriver sets**

**Electrician screwdriver set, 7 piece**

VDE electrician screwdriver for slot-head screws				
2.5 x 0.4 x 75				11 7701
3.0 x 0.5 x 100				11 7702
4.0 x 0.8 x 100				11 7704
5.5 x 1.0 x 125				11 7705
VDE cross-head screwdriver				
PH 1 x 80				11 7731
PH 2 x 100				11 7732
VDE voltage tester				11 1280
			1	11 7800



 **1000 V**

**Electrician screwdriver set, 7 piece**

VDE electrician screwdriver for slot-head screws				
2.5 x 0.4 x 75				11 7701
3.0 x 0.5 x 100				11 7702
4.0 x 0.8 x 100				11 7704
5.5 x 1.0 x 125				11 7705
VDE cross-head screwdriver				
PZ 1 x 80				11 7741
PZ 2 x 100				11 7742
VDE voltage tester				11 1280
			1	11 7802



 **1000 V**

**Slot-head screwdriver set, 5 piece**

VDE electrician screwdriver for slot-head screws				
2.5 x 0.4 x 75				11 7701
3.5 x 0.6 x 100				11 7703
4.0 x 0.8 x 100				11 7704
5.5 x 1.0 x 125				11 7705
6.5 x 1.2 x 150				11 7706
			1	11 7700



 **1000 V**

**Cross-head screwdriver set, 6 piece**

VDE cross-head screwdriver				
PH 1 x 80				11 7731
PH 2 x 100				11 7732
PH 3 x 150				11 7733
PZ 1 x 80				11 7741
PZ 2 x 100				11 7742
PZ 3 x 150				11 7743
			1	11 7745



 **1000 V**

**Hex key (Allen wrench) set, 5 piece**

VDE hex key				
Size 3 x 75				11 7823
Size 4 x 75				11 7824
Size 5 x 75				11 7825
Size 6 x 100				11 7826
Size 8 x 100				11 7828
			1	11 7820





Design	Size mm	PU	Article no.
<b>TORX® screwdriver set, 5 piece</b>			
VDE TORX® screwdriver			
T 8 x 60			11 7908
T 10 x 60			11 7910
T 15 x 75			11 7915
T 20 x 100			11 7920
T 25 x 100			11 7925
		1	11 7900



1000 V



<b>Nut driver set, 5 piece</b>			
VDE nut driver			
Size 5.5 x 125			11 7805
Size 7 x 125			11 7807
Size 8 x 125			11 7808
Size 10 x 125			11 7810
Size 13 x 125			11 7813
		1	11 7801



1000 V



<b>VDE SLIM screwdriver set, 5 piece</b>			
for optimal accessibility of recessed screws			
VDE electrician screwdriver for slot-head screws			
3.0 x 0.6 x 100 mm			
4.0 x 0.8 x 100 mm			
5.5 x 1.0 x 125 mm			
VDE cross-head screwdriver			
PZ 1 x 80 mm			
PZ 2 x 100 mm			
		1	11 7850



1000 V



<b>Electronic safety screwdriver set, 7 piece</b>			
according to IEC 60900			
blade, insulation and handle are inseparably connected to each other, individually tested in water bath with a testing voltage of 10,000 V			
for slot-head screws			
1.5 x 0.3 x 40	140		11 2000
1.8 x 0.3 x 60	160		11 2002
2.0 x 0.4 x 60	160		11 2004
2.5 x 0.4 x 75	175		11 2006
3.0 x 0.5 x 75	175		11 2008
for Phillips cross-head screws			
PH 00 x 40	140		11 2020
PH 0 x 60	160		11 2022
		1	11 2050



1000 V



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Design	Size mm	PU	Article no.
<b>1000 V sockets</b> <span style="float: right;">⊗ 3/8</span> according to DIN 7448			
Size 8	28	1	11 2520
Size 10	28	1	11 2522
Size 11	28	1	11 2523
Size 13	28	1	11 2525
Size 14	28	1	11 2526
Size 15	28	1	11 2527
Size 16	28	1	11 2528
Size 17	28	1	11 2529
Size 18	28	1	11 2530
Size 19	28	1	11 2531
Size 22	28	1	11 2534

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Design	Size mm	PU	Article no.
<b>1000 V screwdriver bit sockets</b> <span style="float: right;">⊗ 3/8</span> for screws with hexagon socket (Allen)			
Size 4	65	1	11 2560
Size 5	65	1	11 2561
Size 6	65	1	11 2562
Size 8	65	1	11 2563
Size 10	65	1	11 2564

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Design	Size mm	PU	Article no.
<b>1000 V reversible ratchet</b> <span style="float: right;">⊗ 3/8</span> according to DIN 7449			
	190	1	11 2570

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Design	Size mm	PU	Article no.
<b>1000 V extension</b> <span style="float: right;">⊗ 3/8</span> according to DIN 7434			
	125	1	11 2575
	250	1	11 2576

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Design	Size mm	PU	Article no.
<b>1000 V T-handle</b> <span style="float: right;">⊗ 3/8</span> according to DIN 7436			
	200	1	11 2580

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Insulated screwing tools			
with safety mechanism to prevent unintentional release of the attached tools			
Design	Size mm	PU	Article no.
<b>1000 V sockets</b> <span style="float: right;">⊗ 1/2</span> according to DIN 7448			
Size 10	50	1	11 2600
Size 11	50	1	11 2602
Size 12	50	1	11 2604
Size 13	50	1	11 2606
Size 14	50	1	11 2608
Size 15	50	1	11 2609
Size 16	50	1	11 2611
Size 17	50	1	11 2610
Size 18	50	1	11 2613
Size 19	50	1	11 2612
Size 20	50	1	11 2615
Size 21	50	1	11 2617
Size 22	50	1	11 2614
Size 24	50	1	11 2616
Size 27	50	1	11 2618
Size 32	50	1	11 2622

Design	Size mm	PU	Article no.
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**1000 V screwdriver bit sockets**

for screws with hexagon socket (Allen)



Size 4	70	1	11 2670
Size 5	70	1	11 2671
Size 6	70	1	11 2672
Size 8	70	1	11 2673
Size 10	70	1	11 2674

**1000 V reversible ratchet**

according to DIN 7449



	250	1	11 2628
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**1000 V extensions**

according to DIN 7434



	125	1	11 2640
	250	1	11 2642

**1000 V, 20-piece toolset**

In high-quality **raaco boxser** assortment box with fitted hard foam inserts for secure, well-ordered storage of tools.

- Reversible ratchet 1/2", according to DIN 7449, 250 mm
- Extension 1/2", according to DIN 7434, 125 mm
- Sockets with 1/2" square socket, according to DIN 7448, SW10, 11, 12, 13, 14, 15, 17, 19
- T nut driver, according to DIN 7440, for hex nuts, shaft 300 mm, handle 160 mm, SW13
- Angled screwdriver, according to DIN 7439, for screws with hexagon socket, SW5, 6, 8
- VDE electrician's screwdriver 3.0 x 0.5 x 100 mm, 4.0 x 0.8 x 100 mm
- VDE Phillips cross-head screwdriver PH 1 x 80 mm, PH 2 x 100 mm
- VDE Pozidriv crosshead screwdriver PZ 1 x 80 mm, PZ 2 x 100 mm

		1	11 5288
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**1000 V T-handle**

according to DIN 7436



	200	1	11 2650
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**1000 V torque wrench**

fully insulated according to DIN EN 60900, VDE 0680/2, with integrated reversible ratchet, adjustable from 5 - 50 Nm

with 3/8" square socket

5 - 50 Nm	370	1	11 2581
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with 1/2" square socket

5 - 50 Nm	370	1	11 2582
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**1000 V house connection set, 21 pieces**

in a transport and storage case made of impact-resistant plastic, consisting of dip-insulated tools:

and bit sockets for:


- |                               |           |                                            |
|-------------------------------|-----------|--------------------------------------------|
| 1 x Torque wrench 1/4"        | 5 - 25 Nm | 1 x slot-head screws 4.0 x 0.5 mm          |
| 1 x Extension 1/4"            | 75 mm     | 1 x slot-head screws 5.5 x 0.8 mm          |
| 1 x Extension 1/4"            | 100 mm    | 1 x slot-head screws 6.5 x 1.2 mm          |
| 1 x Extension 1/4"            | 150 mm    | 1 x Phillips crosshead screws PH 1         |
| 1 x Socket wrench insert 1/4" | 6 mm      | 1 x Phillips crosshead screws PH 2         |
| 1 x Socket wrench insert 1/4" | 8 mm      | 1 x Crosshead screws combi profile PZ/FL 1 |
| 1 x Socket wrench insert 1/4" | 10 mm     | 1 x Crosshead screws combi profile PZ/FL 2 |
| 1 x Socket wrench insert 1/4" | 13 mm     | 1 x Hex socket (Allen) 5 mm                |
| 1 x Socket wrench insert 1/4" | 14 mm     | 1 x Hex socket (Allen) 6 mm                |
| 2 x Bit holder 1/4"           |           | 1 x Hex socket (Allen) 8 mm                |

	255 x 210 x 45	1	17 0362
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Design	Size mm	PU	Article no.
 <b>1000 V open-ended spanner</b> according to DIN 7446 , made of chrome vanadium steel, 15° offset			
Size 8	105	1	11 2704
Size 9	105	1	11 2706
Size 10	105	1	11 2708
Size 11	115	1	11 2710
Size 12	125	1	11 2712
Size 13	132	1	11 2714
Size 14	140	1	11 2716
Size 15	150	1	11 2718
Size 16	160	1	11 2719
Size 17	160	1	11 2720
Size 18	165	1	11 2721
Size 19	170	1	11 2722
Size 22	195	1	11 2724
Size 24	220	1	11 2726
Size 27	230	1	11 2728
Size 30	240	1	11 2730
Size 32	240	1	11 2732




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Design	Size mm	PU	Article no.
 <b>1000 V ring spanner</b> according to DIN 7447, made of chrome vanadium steel, deep-offset			
Size 8	155	1	11 2754
Size 10	165	1	11 2758
Size 11	175	1	11 2760
Size 12	185	1	11 2762
Size 13	190	1	11 2764
Size 14	200	1	11 2766
Size 15	210	1	11 2768
Size 16	210	1	11 2769
Size 17	210	1	11 2770
Size 18	220	1	11 2771
Size 19	230	1	11 2772
Size 22	250	1	11 2774
Size 24	270	1	11 2776
Size 27	300	1	11 2778
Size 30	300	1	11 2780






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Design	Wrench size across flats	Weight	PU	Article no.
 <b>1000 V ratchet ring spanners</b> according to DIN 3110 / ISO 3318 (torque) made of chrome vanadium steel. Ratchet mechanism with fine gearing (72 teeth) and a reset angle of 5° (shank angle). Change from clockwise to counterclockwise rotation by simply turning over the spanner.				
	10 mm	Weight 56 g	1	11 2740
	13 mm	Weight 80 g	1	11 2742
	14 mm	Weight 56 g	1	11 2744
	17 mm	Weight 80 g	1	11 2746
	19 mm	Weight 56 g	1	11 2748



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Design	Blade length	PU	Article no.
 <b>1000 V safety cable stripping knife</b> Cable stripping knife especially suitable for working with insulation on large cables, with strong, straight blade of stainless steel, blade length approx. 50 mm. 1000 volt insulating handle with large anti-slip protection in modern 2-component technology (polypropylene with soft rubber insert) for working comfortably and securely even in wet, cold or hot conditions. With blade protection cover.			
		1	12 1042
 <b>1000 V cable stripping knife</b> with strong, straight blade			
	Blade length 50 mm	1	12 0042
 <b>1000 V cable stripping knife</b> with straight blade and insulated blade back			
	Blade length 50 mm	1	12 0043



Design	Size mm	PU	Article no.
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### 1000 V stripping knife

with hooked cutting edge

Blade length 35 mm		1	12 0044
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### 1000 V cable paper knife

with especially sharp blade

Blade length 50 mm		1	12 0045
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### 1000 V cable stripping knife

with hooked blade and shuttle

Blade length 40 mm		1	12 0046
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### 1000 V safety cable stripping knife

with insulated blade back and blade guard, that folds away into the shaft,

with interchangeable blade

Blade length 50 mm		1	12 0064
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interchangeable replacement blade

Blade length 50 mm		1	12 0066
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### 1000 V automatic wire stripper SAFETY STRIP

for flexible stranded wires and solid conductors of 0.2 to 6 mm<sup>2</sup>, insulation-protected to 1000 Volt, tested in accordance to DIN EN 60 900:2004, automatic adjustment to the conductor width, integrated length stop and closer for transport and storage

0.2 – 6 mm <sup>2</sup>		1	10 0762
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### 1000 V one-hand cable shears

with double dip-coated special handle sleeves, high-gloss polished chrome

for cable ø	solid mm <sup>2</sup>	flexible mm <sup>2</sup>			
16 mm	16	50	160	1	12 0206
25 mm	25	70	200	1	12 0202

### 1000 V saw bow

fully insulated










Span width 150 mm		250	1	12 0700
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### 1000 V saw bow

fully insulated hacksaw with innovative quick release on the handle for single-sided saw blades DIN 6494 Form A, with improved grip due to nonslip plastic and reduced weight

Span width 300 mm	Weight 785 g	520	1	12 0702
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## Tool assortment and document bag

Tool and document bag for service technician	1	17 5130	
1000 V Telephone pliers 200 mm DIN ISO 5745 with straight jaws	1	10 8778	
1000 V Combination pliers, 185 mm with flat jaws	1	10 8782	
1000 V high-leverage diagonal cutting pliers, 200 mm, soft and hard wires	1	10 8784	
1000 V Wire stripper adjusting screw 160 mm, for conductors 0.75 - 6 mm <sup>2</sup>	1	10 8790	
1000 V slot-head screwdriver 2.5 x 0.4 mm 160 mm	1	11 7701	
1000 V slot-head screwdriver 4.0 x 0.8 mm 185 mm	1	11 7704	
1000 V slot-head screwdriver 6.5 x 1.2 mm 245 mm	1	11 7706	
1000 V slot-head screwdriver 8.0 x 1.2 mm 285 mm	1	11 7708	
1000 V Screwdriver insulated crosshead 80 mm test voltage PH 1	1	11 7731	
1000 V Screwdriver insulated crosshead 100 mm test voltage PH 2	1	11 7732	
1000 V Safety cable stripping knife, straight strong blade, blade length 50 mm	1	12 1042	
Weight 2360 g	415 x 350 x 205 mm	1	17 0360





INSULATED SAFETY TOOLS, PERSONAL PROTECTIVE EQUIPMENT (PPE)

Design	Weight	External dim. L/W/H	Internal dim. L/W/H1/H2/H	PU	Article no.
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**Leather tool case 3**

Double stitched



Safety gloves for electricians with reinforced dividing walls in centre section

Aluminium edges for case strengthening

Specially for safety tools and safety devices, all outer edges reinforced with aluminium corners. Side parts, front and back wall, bottom and cover with extra reinforcement, front and back wall can be unfolded to a 90° angle. Lockable key locks, lateral closures, heavy cleat carrying handle, numerous tool pockets, document compartment, lateral loops for shoulder strap, floor studs, foam inserts with recesses for spanner sockets. Particularly safe storage of electricians safety gloves and NH safety handle with two reinforced dividing walls.

	5300 g	380/480/220 mm	325/445/60/65/60/200 mm	1	17 0078
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**Tool assortment tool bag VDE**

Tool case made of tough cowhide, signal red

1000 V plastic flat nose pliers, 200 mm

1000 V Telephone pliers with straight jaws 200 mm, DIN ISO 5745

1000 V Telephone pliers with bent jaws 200 mm, DIN ISO 5745

1000 V Combination pliers with flat jaws 185 mm, DIN ISO 5746

1000 V high-leverage diagonal cutting pliers 200 mm, DIN ISO 5749, soft and hard wires

1000 V Wire stripper with adjusting screw 160 mm, for conductors 0.75 - 6 mm<sup>2</sup>

1000 V Offset screwdriver size 5, DIN EN 60900/VDE 0680 Part 2

1000 V Offset screwdriver size 6, DIN EN 60900/VDE 0680 Part 2

Voltage tester up to 690 V, LED display

1000 V socket wrench insert DIN 7448, size 10, 1/2 inch square socket

1000 V socket wrench insert DIN 7448, size 11, 1/2 inch square socket

1000 V socket wrench insert DIN 7448, size 13, 1/2 inch square socket

1000 V socket wrench insert DIN 7448, size 14, 1/2 inch square socket

1000 V socket wrench insert DIN 7448, size 17, 1/2 inch square socket

1000 V socket wrench insert DIN 7448, size 19, 1/2 inch square socket

Reversible ratchet, 1/2 inch

T-handle, 1/2 inch

1000 V Open-ended spanner size 10 105 mm, DIN 7446, 15° cranked

1000 V Open-ended spanner size 13 132 mm, DIN 7446, 15° cranked

1000 V Open-ended spanner size 17 160 mm, DIN 7446, 15° cranked

1000 V Open-ended spanner size 19 170 mm, DIN 7446, 15° cranked

1000 V Open-ended spanner size 22 195 mm, DIN 7446, 15° cranked

1000 V slot-head screwdriver DIN EN 60900 2.5 x 0.4 mm 160 mm

1000 V slot-head screwdriver DIN EN 60900 4.0 x 0.8 mm 185 mm

1000 V slot-head screwdriver DIN EN 60900 6.5 x 1.2 mm 245 mm

1000 V slot-head screwdriver DIN EN 60900 8.0 x 1.2 mm 285 mm

1000 V Screwdriver crosshead 80 mm test voltage PH 1 DIN 7438

1000 V Screwdriver crosshead 100 mm test voltage PH 2 DIN 7438

1000 V nut driver 220 mm DIN 7445 5.5 x 125 mm

1000 V nut driver 235 mm DIN 7445 7.0 x 125 mm

1000 V nut driver 235 mm DIN 7445 8.0 x 125 mm

1000 V nut driver 235 mm DIN 7445 10.0 x 125 mm

One-hand cable shears 160 mm for cables up to 16 mm special insulation up to 1000 V

1000 V Safety cable stripping knife, straight strong blade, blade length 50 mm

1000 V protection slip-on snout size 1 holder 10 mm max. diameter

1000 V protection slip-on snout size 2 holder 10 mm max. diameter

1000 V protection slip-on snout size 3 holder 10 mm max. diameter

Plastic clip

Electrical safety gloves 1000 V, size 10, length 410 mm, material thickness 1.0

Insulating tape universal DIN EN 60454, colour red 25 mm x 25 m

	13 500 g	380/480/220 mm		1	17 0378
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1 11 7701

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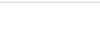
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Design	Weight	External dim. L/W/H	Internal dim. L/W/H1/H2/H	PU	Article no.
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## DIAMANT 45

corresponds to CIMCO article no. 17 8077, but with carrying capacity of up to 45 kg. Case shells have two additional aluminium frames for absolute torsional stiffness.



Case empty, red	6800 g	430/498/235 mm	340/420/50/100/150 mm	1	17 8176
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## Tool assortment DIAMANT 45

Tool case DIAMANT 45, red	1	17 8176		1	
1000 V plastic flat nose pliers, 200 mm	1	10 0796		2	
1000 V Telephone pliers with straight jaws, DIN ISO 5745, 200 mm	1	10 8778		3	
1000 V Telephone pliers with bent jaws, DIN ISO 5745, 200 mm	1	10 8780		4	
1000 V Combination pliers, DIN ISO 5746, 185 mm with flat jaws	1	10 8782		5	
1000 V high-leverage diagonal cutting pliers, DIN ISO 5749, 200 mm, soft and hard wires	1	10 8784		6	
1000 V Wire stripper with adjusting screw 160 mm, for conductors 0.75 - 6 mm <sup>2</sup>	1	10 8790		7	
1000 V Offset screwdriver size 5, DIN EN 60900/VDE 0680 Part 2	1	11 0804		8	
1000 V Offset screwdriver size 6, DIN EN 60900/VDE 0680 Part 2	1	11 0806		9	
Voltage tester up to 690 V, LED display	1	11 1432		10	
1000 V socket wrench insert size 10, DIN 7448, 1/2 inch square socket	1	11 2600		11	
1000 V socket wrench insert size 11, DIN 7448, 1/2 inch square socket	1	11 2602		12	
1000 V socket wrench insert size 13, DIN 7448, 1/2 inch square socket	1	11 2606		13	
1000 V socket wrench insert size 14, DIN 7448, 1/2 inch square socket	1	11 2608		14	
1000 V socket wrench insert size 17, DIN 7448, 1/2 inch square socket	1	11 2610		15	
1000 V socket wrench insert size 19, DIN 7448, 1/2 inch square socket	1	11 2612		16	
1000 V reversible ratchet, DIN 7449, 1/2 inch	1	11 2628		17	
1000 V T-handle, 1/2 inch	1	11 2650		18	
1000 V open-ended spanner size 10, 105 mm, DIN 7446, 15° cranked	1	11 2708		19	
1000 V open-ended spanner size 13, 132 mm, DIN 7446, 15° cranked	1	11 2714		20	
1000 V open-ended spanner size 17, 160 mm, DIN 7446, 15° cranked	1	11 2720		21	
1000 V open-ended spanner size 19, 170 mm, DIN 7446, 15° cranked	1	11 2722		22	
1000 V open-ended spanner size 22, 195 mm, DIN 7446, 15° cranked	1	11 2724		23	
1000 V slot-head screwdriver 160 mm, DIN EN 60900, 2.5 x 0.4 mm	1	11 7701		24	
1000 V slot-head screwdriver 185 mm, DIN EN 60900, 4.0 x 0.8 mm	1	11 7704		25	
1000 V slot-head screwdriver 245 mm, DIN EN 60900, 6.5 x 1.2 mm	1	11 7706		26	
1000 V slot-head screwdriver 285 mm, DIN EN 60900, 8.0 x 1.2 mm	1	11 7708			
1000 V screwdriver PH 1, 7438 mm, 80 mm	1	11 7731			
1000 V screwdriver PH 2, 7438 mm, 100 mm	1	11 7732			
1000 V nut driver 220 mm, DIN 7445 5.5 x 125 mm	1	11 7805			
1000 V nut driver 235 mm, DIN 7445 7.0 x 125 mm	1	11 7807			
1000 V nut driver 235 mm, DIN 7445 8.0 x 125 mm	1	11 7808			
1000 V nut driver 235 mm, DIN 7445 10.0 x 125 mm	1	117810			
1000 V One-hand cable shears 160 mm for cables up to 16 mm	1	12 0206			
1000 V safety cable stripping knife, straight strong blade, blade length 50 mm	1	12 1042			
1000 V protection slip-on snout, size 1, holder 10 mm max. diameter	5	14 0166			
1000 V protection slip-on snout, size 2, holder 10 mm max. diameter	5	14 0168			
1000 V protection slip-on snout, size 3, holder 10 mm max. diameter	5	14 0170			
Plastic clip	2	14 0180			
Electrical safety gloves 1000 V, size 10, length 410 mm, material thickness 1.0	1	14 0214			
Insulating tape universal, DIN EN 60454, colour red, 25 mm x 25 mm	1	16 0145			
Case equipped	13000 g	430/498/235 mm		1	17 5370

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Design	Size mm	PU	Article no.
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**Wrench for set screws for fuses and for contact screws**

combination, re-insert to use for set screws for fuses 2 - 63 A, haft made of insulation material

Diazed	105	1	14 0102
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**1000 V cover cloths**

ozone and weather resistance, excellent flame resistance, resistant to grease and acid, temperature resistant from - 40 °C to +100 °C, no ageing inhibitor necessary, for covering current-carrying parts, according to VDE 0680/1

	L x W x H mm		
	600 x 600 x 1.6	1	14 0154
	1000 x 1000 x 1.6	1	14 0156
	1200 x 1200 x 1.6	1	14 0158
Roll	10 m x 1 m x 1.6 mm	1	14 0157



**1000 V plastic clip**

for attaching cover sheets

	Length mm		
	80	1	14 0179
	160	1	14 0180



**1000 V slip-on snouts**

conical, to protect bare, current-carrying parts, numbered: No. 1 - 2 - 3

	Holder ø max.		
No. 1	10 mm	80	14 0166
No. 2	10 mm	80	14 0168
No. 3	10 mm	80	14 0170



**1000 V slip-on snouts**

self clamping, with sleeve, not numbered

	Holder ø		
	10 mm	75	14 0172
	20 mm	100	14 0174
	30 mm	120	14 0176



**1000 V insulating protective cap**

made of soft PVC, wing length 80 mm

	L x H mm		
with one wing	220 x 160	1	14 0184
with two wings	300 x 160	1	14 0185



**Spreading wedge**

made of plastic

without groove	163 x 16 x 35	1	14 0198
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**1000 V cleaning brush**

fully plastic design

	L x W mm		
	420 x 25	1	14 0260
	420 x 38	1	14 0261

Design	Size mm	PU	Article no.
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   **1000 V electrician and industrial hardhats**

light and modern head protection according to DIN EN 397, made of HDPE (polyethylene), with ventilation holes, electric insulation to 440 V AC, 1000 V in connection with a face guard, longer at the back to provide neck protection, with hygienic towelling sweatband, rain channels and side slots for attaching ear or eye protection, ratcheting headband, 8-point interior webbing, for head sizes 50-66 cm, 310 g  
Colour

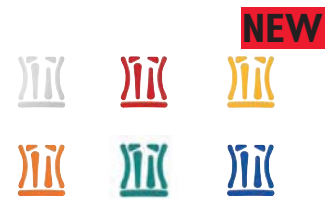
yellow		1	14 0200
blue		1	14 0201
white		1	14 0202
red		1	14 0203



**Reflective helmet sticker**

The sticker was designed to increase the visibility of the wearer in low-light conditions as well as in the dark. Weather-proof self adhesive highly flexible film as well as excellent resistance to corrosive and solvent substances.

silver		1	14 1253
red		1	14 1254
yellow		1	14 1255
Orange		1	14 1256
Green		1	14 1257
Blue		1	14 1258



**2-point chin strap made of elastic material**

to attach to an electrician hardhat. Ensures a secure hold e.g. in high wind, when working at height. etc.

		1	14 0268
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  **1000 V face guard**

according to DIN EN 166 to be combined with the electrician hardhat, complete protection over the whole facial area, including ears, from flame arcs, arc flashes caused by short-circuit, liquid sprays and other damage, transparent and colourless, protective shield can be folded up

clear as glass		1	14 0204
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  **1000 V face guard**

same as CIMCO article no. 14 0204, however with edge protection due to beading tape and symmetrical short circuit value -7 kA

clear as glass		1	14 0207
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 **1000 V electrician protective face hood**

according to DIN EN 166, use as arc flash face protection with ear protection during short-term switching activities as well as other energised work (e.g., on distributor cabinets, home junction boxes, during meter changes, pulling and installing NH fuses, creating a T-socket, etc.), not to be used with energised work on non-insulated, overhead lines and on equipment with risk of contact to active parts, type and CE tested

		1	14 0206
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**Safety glasses EXPLORER**

according to EN 166 5-3.1 1F  
Base model with clear protective lens, scratch-resistant

		1	14 0205
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**Safety glasses SUNDOWNER**

according to EN 166 1  
black frame, clear lens, scratch-resistant, anti-fog

		1	14 0208
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Design	Size mm	PU	Article no.
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### Full view safety goggles

with anti-fog, clear safety lens, high dust protection and wearing comfort thanks to light weight, wide textile elastic strap, indirect ventilation and flat design

**NEW**



### Safety glasses standard clear

lightweight glasses model which fits perfectly around the eyes, clear lens, scratch-resistant, anti-fog, EN 166 3-1.2 1 F

		1	14 1282
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**NEW**



### Safety glasses standard frame

blue frame, clear lens, scratch-resistant, EN 166 1 F

		1	14 1284
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**NEW**



### Safety glasses standard

over- and visitor glasses, clear, uncoated polycarbonate, without front pad, EN 166 1 F

		1	14 1286
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### Electrician safety goggles

according to DIN EN 166, compact goggles in traditional design, soft, flexible, indirectly ventilated PVC frame for high wearing comfort, interchangeable, scratch-resistance polycarbonate anti-fog lens, 130° field of view, weight only 65 g, fits over most prescription glasses

		1	14 0270
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### Panorama safety goggles

according to DIN EN 166, with a 140° field of view, weight only 115 g, otherwise similar to safety glasses CIMCO article no. 14 0270

		1	14 0272
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**NEW**



### Full safety glasses Optimum

Full safety glasses for the welder, polycarbonate visor, protection level 5, ant-fog/scratch-resistant, PVC frame, opaque, black, non-ventilated ENN 169/ EN 175

		1	14 1288
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### Ear muffs

CE according to EN241-1

Flat ear muffs, seal cushion gentle to skin, head piece with comfortable foam cushion, comfortable for all head sizes due to sliding mechanism, pleasant contact pressure thanks to two-point attachment and optimised tension force. Highest comfort, even when worn for long periods of time.

medium noise protection (yellow)		1	14 0274
good noise protection (orange)		1	14 0278

for attaching to electrician hardhat CIMCO Article No. 14 0200 et seq.

medium noise protection (yellow)		1	14 0275
good noise protection (orange)		1	14 0276

### Ear plugs

5 pairs of washable foam rubber ear plugs for multiple use, level range: high 30 dB(A), medium 24 dB(A), low 22 dB(A), SNR value: 28 dB(A), 43.6 dB(A) at 4000 Hz, according to EN 352

		1	14 0279
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Design	Size mm	PU	Article no.
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### Reusable ear plugs

with linear damping, contact to the surrounding environment is retained (good speech intelligibility) despite this, prevents harmful noise exposure, excellent fit, for low noise level area (insulation value SNR 20), removable strap



		1 Pair	14 0280
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### Fine dust mask FFP1

protection from solid particles of inert substances, according to DIN EN 149, protection level FFP1 (particle filter class P1 DIN 58645), CE certified, light, gentle to the skin with low breathing resistance, adjustable rubber band, individually wrapped



		1	14 0282
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### Fine dust mask FFP2

protection class FFP2, CE 0194, EN 149:2001+A1:2009, Latex, PVC and silicone-free, with rubber band and breath valve



		1	14 0284
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### Fine dust mask FFP3

robust and comfortable, with climate valve, protection level EN 149:2001+A1:2009



		1	14 1280
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### 5-finger work gloves

#### STANDARD

made of split pigskin, smoothed, glove back made of cotton, one size 10/11



		1 Pair	14 0230
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#### PROFI

made of full pigskin, glove back made of cotton, lined, one size 10/11



		1 Pair	14 0232
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#### Winter-Worker

made of full pigskin, smoothed, glove back made of cotton, with thermal lining, according to EN 388 cat. II and EN 511, one size 10/11



		1 Pair	14 0233
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#### NITRILE

protective gloves with flexible nitrile coating according to EN 388 cat. II, TÜV and GS tested, with tricot lining and knitted cotton cuff, good wet and dry gripping properties, liquid- and oil-resistant, very sturdy, machine washable, anatomical fit.



		1 Pair	14 0234
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#### SOFT

category II, EN 388, washable, ergonomic fit, good grip on greasy and oily parts, extremely good sense of touch, freedom of movement, excellent mechanical stability, long service life

9		1 Pair	14 0290
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10		1 Pair	14 0292
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11		1 Pair	14 0294
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#### Skinny Soft

nylon gloves in grey, with PU coating and knitted cuff, part-coated on palm and fingers, according to EN 388

9		1 Pair	14 1260
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10		1 Pair	14 1261
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11		1 Pair	14 1262
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Design	Size mm	PU	Article no.
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**NEW**



### Skippy Soft

nylon gloves in white, with PU coating and knitted cuff, part-coated on palm and fingers, according to EN 388

9	1 Pair	14 1263
10	1 Pair	14 1264
11	1 Pair	14 1265

**NEW**



### SKIN FLEX

knitted gloves in black, with special coating and knitted cuff, gloves are 3/4 coated, extremely comfortable to wear and ideal dexterity, very grippy, according to EN 388

9	1 Pair	14 1266
10	1 Pair	14 1267
11	1 Pair	14 1268

### Electrical safety gloves

according to DIN EN 60903, with test mark for work in the 1000 volt range, made of natural latex, anatomical fit, best flexibility



Size	Working-voltage	Test-voltage	Length mm	Class	Material thickness mm		
9	500 V	2 500 V	360	00	0.5	1 Pair	14 0237
10	500 V	2 500 V	360	00	0.5	1 Pair	14 0238
11	500 V	2 500 V	360	00	0.5	1 Pair	14 0239
9	1 000 V	5 000 V	360	0	1.0	1 Pair	14 0215
10	1 000 V	5 000 V	360	0	1.0	1 Pair	14 0214
11	1 000 V	5 000 V	360	0	1.0	1 Pair	14 0240
9	7 500 V	10 000 V	360	1	1.5	1 Pair	14 0245
10	7 500 V	10 000 V	360	1	1.5	1 Pair	14 0244
11	7 500 V	10 000 V	360	1	1.5	1 Pair	14 0243
9	17 000 V	20 000 V	360	2	2.3	1 Pair	14 0247
10	17 000 V	20 000 V	360	2	2.3	1 Pair	14 0246
11	17 000 V	20 000 V	360	2	2.3	1 Pair	14 0242
11	26 500 V	30 000 V	360	3	2.9	1 Pair	14 0241

### Composite electrical safety gloves

according to DIN EN 60903, with increased mechanical properties for working in voltage ranges to 1000 V (class 0)



Size	Working-voltage	Test-voltage	Length mm	Material thickness mm		
8	500 V	2 500 V	360	2.3	1 Pair	14 0130
9	500 V	2 500 V	360	2.3	1 Pair	14 0132
10	500 V	2 500 V	360	2.3	1 Pair	14 0134
11	500 V	2 500 V	360	2.3	1 Pair	14 0136
8	1 000 V	5 000 V	360	2.3	1 Pair	14 0140
9	1 000 V	5 000 V	360	2.3	1 Pair	14 0142
10	1 000 V	5 000 V	360	2.3	1 Pair	14 0144
11	1 000 V	5 000 V	360	2.3	1 Pair	14 0146

### Tricot lining gloves

for absorbing skin moisture and for better ventilation while wearing safety gloves, made of 100% cotton, unbleached and undyed, elastic, especially suited for protecting sensitive skin



One size	1 Pair	14 0216
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### Storage box for electrical safety gloves

for transport or secure storage in vehicles or toolboxes, made of impact-resistant insulating material. Dimensions: 476 x 224 x 100 mm, weight 320 g

1	14 0150
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Design	Size mm	PU	Article no.
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### 1000 V NH safety handle

according to VDE 0680/4, with anti-slip protection and protective guard of smooth, impregnated leather.  
For NH fuses sizes 00-3

		1	14 0210
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### Electrician boots

premium safety boots made of a PVC-nitrile mixture, tested according to EN 345-SB. EN 50321.1999 class 0

Shoe size

42	1 Pair	14 0219
43	1 Pair	14 0220
44 - 45	1 Pair	14 0221
46	1 Pair	14 0222



### Insulating overshoes

The comfortable alternative to rubber boots. For energised electrical work indoors on firm ground (e.g., energised meter changes, meter disconnection activities, work on interior cable distributors). The galoshes serve as a comparable replacement for position insulation to 1000 V AC / 1500 V DC. Use in wet conditions, on ladders and outdoors, especially in cable trenches is not permitted, nor is work where earth contact with other body parts cannot be ruled out (e.g., while working on your knees). Comfortable and quick attachment to normal shoes via 2 hook & loop fasteners in the front area along with a snap-in strap for the heel, type tested on the basis of DIN EN 50 321.

For sole length	approx. shoe size	Interior length		
280 to 300 mm	40 to 43	300 mm	1 Pair	14 0227
300 to 320 mm	43 to 46	320 mm	1 Pair	14 0228



### Overall white / orange

Disposable overalls, comfortable and light to wear, protects against liquid vapour, minor liquid sprays and airborne solid particles, good visibility via clearly visible orange seams, with zipper, hood, arms and legs are closed off by a rubber band, meets Cat. III / Type Typ 4B+5B +6B, anti-static, viral protection test according to EU standard 14126

Size

L	1	14 5026
XL	1	14 5028
XXL	1	14 5030



### Overall white

Disposable overall with pleasant light wearing comfort, protects against liquid mist, minor liquid splashes and airborne solid particles, with zip, elastic inserts on hood, waist, wrists and ankles, CE-certified. Type 5B+6B, Cat III, EN14126 anti-static and breathable, lint-free and abrasion-resistant

Size

L	1	14 5032
XL	1	14 5034
XXL	1	14 5036

### Portable rescue case 36 kV

specially designed for electrical safety interventions (rescue actions involving electrical cars, etc.). Case cover serves simultaneously as an insulating stool to prevent direct contact with the medium during rain (personal protection).

Contents: Insulating bench (case base)

- Insulated telescopic pole (45 kV)
- Rescue hook with voltage indicator (127 V – 90 kV)
- Cable cutter (36 kV)
- Pair of insulated boots (20 kV) size 44
- Bottle of talcum powder
- Adhesive tape yellow/black
- Information sign (first aid measures)
- Electrical safety gloves (class 3, to 26.5 kV, size 9)
- Transport bag with karabiner hook

	570 x 71 x 240 mm	1	17 0366
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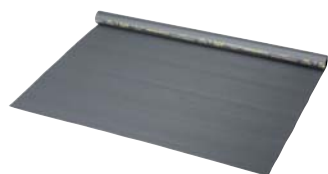


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Design	Size mm	PU	Article no.
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   **1000 V insulating mat**

Protective mats for electrical switch rooms tested according to DIN EN 61111, resistant against weathering, ozone, light, acids, oil and fire-resistant (UL 94 V-0). The 3 mm thick mat has a dielectric strength of the test voltage class 0 (1000 V), a raised, made from grey polymer (hardness approx. 65° Shore A), tear resistance > 10 N/mm, elongation at break > 600%, grippy surface (ribbed) for increased surefootedness, abrasion < 300 mm, temperature stability from -30°C to +70°C. In addition, the standing mat is free of nitrosamine and PAH according to EU 1272/2013.



1000 x 1000 x 3 mm		1	14 0224
10 m x 1 m x 3 mm		1	14 0225

**Your personal safety set, 4 piece**



In a practical and sturdy carrying bag	17 0110
Electrician's hardhat	14 0200
Electrician's face guard	14 0204
NH safety handle	14 0210
Electrician's gloves	14 0214
	1 14 0255

**Your personal safety set, 5 piece**



In a practical and sturdy carrying bag	17 0112
Electrician's hardhat	14 0200
Electrician's face guard	14 0204
NH safety handle	14 0210
Electrician's gloves	14 0214
Insulating mat	14 0224
	1 14 0250

**Your personal safety set, 5 piece**

**NEW**



In a practical and sturdy carrying bag	17 0110
Electrician's hardhat	14 0200
EXPLORER safety glasses	14 0205
Ear plugs	14 0279
Fine dust mask FFP2	14 0284
Work gloves SOFT	14 0290
	1 14 6817

**Safety harness type A**

For working in areas with risk of falling, e.g., towers, poles, building overhangs, safety harness with a back attachment ring (according to DIN EN 361) two side attachment rings, (according to DIN EN 358), weight only 1.4 kg.










Suitable for all body sizes		1	14 0455
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**Safety harness type B**

Like type A but with a chest loop as front attachment point for better work and two side attachment rings as well as a comfortable 100 mm wide, padded back support, weight 1.5 kg.



Suitable for all body sizes		1	14 0456
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Design	Size mm	PU	Article no.	
<b>Safety harness type Economy</b>				
Safety harness with chest loop, simple and fast to put on, according to EN 361:200				
Suitable for all body sizes		1	14 0460	
<b>Safety harness type C</b>				
Safety harness with elastic waist belt and click closure				
Suitable for all body sizes		1	14 0462	
<b>Set safety harness Economy</b>				
The versatile set comprises the safety harness with chest loop, which can be put on quickly and easily.				
The practical rope bag contains:				
Safety harness (EN 361:2002)				
Fall arrester, mobile, up to 10 m (EN 353-2:2002)				
Belt sling, 0.8 m				
		1	14 0458	
<b>Safety set Standard 1</b>				
Versatile set with a fall arrester, which keeps the fall distance as short as possible through the use of a spring-loaded retracting mechanism, safety harness with additional padding and a load-bearing capacity of up to 140 kg.				
The practical rope bag contains:				
Safety harness, up to 140 kg (EN 361/358)				
Fall arrester, 2.5 m, with front and rear attachment				
		1	14 0470	
<b>Safety set Standard 2</b>				
This set is suitable for safe working on mobile elevated platforms. The combination of safety harness and fall arrester make it indispensable.				
The practical rope bag contains:				
Safety harness, up to 140 kg (EN 361/358)				
Fall arrester, 1.8 m				
		1	14 0472	
<b>Electrician safety set STANDARD</b>				
This set is intended for use in repair and maintenance work, e.g. working on pitched roofs.				
The receiver rings in the front and at the sides correspond to the BG [Employer's Liability Insurance Association] guidelines for work in areas with a risk of falling. The stable case of steel sheet contains:				
Safety harness (EN 361/358)				
Belt sling 30 KN - 1 metre				
Running safety lanyard ERGOGRIP				
		1	14 0495	
<b>ROPE BAG electrician safety set</b>				
This set finds versatile application in construction and industry. The receiver rings correspond to the BG [Employer's Liability Insurance Association] guidelines for work in areas with a risk of falling.				
The practical rope bag contains:				
Safety harness (EN 361)				
Belt sling 22 KN - 2 metre				
Guided fall arrester MAGIC 15 m				
		1	14 0496	

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Design	Size mm	PU	Article no.
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### Guided fall arrester MAGIC

according to EN 353-2

The small and light fall arrester runs free in both directions. Available in different rope lengths made of 12 mm kernmantle rope.

	10 m	1	14 0475
	15 m	1	14 0476



### Safety lanyard ERGOGrip

according to EN 358

Safety lanyard for workstation positioning with ergonomically shaped operating element, length 1.5 m and one-hand karabiner, 12 mm kernmantle rope. The rope is fixed to the attachment rings on the harness.

		1	14 0490
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**NEW**



### Belt sling, 25 mm

strong polyamide sling (PA) for industrial use, the round sling is 25 mm wide and has a breaking load of 26 kN.

0.8 m		1	14 0464
1.5 m		1	14 0466

**NEW**



### Throw bag with eye

extremely strong material for optimum throwing characteristics and long service life, accurate aim with quiet flight with steel ring and sewn-on loop.

Weight 250 g		1	14 0468
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### SHOCKYARD fall damping belt

according to EN 355, 354

Fall damper and sling in one.

Extremely short falling distance: only 95 cm at a fall factor of 2 (4 m - 100 kg falling weight). Very comfortable as it is very light and flexible over its whole length, primarily for sternal applications. Temperature-resistant to 80 °C, abrasion proof protective shell. Continuous fall arresting due to elastic fibres. During a fall, no shock-creating noise from tearing.

		1	14 0500
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### Safety belt

The safety belt has a double-pin buckle and two side attachment rings with adjustable length, spliced lanyard.

The belt can only be used in places where there is no risk of falling.

Belt length mm	Waist size cm		
1400	90 - 100	1	14 0502
1500	100 - 110	1	14 0504



### Crampons

according to DIN 48345, pole model, with 2 spikes, angled footplate and wide leather counter

Spike width 260 mm for wooden poles 150 - 240 mm		1	14 0550
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### Warning vest

as a breakdown vest for car drivers and for use by street crews, in luminous orange (RAL 2005), made of mixed cotton fabric (80% polyester, 20% cotton), with two horizontal 50 mm wide reflective strips all the way around the vest for best visibility, one size, universal size adjustment via hook & loop fastener, according to EN 471

		1	14 2012
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### Warning triangle EURO

officially tested and approved according to EC directive ECE-27R03 in all European countries, optimal warning effect even at night, 4 point stand, folds together, in a plastic tube (445 x 160 x 40 mm), total weight only 1700 g

unfolded 440 x 450 mm		1	14 2014
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Design	Size mm	PU	Article no.
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### Commercial first aid case

according to DIN 13 157, in a modern design with attractive colouring, splash-proof, dust-tight and maintenance-free, can be hung on the wall or removed from the holder for mobile help on site, extremely clear layout thanks to transparent ABS housing and variable interior partitioning, one-hand opening and defined opening angle with additional externally accessible plaster dispenser, including room thermometer, "First Aid Instructions", pen, anti-theft protection, with wall bracket, wall plugs and screws

	350 x 370 x 120 mm	1	14 2006
Refill pack for first aid case according to DIN 13 157		1	14 2007

### Car first aid kit

according to DIN 13 164, only for cars, not permitted for commercial operations, in a strong plastic case

	225 x 165 x 70 mm	1	14 2008
Refill pack for car first aid kit according to DIN 13 164		1	14 2009

### SAFETY BOX

To protect plug connections on power lines against humidity and moisture, as well as against unintentional separation of the plug connection. Ideally suited for use when working with electrical devices outdoors (garden, camping, construction site, boat, etc.), for the holiday and Christmas lighting, also worth recommending for the protection of small children. Simple handling: open the housing parts of the SAFETY BOX, connect the plug and socket and insert them in the middle, fix the plug connection and then turn on the power. For lines with up to 9 mm diameter, IP 44 splash protected, weight 110 g.

red		1	14 2016
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### Cutout switch lock

The secure locking element which can be used, for example, for fuses. Once the fuse has been deactivated, an insulated electrician's screwdriver (blade max. 4 mm) can be used to fix the Clip block, after this the locking element can be secured against reactivation using a padlock (CIMCO article no. 18 2612) or a multi-locking clamp (CIMCO article no. 18 2616) to prevent the cutout switch from being switched back on.

Packaging unit 5 pieces

M3 circuit breaker		1	18 2600
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### Padlock for locking device

with 4 mm brass shackle, base body made of plastic with two-sided locking disc, with a "Do not switch on" prohibition sign (according to VBG 125) and label field.

Delivery includes two keys. Weight 192 g

50 x 6 mm		1	18 2610
50 x 4 mm		1	18 2612
23 x 6 mm		1	18 2614

### Multi-locking clamp for locking element

for use with multiple locking elements, with "Do not switch on" prohibition sign (according to VBG 125) and labelling field. Scope of supply: housing with 2 m protection band.

		1	18 2616
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### ESD service kit

practical working mat for mobile application areas, made of sturdy dissipative vinyl material. Equipped with 2 pockets and seamed edges. Delivery including grounding cable 3 m with crocodile clip, wrist band. Bleeder resistance 108 Ohm.

	600 x 650	1	15 0370
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### Circuit board cutlery, 6 pieces

with 12 different accessory soldering tools of special steel that solder does not stick to. With fork, stainless steel brush, hook, awl, knife and scraper.

	175	1	15 0350
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# PLUMBING TOOLS

Innovative ratchet pipe cutter with a worldwide patent and ratchet mechanism allows you to cut a pipe without having to completely rotate the tool.



Especially suitable for work in restricted working spaces.



S-opening pipe pliers: the jaws are ground and inductively hardened. The self-clamping ridges in the 45 degree "S-opening" ensures a secure grip.



With 4 guide rollers for optimum hold of the pipe when cutting: the KOMPAKT professional pipe cutter.



Idea; straight-cutting shears with double hardened, finely serrated cutting.

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Design	Size mm	PU	Article no.
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### Water pump pliers



according to DIN ISO 8976, with box joint, self-clamping on the tool, with ridged opening (burner hole), manufactured from chrome-vanadium steel.



without handle sleeves	250 mm (10")	1	10 1222
with handle sleeves	250 mm (10")	1	10 1224

### Water pump pliers

according to DIN ISO 8976, made of chrome-vanadium steel, with burner hole and box slip joint, for even force distribution, with safety locking protection, varnished



	175	1	10 1236
	245	1	10 1237
	300	1	10 1238

### FastGRIP water pump pliers

according to DIN / ISO 8976 with quick adjustment on the workpiece via push button, easy running, super-fine adjustment via 12 tab locations, ergonomically shaped for the greatest force transmission, self-locking on the workpiece, power conserving, slip-proof design, with box slip joint and double fulcrum, inductively hardened ridged opening and safety lock protection, high-quality tempering, maximum span width 37 mm, weight 392 g.



	240	1	10 1230
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### PowerGRIP plier wrench

parallel gripping pliers with practical push-button adjustment, for working on parallel and flat workpieces such as nuts, bolts, screwed cable glands and thin metal sheets, high transmission ratio with noticeable support of hand power, ergonomic shape, extremely robust, free play joint with continuous, easy-running fine adjustment, chrome-plated with dip insulated handles



Design	Span width	Weight		
180 mm	36 mm	275 g	1	10 1241
250 mm	46 mm	490 g	1	10 1239
300 mm	60 mm	640 g	1	10 1243

### Syphon pliers

for mounting and dismantling syphons and water drains on washbasins and sink units; also for larger filling valves (water taps) made of chrome-vanadium steel, for pipe fittings with screwed slip joint, shanks dipped.



	230	1	10 1256
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### S-opening pipe pliers

according to DIN 5234 C, drop-forged, with inductively hardened grip area, self-locking on the workpiece, double-T profile handle, captive adjusting nut and safety locking protection to prevent crush injuries



For pipes	Span width			
Inch	mm			
1/2	39	245	1	10 1277
1	49	320	1	10 1279
1 1/2	68	440	1	10 1281
2	85	560	1	10 1283
3	120	675	1	10 1285

### Lever pressure pliers (locking pliers)

ideal for holding and fixing of workpieces for welding, soldering, cutting and finishing, jaws made of chrome vanadium steel, with release lever and wire cutter



	Span width mm			
	0 - 35	185	1	10 1300
	0 - 50	250	1	10 1302
	0 - 65	300	1	10 1304



Design	Size mm	PU	Article no.
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### Fitting pliers

with non-slip woven rubber strap

	max. 160 mm ø	1	10 1370
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### Basin wrench

with swivel claw, for left and right-handed rotation, varnished

	235	1	10 2020
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### One-hand basin wrench

for easy mounting of high-quality fittings, e.g. chrome-plated, in hard to access places with restricted working space, holders 3/8"

Wrench inserts

Size 27 mm		1	11 4021
Size 32 mm		1	11 4022
Size 36 mm		1	11 4023
Extension	300 mm	1	11 4024
Sliding T-handle	3/8"	1	11 4026
Set no. 11 4021 to no. 11 4026	5 piece	1	11 4019

### Express spanner

fork spanner with M 10 hanger bolt spanner

Size 17 – 19		1	11 4011
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### Ventil-Quick

waste valve holder and screw-in wrench, just insert to be immediately torque-proof no chance of damaging chrome surfaces, weighs only 365 g, ready for use in seconds

		1	11 4040
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### Plumbing four-way socket wrench

with offset surfaces, making it suitable for all brands for tap extensions 3/8" - 1/2" - 3/4" - 1", with thread for M 10 + M 12 hanger bolts

		1	11 4120
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### Radiator spud wrench

for cam, hex and double hex drive, to install valves and screw fittings 3/8" - 1", 1/2" square drive

		1	11 4000
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### Ratchet

with 1/2" square socket, for radiator spud wrench (CIMCO article no. 11 4000), meaning it can be used as an ordinary ratchet for a nut driver



		1	11 4001
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### Pipe cutters for plastic pipes and cable ducts

for hard and soft PVC pipes and cable ducts; also for fibre-reinforced plastic and rubber hoses The stability and the cutting geometry of the blade ensures a burr and deformation-free, right-angled cut on both round and angular material.

### SUPER pipe cutter

Working range 6 – 35 mm ø		1	12 0410
Replacement blade		1	12 0412



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Design	Size mm	PU	Article no.
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### Pipe cutter

With the handy pistol shape, already laid pipes can be quickly and easily shortened. Pumping movements release the ratchet mechanism and the robust, interchangeable blade is thus pushed through the material to be cut with the slightest manual effort. The blade symmetry provides precise right angle cuts without burrs or deformation.

Area of application:

- Hard and soft plastics
- Rubber hoses
- Isoflex pipes
- Hard and soft plastic PVC pipes



### MAXI pipe cutter

with adjustment-lever for modification of cut-opening

Working range 6 – 42 mm ø	1	12 0420
Replacement blade	1	12 0422

### MINI plastic pipe shears

made of die cast magnesium, for cutting plastic and composite pipes up to a diameter of 35 mm, optimum power transmission, with quick change system for changing blades simply and easily, automatic blade retraction, blade of PTFE-coated INOX steel with long service life (made in Solingen)

Extremely light and compact, only 270 g.



35 mm ø / 1 3/8"	220	1	12 0416
Replacement blade		1	12 0417

### Plastic pipe cutter PROFI

made of die cast magnesium, for cutting plastic and composite tubes up to a diameter of 42 mm, optimum power transmission thanks to ratchet mechanism with progressive, ridged blade feed with 2-component handle, blade retraction via one-hand quick retraction mechanism, with quick change system for replacing blades quickly and easily, blade of PTFE-coated INOX steel with long service life (made in Solingen)



42 mm ø / 1 5/8"	240	1	12 0418
Replacement blade		1	12 0419

### Universal pipe cutter

with 2 interchangeable knives for insulation and hard PVC pipes and for soft plastic and rubber hoses



Pipe outer ø max. 29 mm	200	1	12 0450
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Bulk knives

for hard PVC	1	12 0452
for soft pipes	1	12 0453

### Corrugated pipe cutter

for cutting and trimming corrugated plastic tubes (flex tubes) and plastic shield tubes up to 42 mm ø in the electrical, plumbing and heating fields, simply rotate the tool to safely cut at the outer diameter without damaging the interior pipe, with two interchangeable cutting inserts, weight only 45 g



Working range to 42 mm ø	110	1	12 0430
Replacement cutting inserts		1 pair	12 0432

### Metal saw bow

especially light, yet extremely sturdy metal saw for 300 mm saw blades, made of die cast aluminium in an ergonomic design, with soft rubber inserts on the handle and front grip, high cutting precision of the blade in straight and 40 degree position due to captive locking pins, blade can be tensioned up to 800 N by turn-lock fastener in the handle, delivery incl. a bi-metal cutting saw blade



Span width 300 mm	Weight 650 g	1	12 0602
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### Metal saw bow

according to DIN 6473 A, heavy duty design, material thickness 18 x 8 mm, bright chrome plated, with captive locking pins



Span width 300 mm		1	12 0600
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Design	Size mm	PU	Article no.
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### Metal cutting saw blade

according to DIN 6494, 24 teeth per inch

Version A, ridges on one side

Material	Dimensions mm	PU	Article no.
HSS-CO	300 x 13 x 0.65	1	12 0608

Version B, ridges on both sides

Material	Dimensions mm	PU	Article no.
WS	300 x 25 x 0.8	1	12 0614



### Bolt cutters

robust bolt cutters in a compact design, blade and pipehead manufactured from drop-forged special steel, reduced separating force thanks to ideal geometry and cutting performance up to 48 HRC, with ergonomic 2-component handles and precise, adjustable blades

Weight 2013 g	460	1	10 0450
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### Pipe milling cutter – internal and external

for vibration-free chamfering of plastic, copper, aluminium and soft steel pipes from 4 – 42 mm in diameter

		1	12 0890
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### Ratchet pipe cutter

Innovative pipe cutter with a worldwide patent and ratchet mechanism which allows you to cut a pipe without having to completely rotate the pipe to be cut. Especially suitable for work in restricted working spaces (e.g., pipes installed in corners or on walls). One-hand operation, especially high performance thanks to special cutting wheel and double roller guides (speed, durability). Integrated deburrer for clean edges on the cut pipes. Easily interchangeable cutting wheel, one replacement cutting wheel is contained in the scope of delivery, weight 400 g for plastic, copper, aluminium, and similar pipes for outer pipe diameters ranging from 12 to 35 mm (1/4" to 1 1/8").

