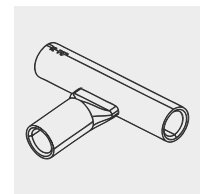
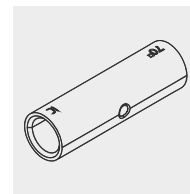
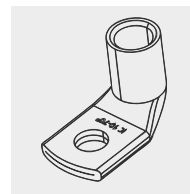
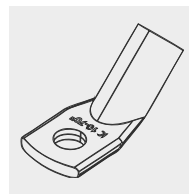
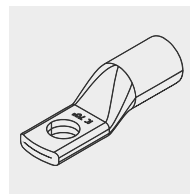
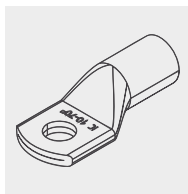




product
design
award



GENERAL CATALOG TOOLS

www.intercable-tools.com

intercable



INTERCABLE - HISTORY

Intercable is one of the world's leading manufacturers of professional electrical products for Utilities, Power Boards, Contractors, Electricians and Industry. Our main ambition is to improve efficiency, safety and quality of our customers' daily work. As a family owned company, established in 1972, we currently count more than 1.500 employees in our manufacturing plants around the world.

Our product range is attuned to LV ,MV and HV cable preparation and consists of five main product lines:

- insulated safety tools up to 1000V
- hydraulic and mechanical crimping and cutting tools
- stripping tools
- special electro technical devices
- cable accessories

Furthermore we are also leading in the development and production of special plastic and metal parts for the automotive market and so an important partner of the biggest car and truck manufacturers worldwide.

Quality is never an accident but the result of advantageous application of a certified quality system: Our Company comply with the latest DIN EN ISO 9001:2015 , ISO/ TS 16949:2009 and ISO 14001 International Standards. Constant internal and external audits help us to identify weaknesses and promote a continuous improvement in all the company processes.

Our tools are produced according to latest international IEC, DIN standards and are certified by independent, accredited German and Italian test institutes such us VDE, BG or CESI.

Our aim is a long lasting customer relation based on confidence. We daily try to recognize the demands and expectations of our customers to be able to fulfil them quickly and effectively but in any case to our customer's satisfaction. Further we satisfy the changing market needs by a constant improvement and development of our product range.

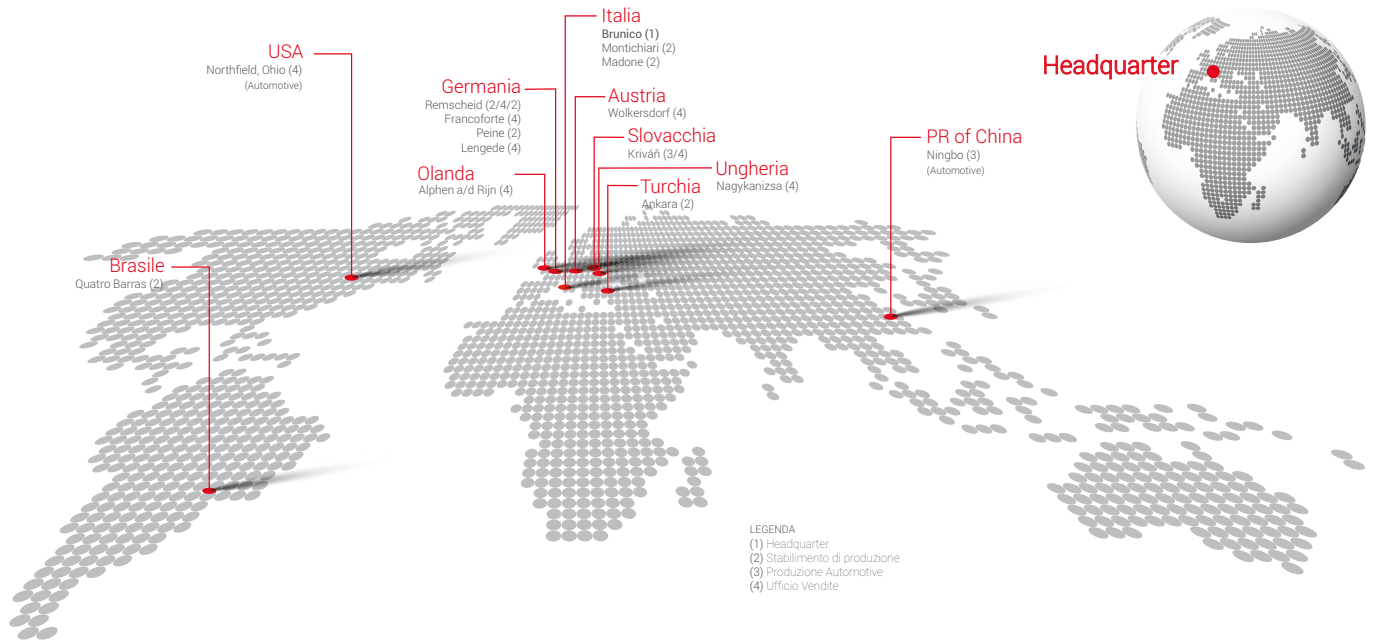
We are proud to be known as an expert and flexible partner on the international market.

THE GROUP

We are stronger as a group!

Through our headquarters in Brunico/South Tyrol and locations in Italy, Germany, Slovakia, China, Turkey and Brazil, we supply customers in the automotive, power distribution, industrial and railway sectors.

As a modern, industrial group we strive for the optimum usage of synergies within the group.





1.000V voltage test



Assembling of hydraulic tools in the headquarter



Assembling of hydraulic tools in the headquarter

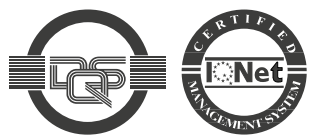
INTERCABLE STANDS FOR HIGH QUALITY

Products and service! An efficient organisation, as well as a quality management according to the EN ISO 9001 International Standards, guarantees optimum processes and continual improvement. In-house design and production in Italy and Germany and full commitment of our highly trained personnel is our main recipe of success.



Assembling of hydraulic tools in the headquarter

TECHNOLOGY IS OUR PASSION



DIN EN ISO 9001: Reg.-Nr. 067378
 ISO/TS 16949: Reg.-Nr. 067378

Our specialists set themselves a clear goal: provide workers in the electrical technology sector with the very best tools and equipment for performing their daily tasks. Our own innovation department with its highest qualified experts and the latest technologies in the planning and construction sector is the assurance for our success and the continuous improvements.



QUALITY CERTIFICATIONS



Quality Management System ISO 9001:2015



Environmental Management System ISO 14001

Quality Certificates:

- IATF 16949
- DIN EN ISO 9001
- ISO 14001
- OHSAS 18001

Other Quality Certificates:

- VDE-/GS-Certifications

Active member of:

- CEI (Italian Electro Technical Committee)
- UNI (Italian Standardisation Committee)
- Working groups of the European and International Standardisation Committee



STANDARD: IEC 60900

Live working or close to live parts working
- up to 1000V a.c. and 1500V d.c.

SAFETY TOOLS SUITABLE FOR
LIVE LINE WORKING ARE MARKED
WITH THE DOUBLE TRIANGLE



QUALITY AND SAFETY TESTS

INSULATING HAND TOOLS

Made totally or essentially from insulating materials except for inserts made from conductive material (reinforcement purpose), but with no exposed conductive parts.

SCOPE: Protection of users against electric shock and avoid short circuit between two parts of different potential

INSULATED HAND TOOLS

Made of conductive material, fully or partially covered by insulating material

SCOPE: Protection of users against electric shock



TECHNICAL INSPECTIONS



INTERNAL TESTING LABORATORY

- 3D-measuring systems
- 3D-videomeasuring systems (SmartScope)
- Hardness-testing systems
- Compression-tension testing machines (50 kN)
- Thermic chambers (until 300°C/-40°C to 180°C)
- Climate chamber (-70°C to 180°C / 0-99% humidity)
- High-tension testing devices (10 kV)
- High-current testing device up to 1.000 A
- Photomicrograph equipment (section analysis)
- Surface thickness measurement
- Coating testing device (high tension)
- Special ohmmeter
- Tightness test equipment
- Torque moment testing device
- Fischerscope X-ray
- Saltspray chamber

DIELECTRIC TEST

10kV at 50Hz or 60Hz for 3min

Linked to following conditioning:

- Water bath 24h - after dry wiping dielectric test
- Wet chamber 48h (23°C ±5°C) - after dry wiping dielectric test

IMPACT TEST

- Ambient temperature impact test(23°C ±5°C / 2m)
- Low temperature impact test (2h -25°C ±3°C / 0,6m)
- Extreme low temperature impact test (2h -40°C ±3°C / 0,6m)

ADHESION TEST

- a) of the insulation of the entire tool
 - 500N for 3min
 - handle must remain firmly on conducting part
- b) of conducting adjusting or switching elements

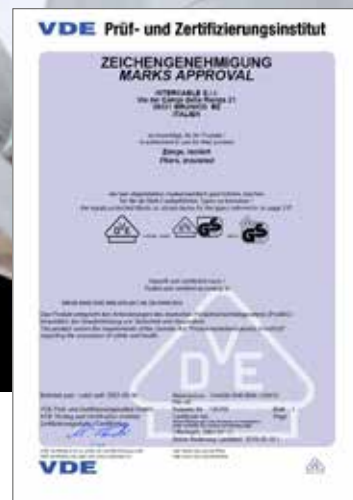


Climate chamber

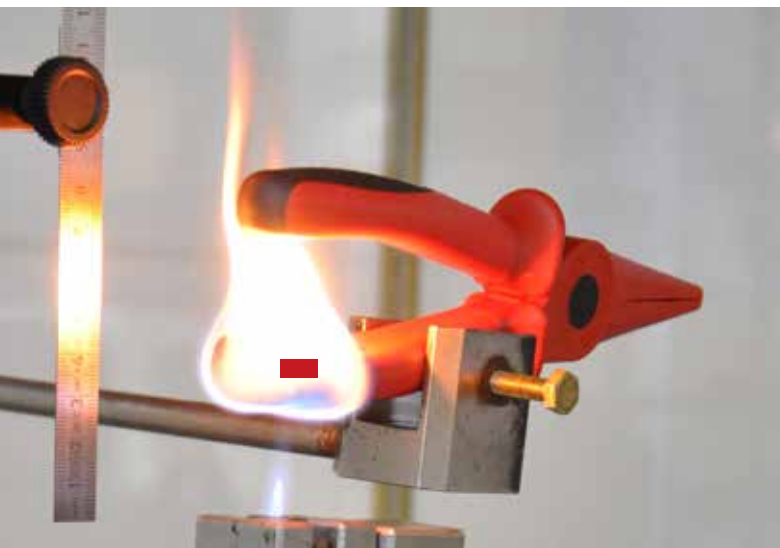


OUR QUALITY ASSURANCE PLAN

- Visual check
- Checking the compatibility of the tools for the final assembly
- Sampling tests
- Records
- Quality audits
- 100% dielectric 10kV for 10sec for every single tool that is marked 1000V



VDE - EN 60900 approval



FLAME RETARDANCY TEST

1. Step: yellow tipped blue flame of 20mm ± 2mm to be pointed for 10sec on the insulation
2. Step: withdrawn the flame and observe 20sec test piece
3. Step: test is passed if the flame height on the tool does not exceed 120mm during 20sec of observation period

INDENTATION TEST

Linked to following conditioning:

- Test pointing in horizontal conditions based on determined data (20N);
The test is considered successful if no electrical puncture, sparkover or flashover occurs during test period. (5kV x 3min)



SAFETY HAND TOOLS

INSULATED SCREWDRIVERS
INSULATED PLIERS
MECHANICAL CUTTING TOOLS

INSULATED WRENCHES
MODULAR INSULATED HANDTOOLS
TOOL CASES AND EQUIPMENT

11 - 62

STRIPPING TOOLS

63 - 88

TOOLS FOR MECHANICAL CONNECTORS

89 - 94

CUTTING TOOLS

MECHANIC CUTTING TOOLS
HYDRAULIC CUTTING TOOLS
SAFETY CUTTING UNIT

95 - 126

CRIMPING TOOLS

MECHANICAL CRIMPING TOOLS
HYDRAULIC CRIMPING TOOLS
CRIMPING DIES

127 - 184

PUNCHING TOOLS

185 - 200

HYDRAULICAL PUMPS

201 - 208

ACCESSORIES

209 - 212

ELECTROTECHNICAL EQUIPMENT

213 - 226

PERSONAL PROTECTIVE EQUIPMENT

227 - 240

ADDITIONAL RANGE

241 - 256

Already fan of *intercable* ?





SAFETY HAND TOOLS

INSULATED SCREWDRIVERS
INSULATED PLIERS
MECHANICAL CUTTING TOOLS
INSULATED WRENCHES
MODULAR INSULATED HANDTOOLS
TOOL CASES AND EQUIPMENT

THE QUALITY AND THE UNIQUE INTERCABLE DESIGN!

The new series of SLIM screwdrivers is the result of extensive studies performed in cooperation with numerous electrical installers.

Standard:
VDE 0682 / 201

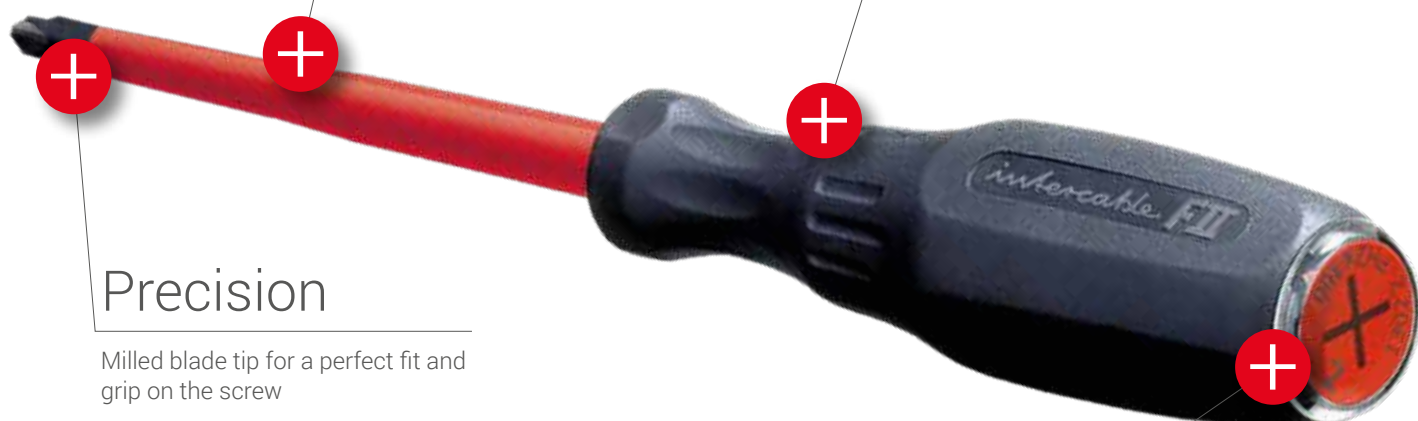


Slim

Very thin insulated blade diameter for a smooth workability in limited space

Ergonomic

Handles in non-slip material, guarantees the maximum force application with minimum strain



Precision

Milled blade tip for a perfect fit and grip on the screw

Clear

Color coding with respective blade symbol under a transparent, impact-resistant plastic lens for fast and reliable tool determination

Identification lens for an easy choice of the proper screwdriver
Color codification:



For slotted head screws
yellow



For "Phillips"-head screws
red



For "Pozidriv®"-head screws
green



For hex socket-head screws
white



For hex-head screws
violet



For spherical hex socket-head screws
grey



For **TORX®**-head screws
blue



For combined "Phillips"-head screws
red / yellow



For combined "Pozidriv®"-head screws
green / yellow

TORX®

registered trademark of
CAMCAR TEXTRON,
Rockford, Illinois, USA

INSULATED SCREWDRIVERS

Screwdrivers for slotted head screws - FUTUR II



mm	mm	mm	mm	Order No.
⊕↓		⊕		
2,5	75	0,4	175	1301025 *
3,0	100	0,5	200	1301030 *
3,5	100	0,6	200	1301035
4,0	100	0,8	200	1301040
4,5	125	1,0	230	1301045
5,5	125	1,0	230	1301055
6,5	150	1,2	255	1301065
8,0	175	1,2	290	1301080 *
10,0	200	1,6	320	1301100 *

- Blade in high resistance chromium-vanadium-molybdenum-steel, hardened, with surface burnish protection
- * NOT SLIM - Version

Screwdrivers for "Phillips" screws - FUTUR II



mm	mm	mm	Order No.
⊕			
0	60	160	13020 *
1	75	175	13021
2	100	205	13022
3	150	265	13023 *
4	200	320	13024 *