	175 x 38 x 68	1	12 0480
Replacement cutting wheel		1	12 0481



### Mini pipe cutter

With a cutting wheel which can be changed without requiring tools thanks to quick change system, double roller guide, for copper pipes.

3 – 16 mm ø	1/8" – 5/8" ø	60	1	12 0460
3 – 25 mm ø	1/8" – 1"	70	1	12 0461



### Pipe cutter

With a cutting wheel which can be changed without requiring tools thanks to quick change system, double roller guide and deburrer.

3 – 35 mm ø	1/8" – 1 3/8" ø	160	1	12 0464
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### Pipe cutter

With a cutting wheel which can be changed without requiring tools thanks to quick change system, double roller guide.

10 – 60 mm ø	1/8" – 2" ø	390	1	12 0472
10 – 42 mm ø	1/8" – 1 1/4"	290	1	12 0473



### KOMPAKT professional pipe cutter

for aluminium, copper and thin-walled steel pipes, made from die cast magnesium with steel bearing mounted spindle to make slide move more easily, with 4 guide rollers for optimum hold of the pipe when cutting, includes an extendable deburring blade and a replacement cutting wheel (in the turn knob), cutting wheel can be changed without tools thanks to quick change mechanism

3 – 35 mm ø	1/8" – 1 3/8" ø	155 mm	1	12 0468
Loose wheels				
for 12 0460, 12 0461, 12 0464, 12 0468			1	12 0462
for 12 0472			1	12 0474
for 12 0473			1	12 0475



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Design	Size mm	PU	Article no.
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### Universal lever shears for sheet metal

with lever transmission, double hardened fine-toothed blades, self-opening  
hex socket head screw, fully hardened, with fine thread for adjusting the cutting edge gap



### Ideal straight cutting shears

	250	1	12 0280
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### Special shape cutting shears

with especially flat lower blade



right-hand cutting	250	1	12 0282
left-hand cutting	250	1	12 0283

### Double sheet metal puncher – Plumbing

for punching holes in sink unit basins (stainless steel), spanner operation size 19



Hole ø	Pre-drill ø	Screw	max. sheet metal thickness mm		
Metric mm	mm	Size			
28 / 32	11	10 x 55	1.5	1	13 1822
Replacement tension bolt		10 x 55		1	13 5068

### Workshop file set, 5-piece

with wooden haft



1 piece each 200 mm Cut no. 2	□ △ □ ◯	1	20 6806
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### Valve seat milling cutter

with double brass cylinder, with flat steel cutters, for water supply taps  
for pipes 3/8" - 1/2" - 3/4" - 1"



		1	14 1150
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### Excelsior spanner

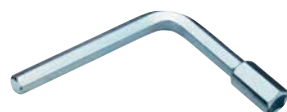
with movable jaw and tyre lever, polished, smooth jaws without teeth



	240	1	11 2842
	300	1	11 2844
	370	1	11 2846

### L-key

chrome-plated, with square socket, for 10 mm tap extensions.



3/8" + 3/4"		1	11 4130
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### Flexible pipe cleaners

made of hot-dip galvanised, double layered steel wire, with claw and adjustable wooden handle



Flexible cleaner ø mm	Claw ø mm	m		
7	17	5	1	14 1170
7	17	10	1	14 1176
10	20	10	1	14 1186
10	30	10	1	14 1200
12	40	5	1	14 1192
12	40	10	1	14 1202

### Extensions for flexible pipe cleaners

Flexible cleaner ø mm	m		
12	5	1	14 1212

Design	Size mm	PU	Article no.
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### ROHRTEUFEL pipe cleaner

Universal use pipe cleaner for cleaning all pipes from 10 to 55 mm diameter, e.g. drain pipes, sinks, washbasins, shower drain pipes, baths and WCs, with crank for hand operation and hex receiver for electronically regulated drills, hot-dip galvanised piano wire spiral, 7.5 m long, 8 mm ø

		1	14 1250
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### Steel wire brush

4-row	Length 290 mm	1	14 1314
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### Magnetic welding mirror

with strong, permanent magnet, ball joint and flexible brass hose, nickel-plated steel mirror, 1 mm thick.

	Length 500 mm	1	14 1330
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Loose welding mirrors

	80 x 70 mm	1	14 1340
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# SOLDERING EQUIPMENT AND ACCESSORIES – CHEMICAL PRODUCTS

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High performance protection for electrics and metals.



WET.PROTECT e-basic protects everywhere, where electrics and electronics come into contact with moisture.



It infiltrates the moisture and then forms a lasting protective film.



ALPA-GEL protects cable connections from dust and moisture.



Removal is possible at any time, without leaving any residue.

Note: Due to the limited shelf-life, it is not possible to return the spray and cleaner cans!

Design	Size mm	PU	Article no.
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**RoHS2**  
2011/65/EU

**Lead-free electronic solder**

according to DIN 29453, S-Sn 99.3 Cu 0.7, with active resin flux according to DIN EN 29454-1 1.1.2.B 2.5% (weight % 2.5 ± 0.5), not corrosive on non-ferrous metals, on disposable spoons



Wire ø mm	Weight g		
1.0	100	1	15 0152
	250	1	15 0154
	500	1	15 0156
1.5	1000	1	15 0158
	100	1	15 0162
	250	1	15 0164
2.0	500	1	15 0166
	1000	1	15 0168
	250	1	15 0174
3.0	500	1	15 0176
	1000	1	15 0178
	250	1	15 0180
	500	1	15 0182



**Electronic solder**

according to DIN EN 29453, with activated resin flux, not corrosive on non-ferrous metal, fast-flowing, flux according to DIN EN 29454-1 1.1.2.B 2.5% (weight % 2.5 ± 0.5) S-Sn60Pb40, on disposable spoons



Wire ø mm	Weight g		
1.0	100	1	15 0052
	250	1	15 0054
	500	1	15 0056
1.5	1000	1	15 0058
	100	1	15 0062
	250	1	15 0064
2.0	500	1	15 0066
	1000	1	15 0068
	250	1	15 0074
3.0	500	1	15 0076
	1000	1	15 0078
	250	1	15 0080
	500	1	15 0082



**Radio solder**

according to DIN EN 29453, with activated resin flux, not corrosive on non-ferrous metals, fast-flowing, flux according to DIN EN 29454-1 1.1.2.B 2.5% (weight % 2.5 ± 0.5) S-Sn40Pb60, on disposable spoons



Wire ø mm	Weight g		
2	250	1	15 0104

**Solder in triangular rods**

according to DIN EN 29453, extruded, standard dimensions: 11 x 11 x 11 mm, approx. length 440 mm



SN %			
35		1 kg	15 0140
40		1 kg	15 0150
60		1 kg	15 0160

**RoHS2**  
2011/65/EU

**Lead-free solder in triangular rods**

according to DIN EN 29453, extruded, standard dimensions: 11 x 11 x 11 mm, approx. length 400 mm



SN %			
99.3		1 kg	15 0161

**Soldering grease**

according to DIN EN 29454-1 3.1.1.C, for the soft soldering of tinplate and leaded sheet metal, for the tinning of copper and brass, not suitable for use in the field of electrical engineering and electronics (contains zinc chloride, corrosive)



	50 g	1	15 0230
	100 g	1	15 0232
	250 g	1	15 0234

Design	Size mm	PU	Article no.
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### Contact soldering paste

according to DIN EN 29454-1 1.1.2.C, for soldering in the fields of electrical engineering, electronics and electrical installation

50 g tin	1	15 0240
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### Desoldering pump

Ideally suitable for repair work on circuit boards and electronic components, in professional industrial quality with extremely high and constant suction power and large aluminium solder chamber, low weight (only 65 g), with narrow, anti-static Teflon desoldering tip.

195	1	15 0300
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### Electronic soldering devices

220 Volt, with plastic handle, 1.5 m power cable and "Schuko" safety plug, interchangeable copper soldering tips

Watt	Soldering tip temp.	App. heating time	Soldering tip ø mm		
15	370 °C	1.5 min	5-straight	1	15 0448
Replacement soldering tip for 15 0448				1	15 0449
30	410 °C	1.5 min	5-straight	1	15 0600
Replacement soldering tip for 15 0600				1	15 0601
60	460 °C	2.0 min	7-bent	1	15 0453
Replacement soldering tip for 15 0453				1	15 0457
80	480 °C	2.5 min	7-bent	1	15 0602
Replacement soldering tip for 15 0602				1	15 0603
100	500 °C	2.5 min	7-bent	1	15 0456
Replacement soldering tip for 15 0456 + 15 0453				1	15 0457



### Tool holder for electrical and gas soldering irons

With tray for cleaning sponge

80 x 110 mm	1	15 0301
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### Electrical soldering gun

220 Volt, with soldering point light and Euro plug

Watt	Soldering tip temp.	App. heating time		
100	400 °C	0.2 min	1	15 0700
Replacement soldering tip			1	15 0702



### Gas soldering set, 10 piece

for lighter butane gas. For challenging soldering tasks without obstructive cables in all locations where power supply is not available, e.g. in installation, service and repair areas. Also suitable for heat-shrinking work, micro-welding and the cutting of plastic films and boards, thanks to diverse interchangeable attachments. With electronic ignition, infinitely variable output, temperatures with naked flame up to 1,300 °C, soldering up to 500 °C, heat-shrinking up to 500 °C, burning duration approx. 60 min. In handy storage and carrying case made from impact-resistant plastic with viewing window. Set consisting of 1 unit each of:

- Gas soldering iron with protective safety cap and locking device 15 0810
- Pencil tip soldering tip 15 0820
- 3 mm single-sided, diagonal soldering tip (elliptical shape) 15 0821
- 3.5 mm dual-sided, diagonal soldering tip (chisel shape) 15 0822
- Hot knife with 12.5 mm blade width for cutting and shaping of plastic and hard foams 15 0826
- Heat reflector for heat-shrinking 15 0828
- 3.5 mm ø flame nozzle for micro-welding 15 0824
- 7 mm and 8 mm spanner for soldering tip assembly
- Cleaning sponge in 40 x 40 mm sponge container
- Comprehensive instruction manual

10-piece gas soldering iron set	275 x 160 x 45 mm	1	15 0800
Gas soldering iron, individual device	235 x 27 mm	1	15 0810



### Soldering station with infinitely variable control

Primary voltage 230 V, 50/60 Hz, secondary voltage 12 V, safety transformer, LED function display, soldering iron with separate equipotential bonding and interchangeable soldering tip

Watt	Soldering tip temp.	App heating time	Soldering tip ø mm		
30	200 - 450 °C	1.5 min	4	1	15 0730



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Design	Size mm	PU	Article no.
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### Replacement soldering iron

Watt	Soldering tip temp.	App. heating time	Soldering tip ø mm	PU	Article no.
30	200 - 450 °C	1.5 min	4	1	15 0732

### Cleaning sprays

#### Plastic cleaner

cleans and degreases plastics, ideal for the pre-treatment of surfaces when bonding sensitive plastics, rubber or painted surfaces, evaporates without leaving residue.

500 ml		1	15 1138
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#### Cleaner and degreaser

cleaner and degreaser for all metals, glass and ceramic as well as the majority of plastics. Cleans stubborn dirt such as oil, grease, tar, wax, silicone/adhesive residue from electrical contacts, boilers and burners, brakes, clutches, engines, transmissions, etc. without leaving any residue, degreasing effect.

500 ml		1	15 1150
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#### TFT/LCD screen cleaner

Reliable removal of dirt, dust, grease and nicotine. Leaves behind an anti-static effect in order to provide long-term surface protection against contamination. Also suitable for use on sensitive plastics and glass surfaces. Application for flat and plasma screens, computers, notebooks.

200 ml		1	15 1151
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#### Multi-foam

The powerful universal cleaner, completely biodegradable. Cleans all metals, glass and plastic parts without leaving residue, removes insects, smears, films of dirt, freshens matt and weathered plastics, prevents rubber seals from bonding and freezing solid, etc.

400 ml		1	15 1152
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### Technical sprays

#### AT 44 all-round spray with PTFE

Corrosion protection, cleaning, lubrication, water displacement and conservation in a single product. Displaces moisture on electrical lines, prevents creep currents, loosens seized screws, etc. eliminates squeaking and creaking noises, cleans surfaces. Leaves behind a wafer-thin film that does not stick and does not attract dust.

400 ml		1	15 1000
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#### PTFE spray

a dry, clean, grease-free, highly-adhesive and durable dry lubricant. Repels dirt, dust and water. Resistant to corrosive chemicals and oils. Temperature-resistant from -180 °C to +250 °C.

400 ml		1	15 1002
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#### Silicone spray

An ideal lubricating, protecting, maintenance and release agent. Facilitates the drawing in of cables, protects electrical contacts from moisture, protects rubber, plastic and metal parts. Only handle when in a de-energised state.

400 ml		1	15 1004
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#### Rust remover and contact spray

Corrosion protection, cleaning, lubrication, water displacement and conservation in a single product. Removes rust, displaces water from ignition contacts and electrical lines, provides sustainable protection against corrosion and greases sliding surfaces, with good creeping properties. Prevents creep currents, sparks and short circuits.

400 ml		1	15 1040
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Design	Size mm	PU	Article no.
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### Freeze spray

For thermal troubleshooting and the quickest functional testing of electrical components, thermostats, ignition- and control units, for the cooling of motor parts and heat-sensitive components (e.g. in order to prevent overheating during soldering) cools locally to -45°C, suitable for all materials (excluding plastics), highly flammable.

400 ml		1	15 1090
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### Compressed air spray

Removes dust and loose contamination without residue, thus enabling a dry, contact-free cleaning, even in inaccessible corners and on sensitive surfaces when dealing with electronic devices, magnetic heads, cameras, clockwork mechanisms, model-making equipment, metrology, etc.

400 ml		1	15 1092
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### All-round spray

High-performance maintenance and service product for all applications in the fields of industry, trade, household and hobby, acts as corrosion protection on metal parts, as penetrating oil (rust remover, elimination of squeaking and creaking noises), as a water displacing agent, as a lubricant and as a cleaner (including oil, grease, tar and adhesive residue), leaves behind a long-lasting adhesive film that neither smears nor sticks. Ideal application in the field of electrical engineering and electronics as an anti-condensation agent on circuit boards, as a contact spray on generators and solenoid switches.

400 ml	1	15 1120
50 ml	1	15 1122

### Smoke detector test spray

Special testing gas for the quick and reliable functional testing of photoelectric (optoelectronic) smoke detectors without complex testing equipment. Tin content sufficient for approx. 150 smoke detector tests.

250 ml	1	15 1126
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### Adhesives

#### Assembly adhesive

For the quick, universal bonding of metals, various plastics, concrete, marble, natural and artificial stone, ceramics, enamel, plaster as well as MDF board, wooden board, chipboard, fibreboard and plasterboard. Thanks to its firm consistency, it is possible to bond cable ducts in areas where drilling is not possible (e.g. on walls and ceilings) without any problems whatsoever. The assembly adhesive is silicone and solvent free and can be coated / painted over ("wet on wet").

white	310 ml	1	15 1154
grey	310 ml	1	15 1156

#### Epoxy minute adhesive

Transparent 2-component adhesive with extremely strong adhesion, elastic as well as impact/tension/shock resistant, for all materials.

24 g	1	15 1210
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#### Fast metal minute adhesive

Steel-filled 2-component epoxy minute adhesive, high impact and tensile strength, temperature resistant from -60°C to +145°C.

24 g	1	15 1215
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#### CIMLOCK screw lock

Premium adhesive and sealant for the securing, fastening and sealing of screws, studs, joint and surface connections. Hardening takes place following metal contact with the air. Medium strength, for gap bridging 0.05 mm to max. 0.25 mm.

10 ml	1	15 1224
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#### Universal instant adhesive

Solvent-free and cold-setting cyanoacrylate adhesive that hardens under pressure.

20 g	1	15 1200
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Product video  
Smoke detector  
test spray



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Design	Size mm	PU	Article no.
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### Silicone

1 component adhesive and sealant, bonds to the majority of substrates, such as aluminium, steel, glass, glass fabric, ceramic, plastic, wood and many other materials.

transparent	310 ml	1	15 1260
white	310 ml	1	15 1262
grey	310 ml	1	15 1264

### Metal sprays

#### Zinc spray

Durable, quick-drying cathodic corrosion protection with long-term effect for all metal surfaces, resistant to salt, water and heat up to approx. 500 °C, suitable for the improvement of damaged zinc coatings.

	400 ml	1	15 1100
light	400 ml	1	15 1102

#### Aluminium spray

99.5% pure aluminium, long-term heat resistant protection up to +800 °C, bonds to almost all materials such as steel, nonferrous metal, wood, cardboard, plastic, ceramic, etc. resistant to the effects of weathering.

	400 ml	1	15 1110
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#### Stainless steel spray

Corrosion-resistant and effective surface coating, bonds securely to all metals, glass, wood, stone, cardboard and the majority of plastics.

	400 ml	1	15 1114
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### WET.PROTECT

Protects against wet and moisture-related short circuits, failure and corrosion, infiltrates the moisture and subsequently forms a durable protective film, maintains conductivity and increases the service life of the treated parts, can be used as a preventive measure or directly following the effects of moisture as a means of repair. Only handle when in a de-energised state.

For use in industry, trade and private household

e.basic	50 ml	1	15 1140
e.basic	200 ml	1	15 1142

For use on motorbikes, trikes and mopeds

e.motorbike	50 ml	1	15 1144
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For use on boats and yachts in saltwater environments

e.nautic	50 ml	1	15 1146
e.nautic	200 ml	1	15 1147

For use on passenger cars and heavy goods vehicles

e.car	50 ml	1	15 1148
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Note: Due to the limited shelf-life, it is not possible to return the spray and cleaner cans!



### Cartridge gun

For all standard cartridges (e.g. silicone), open skeleton structure, soft delivery stroke, extremely long service life, with pressure release and spray nozzle opener

		1	15 1270
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### Hot glue gun set

Electronic temperature control, mechanical feed device for glue sticks, approx. melting temperature 120 °C, approx. heating time 7 min., output 25 W, for 11 mm ø glue sticks. Supplied in a practical plastic case complete with 6 glue sticks.

set		1	18 1400
25 glue sticks	Length 200 mm	1	18 1401



Design	Size mm	PU	Article no.
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### Plaster and assembly cement

Supply to **wholesale trade in Germany** only in full packaging units (= 1 pallet per article) and from a minimum total delivery amount of 5 t per shipment!

### Building and electrician plaster

For the insertion of sockets, filling of holes, for improvement and installation work, dowelling, smoothing and fixing indoors. Specially designed for building and electrical work. Also ideally suitable for forming and model-making work. Approx. processing time of 15 to 20 minutes, approx. mixing ratio of 8 l water / 10 kg, approx. storage time of 6 months.

		PU = 1 pallet	
in paper sack	25 kg	24 Sacks	14 0330
	10 kg	60 Sacks	14 0332
	5 kg	120 Sacks	14 0334
in plastic bucket	10 kg	44 buckets	14 0335



### Fixing plaster

For fixing drywall, gypsum fibre and composite plasterboard boards on stable and absorbent substrates. Pre-treat smooth concrete surfaces with Betokontakt and highly absorbent substrates with primer or absorbent barrier. The processing guidelines provided by the building board manufacturer must be observed. Also suitable for the fixing indoor plaster profiles. Approx. processing time of 50 minutes, approx. material consumption of 5 kg / m<sup>2</sup>, approx. storage time of 6 months.

		PU = 1 pallet	
in paper sack	25 kg	40 Sacks	14 0338



### RED-WHITE bonding plaster

Single-layer indoor plaster complete with adhesive additives and high yield for manual processing on all common plaster substrates as well as on rough or smooth concrete surfaces indoors including domestic kitchens and bathrooms. A pre-treatment with Betokontakt is essential when dealing with smooth substrates. Smoothened, felted or can be freely processed. Processing time approx. 100 minutes (depending on processing conditions), recommended plaster thickness 8 mm, material consumption approx. 5 m<sup>2</sup> / 25 kg sack with 8 mm plaster thickness, approx. storage time of 6 months.

		PU = 1 pallet	
in paper sack	25 kg	40 Sacks	14 0342



### Assembly cement MZ 1

Quick-hardening cement for attachments, installations and repairs. For the dowelling and fixing of consoles, railings, wall hooks, doors, gates, frames, switch boxes and much more. For the sealing of water penetrations in concrete, masonry and pipes. For the improvement of stair steps, screeds, concrete and plaster. Approx. processing time of 5 - 7 minutes, approx. mixing ratio of 0.15 - 0.2 l water / 1 kg powder, approx. storage time of 12 months.

		PU = 1 pallet	
in plastic bucket	7 kg	80 buckets	14 0346
	15 kg	44 buckets	14 0348



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# WORKSHOP AND BUSINESS EQUIPMENT, CONSTRUCTION SITE SPOTLIGHTS AND LAMPS

The ideal companion for every mobile application, even outdoors. Thanks to large lithium-ion rechargeable batteries, the cordless LED construction site spotlights provide continuous light for up to five hours.



The cable drum with patented cable guide is equipped with 3 professional shockproof sockets. The sockets are securely closed with spring hinged covers.



The insulating effect of the plastic ladders up to 100,000 Volt is regularly tested and confirmed by independent testing institutes.



The reliable and robust high-performance torches excel due to the extremely bright XENON bulbs, which ensure an optimal light yield.

A wide floor beam provides additional stability and a steady hold, especially when it comes to large conductors.

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Design	Weight	PU	Article no.
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### Plastic ladders

Conductors with tested and extremely ageing-resistant fibre glass bars with an insulating effect, designed especially for professional users who work in close proximity to cables, connections or other live systems. Light and handy thanks to the special design of the GRP bars (hollow / C-profile) as well as aluminium rungs / steps, rungs and steps durably crimped twofold with the bars, rung distance 280 mm, load-bearing capacity 150 kg, anti-slip stability thanks to rubber ladder feet, including comprehensive operating, assembly and safety instructions. Conductors conform to European Standard EN 131 and electrical tests according to DIN 53 481, 53 482 and 53 483 performed by independent testing institute C.E.S.I., 5-year durability warranty.



### 3 piece rung step ladder and extension ladder

Insulating conductor up to 100,000 V. Combined three-piece rung ladder that can be used as a step ladder as well as an extension ladder (leaning ladder). When used as a step ladder, the third upper section of the ladder serves only as a safety bridge. Optimal stability thanks to the floor beam, height of the extension ladder can be adjusted from rung to rung by hand, 2 wall rollers on the upper end of the ladder, aluminium locking and opening mechanism, high-strength tension straps against the unintentional opening of the step ladder, hollow GRP bars in H-shape (90 x 32 mm or 70 x 32 with 8 rungs), aluminium rungs with a width of 27 mm and a length of 425 mm, outer width 480 mm.

Number of rungs	Step ladder height (m)	Extension ladder height (max.)	Weight kg		
3 x 8	2.30	5.75	27	1	14 6208
3 x 10	2.90	7.45	32	1	14 6210
3 x 12	3.40	8.60	38	1	14 6212
3 x 14	4.00	10.25	43	1	14 6214



### Step ladder

Insulating conductor up to 100,000 V. 80 mm wide aluminium steps grooved on both sides for safe and comfortable standing, especially when undertaking lengthy work, aluminium connecting joints, stable and collapsible metal struts on both sides preventing the unintentional opening of the step ladder, GRP bars in C-profile (82 x 30 mm), outer conductor width 480 mm.

Number of steps	Height (m)	Weight kg		
2 x 6	1.50	7.5	1	14 6506
2 x 8	2.00	10.5	1	14 6508
2 x 10	2.50	13.5	1	14 6510
2 x 12	3.00	21.6	1	14 6512



### Aluminium folding ladder

according to European Standard EN 131

In aluminium rectangular tube design 50 x 25 mm, with aluminium platform 300 x 260 mm, narrow design measuring only 140 mm (when folded up). Hooks and tool tray for the safe storage of objects.

Two aluminium hinges protect against unintentional opening, two nylon retainers act as an opening restrictor. The step distance measures 25 cm, complete with anti-slip plastic feet, max. load-bearing capacity 150 kg.

Number of steps	Height (m)	Weight kg		
7	2.19	7.8	1	14 6742
8	2.42	8.6	1	14 6744

Design	Size/Weight	PU	Article no.
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## Aluminium conductors

### Height-adjustable aluminium telescopic ladder

Versatile 3-in-1 aluminium rung ladder that can be used as a leaning ladder, an extension ladder as well as a step ladder. Both sides of the ladder can be extended from rung to rung separately from one another, as a result, this ladder can also be used on inclined surfaces as well as on stairs. Light, handy, easy to use and is professionally equipped and finished: maximum load-bearing capacity for 6 to 9 rungs: 150 kg, for 10 and 12 rungs: 120 kg, optimum stability thanks to rubber feet, strong automatic aluminium joints, absolutely secure and convenient locking of the conductor thanks to 4 locking elements complete with spring bolts, snap-in hooks and covers manufactured from unbreakable plastic, with practical plastic tool holder measuring 310 x 260 mm, continuously grooved, crimped aluminium rungs, rung width of 27 mm, rung distance of 280 mm, according to DIN EN 131.

Number of steps	Height min. (m)	Step ladder height (m)	Height max. (m)	Weight kg	PU	Article no.
2 x 6	0.97	1.46	3.00	8.5	1	14 6706
2 x 7	1.25	1.71	3.55	9.6	1	14 6707
2 x 8	1.25	1.96	4.10	11.0	1	14 6708
2 x 10	1.53	2.51	5.22	13.0	1	14 6710
2 x 12	1.81	3.10	6.35	15.0	1	14 6712



### Aluminium telescopic ladder X-TEND

From 0.8 to 3.8 metres in a few seconds. X-TEND is an innovative telescopic ladder complying with European Standard EN 131 for professional use in the fields of trade and industry. By simply pulling out the ladder bars from rung to rung, the height of the ladder can be varied as desired and can be fixed in the desired position by means of the self-locking safety buttons. After use, the conductor retracts automatically by pressing the locking buttons. Extremely compact in the transport state (only 80 cm high), can be extended to a maximum height of 3.80 metres. Manufactured from abrasion-resistant anodised aluminium. 13 rungs with a width of 40 mm and an anti-slip profile for comfortable and safe working, rung distance of 30 cm, lower ladder beam diameter of 8 cm, 49 cm wide floor beam complete with anti-slip plastic feet, max. load-bearing capacity of 150 kg, weight only 11.5 kg.

	800 mm	1	14 6720
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### Aluminium telescopic ladder X-TEND PLUS

The further development of the X-TEND telescopic ladder sets new standards for the user. Manufactured according to European Standard EN 131. Can be used as a leaning ladder with a height of 2 metres and as a step ladder with a height of 1.70 metres. The two last rungs (0.60 metres) additionally serve as a safety function for leaning or securing. Also ideal for use on stairs. Thanks to the telescopic function, the conductor can be stored in the most confined of spaces and increases carrying comfort. 5 rungs with a width of 40 mm and an anti-slip profile for comfortable and safe working, rung distance of 30 cm, max. load-bearing capacity of 150 kg, weight only 19.3 kg.

	750 mm	1	14 6722
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### Folding working platform

Manufactured from lightweight metal. Can be folded in one movement, stable aluminium rectangular pipe beams, upper standing area (platform) manufactured from grooved aluminium plate, wide platform (300 x 400 mm) and 80 mm wide grooved steps for maximum step safety, anti-slip PVC ladder feet, doubly secured against unintentional folding by snap-in platform and safety struts, load-bearing capacity of 150 kg, step distance of 250 mm, ladder width when folded together only 150 mm, complies with European Standard EN 131.

Number of steps	Height (m)	Width (m)	Weight kg	PU	Article no.
3	0.69	0.54	4.6	1	14 6800

## Conductor accessories

### Safety equipment for masts

Device to protect against the unintentional slipping of leaning ladders on masts (lighting posts and power posts, flag poles, trees and similar objects), universal fastening onto all rung ladders, with 2 plastic sliding surfaces and strong safety chain. Max. diameter 280 mm

		1	14 6810
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Design	Size	PU	Article no.
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### Cable drum

With double tube frame (powder-coated), with patented cable guidance and 3 professional shockproof sockets 230 V 16A 3-pin with spring hinged covers and thermo switches, drum body made from special material with properties similar to hard rubber and ventilation slits for improved heat dissipation. H07RN-F 3G1.5 supply line, IP 44 protection class.

25 m	285 x 370 x 220	1	14 6900
40 m	285 x 370 x 220	1	14 6902

### Cable drum

With double tube frame (powder-coated), with patented cable guidance and 2 sockets 230 V 16A 3-pin and 1 CEE-socket 400 V 16A 5-pin with spring hinged covers and thermo switches, drum body made from special material with properties similar to hard rubber and ventilation slits for improved heat dissipation. H07RN-F 5G1.5 supply line, IP 44 protection class.

25 m	285 x 370 x 220	1	14 6904
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### Hand cleaner

With biodegradable abrasive agent (walnut shell flour), good cleaning power when dealing with medium soiling caused by oils, greases, carbon black, graphite, metal dusts, lubricants for example, good skin tolerance, solvent and soap-free, scented.

Tube	250 ml	1	15 1626
Soft bottle dispenser	2000 ml	1	15 1624



### Hand cleaner dispenser

For holding the 2-litre hand cleaner soft bottles, in proven quality and function, simple handling and filling, also suitable for use in shower rooms, impact-resistant plastic housing for wall mounting, with drip-proof dosage mechanism.

white	135 x 135 x 320 mm	1	15 1630
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### Moist cleaning wipes

Ideal if areas need to be cleaned with only a small amount of liquid in order to prevent danger from occurring to sensitive technology, for hands, tools and machines, removes greases, lubricants, adhesives, oil, tar, asphalt, ink, carbon, graphite and similar soiling, moist viscous cloths with textile characteristic, soaked in a liquid detergent, quick-drying without residue, particularly skin-friendly, pleasant fresh fragrance, supplied in a handy, re-sealable dispenser bucket with 72 wipes.

	250 x 250 mm	1 bucket	14 5018
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### Skin care cream

Fast-absorbing cream for the hands and face, especially for the care of skin stressed by work and the environment, suitable for all skin types, moderately greasy, silicone-free, unscented.

Tube	100 ml	1	15 1628
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### Pickaxe

according to DIN 20 109, with oval eye, painted black, with wooden handle

3 kg		1	13 1424
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### Sand shovel (Frankfurt shape)

according to DIN 20 121, round-pointed shape, oil-hardened, with handle sleeve, with beech handle

	300 x 270 mm	1	13 1428
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### Sand shovel (Holstein shape)

according to DIN 20 120, square shape, oil-hardened, with handle sleeve, painted, with beech handle

	250 x 270 mm	1	13 1430
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Design	Size	PU	Article no.
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### Construction bucket

With litre scale, manufactured from premium polyethylene regenerate mixture, recyclable, reinforced bottom, galvanised 5 mm handle.

black	12 litres	1	13 1435
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### Street broom

For coarse and stuck dirt - including moist dirt - on streets and factory surfaces, particularly durable plastic fibres (Elaston), flat wood with handle hole, supplied without handle.

red	400 mm	1	14 3024
including wooden handle	1.4 m	1	14 3028



### Hall broom

For light and dusty dirt on dry floors, maximum quality made from real horsehair, saddle wood with handle hole, supplied without handle.

black	600 mm	1	14 3026
including wooden handle	1.4 m	1	14 3028



### Hand brush

Best quality made from horsehair, with black bristles, made from wood

	300 mm	1	14 3030
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### Dustpan

Robust design manufactured from painted metal.

		1	14 3032
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### All-purpose waste bag

Approx. content of 120 L, made from recyclable polyethylene regenerate film (PE-LD), problem-free incineration at landfill sites thanks to its groundwater-neutral behaviour and no release of harmful gases or substances, film thickness of 80 µm, particularly stable and tear-proof, water-proof, 25 bags per roll.

blue	700 x 1100 mm	1 roll	14 5001
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### Cover sheets

Clear-transparent, made from recyclable polyethylene regenerate film, dimensions 4 m x 5 m = 20 m²

made from PE-HD	Film thickness 10 µm	1	14 5004
made from PE-LD	Film thickness 15 µm	1	14 5006



### Workshop trolley towel roll

White, 2-layer, individually packed, with feeder and carrying handle, wet strength, absorbent, low linting tear off 500 each 19.5 cm

Dimensions 97.5 m x 21.7 cm		1	14 5020
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### Workshop towel roll

Blue, 3-layer, individually packed, high-volume and very absorptive, wet strength, absorbent, low linting tear off 500 each 36 cm

Dimensions 190 m x 36 cm		1	14 5022
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### Floor stand with waste bag holder

Cleaning cloth roll holder for workshop towel rolls up to 42 cm roll width.

		1	14 5024
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Design	Size	PU	Article no.
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### Non-slip non-woven cover

Absorbent, non-woven material coated with non-slip PE membrane for the protection of sensitive surfaces and smooth marble, wood (parquet, boards), plastic, laminate, carpet and similar types of floors, prevents the seeping through of paints, dilutions, oil, adhesives, plaster, etc., easy to cut to size and lay, re-usable.

	1 m x 25 m	1 roll	14 5007
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### Standard non-woven cover

Absorbent non-woven cotton 180 g/m<sup>2</sup> 1 m x 25 m, non-woven material coated with PE non-slip membrane for the protection of sensitive surfaces and smooth floors, easy to cut to size and lay, re-usable.

	1 m x 25 m	1 roll	14 5010
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### Overshoes

Ideal for all areas of application, for the prevention of dirt and damage caused by fitters / work shoes, permeable to air and water vapour, anti-static, abrasion-resistant, lint-free, colour: white

flat		1	14 0235
flat with outsole		1	14 0236

Unsterile, can be worn on both feet, rectangular shape, elasticated opening, hammered PE film (anti-slip effect), free from formaldehyde and chlorine, colour: blue

flat		100	14 0229
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### Overall white/orange

Disposable overall with pleasant light wearing comfort, protects against liquid mist, minor liquid splashes and airborne solid particles, good visibility due to clearly contrasting orange seams, with zip, hood, arms and legs are closed with an elastic band, complies with Cat. III / Type 4B+5B +6B, antistatic, virus protection test according to EU Standard 14126

L		1	14 5026
XL		1	14 5028
XXL		1	14 5030

### Overall white

Disposable overall with pleasant light wearing comfort, protects against liquid mist, minor liquid splashes and airborne solid particles, with zip, elastic inserts on hood, waist, wrists and ankles, CE-certified. Type 5B+6B, Cat. III, EN14126 antistatic and breathable, lint-free and abrasion proof.

L		1	14 5032
XL		1	14 5034
XXL		1	14 5036

### Bump cap - FIRSTBASE

according to EN 812

Removable ABS plastic shells as bump and head protection minimise the impact of unintended head bumps. Made of microfibre (40° machine washable), head size can be adjusted individually, high wearing comfort, weight: 200 g.

Design with normal visor (length: 70 mm)

Navy blue		1	14 0190
Royal blue		1	14 0192
Black		1	14 0194
Grey		1	14 0196

Design with shortened visor (length: 50 mm)

Navy blue		1	14 0191
Royal blue		1	14 0193
Black		1	14 0195
Grey		1	14 0197





Design	Size mm	PU	Article no.
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## Professional torches UNDERWATER KINETICS

Very reliable and robust high-performance torches, with extremely bright XENON bulbs in a pre-focused quality reflector for optimal light yield, with rotating front switch, tested according to the most recent EC directive, ATEX 100a Eex, and approved for use in potentially explosive areas of zones 1 and 2, light and non-slip ABS housing, 100% dust- and water-tight, corrosion-resistant, not electrically conductive.

Additional technical data:

Length x diameter	Weight including batteries	Burning duration	Output / Range
120 mm x 17 mm	38 g	2 to 3 h	1 Watt / 50 m
120 mm x 17 mm	38 g	2 to 3 h	1 Watt / 50 m
157 mm x 40 mm	148 g	4 to 5 h	2 Watt / 120 m
218 mm x 50 mm	360 g	4 to 6 h	3 Watt / 140 m

batteries included

MINI inspection light, black	1	11 1510
MINI inspection light, yellow	1	11 1513
Flexible fibre optic attachment for extremely precise work	1	11 1512

MIDI torch and helmet light, neon yellow, with additional rear switch	1	11 1515
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Special helmet mounting kit, universal	1	11 1516
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## Headlamp UK 3AAA LED Vizion

Insert can be removed and used individually. Via a rotating filter, the light can be used in three different modes: focused, diffuse and red. The duration of the light, at 150 hours, is exceptionally long. The large switch can be perfectly operated even with thick gloves. The continuously adjustable headband is very soft and can be set for a precise fit. The angle of the lamp can be cleanly adjusted via a large button.

Additional technical data: 100% dust and water tight, output: 1 Watt, weight 110 g, including batteries

black	74 x 37 x 46 mm	1	11 1525
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## MIDI-LED torch and helmet light

Greater light output due to an improved high-performance LED and improved explosion protection class (II 2G EX e ib IIC T4/II 2D Ex ib 21 T 98°C) confirm the torch's claim to be the standard in its output class. With rotating front switch and rear switch. Additional technical data: output: 3 watts, light intensity: 80 lumens, light duration: 10.5 h, weight: 159 g, batteries included

Neon yellow	172 x 40 x 37 mm	1	11 1517
Special helmet mounting kit, universal		1	11 1516

## Mini LED lamp

with holding clip and magnet. Patented mini torch for bright, point illumination, pivots in all directions, with three attachment or standing options:

- Foot for standing on horizontal surfaces
- Magnetic foot for attaching to metal objects
- Spring clip for attaching to clothing, helmet, visor, metal sheets, tool bags, etc.

Long light duration thanks to LED technology, delivery includes 3 LR44 button cell batteries.

		1	11 1506
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## LED pocket torches

High-quality LEDs with point illumination, 1 (to 1.2) watt output, very robust housing made of solid aluminium, splash protected (protection class IP 67), can be expanded with extensive accessories, maximum light yield with low heat development at the same time, rechargeable battery operation for long light duration and service life. Rotate to turn on and off. With all functions described above, but with an additional rotating function for focusing the light, IP 64, with soft grip, battery operated.

Housing ø 28 mm	165	1	11 1534
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Design	Size mm	PU	Article no.
<b>LED inspection lamps</b> High-quality LEDs with selective spotlighting, 1 watt output, very robust housing made of solid aluminium, splash protected (protection class IP 67), can be expanded with extensive accessories, maximum light yield with low heat development at the same time, battery operation for long light duration and service life. Rotate to turn on and off. Design with black rubber shaft, 1 x mirror $\varnothing$ 30 mm, 1 x mirror 65 x 43 mm, magnetic head, battery operated.	Handle $\varnothing$ 22 mm, head $\varnothing$ 15 mm	Total length 630 mm	1 11 1540

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Design	Size mm	PU	Article no.
<b>LED workshop lamps</b> High-quality LEDs with patented focusing system for adjustable radiation angle, 6 watt output, very robust housing made of solid aluminium, splash-proof (protection class IP 64), can be expanded with extensive accessories, maximum light yield with low heat development at the same time, mains operation for long light duration and service life. With black rubber flex shaft, magnetic base, power supply plug.	Head $\varnothing$ 64 mm	Flex length 500 mm	1 11 1562

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### LED work lamp

Ideal for use in the home, workshop, garage, construction site, camping, boat etc.

This innovative LED work lamp replaces the common neon tube lights thanks to numerous advantages.

With 60 (tube light) plus 9 (torch light) white LEDs, the lamp wins acclaim due to its high yield of bright, even and focused light, simple operation with just one push button switch, unlimited freedom of movement thanks to cordless operation with integrated rechargeable battery (7.2 V NiMH), can be charged with 230 Volt/50 Hz battery charger and 12-volt cigarette lighter (charging time approx. 1.5 hours), very low power consumption for a long light duration (approx. 5 to 8 hours, depending on mode), shock-resistant, oil, splash and dust-proof housing (IP 54) made of polycarbonate with a non-slip rubber handle, handy and light: length 410 mm,  $\varnothing$  41 mm, weight 470 g.

LED work lamp	1	11 1522
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### LED PEN lamp

Can be switched from surface illumination to point illumination (torch), wide area illumination in pocket format, housing made from ABS material, rechargeable Li-Ion battery, with attachment clip for shirt pocket and/or trouser pockets, 2 magnets ensure secure hold to metallic objects, including USB charging cable.

180 x 20 x 35 mm	1	11 1524
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### LED construction site spotlight 10 W

For every mobile application, also outdoors (protection class: IP 65) due to large lithium ion batteries (7.4 V/ 2,260 mAh). Battery operating time: 4 hours, battery charging time: 3 hours, luminous flux: 700 Lumen, luminous colour: 5,500 – 6,000 K, radiation angle: 120°. State-of-the-art LED technology enables precise illumination in a horizontal and vertical orientation, overcharge and discharge protection, solid die cast aluminium housing, toughened glass.

10 W	148 x 167 x 240 mm	1	11 1580
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### LED construction site spotlight 20 W

For every mobile application, also outdoors (protection class: IP 65) due to large lithium ion batteries (7.4 V/6,600 mAh). Battery operating time: 5 hours, battery charging time: 5 hours, luminous flux: 1,300 Lumen, luminous colour: 5,500 K – 6,000 K, radiation angle: 120°. State-of-the-art LED technology enables precise illumination in a horizontal and vertical orientation, overcharge and discharge protection, solid die cast aluminium housing, toughened glass.

20 W	215 x 185 x 268 mm	1	11 1586
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Design	Size mm	PU	Article no.
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### LED construction site spotlight 30 W

For every mobile application, also outdoors (protection class: IP 65) due to large lithium-ion batteries (14.8 V/6,600 mAh). Battery operating time: 3 hours, battery charging time: 5 hours, luminous flux: 2,000 Lumen, luminous colour: 5,500 K – 6,000 K, radiation angle: 120°. State-of-the-art LED technology enables precise illumination in a horizontal and vertical orientation, overcharge and discharge protection, solid die cast aluminium housing, toughened glass.

30 W	225 x 184 x 305 mm	1	11 1588
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### LED construction site spotlight 50 W

For every mobile application, also outdoors (protection class: IP 65) due to large lithium-ion batteries (14.8 V/6,600 mAh). Battery operating time: 3 hours, battery charging time: 5 hours, luminous flux: 2,600 Lumen, luminous colour: 5,500 K – 6,000 K, radiation angle: 120°. State-of-the-art LED technology enables precise illumination in a horizontal and vertical orientation, overcharge and discharge protection, solid die cast aluminium housing, toughened glass.

50 W	288 x 188 x 325 mm	1	11 1590
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### LED construction site spotlight 20 W with spare rechargeable battery

For every mobile application, also outdoors (protection class: IP 65) due to large lithium ion batteries (7.4 V/6,600 mAh). Battery operating time: 3 hours, battery charging time: 5 hours, luminous flux: 1,300 Lumen, luminous colour: 5,500 K – 6,000 K, radiation angle: 120°. Including spare rechargeable battery, CIMCO article no. 11 1593. Special feature: the USB port with lockable cover can be used to charge mobile devices such as smartphones or tablets. State-of-the-art LED technology enables precise illumination in a horizontal and vertical orientation, overcharge and discharge protection, solid die cast aluminium housing, toughened glass.

20 W	182 x 170 x 256 mm	1	11 1592
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### Spare rechargeable battery for 11 1592

with USB port for use as a power bank. Lithium-ion batteries (7.4 V/6,600 mAh), suitable for LED construction site spotlight CIMCO article no. 11 1592.

		1	11 1593
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# CRIMPING TOOLS

FLEXI-CRIMP PRO front crimping pliers:  
Square crimping, ideal fit for the terminal  
technology.



High-precision crimp profile avoids  
deadlocking of crimped ferrules.



Large scope of application from 0.5 to  
16 mm<sup>2</sup>. The cross section is set in a flash  
thanks to the switch lever.



So that with the crimping of wire end  
ferrules, the technical requirements are  
fulfilled!



The innovative spring system promises  
consistent crimping quality with proven,  
extended tool durability.

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Design	Size mm	PU	Article no.
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Product video  
click 'n' crimp

Crimping pliers with interchangeable crimping profile inserts, fixed by a catch holder in the tool body, thus offering profile change in seconds without the aid of any other tools. Two further crimping profiles not currently in use are held captive in the two integral magazine holders of the legs of the pliers. Tool body is made of strong, specially tempered, hardened sheet steel, with leverage transfer for reduced use of manual force, adjustable ratchet mechanism with automatic release for standard-compliant crimping pressure, ergonomic 2-component handle sleeves, completely equipped with hardened precision crimping profile inserts. Weight including 3 crimping profile inserts, only 690 g.



**click 'n' crimp sets**

click 'n' crimp is available in standard sets, consisting of the crimping pliers body and the three most frequently used crimping profile inserts for a particular application:

**click 'n' crimp ELECTRICAL ENGINEERING**

with crimping profile inserts CIMCO article no. 10 6010 (for insulated cable lugs from 0.5 mm<sup>2</sup> to 6 mm<sup>2</sup>), CIMCO article no. 10 6011 (for non-insulated cable lugs 0.5 mm<sup>2</sup> to 10 mm<sup>2</sup>) and CIMCO article no. 10 6012 (for wire end ferrules from 0.5 mm<sup>2</sup> to 10 mm<sup>2</sup>)

		1	10 6000
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**click 'n' crimp AUTOMOTIVE**

with crimping profile inserts CIMCO article no. 10 6010 (for insulated cable lugs from 0.5 mm<sup>2</sup> to 6 mm<sup>2</sup>), CIMCO article no. 10 6011 (for non-insulated cable lugs 0.5 mm<sup>2</sup> to 10 mm<sup>2</sup>) and CIMCO article no. 10 6013 (for blade receptacles and blade terminals with open crimping ears from 0.5 mm<sup>2</sup> to 6 mm<sup>2</sup>)

		1	10 6002
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**click 'n' crimp DATA NETWORK TECHNOLOGY**

with crimping profile inserts CIMCO article no. 10 6015 (for BNC/TNC coaxial plug connectors), CIMCO article no. 10 6017 (for unshielded 8-pole modular plugs) and CIMCO article no. 10 6019 (for shielded 8-pole modular plugs, CIMCO design and similar)

		1	10 6009
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**click 'n' crimp SOLAR TECHNOLOGY**

with crimping profile inserts CIMCO article no. 10 6010 (for insulated cable lugs from 0.5 mm<sup>2</sup> to 6 mm<sup>2</sup>), CIMCO article no. 10 6027 (for solar plug connectors type MC 3 from 2.5 mm<sup>2</sup> to 6 mm<sup>2</sup>) and CIMCO article no. 10 6028 (for solar plug connectors type MC 4 from 2.5 mm<sup>2</sup> to 6 mm<sup>2</sup>)

		1	10 6052
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**click 'n' crimp crimping profile inserts**

click 'n' crimp can be assembled according to the user's individual requirements: click 'n' crimp crimping pliers bodies without crimping profile inserts

		1	10 6005
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click 'n' crimp crimping profile inserts (in pairs, consisting of upper and lower profile jaw) for insulated cable lugs red – blue – yellow from 0.5 mm<sup>2</sup> to 6 mm<sup>2</sup> resp. AWG 22 to AWG 10, oval crimp (W)

	IS	1 Pair	10 6010
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for non-insulated cable lugs from 0.5 mm<sup>2</sup> to 10 mm<sup>2</sup> or AWG 22 to AWG 8, indent crimp (N)

	Q R	1 Pair	10 6011
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for insulated and non-insulated wire end ferrules from 0.5 mm<sup>2</sup> to 10 mm<sup>2</sup> respectively AWG 22 to AWG 8, trapezoid crimp (B)

	ZAE AE	1 Pair	10 6012
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for insulated and non-insulated wire end ferrules from 16 mm<sup>2</sup> to 35 mm<sup>2</sup> respectively AWG 5 to AWG 2, trapezoid-indent crimp (D2), optimised crimp shape; particularly suitable for thinned-out, finely-stranded conductors according to IEC 228

	ZAE AE	1 Pair	10 6014
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for insulated and non-insulated wire end ferrules 25 mm<sup>2</sup> and 50 mm<sup>2</sup>, trapezoid-indent crimp (D1), optimised crimp shape; particularly suitable for thinned-out, finely-stranded conductors according to IEC 228

	ZAE AE	1 Pair	10 6071
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Design	Size mm	PU	Article no.
for non-insulated blade terminals and blade receptacles with open crimping ears from 0.5 mm <sup>2</sup> to 6 mm <sup>2</sup> resp. AWG 22 to AWG 10, roll crimp (C)		<b>FL</b>	1 Pair 10 6013
for BNC/TNC coaxial plug connectors RG 58, RG 59, RG 62 AU, RG 174, hexagonal crimping (A) (crimping dimensions: 1.73 mm / 0.068" – 4.75 mm / 0.187" – 5.41 mm / 0.213" – 6.48 mm / 0.255")			1 Pair 10 6015
for unshielded 6-pin modular plugs (Western plugs) RJ 11 (6P4C) and RJ 12 (6P6C), SS design, AMP (M4)			1 Pair 10 6016
for unshielded 8-pin modular plugs (Western plugs) RJ 45 (8P8C), SS design, AMP (M5)			1 Pair 10 6017
for shielded 8-pin modular plugs (Western plugs) RJ 45 (8P8C) CAT 5 etc., CIMCO design (M2)			1 Pair 10 6019
for shielded 8-pin modular plugs (Western plugs) RJ 45 (8P8C) CAT 5 etc., HIROSE TM 11/21 design (M1)			1 Pair 10 6018
for solar plug connectors type MC 3 from 2.5 mm <sup>2</sup> to 6 mm <sup>2</sup> (C3)			1 Pair 10 6027
for solar plug connectors type MC 4 from 2.5 mm <sup>2</sup> to 6 mm <sup>2</sup> (C4)			1 Pair 10 6028



### One-hand system crimping pliers

Compound leverage crimping pliers with ratchet mechanism and pressure point release, with a variety of interchangeable crimping profile inserts fixed by two fastening screws. The ergonomically shaped crimping pliers are easy and convenient to use. The lever action of the handle triggers the integrated automatic ratchet mechanism. Adjustable automatic release guarantees optimum crimping results. All inserts are made of carbon tool steel. The 17 different profiles are suitable for almost all kinds of cable connector crimping.

PROFI-CRIMP tool body		1	10 6112
Crimping profile inserts for: insulated cable lugs according to DIN: 0.5 to 1 (red), 1.5 to 2.5 (blue), 4 to 6 mm <sup>2</sup> (yellow), AWG: 18/20 - 14/16 - 10/12, with oval crimp			

Crimping pliers complete with insert	230	1	10 6144
Crimping profile inserts loose asymmetric, standard crimping	<b>IS</b>	1 Pair	10 2008
Crimping pliers complete with insert		1	10 1916
Crimping profile inserts loose symmetric, oval crimp	<b>IS</b>	1 Pair	10 2004

non-insulated cable lugs according to DIN: 1.5 to 10 mm<sup>2</sup>, AWG: 20 to 8

Crimping pliers complete with insert	230	1	10 6134
Crimping profile inserts loose, indent crimp	<b>Q R</b>	1 Pair	10 2003

non-insulated plug connectors with open crimping ears according to DIN: 0.5 to 1, 1.5 to 2.5, 4 to 6 mm<sup>2</sup>, AWG: 18/20 - 14/16 - 10/12

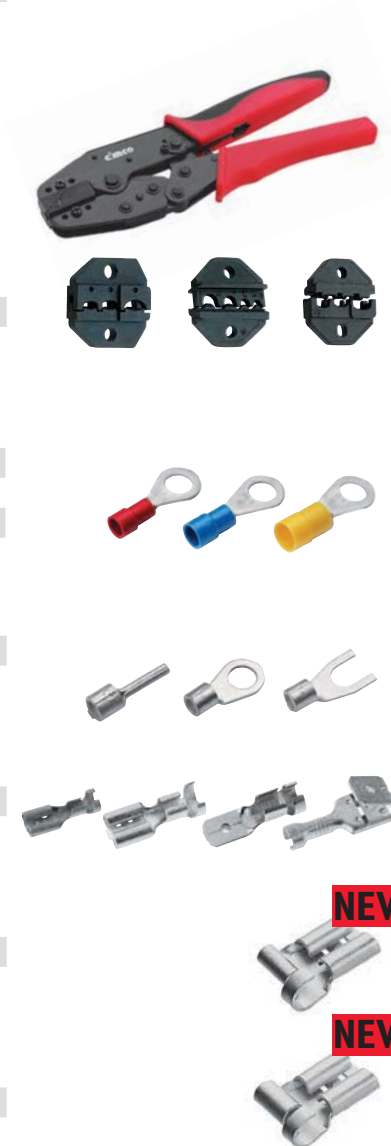
Crimping pliers complete with insert	230	1	10 6136
Crimping profile inserts loose, roll crimp	<b>FL</b>	1 Pair	10 2002

insulated plug connectors with open crimping ears with lateral conductor connection: 0.5 to 1, 1.5 to 2.5 AWG: 18/22 - 14/16

Crimping pliers complete with insert	220	1	10 6128
Crimping profile inserts loose, roll crimp		1 Pair	10 2016

non-insulated plug connectors with open crimping ears with lateral conductor connection: 0.5 to 1, 1.5 to 2.5 AWG: 18/22 - 14/16

Crimping pliers complete with insert	220	1	10 6130
Crimping profile inserts loose, roll crimp		1 Pair	10 2017



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**NEW**

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	Design	Size mm	PU	Article no.	
1					
2					
3		insulated and non-insulated wire end ferrules according to DIN: 0.5 - 0.75 - 1.5 - 2.5 - 4 - 6 - 10 - 16 mm <sup>2</sup> , AWG: 22 - 20 - 16 - 14 - 12 - 10 - 8 - 6	230	1	10 6120
4					
5		insulated and non-insulated wire end ferrules according to DIN: 16 - 25 - 35 mm <sup>2</sup> optimised crimp shape; particularly suitable for thinned-out, finely-stranded conductors according to IEC 228	230	1	10 6140
6					
7		insulated and non-insulated wire end ferrules according to DIN: 25 and 50 mm <sup>2</sup> optimised crimp shape; particularly suitable for thinned-out, finely-stranded conductors according to IEC 228	230	1	10 6142
8		shielded modular plug, 8-pin, RJ 45 CAT.5 (8P8C), CIMCO design (F236Q)	230	1	10 6201
9					
10		shielded modular plug, 8-pin, RJ 45 CAT.5 (8P8C), HIROSE design (2Q1)	230	1	10 6202
11		shielded modular plug, 8-pin, RJ 45 CAT.5/6 (8P8C), Stewart Stamping design (2S)	230	1	10 6203
12					
13		BNC/TNC coaxial plug connectors RG 55, RG 58, RG 59, RG 62, RG 174, RG 8279, FO (3A4)	230	1	10 6138
14					
15					
16					
17					
18		Loose crimping profile inserts for unshielded modular plugs (Western plugs) (28P)	230	1	10 6158
19					
20		Automatic crimping pliers for turned industrial plug-in contacts (e.g. Harting, ILME, Phoenix, Amphenol, Walther, HTS, Contact, Weidmüller)	230	1	10 6156
21					
22					
23					
24		Solder, screw and stripping-free connection and automatic trimming of conductors with 0.5 to 0.8 mm ø (AWG 24 to 20) to insulation displacement termination in connection boxes and patch panels, professional design with pressure sensor for optimum pressing force, 2 pull-out hooks ECONOMY model	230	1	10 6213
25					
26		KRONE model, pressure sensor and trimming function can be switched off	230	1	10 6215

**Automatic crimping pliers for turned industrial plug-in contacts**

Automatic crimping pliers for turned industrial plug-in contacts (e.g. Harting, ILME, Phoenix, Amphenol, Walther, HTS, Contact, Weidmüller)

2.5 mm <sup>2</sup>	1	10 6122
0.35 – 1.5 mm <sup>2</sup>	1	10 6124
0.14 - 0.5 mm <sup>2</sup>	1	10 6126

**Insertion tools for LSA-Plus terminals**

Solder, screw and stripping-free connection and automatic trimming of conductors with 0.5 to 0.8 mm ø (AWG 24 to 20) to insulation displacement termination in connection boxes and patch panels, professional design with pressure sensor for optimum pressing force, 2 pull-out hooks  
ECONOMY model

	1	11 8017
KRONE model, pressure sensor and trimming function can be switched off		
	1	11 8018

Design	Size mm	PU	Article no.
<b>Crimping pliers for BNC/TNC coaxial plug connectors</b>			
Ratchet mechanism with compound leverage, with adjustable locking (pressure point release), for data plug connectors for RG 58/RG 59/RG 62/RG 174, crimp sizes: 1.72 mm (0.068") - 4.75 mm (0.187") - 5.41 mm (0.213") - 6.48 mm (0.255")			
	220	1	10 6138



<b>ECONOMY crimping pliers for Western plugs</b>			
for unshielded modular plugs, with trimming and stripping tools, interchangeable knives			
for Western plugs 4-pin RJ 10 (4P4C) and RJ 14 (4P2C)	1	10 6116	
for Western plugs 6-pin RJ 11 (6P4C) and RJ 12 (6P6C)	1	10 6117	
for Western plugs 8-pin RJ 45 (8P8C)	1	10 6118	



### Crimping pliers for unshielded modular plugs (Western plugs) 4-, 6- and 8-pin

Ratchet mechanism with adjustable locking, trimming and stripping tools, 2-component handles, for RJ 10 (4P2C and 4P4C), RJ 11 (6P4C), RJ 12 (6P6C), RJ 45 (8P8C)

	1	10 6200	
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<b>Crimping pliers for shielded modular plugs, 8-pin</b>			
Ratchet mechanism with adjustable locking, conductors and shielding are crimped in a single operation, for RJ 45 CAT.5 (8P8C)			
for CIMCO design connectors	220	1	10 6201
for HIROSE design connectors	220	1	10 6202
for STEWART STAMPING design connectors	220	1	10 6203



<b>Crimping pliers for FO (fibre-optic) connectors</b>			
with automatic ratchet mechanism and adjustable locking			
Round crimp, crimp sizes: 1.07 mm (0.042") - 1.72 mm (0.068") - 3.38 mm (0.133") - 4.11 mm (0.162") - 4.95 mm (0.195"), e.g. for SC-/AMP-SMA-/FC-/PC connectors			
	1	10 6156	



Hexagonal crimping, crimp sizes: 1.07 mm (0.042") - 1.72 mm (0.068") - 3.84 mm (0.151") - 4.52 mm (0.178") - 5.41 mm (0.213"), e.g. for 3M-ST/AT&T ST/SMA connectors			
	1	10 6158	

### Crimping pliers set DATA TECHNOLOGY/TELECOMMUNICATIONS

Crimping pliers with 7 interchangeable crimping profile inserts for almost all copper- and fibreglass-based cabling, neatly arranged in a handy, impact-resistant plastic case. Contents:

Crimping tool body with automatic ratchet mechanism and adjustable locking device

One crimping profile insert each for:

- unshielded modular plugs (Western plugs) 8-pin RJ 45 (8P8C), (CIMCO article no. 10 6212)
- shielded modular plugs 8-pin RJ 45 CAT.5/6 (8P8C), HIROSE design (CIMCO article no. 10 6215)
- shielded modular plugs 8-pin RJ 45 CAT.5 (8P8C), STEWART STAMPING design (CIMCO article no. 10 6216)
- unshielded modular plugs (Western plugs) 6-pin RJ 11 (6P4C), RJ 12 (6P6C) (CIMCO article no. 10 6211)
- BNC/TNC coaxial plug connectors RG 55, RG 58, RG 59, RG 62, RG 174, RG 8279, FO (CIMCO article no. 10 6218)
- FO connector with round crimping, e.g. for SC-/AMP-SMA-/FC-/PC connectors (CIMCO article no. 10 6213)
- FO connectors with hexagonal crimping, e.g. for 3M-ST-/AT&T-ST-/Amphenol-SMA connectors (CIMCO article no. 10 6214)
- Screwdriver with 1000 V protective insulation for Phillips crosshead screws, size PH 1 (CIMCO article no. 11 7731)

	1	10 6210	
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Design	for cross section mm <sup>2</sup>	Size mm	PU	Article no.
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### Tool set F-compression connectors

for creating watertight and therefore weatherproof coax connections, in particular for cable and satellite TV equipment. For connections with high mechanical stress and excellent shielding.

Set consisting of:

- Professional crimping tool for compression connectors (CIMCO article no. 10 6152)  
Specially for RG 59 and RG 6 coaxial cables. Thanks to the easily adjustable length stop, suitable for crimping compression connectors of various lengths and types (F, BNC and RCA connectors). Also suitable for angle connectors and keystones. Very little manual effort required for crimping. With ergonomic two-component handle sleeves, length 195 mm
- Coaxial cable stripping tool (CIMCO article no. 12 0098)  
For quick and precise sheath stripping and insulation stripping of coaxial cables (RG 58, RG 59, RG 62, RG 6, RG 9 and others) in a single operation. With three interchangeable knives; depth of cut and distance between cuts are adjustable.
- 20x F-compression connectors (CIMCO article no. 18 2980)  
Double protected against moisture penetration through external sleeve and internal O-ring, outstanding shielding and mechanical strength of the cable connection. Gold-plated, for RG 6 coaxial cables



Tool set F-compression connectors	1	10 6154
Crimping tool for compression connectors	1	10 6152
Coaxial cable stripping tool	1	12 0098
F-compression connectors (price unit per 100)	1	18 2980

### Hand crimping pliers for insulated and non-insulated wire end ferrules and twin wire end ferrules

Trapezoid crimp	0.25 - 2.5	AE	150	1	10 1911
Indent crimp	0.5 - 2.5	AE	150	1	10 1906
Indent crimp	1.5 - 6	AE	150	1	10 1907
Indent crimp	0.5 - 16	AE	230	1	10 1904
Indent crimp	10.0 - 35	AE	230	1	10 1905



### Crimping pliers for wire end ferrules, compound leverage, with ratchet mechanism and adjustable locking (pressure point release)

#### Crimping pliers

Trapezoid crimp	0.5 - 16	ZAE AE	226	1	10 6120
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### FLEXI-CRIMP front crimping pliers

With web or lamella die that self-adjusts to the conductor cross-section, square crimp with 16 mm crimp length, rounded inner edges so as not to cut into thin-walled wire end ferrules, front crimping, i.e. the connectors and conductors are inserted into the tool from the front, making it suitable for work in hard to access places and confined spaces, with innovative precision steel spring component for constant crimping quality even at extremely high or low temperatures, adjustable via cam, unlockable forced locking, ergonomically shaped two-component handles with soft padding.

Square crimp	0.14 - 6	ZAE AE	210	1	10 1940
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### Front crimping pliers FLEXI-CRIMP PRO

Crimping pliers for wire end ferrules up to 16 mm<sup>2</sup> with reliable technology as with FLEXI-CRIMP, CIMCO article no. 10 1940, crimping ranges set with selector switch 0.5 to 6 mm<sup>2</sup> and 6 to 16 mm<sup>2</sup>. Also for twin wire end ferrules from 2 x 0.5 to 2 x 6 mm<sup>2</sup>. Suitable for all conductor types, even thinned-out, finely-stranded conductors according to IEC 228!

Square crimp	0.5 - 16	ZAE AE	220	1	10 1945
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### Crimping pliers

with automatic adjustment to conductor cross-section

Square crimp	0.08 - 10	ZAE AE	180	1	10 1920
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Product video  
Front crimping pliers  
FLEXI-CRIMP PRO



**NEW**



Design	for cross section mm <sup>2</sup>	Size mm	PU	Article no.
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### Crimping pliers

optimised crimp shape, especially suitable for thinned-out, finely stranded conductors according to IEC 228

Trapezoid crimp	16 - 35	ZAE AE	226	1	10 6140
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optimised crimp shape, especially suitable for thinned-out, finely stranded conductors according to IEC 228

Trapezoid crimp	25 and 50	ZAE AE	226	1	10 6142
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### »JOKARI<sup>original</sup> Wire stripper - QUADRO – the 4-function pliers

for efficient and precise processing of insulated wire end ferrules in strip form from 0.5 - 2.5 mm<sup>2</sup>

Functions

1. Cutting of wires and strands up to 2.5 mm<sup>2</sup>
2. Insulation stripping, working range 0.5 - 2.5 mm<sup>2</sup>
3. Twisting; no fanning out of the wires means safe insertion of the conductor into the wire end ferrule
4. Crimping, flawless crimping from 0.5 - 2.5 mm<sup>2</sup> with professional trapezoid crimp

QUADRO case complete		AE		1	10 0728
QUADRO pliers with magazine			180	1	10 0725

Stripware, see page 307 in chapter 21.

### Multi-function tool DUO CRIMP

for cutting off and stripping insulation from conductors and stranded wires, as well as for crimping non-insulated and insulated wire end ferrules.

Working range of diagonal pliers: flexible up to 6 mm<sup>2</sup>  
solid up to 4 mm<sup>2</sup>

Working range of insulation stripper: up to 6 mm<sup>2</sup>

Crimping ranges: 0.5 to 2.5 mm<sup>2</sup>  
4 to 6 mm<sup>2</sup>

		AE		160	1	10 0720
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### Crimping tools **Diamant**

Automatic crimping tools:

for wire end ferrules, side insertion of ferrule

Square crimp	0.08 - 10	ZAE AE		1	10 4194
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for wire end ferrules, side insertion of ferrule

Square crimp	2.5 - 16	ZAE AE		1	10 4196
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for wire end ferrules, front insertion of ferrule

Trapezoid crimp	0.14 - 6	ZAE AE		1	10 4190
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for wire end ferrules, front insertion of ferrule

Trapezoid crimp	6 - 16	ZAE AE		1	10 4192
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Crimping tools:

for wire end ferrules

Trapezoid crimp	10.0 - 50	ZAE AE		1	10 4200
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for wire end ferrules

Trapezoid crimp	50.0 - 95	ZAE AE		1	10 4202
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### ECONOMY crimping pliers

for insulated and non-insulated cable lugs, with wire and screw cutters up to M 5, as well as insulation stripping device 0.5 - 6 mm<sup>2</sup>, crimping of stranded wires and cable insulation in 2 operations

Crimp shape insulation stripping range mm<sup>2</sup>

Oval crimp	0.5 - 6	IS	220	1	10 1892
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Design	for cross section mm <sup>2</sup>	Size mm	PU	Article no.
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**Crimping pliers for insulated cable lugs, compound leverage, with ratchet mechanism and adjustable locking (pressure point release), double crimping**

**Crimping pliers**

Oval crimp, asymmetric, standard	0.5 - 6	IS	220	1	10 6144
Oval crimp, symmetric	0.5 - 6	IS	220	1	10 1916
Oval crimp	10.0 - 16	IS	215	1	10 1918



**Crimping pliers Diamant**

for insulated cable connectors

Oval crimp	0.5 - 6	IS		1	10 4206
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for insulated cable connectors

Oval crimp	6.0 - 16	IS		1	10 4210
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**Crimping pliers for blade terminal connections**

Crimping pliers for non-insulated blade terminal connectors according to DIN 46244 etc., 2.8 - 4.8 - 6.3 mm tab width

**Crimping pliers**

compound leverage, with ratchet mechanism and adjustable locking (pressure point release), crimping of stranded wires and cable insulation in 1 operation

Roll crimp	0.5 - 6	FL	220	1	10 6136
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for non-insulated blade terminal connectors, Diamant crimping pliers

Roll crimp	0.25 - 6	FL		1	10 4208
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**Crimping pliers for non-insulated cable lugs (crimping cable lugs / terminal pins)**

**Crimping pliers**

compound leverage, with ratchet mechanism and locking (pressure point release)

Indent crimp	1.5 - 10	Q	220	1	10 6134
Indent crimp	0.5 - 16	Q	325	1	10 1909
Indent crimp	10 - 35	Q	325	1	10 6146



for non-insulated cable connectors, Diamant crimping pliers

Notch crimp	0.1 - 16	R Q		1	10 4204
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**STANDARD crimping pliers set**

Crimping pliers with 4 interchangeable crimping profile inserts for the most commonly used standard cable connectors, conveniently arranged in an impact-resistant plastic case

Contents:

Crimping tool body with automatic ratchet mechanism and adjustable locking device

One crimping profile insert each for:

insulated and non-insulated wire end ferrules from 0.5 to 16 mm<sup>2</sup>, trapezoid crimp, (CIMCO article no. 10 2001) **AE**

insulated cable lugs from 0.5 to 6 mm<sup>2</sup> (red - blue - yellow) **IS**, symmetric oval crimp, (CIMCO article no. 10 2004)

non-insulated cable lugs from 1.5 to 10 mm<sup>2</sup>, indent crimp, (CIMCO article no. 10 2003) **Q**

non-insulated plug connectors with open crimping ears from 0.5 to 6 mm<sup>2</sup>, roll crimp, (CIMCO article no. 10 2002) **FL**

Knurled screws for easy fastening of the inserts by hand, 2-component screwdriver with

1000 volt protective insulated blade, for PHILLIPS cross-head screws

size PH 1 (CIMCO article no. 11 7731)



				1	10 2000
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Design	for cross section mm <sup>2</sup>	Size mm	PU	Article no.
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### Crimping pliers for tubular cable lugs and connectors, "standard design"

#### Crimping pliers

compound leverage, with locking device (pressure point release)

Indent crimp	0.75 - 16	R	Q	325	1	10 1902
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#### Crimping pliers

with integral, rotatable profile discs, compound leverage

Notch crimp	6 - 50	R	F	600	1	10 1870
Notch crimp	50 - 120	R	F	970	1	10 1872
Notch crimp	120 - 240	R	F	975	1	10 1874
Hex crimp	6 - 50	R		390	1	10 1882
Hex crimp	10 - 120	R		650	1	10 1880
Hex crimp	16 - 95	R		530	1	10 1884
Hex crimp	25 - 150	R		650	1	10 1885



### Crimping pliers for compression cable lugs and connectors according to DIN 46235/46267

#### Crimping pliers

with integral, rotatable profile discs, compound leverage

Hex crimp	6 - 50	D		390	1	10 1883
Hex crimp	16 - 95	D		650	1	10 1886
Hex crimp	25 - 150	D		650	1	10 1888



### Mechanical hand press up to 60 kN (185 mm<sup>2</sup>)

suitable for crimping conductor material up to a maximum cross-section of 185 mm<sup>2</sup>.

Features:

- For interchangeable inserts DIN 48083, Sheet 1
- Lightweight, compact design
- Variably adjustable telescopic handles (total length 580 - 830 mm)
- C-shaped head, can be rotated through 360°
- Without crimping inserts
- Crimping force: 60 kN
- Max. travel: 20 mm

Additional inserts can be supplied / scope of application

Tubular cable lugs and connectors "standard design"

Compression cable lugs and compression connectors DIN 46235 / DIN 46267, part 1

Aluminium cable lugs and connectors

Rounding inserts for Al and Cu sector-shaped conductors

Crimping cable lugs DIN 46234 / pin-type cable lugs DIN 46230

Wire end ferrules

Twin wire end ferrules

Cutting insert

For crimping inserts see catalogue page 228 ff.

Other inserts can be supplied on request

Cross section range (mm<sup>2</sup>):

- 6 - 185
- 6 - 185
- 10 - 185
- 10sm - 240se / 185sm
- 10 - 70
- 10 - 95
- 2 x 4 - 2 x 16
- 18 mm ø



				1	10 1867
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### Mechanical hand press up to 60 kN (300 mm<sup>2</sup>)

suitable for crimping connection material up to a maximum conductor cross-section of 300 mm<sup>2</sup>.

Features:

- Lightweight, compact design
- Variably adjustable telescopic handles (total length 560 - 860 mm)
- Foldable crimping head can be rotated through 360°
- Without crimping inserts
- Crimping force: 60 kN
- Max. travel: 19 mm

Additional inserts can be supplied / scope of application

Tubular cable lugs and connectors "standard design"

Compression cable lugs and compression connectors DIN 46235 / DIN 46267, part 1

Aluminium cable lugs and connectors

Rounding inserts for Al and Cu sector-shaped conductors

Crimping cable lugs DIN 46234 / pin-type cable lugs DIN 46230

Wire end ferrules

Twin wire end ferrules

For crimping inserts see catalogue page 230 ff.

Other inserts can be supplied on request

cross section range (mm<sup>2</sup>):

- 6 - 300
- 6 - 300
- 10 - 300
- 10sm - 300se/240sm
- 10 - 70
- 10 - 240
- 2 x 4 - 2 x 16



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Product video  
Hydraulic system GENiUS 2.0

Design	Size mm	PU	Article no.
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## Hydraulic System GENiUS 2.0

One basic tool, revolutionary possibilities – now in improved design with modified return valve!  
With the interchangeable head system, a wide variety of applications can be carried out with only one device and in professional quality.

The basic tool is one of the smallest and lightest 60 kN battery-operated hydraulic units of its kind on the global market.

For the first time, it is possible to carry out the following applications with a single device:

- Crimping up to 300 mm<sup>2</sup> DIN compression cable lugs
- Cutting up to a ø of 50 mm (corresponds to 4 x 120 mm<sup>2</sup>)
- Hole punching up to a size of ø ISO 63 or square punching 92 x 92 mm

## Battery-operated hydraulic basic tool for holding interchangeable heads for crimping, cutting and punching

Electronic control and monitoring of the crimping, cutting and punching process.

Bar shape design - one-button operating concept for easy use.

- On/Off switch with automatic switch-off (no stand-by power consumption)
- Selectable light for illuminating the working area
- Evaluation function via visual interface, also for maintenance/charge status of the batteries
- Universal electronics with
  - Cycle counter
  - Real-time clock
  - Storage of all work processes with date
  - Readable current wave form
  - Storage of all processing parameters



- Automatic warranty start only after completion of the first 20 operations
- Guaranteed crimping force: 61 - 63.5 kN
- Ergonomically shaped housing with soft touch
- Automatic return for cutting and crimping
- Manual return if required and in emergency
- Motor brake, no dangerous piston overtravel
- Closure time for 240 mm<sup>2</sup> crimping: 4 seconds
- Cycle time 6-7 seconds
- At least 100 operations per battery charge
- Software for evaluation available as an option (please request)
- Service - cycle: 30,000 operations
- Heads can be rotated as desired without limit stop
- Optional attachment of a shoulder carrying strap possible

## Interchangeable heads GENiUS 2.0

### Crimping head

up to 300 mm<sup>2</sup>

Crimping inserts suitable for e.g. CIMCO article no. 10 5701

Weight 1600 g	155	1	10 6301
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### Four-mandrel crimping head

for crimping cable lugs and connectors up to 300 mm<sup>2</sup> without inserts

Weight 2600 g	225	1	10 6340
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### Cutting head

for copper and aluminium cables up to max. ø 50 mm (e.g. 4 x 120 mm NYY)

Weight 2150 g	240	1	10 6332
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Replacement blade for copper and aluminium cables		1	10 6334
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for ACSR cables up to a maximum ø of 20 mm

Weight 2150 g	240	1	10 6336
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Replacement blade for ACSR cables		1	10 6338
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### Hole punching head

up to a size of ø ISO 63 or square punching 92 x 92 mm

Tension bolts and receptacle thread correspond to the CIMCO screw puncher range

Weight 1600 g	165	1	10 6308
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Design		PU	Article no.	
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### Battery-operated hydraulic crimping tool GENiUS 2.0

consisting of:  
battery-operated hydraulic basic tool, carrying case, battery charger and two batteries  
crimping head up to 300 mm<sup>2</sup>

		1	10 6321	
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### Battery-operated hydraulic cutting tool GENiUS 2.0

consisting of:  
battery-operated hydraulic basic tool, carrying case, battery charger and two batteries  
cutting head up to ø 50 mm

		1	10 6324	
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### Battery-operated hydraulic punching tool GENiUS 2.0

consisting of:  
battery-operated hydraulic basic tool, carrying case, battery charger and two batteries  
hole punching head

		1	10 6326	
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### Battery-operated hydraulic crimping and cutting tool GENiUS 2.0

consisting of:  
battery-operated hydraulic basic tool, carrying case, battery charger and two batteries  
crimping head up to 300 mm<sup>2</sup>  
cutting head up to ø 50 mm

		1	10 6330	
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### Battery charger GENiUS 2.0

		1	10 4312	
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### Replacement rechargeable battery GENiUS 2.0

Rechargeable battery technology: 18 V Li-Ion, 2.0 Ah		1	10 4314	
Rechargeable battery technology: 18 V Li-Ion, 3.0 Ah		1	10 4313	

### Reading unit for documentation

		1	10 4315	
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### Mains adapter 230 Volt

		1	10 4311	
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### Hydraulic battery-operated crimping tool up to 60 kN (300 mm<sup>2</sup>)

Same technical features as the hydraulic system Genius 2.0, but here with a permanently mounted crimping head, suitable for crimping of connection material up to a maximum conductor cross section of 300 mm<sup>2</sup>

Features:

- Foldable crimping head, can be rotated through 270°
- Weight with case 8,200 g, weight without case 3,550 g
- Without crimping inserts
- Max. travel: 17 mm
- Crimping force: 60 kN
- Operating pressure: 700 bar (70MPa)
- Scope of supply: basic tool in case with storage possibility for crimping inserts, battery charger, 2 batteries

#### Additional inserts that can be supplied / Scope of application

	Cross section range (mm <sup>2</sup> ):
Tubular cable lugs and connectors "standard design"	6 – 300
Compression cable lugs and compression connectors DIN 46235 / DIN 46267, part 1	6 – 300
Aluminium cable lugs and connectors	10 – 300
Rounding inserts for aluminium and copper sector-shaped conductors	10sm - 300se/240sm
Crimping cable lugs DIN 46234 / pin-type cable lugs DIN 46230	10 – 70
Wire end ferrules	10 – 240
Twin wire end ferrules	2 x 4 - 2 x 16

For crimping inserts see catalogue page 230.

Other inserts can be supplied on request

		1	10 5705	
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	Design		PU	Article no.
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### Battery-operated hydraulic crimping tools for interchangeable inserts

General product features of CIMCO battery-operated hydraulic tools:

- Fast feed thanks to double piston hydraulics (advantage: reduced pressing time due to rapid bridging of no-load travel)
- Automatic pressure limit (advantage: no danger of overpressing)
- Quick stop (advantage: no running-on of the hydraulics - consequently no unwanted damage)
- Motor switch-off and automatic return travel after completed crimping (advantage: clear indication of end of crimping process)
- Electronic control and monitoring of the pressing process (advantage: errors minimised by monitoring)
- Manual return
- Multi-function electronics with sleep mode for maintenance display and battery monitoring (advantage: longer service life for all components)
- Mini-USB port enables connection to all common PC systems for service and monitoring
- The latest in battery technology! Lithium-ion technology without self-discharge and with low weight!
- Service and monitoring software for all common PC systems

### Hydraulic battery-operated crimping tool up to 60 kN (185 mm<sup>2</sup>)

suitable for crimping connection material up to a maximum conductor cross section of 185 mm<sup>2</sup>.

Features:

- For interchangeable inserts DIN 48083, Sheet 1
- Foldable crimping head, can be rotated through 270°
- Without crimping inserts
- Max. travel: 17 mm
- Crimping force: 60 kN
- Operating pressure: 700 bar (70MPa)
- Scope of supply: basic tool in case with storage possibility for crimping inserts, battery charger, 2 batteries, analysis software, Mini-USB cable
- Weight with case 10,150 g, weight without case 4,900 g



#### Additional inserts that can be supplied / Scope of application

Tubular cable lugs and connectors "standard design"	Cross section range (mm <sup>2</sup> ):
Compression cable lugs and compression connectors DIN 46235 / DIN 46267, part 1	6 – 185
Aluminium cable lugs and connectors	6 – 185
Rounding inserts for aluminium and copper sector-shaped conductors	10 – 185
Crimping cable lugs DIN 46234 / pin-type cable lugs DIN 46230	10sm - 240se / 185sm
Wire end ferrules	10 – 70
Twin wire end ferrules	10 – 95
Cutting insert	2 x 4 - 2 x 16
	18 mm ø

For crimping inserts see catalogue page 274 + 275.

Other inserts can be supplied on request

		1	10 5698
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### Hydraulic battery-operated crimping tool up to 60 kN (300 mm<sup>2</sup>)

suitable for crimping connection material up to a maximum conductor cross-section of 300 mm<sup>2</sup>.

Features:

- Foldable crimping head, can be rotated through 270°
- Without crimping inserts
- Max. travel: 17 mm
- Crimping force: 60 kN
- Weight with case 10,350 g, weight without case 5,100 g
- Operating pressure: 700 bar (70MPa)
- Scope of supply: basic tool in case with storage possibility for crimping inserts, battery charger, 2 batteries, analysis software, Mini-USB cable



#### Additional inserts that can be supplied / Scope of application

Tubular cable lugs and connectors "standard design"	Cross section range (mm <sup>2</sup> ):
Compression cable lugs and compression connectors DIN 46235 / DIN 46267, part 1	6 – 300
Aluminium cable lugs and connectors	6 – 300
Rounding inserts for aluminium and copper sector-shaped conductors	10 – 300
Crimping cable lugs DIN 46234 / pin-type cable lugs DIN 46230	10sm - 300se/240sm
Wire end ferrules	10 – 70
Twin wire end ferrules	10 – 240
	2 x 4 - 2 x 16

For crimping inserts see catalogue page 276 + 277.

Other inserts can be supplied on request

		1	10 5701
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### Hydraulic battery-operated crimping tool up to 130 kN (400 mm<sup>2</sup>)

suitable for crimping of connection material up to a maximum conductor cross-section of 400 mm<sup>2</sup>.

Features:

- C-shaped crimping head for easy insertion of the crimping inserts
- Can be rotated through 270°
- Without crimping inserts
- Weight with case 14,950 g
- Weight without case 7,750 g
- Head opening: 29 mm
- Crimping force: 130 kN
- Operating pressure: 700 bar (70MPa)
- Scope of supply: basic tool in case with storage possibility for crimping inserts, battery charger, 2 batteries, analysis software, Mini-USB cable



#### Additional inserts that can be supplied / Scope of application

Tubular cable lugs and connectors "standard design"	Cross section range (mm <sup>2</sup> ):
Compression cable lugs and compression connectors DIN 46235 / DIN 46267, part 1	10 – 400
Aluminium cable lugs and connectors	10 – 300
Rounding inserts for aluminium and copper sector-shaped conductors	16 – 300
Crimping cable lugs DIN 46234 / pin-type cable lugs DIN 46230	10sm - 300sm
Wire end ferrules	16 – 150
	16 – 240

For crimping inserts see catalogue page 278 + 279.

Other inserts can be supplied on request

		1	10 5702
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Design		PU	Article no.	
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### Hydraulic battery-operated crimping tool up to 130 kN (400 mm<sup>2</sup>)

suitable for crimping of connection material up to a maximum conductor cross-section of 400 mm<sup>2</sup>.

Features:

- H-shaped crimping head, can be rotated through 270°
- Deep groove crimping possible
- Without crimping inserts
- Head opening: 35 mm
- Crimping force: 130 kN
- Operating pressure: 700 bar (70MPa)
- Scope of supply: basic tool in case with storage possibility for crimping inserts, battery charger, 2 batteries, analysis software, Mini-USB cable

**Additional inserts that can be supplied / Scope of application**

Tubular cable lugs and connectors "standard design"	Cross section range (mm <sup>2</sup> ):
Compression cable lugs and compression connectors DIN 46235 / DIN 46267, part 1	10 – 400
Aluminium cable lugs and connectors	10 – 300
Rounding inserts for aluminium and copper sector-shaped conductors	16 – 300
Crimping cable lugs DIN 46234 / pin-type cable lugs DIN 46230	10sm - 300sm
Wire end ferrules	16 – 150
	16 – 240

Weight with case 14,550 g, weight without case 6,100 g, for crimping inserts see catalogue page 278 + 279.

Other inserts can be supplied on request

	1	10 5704
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### Accessories for battery-operated hydraulic crimping and cutting tools

14.4 V Lithium-Ion rechargeable battery for all CIMCO battery-operated hydraulic crimping and cutting tools

	1	10 5550
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### Battery charger

Universal battery charger for all CIMCO rechargeable batteries, 230 V

	1	10 5554
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### Analysis software

CD-Rom with the current analysis software for all CIMCO battery-operated hydraulic crimping and cutting tools

	1	10 5555
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### Compact electro-hydraulic drive unit

Hydraulic battery/mains drive unit, suitable for the operation of all industry standard hydraulic crimping and cutting tools. The compact design, smaller size and lower weight enable universal deployment and mobility. The drive unit is distinguished by very high performance, which ensures enormous productivity.

Features:

- Lightweight, compact and robust design
- With remote control (1.5 m)
- Ergonomic design
- Integrated scratch-proof display
- Fast tool return travel due to high return flow rate
- Pressure monitoring by means of electronic pressure sensor
- Li-Ion battery
- Charging status display on the battery
- Double piston technology for fast feed and high pressure:
- Delivery volume in the low pressure range < 100 bar: 1.15 l/min
- Delivery volume in the high pressure range up to 700 bar: 0.1 l/m
- Operating pressure: 700 bar (70MPa)
- Output: 200 W
- Battery voltage: 18.0 V DC
- Battery capacity: 3.0 Ah
- Operating temperature: -20 °C to +55 °C

Weight 4.6 kg (with battery)	290 x 190 x 205 mm	1	10 5650
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### Accessories

Hydraulic crimping head, round, up to 300 mm<sup>2</sup>, crimping force 60 kN

	1	10 5652
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Hydraulic crimping head up to 400 mm<sup>2</sup>, crimping force 130 kN

	1	10 5655
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Hydraulic cutting head up to max. ø 50 mm, for CU/ALU cables, closed form

	1	10 5654
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Hydraulic cutting head up to max. ø 95 mm, for CU/ALU cables, closed form

	1	10 5656
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Hydraulic cutting head up to max. ø 120 mm, for CU/ALU cables, closed form

	1	10 5657
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Safety foot switch

	1	10 5651
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Hydraulic high-pressure hose 5 m

	1	10 5658
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Hydraulic high-pressure hose 10 m

	1	10 5659
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Hydraulic plug adapter, for connecting hydraulic components of other manufacturers

	1	10 5653
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Design	for cross section mm <sup>2</sup>	PU	Article no.
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### Hydraulic cylinder

For all electric-, foot- and hand operated hydraulic pumps with quick coupling connection and a maximum output pressure of 700 bar. Compact design, for punching round, square and rectangular openings as well as special shapes in stainless steel and steel sheets ST 37 (switch cabinet and plant construction).

- Hydraulic cylinder with quick coupling (up to 115 kN)
- Weight 0.68 kg
- Supplied in plastic case
- High tensile strength aluminium body
- Suitable for tension bolts with UNF thread  $\varnothing$  19.0 mm
- Operating pressure 700 bar
- Drip-free coupling and uncoupling
- Convenient operability
- With dust protection cap

		1	13 4023
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### Crimping inserts for the tools: 10 1867 and 10 5698

for tubular cable lugs and connectors "standard design"

hexagonal crimping, crimp width 5 mm

mm<sup>2</sup>

6		R	1 Pair	10 5300
10		R	1 Pair	10 5302
16		R	1 Pair	10 5304
25		R	1 Pair	10 5306
35		R	1 Pair	10 5308
50		R	1 Pair	10 5310
70		R	1 Pair	10 5312
95		R	1 Pair	10 5314
120		R	1 Pair	10 5316
150		R	1 Pair	10 5318
185		R	1 Pair	10 5320



for compression cable lugs and compression connectors DIN 46235/46267

hexagonal crimping, crimp width 5 mm

mm<sup>2</sup>

Index according to DIN

6	5	D	1 Pair	10 5330
10	6	D	1 Pair	10 5332
16	8	D	1 Pair	10 5334
25	10	D	1 Pair	10 5336
35	12	D	1 Pair	10 5338
50	14	D	1 Pair	10 5340
70	16	D	1 Pair	10 5342
95	18	D	1 Pair	10 5344
120	20	D	1 Pair	10 5346
150	22	D	1 Pair	10 5348
185	25	D	1 Pair	10 5350



for aluminium cable lugs and connectors DIN 46329 and similar

hexagonal crimping, crimp width 7 mm

mm<sup>2</sup>

Index according to DIN

10	10	AL	1 Pair	10 5360
16-25	12	AL	1 Pair	10 5362
35	14	AL	1 Pair	10 5364
50	16	AL	1 Pair	10 5366
70	18	AL	1 Pair	10 5368
95-120	22	AL	1 Pair	10 5370
150	25	AL	1 Pair	10 5372
185	28	AL	1 Pair	10 5374



Design	for cross section mm <sup>2</sup>	PU	Article no.
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### Crimping inserts for the tools: 10 1867 and 10 5698

for rounding of single-strand (se) and multi-strand (sm) Al and Cu sector-shaped conductors, for 3 and 4 sector-shaped conductors (120° and 90°)

Rounding width 19.5 mm

mm <sup>2</sup>	Index according to DIN			
sm	se			
10	-	RU	1 Pair	10 5392
16	-	RU	1 Pair	10 5394
25	35	RU	1 Pair	10 5396
35	50	RU	1 Pair	10 5398
50	70	RU	1 Pair	10 5400
70	95	RU	1 Pair	10 5402
95	120	RU	1 Pair	10 5404
120	150	RU	1 Pair	10 5406
150	185	RU	1 Pair	10 5408
185	240	RU	1 Pair	10 5410

for crimping cable lugs DIN 46234 and pin-type cable lugs DIN 46230

Indent crimp

mm <sup>2</sup>				
10		F Q	1 Pair	10 5442
16		F Q	1 Pair	10 5444
25		F Q	1 Pair	10 5446
35		F Q	1 Pair	10 5448
50		F Q	1 Pair	10 5450
70		F Q	1 Pair	10 5452
95		F Q	1 Pair	10 5454

for wire end ferrules

trapezoid crimp, crimping width 20 mm

mm <sup>2</sup>				
10		AE	1 Pair	10 5462
16		AE	1 Pair	10 5464
25		AE	1 Pair	10 5466
35		AE	1 Pair	10 5468
50		AE	1 Pair	10 5470
70		AE	1 Pair	10 5472
95		AE	1 Pair	10 5474

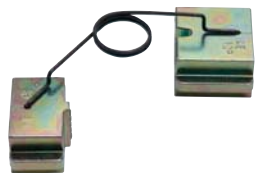
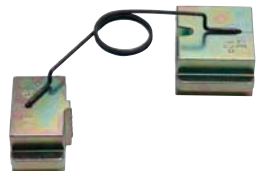
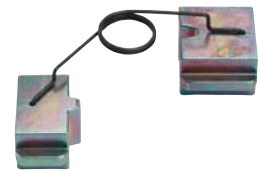
for twin wire end ferrules

trapezoid crimp, crimping width 20 mm

mm <sup>2</sup>				
2 x 4		ZAE	1 Pair	10 5480
2 x 6		ZAE	1 Pair	10 5482
2 x 10		ZAE	1 Pair	10 5484
2 x 16		ZAE	1 Pair	10 5486

Cutting insert for Al and Cu cables

Cutting range up to 18 mm ø			1 Pair	10 5490
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Design for cross section mm<sup>2</sup> PU Article no.

**Crimping inserts for the tools: 10 1868, 10 5701, 10 5705, 10 6321 and 10 6330**

for tubular cable lugs and connectors "standard design"  
hexagonal crimping, crimp width 5 mm

mm <sup>2</sup>				
6		R	1 Pair	10 5711
10		R	1 Pair	10 5712
16		R	1 Pair	10 5713
25		R	1 Pair	10 5714
35		R	1 Pair	10 5715
50		R	1 Pair	10 5716
70		R	1 Pair	10 5717
95		R	1 Pair	10 5718
120		R	1 Pair	10 5719
150		R	1 Pair	10 5720
185		R	1 Pair	10 5721
240		R	1 Pair	10 5722
300		R	1 Pair	10 5723



for tubular cable lugs and connectors "standard design"  
WM-crimping, for compressed, multi-stranded or thinned-out, finely stranded conductors, crimp width 5 mm

mm <sup>2</sup>				
6		R	1 Pair	10 5670
10		R	1 Pair	10 5672
16		R	1 Pair	10 5674
25		R	1 Pair	10 5676
35		R	1 Pair	10 5678
50		R	1 Pair	10 5680
70		R	1 Pair	10 5682
95		R	1 Pair	10 5684
120		R	1 Pair	10 5686
150		R	1 Pair	10 5688
185		R	1 Pair	10 5690
240		R	1 Pair	10 5692
300		R	1 Pair	10 5694



for compression cable lugs and compression connectors DIN 46235/46267  
hexagonal crimping, crimp width 5 mm

mm <sup>2</sup>	Index according to DIN			
6	5	D	1 Pair	10 5730
10	6	D	1 Pair	10 5731
16	8	D	1 Pair	10 5732
25	10	D	1 Pair	10 5733
35	12	D	1 Pair	10 5734
50	14	D	1 Pair	10 5735
70	16	D	1 Pair	10 5736
95	18	D	1 Pair	10 5737
120	20	D	1 Pair	10 5738
150	22	D	1 Pair	10 5739
185	25	D	1 Pair	10 5740
240	28	D	1 Pair	10 5741
300	32	D	1 Pair	10 5742



for aluminium cable lugs and connectors DIN 46329 and similar  
hexagonal crimping, crimp width 7 mm

mm <sup>2</sup>	Index according to DIN			
10	10	AL	1 Pair	10 5784
16-25	12	AL	1 Pair	10 5785
35	14	AL	1 Pair	10 5786
50	16	AL	1 Pair	10 5787
70	18	AL	1 Pair	10 5788
95-120	22	AL	1 Pair	10 5789
150	25	AL	1 Pair	10 5790
185	28	AL	1 Pair	10 5791
240	32	AL	1 Pair	10 5792
300	34	AL	1 Pair	10 5793





Design	for cross section mm <sup>2</sup>	PU	Article no.
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**Crimping inserts for the tools: 10 1868, 10 5701, 10 5705, 10 6321 and 10 6330**

for rounding of single-strand (se) and multi-strand (sm) Al and Cu sector-shaped conductors, for 3 and 4 sector-shaped conductors (120° and 90°)

Rounding width 19.5 mm

mm <sup>2</sup>	Index according to DIN			
sm	se			
10	-	RU	1 Pair	10 5749
16	-	RU	1 Pair	10 5750
25	35	RU	1 Pair	10 5751
35	50	RU	1 Pair	10 5752
50	70	RU	1 Pair	10 5753
70	95	RU	1 Pair	10 5754
95	120	RU	1 Pair	10 5755
120	150	RU	1 Pair	10 5756
150	185	RU	1 Pair	10 5757
185	240	RU	1 Pair	10 5758
240	300	RU	1 Pair	10 5759



for crimping cable lugs DIN 46234 and pin-type cable lugs DIN 46230

Indent crimp

mm <sup>2</sup>				
10		F Q	1 Pair	10 5760
16		F Q	1 Pair	10 5761
25		F Q	1 Pair	10 5762
35		F Q	1 Pair	10 5763
50		F Q	1 Pair	10 5764
70		F Q	1 Pair	10 5765



for wire end ferrules

trapezoid crimp, crimping width 20 mm

mm <sup>2</sup>				
10		AE	1 Pair	10 5770
16		AE	1 Pair	10 5771
25		AE	1 Pair	10 5772
35		AE	1 Pair	10 5773
50		AE	1 Pair	10 5774
70		AE	1 Pair	10 5775
95		AE	1 Pair	10 5776
120		AE	1 Pair	10 5777
150		AE	1 Pair	10 5778
185		AE	1 Pair	10 5779
240		AE	1 Pair	10 5799



for twin wire end ferrules

trapezoid crimp, crimping width 20 mm

mm <sup>2</sup>				
2 x 4		ZAE	1 Pair	10 5780
2 x 6		ZAE	1 Pair	10 5781
2 x 10		ZAE	1 Pair	10 5782
2 x 16		ZAE	1 Pair	10 5783



**Empty box**

Including 2-component foam for the storage and transport of up to 20 crimping insert pairs.

Suitable for crimping inserts for the tools 101868, 105701, 105705, 106321 and 106330

Dimensions: 338 x 261 x 57 mm	1	10 5518
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Design	for cross section mm <sup>2</sup>	PU	Article no.
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### Crimping inserts for the tools: 10 5702 and 10 5704

for tubular cable lugs and connectors "standard design"

hexagonal crimping, wide crimping (exception: 300 and 400 mm<sup>2</sup> / 7 mm)

mm <sup>2</sup>				
10		R	1 Pair	10 5802
16		R	1 Pair	10 5804
25		R	1 Pair	10 5806
35		R	1 Pair	10 5808
50		R	1 Pair	10 5810
70		R	1 Pair	10 5812
95		R	1 Pair	10 5814
120		R	1 Pair	10 5816
150		R	1 Pair	10 5818
185		R	1 Pair	10 5820
240		R	1 Pair	10 5822
300		R	1 Pair	10 5824
400		R	1 Pair	10 5826



for compression cable lugs and compression connectors DIN 46235/46267

hexagonal crimping, wide crimping (exception: 240 and 300 mm<sup>2</sup> / 7 mm)

mm <sup>2</sup>	Index according to DIN			
10	6	D	1 Pair	10 5830
16	8	D	1 Pair	10 5832
25	10	D	1 Pair	10 5834
35	12	D	1 Pair	10 5836
50	14	D	1 Pair	10 5838
70	16	D	1 Pair	10 5840
95	18	D	1 Pair	10 5842
120	20	D	1 Pair	10 5844
150	22	D	1 Pair	10 5846
185	25	D	1 Pair	10 5848
240	28	D	1 Pair	10 5850
300	32	D	1 Pair	10 5852
400	34	D	1 Pair	10 5854



for aluminium cable lugs and connectors DIN 46329 and similar

hexagonal crimping, wide crimping

mm <sup>2</sup>	Index according to DIN			
10	10	AL	1 Pair	10 5860
16-25	12	AL	1 Pair	10 5862
35	14	AL	1 Pair	10 5864
50	16	AL	1 Pair	10 5866
70	18	AL	1 Pair	10 5868
95-120	22	AL	1 Pair	10 5870
150	25	AL	1 Pair	10 5872
185	28	AL	1 Pair	10 5874
240	32	AL	1 Pair	10 5876
300	34	AL	1 Pair	10 5878



Design	for cross section mm <sup>2</sup>	PU	Article no.
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### Crimping inserts for the tools: 10 5702 and 10 5704

for rounding of single-strand (se) and multi-strand (sm) Al and Cu sector-shaped conductors, for 3 and 4 sector-shaped conductors (120° and 90°)

Rounding width 35 mm

mm <sup>2</sup> sm	Index according to DIN se			
10	-	RU	1 Pair	10 5892
16	-	RU	1 Pair	10 5894
25	35	RU	1 Pair	10 5896
35	50	RU	1 Pair	10 5898
50	70	RU	1 Pair	10 5900
70	95	RU	1 Pair	10 5902
95	120	RU	1 Pair	10 5904
120	150	RU	1 Pair	10 5906
150	185	RU	1 Pair	10 5908
185	240	RU	1 Pair	10 5910
240	300	RU	1 Pair	10 5912
300	-	RU	1 Pair	10 5914



for crimping cable lugs DIN 46234 and pin-type cable lugs DIN 46230

Indent crimp

mm <sup>2</sup>				
16		F Q	1 Pair	10 5942
25		F Q	1 Pair	10 5944
35		F Q	1 Pair	10 5946
50		F Q	1 Pair	10 5948
70		F Q	1 Pair	10 5950
95		F Q	1 Pair	10 5952
120		F Q	1 Pair	10 5954
150		F Q	1 Pair	10 5956



for wire end ferrules

trapezoid crimp, crimping width 20 mm

mm <sup>2</sup>				
10		AE	1 Pair	10 5962
16		AE	1 Pair	10 5964
25		AE	1 Pair	10 5966
35		AE	1 Pair	10 5968
50		AE	1 Pair	10 5970
70		AE	1 Pair	10 5972
95		AE	1 Pair	10 5974
120		AE	1 Pair	10 5976
150		AE	1 Pair	10 5978
185		AE	1 Pair	10 5980
240		AE	1 Pair	10 5982



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# SOLDERLESS + INSULATED CABLE CONNECTORS, WIRE END FERRULES

## Solderless cable connectors

Manufactured using the highest quality copper according to DIN EN 13600, the solderless cable connectors feature maximum electrical and mechanical resilience.



Greatest dimensional precision thanks to automated production according to automotive guidelines. Compatibility with all market standards is always provided.



## SG tubular cable lug

A special production process allows the flange width to be reduced while maintaining the conductive cross section. This means the cable lug can easily be used for all switch-gears, without compromising performance.



## Wire end ferrules

The premium insulation guarantees dielectric strength. Clear identification is possible with the colour coding. Adjusted crimp shapes ...



...are suitable for tapered, finely stranded conductors according to IEC 228. The wire end ferrules improve the contact in terminals and prevent finely stranded conductors from fanning out.