- Blade in high resistance chromium-vanadium-molybdenum-steel, hardened, with surface burnish protection
- * NOT SLIM - Version

Screwdrivers for "Pozidriv®" screws - FUTUR II



mm	mm	mm	Order No.
⊕*			
0	60	160	13030 *
1	75	175	13031
2	100	205	13032
3	150	265	13033 *

- Blade in high resistance chromium-vanadium-molybdenum-steel, hardened, with surface burnish protection
- * NOT SLIM - Version

INSULATED SCREWDRIVERS



Combination screwdriver "Phillips" - FUTUR II

mm	mm	mm	Order No.
1	75	175	13131
2	100	205	13132

- For combined slotted-/intersecting slot screws in electrical systems
- Blade in high resistance chromium-vanadium-molybdenum-steel, hardened, with surface burnish protection



Combination screwdriver "Pozidriv®" - FUTUR II

mm	mm	mm	Order No.
1	75	175	13141
2	100	205	13142

- For combined slotted-/intersecting slot screws in electrical systems
- Blade in high resistance chromium-vanadium-molybdenum-steel, hardened, with surface burnish protection



TORX® - Screwdriver - FUTUR II

mm	mm	mm	Order No.
10	60	160	1307010
15	75	175	1307015
20	75	180	1307020
25	75	180	1307025
30	100	215	1307030

- Blade in high resistance chromium-vanadium-molybdenum-steel, hardened, with surface burnish protection

INSULATED SCREWDRIVERS



Screwdriver for hexagon socket screws - FUTUR II

mm	mm	mm	Order No.
2	60	160	1304020
2,5	75	175	1304025
3	75	180	1304030
4	75	180	1304040
5	75	190	1304050
6	100	215	1304060
8	100	220	1304080

• Blade in high resistance chromium-vanadium-molybdenum-steel, hardened, with surface burnish protection



Ball-Point screwdriver for hexagon socket screws

mm	mm	mm	Order No.
2	100	200	1305020
2,5	100	200	1305025
3	100	205	1305030
4	100	205	1305040
5	100	215	1305050
6	125	230	1305060
8	150	270	1305080

• Blade in high resistance chromium-vanadium-molybdenum-steel, hardened, with surface burnish protection



Screwdriver for hexagon screws - FUTUR II

mm	mm	mm	Order No.
4	125	225	1306040
5	125	225	1306050
5,5	125	225	1306055
6	125	230	1306060
7	125	230	1306070
8	125	230	1306080
9	125	230	1306090
10	125	240	1306100
11	125	240	1306110
12	125	240	1306120
13	125	240	1306130

• Blade in high resistance chromium-vanadium-molybdenum-steel, hardened, with surface burnish protection

INSULATED SCREWDRIVERS



1000V

Magazine screwdriver

Length	Order No.
230 mm	119300

- Bit Holder 1/4"; magnetic
- The transparent selection disc inside the handle prevents the bits from falling out of the magazine
- Includes 6 bits of the standard equipment (25 mm long) as shown in picture on the left
- Power grip: high-quality plastic, shock resistant, red, cadmium-free
- Bit sizes to 119300: Slot: 4.5 x 0.6 / 6.5 x 1.2 / 8.0 x 1.6
- Cross slot: PH 1 / PH 2 / PH



Phase screwdriver

mm	mm	mm	Order No.
⌀			
3,0	65	140	AV6104
3,5	105	190	AV6105



INSULATED SCREWDRIVERS



Screwdriver set - Slotted/"Phillips" - head

Equipment	Order No.
1 Slotted head screwdriver 0,8 x 4 x 100 - SLIM	1399001
1 Slotted head screwdriver 1 x 5,5 x 125 - SLIM	
1 Screwdriver "Phillips" PH1 x 75 - SLIM	
1 Screwdriver "Phillips" PH2 x 100 - SLIM	



Screwdriver set - "Phillips"

Equipment	Order No.
1 Screwdriver "Phillips" PH0 x 60	1399003
1 Screwdriver "Phillips" PH1 x 75 - SLIM	
1 Screwdriver "Phillips" PH2 x 100 - SLIM	



Combination screwdriver set - "Phillips"

Equipment	Order No.
1 Combination screwdriver "Phillips" +- PH1 x 80 - SLIM	1399005
1 Combination screwdriver "Phillips" +- PH2 x 100 - SLIM	



INSULATED SCREWDRIVERS



Screwdriver set - slotted head

Equipment	Order No.
1 Slotted head screwdriver 0,5 x 3 x 100	1399002
1 Slotted head screwdriver 0,8 x 4 x 100 - SLIM	
1 Slotted head screwdriver 1 x 5,5 x 125 - SLIM	
1 Slotted head screwdriver 1,2 x 6,5 x 150 - SLIM	



Screwdriver set - "Pozidriv®"

Equipment	Order No.
1 Screwdriver "Pozidriv®" PZ0 x 60	1399004
1 Screwdriver "Pozidriv®" PZ1 x 75 - SLIM	
1 Screwdriver "Pozidriv®" PZ2 x 100 - SLIM	



Combination screwdriver set - "Pozidriv®"

Equipment	Order No.
1 Combination screwdriver "Pozidriv®" + PZ1 x 80 - SLIM	1399006
1 Combination screwdriver "Pozidriv®" + PZ2 x 100 - SLIM	

INSULATED SCREWDRIVERS



Screwdriver set for hexagon screws

Dimensions	Order No.
270 x 195 x 35 mm	1399010

Equipment:

- 1 Hexagon screw - size 4 1306 040
- 1 Hexagon screw - size 5 1306 050
- 1 Hexagon screw - size 5,5 1306 055
- 1 Hexagon screw - size 6 1306 060
- 1 Hexagon screw - size 7 1306 070
- 1 Hexagon screw - size 8 1306 080
- 1 Hexagon screw - size 9 1306 090
- 1 Hexagon screw - size 10 1306 100
- 1 Hexagon screw - size 11 1306 110
- 1 Hexagon screw - size 12 1306 120
- 1 Hexagon screw - size 13 1306 130



Screwdriver set for hexagon socket screws

Dimensions	Order No.
290 x 165 x 35 mm	1399011

Equipment:

- 1 Hexagon socket screw - size 2 1304 020
- 1 Hexagon socket screw - size 2,5 1304 025
- 1 Hexagon socket screw - size 3 1304 030
- 1 Hexagon socket screw - size 4 1304 040
- 1 Hexagon socket screw - size 5 1304 050
- 1 Hexagon socket screw - size 6 1304 060
- 1 Hexagon socket screw - size 8 1304 080



Ball-Point screwdriver set for hexagon socket screws

Dimensions	Order No.
290 x 165 x 35 mm	1399012

Equipment:

- 1 Ball-Point screwdriver - size 2 1305 020
- 1 Ball-Point screwdriver - size 2,5 1305 025
- 1 Ball-Point screwdriver - size 3 1305 030
- 1 Ball-Point screwdriver - size 4 1305 040
- 1 Ball-Point screwdriver - size 5 1305 050
- 1 Ball-Point screwdriver - size 8 1305 080



TORX® - Screwdriver set

Dimensions	Order No.
290 x 165 x 35 mm	1399013

Equipment:

- 1 **TORX®** - Screwdriver - size 10 1307 010
- 1 **TORX®** - Screwdriver - size 15 1307 015
- 1 **TORX®** - Screwdriver - size 20 1307 020
- 1 **TORX®** - Screwdriver - size 25 1307 025
- 1 **TORX®** - Screwdriver - size 30 1307 030

INSULATED SCREWDRIVERS



Torque screwdriver set 0,8 - 5,0 Nm

Description	Order No.
Torque screwdriver set	1308804

Suitable for controlled fastening in the presence of live parts up to 1,000V AC, e.g. In case of switching devices.

Technical Characteristics:

- Insulation according IEC 60900/VDE0682/201
- Torque continually variable from 0,8 to 5,0 Nm
- Bit-holder with galvanic insulation
- Tested by VDE, ergonomically shaped handle

Set Equipment:

- 1 Torque screwdriver + insulated Bit-holder, T-adjusting tool 0,8 Nm 13085
- 1 Blade slotted screw 0,8 x 4 mm 1381040
- 1 Blade slotted screw 1,0 x 5,5 mm 1381055
- 1 Blade for screwdriver PH size 1 13821
- 1 Blade for screwdriver PH size 2 13822
- 1 Blade for screwdriver PZ size 1 13831
- 1 Blade for screwdriver PZ size 2 13832
- 1 Blade for screwdriver SW3,0 1384030
- 1 Blade for screwdriver SW4,0 1384040
- Plastic case with foam insert 1308800

* Individual set-equipments on request

Torque screwdriver set 0,8 - 5,0 Nm - ZAK1

Description	Order No.
Torque screwdriver set - ZAK1	1308808

Suitable for controlled fastening in the presence of live parts up to 1,000V AC, e.g. In case of switching devices.

Technical Characteristics:

- Insulation according IEC 60900/VDE0682/201
- Torque continually variable from 0,8 to 5,0 Nm
- Bit-holder with galvanic insulation
- Tested by VDE, ergonomically shaped handle

Set Equipment:

- 1 Torque screwdriver + insulated Bit-holder, T-adjusting tool 0,8 Nm 13085
- 1 Slim change bit Torx T10 1387010
- 1 Slim change bit Torx T15 1387015
- 1 Slim change bit Torx T25 1387025
- 1 Slim change bit plus/minus PZ1 13841
- 1 Slim change bit plus/minus PZ2 13842
- Nylon folding bag with velcro 1308800B

* Individual set-equipments on request



INSULATED SCREWDRIVERS



Torque screwdriver set 0,8 - 5,0 Nm - ZAK2

Description	Order No.
Torque screwdriver set - ZAK2	1308811

Suitable for controlled fastening in the presence of live parts up to 1,000V AC, e.g. In case of switching devices.

Technical Characteristics:

- Insulation according IEC 60900/VDE0682/201
- Torque continually variable from 0,8 to 5,0 Nm
- Bit-holder with galvanic insulation

Set Equipment:

- 1 Torque screwdriver + insulated Bit-holder, T-adjusting tool 0,8 Nm 13085
- 1 Slim change bit Torx T10 1387010
- Telescope plastic packaging

* Individual set-equipments on request



Adjusting tool Quickcheck

Description	Order No.
Adjusting tool Quickcheck	13091

Suitable for all torque screwdrivers that can be set to the test value of 2.8 Nm.

Technical Characteristics:

- Regular inspection of the torque tool guarantees safe and precise working with the correct torque value
- Quick and easy inspection of the torque tool due to its mobile, compact shape
- Test result can be quite clearly read at the LED light.



Grip 2 - 7 Nm

Description	Order No.
Grill 2 - 7 Nm	13090

Suitable for controlled fastening in the presence of live parts up to 1,000 V AC, to be used exclusively in combination with a SlimTorque VDE bit-holder for 6 mm SlimBits.

Technical Characteristics:

- Accuracy ±6%, traceable to national standards
- Insulation in accordance with IEC 60900/VDE0682/201 standard
- Infinitely adjustable torque from 2 - 7 Nm with setting tool Torque-Setter (included).
- Ergonomic multi-component handle, protective insulation 1000V AC, GS approved.
- Optimally matched to the torque range grip size.
- Click signal when reaching the set torque value.
- Compatible with all 138xxseries SLIM blades in combination with the bit-holder
- Bit-holder with galvanic isolation
- SlimTorque VDE bit holder (included) for 6 mm slim bits

Set Equipment:

- 1 Torque screwdriver 2 - 7 Nm
- 1 Insulated Bit-holder
- 1 T-adjusting tool

INSULATED SCREWDRIVERS



ISO 2380-1-2 (excluded AC1501,
AC1503) UNI 10562-1-2



Screwdriver for slotted head screws - FUTUR

Description	Order No.	mm	mm	mm	mm
		⊖		⊖	
Screwdriver	AC1501	3,0	75	0,6	155
	AC1502	4,0	100	0,8	180
	AC1503	4,5	125	1,0	215
	AC1504	5,5	150	1,0	250
	AC1505	6,5	150	1,2	250
	AC1506	8,0	150	1,6	260
	AC1507	10,0	200	1,6	320

- Insulation of the blade and handles by shock-proof thermoplastic resin
- High resistance alloy, hardened steel with surface burnish protection
- Ergonomic handles for operations with maximum effort



ISO 8764-1-2
UNI ISO 8764-1-2



Screwdriver for Phillips screws - FUTUR

Description	Order No.	mm	mm	mm
		⊕		
Screwdriver	AC1600	0	60	140
	AC1601	1	80	170
	AC1602	2	100	200
	AC1603	3	150	260
	AC1604	4	200	320

- Insulation of the blade and handles by shock-proof thermoplastic resin
- High resistance alloy, hardened steel with surface burnish protection
- Ergonomic handles for operations with maximum effort



ISO 8764-1-2
UNI ISO 8764-1-2

Screwdriver for Pozidriv® screws - FUTUR

Description	Order No.	mm	mm	mm
		⊕		
Screwdriver	AC1610	0	60	140
	AC1611	1	80	170
	AC1612	2	100	200
	AC1613	3	150	260
	AC1614	4	200	320

- Insulation of the blade and handles by shock-proof thermoplastic resin
- High resistance alloy, hardened steel with surface burnish protection
- Ergonomic handles for operations with maximum effort

INSULATED SCREWDRIVERS



Set - screwdrivers - FUTUR

Description	Order No.	dimensions	-
Set - screwdrivers	AS2001	112 x 345 mm	-

• Screwdriver for slotted head screws:

Equipment:

- 0.6 x 3 x 75 mm AC1501
- 0.8 x 4 x 100 mm AC1502
- 1.0 x 5.5 x 150 mm AC1504
- 1.6 x 8 x 150 mm AC1506



Set - screwdrivers - FUTUR

Description	Order No.	dimensions	-
Set - screwdrivers	AS2002	95 x 285 mm	-

• Screwdriver for Phillips screws:

Equipment:

- "Phillips" PH0 x 60 mm AC1600
- "Phillips" PH1 x 80 mm AC1601
- "Phillips" PH2 x 100 mm AC1602



Set - screwdrivers - FUTUR

Description	Order No.	dimensions	-
Set - screwdrivers	AS2003	132 x 335 mm	-

Equipment:

- Screwdriver for slotted head screws:
 - 0.6 x 3 x 75 mm AC1501
 - 0.8 x 4 x 100 mm AC1502
 - 1.0 x 5.5 x 150 mm AC1504
- Screwdriver for Phillips screws:
 - "Phillips" PH1 x 80 mm AC1601
 - "Phillips" PH2 x 100 mm AC1602



Set - screwdrivers - FUTUR

Description	Order No.	dimensions	-
Set - screwdrivers	AS2004	112 x 345 mm	-

• Screwdriver for Pozidriv® screws:

Equipment:

- "Pozidriv®" PZ0 x 60 mm AC1610
- "Pozidriv®" PZ1 x 80 mm AC1611
- "Pozidriv®" PZ2 x 100 mm AC1612

1

intercable

INSULATED PLIERS

THE QUALITY AND THE UNIQUE INTERCABLE DESIGN!

This new series of PLIERS is the result of extensive studies performed in cooperation with numerous electrical installers.

Standards:

ISO 5746

UNI 9894

VDE 0682-201




Slim
Makes it easier for working in hard-to-reach areas

Resistant
Blank produced from high alloy tool steel, cutting edges specially hardened, chrome-plated surface

Powerful
Extra long cutting edges for large cable cross sections, suitable for cutting soft and hard wire, as well as piano wire

Smooth
One-hand operation due to a special, smooth-running joint

Ergonomic
The ergonomic handle guarantees the maximal application of the force with a minimum of labor

Environmentally friendly
Skin-friendly, special plastic material free of cadmium and heavy metals

24

INSULATED PLIERS



Engineers pliers 2K

Description	Order No.	Length
Engineers pliers 2K	1201160	160 mm
	1201180	180 mm
	1201200	200 mm

- Head laterally rounded



Telephone pliers with straight jaws 2K

Description	Order No.	Length
Telephone pliers with straight jaws 2K	1203160	160 mm
	1203200	200 mm

- For cutting soft and medium hard wires



Telephone pliers with bent jaws 2K

Description	Order No.	Length
Telephone pliers with bent jaws 2K	1204160	160 mm
	1204200	200 mm

- Head laterally rounded



Flat nose pliers 2K

Description	Order No.	Length
Flat nose pliers 2K	1206160	160 mm

INSULATED PLIERS



Round nose pliers 2K

Description	Order No.	Length
Round nose pliers 2K	1207160	160 mm



Wire stripper 2K

Description	Order No.	Length
Wire stripper 2K	1205160	160 mm

- With locking screw and opening spring
- For cables from 0,75 to 6 mm²



Side cutter 2K

Description	Order No.	Length
Side cutter 2K	1202160	160 mm

- Very slim design with dropped forged head
- For cutting hard and soft wire



Pipe wrench 2K

Description	Order No.	Length
Pipe wrench 2K	1110250	240 mm

- Adjustable (7 different positions)
- Chrome-Vanadium

INSULATED PLIERS OF INTERCABLE ISOPLUS



THE QUALITY AND DISTINCTIVE DESIGN OF INTERCABLE guarantees the maximum degree of ergonomics and the highest level of safety

These pliers are made entirely of shock-resistant plastic with excellent insulation and mechanical properties and can be used even at very low temperatures down to -40 ° C. The completely insulated headboard and the jaws are insulated from each other to prevent the danger of a short-circuit during their use.