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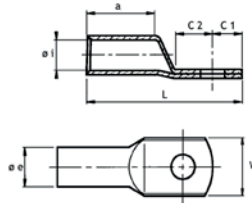
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## Solderless cable connectors tubular cable lugs Cu, standard design

Technical data

- Material: ETP Cu according to DIN EN 13600
- Surface: galvanically tin-coated, other surfaces available upon request
- Also available with view hole
- Also suitable for finely stranded conductors according to IEC 228 tubular cable lugs, Cu, standard design
- Annealed to copper hardness F 20



UL approval  
applied for

Cross section (mm <sup>2</sup> )	Bolt ø (mm)	W	øi	øe	C1	C2	a	L	Weight per 100 pcs. ~kg	PU/pcs.	Article no.
0.75	3	4.8	1.4	3.2	2.3	4.8	6.9	16	0.07	100	18 0650
	4	8	1.4	3.2	4.1	6.6	6.9	19.6	0.09	100	18 0652
	5	8	1.4	3.2	4.1	6.6	6.9	19.6	0.08	100	18 0654
1.5	4	6.5	1.9	3.3	3.5	5	6	17	0.13	100	18 0660
	5	7.5	1.9	3.3	3.5	5	6	18	0.08	100	18 0662
	6	9	1.9	3.3	4.5	5.5	6	18.5	0.09	100	18 0664
2.5	4	8	2.3	3.9	3.8	6.1	6.9	20.1	0.14	100	18 0670
	5	8	2.3	3.9	3.8	6.1	6.9	20.1	0.16	100	18 0672
	6	10.7	2.3	3.9	6.1	8.1	6.9	25.2	0.15	100	18 0674
4	8	12	2.3	3.9	6.1	8.1	6.9	25.2	0.15	100	18 0676
	4	9	2.7	5	6.2	7.4	9	26	0.30	100	18 0680
	5	9	2.7	5	6.2	7.4	9	26	0.29	100	18 0682
6	6	12	2.7	5	6.2	7.4	9	26	0.28	100	18 0684
	8	12	2.7	5	6.2	7.4	9	26	0.26	100	18 0686
	5	10	3.5	6.5	6.8	6.5	9	26.5	0.5	100	18 0692
6	6	10	3.5	6.5	6.8	6.5	9	26.5	0.48	100	18 0694
	8	12	3.5	6.5	6.8	6.5	9	26.5	0.57	100	18 0696
	10	15	3.5	6.5	9.8	9.5	9	32.5	0.66	100	18 0697
10	12	17	3.5	6.5	12	12	9	35	0.66	100	18 0698
	5	12	4.5	7	6.8	6.5	10	28	0.51	100	18 0700
	6	12	4.5	7	6.8	6.5	10	28	0.49	100	18 0702
10	8	15	4.5	7	9.8	9.5	10	34	0.59	100	18 0704
	10	17	4.5	7	11.8	11.5	10	38	0.64	100	18 0705
	12	19	4.5	7	13	12.5	10	41	0.65	100	18 0706
16	5	12	5.5	8.5	6.8	6.5	13	31.5	0.85	100	18 0709
	6	12	5.5	8.5	6.8	6.5	13	31.5	0.83	100	18 0710
	8	15	5.5	8.5	9.8	9.5	13	37.5	0.96	100	18 0712
16	10	17	5.5	8.5	11.8	11.5	13	41.5	1.03	100	18 0714
	12	19	5.5	8.5	13	12.5	13	44	1.07	100	18 0715
	5	14	7	10	7	7	15	35.5	1.18	50	18 0718
25	6	14	7	10	7	7	15	35.5	1.15	50	18 0720
	8	16	7	10	9.5	9.5	15	40.5	1.28	50	18 0722
	10	18	7	10	11.5	11.5	15	44.5	1.37	50	18 0724
25	12	19	7	10	13	13.5	15	48	1.40	50	18 0725
	14	21	7	10	14.5	14.5	15	52.5	1.42	50	18 0726
	6	17	8.5	12	7	7	17	39	1.80	1	18 0730
35	8	17	8.5	12	9.5	9.5	17	44	1.98	1	18 0732
	10	19	8.5	12	11.5	11.5	17	48	2.09	1	18 0734
	12	21	8.5	12	13	13.5	17	51.5	2.13	1	18 0735
35	14	21	8.5	12	14	14.5	17	53.5	2.14	1	18 0736
	16	26	8.5	12	16	16	17	58	2.28	1	18 0737
	6	20	10	14	9.5	9.5	19	47	2.92	1	18 0739
50	8	20	10	14	9.5	9.5	19	47	2.84	1	18 0740
	10	20	10	14	11.5	11.5	19	51	3.01	1	18 0742
	12	23	10	14	13	13.5	19	54.5	3.16	1	18 0744
50	14	23	10	14	14	14.5	19	56.5	3.18	1	18 0745
	16	28	10	14	16	16	19	62	3.29	1	18 0746
50	20	30	10	14	19	19	19	67	3.60	1	18 0747

## Tubular cable lugs, Cu, standard design



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UL approval  
applied for

See previous page for description

Cross section (mm <sup>2</sup> )	Bolt ø (mm)	W	øi	øe	C1	C2	a	L	Weight per 100 pcs. ~kg	PU/pcs.	Article no.
70	6	23	12	16.5	10	10	21	53	4.57	1	18 0749
	8	23	12	16.5	11.5	11.5	21	54	4.48	1	18 0750
	10	23	12	16.5	11.5	11.5	21	54	4.36	1	18 0752
	12	23	12	16.5	13	13.5	21	57.5	4.49	1	18 0754
	14	23	12	16.5	14	14.5	21	59.5	4.52	1	18 0755
	16	28	12	16.5	15.5	16	21	62.5	4.67	1	18 0756
95	20	30	12	16.5	19	19	21	72	5.05	1	18 0758
	8	26	13.5	18	11.5	11.5	25	59	5.48	1	18 0759
	10	26	13.5	18	11.5	11.5	25	59.5	5.36	1	18 0760
	12	26	13.5	18	13	13.5	25	63	5.53	1	18 0762
	14	26	13.5	18	14	14.5	25	65	5.58	1	18 0763
	16	28	13.5	18	15.5	16	25	68	5.68	1	18 0764
120	20	36	13.5	18	22	22	25	82	6.26	1	18 0766
	8	28	15	19.5	13	13.5	26	65.5	6.58	1	18 0768
	10	28	15	19.5	13	13.5	26	65.5	6.50	1	18 0770
	12	28	15	19.5	13	13.5	26	65.5	6.32	1	18 0772
	14	28	15	19.5	14	14.5	26	67.5	6.39	1	18 0773
	16	30	15	19.5	15.5	16	26	70.5	6.52	1	18 0774
150	20	36	15	19.5	22	22	26	85	7.13	1	18 0776
	8	31	16.5	21	14.5	14.5	30	73	8.12	1	18 0778
	10	31	16.5	21	14.5	14.5	30	73	8.01	1	18 0780
	12	31	16.5	21	14.5	14.5	30	73	7.83	1	18 0782
	14	31	16.5	21	14.5	14.5	30	73	7.68	1	18 0783
	16	31	16.5	21	15.5	16	30	75.5	7.79	1	18 0784
185	20	36	16.5	21	22	22	30	88	8.34	1	18 0786
	10	35	19	24	17	18	30	81	11.33	1	18 0788
	12	35	19	24	17	18	30	81	11.13	1	18 0790
	14	35	19	24	17	18	30	81	10.96	1	18 0791
	16	35	19	24	17	18	30	81	10.75	1	18 0792
	20	39	19	24	21	22	30	89	11.53	1	18 0794
240	10	39	21	26	17	18	35	88	13.58	1	18 0798
	12	39	21	26	17	18	35	88	13.38	1	18 0800
	14	39	21	26	17	18	35	88	13.22	1	18 0801
	16	39	21	26	17	18	35	88	13.00	1	18 0802
	20	39	21	26	21	22	35	96	13.72	1	18 0804
	300	12	43	23.5	29.5	17	18	44	99	20.49	1
14		43	23.5	29.5	17	18	44	99	20.29	1	18 0819
16		43	23.5	29.5	17	18	44	99	20.03	1	18 0820
20		43	23.5	29.5	21	22	44	107	21.10	1	18 0822
400	12	49	27	34	23	23	44	112	31.31	1	18 0826
	14	49	27	34	23	23	44	112	31.08	1	18 0828
	16	49	27	34	23	23	44	112	30.77	1	18 0830
	20	49	27	34	23	23	44	112	29.94	1	18 0832

## Angled tubular cable lugs Cu, standard design with 90° and 45° angle

Technical data

- Material: ETP Cu according to DIN EN 13600
- Surface: galvanically tin-coated, other surfaces available upon request
- Also suitable for finely stranded conductors according to IEC 228
- Annealed to copper hardness F 20



UL approval applied for

90° angle

Cross section (mm <sup>2</sup> )	Bolt ø (mm)	Weight per 100 pcs. ~kg	PU/pcs.	Article no.
6	5	0.6	100	18 3160
	6	0.59	100	18 3161
	8	0.67	100	18 3162
	10	0.8	100	18 3163
10	12	0.8	100	18 3164
	5	0.6	100	18 3165
	6	0.59	100	18 3166
16	8	0.67	100	18 3167
	10	0.72	100	18 3168
	12	0.76	100	18 3169
	5	1.01	100	18 3170
25	6	1	100	18 3171
	8	1.2	100	18 3172
	10	1.2	100	18 3173
	12	1.23	100	18 3174
35	5	1.34	100	18 3175
	6	1.31	100	18 3134
	8	1.47	100	18 3135
	10	1.56	100	18 3176
50	12	1.6	100	18 3177
	6	2.04	1	18 3156
	8	2.28	1	18 3130
	10	2.39	1	18 3136
70	12	2.54	1	18 3157
	6	3.14	1	18 3158
	8	3.38	1	18 3131
	10	3.52	1	18 3137
95	12	3.8	1	18 3159
	8	5.09	1	18 3132
	10	5.34	1	18 3133
	12	5.44	1	18 3140
120	16	5.85	1	18 3141
	8	6.4	1	18 3138
	10	6.27	1	18 3139
	12	6.48	1	18 3142
150	16	7.12	1	18 3143
	8	6.69	1	18 3144
	10	7.1	1	18 3145
	12	7.23	1	18 3146
185	16	7.81	1	18 3147
	10	8.2	1	18 3148
	12	8.3	1	18 3149
240	12	11.9	1	18 3150
	20	11.53	1	18 3152
	10	14.63	1	18 3153
	12	14.42	1	18 3154
	20	14.76	1	18 3155

45° angle

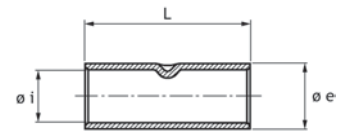
Cross section (mm <sup>2</sup> )	Bolt ø (mm)	Weight per 100 pcs. ~kg	PU/pcs.	Article no.
6	5	0.6	100	18 3060
	6	0.59	100	18 3061
	8	0.67	100	18 3062
	10	0.8	100	18 3063
10	12	0.8	100	18 3064
	5	0.6	100	18 3065
	6	0.6	100	18 3066
16	8	0.67	100	18 3067
	10	0.8	100	18 3068
	12	0.76	100	18 3069
	5	1.1	100	18 3070
25	6	0.97	100	18 3071
	8	1.1	100	18 3072
	10	1.17	100	18 3073
	12	1.23	100	18 3074
35	5	1.34	100	18 3075
	6	1.31	100	18 3034
	8	1.47	100	18 3035
	10	1.56	100	18 3052
50	12	1.6	100	18 3053
	6	2.04	1	18 3056
	8	2.28	1	18 3030
	10	2.39	1	18 3036
70	12	2.54	1	18 3057
	6	3.14	1	18 3058
	8	3.45	1	18 3031
	10	3.58	1	18 3037
95	12	3.76	1	18 3059
	8	5.24	1	18 3032
	10	6.6	1	18 3033
	12	5.69	1	18 3040
120	16	5.94	1	18 3041
	8	6.3	1	18 3038
	10	6.46	1	18 3039
	12	6.68	1	18 3042
150	16	7.06	1	18 3043
	8	6.87	1	18 3044
	10	7.29	1	18 3045
	12	7.71	1	18 3046
185	16	8.03	1	18 3047
	10	8.6	1	18 3048
	12	13.2	1	18 3050
	16	13	1	18 3051

### Butt connectors, Cu, standard design

Technical data

- Material: ETP Cu according to DIN EN 13600
- Surface: galvanically tin-coated, other surfaces available upon request
- Also suitable for finely stranded conductors according to IEC 228
- Annealed to copper hardness F 20

UL approval  
applied for



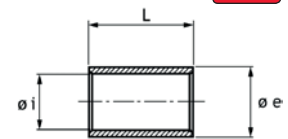
Cross section (mm <sup>2</sup> )	øi	øe	L	Weight per 100 pcs. ~kg	PU/pcs.	Article no.
0.75	1.4	3.2	15.7	0.08	100	18 0900
1.5	1.8	3.3	14.5	0.08	100	18 0902
2.5	2.4	4	14.5	0.11	100	18 0904
4	2.7	5	19	0.25	100	18 0906
6	3.5	6.5	24	0.50	100	18 0908
10	4.5	7	28	0.56	100	18 0910
16	5.5	8.5	34	1.00	100	18 0912
25	7	10	38	1.36	100	18 0914
35	8.5	12	42	2.11	1	18 0916
50	10	14	48	3.22	1	18 0918
70	12	16.5	52	4.66	1	18 0920
95	13.5	18	59	5.85	1	18 0922
120	15	19.5	62	7.4	1	18 0924
150	16.5	21	72	9	1	18 0926
185	19	24	72	12.2	1	18 0928
240	21	26	82	15.2	1	18 0930
300	23.5	29.5	102	22.23	1	18 0932
400	27	34	102	29.85	1	18 0934

### Parallel connectors, Cu, standard design

Technical data

- Material: ETP Cu according to DIN EN 13600
- Surface: galvanically tin-coated, other surfaces available upon request
- Also suitable for finely stranded conductors according to IEC 228
- Annealed to copper hardness F 20

UL approval  
applied for



Cross section (mm <sup>2</sup> )	øi	øe	L	Weight per 100 pcs. ~kg	PU/pcs.	Article no.
1.5	1.6	3.2	7	0.04	100	18 3180
2.5	2.3	3.9	7	0.05	100	18 3182
4 – 6	3.6	5.6	7	0.09	100	18 3184
10	4.5	6.7	9	0.18	100	18 3186
16	5.8	8.2	10	0.22	100	18 3188
25	7.5	10.5	11	0.41	50	18 3190
35	9	12.2	12	0.74	1	18 3192
50	11	15	16	1.20	1	18 3194
70	13.1	17	19	1.60	1	18 3196
95	14.5	19	20	2.11	1	18 3198
120	16.2	21	20	2.50	1	18 3200
150	18	23	20	2.87	1	18 3202
185	20.6	26	28	4.93	1	18 3204
240	23	28	31	5.53	1	18 3206

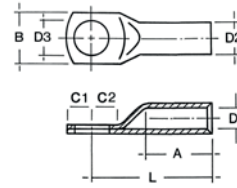
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### Tubular cable lugs for switchgear connections

SG series

- Design with narrow flange, without view hole
- Material: Cu-ETP according to DIN EN 13 600, soft, F20, which means it can still be manually crimped without any problem ever with large cross sections
- Surface: galvanically tin-coated



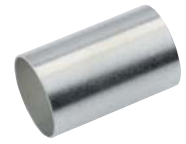
Cross section (mm <sup>2</sup> )	Bolt ø (mm)	øD1	A	B	øD3	øD2	C1	C2	L	PU/pcs.	Article no.
25	6	7.2	15	10	6.5	10	7	7	29.5	1	18 3798
35	6	8.5	17	15	6.5	12	8	8	33	1	18 3800
35	8	8.5	17	15	8.5	12	10	10	35	1	18 3801
50	6	10	19	15	6.5	14	8	9	37	1	18 3802
50	8	10	19	17	8.5	14	10	11	39	1	18 3804
50	10	10	19	19	10.5	14	12	13	41	1	18 3806
70	6	12	21	17	6.5	16.4	8	9.5	41	1	18 3808
70	8	12	21	17	8.5	16.4	10	11.5	43	1	18 3810
70	10	12	21	19	10.5	16.4	12	13.5	45	1	18 3812
70	12	12	21	19	13	16.4	12	14.5	46	1	18 3814
95	6	13.5	23	19	6.5	17.8	8	9.5	43	1	18 3815
95	8	13.5	23	19	8.5	17.8	10	11.5	48	1	18 3816
95	10	13.5	23	19	10.5	17.8	12	13.5	48	1	18 3818
95	12	13.5	23	19	13	17.8	12	14.5	49	1	18 3820
120	6	15	26	20	6.5	19.4	8	9	49	1	18 3821
120	8	15	26	20	8.5	19.4	10	11	51	1	18 3822
120	10	15	26	20	10.5	19.4	12	13	53	1	18 3824
120	12	15	26	20	13	19.4	12	14	54	1	18 3826
150	6	16.5	29	20	6.5	20.8	8	9	52	1	18 3827
150	8	16.5	29	20	8.5	20.8	10	11	54	1	18 3828
150	10	16.5	29	20	10.5	20.8	12	13	56	1	18 3830
150	12	16.5	29	20	13	20.8	12	14	57	1	18 3832
185	8	19	30	26	8.5	23.8	10	12	58	1	18 3833
185	10	19	30	26	10.5	23.8	12	14	60	1	18 3834
185	12	19	30	26	13	23.8	12	14	60	1	18 3836
185	16	19	30	26	17	23.8	16	18	64	1	18 3838
240	8	21	35	30	8.5	25.8	10	12	63	1	18 3839
240	10	21	35	30	10.5	25.8	12	14	65	1	18 3840
240	12	21	35	30	13	25.8	12	14	65	1	18 3842
240	16	21	35	30	17	25.8	16	18	69	1	18 3844
300	10	24	42	30	10.5	29.8	12	13	76	1	18 3846
300	12	24	42	30	13	29.8	12	16	79	1	18 3848
300	16	24	42	30	17	29.8	16	18	81	1	18 3850



## Sleeves for compressed or tapered conductors, Cu, standard design

Technical data

- Material: ETP Cu according to DIN EN 13600
- Surface: galvanically tin-coated
- Suitable for compressed, multi-stranded or tapered, finely stranded conductors for diameter equalisation (only narrow hexagonal crimping!)



Cross section (mm <sup>2</sup> )	Length mm	PU/pcs.	Article no.
16	11	100	18 3400
25	14	100	18 3401
35	15	1	18 3402
50	18	1	18 3403
70	19	1	18 3404
95	21	1	18 3405
120	22	1	18 3406
150	26	1	18 3407
185	26	1	18 3408
240	30	1	18 3409
300	38	1	18 3410
400	38	1	18 3411

## Set of sleeves for compressed conductors

in premium-quality raaco set box

Contents:

285 pieces, sorted

50 pieces each	50 mm <sup>2</sup>	18 3403
50 pieces each	70 mm <sup>2</sup>	18 3404
50 pieces each	95 mm <sup>2</sup>	18 3405
50 pieces each	120 mm <sup>2</sup>	18 3406
25 pieces each	150 mm <sup>2</sup>	18 3407
25 pieces each	185 mm <sup>2</sup>	18 3408
25 pieces each	240 mm <sup>2</sup>	18 3409
10 pieces each	300 mm <sup>2</sup>	18 3410
Set box of sleeves for compressed conductors		18 3415



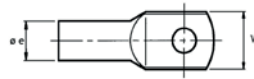
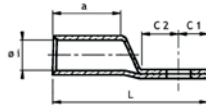
Product video  
Sleeves for compressed  
conductors

## Tubular cable lugs, Cu, designed for finely stranded conductors according to DIN 0295 and IEC 228

F

Technical data

- Material: ETP Cu according to DIN EN 13600
- "Easy Entry" flared cable entry
- Surface: galvanically tin-coated, other surfaces available upon request
- Annealed to copper hardness F 20



Cross section (mm <sup>2</sup> )	Bolt ø (mm)	W	øi	øe	C1	C2	a	L	Weight per 100 pcs. ~kg	PU/pcs.	Article no.
10	5	12	5.6	8	6	7	12.6	32	0.68	100	18 3255
	6	12	5.6	8	6	7	12.6	32	0.65	100	18 3256
	8	15	5.6	8	8	10	12.6	36	0.71	100	18 3258
	10	15	5.6	8	8	10	12.6	36	0.67	100	18 3260
16	12	15	5.6	8	8	10	12.6	36	0.72	100	18 3262
	5	13	6.6	9.5	7	9	14.6	37.6	1.18	50	18 3265
	6	13	6.6	9.5	7	9	14.6	37.6	1.15	50	18 3266
	8	16	6.6	9.5	9	11	14.6	41.6	1.24	50	18 3268
25	10	16	6.6	9.5	9	11	14.6	41.6	1.18	50	18 3270
	12	17.5	6.6	9.5	9	11	14.6	41.6	1.11	50	18 3272
	5	15	7.9	11	9	11	16.5	43.5	1.73	50	18 3275
	6	15	7.9	11	9	11	16.5	43.5	1.7	50	18 3276
35	8	17	7.9	11	9	11	16.5	43.5	1.65	50	18 3278
	10	17	7.9	11	9	11	16.5	43.5	1.58	50	18 3280
	12	18.5	7.9	11	9	11	16.5	43.5	1.49	50	18 3282
	6	18	9.2	12.5	7	10	18.5	43.5	2.08	1	18 3286
50	8	18	9.2	12.5	10	14	18.5	51	2.40	1	18 3288
	10	18	9.2	12.5	10	14	18.5	51	2.32	1	18 3290
	12	19	9.2	12.5	10	14	18.5	51	2.20	1	18 3292
	14	20.8	9.2	12.5	10	14.5	18.5	51	2.12	1	18 3294
50	6	21	11	15	10	14	21.5	55.5	3.90	1	18 3296
	8	21	11	15	10	14	21.5	55.5	3.82	1	18 3298
	10	21	11	15	10	14	21.5	55.5	3.72	1	18 3300
	12	21	11	15	10	14	21.5	55.5	3.56	1	18 3302
	14	21	11	15	10	14	21.5	55.5	3.44	1	18 3304

## Tubular cable lugs, Cu, designed for finely stranded conductors according to DIN 0295 and IEC 228



F

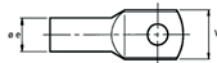
See previous page for description

Cross section (mm <sup>2</sup> )	Bolt $\phi$ (mm)	W	$\phi_i$	$\phi_e$	C1	C2	a	L	Weight per 100 pcs. ~kg	PU/pcs.	Article no.
70	6	24	13.1	17	13.5	15.5	27.5	67.5	5.39	1	18 3306
	8	24	13.1	17	13.5	15.5	27.5	67.5	5.31	1	18 3308
	10	24	13.1	17	13.5	15.5	27.5	67.5	5.21	1	18 3310
	12	24	13.1	17	13.5	15.5	27.5	67.5	5.06	1	18 3312
	14	24	13.1	17	13.5	15.5	27.5	67.5	4.93	1	18 3314
95	16	24	13.1	17	13.5	15.5	27.5	67.5	4.77	1	18 3316
	8	28	14.5	19	13	17	32.5	75.5	7.66	1	18 3318
	10	28	14.5	19	13	17	32.5	75.5	7.55	1	18 3320
	12	28	14.5	19	13	17	32.5	75.5	7.38	1	18 3322
	14	28	14.5	19	13	17	32.5	75.5	7.24	1	18 3324
120	16	28	14.5	19	13	17	32.5	75.5	7.06	1	18 3326
	8	30	16.2	21	17	17	31.5	80	8.95	1	18 3328
	10	30	16.2	21	17	17	31.5	80	8.83	1	18 3330
	12	30	16.2	21	17	17	31.5	80	8.64	1	18 3332
	14	30	16.2	21	17	17	31.5	80	8.98	1	18 3334
150	16	30	16.2	21	17	17	31.5	80	8.78	1	18 3336
	8	33	18	23	17	18	35.5	89	11.26	1	18 3338
	10	33	18	23	17	18	31.5	89	11.13	1	18 3340
	12	33	18	23	17	18	31.5	89	10.55	1	18 3342
	14	33	18	23	17	18	31.5	89	11.34	1	18 3344
185	16	33	18	23	17	18	31.5	89	11.13	1	18 3346
	20	33	18	23	13.5	21.5	31.5	89	10.55	1	18 3348
	10	37	20.6	26	19	20	39.6	96	15.04	1	18 3350
	12	37	20.6	26	19	20	39.6	96	14.82	1	18 3352
	14	37	20.6	26	19	20	39.6	96	15.35	1	18 3354
240	16	37	20.6	26	19	20	39.6	96	15.12	1	18 3356
	20	37	20.6	26	19	20	39.6	96	14.85	1	18 3360
	12	41	23	28	19	21	41	101	16.04	1	18 3362
	14	41	23	28	19	21	41	101	15.88	1	18 3364
	16	41	23	28	19	21	41	101	15.66	1	18 3366
300	20	41	23	28	19	21	41	101	15.44	1	18 3370
	12	47	26	32	20	25	43	111	25.39	1	18 3372
	14	47	26	32	20	25	43	111	25.20	1	18 3374
	16	47	26	32	20	25	43	111	24.95	1	18 3376
	20	47	26	32	20	25	43	111	24.26	1	18 3380

### Compression cable lugs, Cu, DIN 46235

Technical data

- Material: ETP Cu according to DIN EN 13600
- Surface: galvanically tin-coated, other surfaces available upon request
- Especially suitable for finely stranded conductors according to IEC 228
- Annealed to copper hardness F 20



UL approval applied for

Cross section (mm <sup>2</sup> )	Bolt ø (mm)	Ident. no.	W	øi	øe	C1	C2	a	L	Weight per 100 pcs. ~kg	PU/pcs.	Article no.
6	5	5	8.5	3.8	5.5	7	9	11	32	0.34	100	18 3500
	6	5	8.5	3.8	5.5	8.5	9	11	33.5	0.32	100	18 3501
	8	5	13	3.8	5.5	11	9	11	36	0.32	100	18 3570
10	5	6	9	4.5	6	7	11	12	35	0.39	100	18 3502
	6	6	9	4.5	6	8.5	11	12	36.5	0.38	100	18 3503
	8	6	13	4.5	6	11	11	12	39	0.38	100	18 3504
16	6	8	13	5.5	8.5	8.5	12.5	20.5	45.5	1.32	100	18 3505
	8	8	13	5.5	8.5	11	12.5	20.5	48	1.27	100	18 3506
	10	8	17	5.5	8.5	13	12.5	20.5	50	1.31	100	18 3507
	12	8	18	5.5	8.5	14	12.5	20.5	51	1.35	100	18 3508
25	6	10	14	7	10	8.5	13.5	20.5	47.5	1.67	50	18 3509
	8	10	16	7	10	11	13.5	20.5	50	1.64	50	18 3510
	10	10	17	7	10	13	13.5	20.5	52	1.72	50	18 3511
	12	10	19	7	10	14	13.5	20.5	53	1.65	25	18 3512
35	6	12	17	8.2	12.5	8.5	14.5	20.5	51.5	2.5	1	18 3572
	8	12	17	8.2	12.5	11	14.5	20.5	54	3.44	1	18 3513
	10	12	19	8.2	12.5	13	14.5	20.5	56	3.34	1	18 3514
	12	12	21	8.2	12.5	14	14.5	20.5	57	3.21	1	18 3515
	14	12	21	8.2	12.5	15.5	14.5	20.5	58.5	2.90	1	18 3516
50	8	14	20	10	14.5	11	16.5	30	64	5.04	1	18 3517
	10	14	22	10	14.5	13	16.5	30	66	4.93	1	18 3518
	12	14	24	10	14.5	14	16.5	30	67	5.06	1	18 3519
	14	14	24	10	14.5	15.5	16.5	30	68.5	4.96	1	18 3520
	16	14	28	10	14.5	17	16.5	30	70	4.77	1	18 3521
70	8	16	24	11.5	16.5	11	16.5	31	67	6.76	1	18 3522
	10	16	24	11.5	16.5	13	16.5	31	69	6.64	1	18 3523
	12	16	24	11.5	16.5	14	16.5	31	70	6.8	1	18 3524
	14	16	24	11.5	16.5	15.5	16.5	31	71.5	6.12	1	18 3525
	16	16	30	11.5	16.5	17	16.5	31	73	6.43	1	18 3526
95	8	18	28	13.5	19	11	16.5	37	77	9.00	1	18 3574
	10	18	28	13.5	19	13	16.5	37	79	10.22	1	18 3527
	12	18	28	13.5	19	14	16.5	37	80	10	1	18 3528
	14	18	28	13.5	19	15.5	16.5	37	81.5	10	1	18 3529
	16	18	32	13.5	19	17	16.5	37	83	9.58	1	18 3530
120	10	20	32	15.5	21	13	21	38	84	11.36	1	18 3531
	12	20	32	15.5	21	14	21	38	85	11.28	1	18 3532
	14	20	32	15.5	21	15.5	21	38	86.5	11.7	1	18 3533
	16	20	32	15.5	21	17	21	38	88	11.63	1	18 3534
	20	20	38	15.5	21	20	21	38	91	12.18	1	18 3535
150	10	22	34	17	23.5	13	21	41	92	16.11	1	18 3536
	12	22	34	17	23.5	14	21	41	93	16.00	1	18 3537
	14	22	34	17	23.5	15.5	21	41	94.5	16.14	1	18 3538
	16	22	34	17	23.5	17	21	41	96	16.07	1	18 3539
	20	22	40	17	23.5	20	21	41	99	17.65	1	18 3540
185	10	25	37	19	25.5	13	24	42	96	18.96	1	18 3541
	12	25	37	19	25.5	14	24	42	97	18.89	1	18 3542
	14	25	37	19	25.5	15.5	24	42	98.5	19.21	1	18 3543
	16	25	37	19	25.5	17	24	42	100	19.92	1	18 3544
	20	25	40	19	25.5	20	24	42	103	20.09	1	18 3545
240	12	28	42	21.5	29	14	24	51	107	26.58	1	18 3546
	14	28	42	21.5	29	15.5	24	51	108.5	29.90	1	18 3547
	16	28	42	21.5	29	17	24	51	110	28.44	1	18 3548
	20	28	45	21.5	29	20	24	51	113	28.44	1	18 3549
300	14	32	48	24.5	32	15.5	24	55	116.5	38.60	1	18 3550
	16	32	48	24.5	32	17	24	55	118	32.46	1	18 3551
	20	32	48	24.5	32	20	24	55	121	32.72	1	18 3552
400	14	38	55	27.5	38.5	23	24	72	139	68.5	1	18 3553
	16	38	55	27.5	38.5	23	24	72	139	68.2	1	18 3554
	20	38	55	27.5	38.5	23	24	72	139	67.5	1	18 3555
500	16	42	60	31	42	23	26	75	149	81	1	18 3556
	20	42	60	31	42	23	26	75	149	81	1	18 3557
625	16	44	60	34.5	44	23	26	83	159	84	1	18 3558
	20	44	60	34.5	44	23	26	83	159	84	1	18 3559

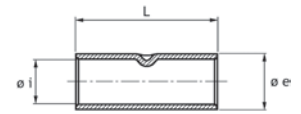
**Compression connectors, Cu, DIN 46267, Part 1**

## Technical data

- Material: ETP Cu according to DIN EN 13600
- Surface: galvanically tin-coated, other surfaces available upon request
- For connections with strain relief
- Especially suitable for finely stranded conductors according to IEC 228
- Annealed to copper hardness F 20

UL approval  
applied for

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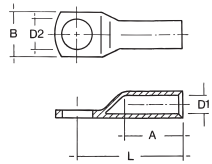
Cross section (mm <sup>2</sup> )	Ident. no.	øi	øe	L	Weight per 100 pcs. ~kg	PU/pcs.	Article no.
6	5	3.8	5.5	31	0.34	100	18 3700
10	6	4.5	6	31	0.33	100	18 3701
16	8	5.5	8.5	51	1.49	100	18 3702
25	10	7	10	51	1.80	50	18 3703
35	12	8.2	12.5	51	3.15	1	18 3704
50	14	10	14.5	57	4.37	1	18 3705
70	16	11.5	16.5	57	5.54	1	18 3706
95	18	13.5	19	71	8.84	1	18 3707
120	20	15.5	21	71	9.92	1	18 3708
150	22	17	23.5	81	14.86	1	18 3709
185	25	19	25.5	86	17.35	1	18 3710
240	28	21.5	29	91	24.03	1	18 3711
300	32	24.5	32	101	29.86	1	18 3712
400	38	27.5	38.5	151	71.00	1	18 3713
500	42	31	42	161	92.00	1	18 3714
625	44	34.5	44	161	80.00	1	18 3715



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### AL compression cable lugs, DIN 46329

made of E-Al, bare, barrier seal design with oil stop



Cross section mm/sm (mm <sup>2</sup> )	Cross section se (mm <sup>2</sup> )	Bolt ø	Ident. No.	D1 mm	D2 mm	A mm	B mm	L mm	Weight per 100 pcs. ~kg	PU/pcs.	Article no.
50	70	M 8	16	9.8	8.4	42	25	62	2.75	4	18 3617
50	70	M10	16	9.8	10.5	42	25	62	2.7	4	18 3618
50	70	M12	16	9.8	13	42	25	62	2.65	4	18 3619
70	95	M 8	18	11.2	8.4	52	25	72	3.45	4	18 3622
70	95	M10	18	11.2	10.5	52	25	72	3.8	4	18 3623
70	95	M12	18	11.2	13	52	25	72	3.35	4	18 3624
95	120	M10	22	13.2	10.5	56	25	75	6.9	4	18 3627
95	120	M12	22	13.2	13	56	25	75	4.92	4	18 3628
95	120	M16	22	13.2	17	56	25	75	6	4	18 3630
120	150	M10	22	14.7	10.5	56	30	80	5.95	4	18 3631
120	150	M12	22	14.7	13	56	30	80	5.84	4	18 3632
120	150	M16	22	14.7	17	56	30	80	6.6	4	18 3634
150	185	M10	25	16.3	10.5	60	30	90	8.5	4	18 3636
150	185	M12	25	16.3	13	60	30	90	7.73	4	18 3637
150	185	M16	25	16.3	17	60	30	90	7.6	4	18 3639
150	185	M20	25	16.3	21	60	30	90	8.2	4	18 3640
185	240	M10	28	18.3	10.5	60	30	91	11	4	18 3641
185	240	M12	28	18.3	13	60	30	91	9.88	4	18 3642
185	240	M16	28	18.3	17	60	30	91	10.1	4	18 3644
185	240	M20	28	18.3	21	60	30	91	10	4	18 3645
240	300	M10	32	21	10.5	70	38	103	15.5	4	18 3646
240	300	M12	32	21	13	70	38	103	13.8	4	18 3647
240	300	M16	32	21	17	70	38	103	13.48	4	18 3648
240	300	M20	32	21	21	70	38	103	15	4	18 3649
300		M12	34	23.3	13	70	38	103	17.6	1	18 3650
300		M16	34	23.3	17	70	38	103	17.28	1	18 3651
300		M20	34	23.3	21	70	38	103	17.4	1	18 3652
400		M12	38	26	13	73	38	116	38	1	18 3653
400		M16	38	26	17	73	38	116	37.4	1	18 3654
400		M20	38	26	21	73	38	116	40.2	1	18 3655
500		M12	44	29	13	79	44	122	43.7	1	18 3656
500		M16	44	29	17	79	44	122	43.3	1	18 3657
500		M20	44	29	21	79	44	122	43	1	18 3658

**AL compression connectors, DIN 46267, Part 2**

made of E-Al, bare, for pre-rounded sm/se sector-shaped conductors

**AL**

Cross section mm <sup>2</sup>	Cross section se (mm <sup>2</sup> )	Ident. No.	Inner ø mm	Length mm	Weight kg/100	PU/pcs.	Article no.
35	50	14	8	85	2.6	10	18 3860
50	70	16	9.8	85	3.2	10	18 3861
70	95	18	11.2	105	5.3	10	18 3862
95	120	22	13.2	105	7.6	10	18 3863
120	150	22	14.7	105	7.8	10	18 3864
150	185	25	16.3	125	10.7	10	18 3865
185	240	28	18.3	125	14.3	5	18 3866
240	300	32	21	145	20.3	5	18 3867
300	---	34	23.3	145	22.2	1	18 3868
400	---	38	26	210	40.8	1	18 3869

**Compression cable lugs, Al-Cu**

made of E-Al and E-Cu according to EN 13600, bare, barrier seal with solid Cu screw mounting link. Pipe dimensions according to DIN 46329, with compression markings. For screwing Al connections to Cu rails.

For strain-relieved connections of AL cables according to DIN 48201, Part 1 and AL conductors according to DIN EN 50182.

For pre-rounded sector-shaped conductors.

**AL**

Cross section mm <sup>2</sup>	Cross section se (mm <sup>2</sup> )	Bolt ø	Ident. No.	D1 mm	D2 mm	B mm	L mm	Weight tot. kg/100	PU/pcs.	Article no.
25	35	M8	12	6.8	8.5	25	61	3.2	10	18 3910
25	35	M10	12	6.8	10.5	25	61	3.1	10	18 3911
25	35	M12	12	6.8	13	25	61	3	10	18 3912
35	50	M10	14	8	10.5	25	71	3.8	10	18 3914
35	50	M12	14	8	13	25	71	3.6	10	18 3915
50	70	M10	16	9.8	10.5	25	72	4.3	10	18 3918
50	70	M12	16	9.8	13	25	72	4.1	10	18 3919
70	95	M10	18	11.2	10.5	25	82	5.3	10	18 3923
70	95	M12	18	11.2	13	25	82	5.1	10	18 3924
95	120	M12	22	13.2	13	30	85	9.9	10	18 3928
95	120	M16	22	13.2	17	30	85	10.5	10	18 3930
120	150	M12	22	14.7	13	30	87	10.6	10	18 3932
120	150	M16	22	14.7	17	30	87	10	10	18 3934
150	185	M12	25	16.3	13	30	104	16.2	5	18 3937
150	185	M16	25	16.3	17	30	104	15.7	5	18 3939
185	240	M12	28	18.3	13	30	105	21.8	5	18 3942
185	240	M16	28	18.3	17	30	105	21.4	5	18 3944
240	300	M12	32	21	13	35	120	29.8	5	18 3946
240	300	M16	32	21	17	35	120	29	5	18 3948
300		M16	34	24.5	17	40	120	40.7	1	18 3951
300		M20	34	24.5	21	40	120	39.5	1	18 3952



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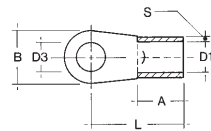
**AL-CU compression connectors, DIN 46267, Part 2**

made of E-Al and E-Cu according to EN 13600, bare. For connections of  
 CU cables according to DIN 48201, ALU cables according to DIN 48201, Part 1 and ALU conductors DIN EN 50182.



Cross sect. AL mm/sm (mm <sup>2</sup> )	Cross sect. AL se (mm <sup>2</sup> )	Cross sect. (mm <sup>2</sup> )	Ident. No. AL	Ident. No. CU	AL mm	CU mm	Length mm	Weight CU kg/100	Weight tot. kg/100	PU/pcs.	Article no.
70	95	16	18	8	11.2	5.5	79	0.71	4.1	4	18 3420
70	95	25	18	10	11.2	7	79	0.89	3.95	4	18 3421
70	95	35	18	12	11.2	8.2	79	1.62	4.9	4	18 3422
70	95	50	18	14	11.2	10	85	2.36	5.7	4	18 3423
70	95	70	18	16	11.2	11.5	96	2.92	7.25	4	18 3424
70	95	95	18	18	11.2	13.5	95	4.96	9.36	4	18 3425
70	95	120	18	20	11.2	15.5	99	5.64	10.54	4	18 3426
95	120	16	22	8	13.2	5.5	79	0.71	6.15	4	18 3430
95	120	25	22	10	13.2	7	79	0.89	6.3	4	18 3431
95	120	35	22	12	13.2	8.2	79	1.52	6.8	4	18 3432
95	120	50	22	14	13.2	10	85	2.36	8.05	4	18 3433
95	120	70	22	16	13.2	11.5	87	3.11	8.2	4	18 3434
95	120	95	22	18	13.2	13.5	95	4.96	10.35	4	18 3435
95	120	120	22	20	13.2	15.5	95	5.64	11.55	4	18 3436
120	150	35	22	12	14.7	8.2	81	1.52	7.6	4	18 3440
120	150	50	22	14	14.7	10	87	2.36	7.9	4	18 3441
120	150	70	22	16	14.7	11.5	89	3.11	8.5	4	18 3442
120	150	95	22	18	14.7	13.5	97	4.86	11	4	18 3443
120	150	120	22	20	14.7	15.5	97	5.64	10.28	4	18 3444
150	185	16	25	8	16.3	5.4	92	0.71	7.8	4	18 3450
150	185	25	25	10	16.3	6.8	92	0.89	8	4	18 3451
150	185	35	25	12	16.3	8.2	92	1.62	8.4	4	18 3452
150	185	50	25	14	16.3	10	99	2.36	10.2	4	18 3453
150	185	70	25	16	16.3	11.5	100	3.11	10.35	4	18 3454
150	185	95	25	18	16.3	13.5	108	4.96	12.65	4	18 3455
150	185	120	25	20	16.3	15.5	108	5.64	13.9	4	18 3456
150	185	150	25	22	16.3	17	124	8.23	16.7	4	18 3457
185	240	50	28	14	18.3	10	99	2.36	12.1	1	18 3460
185	240	70	28	16	18.3	11.5	100	3.11	13	1	18 3461
185	240	95	28	18	18.3	13.5	108	4.96	14.45	1	18 3462
185	240	120	28	20	18.3	15.5	108	5.64	13.72	1	18 3463
185	240	150	28	22	18.3	17	113	8.23	19.55	1	18 3464
185	240	185	28	25	18.3	19	116	9.62	21	1	18 3465
240	300	50	32	14	21	10	110	2.36	16.5	1	18 3470
240	300	70	32	16	21	11.5	111	3.11	18	1	18 3471
240	300	95	32	18	21	13.5	119	4.96	19	1	18 3472
240	300	120	32	20	21	15.5	119	5.64	20.5	1	18 3473
240	300	150	32	22	21	17	124	8.23	23.3	1	18 3474
240	300	185	32	25	21	19	127	9.62	25.5	1	18 3475
240	300	240	32	28	21	21.5	128	12.71	30.1	1	18 3476
300	300	120	34	20	23.5	15.5	119	5.64	27.8	1	18 3480
300	300	150	34	22	23.5	17	124	8.23	31.1	1	18 3481
300	300	185	34	25	23.5	19	127	9.62	32.7	1	18 3482
300	300	240	34	28	23.5	21.5	128	12.71	37.5	1	18 3483
300	300	300	34	32	23.5	24.5	134	16.1	41.7	1	18 3484

## Crimping cable lugs, ring-shaped, Cu, DIN 46234

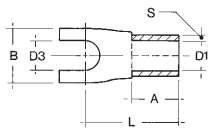


## Technical data

- Material: ETP Cu according to DIN EN 13600
- Surface: galvanically tin-coated, other surfaces available upon request
- Especially suitable for finely stranded conductors according to IEC 228

Cross section (mm <sup>2</sup> )	Bolt ø (mm)	Nom. size acc. to DIN	D1	D3	A	B	L	S	Weight per 100 pcs. ~kg	PU/pcs.	Article no.
0.5 - 1	3	3 - 1	1.6	3.2	5	6	11	0.8	0.07	100	18 0400
	4	4 - 1	1.6	4.3	5	8	12	0.8	0.07	100	18 0402
	5	5 - 1	1.6	5.3	5	10	13	0.8	0.07	100	18 0403
1.5 - 2.5	3	3 - 2.5	2.3	3.2	5	6	11	0.8	0.07	100	18 0407
	4	4 - 2.5	2.3	4.3	5	8	12	0.8	0.08	100	18 0408
	5	5 - 2.5	2.3	5.3	5	10	14	0.8	0.09	100	18 0410
	6	6 - 2.5	2.3	6.5	5	11	16	0.8	0.11	100	18 0412
	8	8 - 2.5	2.3	8.4	5	14	17	0.8	0.13	100	18 0413
4 - 6	4	4 - 6	3.6	4.3	6	8	14	1	0.14	100	18 0416
	5	5 - 6	3.6	5.3	6	10	15	1	0.16	100	18 0418
	6	6 - 6	3.6	6.5	6	11	16	1	0.16	100	18 0420
	8	8 - 6	3.6	8.4	6	14	19	1	0.22	100	18 0422
	10	10 - 6	3.6	10.5	6	18	21	1	0.28	100	18 0423
10	5	5 - 10	4.5	5.3	8	10	16	1.1	0.23	100	18 0426
	6	6 - 10	4.5	6.5	8	11	17	1.1	0.25	100	18 0428
	8	8 - 10	4.5	8.4	8	14	20	1.1	0.3	100	18 0430
	10	10 - 10	4.5	10.5	8	18	21	1.1	0.35	100	18 0432
	12	12 - 10	4.5	13	8	22	23	1.1	0.43	100	18 0434
16	5	5 - 16	5.8	5.3	10	11	20	1.2	0.39	100	18 0436
	6	6 - 16	5.8	6.5	10	11	20	1.2	0.38	100	18 0438
	8	8 - 16	5.8	8.4	10	14	22	1.2	0.43	100	18 0440
	10	10 - 16	5.8	10.5	10	18	24	1.2	0.5	100	18 0442
	12	12 - 16	5.8	13	10	22	26	1.2	0.5	50	18 0444
25	5	5 - 25	7.5	5.3	11	12	25	1.5	0.7	100	18 0446
	6	6 - 25	7.5	6.5	11	12	25	1.5	0.69	100	18 0448
	8	8 - 25	7.5	8.4	11	16	25	1.5	0.75	100	18 0450
	10	10 - 25	7.5	10.5	11	18	26	1.5	0.8	50	18 0452
	12	12 - 25	7.5	13	11	22	31	1.5	0.92	100	18 0454
35	16	16 - 25	7.5	17	11	28	35	1.5	0.92	100	18 0456
	6	6 - 35	9	6.5	12	15	26	1.6	1.01	1	18 0458
	8	8 - 35	9	8.4	12	16	26	1.6	0.98	1	18 0460
	10	10 - 35	9	10.5	12	18	27	1.6	1	1	18 0462
	12	12 - 35	9	13	12	22	31	1.6	1.26	1	18 0464
50	16	16 - 35	9	17	12	28	36	1.6	1.47	1	18 0466
	6	6 - 50	11	6.5	16	18	34	1.8	1.75	1	18 0468
	8	8 - 50	11	8.4	16	18	34	1.8	1.68	1	18 0470
	10	10 - 50	11	10.5	16	18	34	1.8	1.6	1	18 0472
	12	12 - 50	11	13	16	22	36	1.8	1.8	1	18 0474
70	16	16 - 50	11	17	16	28	40	1.8	2.1	1	18 0476
	6	6 - 70	13	6.5	18	22	38	2	2.7	1	18 0478
	8	8 - 70	13	8.4	18	22	38	2	2.6	1	18 0480
	10	10 - 70	13	10.5	18	22	38	2	2.5	1	18 0482
	12	12 - 70	13	13	18	22	38	2	2.4	1	18 0484
95	16	16 - 70	13	17	18	28	42	2	2.7	1	18 0486
	8	8 - 95	15	8.4	20	24	42	2.5	4.02	1	18 0488
	10	10 - 95	15	10.5	20	24	42	2.5	3.92	1	18 0490
	12	12 - 95	15	13	20	24	42	2.5	3.9	1	18 0492
	16	16 - 95	15	17	20	28	44	2.5	3.7	1	18 0494
120	8	8 - 120	17	8.4	22	24	44	3	5.8	1	18 0496
	10	10 - 120	17	10.5	22	24	44	3	5.6	1	18 0498
	12	12 - 120	17	13	22	24	44	3	5.4	1	18 0500
150	16	16 - 120	17	17	22	28	48	3	5.8	1	18 0502
	10	10 - 150	19	10.5	24	30	50	3.2	7.7	1	18 0504
	12	12 - 150	19	13	24	30	50	3.2	7.6	1	18 0506
185	16	16 - 150	19	17	24	30	50	3.2	7.5	1	18 0508
	12	12 - 185	21	13	28	36	50	3.5	10.8	1	18 0510
	16	16 - 185	21	17	28	36	50	3.5	10.2	1	18 0512
240	12	12 - 240	23.5	13	32	38	56	4	14.70	1	18 0514
	16	16 - 240	23.5	17	32	38	56	4	14.30	1	18 0516

**Crimping cable lugs, fork-shaped, Cu**

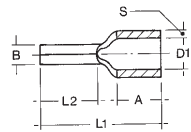


Technical data

- Material: ETP Cu according to DIN EN 13600
- Surface: galvanically tin-coated
- Hard soldered ferrule seam
- For connections with strain relief

Cross section (mm <sup>2</sup> )	Bolt ø (mm)	D1	D3	A	B	L	S	Weight per 100 pcs. ~kg	PU/pcs.	Article no.
0.5 - 1	3	1.6	3.2	5	5.8	11	0.8	0.06	100	18 0520
	4	1.6	4.3	5	7	12	0.8	0.07	100	18 0522*
	5	1.6	5.3	5	9.6	13	0.8	0.07	100	18 0524*
1.5 - 2.5	3	2.3	3.2	5	5.8	11	0.8	0.06	100	18 0530*
	4	2.3	4.3	5	7	12	0.8	0.08	100	18 0532*
	5	2.3	5.3	5	9.6	13	0.8	0.09	100	18 0534*
4 - 6	6	2.3	6.5	5	12	13	0.8	0.12	100	18 0536*
	4	3.6	4.3	6	8.5	14	1	0.14	100	18 0540*
	5	3.6	5.3	6	9	14	1	0.16	100	18 0542*
10	6	3.6	6.5	6	12.5	18	1	0.17	100	18 0544*
	8	3.6	8.4	6	15	21	1	0.2	100	18 0546*
	5	4.5	5.3	7	10.5	17	1.1	0.22	100	18 0550
16	6	4.5	6.5	7	10.5	17	1.1	0.25	100	18 0552
	5	5.8	5.3	10	11	20	1.2	0.358	100	18 0560
	6	5.8	6.5	10	11	20	1.2	0.358	100	18 0562

**Crimping cable lugs, pin-shaped, Cu, 0.5 - 6 mm<sup>2</sup> acc. to DIN 46230**



Technical data

- Material: ETP Cu according to DIN EN 13600
- Surface: galvanically tin-coated
- Hard soldered ferrule seam
- For connections with strain relief

Cross section (mm <sup>2</sup> )	Pin ø (mm)	L1	L2	D1	A	B	S	Weight per 100 pcs. ~kg	PU/pcs.	Article no.
0.5 - 1	1.8	17	10	1.8	5	1.9	0.8	0.06	100	18 0590*
1.5-2.5	2.3	17	10	2.3	5	1.9	0.8	0.07	100	18 0592*
4 - 6	3.4	20	11	3.6	6	2.7	0.8	0.15	100	18 0594*
10	4.5	24.5	11	4.3	10	4.3	1	0.27	100	18 0600*
16	6	29.5	15	5.4	11.5	5.8	1	0.42	100	18 0602*
25	7	33.5	15	6.7	13.5	6.8	1.2	0.66	100	18 0604
35	8	40.5	20	8.2	16	8	1.5	1.2	1	18 0606*
50	9.5	45	20	9.5	19	9.5	1.8	1.91	1	18 0608*
70	11	55	23	11.2	24	11	2	3	1	18 0610
95	12.5	55	23	13.5	24	12.5	2.5	4.3	1	18 0612

\*The articles marked with an asterisk





## Tubular cable lug sets

in a premium **raaco** set box with crimping pliers

Content:

255 assorted pieces:	PU	Article no.
• 25 tubular cable lugs 6 mm <sup>2</sup> , M6		18 0694
• 25 tubular cable lugs 6 mm <sup>2</sup> , M8		18 0696
• 25 tubular cable lugs 10 mm <sup>2</sup> , M6		18 0702
• 25 tubular cable lugs 10 mm <sup>2</sup> , M8		18 0704
• 25 tubular cable lugs 16 mm <sup>2</sup> , M8		18 0712
• 25 tubular cable lugs 25 mm <sup>2</sup> , M8		18 0722
• 25 tubular cable lugs 25 mm <sup>2</sup> , M10		18 0724
• 20 tubular cable lugs 35 mm <sup>2</sup> , M8		18 0732
• 20 tubular cable lugs 35 mm <sup>2</sup> , M10		18 0734
• 20 tubular cable lugs 50 mm <sup>2</sup> , M10		18 0742
• 20 tubular cable lugs 50 mm <sup>2</sup> , M12		18 0744
• Crimping tool, 6 – 50 mm <sup>2</sup> , hexagonal crimping		10 1882
<b>Set box with tubular cable lugs</b>	<b>1</b>	<b>18 1545</b>

## Compression cable lug sets

in a premium **raaco** set box with crimping pliers

Content:

370 pieces, sorted:	PU	Article no.
• 50 compression cable lugs 6 mm <sup>2</sup> , M5		18 3500
• 50 compression cable lugs 6 mm <sup>2</sup> , M6		18 3501
• 50 compression cable lugs 10 mm <sup>2</sup> , M5		18 3502
• 50 compression cable lugs 10 mm <sup>2</sup> , M6		18 3503
• 25 compression cable lugs 16 mm <sup>2</sup> , M8		18 3506
• 25 compression cable lugs 16 mm <sup>2</sup> , M10		18 3507
• 25 compression cable lugs 25 mm <sup>2</sup> , M8		18 3510
• 25 compression cable lugs 25 mm <sup>2</sup> , M10		18 3511
• 20 compression cable lugs 35 mm <sup>2</sup> , M8		18 3513
• 20 compression cable lugs 35 mm <sup>2</sup> , M10		18 3514
• 15 compression cable lugs 50 mm <sup>2</sup> , M10		18 3518
• 15 compression cable lugs 50 mm <sup>2</sup> , M12		18 3519
• Crimping tool, 6 – 50 mm <sup>2</sup> , hexagonal crimping		10 1883
<b>Set box with compression cable lugs</b>	<b>1</b>	<b>18 1546</b>



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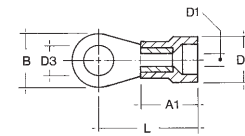
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**Insulated cable connectors**  
**Crimping cable lugs, ring-shaped, Cu, insulated,**  
**DIN 46237, from 0.5 - 6 mm<sup>2</sup>**



Technical data

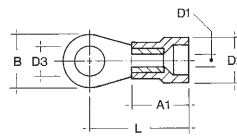
- Material: ETP Cu according to DIN EN 13600
- Surface: galvanically tin-coated
- For connections with strain relief
- Insulated PA (polyamide, nylon), halogen-free
- Temperature resistance -60°C to +105°C
- Easy Entry allows the conductor to be inserted quickly and easily

Cross section (mm <sup>2</sup> )	Bolt ø (mm)	Nom. size acc. to DIN	Insulation colour	D1	D2	D3	A1	B	L	Weight per 100 pcs. ~kg	PU/pcs.	Article no.
0.1 - 0.4	2		yellow	1	3.2	2.3	10.5	5	14	0.02	100	18 0008
	3		yellow	1	3.2	3.2	10.5	5	16	0.03	100	18 0010
	4		yellow	1	3.2	4.3	10.5	6	17	0.04	100	18 0014
	5		yellow	1	3.2	5.3	10.5	8	18	0.05	100	18 0016
0.5 - 1	3	3 - 1	red	1.6	4.1	3.2	11.5	6	16	0.07	100	18 0020
	4	4 - 1	red	1.6	4.1	4.3	11.5	8	17	0.08	100	18 0024
	5	5 - 1	red	1.6	4.1	5.3	11.5	10	18	0.1	100	18 0026
	6		red	1.6	4.1	6.5	11.5	11	20	0.11	100	18 0028
	8		red	1.6	4.1	8.4	11.5	14	22	0.14	100	18 0027
1.5 - 2.5	10		red	1.6	4.1	10.5	11.5	18	24	0.19	100	18 0029
	3	3 - 2.5	blue	2.3	4.5	3.2	11.5	6	17	0.08	100	18 0030
	4	4 - 2.5	blue	2.3	4.5	4.3	11.5	8	18	0.09	100	18 0034
	5	5 - 2.5	blue	2.3	4.5	5.3	11.5	10	20	0.11	100	18 0036
4 - 6	6	6 - 2.5	blue	2.3	4.5	6.5	11.5	11	22	0.12	100	18 0038
	8	8 - 2.5	blue	2.3	4.5	8.4	11.5	14	23	0.15	100	18 0040
	10		blue	2.3	4.5	10.5	11.5	18	25	0.21	100	18 0042
	4	4 - 6	yellow	3.6	6.8	4.3	13	8	20	0.16	100	18 0050
10	5	5 - 6	yellow	3.6	6.8	5.3	13	10	21	0.19	100	18 0052
	6	6 - 6	yellow	3.6	6.8	6.5	13	11	22	0.2	100	18 0054
	8	8 - 6	yellow	3.6	6.8	8.4	13	14	25	0.24	100	18 0056
	10	10 - 6	yellow	3.6	6.8	10.5	13	18	27	0.3	100	18 0058
16	5		red	4.5	8.6	5.3	16.5	10	24	0.29	100	18 0070
	6		red	4.5	8.6	6.5	16.5	11	25	0.3	100	18 0072
	8		red	4.5	8.6	8.4	16.5	14	28	0.34	50	18 0074
	10		red	4.5	8.6	10.5	16.5	18	29	0.41	50	18 0076
16	12		red	4.5	8.6	13	16.5	22	31	0.49	50	18 0078
	5		blue	5.8	9.6	5.3	21.5	11	30	0.494	50	18 0080
	6		blue	5.8	9.6	6.5	21.5	11	30	0.494	50	18 0082
	8		blue	5.8	9.6	8.4	21.5	14	32	0.592	50	18 0084
16	10		blue	5.8	9.6	10.5	21.5	18	34	0.572	50	18 0086
	12		blue	5.8	9.6	13	21.5	22	36	0.768	50	18 0088

### Crimping cable lugs, fork-shaped, Cu, insulated, DIN 46237 from 0.5 - 6 mm<sup>2</sup>

Technical data

- Material: ETP Cu according to DIN EN 13600
- Surface: galvanically tin-coated
- For connections with strain relief
- Insulated PA (polyamide, nylon), halogen-free
- Temperature resistance -60°C to +105°C
- Easy Entry allows the conductor to be inserted quickly and easily