The benefit of the pliers is on the contrary to conventional metal models with a weight reduction of approx. 30-40%. All Intercable insulated pliers comply with applicable regulations and are approved by an accredited laboratory. Special custom-made heads on request.

2 in 1

- Gripping surface with 3 indentations for various cable diameters
- Cutting inserts

Powerful

Cutting inserts made of high-strength special steel, hardened and also suitable for cutting hard steel wire.

The highest level of safety

Completely made of impact-resistant, glass fibre-reinforced plastic, no metal parts in contact zones

Ergonomic

The ergonomic handle guarantees the maximal application of the force with a minimum of labor



INSULATED PLIERS



Insulating gripping pliers ISOplus 2K

Description	Order No.	Length
Insulating gripping pliers ISOplus 2K	11091	180 mm

- Gripping surface with 8 indentations for various cable diameters
- No exposed metal parts



Engineers pliers ISOplus 2K

Description	Order No.	Length
Engineers pliers ISOplus 2K	11092	190 mm

- Extra long blades
- Corrosion protection treatment of the cutting edges
- For copper and aluminium cables with maximum 16 mm²
- Gripping surface with 3 indentations for various cable diameters



Cable cutter D15 ISOplus 2K

Description	Order No.	Length
Cable cutter D15 ISOplus 2K	11094	170 mm

- For cutting flexible Al and Cu conductors up to 50 mm²
- High cutting capacity for the smallest dimensions
- Blades induction hardened



Insulating telephone pliers ISOplus 2K

Description	Order No.	Length
Insulating telephone pliers D15 ISOplus 2K	11095	200 mm

- Gripping surface toothed
- Thin head for operation in restricted places
- No exposed metal parts

CABLE CUTTER AND CRIMPER ELECTRICIAN SCISSORS



Special blade design: to cut and strip cables



To cut Cu/Al cables up to 50 mm²



Special slot to crimp (0,5 - 4 mm²)

Strip

easy to strip of cables due to unique shape

Cut

non slip blade with micro-indentations
heavy duty stainless steel blades

Durable

possibility to readjust the tool to avoid the natural wear

Crimp

crimping of terminal-sleeves from 0,5 up to 4mm²

Suitable

2 component handle for a perfect grip to ensure the best cutting performance



Cable cutter and crimper electrician scissor 2K + Safetybox

Description	Order No.	Blade	Length
Scissor with Safetybox	16020-F1	straight	160 mm

- To cut Cu/Al cables up to 50 mm²
- With slot to crimp insulated or non insulated end sleeves from 0,5 to 4 mm²
- Blades with optimized teeth
- High cutting performance
- Loose-free screw/pin hinge
- 2 component handle

Attention: Not suitable for work under voltage!

MECHANICAL CUTTING TOOLS



Special electricians' scissors

Description	Order No.	Blade	Length
Special scissors	16011	straight	140 mm

- Loose-free screw/pin fixing
- High cutting performance
- Blades with micro-toothing

Attention: Not suitable for work under voltage!

Special electricians' scissors 2K

Description	Order No.	Blade	Length
Special scissors	16012	straight	140 mm

- 2-component handles
- High cutting performance
- Blades with optimized teeth
- Loose-free screw/pin fixing

Attention: Not suitable for work under voltage!

Cable cutter scissors + safety box and Voltage tester

Description	Order No.
1 Cable scissors - 16020-F1	16020-CF1
1 Voltage tester	

- Voltage range: 50 - 600 VAC, 50 - 60 Hz
- Voltage display: optical and acoustic signal
- Application range: 0 - 50°C

Suitable for determining the voltage without contact



Safetybox

Description	Order No.
Safetybox empty for model 1601 1, 1601 2, 1602 0, 1604 0	16029

MECHANICAL CUTTING TOOLS



• Universal cutting blade



Universal knife with clappable blade protection

Description	Order No.	Blade	Length
Cable knife	AV3910	interch. 50 mm	185 mm
Spare blade	AV3911	-	50 mm

- 1000V insulated tool
- With replaceable standard blade (thickness 0,65 mm)
- Made of shock-proofed material
- Integrated, captive blade guard



Cable stripping knife with clappable blade protection

Description	Order No.	Blade	Length
Cable knife	AV3920	interch. 50 mm	185 mm
Spare blade	AV3921	-	50 mm

- 1000V insulated tool
- Specially hardened blade suitable for stripping cables
- With replaceable solid blade and insulated blade-back
- Made of shock-proofed material
- Integrated, captive blade guard



- Special stripping blade shape
- Special blade grinding suitable for stripping cable without damaging the individual wires



Special cable stripping knife with ceramic blade

Description	Order No.	Blade	Length
Cable knife	AV3930	fixed 46 mm	185 mm

- 1000V insulated tool
- Integrated, captive blade guard
- High cutting capacity

No replacing blade



- Special blade grinding suitable for stripping cable without damaging the individual wires
- Individual wires
- Insulating blade with a very long service life



Cable stripping knife with safety cap

Description	Order No.	Blade	Length
Cable knife	288700	fixed 47 mm	175 mm

- Special blade with guide blade prevents damage of conductor strands
- For removal of insulation and sheath
- Blade and blade back sharpened
- Blade of tempered stainless steel
- Insulation of tough non-brittle plastic



MECHANICAL CUTTING TOOLS





 C 1000V
 EN/IEC60900:2004

Insulated electrician's shears 2K

Description	Order No.	Length	Weight
Electrician shears	16032	180 mm	100 g

- Adjustable screwjoint
- High cutting performance
- Surface treatment: burnished and polished
- 2-component-handles





 C 1000V
 EN/IEC60900:2004

Side cutter 2K

Description	Order No.	Length	Weight
Side cutter 2K	1202160	160 mm	208 g

- Very slim design of the head with pronounced tip shape
- For cutting hard and soft wire
- Induction hardened precision cutting
- High cutting performance
- 2-component impact resistant insulated handles





 C 1000V
 EN/IEC60900:2004

Cable cutter D17 2K

APPLICATION RANGE	max. 50 mm ²
SUGGESTED APPLICATION	Copper and Aluminium

Description	Order No.	Length	Weight
Cable cutter D17	1602160	160 mm	218 g

- High cutting capacity for the smallest dimensions
- With adjustable screw joint
- Special tool steel with chrome finish
- Handles of impact resistant plastic in 2-component-design
- Jaw opening: 17 mm





 C 1000V
 EN/IEC60900:2004

Cable cutter D22 2K

APPLICATION RANGE	Ø 25 mm / 80 mm ²
SUGGESTED APPLICATION	Copper and Aluminium

Description	Order No.	Length	Weight
Cable cutter D22	1602200	200 mm	345 g

- With break down and resaw (1st and 2nd cutting edge)
- High cutting capacity for the smallest dimensions
- Easy and clean cut with single hand use
- With adjustable screw joint
- Special tool steel with chrome finish
- Handles of impact resistant plastic in 2-component-design

MECHANICAL CUTTING TOOLS



MultiCutter 3 in 1

Description	Order No.	Length	Weight
MultiCutter 3 in 1	MSA180	185 mm	0,270 kg

- Multifunctional cable shears off wire and cut
- Stripper: Cable $\varnothing < 11$ mm
- Soft wire $< \varnothing 6$ mm,
- Hard wire $< \varnothing 2$ mm,
- Inductively hardened cutting edges
- Ergonomic grip
- Stripping (dismantling): Cable $\varnothing 5 - 16$ mm, $3 \times 1,5 \text{ mm}^2 < 5 \times 1,5 \text{ mm}^2$
- Stripping (insulation): Cable $< \varnothing 5$ mm

Attention: Not suitable for work under voltage!



Wire cutter

Description	Order No.	Length	Weight
Wire cutter	MKS200	200 mm	0,330 kg

- Precision cutter for piano wire 62 HRC
- Cutting length: 24 mm
- Special tool steel, oil-hardened
- Leverage, thus 40% power savings

Attention: Not suitable for work under voltage!

MECHANICAL CUTTING TOOLS



ISO 5746



ISO 5749



ISO 5745



ISO 5745



Engineers pliers

Description	Order No.	Length blank	Weight
Engineers pliers	AP0116N	160 mm	210 g
Engineers pliers	AP0119N	180 mm	240 g

- For cutting soft and medium hard wires
- High resistant gripping surface

Diagonal cutting nipper

Description	Order No.	Length blank	Weight
Diagonal cutting nipper	AP0616N	160 mm	190 g

- For cutting soft and medium hard wires

Telephone pliers with straight jaws

Description	Order No.	Length blank	Weight
Telephone pliers	AP0416N	160 mm	160 g
Telephone pliers	AP0420N	200 mm	190 g

- For cutting soft and medium hard wires
- Toothed gripping surface

Telephone pliers with bent jaws

Description	Order No.	Length blank	Weight
Flat nose pliers	AP0516N	160 mm	155 g
Flat nose pliers	AP0520N	200 mm	195 g

- For cutting soft and medium hard wires
- Toothed gripping surface

MECHANICAL CUTTING TOOLS



ISO 5745



Flat nose pliers

Description	Order No.	Length blank	Weight
Flat nose pliers	AP0216N	160 mm	160 g

- Toothed gripping surface



ISO 5745



Round nose pliers

Description	Order No.	Length blank	Weight
Round nose pliers	AP0316N	160 mm	160 g

- Toothed gripping surface



ISO 5745



Set - pliers and cable cutter

Description	Order No.	Length blank	Weight
Set	AS1001	240 x 260mm	-

- 1 engineers pliers 180mm AP0119N
- 1 diagonal cutting nipper 160mm AP0616N
- 1 telephone pliers with straight jaws AP0420N
- 1 cable cutter AP1017

INSULATED WRENCHES



1000V
IEC 60900

Insulated adjustable wrench

Description	Order No.	Opening	Length	Weight
Adjustable wrench	151904	0 - 13 mm	110 mm	140 g
	151906	0 - 20 mm	130 mm	190 g
	151908	0 - 27 mm	210 mm	260 g
	151910	0 - 30 mm	260 mm	400 g
	151912	0 - 34 mm	310 mm	870 g
	151915	0 - 44 mm	360 mm	1230 g
	151918	0 - 53 mm	450 mm	1900 g

- Read off scale for jaw opening
- Hardened and tempered alloy steel
- Dip insulation
- Shockproof resin insulation
- Not recommended for working on live parts



D'E GS C 1000V
IEC 60900

Insulated open-end wrench

Description	Order No.	Size	Length	Weight
Open-end wrench	151306	6	76 mm	20 g
	151307	7	82 mm	20 g
	151308	8	96 mm	20 g
	151309	9	105 mm	24 g
	151310	10	110 mm	29 g
	151311	11	115 mm	33 g
	151312	12	130 mm	44 g
	151313	13	137 mm	48 g
	151314	14	140 mm	54 g
	151315	15	150 mm	58 g
	151316	16	160 mm	70 g
	151317	17	161 mm	84 g
	151318	18	163 mm	100 g
	151319	19	175 mm	105 g
	151320	20	172 mm	149 g
	151321	21	200 mm	159 g
	151322	22	200 mm	192 g
	151324	24	220 mm	242 g
	151327	27	242 mm	322 g
	151330	30	285 mm	343 g
151332	32	280 mm	500 g	
151334	34	280 mm	500 g	
151336	36	310 mm	575 g	

- Hardened and tempered alloy steel
- Dip insulation
- Shockproof resin insulation

INSULATED WRENCHES

Insulated 12-point wrench



Description	Order No.	Ⓜ Size	Length	Weight
12-point wrench	161306	6	146 mm	41 g
	161307	7	151 mm	50 g
	161308	8	159 mm	62 g
	161309	9	157 mm	68 g
	161310	10	179 mm	84 g
	161311	11	183 mm	90 g
	161312	12	195 mm	106 g
	161313	13	188 mm	113 g
	161314	14	197 mm	135 g
	161315	15	191 mm	160 g
	161316	16	218 mm	175 g
	161317	17	204 mm	205 g
	161318	18	236 mm	227 g
	161319	19	240 mm	296 g
	161320	20	250 mm	300 g
	161321	21	264 mm	305 g
	161322	22	255 mm	308 g
	161324	24	268 mm	422 g
	161327	27	290 mm	455 g
	161330	30	272 mm	561 g
161332	32	317 mm	646 g	
161334	34	322 mm	1060 g	
161336	36	306 mm	1060 g	

- Hardened and tempered alloy steel
- Dip insulation
- Shockproof resin insulation

Insulated 90° bent 12-point wrench



Description	Order No.	Ⓜ Size	Dimensions	Weight
90° bent 12-point wrench	161410	10	70 x 190 mm	100 g
	161412	12	70 x 195 mm	100 g
	161413	13	70 x 215 mm	180 g
	161414	14	80 x 245 mm	220 g
	161417	17	90 x 245 mm	240 g
	161418	18	90 x 245 mm	240 g
	161419	19	95 x 245 mm	240 g
	161420	20	100 x 250 mm	280 g
	161422	22	100 x 250 mm	280 g
	161424	24	100 x 250 mm	280 g
	161430	30	110 x 260 mm	470 g

- Hardened and tempered alloy steel
- Dip insulation
- Shockproof resin insulation
- For nuts placed in hard-to-get-at positions

INSULATED WRENCHES



Insulated hex socket T-wrench

Description	Order No.	Ⓜ Size	Dimensions	Weight
Hex socket T-wrench 200mm shank length	137410	10	160 x 200 mm	310 g
	137411	11	160 x 200 mm	330 g
	137412	12	160 x 200 mm	350 g
	137413	13	160 x 200 mm	360 g
	137414	14	160 x 200 mm	440 g
	137416	16	160 x 200 mm	450 g
	137417	17	160 x 200 mm	450 g
	137418	18	160 x 200 mm	470 g
	137419	19	160 x 200 mm	510 g
	137420	20	160 x 200 mm	510 g
	137422	22	160 x 200 mm	520 g
	137424	24	160 x 200 mm	540 g

- 200 mm shank length
- Hardened and tempered alloy steel
- Dip insulation
- Shockproof resin insulation



Insulated hex socket T-wrench long

Description	Order No.	Ⓜ Size	Dimensions	Weight
Hex socket T-wrench 300mm shank length	138410	10	160 x 300 mm	370 g
	138411	11	160 x 300 mm	380 g
	138412	12	160 x 300 mm	400 g
	138413	13	160 x 300 mm	420 g
	138414	14	160 x 300 mm	470 g
	138416	16	160 x 300 mm	520 g
	138417	17	160 x 300 mm	520 g
	138418	18	160 x 300 mm	560 g
	138419	19	160 x 300 mm	560 g
	138420	20	160 x 300 mm	600 g
	138422	22	160 x 300 mm	600 g
	138424	24	160 x 300 mm	660 g

- 300 mm shank length
- Hardened and tempered alloy steel
- Dip insulation
- Shockproof resin insulation



Insulated cross wrench

Description	Order No.	Ⓜ Size	Dimensions	Weight
Cross wrench	121401	10 11 14 17	140 x 140 mm	220 g
	121402	10 12 14 17	140 x 140 mm	220 g
	121403	11 12 13 17	140 x 140 mm	220 g
	121404	10 13 14 17	140 x 140 mm	230 g
	121405	11 13 14 17	140 x 140 mm	230 g
	121406	13 17 19 22	140 x 140 mm	340 g
	121407	14 17 19 22	140 x 140 mm	360 g
	121408	10 11 12 13	140 x 140 mm	200 g
	121409	10 11 13 17	140 x 140 mm	220 g

- Hardened and tempered alloy steel
- Dip insulation
- Shockproof resin insulation

INSULATED WRENCHES



Insulated 90° hex wrench

Description	Order No.	Ⓢ Size	Dimensions	Weight
90° hex wrench	116325	2,5	35 x 104 mm	30 g
	116303	3	35 x 104 mm	31 g
	116304	4	35 x 104 mm	34 g
	116305	5	35 x 106 mm	36 g
	116306	6	40 x 110 mm	46 g
	116308	8	45 x 120 mm	80 g
	116310	10	50 x 120 mm	125 g