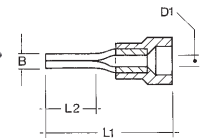


Cross section (mm <sup>2</sup> )	Bolt ø (mm)	Nom. size acc. to DIN	Insulation colour	D1	D2	D3	A1	B	L	Weight per 100 pcs. ~kg	PU/pcs.	Article no.
0.1 - 0.4	3		yellow	1	3.2	3.3	10.5	5	16	0.04	100	18 0118
0.5 - 1	3	3 - 1	red	1.6	4.1	3.2	11.5	5.8	16	0.07	100	18 0120*
	4	4 - 1	red	1.6	4.1	4.3	11.5	7	17	0.08	100	18 0124*
	5	5 - 1	red	1.6	4.1	5.3	11.5	9.6	18	0.09	100	18 0126*
1.5 - 2.5	6		red	1.6	4.1	6.5	11.5	11	20	0.1	100	18 0128*
	3	3 - 2.5	blue	2.3	4.5	3.2	11.5	5.9	17	0.08	100	18 0140*
	4	4 - 2.5	blue	2.3	4.5	4.3	11.5	7	19	0.09	100	18 0144*
4 - 6	5	5 - 2.5	blue	2.3	4.5	5.3	11.5	10	20	0.11	100	18 0146*
	6	6 - 2.5	blue	2.3	4.5	6.5	11.5	12	23	0.12	100	18 0148*
	4	4 - 6	yellow	3.6	6.8	4.3	13	9	20	0.17	100	18 0160*
10	5	5 - 6	yellow	3.6	6.8	5.3	13	9	21	0.19	100	18 0162*
	6	6 - 6	yellow	3.6	6.8	6.5	13	12.5	22	0.2	100	18 0164*
	8	8 - 6	yellow	3.6	6.8	8.4	13	15	25	0.24	100	18 0166*
16	10	10 - 6	yellow	3.6	6.8	10.5	13	19.2	27	0.3	100	18 0168*
	5		red	4.5	8.6	5.3	16.5	10.5	17	0.16	100	18 0170
10	6		red	4.5	8.6	6.4	16.5	10.5	17	0.16	100	18 0172
	6		blue	5.8	9.6	6.4	21.5	11	20	0.44	50	18 0174

### Crimping cable lugs, pin-shaped, Cu, insulated, DIN 46231 from 0.5 - 6 mm<sup>2</sup>

Technical data

- Material: ETP Cu according to DIN EN 13600
- Surface: galvanically tin-coated, other surfaces available upon request
- For connections with strain relief
- Insulated PA (polyamide, nylon), halogen-free
- Temperature resistance -60°C to +105°C
- Easy Entry allows the conductor to be inserted quickly and easily



Cross section (mm <sup>2</sup> )	Pin length (mm)	Nom. size	Insulation colour acc. to DIN	L1	L2	D1	B	Weight per 100 pcs. ~kg	PU/pcs.	Article no.
0.1 - 0.4	9		yellow	20	9	1	1	0.05	100	18 0220
0.5 - 1	10	1	red	22	10	1.6	1.9	0.08	100	18 0222*
1.5 - 2.5	10	2.5	blue	22	10	2.3	1.9	0.09	100	18 0224*
4 - 6	11	6	yellow	27	11	3.6	2.7	0.19	100	18 0226*
10	11		red	33	11	4.3	4.3	0.31	100	18 0227*
16	15		blue	38	15	5.4	5.5	0.49	100	18 0228*

\*The articles marked with an asterisk



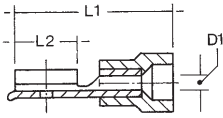
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### Blade receptacles, insulated, DIN 46245, Part 1 - 3, and similar designs

Technical data

- Material: CuZn (brass)
- Surface: galvanically tin-coated
- Insulated PA (polyamide, nylon), halogen-free
- Temperature resistance -60°C to +105°C
- Easy Entry allows the conductor to be inserted quickly and easily



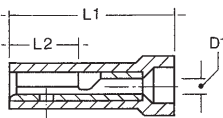
Cross section (mm <sup>2</sup> )	Connector size (mm)	Nom. size acc. to DIN	Insulation colour	L1	L2	D1	Weight per 100 pcs. ~kg	PU/pcs.	Article no.
0.5 - 1	2.8 x 0.5		red	17.5	8	1.6	0.07	100	18 0250*
	2.8 x 0.8		red	17.5	8	1.6	0.07	100	18 0252*
	4.8 x 0.5		red	18	6	1.6	0.09	100	18 0254*
	4.8 x 0.8	4.8 - 1	red	18	6	1.6	0.09	100	18 0256*
1.5 - 2.5	6.3 x 0.8	6.3 - 1	red	22	7.5	1.6	0.11	100	18 0230*
	2.8 x 0.5		blue	18	8	2.3	0.1	100	18 0236*
	2.8 x 0.8		blue	18	8	2.3	0.08	100	18 0238*
	4.8 x 0.5		blue	18	6	2.3	0.09	100	18 0258*
4 - 6	4.8 x 0.8	4.8 - 2.5	blue	18	6	2.3	0.09	100	18 0260*
	6.3 x 0.8	6.3 - 2.5	blue	21	7.4	2.3	0.11	100	18 0232*
	6.3 x 0.8	6.3 - 6	yellow	21	7.5	3.6	0.17	100	18 0234*
	9.5 x 1.2		yellow	26.5	12	3.6	0.26	100	18 0235



### Blade receptacles, fully insulated

Technical data

- Material: CuZn (brass)
- Surface: galvanically tin-coated
- Insulation: fully insulated PA (polyamide, nylon), halogen-free
- Temperature resistance -60°C to +105°C
- Easy Entry allows the conductor to be inserted quickly and easily



Cross section (mm <sup>2</sup> )	Connector size (mm)	Insulation colour	L1	L2	D1	Weight per 100 pcs. ~kg	PU/pcs.	Article no.
0.5 - 1	2.8 x 0.5	red	20	8	1.6	0.08	100	18 0241*
	2.8 x 0.8	red	20	8	1.6	0.1	100	18 0243*
	4.8 x 0.5	red	18	6	1.6	0.09	100	18 0244*
	4.8 x 0.8	red	18	6	1.6	0.09	100	18 0245*
1.5 - 2.5	6.3 x 0.8	red	21	7.5	1.6	0.12	100	18 0240
	2.8 x 0.5	blue	20	8	2.3	0.1	100	18 0246*
	2.8 x 0.8	blue	20	8	2.3	0.09	100	18 0247*
	4.8 x 0.5	blue	18	6	2.3	0.1	100	18 0248*
4 - 6	4.8 x 0.8	blue	18	6	2.3	0.1	100	18 0249*
	6.3 x 0.8	blue	21	7.4	2.3	0.13	100	18 0242
	4.8 x 0.5	yellow	18	6	2.3	0.15	100	18 0270
	4.8 x 0.8	yellow	18	6	2.3	0.15	100	18 0272
	6.3 x 0.8	yellow	21	7.5	3.6	0.19	100	18 0274*

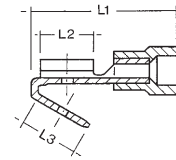
\*The articles marked with an asterisk



### Blade receptacles with branch, insulated

Technical data

- Material: CuZn (brass)
- Surface: galvanically tin-coated
- Insulated PA (polyamide, nylon), halogen-free
- Temperature resistance -60°C to +105°C
- Easy Entry allows the conductor to be inserted quickly and easily



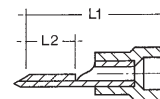
Cross section (mm <sup>2</sup> )	Connector size (mm)	Insulation colour	L1	L2	D1	Weight per 100 pcs. ~kg	PU/pcs.	Article no.
0.5 - 1	6.3 x 0.8	red	22	7.5	8	0.15	100	18 0280
1.5 - 2.5	6.3 x 0.8	blue	22	7.5	8	0.15	100	18 0282
4 - 6	6.3 x 0.8	yellow	25	8	8	0.21	100	18 0284



### Blade terminal, insulated

Technical data

- Material: CuZn (brass)
- Surface: galvanically tin-coated
- Insulated PA (polyamide, nylon), halogen-free
- Temperature resistance -60°C to +105°C
- Easy Entry allows the conductor to be inserted quickly and easily



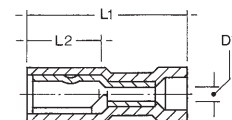
Cross section (mm <sup>2</sup> )	Connector size (mm)	Insulation colour	L1	L2	D1	Weight per 100 pcs. ~kg	PU/pcs.	Article no.
0.5 - 1	2.8 x 0.8	red	14.6	5.5		0.09	100	18 0286
	4.8 x 0.8	red	18.5	6.5		0.08	100	18 0288
	6.3 x 0.8	red	22	7.5		0.1	100	18 0290
1.5 - 2.5	4.8 x 0.8	blue	18.5	6.5		0.09	100	18 0291
	6.3 x 0.8	blue	22	7.5		0.1	100	18 0292
4 - 6	6.3 x 0.8	yellow	22	7.5		0.16	100	18 0294



### Circular sockets, insulated

Technical data

- Material: CuZn (brass)
- Surface: galvanically tin-coated
- Insulated PA (polyamide, nylon), halogen-free
- Temperature resistance -60°C to +105°C
- Easy Entry allows the conductor to be inserted quickly and easily



Cross section (mm <sup>2</sup> )	Connector size (mm)	Insulation colour	L1	L2	D1	Weight per 100 pcs. ~kg	PU/pcs.	Article no.
0.5 - 1	4	red	24	13	1.6	0.12	100	18 0310*
1.5 - 2.5	5	blue	24	13	2.3	0.15	100	18 0312*
4 - 6	5	yellow	24	13	3.6	0.2	100	18 0314



\*The articles marked with an asterisk



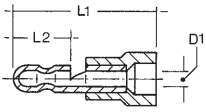
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**IS**

**Pin terminal, insulated**

Technical data

- Material: CuZn (brass)
- Surface: galvanically tin-coated
- For connections with strain relief and Cu inner sleeve
- Insulated PA (polyamide, nylon), halogen-free
- Temperature resistance -60°C to +105°C
- Easy Entry allows the conductor to be inserted quickly and easily



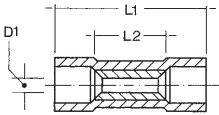
Cross section (mm <sup>2</sup> )	Connector size (mm)	Insulation colour	L1	L2	D1	Weight per 100 pcs. ~kg	PU/pcs.	Article no.
0.5 - 1	4	red	23	13	1.6	0.12	100	18 0300
1.5 - 2.5	5	blue	23	13	2.3	0.15	100	18 0302
4 - 6	5	yellow	25	13	3.6	0.2	100	18 0304

**IS**

**Parallel connectors, insulated**

Technical data

- Material: ETP Cu according to DIN EN 13600
- Surface: galvanically tin-coated
- For connections with strain relief
- Insulation PVC/PE
- Temperature resistance -40 °C to +70 °C



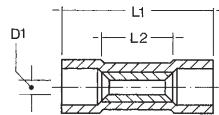
Cross section (mm <sup>2</sup> )	Insulation material	Insulation colour	L1	L2	D1	Weight per 100 pcs. ~kg	PU/pcs.	Article no.
0.1 - 0.4	PE	yellow	13	5	1	0.06	100	18 0318
0.5 - 1	PVC	red	18	8	1.6	0.07	100	18 0320*
1.5 - 2.5	PVC	blue	19	8	2.3	0.09	100	18 0322*
4 - 6	PVC	yellow	21	9	3.6	0.14	100	18 0324

**IS**

**Butt connectors, insulated**

Technical data

- Material: ETP Cu according to DIN EN 13600
- Surface: galvanically tin-coated
- For connections with strain relief
- Insulated PA (polyamide, nylon), halogen-free
- Temperature resistance -60 °C to +105 °C
- Easy Entry allows the conductor to be inserted quickly and easily



Cross section (mm <sup>2</sup> )	Insulation colour	L1	L2	D1	Weight per 100 pcs. ~kg	PU/pcs.	Article no.
0.1 - 0.4	yellow	20	11	1	0.04	100	18 0328
0.5 - 1	red	25	15	1.6	0.13	100	18 0330
1.5 - 2.5	blue	25	15	2.3	0.14	100	18 0332
4 - 6	yellow	27	15	3.6	0.24	100	18 0334

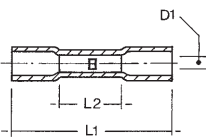
**IS**



**Butt connectors with shrink insulation**

Technical data

- Material: ETP Cu according to DIN EN 13600
- Surface: galvanically tin-coated
- For connections with strain relief
- Polyolefin insulation with inner layer of hot-melt adhesive
- Shrinking temperature: +150 °C
- Temperature resistance -10 °C to +105 °C
- After shrinking the hot-melt adhesive forms a connection that insulates, resists ageing, relieves strain, and is water-tight.



Cross section (mm <sup>2</sup> )	Insulation colour	L1	L2	D1	Weight per 100 pcs. ~kg	PU/pcs.	Article no.
0.5 - 1	red	37	15	1.6	0.12	100	18 0340
1.5 - 2.5	blue	37	15	2.3	0.15	100	18 0342
4 - 6	yellow	42	15	3.6	0.25	50	18 0346



## Butt connectors with shrink insulation, for solid conductors, extended design

Due to the longer design of the copper ferrule and consequently the possibility to crimp the conductor twice, these connectors are also suitable for repairing damaged solid conductors.

IS

NEW



Cross section (mm <sup>2</sup> )	Insulation colour	L1	L2	D1	Weight per 100 pcs. ~kg	PU/pcs.	Article no.
1.5 - 2.5	blue	55	28	2.3	0.28	15	18 0352

## Insulating cable lug sets in a premium **raaco** set box with crimping pliers

Content:	PU/pcs.	Article no.
135 pieces, sorted		
• 15 ring cable lugs DIN 46237, 0.5 – 1 mm <sup>2</sup> , M4		18 0024
• 15 ring cable lugs DIN 46237, 1.5 – 2.5 mm <sup>2</sup> , M4		18 0034
• 15 ring cable lugs DIN 46237, 1.5 – 2.5 mm <sup>2</sup> , M5		18 0036
• 15 ring cable lugs DIN 46237, 4 – 6 mm <sup>2</sup> , M5		18 0052
• 15 blade receptacles DIN 46245, 1.5 – 2.5 mm <sup>2</sup> , 6.3 x 0.8 mm		18 0232
• 15 blade receptacles DIN 46245, 4 – 6 mm <sup>2</sup> , 6.3 x 0.8 mm		18 0234
• 15 blade receptacles with branch, 1.5 – 2.5 mm <sup>2</sup> , 6.3 x 0.8 mm		18 0282
• 15 blade terminals, insulated, 1.5 – 2.5 mm <sup>2</sup> , 6.3 x 0.8 mm		18 0292
• 15 butt connectors, insulated, 1.5 – 2.5 mm <sup>2</sup>		18 0332
• Crimping tool, 0.5 – 6 mm <sup>2</sup> , oval crimp		10 1892
<b>Set box with insulated cable lugs</b>	<b>1</b>	<b>18 1530</b>



Content:	PU/pcs.	Article no.
500 pieces, sorted		
• 50 ring cable lugs DIN 46237, 0.5 – 1 mm <sup>2</sup> , M4		18 0024
• 50 ring cable lugs DIN 46237, 0.5 – 1 mm <sup>2</sup> , M5		18 0026
• 50 ring cable lugs DIN 46237, 1.5 - 2.5 mm <sup>2</sup> , M5		18 0036
• 25 ring cable lugs DIN 46237, 4 – 6 mm <sup>2</sup> , M5		18 0052
• 25 fork-shaped cable lugs DIN 46237, 0.5 – 1 mm <sup>2</sup> , M4		18 0124
• 25 fork-shaped cable lugs DIN 46237, 1.5 – 2.5 mm <sup>2</sup> , M5		18 0146
• 25 pin-type cable lugs DIN 46231, 0.5 – 1 mm <sup>2</sup> , 9 mm		18 0222
• 25 pin-type cable lugs DIN 46231, 1.5 – 2.5 mm <sup>2</sup> , 10 mm		18 0224
• 25 blade receptacles DIN 46245, 0.5 – 1 mm <sup>2</sup> , 6.3 x 0.8 mm		18 0230
• 25 blade receptacles DIN 46245, 1.5 – 2.5 mm <sup>2</sup> , 6.3 x 0.8 mm		18 0232
• 20 blade receptacles with branch, 0.5 – 1 mm <sup>2</sup> , 6.3 x 0.8 mm		18 0280
• 20 blade receptacles with branch, 1.5 – 2.5 mm <sup>2</sup> , 6.3 x 0.8 mm		18 0282
• 20 blade terminals, insulated, 0.5 – 1 mm <sup>2</sup> , 6.3 x 0.8 mm		18 0290
• 20 blade terminals, insulated, 1.5 – 2.5 mm <sup>2</sup> , 6.3 x 0.8 mm		18 0292
• 10 pin terminals, insulated, 0.5 – 1 mm <sup>2</sup> , 4 mm		18 0300
• 10 pin terminals, insulated, 1.5 – 2.5 mm <sup>2</sup> , 5 mm		18 0302
• 10 circular sockets, 0.5 – 1 mm <sup>2</sup> , 4 mm		18 0310
• 10 circular sockets, 1.5 – 2.5 mm <sup>2</sup> , 5 mm		18 0312
• 25 butt connectors, 0.5 – 1 mm <sup>2</sup>		18 0330
• 20 butt connectors, 1.5 – 2.5 mm <sup>2</sup>		18 0332
• 10 butt connectors, 4 – 6 mm <sup>2</sup>		18 0334
• Crimping tool, 0.5 – 6 mm <sup>2</sup> , oval crimp		10 1892
<b>Set box with insulated cable lugs</b>	<b>1</b>	<b>18 1540</b>



\*The articles marked with an asterisk



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**FL**

**NEW**



**Blade receptacles, non-insulated**

- Technical data  
 • Material: Brass, bare, DIN 46247  
 • Part 1 – 3 and similar designs

Cross section (mm <sup>2</sup> )	Connector size (mm)	Nominal size acc. to DIN	Length total mm	Weight per 100 pcs. ~kg	PU/pcs.	Article no.
0.5 - 1	6.3 x 0.8	6.3 - 1	20	0.085	100	18 1200
1.5 - 2.5	6.3 x 0.8	6.3 - 2.5	20	0.082	100	18 1202
4 - 6	6.3 x 0.8	6.3 - 6	20	0.1	100	18 1204

**FL**

**NEW**



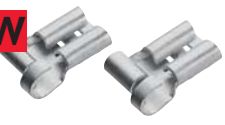
**Blade receptacles with locking lug, not insulated**

- Technical data  
 • Material: brass, bare, DIN 46340  
 • For locking into housings

Cross section (mm <sup>2</sup> )	Connector size (mm)	Nominal size acc. to DIN	Length total mm	Weight per 100 pcs. ~kg	PU/pcs.	Article no.
0.5 - 1	6.3 x 0.8		20	0.085	100	18 1210
1.5 - 2.5	6.3 x 0.8		20	0.082	100	18 1212
4 - 6	6.3 x 0.8		20	0.1	100	18 1214

**FL**

**NEW**



**Blade receptacles with side conductor connection, not insulated**

- Technical data  
 • Material: brass, tin-coated

Cross section (mm <sup>2</sup> )	Connector size (mm)	Nominal size acc. to DIN	Length total mm	Weight per 100 pcs. ~kg	PU/pcs.	Article no.
0.5 - 1	6.3 x 0.8		15	0.08	100	18 1220
1.5 - 2.5	6.3 x 0.8		15	0.082	100	18 1222

**FL**

**NEW**



**Blade terminal, not insulated**

- Technical data  
 • Material: brass, bare, according to DIN 46248

Cross section (mm <sup>2</sup> )	Connector size (mm)	Nominal size acc. to DIN	Length total mm	Weight per 100 pcs. ~kg	PU/pcs.	Article no.
1.5 - 2.5	6.3 x 0.8	A 6.3 - 2.5	20	0.066	100	18 1224
1.5 - 2.5	6.3 x 0.8	B 6.3 - 2.5	28	0.09	100	18 1226

**FL**

**NEW**



**Insulated sleeves**

- Technical data  
 • for blade terminal connectors, not insulated

Cross section (mm <sup>2</sup> )	Nominal size acc. to DIN	Suitable for	Weight per 100 pcs. ~kg	PU/pcs.	Article no.
0.5 - 1	6.3	18 1200, 18 1202	0.035	100	18 1230
1.5 - 2.5	6.3	18 1224	0.03	100	18 1232
0.5 - 6		18 1200, 18 1202, 18 1204 18 1210, 18 1212, 18 1214	0.055	100	18 1234

**Blade terminal, not insulated**

Technical data

- Material: brass, bare
- Angled design

Design	Connector size (mm)	for bolts ø (mm)	Weight per 100 pcs. ~kg	PU/pcs.	Article no.
2 x 45°	6.3 x 0.8	M4	0.15	100	18 1240
1 x 45°	6.3 x 0.8	M4	0.085	100	18 1242
1 x 45°	6.3 x 0.8	M3.5	0.085	100	18 1244
1 x 45°	6.3 x 0.8	M5	0.085	100	18 1246

**Blade terminal, not insulated**

Technical data

- Material: brass, bare
- Straight design

Design	Connector size (mm)	for bolts ø (mm)	Weight per 100 pcs. ~kg	PU/pcs.	Article no.
straight	6.3 x 0.8	M4	0.086	100	18 1248
straight	6.3 x 0.8	M5	0.08	100	18 1250

**Blade terminal, not insulated**

Technical data

- Material: brass, bare
- For soldering into printed circuits
- Straight design

Design	Connector size (mm)	Grid dim (mm)	Length total (mm)	Weight per 100 pcs. ~kg	PU/pcs.	Article no.
angled 90°	2.8 x 0.5	6.3	13.3	0.025	100	18 1252
angled 90°	2.8 x 0.8	6.3	13.3	0.027	100	18 1254
straight	6.3 x 0.8	5	14	0.065	100	18 1256
angled 90°	6.3 x 0.8	5	20	0.085	100	18 1258

**Plug connector, not insulated**

Technical data

- Material: brass, bare

Design	Connector size (mm)	Angle	Length total (mm)	Weight per 100 pcs. ~kg	PU/pcs.	Article no.
3-way distributor (2 x male, 1 x female)	6.3 x 0.8	165°; 95°	17.8	0.015	100	18 1260
4-way distributor (3 x male, 1 x female)	6.3 x 0.8		21.2	0.02	100	18 1262





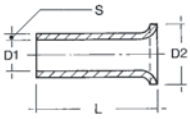
**Wire end ferrules**

**Non-insulated wire end ferrules**

**DIN 46228 , part 1 and special dimensions**

Technical data

- Material: ETP Cu according to DIN EN 13600
- Surface: galvanically tin-coated



Cross section (mm <sup>2</sup> )	Length L (mm)	D1	D2	S	Weight per 100 pcs. ~kg	PU/pcs.	Article no.
0.25	5	0.8	1.7	0.15	0.01	1000	18 2040
	7	0.8	1.7	0.15	0.01	1000	18 2042
0.34	5	0.9	1.8	0.15	0.01	1000	18 2046
	7	0.9	1.8	0.15	0.01	1000	18 2048
0.5	6	1	2.1	0.15	0.01	1000	18 2050
	8	1	2.1	0.15	0.01	1000	18 2051
	10	1	2.1	0.15	0.01	1000	18 2049
0.75	6	1.2	2.3	0.15	0.01	1000	18 2052
	10	1.2	2.3	0.15	0.01	1000	18 2054
	15	1.2	2.3	0.15	0.01	1000	18 2055
1	6	1.4	2.5	0.15	0.01	1000	18 2056
	8	1.4	2.5	0.15	0.01	1000	18 2057
	10	1.4	2.5	0.15	0.01	1000	18 2058
	12	1.4	2.5	0.15	0.01	1000	18 2059
1.5	7	1.7	2.8	0.15	0.01	1000	18 2060
	10	1.7	2.8	0.15	0.01	1000	18 2062
	12	1.7	2.8	0.15	0.02	1000	18 2064
	15	1.7	2.8	0.15	0.02	1000	18 2066
2.5	18	1.7	2.8	0.15	0.02	1000	18 2067
	7	2.2	3.4	0.15	0.01	1000	18 2070
	10	2.2	3.4	0.15	0.01	1000	18 2071
	12	2.2	3.4	0.15	0.01	1000	18 2072
4	15	2.2	3.4	0.15	0.02	1000	18 2074
	20	2.2	3.4	0.15	0.02	1000	18 2075
	9	2.8	4	0.2	0.02	1000	18 2078
	12	2.8	4	0.2	0.02	1000	18 2080
6	15	2.8	4	0.2	0.02	250	18 2082
	20	2.8	4	0.2	0.03	250	18 2083
	10	3.5	4.7	0.2	0.02	250	18 2085
	12	3.5	4.7	0.2	0.03	250	18 2086
10	15	3.5	4.7	0.2	0.03	100	18 2088
	20	3.5	4.7	0.2	0.05	250	18 2089
	12	4.5	5.8	0.2	0.06	100	18 2092
	15	4.5	5.8	0.2	0.07	250	18 2094
16	18	4.5	5.8	0.2	0.08	100	18 2096
	25	4.5	5.8	0.2	0.09	250	18 2097
	12	5.8	7.5	0.2	0.05	250	18 2100
	15	5.8	7.5	0.2	0.05	250	18 2102
25	18	5.8	7.5	0.2	0.07	100	18 2104
	25	5.8	7.5	0.2	0.09	250	18 2103
	32	5.8	7.5	0.2	0.01	250	18 2105
	12	7.3	9.5	0.22	0.06	100	18 2106
35	15	7.3	9.5	0.22	0.07	100	18 2108
	18	7.3	9.5	0.22	0.09	100	18 2110
	25	7.3	9.5	0.22	0.12	100	18 2112
	32	7.3	9.5	0.22	0.14	100	18 2111
50	15	8.3	11	0.22	0.1	100	18 2113
	18	8.3	11	0.22	0.11	100	18 2114
	25	8.3	11	0.22	0.16	100	18 2115
	32	8.3	11	0.22	0.24	100	18 2119
70	18	10.3	13	0.3	0.17	100	18 2120
	22	10.3	13	0.3	0.2	100	18 2116
	32	10.3	13	0.3	0.31	100	18 2121
	22	12.5	15	0.4	0.22	100	18 2123
95	26	12.5	15	0.4	0.35	100	18 2118
	30	12.5	15	0.4	0.4	100	18 2124
	32	12.5	15	0.4	0.43	100	18 2125
	25	14.5	17	0.4	0.4	100	18 2127
120	30	14.5	17	0.4	0.47	25	18 2122
	32	14.5	17	0.4	0.48	25	18 2128
	32	16.5	19	0.5	0.75	25	18 2129
	34	16.5	19	0.5	0.97	25	18 2126
150	40	16.5	19	0.5	1.11	25	18 2131
	32	18.5	21	0.5	0.95	25	18 2132
	40	18.5	21	0.5	1.3	25	18 2133
185	32	20	23.5	0.6	1.26	25	18 2134
	40	20	23.5	0.6	1.54	25	18 2135

Silver-plated design upon request.

## Insulated wire end ferrules, in tapes

Technical data

- Material: ETP Cu according to DIN EN 13600
- Surface: galvanically tin-coated
- Polypropylene insulation
- Temperature resistance -35 °C to +105 °C

### Colour code according to DIN 46228, part 4

Cross section (mm <sup>2</sup> )	Length (mm)	Insulation colour	PU/pcs.	Article no.
0.5	14	white	500	18 4500
0.75	14	grey	500	18 4502
1	14	red	500	18 4504
1.5	14	black	500	18 4506
2.5	14	blue	400	18 4508

### Colour row 1

Cross section (mm <sup>2</sup> )	Length (mm)	Insulation colour	PU/pcs.	Article no.
0.5	14	white	500	18 4460
0.75	14	blue	500	18 4462
1	14	red	500	18 4464
1.5	14	black	500	18 4466
2.5	14	grey	400	18 4468

### Colour code 2

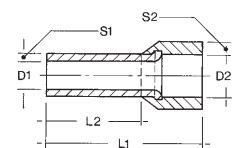
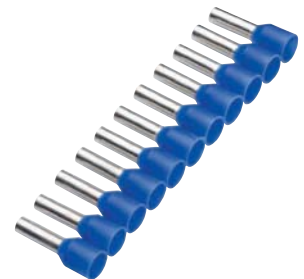
Cross section (mm <sup>2</sup> )	Length (mm)	Insulation colour	PU/pcs.	Article no.
0.5	14	orange	500	18 4480
0.75	14	white	500	18 4482
1	14	yellow	500	18 4484
1.5	14	red	500	18 4486
2.5	14	blue	400	18 4488

## Insulated wire end ferrules according to DIN 46228, Part 4 and special dimensions

Technical data

- Material: ETP Cu according to DIN EN 13600
- Surface: galvanically tin-coated
- Polypropylene insulation
- Temperature resistance -35 °C to +105 °C
- For effortless attachment to finely stranded copper conductors, prevents damage and fanning out

Cross section (mm <sup>2</sup> )	L without insulation L2 (mm)	Total length L1 (mm)	D1	S1	S2	D2	Insulation colour	Weight per 100 pcs. ~kg	PU/pcs.	Article no.
0.5	6	12	1	0.15	0.25	2.6	white	0.01	100	18 2310
	8	14	1	0.15	0.25	2.6				
	10	16	1	0.15	0.25	2.6				
0.75	6	12	1.2	0.15	0.25	2.8	grey	0.01	100	18 2316
	8	14	1.2	0.15	0.25	2.8				
	10	16	1.2	0.15	0.25	2.8				
1	6	12	1.4	0.15	0.25	3	red	0.01	100	18 2324
	8	14	1.4	0.15	0.25	3				
	10	16	1.4	0.15	0.25	3				
	12	18	1.4	0.15	0.25	3				
1.5	8	14	1.7	0.15	0.25	3.5	black	0.01	100	18 2332
	10	16	1.7	0.15	0.25	3.5				
	12	18	1.7	0.15	0.25	3.5				
	18	24	1.7	0.15	0.25	3.5				



### Insulated wire end ferrules according to DIN 46228,

#### Part 4 and special dimensions See previous page for description



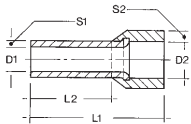
Cross section (mm <sup>2</sup> )	L without insulation L2 (mm)	Total length L1 (mm)	D1	S1	S2	D2	Insulation colour	Weight per 100 pcs. ~kg	PU/pcs.	Article no.
2.5	8	15	2.2	0.15	0.25	4.2	blue	0.02	100	18 2338
	12	18	2.2	0.15	0.25	4.2		0.03	100	18 2340
	18	25	2.2	0.15	0.25	4.2		0.03	100	18 2342
4	10	17	2.8	0.2	0.3	4.8	grey	0.03	100	18 2344
	12	20	2.8	0.2	0.3	4.8		0.03	100	18 2346
	18	26	2.8	0.2	0.3	4.8		0.03	100	18 2348
6	12	20	3.5	0.2	0.3	6.3	yellow	0.06	100	18 2350
	18	26	3.5	0.2	0.3	6.3		0.06	100	18 2352
10	12	22	4.5	0.2	0.4	7.6	red	0.06	100	18 2354
	18	28	4.5	0.2	0.4	7.6		0.08	100	18 2356
16	12	24	5.8	0.2	0.4	8.8	blue	0.08	100	18 2358
	18	28	5.8	0.2	0.4	8.8		0.08	100	18 2360
25	16	30	7.3	0.2	0.4	11.2	yellow	0.13	50	18 2362
	22	36	7.3	0.2	0.4	11.2		0.16	50	18 2364
35	16	30	8.3	0.2	0.4	12.7	red	0.21	50	18 2366
	25	39	8.3	0.2	0.4	12.7		0.22	50	18 2368
50	20	36	10.3	0.3	0.5	15	blue	0.30	50	18 2370
	25	40	10.3	0.3	0.5	15		0.35	50	18 2372
70	21	37	13.5	0.4	0.6	16	yellow	0.67	25	18 2374
	95	25	44	14.7	0.4	0.6	18	red	0.67	25
120	27	48	16.7	0.45	0.7	20	blue	0.93	25	18 2378
	150	32	58	19	0.5	1	23	yellow	1.06	25



### Insulated wire end ferrules, dimensions according to DIN 46228, Part 4, colour row 1

Technical data

- Material: ETP Cu according to DIN EN 13600
- Surface: galvanically tin-coated
- Polypropylene insulation
- Temperature resistance -35 °C to +105 °C
- For effortless attachment to finely stranded copper conductors, prevents damage and fanning out



Cross section (mm <sup>2</sup> )	L without insulation L2 (mm)	Total length L1 (mm)	D1	S1	S2	D2	Insulation colour	Weight per 100 pcs. ~kg	PU/pcs.	Article no.
0.25	6	10	0.8	0.15	0.25	1.8	violet	0.01	100	18 0988
	8	12	0.8	0.15	0.25	1.8		0.01	100	18 0990
0.34	6	10	0.9	0.15	0.25	2	pink	0.01	100	18 0992
	8	12	0.9	0.15	0.25	2		0.01	100	18 0994
0.5	6	12	1	0.15	0.25	2.6	white	0.01	100	18 0996
	8	14	1	0.15	0.25	2.6		0.01	100	18 0998
	8	14	1	0.15	0.25	2.6		0.01	500	18 4998
	10	16	1	0.15	0.25	2.6		0.01	100	18 0999
0.75	6	12	1.2	0.15	0.25	2.8	blue	0.01	100	18 0940
	8	14	1.2	0.15	0.25	2.8		0.01	100	18 1000
	8	14	1.2	0.15	0.25	2.8		0.01	500	18 5000
	10	16	1.2	0.15	0.25	2.8		0.01	100	18 1001
	12	18	1.2	0.15	0.25	2.8		0.01	100	18 0942
1	6	12	1.4	0.15	0.25	3	red	0.01	100	18 0944
	8	14	1.4	0.15	0.25	3		0.01	100	18 1002
	8	14	1.4	0.15	0.25	3		0.01	500	18 5002
	10	16	1.4	0.15	0.25	3		0.01	100	18 1003
	12	18	1.4	0.15	0.25	3		0.02	100	18 0946
1.5	8	14	1.7	0.15	0.25	3.5	black	0.01	100	18 1004
	8	14	1.7	0.15	0.25	3.5		0.01	500	18 5004
	10	16	1.7	0.15	0.25	3.5		0.01	100	18 0948
	12	18	1.7	0.15	0.25	3.5		0.02	100	18 0949



## Insulated wire end ferrules, dimensions according to DIN

### 46228, part 4, colour code 1

See previous page for description

Cross section (mm <sup>2</sup> )	L without insulation L2 (mm)	Total length L1 (mm)	D1	S1	S2	D2	Insulation colour	Weight per 100 pcs. ~kg	PU/pcs.	Article no.
	18	24	1.7	0.15	0.25	3.5		0.02	100	18 1005
	18	24	1.7	0.15	0.25	3.5		0.02	500	18 5005
2.5	8	15	2.2	0.15	0.25	4.2	grey	0.02	100	18 1006
	8	15	2.2	0.15	0.25	4.2		0.02	500	18 5006
	12	18	2.2	0.15	0.25	4.2		0.03	100	18 0950
	18	25	2.2	0.15	0.25	4.2		0.03	100	18 1007
	18	25	2.2	0.15	0.25	4.2		0.03	500	18 5007
4	10	17	2.8	0.2	0.3	4.8	orange	0.03	100	18 1008
	10	17	2.8	0.2	0.3	4.8		0.03	500	18 5008
	12	20	2.8	0.2	0.3	4.8		0.03	100	18 0952
	18	26	2.8	0.2	0.3	4.8		0.04	100	18 1009
	18	26	2.8	0.2	0.3	4.8		0.04	500	18 5009
6	12	20	3.5	0.2	0.3	6.3	green	0.06	100	18 1010
	12	20	3.5	0.2	0.3	6.3		0.06	500	18 5010
	18	26	3.5	0.2	0.3	6.3		0.06	100	18 1012
	18	26	3.5	0.2	0.3	6.3		0.06	500	18 5012
10	12	22	4.5	0.2	0.3	7.6	brown	0.06	100	18 1014
	12	22	4.5	0.2	0.3	7.6		0.06	500	18 5014
	18	28	4.5	0.2	0.3	7.6		0.08	100	18 1016
	18	28	4.5	0.2	0.3	7.6		0.08	500	18 5016
16	12	24	5.8	0.2	0.4	8.8	ivory	0.08	100	18 1018
	12	24	5.8	0.2	0.4	8.8		0.08	500	18 5018
	18	28	5.8	0.2	0.4	8.8		0.08	100	18 1020
	18	28	5.8	0.2	0.4	8.8		0.08	500	18 5020
25	16	30	7.3	0.2	0.4	11.2	black	0.13	50	18 1022
	22	36	7.3	0.2	0.4	11.2		0.16	50	18 1023
35	16	30	8.3	0.2	0.4	12.7	red	0.21	1	18 1024
	25	39	8.3	0.2	0.4	12.7		0.22	1	18 1025
50	20	36	10.3	0.3	0.5	15.0	blue	0.30	1	18 1026
	25	40	10.3	0.3	0.5	15.0		0.35	1	18 1027



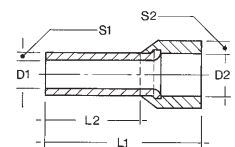
## Insulated wire end ferrules, dimensions according to DIN

### 46228, part 4, colour code 2

Technical data

- Material: ETP Cu according to DIN EN 13600
- Surface: galvanically tin-coated
- Insulation: Polypropylene
- Temperature resistance -35 °C to +105 °C
- For effortless attachment to finely stranded copper conductors, prevents damage and fanning out

Cross section (mm <sup>2</sup> )	L without insulation L2 (mm)	Total length L1 (mm)	D1	S1	S2	D2	Insulation colour	Weight per 100 pcs. ~kg	PU/pcs.	Article no.
0.25	6	10	0.8	0.15	0.25	1.8	light blue	0.01	100	18 2188
	8	12	0.8	0.15	0.25	1.8		0.01	100	18 2190
0.34	6	10	0.9	0.15	0.25	2	turquoise	0.01	100	18 2192
	8	12	0.9	0.15	0.25	2		0.01	100	18 2194
0.5	6	12	1	0.15	0.25	2.6	orange	0.01	100	18 2196
	8	14	1	0.15	0.25	2.6		0.01	100	18 2198
	10	16	1	0.15	0.25	2.6		0.01	100	18 2199
0.75	6	12	1.2	0.15	0.25	2.8	white	0.01	100	18 2140
	8	14	1.2	0.15	0.25	2.8		0.01	100	18 2200
	10	16	1.2	0.15	0.25	2.8		0.01	100	18 2201
	12	18	1.2	0.15	0.25	2.8		0.01	100	18 2242
1	6	12	1.4	0.15	0.25	3	yellow	0.01	100	18 2244
	8	14	1.4	0.15	0.25	3		0.01	100	18 2202
	10	16	1.4	0.15	0.25	3		0.01	100	18 2203
	12	18	1.4	0.15	0.25	3		0.02	100	18 2246
1.5	8	14	1.7	0.15	0.25	3.5	red	0.01	100	18 2204
	10	16	1.7	0.15	0.25	3.5		0.01	100	18 2248
	12	18	1.7	0.15	0.25	3.5		0.02	100	18 2249
	18	24	1.7	0.15	0.25	3.5		0.02	100	18 2205
2.5	8	14	2.2	0.15	0.25	4.2	blue	0.02	100	18 2206
	12	18	2.2	0.15	0.25	4.2		0.03	100	18 2250
	18	25	2.2	0.15	0.25	4.2		0.03	100	18 2207



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### Insulated wire end ferrules, dimensions according to DIN 46228, part 4, colour code 2



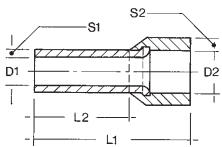
Cross section (mm <sup>2</sup> )	L without insulation L2 (mm)	Total length L1 (mm)	D1	S1	S2	D2	Insulation colour	Weight per 100 pcs. ~kg	PU/pcs.	Article no.
4	10	17	2.8	0.2	0.3	4.8	grey	0.03	100	18 2208
	12	20	2.8	0.2	0.3	4.8		0.03	100	18 2252
	18	26	2.8	0.2	0.3	4.8		0.04	100	18 2209
6	12	20	3.5	0.2	0.3	6.3	black	0.06	100	18 2210
	18	26	3.5	0.2	0.3	6.3		0.06	100	18 2212
10	12	22	4.5	0.2	0.4	7.6	ivory	0.06	100	18 2214
	18	28	4.5	0.2	0.4	7.6		0.08	100	18 2216
16	12	24	5.8	0.2	0.4	8.8	green	0.08	100	18 2218
	18	28	5.8	0.2	0.4	8.8		0.08	100	18 2220
25	16	30	7.3	0.2	0.4	11.2	brown	0.13	50	18 2222
	22	36	7.3	0.2	0.4	11.2		0.16	50	18 2223
35	16	30	8.3	0.2	0.4	12.7	beige	0.21	50	18 2224
	25	39	8.3	0.2	0.4	12.7		0.22	50	18 2225
50	20	36	10.3	0.3	0.5	15	olive	0.35	50	18 2226
	25	40	10.3	0.3	0.5	15		0.35	50	18 2227



### Insulated twin wire end ferrules

Technical data

- Material: ETP Cu according to DIN EN 13600
- Surface: galvanically tin-coated
- Polypropylene insulation
- Temperature resistance -35 °C to +105 °C
- For effortless work with 2 finely stranded copper conductors, prevents damage and fanning out



Colour row according to DIN 46228, part 4



Cross section (mm <sup>2</sup> )	L without insulation L2 (mm)	Total length L1 (mm)	D1	S1	S2	D2	Insulation colour	Weight per 100 pcs. ~kg	PU/pcs.	Article no.
2 x 0.5	8	15	1.5	0.15	0.25	2.5	white	0.03	100	18 2460
2 x 0.75	8	15	1.8	0.15	0.25	2.8	grey	0.03	100	18 2462
	10	17	1.8	0.15	0.25	2.8		0.03	100	18 2464
2 x 1	8	15	2	0.15	0.25	3.4	red	0.04	100	18 2466
	10	17	2	0.15	0.25	3.4		0.04	100	18 2468
2 x 1.5	8	16	2.3	0.15	0.25	3.6	black	0.02	100	18 2470
	12	20	2.3	0.15	0.25	3.6		0.03	100	18 2472
2 x 2.5	10	18.5	2.9	0.2	0.25	4.2	blue	0.07	100	18 2474
	13	21.5	2.9	0.2	0.25	4.2		0.08	100	18 2476
2 x 4	12	23	3.8	0.2	0.3	4.9	grey	0.11	100	18 2478
2 x 6	14	26	4.9	0.2	0.3	5.9	yellow	0.09	100	18 2480
2 x 10	14	26	6.5	0.2	0.4	7.2	red	0.13	100	18 2482
2 x 16	14	30	8.3	0.2	0.4	9.6	blue	0.13	100	18 2484
Colour row 1										
2 x 0.5	8	15	1.5	0.15	0.25	2.5	white	0.03	100	18 2400
2 x 0.75	8	15	1.8	0.15	0.25	2.8	blue	0.03	100	18 2402
	10	17	1.8	0.15	0.25	2.8		0.03	100	18 2404
2 x 1	8	15	2	0.15	0.25	3.4	red	0.04	100	18 2406
	10	17	2	0.15	0.25	3.4		0.04	100	18 2408
2 x 1.5	8	16	2.3	0.15	0.25	3.6	black	0.02	100	18 2410
	12	20	2.3	0.15	0.25	3.6		0.03	100	18 2412
2 x 2.5	10	18.5	2.9	0.2	0.25	4.2	grey	0.07	100	18 2414
	13	21.5	2.9	0.2	0.25	4.2		0.08	100	18 2416
2 x 4	12	23	3.8	0.2	0.3	4.9	orange	0.11	100	18 2418
2 x 6	14	26	4.9	0.2	0.3	5.9	green	0.09	100	18 2420
2 x 10	14	26	6.5	0.2	0.4	7.2	brown	0.13	100	18 2422
2 x 16	14	30	8.3	0.2	0.4	9.6	ivory	0.13	100	18 2424
Colour code 2										
2 x 0.5	8	15	1.5	0.15	0.25	2.5	orange	0.03	100	18 2430
2 x 0.75	8	15	1.8	0.15	0.25	2.8	white	0.03	100	18 2432
	10	17	1.8	0.15	0.25	2.8		0.03	100	18 2434
2 x 1	8	15	2	0.15	0.25	3.4	yellow	0.04	100	18 2436
	10	17	2	0.15	0.25	3.4		0.04	100	18 2438
2 x 1.5	8	16	2.3	0.15	0.25	3.6	red	0.02	100	18 2440
	12	20	2.3	0.15	0.25	3.6		0.03	100	18 2442
2 x 2.5	10	18.5	2.9	0.2	0.25	4.2	blue	0.07	100	18 2444
	13	21.5	2.9	0.2	0.25	4.2		0.08	100	18 2446
2 x 4	12	23	3.8	0.2	0.3	4.9	grey	0.11	100	18 2448
2 x 6	14	26	4.9	0.2	0.3	5.9	black	0.09	100	18 2450
2 x 10	14	26	6.5	0.2	0.4	7.2	ivory	0.13	100	18 2452
2 x 16	14	30	8.3	0.2	0.4	9.6	green	0.13	100	18 2454

## Insulated wire end ferrules for short-circuit-proof and short-to-ground-proof conductors (NSGAFÖU), colour code according to DIN 46228, part 4



### Technical data

- Material: ETP Cu according to DIN EN 13600
- Surface: galvanically tin-coated
- Polypropylene insulation
- Temperature resistance -35 °C to +110 °C
- With large plastic collar for accepting conductors with thick insulation



Cross section (mm <sup>2</sup> )	L without insulation L2 (mm)	Total length L1 (mm)	D1	S1	S2	D2	Insulation colour	Weight per 100 pcs. ~kg	PU/pcs.	Article no.
1.5	8	17.5	1.8	0.15	0.25	7	black	0.02	100	18 2500
	10	19.5	1.8	0.15	0.25	7		0.03	100	18 2502
2.5	8	17.5	2.3	0.15	0.25	7.9	blue	0.03	100	18 2504
	12	21.5	2.3	0.15	0.25	7.9		0.04	100	18 2506
4	10	19.5	2.9	0.2	0.3	7.9	grey	0.04	100	18 2508
6	12	23	3.6	0.2	0.3	8.7	yellow	0.07	100	18 2510
10	12	24	4.6	0.2	0.3	10.2	red	0.08	100	18 2512
16	12	25.5	6	0.2	0.3	12.5	blue	0.11	100	18 2514

## Non-insulated wire end ferrule sets

in a practical dispenser, 2500 pieces, sorted

Content:	PU/pcs.	Article no.
• 500 pieces 0.50 mm <sup>2</sup> 6 mm long		
• 500 pieces 0.75 mm <sup>2</sup> 6 mm long		
• 500 pieces 1 mm <sup>2</sup> 6 mm long		
• 500 pieces 1.50 mm <sup>2</sup> 7 mm long		
• 500 pieces 2.50 mm <sup>2</sup> 7 mm long		
<b>Dispenser with non-insulated wire end ferrules</b>	<b>1</b>	<b>18 1520</b>

in **Traco** - PSC Vario 240 set box, with crimping pliers CIMCO article no. 10 1906, 3500 pieces, sorted

Content:	PU/pcs.	Article no.
• 1000 pieces 0.75 mm <sup>2</sup> 6 mm long		
• 1000 pieces 1 mm <sup>2</sup> 6 mm long		
• 750 pieces 1.50 mm <sup>2</sup> 7 mm long		
• 750 pieces 2.50 mm <sup>2</sup> 7 mm long		
<b>Set box with non-insulated wire end ferrules</b>	<b>1</b>	<b>18 1510</b>

in **Traco** - PSC Vario 340 set box, with universal notch pliers CIMCO article no. 10 1904, 4350 pieces, insulated

Content:	PU/pcs.	Article no.
• 1000 pieces 1 mm <sup>2</sup> 6 mm long		
• 1000 pieces 1.50 mm <sup>2</sup> 7 mm long		
• 1000 pieces 2.50 mm <sup>2</sup> 7 mm long		
• 500 pieces 4 mm <sup>2</sup> 9 mm long		
• 500 pieces 6 mm <sup>2</sup> 12 mm long		
• 250 pieces 10 mm <sup>2</sup> 18 mm long		
• 100 pieces 16 mm <sup>2</sup> 18 mm long		
<b>Set box with non-insulated wire end ferrules</b>	<b>1</b>	<b>18 1512</b>

## Insulated wire end ferrule sets

400 pieces, sorted, in a practical dispenser, stackable

Content:	PU/pcs.	Article no.
• 50 pieces 0.5 mm <sup>2</sup> 8 mm long		
• 100 pieces 0.75 mm <sup>2</sup> 8 mm long		
• 100 pieces 1 mm <sup>2</sup> 8 mm long		
• 100 pieces 1.5 mm <sup>2</sup> 8 mm long		
• 50 pieces 2.5 mm <sup>2</sup> 8 mm long		
<b>Colour row 1</b>	<b>1</b>	<b>18 1502</b>
<b>Colour code 2</b>	<b>1</b>	<b>18 1503</b>
<b>Colour code DIN</b>	<b>1</b>	<b>18 1504</b>

100 pieces, sorted, in a practical dispenser, stackable

Content:	PU/pcs.	Article no.
• 50 pieces 4 mm <sup>2</sup> 10 mm long		
• 20 pieces 6 mm <sup>2</sup> 12 mm long		
• 20 pieces 10 mm <sup>2</sup> 12 mm long		
• 10 pieces 16 mm <sup>2</sup> 12 mm long		
<b>Colour row 1</b>	<b>1</b>	<b>18 1505</b>
<b>Colour code 2</b>	<b>1</b>	<b>18 1506</b>
<b>Colour code DIN</b>	<b>1</b>	<b>18 1507</b>



### Modular plugs

for telecommunication and data networks, quality plugs for at least 500 plug cycles, contacts with 50 μ inches (1.27 micrometres) gold-plated, housing made of flame-retardant polycarbonate, tensile load-bearing capacity cable to plug at least 89 N.

### Unshielded modular plugs (at least cat. 3)

suitable for flat and round cables

for flexible conductors

Designation	Number of positions	Number of contacts	PU/pcs.	Article no.
RJ 10	4	4	100	18 3000
RJ 11	6	4	100	18 3002
RJ 12	6	6	100	18 3004
RJ 45	8	8	50	18 3008

For solid conductors

Designation	Number of positions	Number of contacts	PU/pcs.	Article no.
RJ 45	8	8	50	18 3010

### Shielded modular plugs (at least cat. 5e)

suitable for round cables, includes a threading ridge for each plug for easily placing the conductor in the correct crimping position, for crimping with CIMCO crimping pliers CIMCO article no. 10 6201.

for flexible conductors and solid conductors

Designation	Number of positions	Number of contacts	PU/pcs.	Article no.
RJ 45	8	8	50	18 3012

### Kink protection sleeve for modular plugs

can be opened and closed again at any time, can be subsequently attached to and removed from plug, for shielded and unshielded modular plugs RJ 45, for round cables up to 6 mm ø

black	25	18 3020
red	25	18 3022
white	25	18 3024
blue	25	18 3026
yellow	25	18 3028

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## Service case NETZWERKTECHNIK I

**raaco**-CARRY-LITE 55 service case containing:

DATA STRIP insulation stripper	1	12 0092	
ECONOMY insertion tool	1	11 8017	
Crimping pliers 4, 6, 8 pin, unshielded	1	10 6200	
Crimping pliers 8 pin, shielded	1	10 6201	
Modular plug 4 pin RJ 10, unshielded	100	18 3000	
Modular plug 6 pin RJ 12 unshielded	100	18 3004	
Modular plug 8 pin RJ 45, unshielded for flexible conductors	50	18 3008	
Modular plug 8 pin RJ 45 shielded	50	18 3012	
Anti-kink sleeves for modular plugs, black	25	18 3020	
Anti-kink sleeves for modular plug, red	25	18 3022	
<b>413 x 330 x 55</b>	<b>1</b>	<b>18 1300</b>	



## Service case NETZWERKTECHNIK II

**raaco**-CARRY-LITE 55 service case containing:

Modular plug 4 pin RJ 10, unshielded	100	18 3000	
Modular plug 6 pin RJ 12 unshielded	100	18 3004	
Modular plug 8 pin RJ 45, unshielded for flexible conductors	50	18 3008	
Modular plug 8 pin RJ 45 shielded	50	18 3012	
Anti-kink sleeves for modular plugs, black	25	18 3020	
Anti-kink sleeves for modular plug, red	25	18 3022	
Roll of hook & loop tape, 16 mm wide x 25 mm long, black	1	18 1922	
<b>413 x 330 x 55</b>	<b>1</b>	<b>18 1302</b>	



## Photovoltaic connector system

Using this new photovoltaic connector saves time and effort on the construction site.

The CIMCO connector system is compatible with the MC4 market standard and fits all common solar cables from 2.5 mm<sup>2</sup> to 6 mm<sup>2</sup>.

Consisting of a plug and socket connection system, including plastic housing; each package contains 100 connector-crimp contacts as well as plastic housing in a polythene bag and 100 connector-crimp contacts as well as plastic housing in a polythene bag.

Specifications:

2.5 to 6 mm<sup>2</sup>, voltage range: 1000 V, current capacity: 30 A (4 mm<sup>2</sup>, 6 mm<sup>2</sup>), contact resistance of the connector system: 5 mΩ, diameter of the plug contact: 4 mm, protection class: IP 67, temperature range: -40 °C / +85 °C, insulation material: PC/PA, contact material: copper, silver-plated, safety class: II, certification: TÜV, crimping range: 2.5 – 6 mm<sup>2</sup>

	100	18 0000	
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## Photovoltaic MC3 adapter system

Adapter set for plugging onto MC3 contacts, for crimping with MC4-compatible tools 1.5 to 4 mm<sup>2</sup>

Consisting of an MC3 plug and socket adapter system, including plastic housing; each package contains 1 plug-crimp contacts as well as plastic housing and 1 socket-crimp contact as well as plastic housing.

Specifications:

Pin dimensions: ø 3.0 mm, cable diameter: ø 5.0 mm to ø 8.0 mm, cable cross section: 1.5 4.0 mm<sup>2</sup>, AWG 16/14/12, contact type: stamp roll contact, nominal voltage: 1000 V DC, nominal current: 25 A at 70 °C / 20 A at 85 °C, contact resistance: <5 mΩ Ohm, protection class: IP 67, temperature range: -40 °C / + 90 °C, certification: TÜV

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### Photovoltaic MC4 unlocking tool

Unlocking tool for releasing the plug connection of photovoltaic connectors.

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### Photovoltaic MC4 Y-distributor

Y-distributor on an MC4-basis.

Specifications:

Pin dimensions:  $\varnothing$  4.0 mm, contact type: stamp roll contact, nominal voltage: 1000 V DC, nominal current: 30 A at 70 °C / 25 A at 85 °C, contact resistance:  $<5$  m $\Omega$  Ohm, protection class: IP 67, temperature range: -40 °C / +90 °C, certification: TÜV

MMF = 1 x female input and 2 x male outputs	1	18 0005	
FFM = 1 x male input and 2 x female outputs	1	18 0006	



### Earthing terminal SOLFIL

CIMCO's secure and permanent solution for earthing PV panels. The choice for simple and permanent protection. It is necessary to protect photovoltaic panels by earthing. It should be permanent and guarantee protection against the effects of lightning strikes and electromagnetic disturbances over the entire service life. The connection series offers you solutions that are adapted to the various types of photovoltaic panels. A secure earthing connection is produced by establishing an optimal electrical contact between the panel housing and the earthing conductor. The module frames are made of anodised aluminium, or whose surface is treated in another way. These surface treatments protect against rust but are not conductive. Thanks to the series, electrical contact with the aluminium of the panel is possible. Either by a thread on the screwed models or secured through the recessed thread with bolt connection with the help of a serrated washer that scrapes off the anodising when tightened. The connection is secured by tightening the earthing conductor with a maximum cross section of 10 mm<sup>2</sup>. With an insulated conductor you have to remove the insulation on 30 mm. The models are made of stainless steel which guarantees outstanding rust protection and galvanic compatibility with the aluminium.

### Attachment to an existing bore

with bolts, each bore  $\varnothing$  6 mm (0.26"). The serrated washer ensures the electrical contact.

Cross section range of the earthing conductor in mm<sup>2</sup> [multi-stranded or solid]: 4, 6, 10, 4+4, 6+6

	100	18 8012	
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### Attachment to an existing bore

with self-tapping screw, each bore  $\varnothing$  4 mm (0.16").

Cross section range of the earthing conductor in mm<sup>2</sup> [multi-stranded or solid]: 4, 6, 10, 4+4, 6+6

	1	18 8014	
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### Attachment outside the bore

with self-drilling screw.

Cross section range of the earthing conductor in mm<sup>2</sup> [multi-stranded or solid]: 4, 6, 10, 4+4, 6+6

	1	18 8016	
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### Attachment outside the bore

with self-drilling screw.

Cross section range of the earthing conductor in mm<sup>2</sup> [multi-stranded or solid]: 16, 16+4, 16+6, 25

	1	18 8018	
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## Stainless steel (VA) tubular cable lugs

- Material: V2A
  - Temperature resistant up to 400 °C
  - Resistant to acid and rust
  - Ring shaped
  - Especially suitable for earthing and lightning protection of aluminium support and frame elements in the photovoltaic field.
  - The stainless steel cable lug can be used to connect copper conductors to aluminium elements, since VA steel does not react corrosively or electrochemically with either of these materials.
- When commercially available tubular copper cable lugs are used, the less precious metal (in this case aluminium) can be successively stripped away under the influence of moisture and voltage and thus destroy the frame profiles!

Nom. Cross section mm <sup>2</sup>	Fixing bolts Ø	Weight / 100 pieces in kg			
4 - 6	M 8	0.28	100	18 8686	
10	M 8	0.78	100	18 8704	
10	M 10	0.77	100	18 8705	
16	M 8	0.6	50	18 8712	
16	M 10	0.6	50	18 8714	



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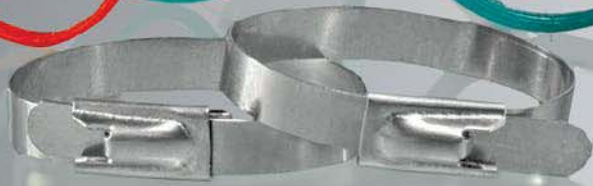
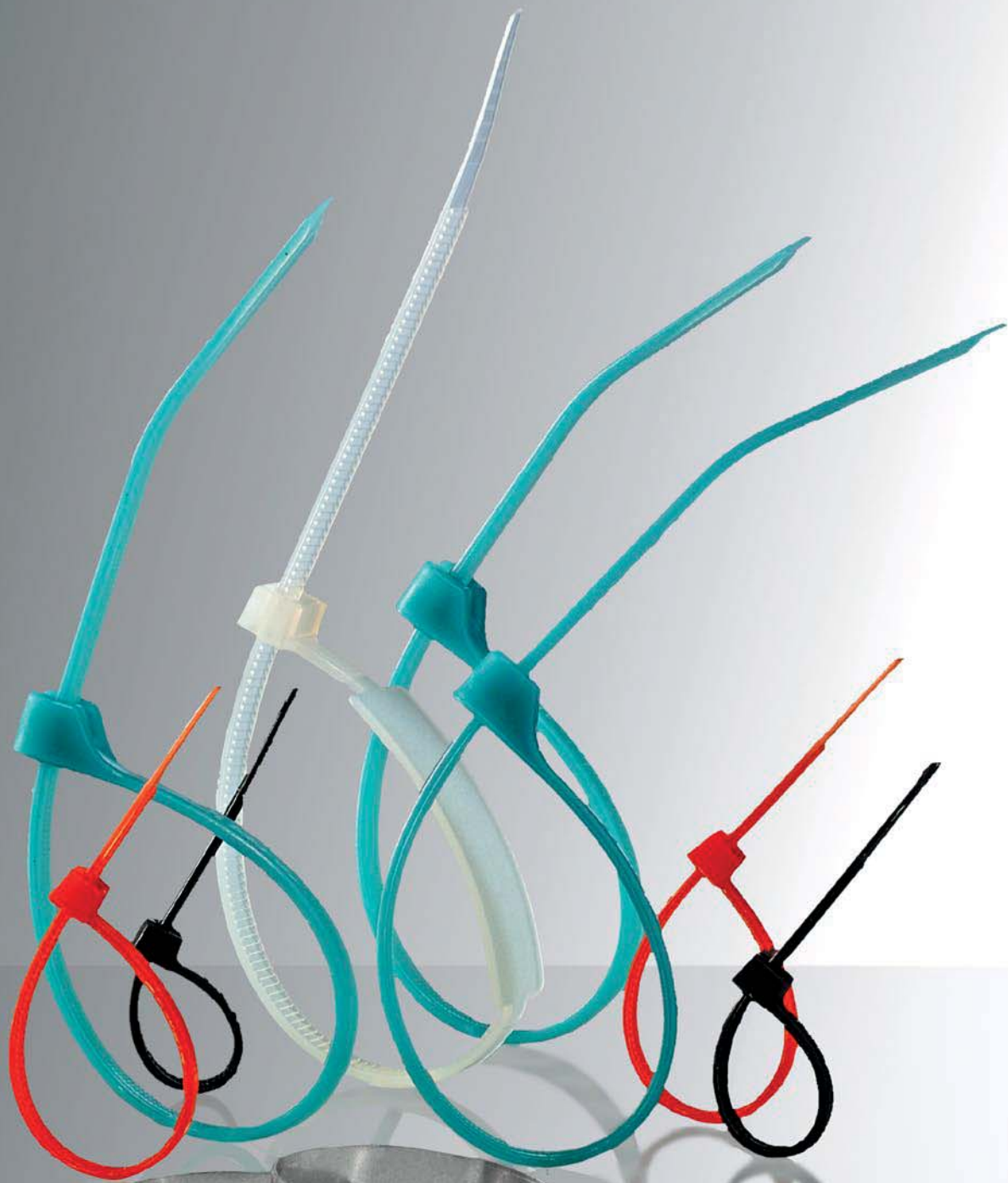
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# CABLE TIES, HOOK & LOOP TAPE

Whether standard, releasable or steel cable ties:



We offer tested quality at good prices.

Steel cable ties with ball-lock are resistant to corrosion and radiation, antimagnetic and extremely resistant to high temperatures.



Hook & loop tape belt with synthetic eyelet and hookless belt end to quickly open the tie.



Colour cable ties for marking and labelling.

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	Design	PU	Article no.
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**UL** UNDERWRITERS LABORATORIES INC.

**GL** GERMANISCHER LLOYD



### Cable ties

**Raw material:**

Pure polyamide 6.6 (PA 6.6, nylon) with no recycling material content, raw materials procured solely from leading quality manufacturers, colours: natural or black (RAL 9011) through enrichment with carbon (carbon black).

**Material properties:**

Self-extinguishing according to UL 94-V2, melting point +260 °C, halogen-free, silicon-free, non-toxic, food-safe according to Recommendation "X" (10) BGA (German Health Authority), non-conductive, high abrasion resistance, low frictional resistance, impact-resistant, recyclable. Black cable ties retain the moisture in the plastic, thus preventing embrittlement, hardening and fragility. Black cable ties are thus suitable for outdoor application and weatherproof for at least two years.

**Chemical resistance:**

Resistant to (among others) oils, petroleum products (e.g. petrol, kerosene, fats and lubricants), hydrocarbons (e.g. lower alcohols, acetone), cleaning agents and solvents, alkalis, mould, salt water. Conditionally resistant among others, to strongly diluted acids. Non-resistant to, amongst others, phenols, oxidising chemicals, formic acid, phosphoric acid, chlorine, chloric acids (e.g. hydrochloric acid, butanoic acid), benzoic acid, mineral acids.

**Processing conditions and conditions of use:**

Installation temperature (during installation) -10 °C to +80 °C, continuous service temperature (following installation) -40 °C to +105 °C, possible changes in length depending on temperature (between -20 °C and +100 °C) maximum ± 1.5 %, depending on relative air humidity (between 25 % and 100 %) maximum ± 3 %, no changes in length due to ageing if cable ties are not under load.

**Important when storing cable ties:**

Before use, store cable ties in the sealed packaging, to prevent drying out in a cool, not exceedingly dry place, away from sources of heat. Naturally coloured cable ties can turn yellow after an extended period of time due to temperature-dependent oxidation. This will not affect performance properties.

**Packaging:**

Packaged in plastic transparent foil, 100 % recyclable, vacuum sealed.

**Authorisations and Certifications of Quality:**

Products comply with ISO EN 62275, the IEC Standard IEC 92-101, flame retardant according to UL 94-V2, "Yellow Card" certification from Underwriters Laboratories Inc., self-extinguishing in accordance with UL 94, flame class 94V-2, self-extinguishing in accordance with ISO 1210, flame class FV-2, minimum retention strength in accordance with MIL-S-23190 E standard.

natural colour

Width	Length	Cable harness	Minimal tensile strength			
mm	mm	ø mm	kp	N		
2.5	75	2 – 16	9	88	100	18 1360
	100	2 – 24			100	18 1361
	135	2 – 35			100	18 1362
	160	2 – 42			100	18 1402
	200	2 – 55			100	18 1363
3.5	140	2.5 – 36	18	176	100	18 1364
	200	2.5 – 55			100	18 1404
	280	2.5 – 80			100	18 1378
4.5	160	2.5 – 40	22	216	100	18 1365
	180	3 – 45			100	18 1366
	200	3 – 51			100	18 1367
	250	5 – 70			100	18 1379
	280	5 – 76			100	18 1368
	360	5 – 101			100	18 1369
7.5	380	5 – 110			100	18 1408
	180	5 – 46	60	588	100	18 1371
	240	5 – 64			100	18 1372
	280	5 – 76			100	18 1377
	360	5 – 101			100	18 1373
9.0	450	18 – 132			100	18 1374
	540	20 – 160			100	18 1375
	750	32 – 222			100	18 1376
	780	20 – 235	80	784	100	18 1390
	920	40 – 280			100	18 1391
12.5	1220	50 – 375			100	18 1394
	500	10 – 140	110	1080	50	18 1392
	750	40 – 225			50	18 1393
	1000	40 – 300			50	18 1395



Design	PU	Article no.
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## Cable ties

black (RAL 9011) = weather-proof design, conditionally UV resistant

Width mm	Length mm	Cable harness ø mm	Minimal tensile strength			
			kp	N		
2.5	75	2 - 16	9	88	100	18 1860
	100	2 - 24			100	18 1861
	135	2 - 35			100	18 1862
	160	2 - 42			100	18 1802
3.5	200	2 - 55			100	18 1863
	140	2.5 - 36	18	176	100	18 1864
	200	2.5 - 55			100	18 1804
4.5	280	2.5 - 80			100	18 1878
	160	2.5 - 40	22	216	100	18 1865
7.5	180	3 - 45			100	18 1866
	200	3 - 51			100	18 1867
	250	5 - 70			100	18 1879
	280	5 - 76			100	18 1868
	360	5 - 101			100	18 1869
	450	18 - 132			100	18 1874
9.0	540	20 - 160			100	18 1875
	750	32 - 222			100	18 1876
	780	20 - 235	80	784	100	18 1890
	920	40 - 280			100	18 1891
12.5	1220	50 - 375			100	18 1894
	500	10 - 140	110	1080	50	18 1892
	750	40 - 225			50	18 1893
	1000	40 - 300			50	18 1895



## Releasable cable ties

made of polyamide 6.6, after opening re-usable as often as required, simple release by pressing a finger on the tab

natural colour

Width mm	Length mm	Bundle ø mm	Minimal tensile strength			
			kp			
7.5	200	up to 50	36		100	18 1490
	280	up to 76	36		100	18 1491
	360	up to 100	36		100	18 1492

black (RAL 9011) = weather-proof design, UV resistance

7.5	200	up to 50	36		100	18 1495
	280	up to 76	36		100	18 1496
	360	up to 100	36		100	18 1497



1	Design	PU	Article no.
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### Coloured cable ties

for labelling and marking



Width mm	Length mm	Cable harness ø mm	Minimal tensile strength	
			kp	N

red (RAL 3000)

2.5	100	2 – 24	9	88	100	18 1450
3.5	140	2.5 – 36	18	176	100	18 1452
4.5	200	3 – 51	22	216	100	18 1454
	280	5 – 76			100	18 1456

blue (RAL 5002)

2.5	100	2 – 24	9	88	100	18 1460
3.5	140	2.5 – 36	18	176	100	18 1462
4.5	200	3 – 51	22	216	100	18 1464
	280	5 – 76			100	18 1466

green (RAL 6024)

2.5	100	2 – 24	9	88	100	18 1470
3.5	140	2.5 – 36	18	176	100	18 1472
4.5	200	3 – 51	22	216	100	18 1474
	280	5 – 76			100	18 1476

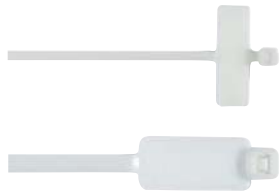
yellow (RAL 1021)

2.5	100	2 – 24	9	88	100	18 1480
3.5	140	2.5 – 36	18	176	100	18 1482
4.5	200	3 – 51	22	216	100	18 1484
	280	5 – 76			100	18 1486

Other colours available upon request. Please inquire for minimum order quantity, price and delivery times.

### Cable ties with labelling surface

made of polyamide 6.6, natural colour



Width mm	Length mm	Cable harness ø mm	Size Labelling surface mm x mm
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2.5	100	4.0 - 18	8 x 25	100	18 1420
2.5	200	4.0 - 50	8 x 25	100	18 1422
4.8	190	15 - 50	10 x 28	100	18 1424
4.8	270	15 - 75	10 x 28	100	18 1426

### Printed cable ties

Cable ties can be custom printed, also with logo, serial numbers and variable printing ink colour.

For special marking, registration and labelling of cables, equipment and many other components, including closure and tamper-proof sealing of packages, envelopes, sacks, etc. For use in electrical engineering, machine- and vehicle construction, logistics, food and pharmaceutical industries, public authorities, etc. For cable ties of any length with at least 1 mm thickness, min. order quantity per printing order 30,000 cable ties.

We are happy to advise you about technical details and questions of processing, delivery times, pricing etc.



### Plug-in cable ties

Cable ties made from polyamide 6.6, black, self-extinguishing according to UL 94 V-2, with expansion anchor head for fast and safe installation in drill holes (approx. 5 mm ø) by means of force fitting, affixing and bundling of cables in one working step, especially suited for use in vehicle and engine construction, as well as the aerospace industry.



Width mm	Length mm	Cable harness ø mm	Minimal tensile strength	
			kp	N

3.5	140	max. 32	18	176	100	18 1850
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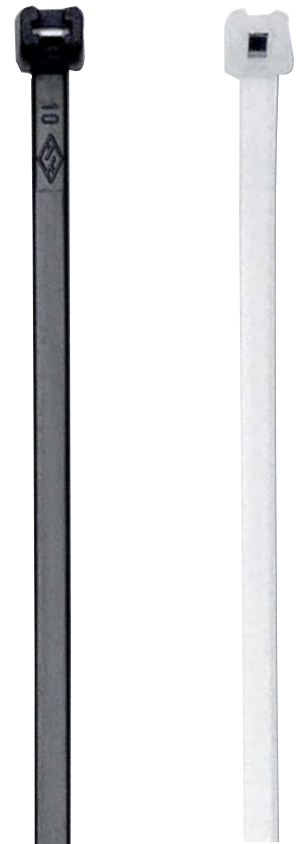
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## Cable ties with steel tongue

made of polyamide 6.6, with corrosion-resistant, anti-magnetic, stainless steel tongue

Width	Length	Cable harness	Minimal tensile strength			
			mm	kp		
natural colour						
2.5	100	2 – 16	8	80	100	18 1338
	200	2 – 50			100	18 1336
2.4	356	2 – 102			100	18 1337
3.5	140	2 – 29	18	180	100	18 1339
	200	2 – 50			100	18 1340
	280	2 – 76			100	18 1341
3.6	368	2 – 103			100	18 1342
4.5	200	3.5 – 54	22	220	100	18 1343
	290	3.5 – 78			100	18 1344
	360	3.5 – 102			100	18 1345
7.5	360	6 – 90	55	540	50	18 1347
7.0	762	6 – 229			50	18 1348
black						
2.5	100	2 – 16	8	80	100	18 1738
	200	2 – 50			100	18 1736
2.4	356	2 – 102			100	18 1737
3.5	140	2 – 29	18	180	100	18 1739
	200	2 – 50			100	18 1740
	280	2 – 76			100	18 1741
3.6	368	2 – 103			100	18 1742
4.5	200	3.5 – 54	22	220	100	18 1743
	290	3.5 – 78			100	18 1744
	360	3.5 – 102			100	18 1745
7.5	360	6 – 90	55	540	50	18 1747
7.0	762	6 – 229			50	18 1748

Packaging unit 1000 pieces upon request.



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	Design		PU	Article no.
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### Heat-resistant cable ties

special additives to the raw material create permanently temperature-resistant cable ties up to +130 °C, properties otherwise the same as standard cable ties, basic material pure polyamide 6.6 without recycling content, colour pale green.

Width mm	Length mm	Cable harness ø mm	Minimal tensile strength			
			kp	N		
3.5	140	2.5 - 36	18	176	100	18 1710
4.5	200	3 - 51	22	216	100	18 1712
	280	5 - 76			100	18 1713
	360	5 - 101			100	18 1714
7.5	360	5 - 101	60	588	100	18 1716



### UV and cold-resistant cable ties

Continual exposure to UV radiation and cold causes standard cable ties to become brittle. They will eventually crack following continuous exposure. The addition of special carbons increases the service life of UV-resistant cable ties by approx. a factor of ten, for up to 10 years when used correctly. They are also cold-resistant to -40 °C. These cable ties are thus ideal for outdoor use and at continuously low temperatures. Flammability rating according to UL 94 HB, colour black (RAL 9011).

Width mm	Length mm	Cable harness ø mm	Minimal tensile strength			
			kp	N		
3.5	140	2.5 - 36	16	158	100	18 1720
4.5	200	3 - 51	20	194	100	18 1722
	280	5 - 76			100	18 1723
	360	5 - 101			100	18 1724
7.5	360	5 - 101	54	529	100	18 1726



### Flame-resistant, self-extinguishing cable ties

for use in areas requiring especially high flame retardant properties. Flame retardant according to UL 94 V-0: The flame-retardant material must not burn longer than 10 seconds nor ignite combustible materials underneath it. Halogen-free, can be used in a temperature range of -20 °C to +80 °C. Colour milk white.

Width mm	Length mm	Cable harness ø mm	Minimal tensile strength			
			kp	N		
3.5	140	2.5 - 36	14	140	100	18 1728
	280	5 - 76			100	18 1731
	360	5 - 101			100	18 1732
7.5	360	5 - 101	48	470	100	18 1734



### TEFZEL® cable ties

Cable ties made from ethylene tetrafluorethylene copolymer. Very high resistance to UV radiation, radioactivity, many aggressive chemicals (incl. acids, alkalis, oxidising agents, metal salt solutions, oils, fats), weatherproof, does not absorb water, heat-stable and flame-retardant (UL 94 V 0), operating temperature -50 °C to +150 °C, the ideal tie for use in nuclear power plants, the chemical industry, refineries, etc.

Width mm	Length mm	Cable harness ø mm	Minimal tensile strength			
			kp	N		
4.8	186	46	100		100	18 1487
	360	104	100		100	18 1488
7.0	338	85	320		100	18 1489



### Detectable cable ties

Cable ties developed especially for food or pharmaceutical industry, detectable due to added metal filings which mean even the smallest fragments can be detected with a metal detector or x-ray machine. Base material pure polyamide 6.6, halogen and silicone-free, self-extinguishing. Flammability class UL 94 HB, temperature resistant: -25 °C to +65 °C, colour code blue.

Width mm	Length mm	Bundle ø mm	Minimal tensile strength			
			kp	N		
2.5	100	24	8	80	100	18 1750
3.5	140	36	18	180	100	18 1752
4.5	200	51	22	220	100	18 1754
4.5	280	76	22	220	100	18 1756
4.5	380	110	22	220	100	18 1758
7.5	360	101	55	550	100	18 1760

**NEW**



Design		PU	Article no.		
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### Fastening element for cable ties

natural colour

Fastening	Dimensions mm	or cable ties up to max. mm width	for screw up to ø mm		
For screwing					
	20 x 10	4.8	4	100	18 1380
	30 x 15	9.0	4	100	18 1389
For bonding					
Adhesive (self-adhesive) + screw, natural colours					
	19 x 19	3.6	4	100	18 1382
Adhesive (self-adhesive) + screw, black					
	19 x 19	3.6	4	100	18 1882
Adhesive (self-adhesive) + screw, natural colours					
	27 x 27	4.8	4	100	18 1384
Adhesive (self-adhesive) + screw, black					
	27 x 27	4.8	4	100	18 1884



### Cable clips

Suitable for fastening and release at any time of one or several hoses, round cables and lines of different diameters. Especially suitable when laying cables on very smooth, hard surfaces and in places difficult to access, where the use of normal fastening elements / cable ties is not possible. Made from polyamide 6.6, natural colour, self-adhesive. Black available on request.

Length mm	Width mm	Height mm	max. cable ø mm		
19	19	10	5	100	18 1381
26	26	13	10	100	18 1383
26	26	18	15	100	18 1385



### Wall dowel cable tie holder

for fastening cables, cable bundles, pipes etc. on masonry, for drilled holes 7 to 8 mm in diameter, screw-on head for easy adjustment of height and alignment of the holding block, distance from cable to wall approx. 12 mm

for cable ties up to 9 mm in width	10 x 13	100	18 1386
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### Assembly dowels for cable ties

A journal mount, which is knocked into a drill hole in the wall, ø 6 or 8 mm. The protruding head allows a cable bundle to be fastened at a specific distance from the wall. With heads stabilised with strong fins for perfect hold and cable tie widths up to 9 mm. basic material pure polyamide 6.6, halogen and silicone-free, self-extinguishing. Flammability class of base material UL 94 V-2, temperature resistance: -40 °C to +85°C, Colour code black

Head width mm	Head length mm	Head height mm	Length mm	Drill hole		
14.0	11.0	6.3	36.0	6.0	100	18 1762
14.0	11.0	6.3	43.0	8.0	100	18 1764



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Design	Size mm	PU	Article no.
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### Spiral bands

To bundle and protect cables in cable manufacturing, in the electronics industry, as well as in switch cabinet, controller, and plant engineering. For efficient and tidy bundling and laying of cables, wiring, cable harnesses, and wire bundles. Also for protecting cables from abrasion or other damage, as well as for stiffening cable harnesses. Customised lengths possible, thus no material wastage. Easily adaptable to different bundle diameters, re-openable and reusable. In the case of spiral bands wound at a distance, the material usage is lower, the cable bundles are more flexible and branches consisting of one or more cables are possible at any point without problem. Ideal for subsequent winding around cable bundles.

Made of polyethylene (PE), temperature-resistant from -20°C to +65°C, flame resistant, halogen-free, silicone-free

1 roll each = 10 m length.



Bundle ø mm	Coil width mm	Outer ø mm		
natural colour				
4 - 20	7.0	6	1	18 6200
6 - 60	11.4	10	1	18 6202
9 - 70	13.9	12	1	18 6204
12 - 80	15.0	15	1	18 6206
15 - 100	18.2	19	1	18 6208
25 - 130	19.6	24	1	18 6210
black				
4 - 20	7.0	6	1	18 6220
6 - 60	11.4	10	1	18 6222
9 - 70	13.9	12	1	18 6224
12 - 80	15.0	15	1	18 6226
15 - 100	18.2	19	1	18 6228
25 - 130	19.6	24	1	18 6230

### Adjustable cable tie clamping and cutting tool

In pistol format for cable ties with a width of 2.2 mm to 4.8 mm, clamping strength adjustable to max. 12 kg and with automatic cutting tool. Weight 303 g.



adjustable	175 mm	1	10 1930
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### Cable tie clamping and cutting tool HEAVY DUTY

Made of sheet steel for cable ties with a width of 2.3 mm to 12.5 mm, with integrated cutting tool. Weight 320 g.



heavy duty version	195 mm	1	10 1931
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### Cable tie bag

for all standard cable ties, sewn in hard-wearing, double padded material, with elastic band retainer and belt loop function. When removing individual cable ties from the bag, the elastic band prevents the ties remaining in the bag from falling out.



	280 x 70 x 45 mm	1	17 0120
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Design	Size mm	PU	Article no.
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### Steel cable ties

made from stainless steel 316 (DIN 1.4401), with ball lock, resistant to corrosion and radiation, anti-magnetic, extremely resistant to high temperatures (steel -80°C to +538°C) and aggressive chemicals, steel thickness 0.25 mm, spec./approval UL. For use in machine and vehicle construction, signalling systems, shipbuilding and mining, in the food and chemical industries, in power plants, subways, buildings, switch cabinets, on oil rigs etc.

Width mm	Length mm	Cable harness ø mm	Minimal tensile strength		PU	Article no.
			kp	N		
4.6	100	20	56	550	100	18 6000
	125	27			100	18 6001
	150	44			100	18 6002
	200	50			100	18 6003
	290	75			100	18 6004
	360	102			100	18 6005
	520	152			25	18 6006
7.9	200	50	122	1200	100	18 6010
	290	75			100	18 6011
	360	102			100	18 6012
	520	152			25	18 6013
	680	203			50	18 6014
	840	254			25	18 6015
	1000	318			25	18 6016
12.0	290	75	224	2200	25	18 6020
	360	102			25	18 6021
	520	152			25	18 6022
	680	203			25	18 6023
	840	254			25	18 6024
	1000	318			25	18 6025



with protective cable coating made from epoxy resin polyester, halogen-free, black

Width mm	Length mm	Cable harness ø mm	Minimal tensile strength		PU	Article no.
			kp	N		
4.6	100	20	56	550	100	18 6100
	150	44			100	18 6102
	200	50			100	18 6103
	290	75			100	18 6104
	360	102			100	18 6105
	520	152			25	18 6106
7.9	200	50	122	1200	100	18 6110
	290	75			100	18 6111
	360	102			100	18 6112
	520	152			25	18 6113
	680	203			25	18 6114
	840	254			25	18 6115
	1000	318			25	18 6116
12.0	290	75	224	2200	25	18 6120
	360	102			25	18 6121
	520	152			25	18 6122
	680	203			25	18 6123
	840	254			25	18 6124
	1000	318			25	18 6125



### Clamping tool

made of steel, for clamping steel ties up to 12 mm in width, even with protective cable coating, with rotating cutter for burr-free cutting edges

Length mm			
	205	1	10 1935



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Design	PU	Article no.
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**NEW**

### SLE steel ties

Ladder cable ties made of stainless steel AISI 316, self-locking with locking mesh, non-releasable. No slipping or sliding effect when tie is pulled tight. Coated with black polyester, UV-stabilised and halogen-free, anti-magnetic, resistant to corrosion and radiation, extremely resistant to high temperatures and aggressive chemicals. Approvals: DNV-GL, Lloyds Register, UL; steel thickness 7.0 mm = 0.30 mm / 12.0 mm = 0.35 mm. Temperature resistant: Steel -80°C to +538°C; Polyester -80°C to +150°C



Width mm	Length mm	Bundle ø mm	Minimal tensile strength N		
7.0	150	45	445	100	18 6130
7.0	225	70	445	100	18 6132
7.0	300	95	445	100	18 6134
7.0	360	105	445	100	18 6136
7.0	450	140	445	50	18 6138
7.0	610	190	445	50	18 6140
12.0	200	50	890	100	18 6142
12.0	360	100	890	100	18 6144
12.0	450	135	890	50	18 6146
12.0	610	185	890	50	18 6148
12.0	750	230	890	25	18 6150

### Hook & loop ties (Hook & loop tape cable ties and retaining strips)

**Areas of application:**

For bundling, fastening, affixing, and many other uses. Especially suitable for the installation of sensitive cables (network cabling, telecommunications, fibre optic cables) and whenever frequent closing and opening of the ties is required (e.g. pre-assembly of cable harnesses).

**Special product features:**

Soft, flexible surface for minimum pressure on cable bundles, avoids unintentional damage of cables due to sharp or hard edges, even and flush contact over the entire circumference of the cable bundle, hook & loop closure technique adheres in any position, easy to open and close, quick installation without the use of tools, high tensile and shearing strength, adjustable, multiple-use, low wear for long service life, durable, non-fading colours, washable with no risk of damage, light-resistant, UV-resistant and sweat-resistant, waterproof and resistant to saltwater, no wastage during use, in a range of dimensions.

### Hook & loop tape belt with synthetic eyelet

made of woven polyamide, in two colours red/black to facilitate use, belt end without hook to open the tie quickly, suitable for up to 10,000 tie openings, tensile strength 260 N/cm, thickness approx. 2 mm (the minimum tensile load given is valid with at least 50 mm band overlap), silicone- and halogen-free.

Width mm	Length mm		
25	240	10	18 1900
25	300	10	18 1902
25	360	10	18 1904

### Hook & loop tape

made of black, extruded polyamide velour laminate, tensile strength min. 120 N/cm, thickness approx. 1.4 mm, self-adhesive "back-to-back", suitable for approx. 200 actuations. Apart from the standard colour black, also available in white, red, blue, green, yellow. Please enquire about minimum order quantity, delivery time approx. 8 weeks.

Hook & loop ties with tab, cut to binding lengths for common electrical installations

Width mm	Length mm		
7	200	25	18 1910
13	200	25	18 1912
16	300	25	18 1914





Design	PU	Article no.
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## Hook & loop tape

Hook & loop ties on rolls, roll length 25 m, tensile strength min. 120 N/cm, custom-cut lengths

Width mm	Length m			
13	25	1 roll	18 1920	
16	25	1 roll	18 1922	
20	25	1 roll	18 1924	
25	25	1 roll	18 1926	
30	25	1 roll	18 1928	



## Self-adhesive hook & loop tape

self-adhesive hook and loop tape. Ideal for individual and secure fastenings and yet always separable. Hook & loop tape can simply be cut to the desired length, according to requirements.

Material strength min. 210 N/cm, shear strength 10.3 N/cm, approx. 10,000 actuations possible.

Adhesive: rubber-resin based, temperature range: -15° C to +90° C

Supplied in dispenser box, each with one roll of hook and loop tape

Width mm	Length m			
20	10	1	18 1980	
50	25	1	18 1982	



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 **Nicht schalten! Es wird gearbeitet!**  
Entfernen des Schildes nur durch: \_\_\_\_\_



# MARKINGS AND SIGNS

Inspection stickers are used in quality assurance (QA) processes, in association with legally stipulated inspections and in accident prevention.

The inspection stickers consist of tamper-proof document film.

Warning labels and prohibition signs made of plastic.



Cable markers for simple, fast and permanent identification of cables.



Basic stickers made of document film are resistant to water, aliphatic solvents and petroleum-based oils and fats.

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Design	Size mm	PU	Article no.
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### Markings

#### Self-laminating cable markers

Cable markers for simple, fast and permanent identification of cables.

Clear PV 006, self-adhesive soft PVC film, 0.08 mm thick. Protects the inscription block from mechanical influences.

The marker consists of a patented and transparent press-on section, white inscription surface, transparent protective section. Temperature-resistant from -30 °C to +120 °C, durable adhesive power, high UV resistance.

Resistant to dirt, moisture, alcohol, petroleum-based oils. Inscription with pencil, pen, printer etc.

Pocket format



Title block mm	Maximum Cable ø mm	Pieces per pack	Length mm		
25 x 25	14	60	75	1	18 2650
25 x 25	38	30	150	1	18 2652
25 x 25	63	30	250	1	18 2654
Sheet					
10 x 23	7	40	38	1	18 2656
25 x 23	14	20	75	1	18 2658

#### Hand inscription labels

Self-adhesive inscription labels in yellow woven fabric for tagging of electrical systems, equipment identification, stock and item labelling. Easy to inscribe with pencil, pen and typewriter. Self-adhesive PVC-impregnated woven fabric in yellow with black border, 0.15 mm thick.

Temperature-resistant from -30 °C to +80 °C, good adhesion, resistant to ageing.



Pieces per sheet	Dim. mm		
40	11 x 19	1	18 2660
20	25 x 38	1	18 2662

#### Inspection stickers

Inspection stickers are used in quality assurance (QA) processes according to DIN EN ISO 9000 ff, in association with, e.g. legally stipulated inspections and within the context of the German Accident Prevention Guidelines (UVV). This especially applies to the monitoring of testing devices, equipment and systems, as well as important supply lines (cables, pipes/tubes). There are two ways to affix the inspection stickers: directly onto the inspected equipment or onto one of the basic stickers provided, which are affixed to the equipment. The date of inspection is documented with a pen or notch pliers. The inspection stickers consist of tamper-proof document film, i.e. to prevent misuse, the sticker is irrevocably destroyed when an attempt is made to remove it.

Document film properties:

The document film can be marked using pencil, pen, felt pen or typewriter. It is 0.05 mm thick and temperature-resistant from -30 °C to +80 °C. The adhesive strength is greater than the tear strength of the film. The film breaks when removed and is largely resistant to ageing, weather and light. It is also resistant to water, salt water, alcohol, aliphatic solvents as well as petroleum-based oils and fats.

	ø mm	Pcs. per Handle		
brown "flash"	30	108	10	18 2670
yellow "18"	30	108	1	18 2688
yellow "19"	20	108	1	18 2689
orange "20"	20	108	1	18 2692
violet "21"	20	108	1	18 2693
green "22"	20	108	1	18 2694



Design	Size mm	PU	Article no.	
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### Control pliers

for paper punches and thin plastics, e.g. for simply marking stickers before they are removed from the backing material. Opening depth 30 mm



round recess 3 mm ø	120	1	10 1650
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Please specify any custom recess when ordering.



### Basic stickers

the self-adhesive basic sticker consists of white, write-on plastic film, to which stickers can be repeatedly attached. It adheres well to a clean surface and is destroyed when removed. The document film is resistant to water, aliphatic solvents, and petroleum-based oils and fats.

Pieces per sheet	Dimensions mm		
25	92 x 40	1	18 2690



### Identification of conductors

the self-adhesive film symbols for the marking of non-insulated and insulated conductors, housings, switch cabinets and equipment are available in a range of sizes on a sheet for rapid application. The symbols correspond to the standards DIN40 009, DIN 40 011, and the IEC. Material: Self-adhesive PVC film with lamination, 0.10 mm thick. Temperature resistant from -30°C to +100°C, dirt-repellent, durable adhesive power. ø: 12.5 mm

	Pieces per sheet		
Outer conductor 1, black	10	1	18 2620
Outer conductor 2, black	10	1	18 2622
Outer conductor 3, black	10	1	18 2624
Neutral conductor N, blue	10	1	18 2626
Protective conductor PE, green-yellow	10	1	18 2628
Neutral conductor protective function	10	1	18 2630
Earth	10	1	18 2632
Earth, does not comply with DIN 40 011	10	1	18 2634



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Design	Size mm	PU	Article no.
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### Test sticker “Electrically tested”

Material: standard film, supplied in booklet with 108 stickers

**NEW**



Colour	Year	Format		
brown	2018	d = 30 mm	1	18 2700
yellow	2019	d = 30 mm	1	18 2764
orange	2020	d = 30 mm	1	18 2770
violet	2021	d = 30 mm	1	18 2775

### Test sticker “Next test date German Social Accident Insurance (DGUV) regulation 3”

Material: standard film, year: 2018, supplied in the booklet with 108 stickers (old name “Next test date Employers’ Liability Association regulations (BGV) A3”)

**NEW**



Colour	Year	Format		
brown	2018	d = 30 mm	1	18 2702
yellow	2019	d = 30 mm	1	18 2765
orange	2020	d = 30 mm	1	18 2771
violet	2021	d = 30 mm	1	18 2776

### Test sticker “Next test date”

Material: standard film, year: 2018, supplied in booklet with 108 stickers

**NEW**



yellow/black	d = 30 mm	1	18 2704
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### Cable test sticker

“Tested according to DGUV regulation 3”, Material: vinyl film, clear, year: 2018, Supplied in a booklet of 80 stickers (old description “Tested according to BGV A3”)

**NEW**



Colour	Year	for cable ø mm	Format		
brown	2018	8 – 25 mm	d = 30 mm	1	18 2706
yellow	2019	8 – 25 mm	d = 30 mm	1	18 2767
orange	2020	8 – 25 mm	d = 30 mm	1	18 2773
violet	2021	8 – 25 mm	d = 30 mm	1	18 2778

### Cable inspection sticker “Next inspection”

Material: vinyl film, clear, year: 2018, Supplied in a booklet of 80 stickers

**NEW**

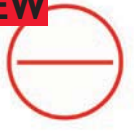


Colour	Year	for cable ø mm	Format		
brown	2018	8 – 25 mm	d = 30 mm	1	18 2708
yellow	2019	8 – 25 mm	d = 30 mm	1	18 2768
orange	2020	8 – 25 mm	d = 30 mm	1	18 2774
violet	2021	8 – 25 mm	d = 30 mm	1	18 2779

### Electric circuit labelling, two fields

for individual labelling, Material: vinyl film, Supplied as 30 stickers and 30 protective laminates stapled together

**NEW**



red	d = 39 mm	1	18 2710
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### Electric circuit labelling, three fields

for individual labelling, Material: vinyl film, Supplied as 30 stickers and 30 protective laminates stapled together

**NEW**

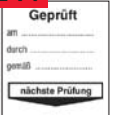


red	d = 39 mm	1	18 2712
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### Basic sticker

“Inspection according to ...Next inspection”, material: vinyl film, white, Supplied as 50 stickers stapled together and without advertising printed

**NEW**



white	W x H		
white	40 x 80 mm	1	18 2714

“Tested / on / by / according to ...”, Material: vinyl film, white, Supplied as 50 pieces stapled together and without advertising printed

white	W x H		
white	40 x 80 mm	1	18 2716



Design	Size mm	PU	Article no.
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### FI test buttons information stickers

"Actuate once a month!", Material: self-adhesive film,  
Supplied stamped onto sheets of 10 stickers

	W x H		
red	48 x 20 mm	1	18 2718



### Warning signs

"Warning – Electric voltage"  
Material: self-adhesive film, design: ASR A 1.3 (2013), DIN EN ISO 7010, W012

yellow	SL = 100 mm	1	18 2720
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### Warning sign for electrical engineering

Material: self-adhesive film, text: "Electric operating room ...",  
Symbol: "Warning – hazardous electric voltage"

	H x W		
yellow	297 x 210 mm	1	18 2722



Material: plastic, text: "Electric operating room ..."  
Symbol: "Warning – hazardous electric voltage"

	H x W		
yellow	297 x 210 mm	1	18 2724



### Warning sign

"High voltage – Danger of death"  
Material: plastic, design: Symbol according to ASR A 1.3 (2013), DIN EN ISO 7010, W012

yellow	122 x 100 mm	1	18 2726
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"High voltage – Danger of death"  
Material: self-adhesive film, design: symbol according to ASR A 1.3 (2013), DIN EN ISO 7010, W012

yellow	122 x 100 mm	1	18 2728
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"High voltage! Danger of death"  
Material: self-adhesive film, design: symbol according to ASR A 1.3 (2013), DIN EN ISO 7010, W012

yellow	244 x 200 mm	1	18 2730
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"High voltage! Danger of death"  
Material: plastic, design: symbol according to ASR A 1.3 (2013) DIN EN ISO 7010, W012

yellow	244 x 200 mm	1	18 2732
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"Electric operating room"  
Material: self-adhesive film, design: symbol according to ASR A 1.3 (2013) DIN EN ISO 7010, W012

yellow	244 x 200 mm	1	18 2734
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"Electric operating room"  
Material: plastic, design: symbol according to ASR A 1.3 (2013), DIN EN ISO 7010, W012

yellow	244 x 200 mm	1	18 2736
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Design	Size mm	PU	Article no.
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### Maintenance tag

"Do not switch! Work is being carried out!"

Material: plastic 0.5 mm, design: hole at top in middle 6 mm, symbol according to ASR A 1.3 (2013), DIN EN ISO 7010, P031, supplied in a pack of 10 pieces

**NEW**



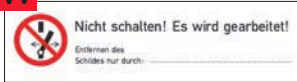
white matt	76 x 147 mm	1	18 2738
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### Warning stickers

"Do not switch! Work is being carried out!"

Material: self-adhesive film, removable, design: symbol according to ASR A 1.3 (2013) DIN EN ISO 7010, P031  
Supplied on sheets of 10 stickers

**NEW**



	80 x 16 mm	1	18 2740
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### Prohibition sign

"Do not switch! Work is being carried out!"

Material: plastic

**NEW**



	d = 200 mm	1	18 2742
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"Electric operating room – Unauthorised access prohibited"

Material: self-adhesive film

**NEW**



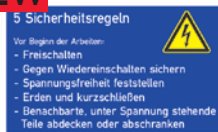
	d = 200 mm	1	18 2744
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### Mandatory signs according to DIN 40 008

"5 safety rules" Electric voltage

Material: plastic

**NEW**



	200 x 120 mm	1	18 2746
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### Combination sign according to ISO 7010

Material: plastic 1 mm

Warning sign: "Caution! Danger from batteries"

Prohibition sign: "Fire, open flames, and smoking prohibited"

**NEW**



	200 x 150 mm	1	18 2748
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### Emergency notice

"First aid instructions" according to German Social Accident Insurance (DGUV) information 204-001

Material: plastic, edition August 2017

**NEW**



	410 x 590 mm	1	18 2750
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### Safety notice

"First aid for electrical accidents"

Material: plastic

**NEW**



yellow	200 x 300 mm	1	18 2752
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Design	Size mm	PU	Article no.
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**Safety notices**

"VDE requirements for operating electric systems"

Material: plastic

yellow	660 x 1000 mm	1	18 2754
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**NEW**

"Information sheet for fighting fire in the vicinity of electric systems"

Material: plastic

yellow	500 x 660 mm	1	18 2756
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**NEW**

"Procedures and safety instructions" for working on high-voltage installations

Material: plastic

yellow	300 x 400 mm	1	18 2758
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**NEW**

"Excerpt from general accident prevention regulations"

Material: plastic

	420 x 297 mm	1	18 2760
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**NEW**

"First aid for accidents with electric current"

Material: plastic

	400 x 600 mm	1	18 2762
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# SCREWS

The multi-purpose screw with a full thread is a real multi-talent and can be used universally.



The Hex-head wood screws are available in the key sizes 10 to 17.



Screws can be stored safely and securely in the **raaco**-assortment box, providing you with an optimal overview (Section 3).



Hex nuts are the most popular and common nuts used in electrical installation.



With the galvanised, serrated washers with external teeth, the surfaces lock in place when tightened.

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Design	PU	Article no.
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### Multi-purpose screws

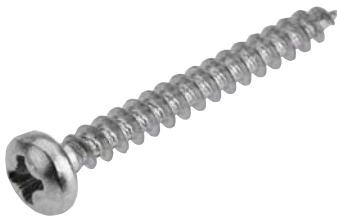
Chipboard screws, galvanised, countersunk head with Pozidriv cross-head



ø mm	Length mm	For cross-head Pozidriv size		
3.0	16	1	200	19 0005
	20	1	200	19 0006
3.5	15 (machine screw)	2	200	19 0014
	20	2	200	19 0015
	25 (machine screw)	2	200	19 0016
	30	2	200	19 0017
4.0	40 (machine screw)	2	200	19 0019
	25	2	200	19 0026
	30	2	200	19 0027
	35	2	200	19 0028
	40	2	200	19 0029
4.5	45	2	200	19 0030
	50	2	200	19 0031
	35	2	200	19 0040
	40	2	200	19 0041
	45	2	200	19 0042
5.0	50	2	100	19 0043
	60	2	100	19 0044
	30	2	200	19 0051
	40	2	200	19 0053
6.0	50	2	100	19 0054
	60	2	100	19 0055
	80	2	100	19 0056
	45	3	100	19 0062
6.0	50	3	100	19 0063
	60	3	100	19 0064

### Multi-purpose screws

Chipboard screws, galvanised, round head (pan head) with Pozidriv cross-head



ø mm	Length mm	For cross-head Pozidriv size		
3.5	16	2	200	19 0088
	20	2	200	19 0089
	25	2	200	19 0090
	30	2	200	19 0091
	35	2	200	19 0092
4.0	40	2	200	19 0093
	20	2	200	19 0098
	25	2	200	19 0099
	30	2	200	19 0100
	35	2	200	19 0101
4.5	40	2	200	19 0102
	45	2	200	19 0103
	50	2	200	19 0104
	25	2	200	19 0108
	30	2	200	19 0109
5.0	35	2	200	19 0110
	40	2	200	19 0111
	45	2	200	19 0112
	50	2	200	19 0113
	30	2	200	19 0118
5.0	35	2	200	19 0119
	40	2	200	19 0120
	50	2	200	19 0121
6.0	60	2	200	19 0122
	60	3	100	19 0126



Design	PU	Article no.
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### Multi-purpose screws

Chipboard screws, hardened steel, galvanised, round head (pan head) with internal serrated drive for TORX® tools

ø mm	Length mm	For TORX® drive	PU	Article no.
3.0	20	T 10	200	19 1201
3.5	16	T 15	200	19 1205
	20	T 15	200	19 1206
	30	T 15	200	19 1208
	40	T 15	200	19 1210
4.0	30	T 20	200	19 1215
	35	T 20	200	19 1216
	40	T 20	200	19 1217
	50	T 20	200	19 1219
4.5	40	T 20	200	19 1227
	45	T 20	200	19 1228
	50	T 20	200	19 1229
5.0	40	T 25	200	19 1235
	50	T 25	200	19 1237
	60	T 25	200	19 1238



### Multi-purpose screws

Chipboard screws, hardened steel, galvanised, countersunk head with internal serrated drive for TORX® tools

ø mm	Length mm	For TORX® drive	PU	Article no.
3.0	16	T 10	200	19 1500
	20	T 10	200	19 1501
3.5	25	T 15	200	19 1507
	30	T 15	200	19 1508
	40	T 15	200	19 1510
4.0	30	T 20	200	19 1515
	35	T 20	200	19 1516
	40	T 20	200	19 1517
4.5	45	T 20	200	19 1528
5.0	40	T 25	200	19 1535
	50	T 25	200	19 1537
	60	T 25	200	19 1538



### Multi-purpose screws SPAX®

Bright galvanised, countersunk head, T-Star plus

ø mm	Length mm	Blade size T	PU	Article no.
4.0	30	20	200	19 3027
	35	20	200	19 3028
	40	20	200	19 3029
4.5	45	20	200	19 3042
5.0	50	20	200	19 3054



### Multi-purpose screws SPAX®

Bright galvanised, round head, T-Star plus

ø mm	Length mm	Blade size T	PU	Article no.
3.5	20	15	200	19 3089
4.0	25	20	200	19 3099
	30	20	200	19 3100
	35	20	200	19 3101
	40	20	200	19 3102
	45	20	200	19 3103
	50	20	200	19 3104
4.5	40	20	200	19 3111
	45	20	200	19 3112
	50	20	200	19 3113
5.0	40	20	200	19 3120
	50	20	100	19 3121
	60	20	100	19 3122



Design	PU	Article no.
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### Hex-head wood screws (key screws)

according to DIN 571, galvanised, general requirements according to DIN 267 Part 1

ø mm	Length mm	For hex key size		
6.0	40	Size 10	50	19 0210
	60	Size 10	25	19 0211
	80	Size 10	25	19 0212
8.0	50	Size 13	50	19 0222
	60	Size 13	25	19 0223
	80	Size 13	25	19 0224
	100	Size 13	25	19 0225
	120	Size 13	25	19 0226
10.0	60	Size 17	10	19 0235
	80	Size 17	10	19 0236
	100	Size 17	10	19 0237
	120	Size 17	10	19 0238



### Sheet metal screws (self-drilling screws)

according to DIN 7504M (previously N), self-drilling, hardened steel, galvanised, round head / raised head with Phillips cross-head, sheet metal screw thread according to DIN 7970

ø mm	Length mm	For cross-head Phillips size		
3.5	9.5	2	100	19 0410
	13	2	100	19 0411
	16	2	100	19 0412
	19	2	100	19 0413
3.9	13	2	100	19 0416
	16	2	100	19 0417
	19	2	100	19 0418
	25	2	100	19 0419
4.2	13	2	100	19 0422
	16	2	100	19 0423
	19	2	100	19 0424
	22	2	100	19 0425
4.8	25	2	100	19 0426
	13	2	100	19 0432
	16	2	100	19 0433
	19	2	100	19 0434
	22	2	100	19 0435
	25	2	100	19 0436



Design	PU	Article no.
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## Raised head sheet metal screws

according to ISO 7049, EN 27049, and DIN 7981, form H with point, galvanised, raised head with Phillips cross-head

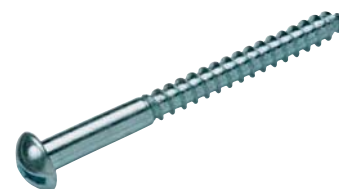
ø mm	Length mm	For cross-head Phillips size		
3.5	9.5	2	100	19 0300
	13.0	2	100	19 0301
	16.0	2	100	19 0302
	19.0	2	100	19 0303
	22.0	2	100	19 0304
3.9	25.0	2	100	19 0305
	13.0	2	100	19 0313
	16.0	2	100	19 0314
	19.0	2	100	19 0315
	25.0	2	100	19 0317
4.2	32.0	2	100	19 0318
	9.5	2	100	19 0324
	13.0	2	100	19 0325
	16.0	2	100	19 0326
	19.0	2	100	19 0327
4.8	22.0	2	100	19 0328
	25.0	2	100	19 0329
	13.0	2	100	19 0336
	16.0	2	100	19 0337
	19.0	2	100	19 0338
	22.0	2	100	19 0339
	25.0	2	100	19 0340
32.0	2	100	19 0341	
	38.0	2	100	19 0342



## Wood screws

according to DIN 96, galvanised, round head with slot

ø mm	Length mm	For slot-head screwdrivers Slot size (mm)		
3.5	20	7.0 x 0.8	200	19 0149
4.0	30	8.0 x 1.0	200	19 0160
	35	8.0 x 1.0	200	19 0161
5.0	40	8.0 x 1.0	200	19 0162
	50	8.0 x 1.0	200	19 0164
	30	10.0 x 1.2	200	19 0182
5.0	35	10.0 x 1.2	200	19 0183
	40	10.0 x 1.2	200	19 0184
	50	10.0 x 1.2	200	19 0186
	60	10.0 x 1.2	100	19 0187



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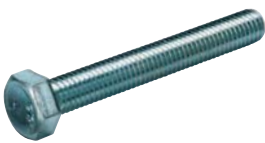
Design	PU	Article no.
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### Hex-head machine screws

according to DIN 933, with thread up to the head, tempered steel, galvanised, Grade 8.8

ø mm      Length mm

M 4	20	Size 7	100	19 0500
	30	Size 7	100	19 0504
	40	Size 7	100	19 0506
M 5	10	Size 8	100	19 0514
	16	Size 8	100	19 0516
	25	Size 8	100	19 0520
	35	Size 8	100	19 0522
	45	Size 8	100	19 0524
M 6	60	Size 8	100	19 0528
	10	Size 10	100	19 0535
	16	Size 10	100	19 0538
	25	Size 10	100	19 0542
	35	Size 10	100	19 0545
M 8	45	Size 10	100	19 0547
	20	Size 13	100	19 0562
	25	Size 13	100	19 0564
	30	Size 13	100	19 0566
	35	Size 13	100	19 0567
M 10	40	Size 13	100	19 0568
	50	Size 13	100	19 0570
	60	Size 13	100	19 0572
	20	Size 17	100	19 0588
	30	Size 17	100	19 0592
M 12	40	Size 17	100	19 0594
	50	Size 17	50	19 0596
	70	Size 17	25	19 0600
	25	Size 19	50	19 0614
	30	Size 19	50	19 0616
M 12	40	Size 19	50	19 0618
	50	Size 19	50	19 0620
	60	Size 19	50	19 0622



### Cylinder head screws

according to ISO 1207, EN 21207, and DIN 84, form A,

with slot, made of tempered steel, galvanised, Grade 4.8

ø mm      Length mm      Slot size (mm)

M 3	10	5.5 x 0.8	100	19 0800
	16	5.5 x 0.8	100	19 0806
	20	5.5 x 0.8	100	19 0808
	30	5.5 x 0.8	100	19 0811
M 4	10	7.0 x 1.2	100	19 0828
	16	7.0 x 1.2	100	19 0832
	20	7.0 x 1.2	100	19 0834
	25	7.0 x 1.2	100	19 0836
	30	7.0 x 1.2	100	19 0837
	40	7.0 x 1.2	100	19 0839
M 5	10	8.5 x 1.2	100	19 0848
	16	8.5 x 1.2	100	19 0862
	20	8.5 x 1.2	100	19 0864
	25	8.5 x 1.2	100	19 0866
	30	8.5 x 1.2	100	19 0867
M 6	40	8.5 x 1.2	100	19 0869
	10	10.0 x 1.6	100	19 0878
	16	10.0 x 1.6	100	19 0882
	20	10.0 x 1.6	100	19 0884
	25	10.0 x 1.6	100	19 0887
	30	10.0 x 1.6	100	19 0888
M 8	40	10.0 x 1.6	100	19 0890
	30	13.0 x 2.0	50	19 0908
	40	13.0 x 2.0	50	19 0910



Design	PU	Article no.
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## Threaded rods (threaded bolts)

according to DIN 976, steel, galvanised, Length 1000 mm

ø mm			
4	1	19 1104	
5	1	19 1105	
6	1	19 1106	
8	1	19 1108	
10	1	19 1110	
12	1	19 1112	



## Hex nuts

according to ISO 4032, EN 24032 and DIN 934, galvanised steel, Grade 8

ø mm	For hex key size		
M 3	Size 5.5	100	19 2000
M 4	Size 7	100	19 2001
M 5	Size 8	100	19 2002
M 6	Size 10	100	19 2003
M 8	Size 13	100	19 2005
M 10	Size 17	100	19 2006
M 12	Size 19	50	19 2007



## Washers

according to ISO 7089, EN 27089, and DIN 125, form A without chamfer, galvanised steel

For screws	Inner ø mm	Outer ø mm		
M 3	3.2	7	100	19 2600
M 4	4.3	9	100	19 2602
M 5	5.3	10	100	19 2603
M 6	6.4	12	100	19 2604
M 8	8.4	16	100	19 2606
M 10	10.5	20	100	19 2607
M 12	13.0	24	100	19 2608



## Washers

according to ISO 7093, EN 27093 and DIN 9021N (mudguard washers), steel, galvanised, outer diameter = approx. 3 x thread ø

For screws	Inner ø mm	Outer ø mm		
M 4	4.3	12	100	19 2650
M 5	5.3	15	100	19 2651
M 6	6.4	18	100	19 2652
M 8	8.4	24	100	19 2654
M 10	10.5	30	100	19 2656



## Serrated washers

according to DIN 6798, form A, with external teeth, steel, galvanised

For screws	Inner ø mm	Outer ø mm		
M 3	3.2	6	100	19 2700
M 4	4.3	8	100	19 2702
M 5	5.3	9	100	19 2703
M 6	6.4	11	100	19 2704
M 8	8.4	14	100	19 2706
M 10	10.5	18	100	19 2708
M 12	13.0	20	100	19 2710



## Spring lock washers

according to DIN 127, form B (smooth), galvanised spring steel, steel

For screws	Outer ø mm		
M 3	6.2	100	19 2750
M 4	7.6	100	19 2752
M 5	9.2	100	19 2754
M 6	11.8	100	19 2756
M 8	14.8	100	19 2758
M 10	18.1	100	19 2760
M 12	21.1	100	19 2762







# ADHESIVE TAPES, HEAT SHRINK TUBES, COUPLING SLEEVE TECHNOLOGY, GROMMETS

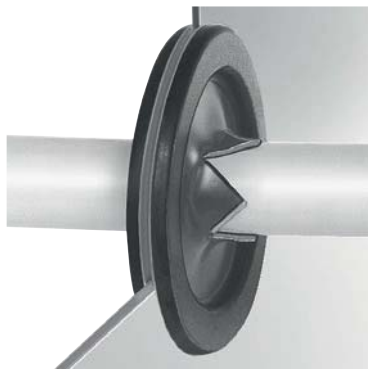
The coupling sleeve sliders allow the coupling sleeve to be easily and reliably poured, even in a sloping position.