- Hardened and tempered alloy steel
- Shockproof resin insulation



Insulated 90° hex wrench heavy duty

Description	Order No.	Ⓢ Size	Dimensions	Weight
90° hex wrench heavy duty	116505	5	35 x 150 mm	75 g
	116506	6	40 x 150 mm	88 g

- Hardened and tempered alloy steel
- Shockproof resin insulation



Insulated hex T-wrench light-weight

Description	Order No.	Ⓢ Size	Dimensions	Weight
Hex T-wrench light-weight	117325	2,5	95 x 115 mm	80 g
	117303	3	95 x 115 mm	80 g
	117304	4	95 x 115 mm	80 g
	117305	5	95 x 115 mm	80 g
	117306	6	95 x 115 mm	90 g

- Hardened and tempered alloy steel
- Shockproof resin insulation



Insulated hex T-wrench heavy duty

Description	Order No.	Ⓢ Size	Dimensions	Weight
Hex T-wrench heavy duty	117504	4	95 x 160 mm	105 g
	117505	5	95 x 160 mm	105 g
	117506	6	95 x 160 mm	110 g
	117508	8	95 x 160 mm	115 g
	117510	10	95 x 160 mm	120 g
	117513	13	95 x 160 mm	145 g

- Hardened and tempered alloy steel
- Shockproof resin insulation

INSULATED WRENCHES



1000V
IEC 60900

Insulated hex T-wrench small

Description	Order No.	Ⓜ Size	Dimensions	Weight
Hex T-wrench small	117973	5	70 x 120 mm	80 g

- Hardened and tempered alloy steel
- Shockproof resin insulation



1000V
IEC 60900

Insulated hex T- wrench long

Description	Order No.	Ⓜ Size	Dimensions	Weight
Hex T-wrench long	117972	5	90 x 200 mm	105 g
	117970	6	90 x 200 mm	105 g

- Hardened and tempered alloy steel
- Shockproof resin insulation



1000V
IEC 60900

Insulated hex T-wrench extra long

Description	Order No.	Ⓜ Size	Dimensions	Weight
Hex T- wrench extra long	117335	5	90 x 240 mm	100 g
	117336	6	90 x 240 mm	115 g
	117338	8	90 x 240 mm	130 g
	117331	10	90 x 240 mm	115 g

- Hardened and tempered alloy steel
- Shockproof resin insulation

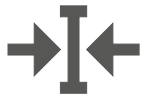
INTERCABLE MODULAR INSULATED HANDTOOLS 1000V



Tools made of shockproof insulated material

Standards:
ISO 1174-1
DIN 3120

Tools are suitable for very low temperature use: down to -40°C



Interchangeable
Guarantees compatibility with tools of various manufacturers, insofar as the inner square follows ISO Standard 117401-1



Square connection, size 1/2" or 3/8" in compliance with ISO 1174-1 Standards



Patented lock device (Intercable Locking System) that ensures a coupling in compliance with IEC 60900 Standards for any bush carrying a square fitting according to ISO 1174 DIN 3120 Standards



DIN7436



Insulated T-wrench

Description	Order No.	Dimensions	Weight
T-wrench Size 3/8"	15012	210 x 160 mm	240 g
T-wrench Size 1/2"	15011	195 x 160 mm	340 g

- Lock device can be actuated by a single hand
- Two-component insulation with excellent grip handle
- Square connection in compliance with ISO1174 DIN 3120 Standards



DIN7449



Insulated reversible ratchet wrench

Description	Order No.	Dimensions	Weight
Ratchet wrench Size 3/8"	15022	200 x 65 mm	250 g
Ratchet wrench Size 1/2"	15021	260 x 75 mm	525 g

- Lock device can be actuated by a single hand
- Two-component insulation with excellent grip handle
- Reverse commutator
- Square connection in compliance with ISO1174 DIN 3120 Standards



Insulated torque wrench

Description	Order No.	Torque	Dimensions	Weight
Torque wrench Size 3/8"	1508008	8 Nm	110 x 160 mm	400 g
	1508010	10 Nm	140 x 160 mm	400 g
	1508012	12 Nm	140 x 160 mm	400 g
	1508015	15 Nm	140 x 160 mm	400 g
	1508020	20 Nm	140 x 160 mm	400 g
	1508025	25 Nm	140 x 160 mm	400 g
Torque wrench Size 1/2"	AC3708	8 Nm	110 x 160 mm	560 g
	AC3710	10 Nm	140 x 160 mm	560 g
	AC3712	12 Nm	140 x 160 mm	560 g
	AC3715	15 Nm	140 x 160 mm	560 g
	AC3720	20 Nm	140 x 160 mm	560 g
	AC3725	25 Nm	140 x 160 mm	560 g

- Fixed adjusted torque in compliance with EN26789 ($\pm 6\%$ tolerance from rated value)
- Lock device can be actuated by a single hand
- Square connection in compliance with ISO1174 DIN3120 in sizes 3/8" and 1/2"



Insulated torque limiter (with galvanic separation)

Description	Order No.	Torque	Dimensions	Weight
Torque limiter Size 3/8"	1509007	7 Nm	37 x 152 mm	430 g
	1509008	8 Nm	37 x 152 mm	430 g
	1509010	10 Nm	37 x 152 mm	430 g
	1509012	12 Nm	37 x 152 mm	430 g
	1509015	15 Nm	37 x 152 mm	430 g
	1509020	20 Nm	37 x 152 mm	430 g
	1509025	25 Nm	37 x 152 mm	430 g
Torque limiter Size 1/2"	AC3807	7 Nm	37 x 154 mm	460 g
	AC3808	8 Nm	37 x 154 mm	460 g
	AC3810	10 Nm	37 x 154 mm	460 g
	AC3812	12 Nm	37 x 154 mm	460 g
	AC3815	15 Nm	37 x 154 mm	460 g
	AC3820	20 Nm	37 x 154 mm	460 g
	AC3825	25 Nm	37 x 154 mm	460 g

- Torque limitation switch in compliance with EN 6789
- Lock device can be actuated by a single hand
- Square connection in compliance with ISO1174 DIN3120 in sizes 3/8" and 1/2"
- Insulation according to EN 60900
- Galvanic isolation



Insulated adjustable torque ratchet

Description	Order No.	Torque	Dimensions	Weight
Torque ratchet Size 3/8"	131937	10-50 Nm	75 x 280 mm	700 g
	131938	10-50 Nm	75 x 350 mm	900 g
Torque ratchet Size 1/2"	131911	10-50 Nm	75 x 280 mm	700 g
	131912	10-50 Nm	75 x 350 mm	1000 g
	131931	30-130 Nm	75 x 465 mm	1300 g

- Made of alloyed and hardened steel
- Anticlockwise rotation without limitation
- Adjustable torque
- Professional multi-coated insulation
- When adjusted setting is achieved, the ratchet head drops sideways with a haptic and acoustic feedback
- Please observe operating instructions
- Suitable for all types of screwdriver heads
- Adjustment tolerance can be ± 10% of the nominal value



Insulated adjustable torque ratchet

Description	Order No.	Torque	Dimensions	Weight
Torque ratchet Size 3/8"	131915	5-50 Nm	84 x 370 mm	500 g
Torque ratchet Size 1/2"	131913	5-50 Nm	84 x 370 mm	900 g
	131918	40-220 Nm	84 x 555 mm	1500 g

- Made of alloyed and hardened steel
- Anticlockwise rotation without limitation
- Adjustable torque
- Professional multi-coated insulation
- When adjusted setting is achieved, the ratchet head drops sideways with a haptic and acoustic feedback
- Please observe operating instructions
- Suitable for all types of screwdriver heads
- Adjustment tolerance can be ± 10% of the nominal value



DIN7434



Insulated extension bar

Description	Order No.	Length	Weight
Extension bar Size 3/8"	15032125 15032250	125 mm 250 mm	140 g 300 g
Extension bar Size 1/2"	15031125 15031250	125 mm 250 mm	200 g 400 g

- Made of alloyed steel
- Fixing of inserts by expanding ball
- Expanding ball bearings by means of threaded pin
- Insulation of shock proof plastic
- Suitable for all types of screwdriver heads
- Patented lock device that guarantees a coupling in compliance with DIN
- IEC 60900, Standards for any brush carrying a square fitting according to ISO-DIS 1174-1/DIN 3120 Standard.



Insulated special reducer 1/2" to 3/8"

Description	Order No.	Length	Weight
Special reducer	15031238	125 mm	145 g

- Reducer from 1/2" to 3/8"
- Lock device actuated by a single hand
- Square connection in compliance with ISO1174 DIN 3120 Standards



Insulated special enlarger 3/8" to 1/2"

Description	Order No.	Length	Weight
Special enlarger	132238	125 mm	100 g

- Enlarger from 3/8" to 1/2"
- Dip Insulation



Insulated cross socket tool for 4 inserts

Description	Order No.	Dimensions	Weight
Cross socket tool Size 3/8"	121400	150 x 150 mm	180 g
Cross socket tool Size 1/2"	121399	150 x 150 mm	340 g

- Square ends made of alloyed and hardened steel, galvanically isolated
- Insulation of non-brittle plastic
- For 8 - 22 mm SW standard socket pieces
- Inserts can be locked in place
- Expanding ball interlock system for inserts



DIN7448
DIN3124



fig. 1



Insulated 12-point female socket 3/8"

Description	Order No.	Ⓜ Size	Length	Weight
12-point female socket Size 3/8"	135206*	6	45 mm	22 g
	135207*	7	45 mm	23 g
	1504208	8	45 mm	30 g
	135209*	9	45 mm	28 g
	1504210	10	45 mm	31 g
	1504211	11	45 mm	31 g
	1504212	12	45 mm	32 g
	1504213	13	45 mm	32 g
	1504214	14	45 mm	35 g
	135215*	15	45 mm	38 g
	1504216	16	45 mm	37 g
	1504217	17	45 mm	40 g
	1504218	18	45 mm	42 g
	1504219	19	45 mm	45 g
	135220*	20	45 mm	70 g
	135221*	21	45 mm	83 g
	1504222	22	45 mm	47 g
	135224*	24	45 mm	112 g

- Greatly reduced outside diameter for use on screws in hard-to-get-at positions
- Square connection to ISO1174 DIN3120 Standards

*Bush with dip insulation (fig.1)

Extra deep insulated 12-point female socket 3/8"

Description	Order No.	Ⓜ Size	Length	Weight
Extra deep 12-point female socket Size 3/8"	135308	8	75 mm	50 g
	135309	9	75 mm	55 g
	135310	10	75 mm	63 g
	135311	11	75 mm	67 g
	135312	12	75 mm	70 g
	135313	13	75 mm	77 g
	135314	14	75 mm	85 g
	135315	15	75 mm	100 g
	135316	16	75 mm	113 g
	135317	17	75 mm	122 g
	135318	18	75 mm	130 g
	135319	19	75 mm	144 g
	135320	20	75 mm	150 g
	135321	21	75 mm	160 g
	135322	22	75 mm	185 g
	135323	23	75 mm	210 g
	135324	24	75 mm	250 g
	135327	27	75 mm	315 g

- Extra deep version - min. 70 mm
- Square connection to ISO1174 DIN3120 Standards
- Dip Insulation





Long insulated 12-point female socket 3/8"

Description	Order No.	⓫ Size	Length	Weight
Long 12-point female socket Size 3/8"	135110	10	140 mm	140 g
	135111	11	140 mm	148 g
	135112	12	140 mm	152 g
	135113	13	140 mm	161 g
	135114	14	140 mm	173 g
	135115	15	140 mm	180 g
	135116	16	140 mm	195 g
	135117	17	140 mm	205 g
	135118	18	140 mm	213 g
	135119	19	140 mm	223 g
	135120	20	140 mm	230 g
	135121	21	140 mm	238 g
135122	22	140 mm	250 g	

- Long version - 140 mm
- Square connection to ISO1174 DIN3120 Standards
- Dip Insulation



Extra long insulated 12-point female socket 3/8"

Description	Order No.	⓫ Size	Length	Weight
Extra long 12-point female socket Size 3/8"	135712	12	270 mm	287 g
	135713	13	270 mm	295 g
	135714	14	270 mm	300 g
	135717	17	270 mm	351 g
	135718	18	270 mm	370 g
	135719	19	270 mm	385 g
	135721	21	270 mm	420 g
	135722	22	270 mm	445 g
	135724	24	270 mm	480 g
	135727	27	270 mm	520 g

- Extra long version - 270 mm
- Square connection to ISO1174 DIN3120 Standards
- Dip Insulation

INSULATED SOCKETS

SERIES 3/8"



ISO691

Short insulated male hex socket 3/8" - 50 mm

Description	Order No.	Ⓢ Size	Length	Weight
Short male hex socket Size 3/8"	1505204	4	50 mm	28 g
	1505205	5	50 mm	29 g
	1505206	6	50 mm	30 g
	1505208	8	50 mm	33 g

• Square connection to ISO1174 DIN3120 Standards



Insulated male hex socket 3/8" - 90 mm

Description	Order No.	Ⓢ Size	Length	Weight
Male hex socket Size 3/8"	140302	2	90 mm	27 g
	140325	2,5	90 mm	52 g
	140303	3	90 mm	49 g
	140304	4	90 mm	50 g
	140305	5	90 mm	56 g
	140306	6	90 mm	60 g
	140307	7	90 mm	66 g
	140308	8	90 mm	78 g
	140309	9	90 mm	75 g
	140310	10	90 mm	103 g
	140311	11	90 mm	114 g
	140312	12	90 mm	124 g
	140313	13	90 mm	135 g
	140314	14	90 mm	118 g

• Square connection to ISO1174 DIN3120 Standards

• Dip Insulation



ISO691

Medium long insulated male hex socket 3/8" - 120 mm

Description	Order No.	Ⓢ Size	Length	Weight
Medium long male hex socket Size 3/8"	1506204	4	120 mm	49 g
	1506205	5	120 mm	54 g
	1506206	6	120 mm	69 g
	1506208	8	120 mm	70 g

• Square connection to ISO1174 DIN3120 Standards



Long insulated male hex socket 3/8" - 140 mm

Description	Order No.	Ⓢ Size	Length	Weight
Long male hex socket Size 3/8"	140105	5	140 mm	63 g
	140106	6	140 mm	73 g
	140108	8	140 mm	90 g
	140110	10	140 mm	151 g

• Square connection to ISO1174 DIN3120 Standards

• Dip Insulation



Extra long insulated male hex socket 3/8" - 265 mm

Description	Order No.	Ⓢ Size	Length	Weight
Extra long male hex socket Size 1/2"	140705	5	265 mm	89 g
	140706	6	265 mm	109 g
	140708	8	265 mm	156 g
	140710	10	265 mm	219 g

• Square connection to ISO1174 DIN3120 Standards

• Dip Insulation



Combi set series 3/8"

Description	Order No.	Dimensions	Weight
Combi set	1598001	275 x 65 x 210 mm	1,5 kg

Equipment:

• Insulated T-wrench	1501 2
• Insulated reversible ratchet wrench.....	1502 2
• Insulated extension bar 125 mm.....	1503 2125
• Insulated extension bar 250 mm.....	1503 2250
• Insulated 12-point female sockets 8-10-13-14-17-19-22.....	1504 2...
• Short Insulated male hex sockets 4-5-6-8.....	1505 2...
• Resin case	1588 001



Basis ratchet set series 3/8"

Description	Order No.	Dimensions	Weight
Basis ratchet set	1598002	225 x 50 x 180 mm	1,0 kg

Equipment:

• Insulated reversible ratchet wrench.....	1502 2
• Insulated 12-point female sockets 8-10-13-17-19-22.....	1504 2...
• Medium long insulated male hex sockets 4-5-6.....	1506 2...
• Resin case	1588 002



Basis T-wrench set series 3/8"

Description	Order No.	Dimensions	Weight
Basis T-wrench set	1598004	275 x 65 x 210 mm	1,0 kg

Equipment:

• Insulated T-wrench	1501 2
• Insulated 12-point female sockets 10-13-14-17-19-22.....	1504 2...
• Short insulated male hex sockets 5-6-8.....	1505 2...
• Medium long insulated male hex sockets 5-6.....	1506 2...
• Resin case	1588 002



Torque wrench set series 3/8"

Description	Order No.	Dimensions	Weight
Torque wrench set	1598009	275 x 65 x 210 mm	2,0 kg

Equipment:

• Insulated torque wrench T 8-10-15Nm.....	1508 0...
• Medium long insulated male hex sockets 4-5-6	1506 2...
• Resin case	1588 009



Torque wrench set series 3/8" reduced

Description	Order No.	Dimensions	Weight
Torque wrench set red.	1598010	192 x 40 x 140 mm	0,6 kg

Equipment:

• Insulated torque wrench T 20Nm.....	1508 020
• Short insulated male hex socket 8	1505 208
• Insulated 12-point female socket 13	1504 213
• Resin case	1588 010



DIN7448
DIN3124



fig. 1



Insulated 12-point female socket 1/2"

Description	Order No.	Ⓜ Size	Length	Weight
12-point female socket Size 1/2"	135408*	8	55 mm	53 g
	135409*	9	55 mm	53 g
	1504110	10	55 mm	55 g
	1504111	11	55 mm	56 g
	1504112	12	55 mm	57 g
	1504113	13	55 mm	58 g
	1504114	14	55 mm	59 g
	135415*	15	55 mm	70 g
	135416*	16	55 mm	74 g
	1504117	17	55 mm	63 g
	135418*	18	55 mm	82 g
	1504119	19	55 mm	71 g
	135420*	20	55 mm	116 g
	135421*	21	55 mm	127 g
	1504122	22	55 mm	87 g
	135423*	23	55 mm	140 g
	1504124	24	55 mm	98 g
	135425*	25	55 mm	180 g
	135426*	26	55 mm	180 g
	1504127	27	55 mm	121 g
	135430*	30	55 mm	252 g
	1504132	32	55 mm	162 g
	130434*	34	55 mm	300 g

*Bush with Dip insulation (fig.1)

- Greatly reduced outside diameter for use on screws in hard-to-get-at positions
- Square connection to ISO1174 DIN3120 Standards

Extra deep insulated 12-point female socket 1/2"



Description	Order No.	Ⓜ Size	Length	Weight
Extra deep 12-point female socket Size 1/2"	135508	8	95 mm	102 g
	135509	9	95 mm	105 g
	135510	10	95 mm	118 g
	135511	11	95 mm	120 g
	135512	12	95 mm	123 g
	135513	13	95 mm	127 g
	135514	14	95 mm	134 g
	135515	15	95 mm	140 g
	135517	17	95 mm	170 g
	135518	18	95 mm	188 g
	135519	19	95 mm	204 g
	135520	20	95 mm	210 g
	135522	22	95 mm	226 g
	135523	23	95 mm	241 g
	135524	24	95 mm	270 g
	135526	26	95 mm	300 g
	135527	27	95 mm	337 g
	135530	30	95 mm	390 g
	135532	32	95 mm	423 g

- Extra deep version - 95 mm
- Square connection to ISO1174 DIN3120 Standards
- Dip insulation



Long insulated 12-point female socket 1/2"

Description	Order No.	⓫ Size	Length	Weight
Long 12-point female socket Size 1/2"	135610	10	140 mm	230 g
	135614	14	140 mm	253 g
	135617	17	140 mm	302 g
	135619	19	140 mm	312 g
	135622	22	140 mm	360 g
	135624	24	140 mm	403 g
	135627	27	140 mm	484 g
	135630	30	140 mm	510 g
	135632	32	140 mm	560 g

- Long version - 140 mm
- Square connection to ISO1174 DIN3120 Standards
- Dip insulation



Extra long insulated 12-point female socket 1/2"

Description	Order No.	⓫ Size	Length	Weight
Extra long 12-point female socket Size 1/2"	135813	13	270 mm	457 g
	135814	14	270 mm	480 g
	135817	17	270 mm	530 g
	135819	19	270 mm	550 g
	135824	24	270 mm	680 g
	135830	30	270 mm	800 g
	135832	32	270 mm	840 g

- Extra long version - 270 mm
- Square connection to ISO1174 DIN3120 Standards
- Dip insulation



DIN7448
DIN3124



ISO691



Insulated male hex socket 1/2"

Description	Order No.	Ⓢ Size	Length	Weight
Male hex socket Size 1/2"	1505104	4	85 mm	76 g
	1505105	5	85 mm	78 g
	1505106	6	85 mm	81 g
	140507*	7	90 mm	79 g
	1505108	8	85 mm	84 g
	1505110	10	85 mm	90 g
	140512*	12	90 mm	126 g
140514*	14	90 mm	158 g	

*Bush with Dip insulation (fig.1)

- Normal version - min. 85 mm
- Square connection to ISO1174 DIN3120 Standards

Long insulated male hex socket 1/2"

Description	Order No.	Ⓢ Size	Length	Weight
Long male hex socket Size 1/2"	1506104	4	135 mm	83 g
	1506105	5	135 mm	88 g
	1506106	6	135 mm	95 g
	1506108	8	135 mm	100 g
	1506110	10	135 mm	107 g

- Long version - 135 mm
- Square connection to ISO1174 DIN3120 Standards

Extra long insulated male hex socket 1/2"

Description	Order No.	Ⓢ Size	Length	Weight
Extra long male hex socket Size 1/2"	140805	5	265 mm	122 g
	140806	6	265 mm	143 g
	140808	8	265 mm	143 g
	140810	10	265 mm	185 g

- Extra long version - 265 mm
- Square connection to ISO1174 DIN3120 Standards
- Dip insulation



Combi set series 1/2"

Description	Order No.	Dimensions	Weight
Combi set	1599002	330 x 75 x 270 mm	3.1 kg

Equipment:

- Insulated T-wrench 1501 1
- Insulated reversible ratchet wrench 1502 1
- Insulated extension bar 125 mm 1503 1125
- Insulated extension bar 250 mm 1503 1250
- Insulated 12-point female sockets 10-13-14-17-19-22-24-27 1504 1...
- Insulated male hex sockets 4-5-6-8-10 1505 1...
- Resin case 1589 002



Basis ratchet set series 1/2"

Description	Order No.	Dimensions	Weight
Basis ratchet set	1599005	275 x 65 x 210 mm	1,6 kg

Equipment:

- Insulated reversible ratchet wrench 1502 1
- Insulated 12-point female sockets 10-13-17-19-22-24 1504 1...
- Insulated male hex sockets 4-5-6 1505 1...
- Resin case 1589 005



Basis T-wrench set series 1/2"

Description	Order No.	Dimensions	Weight
Basis T-wrench set	1599001	275 x 65 x 210 mm	1,5 kg

Equipment:

- Insulated T-wrench 1501 1
- Insulated 12-point female sockets 10-13-14-17-19-22 1504 1...
- Insulated male hex sockets 5-6-8 1505 1...
- Long insulated male hex sockets 5-6 1506 1...
- Resin case 1589 001



Torque wrench set series 1/2"

Description	Order No.	Dimensions	Weight
Torque wrench set	AV3755	275 x 65 x 210 mm	2,0 kg

Equipment:

- Insulated torque wrench T 8-10-15Nm AC37...
- Long insulated male hex sockets 4-5-6 1506 1...
- Resin case 1589 001



Torque wrench set series 1/2" reduced

Description	Order No.	Dimensions	Weight
Torque wrench set red.	AV3760	192 x 40 x 140 mm	0,7 kg

Equipment:

- Insulated torque wrench T 20Nm AC3720
- Insulated male hex socket 8 1505 108
- Insulated 12-point female socket 13 1504 113
- Resin case 1588 010

ALIGNMENT TOOL FOR SECTOR CABLE

Alignment tool for sector cable

Description	Order No.	Cross Section	Length	Weigth
Alignment tool Size 3/8"	132095	95 - 150	75 mm	80 g
	132185	185 - 240	83 mm	140 g
	132030	300	83 mm	140 g
Alignment tool Size 1/2"	132096	95 - 150	75 mm	80 g
	132186	185 - 240	83 mm	140 g
	132031	300	83 mm	140 g

- Insulation of non-brittle plastic
- To align 3 or 4 strand sectoral conductor
- Used with INTERCABLE insulated T-Wrenches (15011, 15012) or ratched wrenches (15021, 15022)
- Other sizes on request

1000V
IEC 60900





Belt pouch "EuroMario"

Description	Order No.	Dimensions	Weight
EuroMario with tools (red)	19122	110 x 220 x 65 mm	0,6 kg
EuroMario with tools (black)	19132	120 x 230 x 70 mm	0,7 kg
EuroMario without tools (red)	19120	110 x 220 x 65 mm	0,1 kg
EuroMario without tools (black)	19130	120 x 230 x 70 mm	0,1 kg

Equipment:

1000V insulated tools (IEC 60900, IEC900, VDE0682-201)

- Engineers pliers 180 mm 2K 1101 180
- Screwdriver for slotted head screws - 0,5 x 3 x 100 1301 030
- Screwdriver for slotted head screws - 0,8 x 4 x 100 - SLIM 1301 040
- Screwdriver for Phillips screws PH 1 x 75 - PH 1 x 75 - SLIM 1302 1

NOT insulated tools

- Special electricians scissors 2K 1601 2



Belt Pouch "IperMario"

Description	Order No.	Dimensions	Weight
IperMario with tools	19152	245 x 245 x 50 mm	1,20 kg
IperMario without tools	19150	245 x 245 x 50 mm	0,3 kg

Equipment:

1000V insulated tools (IEC 60900, IEC900, VDE0682-201)

- Engineers pliers 180 mm 2K 1101 180
- Diagonal cutting nipper 2K 1102 160
- Screwdriver for slotted head screws - 0,8 x 4 x 100 - SLIM 1301 040
- Screwdriver for slotted head screws - 1 x 5,5 x 125 - SLIM 1301 055
- Screwdriver for Phillips screws - PH 2 x 100 - SLIM 1302 2
- Screwdriver for Pozidriv screws - PZ 2 x 100 - SLIM 1303 2

NOT insulated tools

- Special electricians scissors 2K 1601 2
- Voltage tester 3 x 65 mm AV6104

TOOL CASES AND EQUIPMENT



Belt pouch in leather

Description	Order No.	Dimensions	Weight
Belt pouch with tools	19142	200 x 100 x 200 mm	1,5 kg
Belt pouch without tools	19140	200 x 100 x 200 mm	0,7 kg

Equipment:

1000V insulated tools (IEC 60900, IEC900, VDE0682-201)

- Engineers pliers 180 mm 2K 1101 180
- Screwdriver for slotted head screws - 0,5 x 3 x 100 1301 030
- Screwdriver for slotted head screws - 0,8 x 4 x 100 - SLIM 1301 040
- Screwdriver for slotted head screws - 1,2 x 6,5 x 150 - SLIM 1301 065
- Screwdriver for Phillips screws - PH 1 x 75 - SLIM 1302 1
- Screwdriver for Phillips screws - PH 2 x 100 - SLIM 1302 2
- Cable cutter D17 2K 1602 160

NOT insulated tools

- Special electricians scissors 2K 1601 2
- Voltage tester 3 x 65 mm AV6104
- EnerGrip - cable puller AV8902



Pouch 1000/EN60900 "Euronorm"

Description	Order No.	Dimensions	Weight
Pouch with tools	19231	360 x 270 x 70 mm	2,4 kg
Pouch without tools	19230	360 x 270 x 70 mm	1,0 kg

Equipment:

1000V insulated tools (IEC 60900, IEC900, VDE0682-201)

- Engineers pliers 180 mm 2K 1201 180
- Telephone pliers with straight jaws 160 mm 2K 1203 160
- Screwdriver for slotted head screws - 0,5 x 3 x 100 1301 030
- Screwdriver for slotted head screws - 0,8 x 4 x 100 - SLIM 1301 040
- Screwdriver for slotted head screws - 1,2 x 6,5 x 150 - SLIM 1301 065
- Screwdriver for Phillips screws - PH 1 x 75 - SLIM 1302 1
- Screwdriver for Phillips screws - PH 2 x 100 - SLIM 1302 2
- Screwdriver for Pozidriv screws - PZ 1 x 75 - SLIM 1303 1
- Screwdriver for Pozidriv screws - PZ 2 x 100 - SLIM 1303 2
- Cable stripping knife with clappable blade protection AV3920
- Insulated electrician's shears 2K 1603 2
- Cable cutter D17 2K 1602 160





“EUROBAG” Tool box with shoulder strap

Description	Order No.	Dimensions	Weight
Tool box with tools	19331	350 x 310 x 80 mm	1,6 kg
Tool box without tools	19330	350 x 310 x 80 mm	0,8 kg

Equipment:

1000V insulated tools (IEC 60900, IEC900, VDE0682–201)

• Engineers pliers 180 mm 2K	1201 180
• Screwdriver for slotted head screws - 0,5 x 3 x 100	1301 030
• Screwdriver for slotted head screws - 0,8 x 4 x 100 - SLIM	1301 040
• Screwdriver for slotted head screws - 1,2 x 6,5 x 150 - SLIM	1301 065
• Screwdriver for Phillips screws - PH 1 x 75 - SLIM	1302 1
• Screwdriver for Phillips screws - PH 2 x 100 - SLIM	1302 2
• Cable cutter D17 2K	1602 160

NOT insulated tools

• Special electricians scissors 2K	1601 2
• Voltage tester 3 x 65 mm	AV6104
• 2 containers for small parts	



Tool bag with rechargeable flashlight

Description	Order No.	Dimensions	Weight
Tool bag with tools	19401	200 x 300 x 100 mm	2,4 kg
Tool bag without tools	19400	200 x 300 x 100 mm	1,6 kg

Equipment:

1000V insulated tools (IEC 60900, IEC900, VDE0682–201)

• Engineers pliers 180 mm 2K	1201 180
• Screwdriver for slotted head screws - 0,5 x 3 x 100	1301 030
• Screwdriver for slotted head screws - 0,8 x 4 x 100 - SLIM	1301 040
• Screwdriver for Phillips screws - PH 2 x 100 - SLIM	1302 2

NOT insulated tools

• Special electricians scissors 2K	1601 2
• Flexometer 3 m	7406 030
• Baby spirit level	7404 100
• 2 containers for small parts	
• Rechargeable flashlight 12V	50 x 20 x 20 mm

TOOL CASES AND EQUIPMENT

“INTERCABLE” Tool box



Description	Order No.	Dimensions	Weight
Tool box with tools	19601	450 x 240 x 250 mm	3,0 kg
Tool box without tools	19600	450 x 240 x 250 mm	2,3 kg

Equipment:

1000V insulated tools (IEC 60900, IEC900, VDE0682–201)

- Engineers pliers 180 mm 2K 1201 180
- Screwdriver for slotted head screws - 0,5 x 3 x 100 1301 030
- Screwdriver for slotted head screws - 0,8 x 4 x 100 - SLIM 1301 040
- Screwdriver for slotted head screws - 1 x 4,5 x 125 - SLIM 1301 045
- Screwdriver for slotted head screws - 1,2 x 6,5 x 150 - SLIM 1301 065
- Screwdriver for Phillips screws - PH 1 x 75 - SLIM 1302 1
- Screwdriver for Phillips screws - PH 2 x 100 - SLIM 1302 2

NOT insulated tools

- Cable cutter and crimper electrician scissor 2K 16020-F1
- Voltage tester 3 x 65 mm AV6104
- Flexometer 3 m 7406 030
- Pocket saw “PUK” 7402 150
- Baby spirit level 7404 100
- Gloves GRIP 7407 009

TOOL CASES AND EQUIPMENT



"EuroCompact" Tool box

Description	Order No.	Dimensions	Weight
Leather box with tools	19162	440 x 200 x 300mm	4,2 kg
Hard top box with tools	19172	430 x 340 x 160mm	4,5 kg
Leather box without tools	19160	440 x 200 x 300 mm	3,0 kg
Hard top box without tools	19170	430 x 340 x 160 mm	3,3 kg
Shoulder strap (for leather box)	19199	-	0,2 kg

Other tool cases available on request

Equipment:

1000V insulated tools (IEC 60900, IEC900, VDE0682-201)

- Engineers pliers 180 mm 2K 1101 180
- Telephone jaws with straight jaws 160 mm 2K 1103 160
- Screwdriver for slotted head screws - 0,5 x 3 x 100 1301 030
- Screwdriver for slotted head screws - 0,8 x 4 x 100 - SLIM 1301 040
- Screwdriver for slotted head screws - 1 x 5,5 x 125 - SLIM..... 1301 055
- Screwdriver for slotted head screws - 1,2 x 6,5 x 150 - SLIM 1301 065
- Screwdriver for Phillips screws "Phillips" - PH 1 x 75 - SLIM 1302 1
- Screwdriver for Phillips screws "Phillips" - PH 2 x 100 - SLIM 1302 2
- Cable cutter D17 2K 1602 160

NOT insulated tools

- Special electricians scissors 2K 1601 2
- EnerGrip - cable puller AV8902
- Universal key QUATTRO