The easy solution for protecting cable connections from dust and damp (IP 68) – APLA GEL! After the gel mass has cured, it can be removed at any time.



Specially designed for use in the electrical industry and electrical trade, our range comprises a great variety of adhesive tapes for different uses.



The feed-through grommets close the cable outputs; they allow cables and wires to be fed through the membrane, ensuring a secure seal against dust.

CIMCO adhesive tapes comply with the requirements of DIN EN 60454 and in the majority of cases exceed them.



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Design	Width mm	Length m	PU	Article no.
<b>PVC adhesive tapes</b>				
<b>Universal insulating tapes</b>				
Description: PVC film, coated on one side with non-corrosive, pressure sensitive rubber adhesive.				
Special features: Flame-retardant, self-extinguishing, good electrical and mechanical properties, waterproof, weather- and UV-resistant, silicone-free. Certified according to DIN EN 60454 - Part 2				
Typical areas of use: All-round adhesive tape in excellent quality, for bundling, standard insulation, coloured marking (e.g. green-yellow protective conductor) and reinforcing, ideal for many electrical installation and repair tasks.				
black	15	10	1	16 0100
white			1	16 0101
grey			1	16 0102
yellow			1	16 0103
blue			1	16 0104
red			1	16 0105
violet			1	16 0106
green			1	16 0107
brown			1	16 0108
green-yellow			1	16 0109
black	15	20	1	16 0110
white			1	16 0111
grey			1	16 0112
yellow			1	16 0113
blue			1	16 0114
red			1	16 0115
violet			1	16 0116
green			1	16 0117
brown			1	16 0118
green-yellow			1	16 0119
black	19	20	1	16 0130
white			1	16 0131
grey			1	16 0132
yellow			1	16 0133
blue			1	16 0134
red			1	16 0135
violet			1	16 0136
green			1	16 0137
brown			1	16 0138
green-yellow			1	16 0139
black	25	20	1	16 0140
white			1	16 0141
grey			1	16 0142
yellow			1	16 0143
blue			1	16 0144
red			1	16 0145
violet			1	16 0146
brown			1	16 0148
green-yellow			1	16 0149
black	30	20	1	16 0150
black	38	20	1	16 0160
black	50	20	1	16 0170
Rainbow pack				
10 assorted colours	15	10	1	16 0000



Design	Width mm	Length m	PU	Article no.
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## Insulating tapes for phase marking

### Description:

PVC film, coated on one side with non-corrosive, pressure sensitive rubber adhesive.

### Special features:

Black with white print L1, L2 and L3, blue with white print N.

### Typical areas of use:

Electrical insulation tapes for marking the conductor phase of multi-core cables.



black, L1	15	10	1	16 0201
black, L2	15	10	1	16 0202
black, L3	15	10	1	16 0203
blue, N	15	10	1	16 0204
Set, 4-pieces, L1, L2, L3, N	15	10	1	16 0205

## High performance electrical insulation tape for high temperatures, VDE

### Description:

PVC film, coated on one side with non-corrosive, pressure sensitive rubber adhesive.

### Special features:

Excellent resistance to high temperatures up to +105 °C, flame-retardant, self-extinguishing, UV and weather-resistant, VDE approved. Approved according to EN 60 454 Type 10

### Typical areas of use:

Insulating and repair tasks indoors and outdoors, in particular for use with the persistent influence of higher temperatures, e.g. cable wrapping on engines and in bodywork areas, wrapping of cable harnesses for motor vehicles, washing machines, dishwashers, for general thermal insulation, for bundling and for reinforcing as mechanical protection.



black	19	33	1	16 0250
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## All weather high performance electrical insulation tape

### Description:

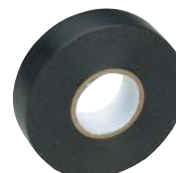
PVC film, coated on one side with non-corrosive, pressure sensitive rubber adhesive.

### Special features:

Excellent resistance and working properties, even at low temperatures (down to -20°C), flame-retardant, self-extinguishing, UV- and weather resistant. Approved according to EN 60 454 Type 11

### Typical areas of use:

Insulating- and repair tasks indoors and outdoors, in particular for outdoor use in extreme weather conditions, above all at low temperatures and great fluctuations in temperature, sealing and joining of medium-voltage cables, insulation and sealing of cold-storage rooms, general thermal insulation.



black	19	20	1	16 0260
black	25	20	1	16 0262

## Corrosion protection tapes

### Description:

Particularly strong PVC membrane, coated on one side with non-corrosive, aggressive adhesive

### Special features:

Heavy duty PVC adhesive tapes with high abrasion resistance, UV and water-resistant (including salt water), resistant to alkaline solutions and many acids and micro-organisms, bitumen compatible.

### Typical areas of use:

As an external wrap for additional protection against wear due to abrasion, weather influences and corrosion, thereby extending the service life and reducing frequent maintenance work. Examples: As protection against stone impact, kicking and scratches for exposed cables and underground cables, pipes and connection points of cables and pipelines, corrosion protection of exposed cables and lines (e.g. on ships, in wet areas, in the chemical industry), outstanding mechanical and corrosion protection for installation pipes and masts that are buried underground, base protection for electrical appliances (washing machines, tumble driers, chest freezers).

Tape thickness 0.25 mm, for heavy duty use

silver	50	33	1	16 0280
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Tape thickness 0.44 mm, for particularly heavy duty use

black	50	33	1	16 0282
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Design	Width mm	Length m	PU	Article no.
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### Self-amalgamating insulating tapes

#### Self-amalgamating high voltage insulating tape up to 35 kV

**Description:**

Cold amalgamating insulating tape made from polyisobutylene, with an easy to pull off plastic separating layer.

**Special features:**

Amalgamated after processing under slight tension to form a solid airtight and waterproof rubber layer, extremely expandable (elongation at break 600%) and able to be adapted to any form, permanently elastic, compatible with all materials for insulation and sheathing, wide application temperature range, very good electrical properties (in particular dielectric strength), resistant to UV, ozone, weather and ageing, not silicone-free.

**Typical areas of use:**

Ideal for sealing, splicing, insulating and the repair of current-carrying cables, mainly for the voltage insulation of power cables up to 17 kV/mm, very good repair properties even on heavy rubber hose lines, for the watertight sealing of electrical joints and connections (e.g. TV satellite dishes), for fastening cables outdoors, corrosion protection of metal parts, also perfectly suitable for emergency repairs on radiators, water- and engine hoses, vacuum cleaner hoses, drainage basins and pipes.



black, 0.5 mm thick	19	10	1	16 2840
	25	10	1	16 2841

#### Self-amalgamating insulating tape for extreme temperatures

**Description:**

Cold amalgamating insulating tape made of polyethylene, with easy to pull off plastic separating layer.

**Special features:**

Amalgamated after processing under slight tension to form a solid airtight and waterproof mass, extremely expandable (elongation at break 600%) and can be adapted to any form, permanently elastic, compatible with all materials for insulating and sheathing, extraordinary wide application temperature range, very good electrical properties (in particular dielectric strength), resistant to ozone, weather and ageing, outstanding resistance to alkaline solutions, hydraulic fluids and other chemical substances.

**Typical areas of use:**

Purposes the same as high voltage insulation tape CIMCO article no. 16 2840 – 16 2841, however additional excellent resistance to very high and very low temperatures (-35 °C to +95 °C, short-term up to 130 °C) as well as to many chemicals, for demanding insulation tasks up to 34 kV/mm and for the retention of the chemical resistance at increased temperatures.



black	19	10	1	16 2830
	25	10	1	16 2831

Design	Width mm	Length m	PU	Article no.
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## Woven insulation tapes

### Universal quality woven tape

#### Description:

Extruded woven tape, coated on the one side with waterproof polyethylene coating, on the other side with an aggressive, non-corrosive, pressure-sensitive adhesive.

#### Special features:

Matt, water- and weatherproof equipment, very easy to write on with pencil, ball-point pen, permanent marker, felt pen and etching pen, largely resistant to many chemicals, insensitive to softeners and oil vapours, very good electrical properties, can be easily torn off crossways and particularly neatly by hand.

#### Typical areas of use:

Universal gaffer tape for trade and industry: coloured identification and marking of cables, electrical components, pipes and ducts, labelling of switch cabinets, distributors, patch bays, for bundling, fixing, securing and reinforcing of cables, pipes and tubes, for masking during decorating and painting work.

black	15	50	1	16 2000
white			1	16 2001
grey			1	16 2002
blue			1	16 2003
yellow			1	16 2004
red			1	16 2005
green			1	16 2006
black	19	50	1	16 2010
white			1	16 2011
grey			1	16 2012
blue			1	16 2013
yellow			1	16 2014
red			1	16 2015
green			1	16 2016
black	25	50	1	16 2020
white			1	16 2021
grey			1	16 2022
blue			1	16 2023
yellow			1	16 2024
red			1	16 2025
green			1	16 2026
black	30	50	1	16 2030
white			1	16 2031
grey			1	16 2032
blue			1	16 2033
yellow			1	16 2034
red			1	16 2035
green			1	16 2036
black	38	50	1	16 2040
white			1	16 2041
grey			1	16 2042
blue			1	16 2043
yellow			1	16 2044
red			1	16 2045
green			1	16 2046
black	50	50	1	16 2050
white			1	16 2051
grey			1	16 2052
blue			1	16 2053
yellow			1	16 2054
red			1	16 2055
green			1	16 2056



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Design	Width mm	Length m	PU	Article no.
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### Special adhesive tapes

#### Aluminium foil adhesive tape

**Description:**

Aluminium foil, 40 µm (0.04 mm) thick, coated on one side with pressure sensitive acrylic adhesive. The tape is laminated with strong, polyethylene-coated separating paper.

**Special features:**

Heat deflecting, light reflecting, moisture resistant, very low water permeability (water vapour barrier).

**Typical areas of use:**

Heat protection and shielding of electromagnetic fields on electronic equipment, sealing of cooling insulation, bonding of intersections of aluminium foil-laminated insulation mats and insulating panels made from rock wool or fibre glass, sealing of metal or plastic ducts, applications with more stringent requirements of preventive fire protection, e.g. flame protection wrap for the installation of cables.



silver	50	50	1	16 2900
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#### Filament adhesive tape with mesh thread reinforcement

**Description:**

Carrier layer made from polypropylene, reinforced with meshed nylon threads running length and crossways for the full length of the tape, coated on one side with rubber adhesive

**Special features:**

Excellent resistance to abrasion, extremely tear resistant (longitudinal and lateral strength), no fraying at the sides, strong immediate adhesion.

**Typical areas of use:**

Bundling and pulling through cables and wiring harnesses, high-strength package tape for sealing and reinforcing even heavy packages, e.g. cardboard boxes and cartons, strapping heavy packages and other goods, banding plastic and metal tubes, metal rods, etc.



transparent	50	50	1	16 2950
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#### Double-sided adhesive foam tape

**Description:**

Closed-cell polyethylene foam, coated on both sides with acrylic-based adhesive, comes with separating paper.

**Special features:**

Excellent resistance to pressure, very pliable, very good resistance to UV, ageing, moisture, oils, solvents and softeners, strong immediate adhesion.

**Typical areas of use:**

Used for diverse installations of heavy loads, even vertical, indoors and outdoors, instead of riveting, screwing and liquid adhesives, also particularly good for bonding onto non-elastic materials with irregular, rough surfaces (wood, masonry, concrete, coats of paint): surface-mounting of cable routing ducts, cable clamps, switchboxes, attachment of badges, displays and signs, both made from and onto plastic, shock-proof and vibration-damped soft mounting of assemblies (e.g. circuit boards, switch panels, fittings), effective reduction of the transmission of noise (rattle protection), form-fit seals against dust, water, vapour, wind and light, also for sealing air outlets to save energy.



white	15	33	1	16 2861
	19	33	1	16 2862
	25	33	1	16 2863

#### Paper masking tape

Low crepe paper masking tape, 0.16 mm. thick. Medium adhesion thanks to rubber-based adhesive.

Suitable for indoor use.

**Special features:**

High tear resistance of approx. 114 N / 25 mm and medium adhesion of 6.2 N / 25 mm. Temperature resistant up to max. 85 °C for 1 hour. The crepe allows it to adapt very well to different substrates and radii.

**Typical areas of use:**

Masking of areas to be blocked when painting and varnishing.



beige	19	50	1	16 0302
	25	50	1	16 0304
	38	50	1	16 0306
	50	50	1	16 0308



Design	PU		Article no.																																														
Type of adhesive tape from CIMCO article no.	Tape thickness (mm)	Tear resistance (N/m)	Elongation at rupture / Breaking load (N/10 mm)	(ohm/25 mm width)	Including resistance	Adhesive strength on steel (N/10 mm)	Adhesive strength w/ regard to spec. dimensions (N/10 mm)	Dielectric strength	Temperature resistance (°C)	min	max	Flame resistance (self-extinguishing)	Water resistance (flame-retardant)	Salt water resistant	UV-resistant	Corrosion resistant	Ozone resistant	Resistance to chemicals	Abrasion-resistant	Aggl. resistance	Shape adaptable	Easy to break-off	Easy to unroll	Residue-free removal	Inscribable																								
PVC insulation adhesive tapes																																																	
16 0000 - 16 0170	0.13	26	180	1 x 10 <sup>11</sup>	2.4	2.1	8	-5	+70	0	+40	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes										
16 0201 - 16 0204	0.18	40	250	5 x 10 <sup>13</sup>	2.3	1.7	10	-5	+70	0	+40	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes								
16 0250 - 16 0252	0.15	25	150	1 x 10 <sup>11</sup>	3.0	2.6	9.5	-5	+105	0	+40	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes							
16 0260 - 16 0262	0.19	30	200	5 x 10 <sup>13</sup>	2.2	2.0	10	-20	+105	-10	+40	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes							
16 0270	0.23	55	300	5 x 10 <sup>13</sup>	2.5	2.0	10	-5	+70	+10	+40	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes						
16 0280	0.25	44	220		3.3	3.0	10	-5	+80	+5	+40	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes							
16 0282	0.44	90	200		3.0	2.6	12	+5	+80	+5	+40	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes							
Self-adhering tapes																																																	
16 2800	1				-	-	16/mm	-30	+80	0	+40			Yes	Yes	Yes	Yes	Yes	Yes	Yes	part.			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes						
16 2810	2				-	-	16/mm	-30	+80	0	+40			Yes	Yes	Yes	Yes	Yes	Yes	Yes	part.			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes					
16 2820	3			2 x 10 <sup>10</sup>			16/mm	-30	+80	0	+40			Yes	Yes	Yes	Yes	Yes	Yes	Yes	part.			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes					
16 2840 - 16 2841	0.5	12	600	1 x 10 <sup>13</sup>	-	-	40/mm	-95	+95	0	+40			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes					
16 2830 - 16 2831	0.5	20	600	1 x 10 <sup>15</sup>	-	-	35/mm	-40	+90	0	+10			Yes	Yes	Yes	Yes	Yes	Yes	Yes	part.			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes					
Fabric adhesive tapes																																																	
16 2000 - 16 2156	0.33	85	8		4.0	2.2	3	-50	+80	+10	+45			Yes																																			
16 2500 - 16 2502	0.18	280	5	1 x 10 <sup>12</sup>	4.0		2.5	0	+130	+10	+10			Yes																																			
16 2510 - 16 2512	0.18	280	5	1 x 10 <sup>12</sup>	3.5		2.5	0	+155	+10	+10			Yes																																			
16 2520 - 16 2522	0.18	280	5	1 x 10 <sup>15</sup>	3.0		2.5	0	+180	+10	+40	Yes																																					
Special adhesive tapes																																																	
16 2900	0.08	22	5		3.8	3.8		-20	+110	0	+40	Yes		Yes																																			
16 2950	0.13	280	10		8.0			0	+80	+10	+25			Yes																																			
16 2860 - 16 2863	0.85	11	300		10.0	10.0		-10	+100	+10	+40			Yes																																			
16 0302 - 16 0308	0.16	45	10		2.5			+5	+85	+5	+25			part.																																			



Product video  
The mechanical coupling sleeve

### Mechanical coupling sleeve

Quick and simple assembly makes mechanical coupling sleeves optimally suited as repair and connection sleeves or branch couplings.

### Mechanical cable joint box TDM

for fast and secure connection of communication-, control- and supply lines.

Waterproof (IP 68), UV-resistant, resistant to alkaline earths and rot, joint box body made from impact-resistant plastic, with screw lid, with lug to secure the seal against unauthorised access. Suitable for connecting up to four cables. The cable joint box meets the ÖVE IM22 standard.

Scope of delivery: one cable joint box with sleeve insert, five cable ties, can of lubricant, cutter, assembly instructions.

Type	Conductor cross section in mm <sup>2</sup>	Application clearance area ø mm		
TDM 1	3 x 1.5 to 5 x 2.5	6 - 14	1	18 4760
TDM 2	3 x 1.5 to 5 x 16	6 - 25	1	18 4762

#### Accessories

Spanner set TDM 2			1	18 4764
Replacement sleeve for TDM 1			1	18 4766
Replacement sleeve for TDM 2			1	18 4768

### Mechanical connecting sleeves (MVM) and branch couplings (MAM)

suitable for connecting from 2 to 4 cables (with double sleeves 4 to 12 cables).

Waterproof (IP 68), high mechanical stability, resistant to acid earth, separate strain relief for each entry.

Type	Application area ø mm		
MVM 23/200	8 - 23 mm (8 - 13 mm)*	1	18 4160
MVM 42/320	8 - 42 mm (8 - 16 mm/8-23 mm)*	1	18 4162
MAM 23/200	8 - 23 mm (8 - 13 mm)*	1	18 4166
MAM 42/320	8 - 42 mm (8 - 16 mm/8-23 mm)*	1	18 4168

\* If double sleeves are used, the values in brackets apply.



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Design	PU	Article no.
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## Cast resin joints

### Cast resin joint

non-flammable according to VDE 0304 Part 3

The joint body consists of a transparent, thermoplastic material and as a result is extremely resistant to chemical and mechanical influences. The polyurethane foam seals are highly reliable, preventing the escape of resin before it has cured.

### The casting resin

according to VDE 0291 Part 2

Polyurethane casting resin is an unfilled, low viscosity, elastic curing two-component system.

Technical data:

- Can be stored for 24 months
- Store in dry rooms between +5 °C and +50 °C
- Curing within 24 hours
- Temperature resistant between -25 °C and +120 °C in the cured state
- Resin and hardener can be disposed of in domestic waste

### 1 kV cast resin joint sets including joint casing and pack of casting resin in cans

consisting of joint casing, including polyurethane casting resin and hardener, one pair of disposable gloves, one spatula, two foam seals and abrasive paper.



Type	Conductor cross section in mm <sup>2</sup>		Fill quantities		
	Clearance	Branch	Resin/Hardener		
AVM 40-175 D	3 x 1.5 to 5 x 6	3 x 1.5 to 5 x 4	0.225 kg	1	18 4660
AVM 55-220 D	5 x 6 to 10	5 x 2.5 to 10	0.615 kg	1	18 4662
AVM 75-300 D	4 x 16 to 25	5 x 4 to 16	1.350 kg	1	18 4664
AVM 95-400 D	4 x 35 to 70	4 x 16 to 25	2.500 kg	1	18 4666
AVM 110-500 D	4 x 95 to 150	4 x 25 to 50	4.700 kg	1	18 4668

### 1 kV two-component casting resin set as can pack

including stirrer, gloves and instructions



Type	Fill quantities Resin	Fill quantities Hardener			
PUR 160-200 D	0.225 kg	172 cm <sup>3</sup>	1	18 4680	
PUR 160-400 D	0.400 kg	345 cm <sup>3</sup>	1	18 4682	
PUR 160-615 D	0.615 kg	528 cm <sup>3</sup>	1	18 4770	

## Shrink-on coupling sleeves

### Shrink-on coupling sleeves for compression connectors or screw connectors 1kV

thick-walled electrical shrink-on sleeves (heat shrinking) with outstanding mechanical strength, chemical resistance and electrical properties. Lined with hot melt adhesive, thus giving excellent protection against water and damp.

For the long-term connection of plastic cables laid in the ground and also on cable trays or in the open air.

Resistant to environmental influences, e.g. UV rays, ozone, oxygen, acids, alkaline earths.



Type	Conductor cross section in mm <sup>2</sup>	Cable ø mm	Hose length mm			
1.5 - 6/3	3 x 1.5 to 6	11 - 18	200 x 60	1	18 4060	
1.5 - 6/5	5 x 1.5 to 6	13 - 21	200 x 60	1	18 4062	
6 - 16/5	5 x 6 to 16	18 - 25	450 x 100	1	18 4064	
6 - 25	4 x 6 to 25	16 - 32	450 x 100	1	18 4066	
16 - 50	4 x 16 to 50	21 - 36	550 x 150	1	18 4068	
50 - 150	4 x 50 to 150	29 - 54	650 x 200	1	18 4070	

Design		PU	Article no.		
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## Connectors

Screw connectors or branch and connector terminals for 1 kV cast resin joints, shrink-on sleeve couplings and mechanical box and branch joints (MVM and MAM).

### Screw connectors

Type	Conductor cross-section in mm <sup>2</sup>				
brass	1.5 – 16	only Cu	1	18 0960	
tin-coated	6 – 25	Cu and Al	1	18 0962	



### Branch and connector terminals

Type	Conductor cross-section in mm <sup>2</sup>				
brass	1.5 – 10	Cu and Al	1	18 0964	
brass	2.5 – 16	Cu and Al	1	18 0966	
brass	6 – 25	Cu and Al	1	18 0968	



## ALPA-GEL

The simple solution for protecting cable connections from dust and damp (IP 68). After the gel mass has cured, it can be removed at any time without a trace. The solvent-free two-component silicone gel, mixing ratio 1:1 and with a dielectric strength of 20 KV/mm, is supplied in 2 different pack sizes with mixing jug, mixing spatula, and disposable gloves.



250 ml			1	15 1010	
1,000 ml			1	15 1012	

Large pack without mixing jug, mixing spatula and disposable gloves

10,000 ml			1	15 1014	
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Product video  
APLA-GEL - the silicone gel  
made by CIMCO

Design	PU	Article no.
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### Heat-shrink tubes

Made from homogenous polyolefin, thermally stabilised, cross-linked by irradiation, with outstanding mechanical stability, chemical resistance and electrical properties:

**Significant mechanical performance properties (typical measured values):**

Tensile strength 14.8 MPa / min (N/mm<sup>2</sup>), tensile strength after heat ageing 14.5 MPa / min (N/mm<sup>2</sup>), elongation at break 460%, elongation at break after heat ageing (168 h at +158 °C) 480 %, thermal shock (4 h at +250°C) 8% with complete shrinkage, cold shock (1 h at -30 °C) no breaking. Long-term operational temperature - 55 °C to + 125 °C. Very good printability with heat seal-, inkjet- and offset printing.

**Significant chemical performance properties:**

Excellent UV light, ozone and salt water resistance, good resistance to commonly used chemicals (cleaners and solvents, weak acids and bases, fuels, oils), resistance to fungus and rot (Rating 1 according to ISO 846 Method A). The heat shrink tubes do not contain any asbestos, azoic compounds, formaldehydes or silicone. The heat shrink tubes are self-extinguishing according to UL 224 VW-1. No dioxin is released during incineration. The products are non-corrosive (compatible with copper) and compatible with all commonly used materials for cable insulation, such as plastic, rubber, lead, steel, aluminium, silicone, etc.

**Significant electrical performance properties:**

Dielectric strength 17 kV/mm (green-yellow design 15 kV/mm), specific electrical resistance 1 x 10<sup>15</sup> Ω/cm (yellow-green design 1 x 10<sup>14</sup> Ω/cm),

Further detailed mechanical, chemical, and electrical product data, as well as an overview of the approvals and certifications from various test institutes, can be obtained on request in the form of our technical data sheets.

Detailed dimensions of the individual types and sizes of the CIMCO heat shrink tube range can be found on page 360.

**Working instructions:**

- If necessary, cut the heat shrink tube to the desired length, taking care to ensure a smooth cut edge.
- Only undertake shrinking on clean surfaces, as free of dust and grease as possible.
- Begin the shrinking process, starting at one end of the tube.
- Shrinkage temperature from +70 °C to +115 °C.
- Ideally, work with a special hot-air blower, heating furnace or infrared lamp.

### Thin-walled, black heat shrink tube shrinkage ratio 2 : 1

Halogen-free, thin-walled, flexible standard electrical heat shrink tube with shrinkage ratio 2 : 1 (shrinking capability down to half the specified internal diameter before heat shrinking). Highly suitable for electrical insulation, as bend- and abrasion protection, as damp protection for seals, for bundling, for strain relief and for marking in electronics and electrical engineering, telecommunications, cable assembly, in the automotive industry and many other areas. Supplied on dispenser rolls, stable, environmentally friendly cardboard rolls, diameter approx. 300 mm – 550 mm (depending on size of heat shrink tube), core diameter approx. 30 mm, for industrial use in particular.

	Nominal-ø		Shrink range	Length		
	BEFORE shrinking					
	inch	mm	mm	m		
	3/64	1.1	0.5 – 1.1	200	1 roll	18 4002
	1/16	1.5	0.65 - 1.5	200	1 roll	18 4004
	3/32	2.5	1.0 - 2.5	200	1 roll	18 4006
	1/8	3.5	1.5 - 3.5	200	1 roll	18 4008
	3/16	5.0	2.3 - 5.0	100	1 roll	18 4010
	1/4	6.5	3.0 - 6.5	100	1 roll	18 4012
	3/8	9.5	4.5 - 9.5	100	1 roll	18 4014
	1/2	12.5	6.0 - 12.5	100	1 roll	18 4016
	3/4	19.0	9.0 - 19.0	100	1 roll	18 4018
	1	26.0	12.5 - 26.0	50	1 roll	18 4020
	1 1/2	41.5	20.0 - 41.5	50	1 roll	18 4022
	2	50.0	25.0 - 50.0	25	1 roll	18 4024
	3	80.0	41.0 - 80.0	25	1 roll	18 4026
	4	100.0	51.0 - 100.0	25	1 roll	18 4028



Design	PU	Article no.
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In handy dispensing boxes for trade and industry use, practical transport and storage boxes made from coated cardboard, for convenient and dust-free storage even after the package has been opened and easy and orderly unrolling and cutting off, ideal for workshops and mobile use.

Nominal-ø BEFORE shrinking		Shrink range mm	Length m	PU	Article no.
inch	mm				
1/16	1.5	0.65 to 1.5	20	1	18 1318
3/32	2.5	1.0 to 2.5	15	1	18 1319
1/8	3.5	1.5 to 3.5	15	1	18 1327
3/16	5.0	2.3 to 5.0	12	1	18 1303
1/4	6.5	3.0 to 6.5	12	1	18 1305
3/8	9.5	4.5 to 9.5	8	1	18 1307
1/2	12.5	6.0 to 12.5	5	1	18 1311
3/4	19.0	9.0 to 19.0	5	1	18 1313
1	26.0	12.5 to 26.0	5	1	18 1317



In small package, suitable for trade use, containing 1 piece heat shrink tube 1 metre in length.

Nominal-ø BEFORE shrinking		Shrink range mm	Length m	PU	Article no.
inch	mm				
3/16	5.0	2.3 to 5.0	1	1	18 1330
1/4	6.5	3.0 to 6.5	1	1	18 1331
3/8	9.5	4.5 to 9.5	1	1	18 1332
1/2	12.5	6.0 to 12.5	1	1	18 1333
3/4	19.0	9.0 to 19.0	1	1	18 1334
1	26.0	12.5 to 26.0	1	1	18 1335

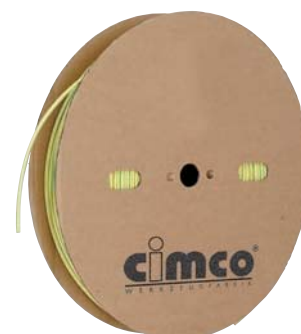


### Thin-walled green-yellow heat shrink tube, shrinkage ratio 2 : 1

Two-coloured, lengthwise striped, thin-walled, flexible electrical heat shrink tube with shrinkage ratio 2 : 1 (shrinking capacity down to half the specified internal diameter before heat shrinking). Highly suitable for electrical insulation, as bend- and abrasion protection, as damp protection for seals, for bundling, for strain relief and for marking in electronics and electrical engineering, telecommunications, cable assembly, in the automotive industry and many other areas, ideal marking grounding conductors.

Supplied on dispenser rolls, stable, environmentally friendly cardboard rolls, diameter approx. 300 mm - 550 mm (depending on size of heat shrink tube), core diameter approx. 30 mm, for industrial use in particular.

Nominal-ø BEFORE shrinking		Shrink range mm	Length m	PU	Article no.
inch	mm				
3/32	2.5	1.0 to 2.5	200	1 roll	18 4106
1/8	3.5	1.5 to 3.5	200	1 roll	18 4108
3/16	5.0	2.3 to 5.0	100	1 roll	18 4110
1/4	6.5	3.0 to 6.5	100	1 roll	18 4112
3/8	9.5	4.5 to 9.5	100	1 roll	18 4114
1/2	12.5	6.0 to 12.5	100	1 roll	18 4116
3/4	19.0	9.0 to 19.0	100	1 roll	18 4118
1	26.0	12.5 to 26.0	50	1 roll	18 4120
1 1/2	41.5	20.0 to 41.5	50	1 roll	18 4122
2	51.0	25.0 to 51.0	25	1 roll	18 4124
3	80.0	40.0 to 80.0	25	1 roll	18 4126
4	100.0	50.0 to 100.0	25	1 roll	18 4128

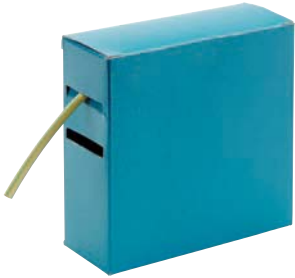


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In handy dispensing boxes for trade and industry use, practical transport and storage boxes made from coated cardboard, for convenient and dust-free storage even after the package has been opened and easy and orderly unrolling and cutting off, ideal for workshops and mobile use.



Nominal-ø BEFORE shrinking		Shrink range mm	Length m		
inch	mm				
3/32	2.5	1.0 to 2.5	15	1	18 4136
1/8	3.5	1.5 to 3.5	15	1	18 4138
3/16	5.0	2.3 to 5.0	12	1	18 4140
1/4	6.5	3.0 to 6.5	12	1	18 4142
3/8	9.5	4.5 to 9.5	8	1	18 4144
1/2	12.5	6.0 to 12.5	8	1	18 4146
3/4	19.0	9.0 to 19.0	5	1	18 4148
1	26.0	12.5 to 26.0	5	1	18 4150

### Medium-walled black heat shrink tube,

#### Shrinkage ratio 3 : 1

Halogen-free, medium-walled, yet very flexible standard electrical heat shrink tube with shrinkage ratio of 3 : 1 (shrinking capacity down to a third of the specified internal diameter before heat shrinking). Highly suitable for electrical insulation, as bend and abrasion protection, as damp protection for seals, for bundling, for strain relief and for marking in electronics and electrical engineering, telecommunications, cable assembly, in the automotive industry and many other areas. Thanks to the shrinkage ratio of 3 : 1, particularly suitable for compensating large differences in diameter of the object to be shrink-wrapped, e.g. markedly contoured parts such as coupling sleeves, plugs and switches, as well as for covering a wide range of applications with just a few heat shrink tube sizes, without adhesive lining.

Supplied on dispenser rolls, stable, environmentally friendly cardboard rolls, diameter approx. 300 mm – 550 mm (depending on size of heat shrink tube), core diameter approx. 30 mm, for industrial use in particular.



Nominal-ø BEFORE shrinking		Shrink range mm	Length m		
inch	mm				
1/16	1.5	0.5 to 1.5	200	1 roll	18 4204
1/8	3.0	1.0 to 3.0	200	1 roll	18 4206
1/4	6.0	2.0 to 6.0	100	1 roll	18 4208
3/8	9.0	3.0 to 9.0	50	1 roll	18 4210
1/2	12.0	4.0 to 12.0	50	1 roll	18 4212
3/4	18.0	6.0 to 18.0	50	1 roll	18 4214
1	24.0	8.0 to 24.0	25	1 roll	18 4216

Heat shrink tube in 1 metre sections

1 1/2	39.0	13 to 39	1	1	18 4218
2	50.0	16 to 50	1	1	18 4220
3	80.0	26 to 80	1	1	18 4222
4	100.0	33 to 100	1	1	18 4224

In handy dispensing boxes for trade and industry use, practical transport and storage boxes made from coated cardboard, for convenient and dust-free storage even after the package has been opened and easy and orderly unrolling and cutting off, ideal for workshops and mobile use.



Nominal-ø BEFORE shrinking		Shrink range mm	Length m		
inch	mm				
1/16	1.5	0.5 to 1.5	17	1	18 4234
1/8	3.0	1.0 to 3.0	15	1	18 4236
1/4	6.0	2.0 to 6.0	5	1	18 4238
3/8	9.0	3.0 to 9.0	8	1	18 4240
1/2	12.0	4.0 to 12.0	6	1	18 4242
3/4	18.0	6.0 to 18.0	4	1	18 4244
1	24.0	8.0 to 24.0	3	1	18 4246



Design		PU	Article no.		
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## Medium-walled black heat shrink tube,

### Shrinking ratio 3 : 1, with internal adhesive

Halogen-free, medium-walled, yet very flexible standard electrical heat shrink tube with shrinkage ratio 3 : 1 (shrinking capacity down to a third of the specified internal diameter before heat shrinking). Thanks to outstanding mechanical stability and chemical resistance, this tube is highly suitable for electrical insulation, as bend and abrasion protection, as damp protection for seals, for bundling, for strain relief and for marking in electronics and electrical engineering, telecommunications, cable assembly, in the automotive industry and many other areas. Thanks to the shrinkage ratio of 3 : 1, particularly suitable for compensating for large differences in diameter of the object to be shrink-wrapped, e.g. markedly contoured parts such as coupling sleeves, plugs, and switches, as well as for covering a wide range of applications with just a few heat shrink tube sizes. Excellent sealing properties thanks to the inner lining of special hot melt adhesive, providing outstanding protection against water and moisture penetration. The melting temperature of the hot melt adhesive is approx. +70 °C to +80 °C.

Supplied on dispenser rolls, stable, environmentally friendly cardboard rolls, diameter approx. 300 mm - 550 mm (depending on size of heat shrink tube), core diameter approx. 30 mm, for industrial use in particular.

Nominal-ø BEFORE shrinking		Shrink range mm	Length m			
inch	mm					
1/8	3.2	1.0 to 3.2	200	1 roll	18 4306	
1/4	6.4	2.2 to 6.4	100	1 roll	18 4308	

Heat shrink tube in 1.22 metre sections

3/8	9.5	3.2 to 9.5	1.22	1	18 4310	
1/2	12.7	4.2 to 12.7	1.22	1	18 4312	
3/4	19.1	6.3 to 19.1	1.22	1	18 4314	
1	25.4	8.5 to 25.4	1.22	1	18 4316	
1 1/2	39.0	13.5 to 39.0	1.22	1	18 4318	
2	50.0	17.0 to 50.0	1.22	1	18 4320	



### Hot air blower set

robust and reliable device "Made in Germany" for all standard applications with hot air up to max. 500 °C, e.g. thawing water pipes, heat shrinking, drying and removing paint, plastic forming, soft-soldering, etc. With 2 heat settings: Setting 1 up to 300 °C and 240 litres/min. air volume, Setting 2 up to 500 °C and 500 litres/min. air volume, wattage 1600 W, 230 - 240 Volt, 50 Hz, with strong rubber connecting cable, double overheating protection, suitable for manual and stand operation. Weight 700 g

Supply includes 2 push-on nozzles: wide angle nozzle (for all-round even heat for soft-soldering thin copper pipes, for heat shrinking heat shrink tubes and for forming PVC tubes), soldering reflector nozzle (for simultaneous soldering and shrinking of soldering sleeves).

			240 x 200 mm	1	18 1351	
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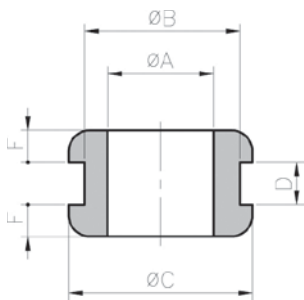
### Feed-through- and anti-kink sleeves made from soft PVC

Softened PVC is one of the first plastics to find a use in technical applications. Thanks to its thermoplastic properties, soft PVC can be processed both by injection moulding and extrusion. Depending on the formula of the blend, its consistency can be from semi-hard to rubber-like.

Soft PVC is distinguished by the following features:

- Heat resistant up to +90 °C briefly, up to +70/75 °C permanently
- Cold resistant up to -25 to -30 °C
- Resistant to water, ozone, weathering, diluted acids, alkalis and salts
- Very good resistance to ageing
- Medium resistance to aromatics, ketones, mineral oil, petrol, esters (swelling)
- Very good electrical insulation properties
- Large colour spectrum, colourfast
- Available in fully transparent or tinted transparent

These shaped parts feature perfect surfaces and exact dimensions.



### Feed-through grommets with through hole

Made of soft black PVC 9542

Can be used at temperatures between -30 °C and +70 °C

Hardness Shore A: 55 +/- 5

Tensile strength: 8 MPa

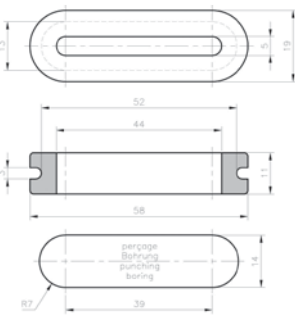
Elongation at break: > 250%

Dielectric strength: > 20 kV/mm

Characteristics: HB UL94



ø A	ø B	ø C	D	F	PG-dim	Metric		
mm	mm	mm	mm	mm				
4	8	11	1.5	2.0			100	18 4800
5	8	11	1.5	2.0			100	18 4802
6	9	12	1.0	2.0			100	18 4804
6	9	12	4.0	2.0			100	18 4806
6	9	12	2.0	2.0			100	18 4808
6	9	12	1.5	2.0			100	18 4810
7	10	14	1.5	2.5			100	18 4812
8	10	14	1.5	2.5			100	18 4814
8	12	16	1.5	2.5	7	12	100	18 4816
9	12	16	1.5	2.5	7	12	100	18 4818
10	12	16	2.0	2.5	7	12	100	18 4820
10	18	22	1.0	2.5	11		100	18 4822
10	18	22	4.0	2.5	11		100	18 4824
12	18	22	1.0	2.5	11		100	18 4826
14	22	27	1.0	3.0	16		100	18 4828
16	22	27	1.0	3.0	16		100	18 4830
18	22	27	1.0	3.0	16		100	18 4832



### Grommet with long hole

Made of grey, soft PVC

Application temperatures: -30 °C to +70 °C

Hardness Shore A: 55 +/- 5

Tensile strength: 8 MPa

Elongation at break: > 250%

Dielectric strength: > 20 kV/mm

Characteristics: HB UL94

Application for protection of flat cables



L mm	W mm	H mm		
52.0	13.0	11.0	100	18 4834

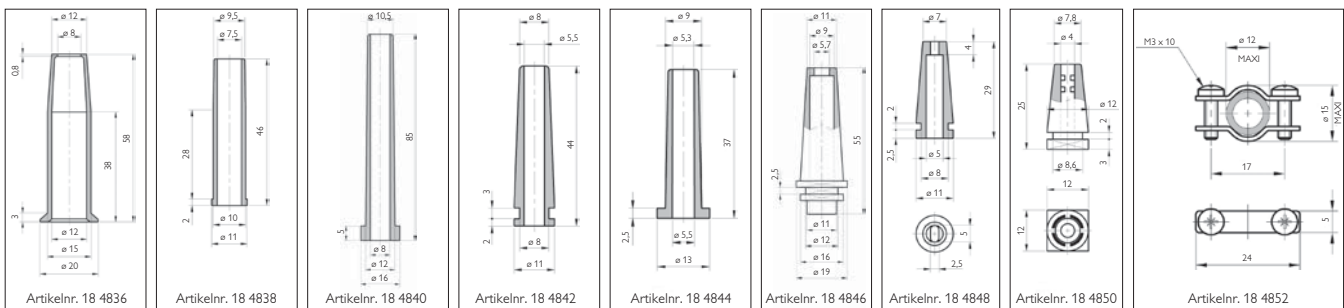
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### Anti-kink sleeves

Made of black, soft PVC  
 Application temperatures: -30 °C to +70°C  
 Hardness Shore A: 55 +/- 5  
 Tensile strength: 8 MPa  
 Elongation at break: > 250%  
 Dielectric strength: > 20 kV/mm  
 Characteristics: HB UL94  
 Application for protection of flat cables

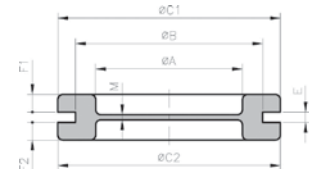
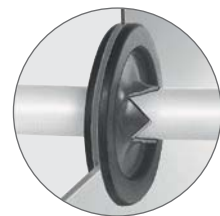
PG-dimen-  
sion

		100	18 4836
		100	18 4838
	7	100	18 4840
		100	18 4842
		100	18 4844
	7	50	18 4846
		100	18 4848
		100	18 4850
		100	18 4852



### Membrane feed-through grommets

Made of black, soft PVC  
 Application temperatures: -30 °C to +70°C  
 Hardness Shore A: 55 +/- 5  
 Tensile strength: 8 MPa  
 Elongation at break: > 250%  
 Dielectric strength: > 20 kV/mm  
 Characteristics: HB UL94  
 Application: to seal cable outlets; they allow cables and wires to be fed through the membrane, ensuring a seal against dust.



ø A	ø B	ø C1	ø C2	E	F1	F2	M	PG-dim		
mm	mm	mm	mm	mm	mm	mm	mm			
9.0	15.0	20.0	18.0	2.0	2.5	2.5	1.0	9	100	18 4854
11.0	18.0	22.5	21.5	2.0	2.5	2.5	1.0	11	100	18 4856
13.5	20.0	24.0	24.0	2.0	2.5	2.5	1.0	13.5	100	18 4858
16.0	22.0	27.5	26.0	2.0	2.7	2.7	1.0	16	100	18 4860
21.0	28.0	34.5	34.5	2.0	3.0	3.0	1.0	21	100	18 4862
21.0	28.0	34.5	34.5	1.0	4.0	3.0	1.2	21	100	18 4864
29.0	36.5	43.0	43.0	2.2	3.7	3.7	1.5	29	100	18 4866
35.0	46.0	52.5	52.5	2.5	3.8	3.8	1.3	36	100	18 4868
46.5	59.0	66.2	66.2	2.5	4.0	4.0	1.6	48	50	18 4870

ø A	ø B	ø C1	ø C2	E	F1	F2	M	Metr.		
mm	mm	mm	mm	mm	mm	mm	mm	dim		
9.0	16.0	20.0	20.0	2.0	2.5	2.5	1.0	M16	100	18 4874
13.5	20.0	25.0	25.0	2.0	2.5	2.5	1.0	M20	100	18 4876
18.5	25.0	30.5	30.5	2.0	2.5	2.5	1.0	M25	100	18 4878
25.0	32.0	39.0	39.0	2.0	3.0	3.0	1.0	M32	100	18 4880
31.0	40.0	47.0	47.0	2.5	3.8	3.8	1.0	M40	50	18 4882
39.0	50.0	57.0	57.0	2.5	3.8	3.8	1.0	M50	50	18 4884
53.0	63.5	75.0	75.0	2.5	3.8	3.8	1.0	M63	50	18 4886




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**Technical data heat-shrink tubes**

Nominal size		Inner diameter			Wall thickness				Application range
		BEFORE shrinking	AFTER shrinking		BEFORE shrinking	AFTER shrinking			
		Tolerance			Tolerance		Tolerance		∅
Inch	mm	mm	+/- mm	mm	mm	+/- mm	mm	+/- mm	mm
<b>Heat shrink tube, thin-walled, black, shrinkage rate 2 : 1</b>									
3/64	1.1	1.0	0.2	0.50	0.13	0.05	0.22	0.05	0.5 to 1.1
1/16	1.5	1.5	0.3	0.65	0.18	0.05	0.25	0.05	0.65 to 1.5
3/32	2.5	2.5	0.3	1.00	0.18	0.05	0.35	0.05	1.0 to 2.5
1/8	3.5	3.5	0.4	1.50	0.20	0.05	0.40	0.05	1.5 to 3.5
3/16	5.0	5.0	0.4	2.25	0.23	0.08	0.50	0.08	2.3 to 5.0
1/4	6.5	6.5	0.4	3.00	0.28	0.08	0.55	0.08	3.0 to 6.5
3/8	9.5	9.5	0.5	4.50	0.30	0.08	0.60	0.08	4.5 to 9.5
1/2	12.5	12.5	0.5	6.00	0.30	0.08	0.60	0.08	6.0 to 12.5
3/4	19.0	19.0	0.7	9.00	0.40	0.15	0.80	0.15	9.0 to 19.0
1	26.0	25.6	0.7	12.5	0.45	0.15	0.90	0.15	12.5 to 26.0
1 1/2	41.5	41.5	0.7	20.0	0.50	0.15	1.0	0.15	20.0 to 41.5
2	50.0	51.5	0.7	25.0	0.50	0.15	1.0	0.15	25.0 to 50.0
3	80.0	80.0	1.0	40.0	0.55	0.20	1.8	0.15	41.0 to 80.0
4	100.0	100.0	1.0	50.0	0.70	0.20	2.2	0.15	51.0 to 100.0
<b>Heat-shrink tube, thin-walled, green-yellow, shrink rate 2 : 1</b>									
3/32	2.5	2.5	0.2	1.00	0.20	0.05	0.40	0.05	1.0 to 2.5
1/8	3.5	3.5	0.3	1.50	0.25	0.05	0.40	0.05	1.5 to 3.5
3/16	5.0	4.5	0.3	2.00	0.25	0.05	0.44	0.05	2.3 to 5.0
1/4	6.5	6.5	0.3	3.00	0.25	0.05	0.55	0.08	3.0 to 6.5
3/8	9.5	10.7	0.4	5.00	0.30	0.08	0.60	0.08	4.5 to 9.5
1/2	12.5	12.5	0.4	6.00	0.30	0.08	0.65	0.08	6.0 to 12.5
3/4	19.0	21.4	0.5	10.0	0.40	0.15	0.82	0.15	9.0 to 19.0
1	26.0	26.5	0.8	12.5	0.40	0.15	1.0	0.15	12.5 to 26.0
1 1/2	41.5	41.5	1.0	20.0	0.50	0.15	1.2	0.15	20.0 to 41.5
2	51.0	51.5	1.0	25.0	0.50	0.15	1.2	0.15	25.0 to 51.0
3	80.0	80.0	1.0	40.0	0.60	0.15	1.7	0.15	40.0 to 80.0
4	100.0	100.0	1.0	50.0	0.70	0.15	2.1	0.15	50.0 to 100.0
<b>Heat shrink tube, medium walled, black, shrinkage ratio 3 : 1</b>									
1/16	1.5	1.5	0.3	0.5			0.50	0.10	0.5 to 1.5
1/8	3.0	3.0	0.3	1.0			0.65	0.10	1.0 to 3.0
1/4	6.0	6.0	0.4	2.0			0.75	0.10	2.0 to 6.0
3/8	9.0	9.0	0.4	3.0			0.95	0.15	3.0 to 9.0
1/2	12.0	12.0	0.4	4.0			1.10	0.15	4.0 to 12.0
3/4	18.0	18.0	0.5	6.0			1.25	0.15	6.0 to 18.0
1	24.0	24.0	0.5	8.0			1.50	0.20	8.0 to 24.0
1 1/2	39.0	39.0	0.7	13.0			1.90	0.20	13.0 to 39.0
2	50.0	50.0	0.7	16.0			2.50	0.20	16.0 to 50.0
3	80.0	80.0	1.0	26.0			2.8	0.20	26.0 to 80.0
4	100.0	100.0	1.03	3.0			3.0	0.20	33.0 to 100.0
<b>Heat shrink tube, medium walled, black, shrinkage ratio 3 : 1, with adhesive lining</b>									
1/16	1.5	1.5	0.3	0.5			0.50	0.10	0.5 to 1.5
1/8	3.2	3.0	0.3	1.0			0.65	0.10	1.0 to 3.2
1/4	6.4	6.0	0.4	2.0			0.75	0.10	2.2 to 6.4
3/8	9.5	9.0	0.4	3.0			0.95	0.15	3.2 to 9.5
1/2	12.7	12.0	0.4	4.0			1.10	0.15	4.2 to 12.7
3/4	19.1	18.0	0.5	6.0			1.25	0.15	6.3 to 19.1
1	25.4	24.0	0.5	8.0			1.50	0.20	8.5 to 25.4
1/8	3.2	3.5	0.3	1.0			0.95	0.35	1.0 to 3.2
1/4	6.4	6.8	0.4	2.2			1.2	0.60	2.2 to 6.4
3/8	9.5	9.9	0.4	3.2			1.4	0.65	3.2 to 9.5
1/2	12.7	13.2	0.5	4.2			1.6	0.75	4.2 to 12.7
3/4	19.1	19.6	0.5	6.3			2.0	0.90	6.3 to 19.1
1	25.4	25.4	0.8	8.5			2.1	0.90	8.5 to 25.4
1 1/2	39.0	40.0	0.8	13.5			2.4	1.05	13.5 to 39.0
2	50.0	51.5	0.8	17.0			2.7	1.20	17.0 to 50.0




















**Safety tools**

Insulated safety tools and insulated protective agents have been developed for use during work on live parts. Their use should not, however, be a "blank cheque" for the user; rather applicable regulations (including accident prevention regulations, VBG, DIN, VDE and others) must always be observed and followed. Upon request we will gladly send you specifics and additional informational material.

 Insulated hand tools, tested and VDE-certified according to European standard EN 60900 or resp. VDE specification 0682, part 201.

 Insulated hand tools tested according to European standard EN 60900 or resp. VDE specification 0682, part 201.

**Description of the symbols**

 Energised work	 Cutting hardness in HRC	 with cutting bevel	 single joint	 Flat nose pliers	 Wire type soft	 Wire type piano
 VDE/GS tested	 Ridged gripping surfaces	 With slight cutting bevel	 Lap joint	 Flat-round pliers	 Wire type medium-hard	 Wire type rope
	 Gripping surfaces ridged at an angle		 Box joint	 Round nose pliers	 Wire type hard	 Wire type Cu-cable

**Functional description of the wire strippers**



- Set the adjusting screw to the desired conductor cross section to be stripped by turning it (left / right).
- Secure the adjusting screw with the counter nut.
- Insert the cable.
- Press the pliers closed and remove the plastic sheathing.