"EUROPROFI" Tool box

Description	Order No.	Dimensions	Weight
Leather box with tools	19182	440 x 200 x 360 mm	5,0 kg
Hard top box with tools	19192	470 x 360 x 200 mm	6,2 kg
Leather box without tools	19180	440 x 200 x 360 mm	3,8 kg
Hard top box without tools	19190	470 x 360 x 200 mm	5,0 kg
Shoulder strap for leather box	19199	-	0,2 kg

Other tool cases available on request

Equipment:

1000V insulated tools (IEC 60900, IEC900, VDE0682-201)

- Engineers pliers 180 mm 2K 1101 180
- Screwdriver for slotted head screws - 0,5 x 3 x 100 1301 030
- Screwdriver for slotted head screws - 0,8 x 4 x 100 - SLIM 1301 040
- Screwdriver for slotted head screws - 1 x 5,5 x 125 - SLIM 1301 055
- Screwdriver for slotted head screws - 1,2 x 6,5 x 150 - SLIM 1301 065
- Screwdriver for Phillips screws "Phillips" - PH 1 x 75 - SLIM 1302 1
- Screwdriver for Phillips screws "Phillips" - PH 2 x 100 - SLIM 1302 2
- Screwdriver for Pozidriv screws - PZ 1 x 75 - SLIM 1303 1
- Insulated scissors 2K 1603 1
- Cable cutter D17 2K 1602 160

NOT insulated tools

- Special electricians scissors 2K 1601 2
- Baby spirit level 7404 100
- EnerGrip - cable puller AV8902
- Voltage tester - 3 x 65 mm AV6104



TOOL CASES AND EQUIPMENT



“ALU” Tool box

Description	Order No.	Dimensions	Weight
Alu box with tools	19281	485 x 380 x 200 mm	9,4 kg
Alu box without tools	19280	485 x 380 x 200 mm	6,3 kg

Other tool cases available on request

Equipment:

1000V insulated tools (IEC 60900, IEC900, VDE0682–201)

- Screwdriver for slotted head screws - 4 x 100 - SLIM 1301 040
- Screwdriver for slotted head screws - 5,5 x 125 - SLIM 1301 055
- Screwdriver for slotted head screws - 6,5 x 150 - SLIM 1301 065
- Screwdriver for Phillips screws - PH 1 x 75 - SLIM 1302 1
- Screwdriver for Phillips screws - PH 2 x 100 - SLIM 1302 2
- Screwdriver for Pozidriv screws - PZ 1 x 75 - SLIM 1303 1
- Screwdriver for Pozidriv screws - PZ 2 x 100 - SLIM 1303 2
- Engineers pliers 180 mm 2K 1101 180
- Cable cutter D17 2K 1602 160
- Telephone pliers with straight jaws 1103 200

NOT insulated tools

- Special electricians scissors 2K 1601 2
- Voltage tester 3 x 65 mm AV6104
- Universal key QUATTRO
- Hammer 300 g 7130 582
- Chisel 7130 008
- Pliers for tubes and nuts 7101 237
- Spirit level 250 mm 7211 440
- Baby spirit level 7404 100
- Flexometer 3 m 7406 030
- Pocket saw “PUK” 7402 150
- Hexagon screw set Pocketstar 7401 208
- Universal knife 7120 081

1000V shockproof resin tool kit

Description	Order No.	Dimensions	Weight
Hard top box with tools	19501	480 x 360 x 235 mm	10,4 kg
Hard top box without tools	19500	480 x 360 x 235 mm	6,5 kg

Other tool cases available on request

Equipment:

1000V insulated tools (IEC 60900, IEC900, VDE0682–201)

- Engineers pliers 180 mm AP0119N
- Telephone pliers with straight jaws 200 mm AP0420N
- Insulating engineers pliers 1108 1
- Cable cutter D17 AP1017
- Insulated wire stripper 2,5-10 mm AE6200
- Screwdriver for slotted head screws - 3 x 75 AC1501
- Screwdriver for slotted head screws - 4 x 100 AC1502
- Screwdriver for slotted head screws - 5,5 x 150 AC1504
- Screwdriver for slotted head screws - 8 x 150 AC1506
- Screwdriver for Phillips screws PH1 AC1601
- Screwdriver for Phillips screws PH2 AC1602
- Screwdriver for Phillips screws PH3 AC1603
- Insulated T- wrench 1/2” 1501 1
- Insulated 12-point female sockets 10, 13, 14, 17, 19, 22 1504 1...
- Insulated male hex sockets 5, 6, 8, 1505 10..
- Long Insulated male hex sockets 5, 6 1506 10..
- 4 insulated safety clamps 6514 09
- Screwdriver for hexagon sockets 2,5, 3, 4 1304 0...
- Rubber cover material 600 x 600 AV4102



TOOL CASES AND EQUIPMENT



"NEW PROFESSIONAL" Tool box

Description	Order No.	Dimensions	Weight
Hard top box with tools	19311	460 x 400 x 200 mm	8,1 kg
Hard top box without tools	19310	460 x 400 x 200 mm	5,5 kg

Other tool cases available on request

Equipment:

1000V insulated tools (IEC 60900, IEC900, VDE0682-201)

- Screwdriver for slotted head screws - 4 x 100 - SLIM 1301 040
- Screwdriver for slotted head screws - 5,5 x 125 - SLIM 1301 055
- Screwdriver for slotted head screws - 6,5 x 150 - SLIM 1301 065
- Screwdriver for Phillips screws - PH 1 x 75 - SLIM 1302 1
- Screwdriver for Phillips screws - PH 2 x 100 - SLIM 1302 2
- Screwdriver for Pozidriv screws - PZ 1 x 75 - SLIM 1303 1
- Screwdriver for Pozidriv screws - PZ 2 x 100 - SLIM 1303 2
- Engineers pliers 180 mm 2K 1101 180
- Cable cutter D17 2K 1602 160
- Telephone pliers with straight jaws 1103 200

NOT insulated tools

- Special electricians scissors 2K 1601 2
- Gloves GRIP 7407 009
- Flexometer 3 m 7406 030
- Baby spirit level 7404 100
- Hexagon screw set Pocketstar 7401 208
- Universal knife 7120 081
- Voltage tester 3 x 65 mm AV6104
- Switch cabinet spanner ProfiKey AV9312
- Pocket saw "PUK" 7402 150
- Hammer 300 g 7130 582
- Pliers for tubes and nuts 7101 237



"PROFESSIONAL TROLLEY" Tool box

Description	Order No.	Dimensions	Weight
Hard top box with tools	19321	460 x 400 x 250 mm	9,5 kg
Hard top box without tools	19320	460 x 400 x 250 mm	6,9 kg

Other tool cases available on request

TOOL CASES AND EQUIPMENT

“EUROTROLLEY” Tool box



Description	Order No.	Dimensions	Weight
Hard top box with tools	A00511	430 x 320 x 160 mm	6,3 kg
Hard top box without tools	19163	430 x 320 x 160 mm	5,0 kg

Other tool cases available on request

Equipment:

1000V insulated tools (IEC 60900, IEC900, VDE0682-201)

- Screwdriver for slotted head screws - 3 x 100 - SLIM..... 1301 030
- Screwdriver for slotted head screws - 4 x 100 - SLIM 1301 040
- Screwdriver for slotted head screws - 4,5 x 125 - SLIM 1301 045
- Screwdriver for slotted head screws - 6,5 x 150 - SLIM 1301 065
- Screwdriver for Phillips screws - PH 1 x 75 - SLIM 1302 1
- Screwdriver for Phillips screws - PH 2 x 100 - SLIM 1302 2
- Screwdriver for Pozidriv screws - PZ 1 x 75 - SLIM 1303 1
- Screwdriver for Pozidriv screws - PZ 2 x 100 - SLIM 1303 2
- Engineers pliers 180 mm 2K 1201 180

NOT insulated tools

- Assortment of hexagonal spanners 8 pc 7110 592
- Cable cutter and crimper electrician scissor 2K 16020-F1
- Voltage tester 3 x 65 mm AV6104
- Flexometer 3 m 7406 030
- Baby spirit level 7404 100
- Gloves GRIP 7407 009



“INTERCABLE” Tool box

Description	Order No.	Dimensions	Weight
Hard top box with tools	A00108	460 x 370 x 200 mm	5,8 kg
Hard top box without tools	A00108B	460 x 370 x 200 mm	4,3 kg

Other tool cases available on request

Equipment:

1000V insulated tools (IEC 60900, IEC900, VDE0682-201)

- Screwdriver for slotted head screws - 3 x 100 - SLIM 1301 030
- Screwdriver for slotted head screws - 4 x 100 - SLIM 1301 040
- Screwdriver for slotted head screws - 4,5 x 125 - SLIM 1301 045
- Screwdriver for slotted head screws - 6,5 x 150 - SLIM 1301 065
- Screwdriver for Phillips screws - PH 1 x 75 - SLIM 1302 1
- Screwdriver for Phillips screws - PH 2 x 100 - SLIM 1302 2
- Screwdriver for Pozidriv screws - PZ 1 x 75 - SLIM 1303 1
- Screwdriver for Pozidriv screws - PZ 2 x 100 - SLIM 1303 2
- Engineers pliers 180 mm 2K 1201 180

NOT insulated tools

- Assortment of hexagonal spanners 8 pc 7110 592
- Cable cutter and crimper electrician scissor 2K 16020-F1
- Voltage tester 3 x 65 mm AV6104
- Gloves GRIP 7407 009
- Flexometer 3 m 7406 030
- Baby spirit level 7404 100
- Universal knife 7120 081
- Pocket saw "PUK" 7402 150
- Hammer 300 g 7130 582



STRIPPING TOOLS

PRODUCT OVERVIEW

2

Insulation	Type	Order No.	Application range	Insulation thickness	Suggested application	1000V certified	Page
STRIPPING TOOLS FOR EXTERNAL INSULATION	AMS	AV6220	∅ > 25 mm	0 - 5 mm	PVC / Rubber		69
	AMS 1000V	17130	∅ > 25 mm	0 - 5 mm	PVC / Rubber	X	69
	AMS MAXI	AV6240	∅ > 45 mm	0 - 5 mm	PVC / Rubber / Polyethylene		70
	MSU	AE6210	∅ 24 - 60 mm	0 - 5 mm	Polyethylene / lead cables		71
	AMX	17300	∅ 16 - 54 mm	0 - 5 mm	Polyethylene / fully bonded aluminium outer insulation		72
	AIS	17190	∅ 16 - 54 mm	0,5 - 5 mm	High density polyethylene	X	73
	FSI 150	17170	6 - 150 mm ²	Preadjusted stripping inserts	ABC cables (overhead, twisted, insulated)	X	74
	FSI	AE6200	2,5, 4, 6 and 10 mm ²		Rigid and flexible single pole	X	75
STRIPPING TOOLS FOR TOOLS FOR SEMICONDUCTOR	FBS	17220	∅ 10 - 52 mm	0 - 1,5 mm	Vulcanized, extruded, bonded semiconductive layer		76
	HLS	AV6400	∅ 16 - 41 mm	0 - 2 mm	Non vulcanized, peelable semiconductive layer		77
STRIPPING TOOL FOR PRIMARY INSULATION	IMS 20 - 22kV	AV6310 + inserts	25 - 240 mm ²	Preadjusted stripping inserts	Any type of primary insulation		78
	IMS 10 - 11kV	AV6310 + inserts	25 - 240 mm ²	Preadjusted stripping inserts	Any type of primary insulation		78
	IMS II	17230	∅ 15 - 52 mm	0 - 15 mm	Any type of primary insulation		80
STRIPPING TOOL FOR CHAMFERING PRIMARY INSULATION	UFS	17240	∅ 15 - 60 mm		Any type of primary insulation		81
STRIPPING TOOL FOR ARMoured CABLE	Roller chains cutter	1609076	∅ 20 - 76 mm cable up to 150 mm ²		Armoured cable		82



■ STRIPPING TOOLS FOR EXTERNAL INSULATION

- AMS (AV6220)
- AMS 1000V (17131)
- AMS MAXI (AV6240)
- MSU (AE6210)
- AMX (17300)
- AIS (17190)
- FSI 150 (17170)
- FSI (AE6200)

■ STRIPPING TOOLS FOR SEMICONDUCTOR

- FBS (vulcanized / bonded / semiconductor) (17221)
- HLS (not vulcanized / semiconductor / peelable) (AV6410 & AV6411)

■ STRIPPING TOOL FOR PRIMARY INSULATION

- IMS II (17231)
- IMS (AV6310)
- UFS (17241)

■ ARMoured WIRES

- Roller chain cutter (1609076)

WE

LOVE

TOOLS

ABI 1

Self adjustable cable stripper

NEW

2

ABI 1 Video



Precision

Cutting depth adjustable up to 3mm, thus no damage to the underlying layers of the cable

Efficency

Blade suitable for all types of cable insulation

Handling

No tilting due to axial pulling of the tool in the longitudinal direction

Safety

The innovative design ensures an injury-free working

Versatile

Setting of round, longitudinal and spiral cuts

Protection

The blocking system prevents opening in the position: longitudinal cut. This prevents the blade from breaking off due to misuse

Ergonomics

The optimally adapted shape of the tool enables fatigue-free working



APPLICATION RANGE	Ø 4,5 - 29 mm
INSULATION THICKNESS	3 mm
SUGGESTED APPLICATION	PVC and rubber

Description	Order No.	Weight	Length
Universal cable stripper	ABI1	150 g	140 mm
Spare blade	110059	-	-

- HANDY AND EFFORTLESS USAGE
- SMALL AND COMPACT DESIGN
- STEP BY STEP DEPTH ADJUSTMENT (IN CLICKS OF 0.1 MM)

- Very small self rotating (<200 mm)
- For every kind of insulation
- Easy to change blade

■ ATTENTION: NOT SUITABLE FOR WORK UNDER VOLTAGE!

2



Universal cable stripper

APPLICATION RANGE	Ø 0,2 - 6 mm ²
INSULATION THICKNESS	ANY
SUGGESTED APPLICATION	PVC

Description	Order No.	Length
Universal cable stripper	PTS4	170 mm

- To strip off and cut flexible cables 0,2 - 6 mm²
- Integrated blade with safety lock
- Adjustable length

■ ATTENTION: NOT SUITABLE FOR WORK UNDER VOLTAGE!



Universal cable stripper 0,03 - 16 mm²

APPLICATION RANGE	Ø 0,03 - 16 mm ²
INSULATION THICKNESS	ANY
SUGGESTED APPLICATION	PVC

Description	Order No.	Length
Universal cable stripper	AB16	210 mm

- To strip off and cut flexible cables 0,03 - 16 mm²
- Integrated blade with safety lock
- Adjustable length

■ ATTENTION: NOT SUITABLE FOR WORK UNDER VOLTAGE!



Universal cable stripper

APPLICATION RANGE	Ø 6 - 16 mm ²
INSULATION THICKNESS	ANY
SUGGESTED APPLICATION	outer PVC insulation

Description	Order No.	Length
Universal cable stripper	AV8203	170 mm

- To strip off flexible cables 6 - 16 mm²

■ ATTENTION: NOT SUITABLE FOR WORK UNDER VOLTAGE!

STRIPPING TOOLS FOR EXTERNAL INSULATION



AMS / AMS 1000V - Universal cable stripper for external insulation

APPLICATION RANGE	Ø > 25 mm
INSULATION THICKNESS	0 - 5 mm
SUGGESTED APPLICATION	PVC / Rubber

Technical characteristics:

- Designed to strip outer sheath from MV and LV cables
- Longitudinal and circular cuts
- Designed to strip ends and or middle parts
- Stripping without hurting the lower layers
- Interchangeable two-sided blade
- Snap closure mechanism (AMS only)

Additional features model AMS 1000V - 17130:

- Suitable for work on live parts up to 1000V AC und 1500V DC (model AMS 1000V - 1713 0 only)
- Model AMS 1000V is also designed for very low temperature uses, down to -40°C



Universal cable stripper AMS - AV6221



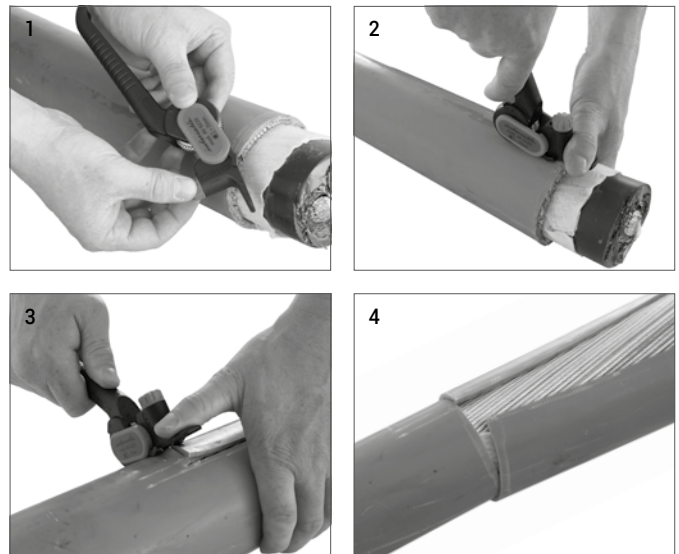
AMS-Set - AV6220



Universal cable stripper AMS 1000V - 1713 1



AMS 1000V-Set - 1713 0



- NO DAMAGING OF BELOW SURFACE
- SUITABLE FOR WORK ON LIVE PARTS (ONLY MODEL 17130)
- LONG LASTING PRECISE INTERCHANGEABLE TWO SIDED BLADE

Description	Order No.	Dimensions	Weight
Set: AMS	AV6220	160 x 65 x 35 mm	200 g
Set: AMS 1000V	17130	170 x 75 x 50 mm	200 g
Spare blade	AV6299	-	-

Set equipment:

- Plastic case to contain the tool and its instructions for use (AMS)
- Soft nylon case to contain the tool and its instructions for use (AMS 1000V)

2



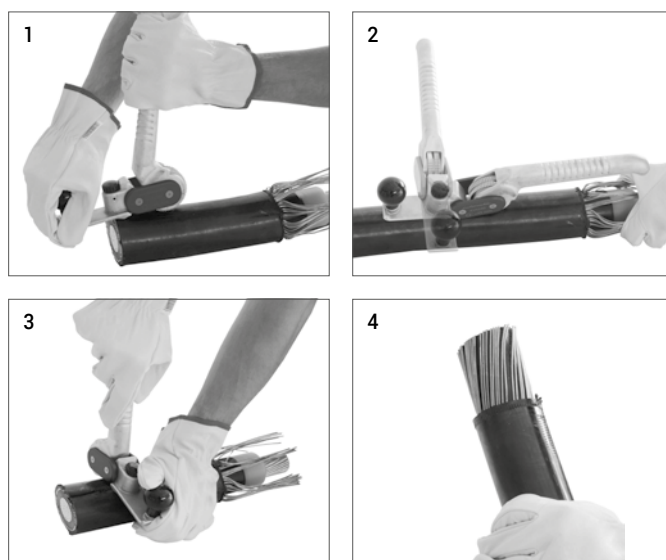
Universal cable stripper AMS MAXI - AV6240

AMS MAXI - Universal cable stripper for large difficult cable insulation

APPLICATION RANGE	Ø > 45 mm
INSULATION THICKNESS	0 - 5 mm
SUGGESTED APPLICATION	PVC / Rubber / Polyethylene

Technical characteristics:

- Designed to strip outer sheath from LV, MV and HV cables
- Longitudinal and circular cuts
- Designed to strip ends or middle parts
- Stripping without hurting the lower layers
- Interchangeable two-sided blade



- NO DAMAGING OF BELOW SURFACE
- LONG LASTING PRECISE INTERCHANGEABLE TWO SIDED BLADE
- SUITABLE TO WORK ON LARGE DIFFICULT CABLES INSULATION



AMS MAXI-Set - AV6240

Description	Order No.	Dimensions	Weight
Set: AMS MAXI	AV6240	250 x 110 x 60 mm	800 g
Spare blade	AV6299	-	-

■ ATTENTION: NOT SUITABLE FOR WORK UNDER VOLTAGE!

Set equipment:

- Soft nylon case to contain the tool and its instructions for use

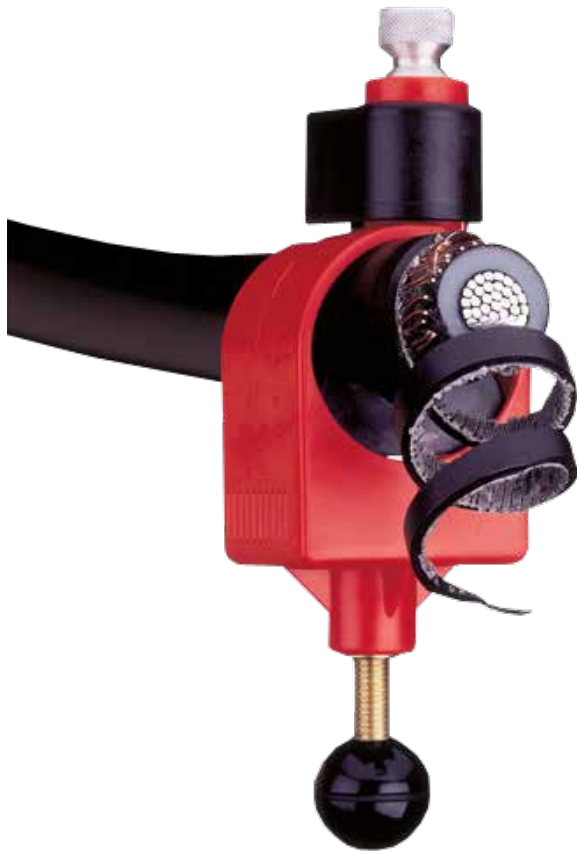
STRIPPING TOOLS FOR EXTERNAL INSULATION

MSU - Special cable stripper for external insulation

APPLICATION RANGE	Ø 24 - 60 mm
INSULATION THICKNESS	0 - 5 mm
SUGGESTED APPLICATION	Polyethylene / lead cables

Technical characteristics:

- Designed to strip outer sheath from MV and LV cables
- Circular and helical cuts
- Operates by simply rotating it around the cable axis
- Designed to strip both ends
- Interchangeable blade



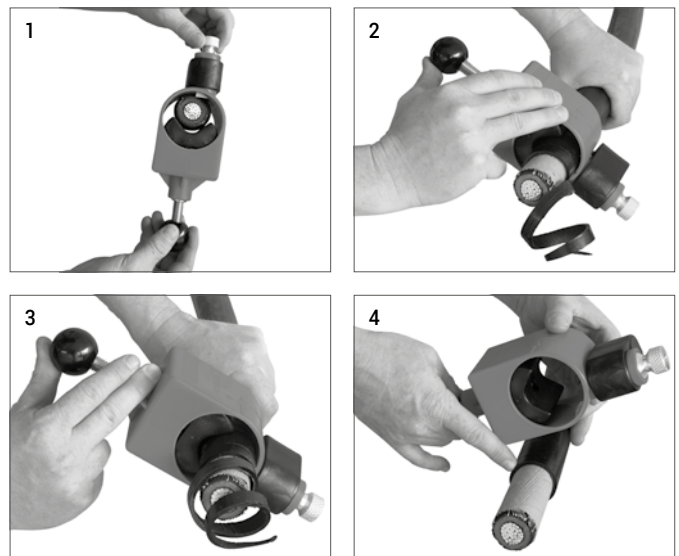
MSU - AE6210



Cable knife - AV3920



Soft case - AB6210



- NO DAMAGING OF BELOW SURFACE
- SUITABLE FOR WORK ON LIVE PARTS (ONLY MODEL 17130)
- LONG LASTING PRECISE INTERCHANGEABLE TWO SIDED BLADE

Description	Order No.	Dimensions	Weight
Set: MSU	AE6210	290 x 110 x 90 mm	900 g
Spare blade	AE6219	-	-

■ ATTENTION: NOT SUITABLE FOR WORK UNDER VOLTAGE!

Set equipment:

- Special MSU cable stripper AE6211
- Cable knife AV3920
- Soft case AB6210

STRIPPING TOOLS FOR EXTERNAL INSULATION

2



Norm: EN10020

AMX - Universal cable stripper for heavy duty outer sheaths

APPLICATION RANGE	Ø 16 - 54 mm
INSULATION THICKNESS	0 - 5 mm
SUGGESTED APPLICATION	Polyethylene / fully bonded aluminium outer insulation

Technical characteristics:

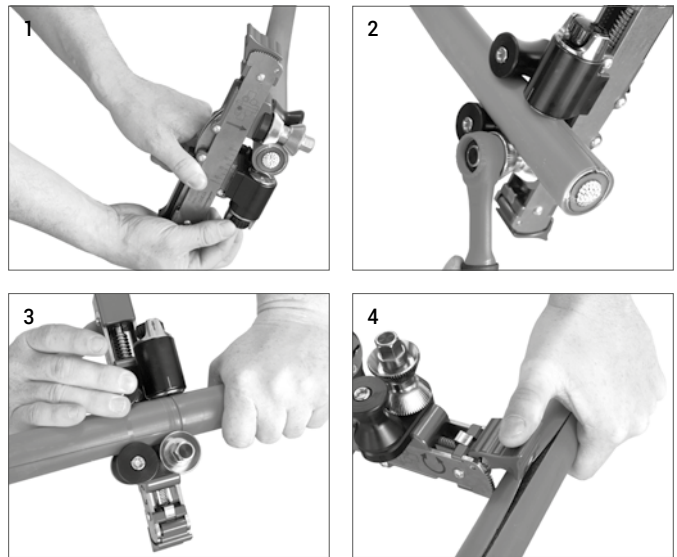
- Designed to strip aluminium armed outer sheaths of LV/MV
- Suitable for longitudinal and circular cutting
- Additional claw to break hard insulation
- The initial setting of the correct cable diameter is done by adjusting the handle
- The fixation of the device on the cable is performed by a quick-release system with toggle lever princip
- The cutting depth is adjustable in steps of 0,1 mm
- Switchable between longitudinal and circular cut
- Maximal rotation diameter of the tool: 300 mm



Cable stripper AMX - 1730 0-LOSE



Feed lever - 1719 4



- SMALL SELF ROTATING TO WORK ON LIMITED SPACE
- EASY AND PRECISE WORKING THROUGH FAST LOCKING SYSTEM
- GRADUALLY DEPTH ADJUSTMENT AND MAX. SAFETY OF OPERATOR



Soft nylon case - AB6230

Description	Order No.	Dimensions	Weight
Set: AMX	17300	260 x 140 x 65 mm	1,3 kg
Spare blade	17301	-	-

■ ATTENTION: NOT SUITABLE FOR WORK UNDER VOLTAGE!

Set equipment:

- AMX - cable stripper 1730 0
- Feed lever 1719 4
- 2,5 mm Allen wrench 1710 1
- Soft nylon case AB6230

STRIPPING TOOLS FOR EXTERNAL INSULATION

AIS - Cable stripper for external insulation

APPLICATION RANGE	Ø 16 - 54 mm
INSULATION THICKNESS	0,5 - 5 mm
SUGGESTED APPLICATION	High density polyethylene

Technical characteristics:

- Longitudinal and circular cuts on MV cables
- Used to work on live parts up to 1000V AC and 1500V DC
- Designed to strip ends or middle parts
- Hooked blade for removing the sheath that has been cut
- 100° tool rotation makes a complete 360° circumference cut
- Longitudinal feed in both directions using the ratchet lever
- Electrically insulated interchangeable blades
- Two-component handles in compliance with CEI/EN60900 Standards
- The tool head (except for the blades) is totally insulated



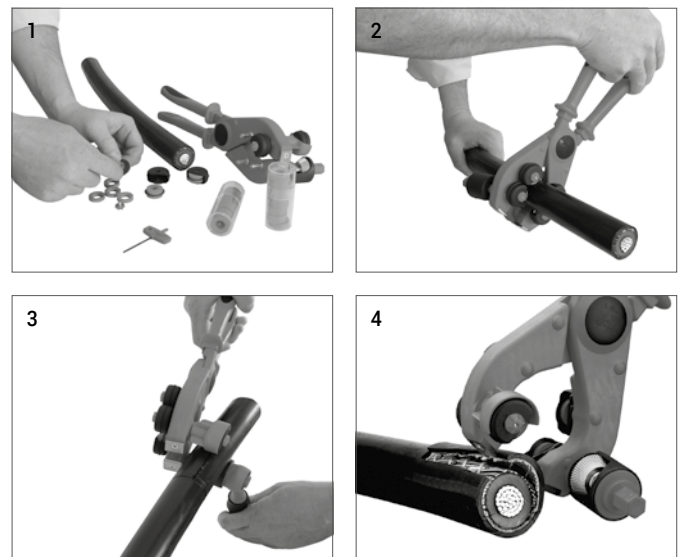
Cable stripper AIS - 1719 6



Feed lever - 1719 4



AIS-Set - 1719 0

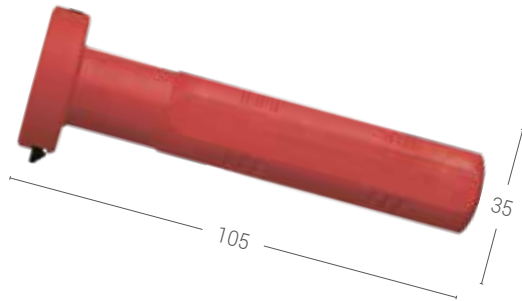


- ADJUSTABLE CUTTING DEPTH LIMITATION
- SUITABLE TO WORK ON LIVE PARTS
- FEED LEVER FOR PRECISE WORKING AND MAX. SAFETY OF OPERATOR

Description	Order No.	Dimensions	Weight
Set: AIS	17190	390 x 340 x 90 mm	2,0 kg
Spare blade	17195	-	-

Set equipment:

- AIS - cable stripper 1719 6
- Feed lever 1719 4
- 10 x 14 Colored identification washers -
- 2 Spare screws to fasten the blade 1719 7
- 2,5 mm Allen wrench 1710 1
- Rigid resin case AB17190



Insulated handle - 1717 1



Stripping insert - 1717...



FSI 150 - Set - 1717 0

FSI 150 - Insulated wire stripper for ABC cables

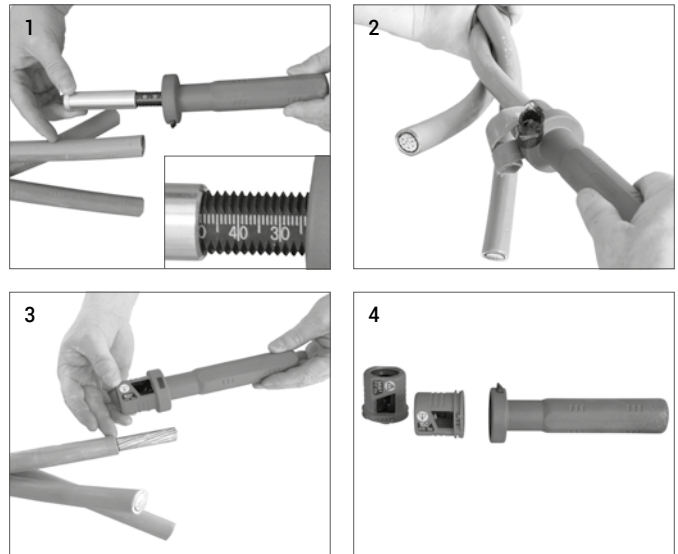
APPLICATION RANGE	6 - 150 mm ²
INSULATION THICKNESS	Preadjusted stripping inserts
SUGGESTED APPLICATION	ABC cables (overhead, twisted, insulated)

Technical characteristics:

- Designed to work on live parts up to 1000V AC and 1500V DC
- Stripping depth adjustment built inside the handle
- Insulated handle with bayonet connection
- Stripping length adjustable from 20 to 80 mm
- Scale marked on the built-in device to display the preset length
- Interchangeable blade

Inserts available:

- Stripping insert 6 mm² 1717 006
- Stripping insert 10 mm² 1717 010
- Stripping insert 16 mm² 1717 016
- Stripping insert 25 mm² 1717 025
- Stripping insert 35 mm² 1717 035
- Stripping insert 50 mm² 1717 050
- Stripping insert 54,6 mm² 1717 054
- Stripping insert 70 mm² 1717 070
- Stripping insert 95 mm² 1717 095
- Stripping insert 150 mm² 1717 150
- Other inserts on request



- EASY HANDLING THROUGH PREADJUSTED INSERTS
- SUITABLE TO WORK ON LIVE PARTS 1000V
- DESIGNED TO WORK IN LIMITED SPACE

Description	Order No.	Dimensions	Weight
Set: FSI 150	17170	235 x 210 x 55 mm	950 g
Spare blade	17179	-	-

Set equipment:

- Insulated handle 1717 1
- Stripping inserts: 16, 25, 35, 50, 54,6, 70 mm²
- 3 Spare blades 1717 9
- Allen wrench 2,5 mm 1710 0
- Rigid resin case AB17170