**Circlip pliers**

Form	Span width mm for circlips	Form	Span width mm for circlips	Form	Span width mm for circlips	Form	Span width mm for circlips
A 3	3 - 10	B 3	3 - 10	C 3	3 - 10	D 3	3 - 10
A 10	10 - 25	B 10	10 - 25	C 10	10 - 25	D 10	10 - 25
A 19	19 - 60	B 19	19 - 60	C 19	19 - 60	D 19	19 - 60
A 40	40 - 100	B 40	40 - 100	C 40	40 - 100	D 40	40 - 100
A 85	85 - 165	B 85	85 - 165	C 85	85 - 165	D 85	85 - 165

Form A and B for outer protection 

Form C and D for inner protection 

**Classification of Cimco screwing tools according to thread ø mm**

Cross-head Pozidriv		Cross-head Phillips		TORX®	
Threaded ø mm	Tool holder	Threaded ø mm	Tool holder	Threaded ø mm	Tool holder
2.5 - 3.0	Size 1	2.0 - 3.0	Gr. 0	3.0 - 3.5	T 10
3.5 - 5.0	Size 2	2.5 - 3.0	Gr. 1	4.0 - 4.5	T 20
6.0	Size 3	3.5 - 4.8	Gr. 2	5.0 - 6.0	T 25
		5.5 - 7.0	Gr. 3		

**Wood screws DIN 96**

Threaded ø mm	Tool holder
3	6.0 x 0.8
3.5	7.0 x 0.8
4	8.0 x 1.0
4.5	9.0 x 1.0
5	10.0 x 1.2
6	12.0 x 1.6

**Cylinder head screws DIN 84**

Threaded ø mm	Tool holder
M 3	5.5 x 0.8
M 4	7.0 x 1.2
M 5	8.5 x 1.2
M 6	10.0 x 1.6
M 8	13.0 x 2.0

**Hex-head machine screws DIN**

Threaded ø mm	Tool holder	Threaded ø mm	Tool holder
2.5	Size 5	12.0	Size 19
3.0	Size 5.5	14.0	Size 22
4.0	Size 7	16.0	Size 24
5.0	Size 8	20.0	Size 30
6.0	Size 10	24.0	Size 36
8.0	Size 13	30.0	Size 46
10.0	Size 17		

**English and American units of measurement**

Weights	Length units
1 ounce	28,349 g
1 pound (lb)	0.454 kg
1 UK ton	1.016 t
1 US ton	0.907 t
1 kp	10 Newtons
	1 inch
	1 foot
	1 yard
	1 mile

**Parameters for installing straddling dowels**

Dowel-ø mm	Dowel length mm	Drill hole depth mm	Drill ø mm	Bolt ø mm
5	25	35	5	2.5 - 4
6	30	40	6	3.5 - 5
8	40	55	8	4.5 - 6
10	50	70	10	6 - 8
12	60	75	12	8 - 10
14	70	85	14	10 - 12
16	80	95	16	12 - 14
20	90	110	20	16

**According to DIN VDE 0220 part 2 screws of strength class 8.8 are tightened with the following torques:**

Thread size	Tightening torque (Nm)	Thread size	Tightening torque (Nm)
M 5	5	M 12	75
M 6	9	M 14	120
M 7	15	M 16	190
M 8	22	M 20	380
M 10	44	M 10	44

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CIMCO article no.	Cat. page	with hammer	Holder			Material																	
			STANDARD	Hex	SDS	Granite	Concrete	Armoured concrete	Clinker brick	Masonry, eg. sand-lime brick	Tiles	Marble	Natural stone	Synthetic stone, eg. aerated concrete	Hard wood	Soft wood	Plastic	Drywall, eg. Rigips	Aluminium	Other non-ferrous metals	Steel sheets	VA steel sheets	
Diamond core drill	20 7380 ff	no		X		X	X	X	X	X	X	X	X	X	X								
Impact core bits	20 7311 ff	yes		X	X	X			X	X			X	X									
T.C.T. hole saws	20 7714 ff	no		X	X						X		X	X	X	X	X						
HSS bi-metal hole saws	20 7414 ff	no		X										X	X	X	X						
Step drill	20 1200 ff	no	X											X	X	X			X	X	X	X	X
Sheet taper drill	20 1280 ff	no	X											X	X	X			X	X	X	X	X
Twist drill	20 0314 ff	no	X											X	X	X			X	X	X	X	X
Stone and concrete drill	20 1600 ff	yes	X						X	X	X	X	X										
Hammer drill	20 8100 ff	yes			X	X	X	X	X	X													
Multi-purpose drills	20 1880 ff	no	X						X	X	X	X	X	X	X	X	X						
Cased drill	20 6306 ff	no	X											X	X	X	X						

**Keyword: new dimensions in electrical installation.**

The European standard DIN EN 50262 "Cable Glands for Electrical Installations" has been valid since 1 January 2000 thus abolishing the PG system common in Germany. Electrical installation tubes, screwed cable glands, sockets, housings and cabinets are affected.

- 10 PG sizes are replaced with just 8 metric sizes
  - With each metric size, a sealing area is achieved that is approx. 20% larger than with the PG size
  - The outer thread diameter can be derived directly from the type designation (example: M16 = 16 mm outer diameter)
- During the transition period, both systems are available simultaneously (for replacement and repair installations). CIMCO recommends always having both types of step drill, thread cutters and screw punchers to hand.

The change provides advantages to the user:

**Recommended installation bores for screwed cable glands (PG and metric)**

PG Thread	Thread ø mm	Installation drill hole required mm		Metric Thread	Installation drill hole required mm	
		Through-hole	Core hole		Through-hole	Core hole
PG 7	12.5	13	11.5	M 12 x 1.5	12.5	10.5
PG 9	15.2	15.7	14	M 16 x 1.5	16.5	14.5
PG 11	18.6	19	17.4	M 20 x 1.5	20.5	18.5
PG 13.5	20.4	21	19	M 25 x 1.5	25.5	23.5
PG 16	22.5	23	21.25	M 32 x 1.5	32.5	30.5
PG 21	28.3	28.8	27	M 40 x 1.5	40.5	38.5
PG 29	37.0	37.5	35.5	M 50 x 1.5	50.5	48.5
PG 36	47.0	47.5	45.5	M 63 x 1.5	63.5	61.5
PG 42	54.0	54.5	52.5			
PG 48	59.0	59.8	58			

**Working guide values with good lubrication**

Recommended revolutions per min. (rpm). For bore diameters not specified, select corresponding speed. Cutting performance and durability are significantly increased by good lubrication (drilling paste CIMCO article no. 20 1307) and by abiding by the recommended speeds.

**Step drill**

ø mm	PG dimension	Alloyed steel	Unalloyed steel	NF-metals	Plastic plywood
12.5	7	360	650	1200	2900
15.2	9	300	540	960	2400
18.6	11	250	450	800	2000
20.4	13.5	230	400	720	1800
22.5	16	200	370	650	1650

**Sheet taper drill**

ø mm	Alloyed steel	Unalloyed steel	NF-metals	Plastic plywood
3-14	600-400	800-500	2000-1500	3000-2000
6-20	500-200	700-400	1800-1000	2500-1500
16-30	200-100	400-200	1000- 500	1500-1000
25-40	100- 80	300-150	500- 300	1000- 500
36-52	80- 50	200-100	300- 200	600- 200

**KITMEX Cable drum hoists**

Cable drum ø mm	max. Capacity/pair kg	Operation	Feature	Article no.	
min. 1100	max. 1600	4000	Spindles, by hand	-	14 2320
1100	1600	4000	Pumps, by hand	Quick adjustment	14 2322
600	1600	2000	Levers, by hand	-	14 2324
800	2200	10000	Pumps, by foot, Presetting by ratcheting the axle bearing shells	Quick adjustment, mobile	14 2326
800	3200	10000	Pumps, by foot, Presetting by ratcheting the axle bearing shells	Quick adjustment, mobile	14 2328

Further hoists for cable drums weighing up to 20,000 kg available on request.



**HSS bi-metal hole saw**

ø mm	Mild steel	VA steel	Cast steel	Brass	Aluminium
14	550	300	400	790	900
16	530	275	365	730	825
17	500	250	330	665	750
19	460	230	300	600	690
21	425	210	280	560	630
22	390	195	260	520	585
24	370	185	245	495	555
25	350	175	235	470	525
27	325	160	215	435	480
29	300	150	200	400	450
30	285	145	190	380	425
32	275	140	180	360	410
33	260	135	175	345	390
35	250	125	165	330	375
37	240	120	160	315	360
38	230	115	150	300	345
40	220	110	145	290	330
41	210	105	140	280	315
43	205	100	135	270	305
44	195	95	130	260	295
46	190	95	125	250	285
48	180	90	120	240	270
51	170	85	115	230	255
52	165	80	110	220	245
54	160	80	105	210	240
57	150	75	100	200	230
59	145	75	100	195	225

**HSS bi-metal hole saw**

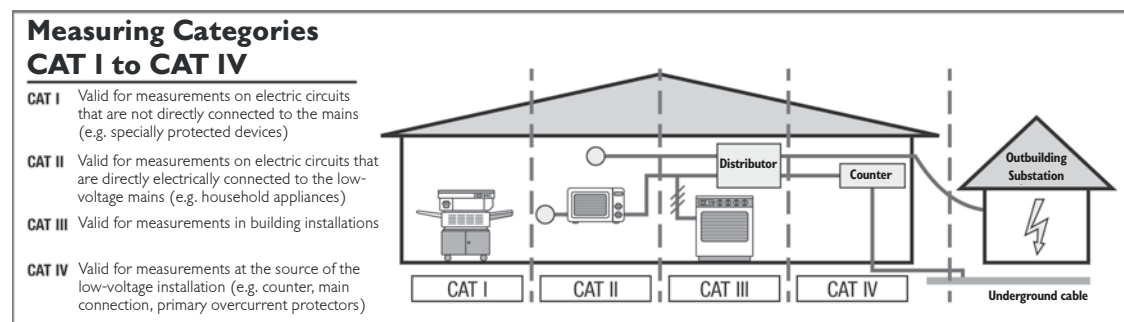
ø mm	Mild steel	VA steel	Cast steel	Brass	Aluminium
60	140	70	95	190	220
64	135	70	90	180	205
65	130	65	85	175	200
67	130	65	85	170	195
70	125	60	80	160	185
73	120	60	80	160	180
76	115	55	75	150	170
79	119	55	70	145	165
83	105	50	70	140	155
86	100	50	65	130	150
89	95	45	65	125	145
92	95	45	60	120	140
95	90	45	60	120	135
98	90	45	60	115	130
102	85	40	55	115	125
105	85	40	55	110	120
108	80	40	55	110	115
111	80	40	50	100	110
114	75	35	50	100	105
121	70	35	45	90	95
127	65	30	40	85	90
140	60	30	35	80	85
146	55	25	35	75	80
152	55	25	35	75	80

**Measuring categories CAT I to CAT IV**

The IEC/EN 61010-1 standard subdivides electric circuits into measuring categories CAT I to CAT IV so that measuring tools can be designed for the widely varying installation and application purposes. The measuring categories indicate in which application areas a measuring tool can be safely used. The protection of a measuring tool from a transient (=short-term, temporary) overvoltage is determined by the specification of the measurement category (overvoltage category) and the working voltage (nominal voltage to ground) e.g. CAT IV 600 V, CAT III 1,000 V.

The IEC/EN 61010-1 standard subdivides measuring electric circuits into the following measuring categories:

- CAT I: for measurements on electric circuits that are not directly connected to the mains.
- CAT II: for measurements on electric circuits that are directly connected to the mains.
- CAT III: for measurements in building installations.
- CAT IV: for measurements at the source of the low-voltage installation.



- The specification of the measurement category and the maximum nominal voltage determine the protection of the measuring tool from transient (temporary) overvoltage.
- These can occur due to a lightning strike in the distribution network or due to the switching on/off of large loads.
- The following basic principle applies: the higher the measurement category and the higher the nominal voltage, the greater the protection of the measuring tool against transient overvoltage.
- Protection against transient overvoltage to 8 kV

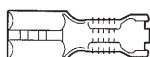
**Data sheet for LED lamps**

Designation	Article no.	Output	Luminous flux	Protection class	Light angle	Operation	Operating time	Luminous colour
LED torches 500.01-4500F	11 1534	1.2 W	180 Lm	IP 64	15 - 75°	3 x AAA	10 hrs	4,500 K
LED head lamp 500.03	11 1536	1 W	100 Lm	IP 64	6°	2 Xx AA	10 hrs	4,500 K
LED inspection lamp 600.08G	11 1540	0.15 W	5 Lm	IP 67	15°	2 x LR06	150 hrs	5,500 K
LED workshop lamps 700.01-4500G	11 1562	6 W	650 Lm	IP 64	25 - 100°	230 V/24 V	-	4,500 K
LED-PEN lamp	11 1524	-	-	-	-	-	-	-
LED-PEN work lamp	11 1522	-	-	IP 54	-	-	8 hrs	-
LED-PEN construction site spotlight	11 1580	10 W	700 Lm	IP 65	120°	-	4 hrs	5,500 K
LED-PEN construction site spotlight	11 1586	20 W	1,300 Lm	IP 65	120°	-	5 hrs	5,500 K
LED-PEN construction site spotlight	11 1588	30 W	2,000 Lm	IP	120°	-	3 hrs	5,500 K
LED-PEN construction site spotlight	11 1590	50 W	2,600 Lm	IP	120°	-	3 hrs	5,500 K
LED-PEN construction site spotlight with repl. battery	11 1592	20 W	1,300 Lm	IP	120°	-	3 hrs	5,500 K

**Protection classes IP...**

First digit	Degree of protection: Protection against contact and foreign bodies foreign body protection	Second digit	Degree of protection: protection against water
X	No special protection	X	No special protection
1	Protection against ingress of solid particles with a diameter greater than 50 mm	1	Protection against vertically dripping water
2	Protection against ingress of solid particles with a diameter greater than 12.5 mm	2	Protection against vertically dripping water, equipment tipped up to 15°
3	Protection against ingress of solid particles with a diameter greater than 2.5 mm	3	Protection against spraying water up to an angle of 60° to vertical
4	Protection against ingress of solid particles with a diameter greater than 1 mm	4	Protection against spraying water from all directions
5	Protection against dust (dust-protected). Complete contact protection	5	Protection against spraying water (jets) from all directions
6	Protection against ingress of dust (dust-tight). Complete contact protection	6	Protection against powerful water spray or rough seas
		7	Protection against water immersion under pressure and time conditions
		8	Protection against water when the equipment is constantly submerged

**Tool recommendation table**



**Non-insulated blade terminal connectors, DIN 46244 ff, 2.8 - 4.8 - 6.3 mm tab width**

Cross section mm <sup>2</sup>	Article no.	Crimp shape	Cat. page
0.5 - 6	10 6136	Roll crimp	263
0.5 - 6	10 6000	Roll crimp	262
0.5 - 6	10 6112	Roll crimp	263
0.5 - 6	10 4208	Roll crimp	267

**Insulated connection materials**



Cross section mm <sup>2</sup>	Article no.	Crimp shape	Cat. page
0.5 - 6	10 1892	Oval crimp	267
0.5 - 6	10 6144	Oval crimp, asymmetric	268
0.5 - 6	10 1916	Oval crimp, symmetric	268
0.5 - 6	10 6000	Oval crimp, symmetric	262
0.5 - 6	10 6112	Oval crimp	263
10 - 16	10 1918	Oval crimp	268
0.5 - 6	10 4206	Oval crimp	268
0.25 - 6	10 4208	Roll crimp	268

**AL compression cable lugs and connectors**



Cross section mm <sup>2</sup>	Article no.	Crimp shape	Cat. page
10 - 185	10 1867	Hex crimp	269
10 - 240	10 1868	Hex crimp	269
10 - 185	10 5698	Hex crimp	272
10 - 240	10 5701	Hex crimp	272
16 - 300	10 5702	Hex crimp	272
16 - 300	10 5704	Hex crimp	273

**Wire end ferrules**



Cross section mm <sup>2</sup>	Article no.	Crimp shape	Cat. page
0.5 - 2.5	10 1906	Indent crimp	266
1.5 - 6	10 1907	Indent crimp	266
0.25 - 2.5	10 1911	Trapezoid crimp	266
0.5 - 16	10 1904	Indent crimp	266
10 - 35	10 1905	Indent crimp	266
0.5 - 16	10 6120	Trapezoid crimp	266
16 - 35	10 6140	Trapezoid crimp	266
25 + 50	10 6142	Trapezoid crimp	267
0.14 - 6	10 1940	Square crimp	266
0.08 - 10	10 1920	Square crimp	266
0.5 - 2.5	10 0725	Trapezoid crimp	267
0.5 - 2.5	10 0720	Trapezoid crimp	267
0.5 - 10	10 6000	Trapezoid crimp	262
0.5 - 50	10 6112	Oval crimp	263
0.5 - 16	10 1945	Square crimp	266
10 - 50	10 4200	Trapezoid crimp	267
50 - 95	10 4202	Trapezoid crimp	267
0.14 - 6	10 4190	Trapezoid crimp	267
6 - 16	10 4192	Trapezoid crimp	267
0.08 - 10	10 4194	Square crimp	267
2.5 - 16	10 4196	Square crimp	267
10 - 95	10 1867	Trapezoid crimp	269
10 - 240	10 1868	Trapezoid crimp	269
10 - 95	10 5698	Trapezoid crimp	272
10 - 240	10 5701	Trapezoid crimp	272
16 - 240	10 5702	Trapezoid crimp	272
16 - 240	10 5704	Trapezoid crimp	273

**Tubular cable lugs and connectors "standard design"**



Cross section mm <sup>2</sup>	Article no.	Crimp shape	Cat. page
0.75 – 16	10 1902	Indent crimp	269
6 – 50	10 1870	Notch crimp	269
50 – 120	10 1872	Notch crimp	269
120 – 240	10 1874	Notch crimp	269
6 – 50	10 1882	Hexagonal crimping	269
10 – 120	10 1880	Hexagonal crimping	269
16 – 95	10 1884	Hexagonal crimping	269
25 – 150	10 1885	Hexagonal crimping	269
0.1 – 16	10 4204	Notch crimp	268
6 – 185	10 1867	Hexagonal crimping	269
6 – 300	10 1868	Hexagonal crimping	269
6 – 185	10 5698	Hexagonal crimping	272
6 – 300	10 5701	Hexagonal crimping	272
10 – 400	10 5702	Hexagonal crimping	272
10 – 400	10 5704	Hexagonal crimping	273

**Non-insulated crimping cable lugs (ring, fork, and pin-shaped)**



Cross section mm <sup>2</sup>	Article no.	Crimp shape	Cat. page
1.5 – 10	10 6134	Indent crimp	268
0.5 – 16	10 1909	Indent crimp	268
10 – 35	10 6146	Indent crimp	268
0.5 – 10	10 6000	Indent crimp	262
0.5 – 10	10 6112	Oval crimp	264
0.1 – 16	10 4204	Notch crimp	268
10 – 70	10 1867	Indent crimp	269
10 – 70	10 1868	Indent crimp	269
10 – 70	10 5698	Indent crimp	272
10 – 70	10 5701	Indent crimp	272
16 – 150	10 5702	Indent crimp	272
16 – 150	10 5704	Indent crimp	273

**Tubular cable lugs for finely-stranded conductors**



Cross section mm <sup>2</sup>	Article no.	Crimp shape	Cat. page
10 – 70	10 1867	Indent crimp	269
10 – 70	10 1868	Indent crimp	269
10 – 70	10 5698	Indent crimp	272
10 – 70	10 5701	Indent crimp	272
16 – 150	10 5702	Indent crimp	272
16 – 150	10 5704	Indent crimp	273

**Compression cable lugs and connectors according to DIN 46235 / DIN 46267**



Cross section mm <sup>2</sup>	Article no.	Crimp shape	Cat. page
6 – 50	10 1883	Hexagonal crimping	269
16 – 95	10 1886	Hexagonal crimping	269
25 – 150	10 1888	Hexagonal crimping	269
6 – 185	10 1867	Hexagonal crimping	269
6 – 300	10 1868	Hexagonal crimping	269
6 – 185	10 5698	Hexagonal crimping	272
6 – 300	10 5701	Hexagonal crimping	272
10 – 300	10 5702	Hexagonal crimping	272
10 – 300	10 5704	Hexagonal crimping	273

**Round crimp inserts**



Cross section mm <sup>2</sup>	Article no.	Crimp shape	Cat. page
10 – 185	10 1867	Indent crimp	269
10 – 240	10 1868	Indent crimp	269
10 – 185	10 5698	Indent crimp	272
10 – 240	10 5701	Indent crimp	272
10 – 300	10 5702	Indent crimp	272
10 – 300	10 5704	Indent crimp	273

**Crimping shapes for cable connections**



**Hexagonal crimping**

For crimping Cu tubular cable lugs and connectors, compression cable lugs and connectors DIN 46235/DIN 46267, Al compression cable lugs and connectors. Application areas: 6 – 1000 mm<sup>2</sup>



**Oval crimp**

For crimping insulated tubular cable lugs and connectors, insulated pin-shape cable lugs and insulated cable connectors. Application areas: 0.1 – 185 mm<sup>2</sup>



**Notching**

For notching Cu tubular cable lugs and connectors. Application areas: 6 – 400 mm<sup>2</sup>



**Indent crimp**

For crimping Cu tubular cable lugs and connectors of "standard design". Application areas: 0.75 – 400 mm<sup>2</sup>



**Trapezoid crimp**

For crimping wire end ferrules and twin wire end ferrules. Application areas: 0.14 – 185 mm<sup>2</sup>



**Indent crimp**

For crimping wire end ferrules and twin wire end ferrules. Application areas: 4 – 95 mm<sup>2</sup>



**Square crimp**

For crimping wire end ferrules and twin wire end ferrules. Application areas: 0.14 – 10 mm<sup>2</sup>



**Roll crimp**

For crimping non-insulated blade terminal connections. Application areas: 0.1 – 6 mm<sup>2</sup>



**Round crimp**

For sector-shaped conductors 90° and 120°. Application areas: 10 sm – 300 sm, 35 se – 300 se

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Order no.	Contacts	Modular plugs		RJ 14	RJ 10	RJ 11	RJ 12	RJ 45	RJ 45 unshielded	RJ 45 shielded	RJ 45 shielded	RJ 45 shielded	BNC-/ TNC shielded	Fibre optics (FOC) plug		
		Positions			4	4	6	6	8	Design CIMCO etc.	Design HIROSE	Design Stewart Stamping	Design (RG 58, RG 59, RG 62)	coaxial	Round crimp	Hex crimp
10 6116	no	no			●	●										
10 6117	no	no					●	●								
10 6211	yes	yes					●	●								
10 6118	no	no							●							
10 6212	yes	yes							●							
10 6110	yes	yes					●	●	●							
10 6200	yes	yes		●	●	●	●	●								
10 6201	yes	yes								●						
10 6202	yes	yes									●					
10 6203	yes	yes										●				
10 6138	yes	yes											●			
10 6156	yes	yes													●	
10 6158	yes	yes														●
Set 10 6210	yes	yes					●	●	●		●	●	●	●	●	●
Set 10 6009	yes	yes							●	●				●	●	●
10 6016	yes	yes					●	●								
10 6018	yes	yes							●							
10 6019	yes	yes								●						
10 6018	yes	yes									●					
10 6015	yes	yes													●	

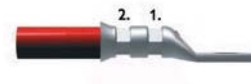
bold = crimping profile inserts for click 'n' crimp system; see page 262.

**We recommend the following number of crimps for the individual cross sections:**

Cross section mm <sup>2</sup>	Tubular cable lugs 5 mm crimping insert	Tubular cable lugs wide crimping inserts	Cable lugs DIN 46235 5 mm crimping insert	Cable lugs DIN 46235
6	1	1		
10	1	1		
16	1	1	2	1
25	2	1	2	1
35	2	1	2	1
50	2	1	3	1
70	2	1	3	1
95	2	1	4	2
120	2	1	4	2
150	2	1	4	2
185	2	1	4	2
240	4	2	5	2
300	4	2	5	4

**Installation notes for cable lugs and connectors:**

- Strip conductor to required insertion length (+10% due to length change of the crimp sleeve).
- The conductor ends must be mechanically cleaned prior to installation.
- Insert the conductor into the cable lug or connector to the full insertion length.
- While minding the crimp direction, crimp the cable lug or connector with the assigned tool. Please use the adjacent drawing to determine the crimping direction for the cable lugs.



MCM	AWG	Outer diameter		Cross section mm <sup>2</sup>	Comparable metric cross section
		mm	inch		
0.0025	46	0.04	0.0016	0.00126	
0.0039	44	0.05	0.0020	0.00196	
0.0076	41	0.07	0.0028	0.00385	
0.0097	40	0.079	0.0031	0.00490	
0.0123	39	0.089	0.0035	0.00622	
0.0161	38	0.102	0.0040	0.00817	
0.0201	37	0.114	0.0045	0.0102	
0.0250	36	0.127	0.0050	0.013	
0.0313	35	0.142	0.0056	0.016	
0.0397	34	0.16	0.0063	0.020	
0.0502	33	0.18	0.0071	0.025	
0.0639	32	0.203	0.0080	0.032	
0.0792	31	0.226	0.0089	0.040	
0.100	30	0.254	0.0100	0.051	0.05
0.128	29	0.287	0.0113	0.065	
0.159	28	0.32	0.0126	0.080	0.08
0.204	27	0.363	0.0143	0.103	0.1
0.253	26	0.404	0.0159	0.128	0.14
0.321	25	0.455	0.0179	0.163	
0.405	24	0.511	0.0201	0.205	0.2
0.511	23	0.574	0.0226	0.259	0.25
0.641	22	0.643	0.0253	0.325	0.34
0.812	21	0.724	0.0285	0.412	0.38
1.02	20	0.813	0.032	0.519	0.5
1.29	19	0.912	0.036	0.653	
1.63	18	1.024	0.040	0.824	0.75
2.05	17	1.151	0.045	1.040	1
2.58	16	1.29	0.051	1.307	
3.26	15	1.45	0.057	1.651	1.5
4.11	14	1.628	0.064	2.082	
5.19	13	1.829	0.072	2.627	2.5
6.53	12	2.052	0.081	3.31	
8.2	11	2.304	0.091	4.17	4
10.4	10	2.588	0.102	5.26	
13.1	9	2.906	0.114	6.63	6
16.6	8	3.268	0.128	8.39	
20.8	7	3.665	0.144	10.5	10
26.2	6	4.12	0.162	13.3	
33.1	5	4.62	0.182	16.8	16
41.7	4	5.19	0.204	21.1	
52.6	3	5.83	0.229	26.7	25
66.4	2	6.54	0.257	33.6	35
83.7	1	7.35	0.289	42.4	
105	0 or 1/0	8.25	0.324	53.5	50
133	00 or 2/0	9.27	0.364	67.4	70
167	000 or 3/0	10.4	0.41	85.0	95
211	0000 or 4/0	11.7	0.46	107.2	
250		14.6	0.57	127	120
300		16.0	0.63	152	150
350		17.3	0.68	177	185
400		18.9	0.74	203	
500		19.7	0.78	253	240
600		20.7	0.81	304	300
700		21.3	0.84	355	
750		22.0	0.87	380	
800		22.7	0.89	405	400
900		24.1	0.95	456	
1000		25.4	1.00	507	500
1250		28.4	1.12	633	625
1500		31.1	1.22	760	800
1750		33.6	1.32	887	
2000		35.9	1.41	1013	1000

The given values refer to single-wire solid conductors. For multi-stranded conductors the values are approximate.

MCM = 1000 circular mils; 1 circular mils = 0.0005067 mm<sup>2</sup>

AWG = American wire gauge

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## Terms of sale and delivery – Status August 2018

### I. General provisions

- Written declarations from both parties are decisive for the scope of the deliveries or performances (hereinafter: deliveries). However, the buyer's general terms and conditions of business only apply if the supplier or performance provider (hereinafter: supplier) has expressly agreed to them in writing. Verbal agreements must be confirmed in writing to be valid. Offers are non-binding prior to our written order confirmation.
- The supplier unconditionally reserve their exploitation rights under property and copyright law for cost estimates, drawings and other documents (hereinafter: documents). The documents may only be made available to third parties with the prior consent of the supplier and, if the order is not granted to the supplier, the documents must immediately be returned to the supplier upon request. Clauses 1 and 2 apply correspondingly for the buyer's documents; these may, however, be made available to such third parties that the supplier has permissibly commissioned to make deliveries.
- Partial deliveries are permissible provided they are reasonable for the buyer.
- Specifications of dimensions, weights, and other characteristics of the goods are approximate values and are subject to the tolerances common in the field. The specifications do not indicate warranted characteristics in the legal sense provided they are not expressly designated as such. The products are described exclusively in our catalogue.

### II. Prices and payment conditions

- The prices listed are ex works and do not include packaging, shipping costs and transport insurance, nor do they include the legally applicable VAT.
- The supplier's pecuniary claim is due 10 days after receipt of invoice.
- For payments made within 10 days of the invoice date a 3% discount is granted. For payments made within 30 days of the invoice date a 2% discount is granted. All invoices are payable in full within 60 days of the invoice date.
- Payments shall be made free of all transfer charges to the supplier's account.
- The buyer can only offset with claims that are uncontested or legally effective.
- If payment is made late, the supplier has the right to charge interest for delay in accordance with currently valid legislation.

### III. Shipping terms; returns

- Shipping occurs ex works and with no guarantee of the cheapest type of shipping, provided no specific agreement has been reached. Consignments with a net order value of more than € 500 are shipped free of charge; below a net order value of € 50, they are shipped ex works plus a € 10.- handling charge. Export shipments above a net goods value of € 250 are made free to the German border or F.O.B. at a German sea port.
- Returning goods requires the consent of the supplier, provided this is not a matter of justified claims. If the buyer returns goods without the express consent of the supplier, and provided the reason for this is not a defective delivery, then the supplier shall charge a processing fee of 15% of the net goods value at current purchasing prices. This does not affect the right to demand contractual fulfillment and acceptance of the goods, including reimbursement of the additional costs incurred by the supplier due to the return. Returns of damaged and discontinued goods are never accepted.
- Articles requiring revision can not be returned.
- VDE certified articles will only be accepted for return against an increased fee of 30 %.

### IV. Retention of title

- The delivery items (reserved goods) remain the property of the supplier until all of the supplier's claims against the buyer that have arisen from the business transaction have been fulfilled. Should the value of all security interests to which the supplier is entitled exceeds the value of all secured claims by more than 20%, the supplier shall release part of the security interests if requested to do so by the buyer.
- While the retention of title is in effect, the buyer does not have the right to pledge the goods or assign them by way of security. Resale is only permitted by resellers in the usual course of business and only subject to the condition that the reseller receives payment from their customer or, if the reseller stipulates that title to the goods is not transferred to their customer until the customer has fulfilled their payment obligations.
- If the buyer sells the reserved goods, then the buyer already assigns as security their future claims arising from resale to their customer, with all ancillary rights – including any outstanding balances – to the supplier for security purposes, without any separate subsequent explanations being required. If the reserved goods are resold together with other objects without an agreement on the individual price of the reserved goods, then the buyer assigns to the supplier, with priority over the remaining claim, that part of the total price claim which corresponds to the price of the reserved goods set by the supplier in their invoice.
  - For substantiation of a justified interest, the buyer must provide the supplier with the information required to satisfy the supplier's claims against the customer and the buyer must hand over the required documents.
  - Until revocation, the buyer is authorised to collect the assigned claims from the resale. If an important reason exists, in particular delayed payment, stoppage of payment, opening insolvency proceedings, protest of a bill or justified suspicion of over-indebtedness or pending inability to pay on the part of the buyer, the supplier has the right to revoke the buyer's authorisation to collect. Furthermore, the supplier can, after giving prior warning with a reasonable grace period, disclose the assignment for security, realise the assigned claims and demand that the buyer disclose the assignment for security to the customer.
- The buyer is permitted to process the reserved goods or to mix them or connect them with other objects. The processing, mixing or connecting (hereinafter: processing) is carried out for the supplier. The buyer shall keep the new item for the supplier with the diligence of a prudent businessman. The new item is considered to be reserved goods.
  - If processing is carried out with other objects which do not belong to the supplier, the supplier is entitled to a share of the ownership of the new item which corresponds to the ratio of the value of the processed, mixed or connected (hereinafter: processed) reserved goods to the value of the rest of the processed goods at the time of processing. If the buyer acquires individual ownership of the new item, the supplier and the buyer agree that the buyer grants to the supplier a share of the ownership of the new item created by the processing corresponding to a ratio of the value of the processed reserved goods to the value of the rest of the processed goods at the time of processing.
  - If the new item is sold, the buyer hereby assigns to the supplier as security their claim against the customer from the resale, including all ancillary rights. This assignment takes effect without requiring any special subsequent explanations. The assignment only applies to an amount that corresponds to the value of the processed reserved goods set by the supplier in their invoice. The share of the claim assigned to the supplier shall be given settlement priority. With regard to the authorisation to collect as well as the requirements for its revocation, No. 3. c) applies correspondingly.
  - If the buyer connects the reserved goods to real estate or movable goods, then, without requiring any further special explanation, the buyer also assigns as security the claim which they are entitled to as compensation for the connection, including all ancillary rights, to an amount corresponding to the ratio of the value of the connected reserved goods to the value of the rest of the connected goods at the time of the connection.
- In the event of pledging, confiscations or other access or intervention by a third party, the buyer must inform the supplier immediately.
- In the event of breach of duty by the buyer, in particular delayed payment, the supplier has the right, after the expiration of a reasonable grace period for performance given to the buyer, to withdraw from the contract and recover the goods; this does not affect the legal stipulations on the expendability of setting a grace period. The buyer is obligated to surrender possession.

### V. Deadlines for deliveries; delay

- If the supplier is prevented from meeting a performance deadline, the performance deadline is pushed back by a reasonable period; this does not apply if the supplier is responsible for the delay. Compliance with deadlines presumes the proper receipt of all documents, required approvals and releases, in particular of plans, to be delivered by the buyer, as well as the compliance of the buyer with the agreed payment conditions and other obligations. If these requirements are not fulfilled on time, then the deadlines shall be extended correspondingly; this does not apply if the supplier is responsible for the delays.
- Agreed delivery dates ("Delivery by ...", "Delivery in ...", "Delivery on ...") count as target dates, provided they are not expressly declared as binding by phrases such as "at the latest on ...", "guaranteed by ...".
- If deadlines are not met due to force majeure, e.g. mobilisation, war, civil unrest or similar events, e.g., strike, lockout, the deadlines are extended accordingly.
- If the supplier is late, then - providing that the buyer can verify that they have incurred damages as a result - they can demand compensation for each complete week of delay of 0.5%, but totaling no more than 5%, of the price for the part of the delivery that could not be put to its intended use because of the delay.
- Compensation claims by the buyer due to delivery delays and instead of performance which exceed the limits listed in No. 4 are excluded in all cases of delayed delivery, even after the expiry of any delivery deadline that may have been set. This does not apply where liability is mandatory as in cases of wilful intent, gross negligence, or due to death, physical injury or damage to health; this is not associated with a change in burden of proof to the disadvantage of the buyer. The buyer can only withdraw from the contract within the framework of legal provisions, insofar as the supplier is responsible for the delivery delay.
- If requested to do so by the supplier, the buyer is obligated to declare by an appropriate deadline whether, due to the delivery delay, they intend to withdraw from the contract and/or demand compensation in lieu of performance or whether they insist on performance.
- If, at the buyer's request, shipment or delivery is delayed by more than a month from notification of readiness for shipping, the buyer may be charged a storage fee for each month commenced of 0.5% of the price of the delivery items, up to a maximum, however, of a total of 5%. The contracting parties have the right to provide evidence of higher or lower storage costs.
- If the buyer claims that they did not receive a delivery shipped to them, the supplier can charge the buyer for the costs of the inquiry of at least € 30.
- Additional and other claims and rights in connection with delayed delivery or performance are excluded.



**VI. Transfer of risk**

1. Risk is transferred to the buyer, even in the case of carriage-free delivery, when shipping the delivery starts or it is collected, but no later than when the delivery leaves the warehouse. This also applies if the delivery is transported on our lorries. Upon the buyer's request and at their expense, the deliveries shall be insured against the usual transport risks.
2. If shipment or delivery is delayed for reasons attributed to the buyer or if the buyer delays acceptance for other reasons, then the risk passes to the buyer.

**VII. Acceptance**

1. The buyer may not refuse acceptance of deliveries due to negligible defects.

**VIII. Material defects**

The supplier is liable for material defects as follows:

1. All parts or performances that display a material defect within the limitation period without regard to operating time, shall, at the discretion of the supplier, be remedied, replaced or rendered again free of charge, provided the cause of the defect occurred before the risk transfer.
2. Material defect claims have a limitation period of 12 months. This does not apply if legislation dictates longer periods.
3. The buyer shall inspect the received goods immediately after arrival for quantity, condition, and any assured characteristics. The buyer shall immediately inform the supplier about material defects in writing. Acknowledgement of material defects must always be made in writing.
4. In the event of a defect notification, then the buyer may retain a portion of the payment due which corresponds to the proportion of the material defects found. The buyer may retain payments if a defect notification is made provided there is no doubt about the validity of the claim. If the defect notification is shown to be unjustified, the supplier has the right to demand that the buyer compensate the supplier for cost incurred.
5. Initially the supplier is always to be given the opportunity for supplementary performance within an appropriate period.
6. If the supplementary performance is unsuccessful, the buyer can withdraw from the contract – without affecting any claims for damages in accordance with Art. XI – or can reduce the payment. The buyer's legal right to withdraw does not require that the supplier is responsible for an existing defect of a purchased good. In all other cases, the buyer may only withdraw if there is a breach of duty for which the supplier is responsible.
7. There shall be no claims for defects in the case of negligible deviations from the agreed condition, or for negligible impairments of usability, of natural wear or of damages that occur after the transfer of risk as a result of improper or careless treatment, overloading or unsuitable operating materials or due to particular external influences which are not presupposed by the contract. If the buyer or a third party makes unsuitable changes or performs improper maintenance work, there shall also be no claims for defects arising from this or from its consequences.
8. Claims by the buyer for the necessary expenses incurred for the purpose of supplementary performance, in particular transport, infrastructure, labour and material costs, are excluded insofar as the expenses increase because the delivery item is subsequently relocated to a different place than the buyer's place of business, unless the relocation is in keeping with its intended use.
9. The buyer has statutory rights of recourse against the supplier only insofar as the buyer has not reached any agreements with their customer which go beyond the statutory claims for defects. Furthermore, number 8 applies correspondingly for the extent of the buyer's right of recourse against the supplier.
10. In other respects, Art. XI applies for claims for damages. (Other claims for damages). Additional claims or claims other than those regulated by Art. VIII, which are made by the buyer against the supplier and their vicarious agents, and which are based on a material defect, are excluded.

**IX. Commercial property rights and copyrights; defects of title**

1. Unless otherwise agreed, the supplier is obligated to provide the delivery free from third-party commercial property rights and copyrights (hereinafter: property rights) in the supplier's country only. Insofar as a third party asserts justified claims against the buyer owing to the infringement of property rights through deliveries provided by the supplier which are used as per contract, the supplier shall be liable to the buyer within the period defined in Art. VIII No. 2 as follows:
  - a) At their discretion and cost, the supplier shall either obtain a right of use for the relevant deliveries, change the delivery so that property rights are not infringed, or exchange the delivery. If this is not possible at reasonable conditions, the buyer shall be entitled to the statutory rights of withdrawal or reduction. The buyer cannot demand compensation for useless expenditures.
  - b) The supplier's obligation to provide compensation for damages is governed by Art. XI.
  - c) The aforementioned obligations of the supplier apply only if the buyer promptly notifies the supplier in writing about claims asserted by third parties, if the buyer does not acknowledge an infringement and if the supplier retains all rights to all defensive actions and settlement talks. Should the buyer discontinue the use of the delivered items in order to mitigate damages or for other important reasons, then they are obliged to notify the third party that the discontinuation of use does not imply the acceptance of an infringement of property rights.
2. Claims of the buyer are excluded insofar as they are responsible for the infringement of property rights.
3. Claims of the buyer are also excluded insofar as the infringement of property rights is caused by special specifications of the buyer, by an application which was not foreseeable by the supplier, or due to the fact that the delivery is changed by the buyer or used together with products which were not delivered by the supplier.
4. In the case of property rights infringements, the provisions of Art. VIII No. 4, 5, and 9 correspondingly apply to the claims of the buyer set out in No. 1 a).
5. In the case of other defects of title, the provisions of Art. VIII apply correspondingly.
6. Irrespective of their legal bases, additional claims and rights or other claims and rights (e.g., amendment, reduction, withdrawal) other than those regulated by this article that are made by the buyer against the supplier and the supplier's vicarious agents on the grounds of material defect are excluded.

**X. Impossibility; amendment**

1. To the extent that supply is not possible, the buyer is entitled to demand compensation unless the supplier is not responsible for the impossibility. However, the claim for compensation by the buyer shall be confined to 10% of the value of the part of the delivery which cannot be put to its intended use, due to the impossibility. This does not apply where liability is mandatory as in cases of wilful intent, gross negligence, or due to death, physical injury or damage to health; this is not associated with a change in burden of proof to the disadvantage of the buyer. The right of the buyer to withdraw from the contract is not affected.
2. Insofar as an unforeseeable event within the meaning of Art. V No. 3 changes the commercial importance or the contents of the delivery or has substantial implications on the operation of the supplier, the contract shall be readjusted in accordance with the principles of good faith. Insofar as this is commercially unjustifiable, the supplier has the right to withdraw from the contract. If the supplier intends to withdraw from the contract, they shall notify the buyer of this without undue delay after recognising the implications of the event, even if an extension of the delivery time was initially agreed with the buyer.

**XI. Other claims to compensation for damages**

1. Claims for compensation for damages on the part of the buyer, regardless of their legal basis, but in particular on account of breach of duties derived from contractual obligation and from impermissible acts, are excluded.
2. This does not apply where liability is mandatory, e.g. in accordance with the Product Liability Act, in cases of wilful intent, gross negligence, or due to death, physical injury or damage to health, or due to infringement of essential contractual obligations. Compensation for damages for infringement of essential contractual obligations is, however, limited to contract-typical, foreseeable damages, unless liable due to wilful intent or gross negligence, or due to death, physical injury or damage to health. The aforementioned stipulations do not imply a change in the burden of proof to the disadvantage of the buyer.
3. Insofar as the buyer is entitled to compensation for damages in accordance with Art. XI, these expire at the end of the limitation period valid for material defect claims in accordance with Art. VIII No. 2.

**XII. Place of jurisdiction and applicable law**

1. If the buyer is a merchant, then the sole place of jurisdiction for all disputes arising directly or indirectly from the contractual relationship (including claims concerning cheques and bills of exchange) is the domicile of the supplier. The supplier, however, has the right to bring legal action at the buyer's domicile.
2. Contractual relations are governed by German substantive law, to the exclusion of the United Nations Convention on Contracts for the International Sale of Goods (CISG).

**XIII. Binding nature of the contract**

If individual provisions of this contract are or become legally invalid, the remaining sections of the contract shall remain binding. This does not apply if abiding by the contract would represent an unreasonable hardship for one of the parties.

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17 0078	1	34, 222	<b>18 0000</b>	<b>100</b>	<b>313</b>	18 0282	100	301	18 0520	100	296
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17 0092	1	27	18 0004	1	314	18 0286	100	301	18 0524	100	296
17 0120	1	324	18 0005	1	314	18 0288	100	301	18 0530	100	296
17 0142	1	36	18 0006	1	314	18 0290	100	301	18 0532	100	296
17 0144	1	36	18 0008	100	298	18 0291	100	301	18 0534	100	296
17 0175	1	13	18 0010	100	298	18 0292	100	301	18 0536	100	296
17 0212	1	36	18 0014	100	298	18 0294	100	301	18 0540	100	296
17 0252	1	36	18 0016	100	298	18 0300	100	302	18 0542	100	296
17 0275	1	19	18 0020	100	298	18 0302	100	302	18 0544	100	296
17 0300	1	29	18 0024	100	298	18 0304	100	302	18 0546	100	296
17 0310	1	15	18 0026	100	298	18 0310	100	301	18 0550	100	296
17 0312	1	14	18 0027	100	298	18 0312	100	301	18 0552	100	296
17 0331	1	18	18 0028	100	298	18 0314	100	301	18 0556	100	296
17 0360	1	39, 221	18 0029	100	298	18 0318	100	302	18 0562	100	296
17 0362	1	219	18 0030	100	298	18 0320	100	302	18 0590	100	296
17 0366	1	229	18 0034	100	298	18 0322	100	302	18 0592	100	296
17 0374	1	21	18 0036	100	298	18 0324	100	302	18 0594	100	296
17 0375	1	19	18 0038	100	298	18 0328	100	302	18 0600	100	296
17 0376	1	20	18 0040	100	298	18 0330	100	302	18 0602	100	296
17 0378	1	34, 222	18 0042	100	298	18 0332	100	302	18 0604	100	296
17 0420	1	35	18 0050	100	298	18 0334	100	302	18 0606	1	296
17 0430	1	35	18 0052	100	298	18 0340	100	302	18 0608	1	296
17 0431	1	24	18 0054	100	298	18 0342	100	302	18 0610	1	296
17 0440	1	36	18 0056	100	298	18 0346	50	302	18 0612	1	296
17 0500	1	28	18 0058	100	298	18 0352	15	303	18 0650	100	282
17 0601	1	17	18 0070	100	298	18 0400	100	295	18 0652	100	282
17 0603	1	29	18 0072	100	298	18 0402	100	295	18 0654	100	282
17 0705	1	36	18 0074	50	298	18 0403	100	295	18 0660	100	282
17 0780	1	36	18 0076	50	298	18 0407	100	295	18 0662	100	282
17 0782	1	38	18 0078	50	298	18 0408	100	295	18 0664	100	282
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17 0932	1	17	18 0082	50	298	18 0412	100	295	18 0672	100	282
17 0940	1	35	18 0084	50	298	18 0413	100	295	18 0674	100	282
17 0996	1	39	18 0086	50	298	18 0416	100	295	18 0676	100	282
17 2004	1	28	18 0088	50	298	18 0418	100	295	18 0680	100	282
17 3136	1	41	18 0118	100	299	18 0420	100	295	18 0682	100	282
17 3138	1	41	18 0120	100	299	18 0422	100	295	18 0684	100	282
17 3140	1	41	18 0124	100	299	18 0423	100	295	18 0686	100	282
17 3142	1	41	18 0126	100	299	18 0426	100	295	18 0692	100	282
17 3144	1	41	18 0128	100	299	18 0428	100	295	18 0694	100	282
17 3310	1	40	18 0140	100	299	18 0430	100	295	18 0696	100	282
17 5075	1	22	18 0144	100	299	18 0432	100	295	18 0697	100	282
17 5102	1	38	18 0146	100	299	18 0434	100	295	18 0698	100	282
17 5104	1	38	18 0148	100	299	18 0436	100	295	18 0700	100	282

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	18 0705	100	282	18 0932	1	285	18 1335	1	355	18 1506	1	311
3	18 0706	100	282	18 0934	1	285	18 1336	100	321	18 1507	1	311
	18 0709	100	282	18 0940	100	308	18 1337	100	321	18 1510	1	311
	18 0710	100	282	18 0942	100	308	18 1338	100	321	18 1512	1	311
4	18 0712	100	282	18 0944	100	308	18 1339	100	321	18 1520	1	311
	18 0714	100	282	18 0946	100	308	18 1340	100	321	18 1530	1	303
	18 0715	100	282	18 0948	100	308	18 1341	100	321	18 1540	1	303
	18 0718	50	282	18 0949	100	308	18 1342	100	321	18 1545	1	297
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	18 0722	50	282	18 0952	100	309	18 1344	100	321	18 1710	100	322
	18 0724	50	282	18 0960	1	353	18 1345	100	321	18 1712	100	322
	18 0725	50	282	18 0962	1	353	18 1347	50	321	18 1713	100	322
6	18 0726	50	282	18 0964	1	353	18 1348	50	321	18 1714	100	322
	18 0730	1	282	18 0966	1	353	18 1351	1	357	18 1716	100	322
	18 0732	1	282	18 0968	1	353	18 1360	100	318	18 1720	100	322
7	18 0734	1	282	18 0988	100	308	18 1361	100	318	18 1722	100	322
	18 0735	1	282	18 0990	100	308	18 1362	100	318	18 1723	100	322
	18 0736	1	282	18 0992	100	308	18 1363	100	318	18 1724	100	322
8	18 0737	1	282	18 0994	100	308	18 1364	100	318	18 1726	100	322
	18 0739	1	282	18 0996	100	308	18 1365	100	318	18 1728	100	322
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	18 0745	1	282	18 1001	100	308	18 1369	100	318	18 1736	100	321
	18 0746	1	282	18 1002	100	308	18 1371	100	318	18 1737	100	321
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	18 0758	1	283	18 1010	100	309	18 1379	100	318	18 1745	100	321
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	18 0760	1	283	18 1014	100	309	18 1381	100	323	18 1748	50	321
	18 0762	1	283	18 1016	100	309	18 1382	100	323	18 1750	100	322
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	18 0766	1	283	18 1022	50	309	18 1385	100	323	18 1756	100	322
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	18 0776	1	283	18 1200	100	304	18 1393	50	318	18 1804	100	319
	18 0778	1	283	18 1202	100	304	18 1394	100	318	18 1850	100	320
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	18 0782	1	283	18 1210	100	304	18 1400	1	248	18 1861	100	319
	18 0783	1	283	18 1212	100	304	18 1401	1	248	18 1862	100	319
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	18 0786	1	283	18 1220	100	304	18 1404	100	318	18 1864	100	319
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	18 0904	100	285	18 1303	1	355	18 1486	100	320	18 1894	100	319
	18 0906	100	285	18 1305	1	355	18 1487	100	322	18 1895	50	319
	18 0908	100	285	18 1307	1	355	18 1488	100	322	18 1900	10	326
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	18 0912	100	285	18 1313	1	355	18 1490	100	319	18 1904	10	326
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	18 0918	1	285	18 1319	1	355	18 1495	100	319	18 1914	25	326
	18 0920	1	285	18 1327	1	355	18 1496	100	319	18 1920	1 roll	327
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18 1982	1	327	18 2209	100	310	18 2464	100	310	18 2774	1	332
18 2040	1000	306	18 2210	100	310	18 2466	100	310	18 2775	1	332
18 2042	1000	306	18 2212	100	310	18 2468	100	310	18 2776	1	332
18 2046	1000	306	18 2214	100	310	18 2470	100	310	18 2778	1	332
18 2048	1000	306	18 2216	100	310	18 2472	100	310	18 2779	1	332
18 2049	1000	306	18 2218	100	310	18 2474	100	310	18 2980	1	266
18 2050	1000	306	18 2220	100	310	18 2476	100	310	18 3000	100	312
18 2051	1000	306	18 2222	50	310	18 2478	100	310	18 3002	100	312
18 2052	1000	306	18 2223	50	310	18 2480	100	310	18 3004	100	312
18 2054	1000	306	18 2224	50	310	18 2482	100	310	18 3008	50	312
18 2055	1000	306	18 2225	50	310	18 2484	100	310	18 3010	50	312
18 2056	1000	306	18 2226	50	310	18 2500	100	311	18 3012	50	312
18 2057	1000	306	18 2227	50	310	18 2502	100	311	18 3020	25	312
18 2058	1000	306	18 2242	100	309	18 2504	100	311	18 3022	25	312
18 2059	1000	306	18 2244	100	309	18 2506	100	311	18 3024	25	312
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18 2067	1000	306	18 2252	100	310	18 2600	1	233	18 3032	1	284
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18 2128	25	306	18 2408	100	310	18 2730	1	333	18 3131	1	284
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18 2132	25	306	18 2414	100	310	18 2736	1	333	18 3134	100	284
18 2133	25	306	18 2416	100	310	18 2738	1	334	18 3135	100	284
18 2134	25	306	18 2418	100	310	18 2740	1	334	18 3136	1	284
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18 2140	100	309	18 2422	100	310	18 2744	1	334	18 3138	1	284
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	18 3163	100	284	18 3372	1	289	18 3523	1	290	18 3712	1	291
	18 3164	100	284	18 3374	1	289	18 3524	1	290	18 3713	1	291
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	18 3166	100	284	18 3380	1	289	18 3526	1	290	18 3715	1	291
	18 3167	100	284	18 3400	100	287	18 3527	1	290	18 3798	1	286
	18 3168	100	284	18 3401	100	287	18 3528	1	290	18 3800	1	286
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	18 3342	1	289	18 3510	50	290	18 3658	1	292	18 4010	1 roll	354
	18 3344	1	289	18 3511	50	290	18 3700	100	291	18 4012	1 roll	354
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18 4062	1	352	18 4804	100	358	18 6113	25	325	19 0111	200	338
18 4064	1	352	18 4806	100	358	18 6114	25	325	19 0112	200	338
18 4066	1	352	18 4808	100	358	18 6115	25	325	19 0113	200	338
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18 4106	1 roll	355	18 4814	100	358	18 6121	25	325	19 0120	200	338
18 4108	1 roll	355	18 4816	100	358	18 6122	25	325	19 0121	200	338
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18 4112	1 roll	355	18 4820	100	358	18 6124	25	325	19 0126	100	338
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18 4212	1 roll	356	18 4870	50	359	18 8012	100	314	19 0302	100	341
18 4214	1 roll	356	18 4874	100	359	18 8014	1	314	19 0303	100	341
18 4216	1 roll	356	18 4876	100	359	18 8016	1	314	19 0304	100	341
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18 4222	1	356	18 4882	50	359	18 8704	100	315	19 0314	100	341
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18 4320	1	357	18 5018	500	309	19 0030	200	338	19 0342	100	341
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18 4462	500	307	18 6000	100	325	19 0040	200	338	19 0411	100	340
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