STRIPPING TOOLS FOR EXTERNAL INSULATION



FSI - Insulated wire stripper for cables from 2.5 to 10 mm²

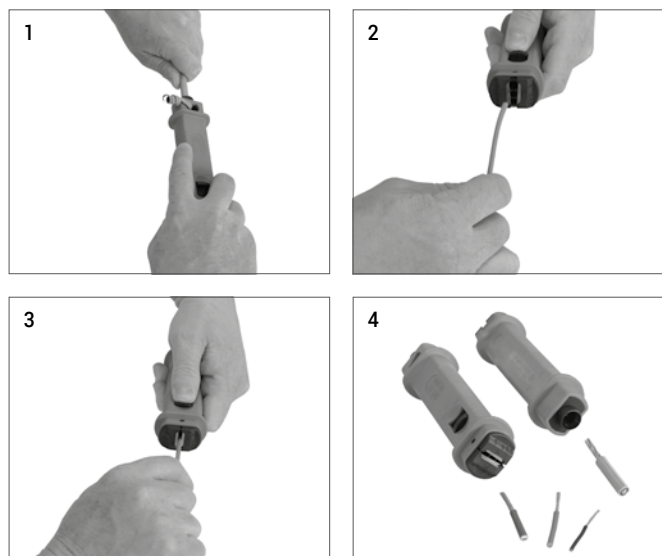
RIGID SINGLE POLE	10 mm ²
FLEXIBLE SINGLE POLE	2,5 - 4 - 6 mm ²

Technical characteristics:

- 20 mm stripping depth
- Blade built into the tool
- The tool can be used with one hand only and allow easy stripping of cables lengths of 20 mm
- The tool is provided with two hand - guards. Central handling permits all stripping operations
- Blades are located in a secure position to prevent accidental contact with worker's hands during the stripping operations and to assure the clean stripping of the insulation



Wire stripper - AE6200



- EASY HANDLING THROUGH PREADJUSTED INSERTS
- SUITABLE TO WORK ON LIVE PARTS 1000V
- DESIGNED TO WORK IN LIMITED SPACE



Soft nylon case - AB6200

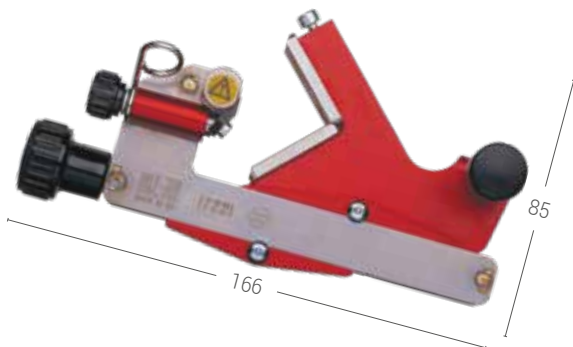
Description	Order No.	Dimensions	Weight
Set: FSI	AE6200	175 x 65 x 50 mm	150 g

Set equipment:

- Insulated stripping tool AE6200
- Soft nylon case AB6200



Norm: EN10020



Cable stripper FBS - 1722 1



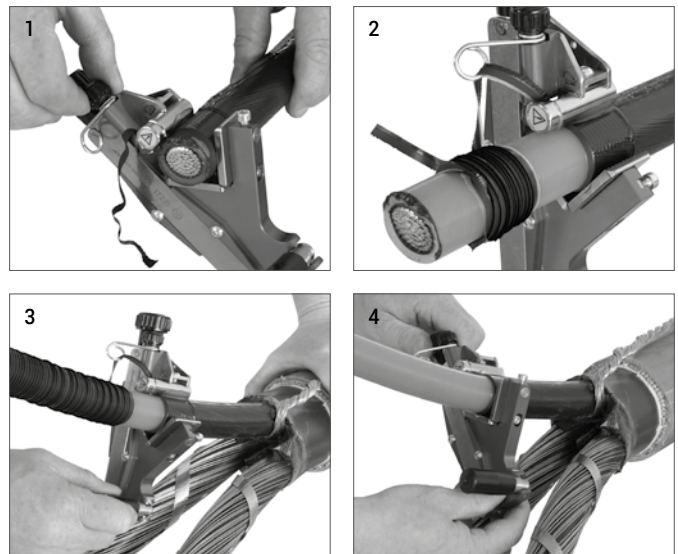
FBS-Set - 1722 0

FBS - Cable stripper for vulcanized semiconductive layer

APPLICATION RANGE	Ø 10 - 52 mm
INSULATION THICKNESS	0 - 1,5 mm
SUGGESTED APPLICATION	Vulcanized, extruded, bonded semiconductive layer

Technical characteristics:

- Positioning on the cable comparable to a vice system
- Axial feed activation/deactivation device (usable in both directions):
Through the stripping operation starting from outside of the cable, 25mm of the semicon layer will not be stripped (as shown in the pictures). By the stripping operation from inside to outside about 6 mm of semicon layer will remain.
- Stripping can be done starting from any position on the cable
- Maximal rotating diameter 200 mm
- Interchangeable blade



- SMALL AND COMPACT DESIGN
- PERFECT CIRCULAR CUT
- STEP BY STEP DEPTH ADJUSTMENT (WITH LOCKING POSSIBILITY)

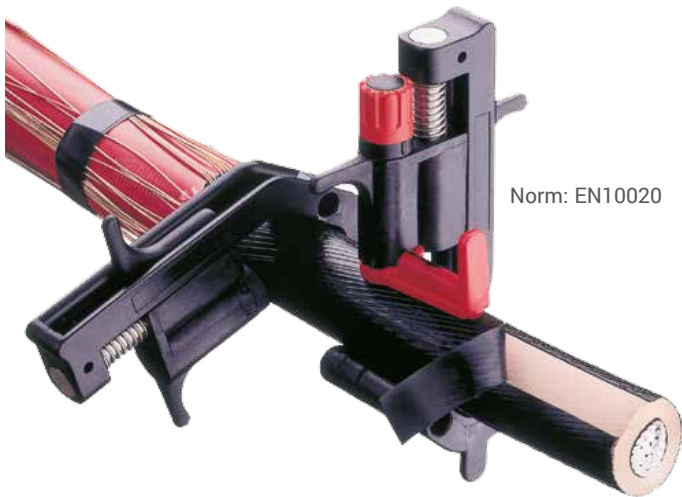
Description	Order No.	Dimensions	Weight
Set: FBS	17220	235 x 200 x 55 mm	800 g
Spare blade 17"	17142	-	-
Spare parts kit (2x plates, 1x roll, suitable screws)	17145	-	-

■ ATTENTION: NOT SUITABLE FOR WORK UNDER VOLTAGE!

Set equipment:

- FBS - cable stripper 1722 1
- 2,5 mm Allen wrench 1710 0
- Tube of silicone grease AG1013
- Rigid resin case AB17220

STRIPPING TOOLS FOR SEMICONDUCTOR



Norm: EN10020

HLS - Cable stripper for non-vulcanized semiconductive layer

APPLICATION RANGE	Ø 16 - 41 mm
INSULATION THICKNESS	0 - 2 mm
SUGGESTED APPLICATION	Non vulcanized, peelable semiconductive layer

Technical characteristics:

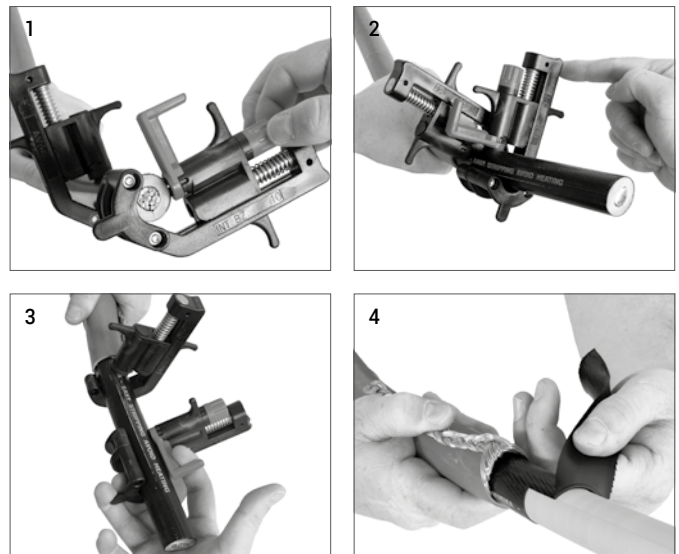
- To strip the non-vulcanized semiconductive layer of MV cables
- Longitudinal, helical and circular cuts
- Positioned on the cable comparable to a vice system
- Stop clamp to limit the stripping length
- Gradually depth adjustment
- Maximal rotating diameter 130 mm
- The positioning of the stripper and holding of stops-clamp is assured by the pressure of the spring
- The incision depth can be adjusted from 0 to 0,9 mm with 0,1 mm steps each by turning the corresponding knob
- The start of longitudinal incision can be done in exact correspondence with the circumferential incision.



Cable stripper - AV6410



Stop clamp - AV6411



- SMALL AND COMPACT DESIGN
- PERFECT PRECISE CIRCULAR CUT
- NO INCISIONS ON SURFACE BELOW

Description	Order No.	Dimensions	Weight
Set: HLS	AV6400	175 x 65 x 50 mm	600 g
Spare blade	AV6499	-	-

■ ATTENTION: NOT SUITABLE FOR WORK UNDER VOLTAGE!

Set equipment:

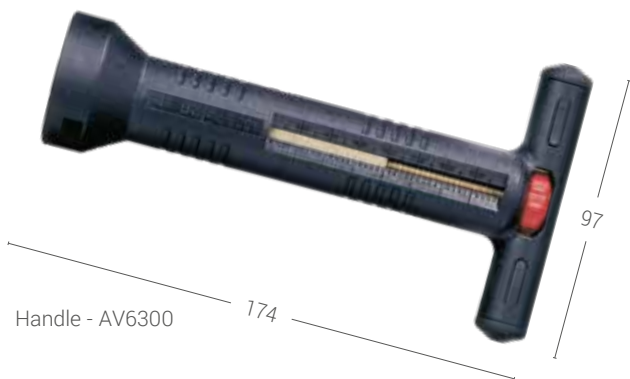
- HLS - cable stripper AV6410
- Stop clamp AV6411
- Tube of silicone grease AG1013
- Rigid resin case AB6400



HLS-Set - AV6400



Norm: EN10020



Handle - AV6300



Stripping insert - AV63...

IMS - Cable stripper for primary insulation

APPLICATION RANGE	25 - 240 mm ²
INSULATION THICKNESS	Preadjusted stripping inserts
SUGGESTED APPLICATION	Any type of primary insulation

Technical characteristics:

- Suitable for MV cables 10/11kV or 20/22kV
- Stripping length adjustable from 20 to 100 mm using the device integrated in the handle
- Scale marked on the handle for preset stripping length
- Handle with bayonet connection
- Interchangeable blade

Inserts available:

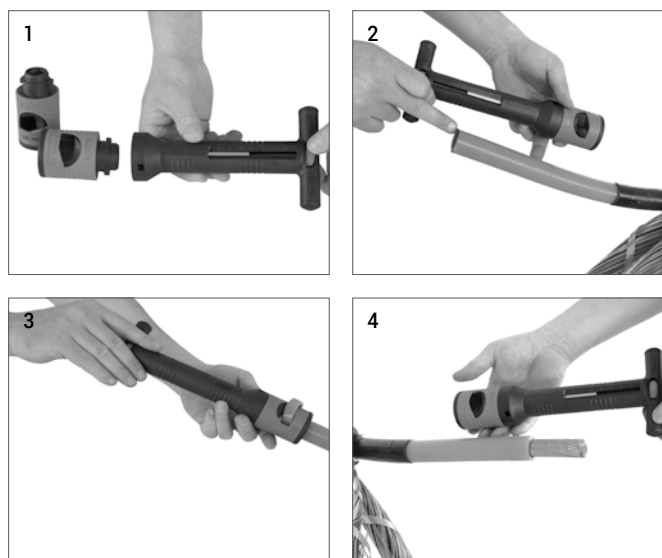
10 - 11kV

- Insert for 35 mm² 1716021
- Insert for 50 mm² 1716024
- Insert for 120 mm² 1716013
- Insert for 150 mm² 1716027
- Insert for 185 mm² 1716020
- Insert for 240 mm² 1716006

20 - 22kV

- Insert for 25 mm² AV63025
- Insert for 35 mm² AV63035
- Insert for 50 mm² AV63050
- Insert for 70 mm² AV63070
- Insert for 95 mm² AV63095
- Insert for 120 mm² AV63120
- Insert for 150 mm² AV63150
- Insert for 185 mm² AV63185
- Insert for 240 mm² AV63240

Other inserts available on request (10kV, 30kV, customized sizes), by sending PE-Coating Ø and Conductor Ø in mm



- EASY HANDLING THROUGH PREADJUSTED INSERTS
- ADJUSTABLE STRIPPING LENGTH
- DESIGNED TO WORK IN LIMITED SPACE

Description	Order No.	Dimensions	Weight
Set: IMS 20kV	AV6310	330 x 290 x 75 mm	600 g
Set: IMS 20kV + AMS	AV6320	330 x 290 x 75 mm	1,70 kg
Spare blade	AV6399	-	-

■ ATTENTION: NOT SUITABLE FOR WORK UNDER VOLTAGE!

Set equipment: - AV6310:

- Handle AV6300
- Stripping inserts 25, 35, 50, 70, 95, 120, 150, 185, 240 mm²
- Rigid resin case AB6300

Set equipment - AV6320 like model AV6310 including:

- AMS - cable stripper AV6221



IMS 20kV-Set - AV6310



Cable stripper for primary insulation

APPLICATION RANGE	300 or 400 mm ²
INSULATION THICKNESS	Preadjusted stripping inserts
SUGGESTED APPLICATION	Any type of primary insulation

Technical characteristics:

- Suitable for MV cables 10/11kV or 20/22kV
- Unlimited stripping length
- Devised with two integrated handles
- Interchangeable blade
- Designed to strip both ends

- UNLIMITED STRIPPING LENGTH
- EXCELLENT TO WORK IN EMPTY SPACE
- COMFORTABLE HANDLING



Description	Order No.	Dimensions	Weight
Stripping insert for 300 mm ²	AV63300	231 x 90 mm	1380 g
Stripping insert for 400 mm ²	AV63400	231 x 90 mm	1330 g

2



Norm: EN10020



Stripping Tool IMS II - 1723 1



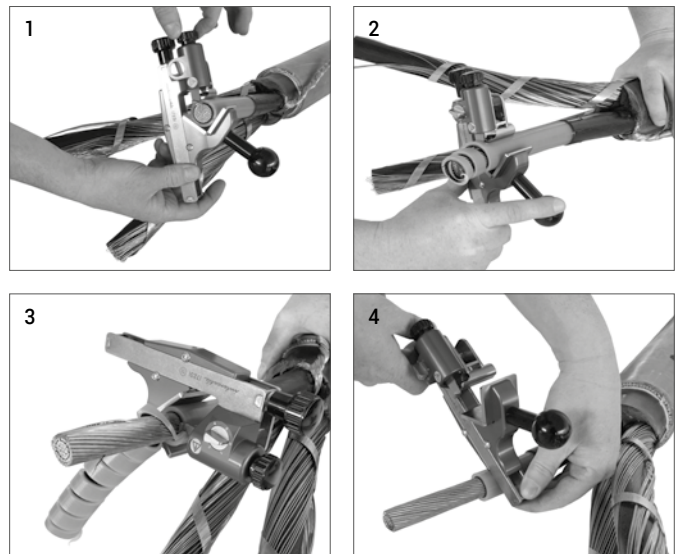
IMS II-Set - 1723 0

IMS II - Universal cable stripper for primary insulation

APPLICATION RANGE	Ø 15 - 52 mm
INSULATION THICKNESS	0 - 15 mm
SUGGESTED APPLICATION	Any type of primary insulation

Technical characteristics:

- Designed to remove the primary insulation of 6 to 45kV cables
- Helical and circular cuts
- Max. rotating diameter 220 mm
- Snap knob to activate/deactivate axial feed
- Positioned on the cable like a vice system
- Designed to strip both ends
- Unlimited stripping length
- Interchangeable blade



- REDUCED ROTATION ENABLES TO WORK ON LIMITED SPACE
- PERFECT CIRCULAR CUT
- NO INCISIONS ON SURFACE BELOW

Description	Order No.	Dimensions	Weight
Set: IMS II	17230	280 x 210 x 65 mm	1,0 kg
Spare blade	17232	-	-
Spare parts kit (2x plates, 1x roll, suitable screws)	17235	-	-

■ ATTENTION: NOT SUITABLE FOR WORK UNDER VOLTAGE!

Set equipment:

- IMS II - cable stripper 1723 1
- 2,5 mm Allen wrench 1710 0
- Tube of silicone grease AG1013
- Rigid resin case AB17230

STRIPPING TOOLS FOR PRIMARY INSULATION

UFS - Tool for chamfering primary insulation

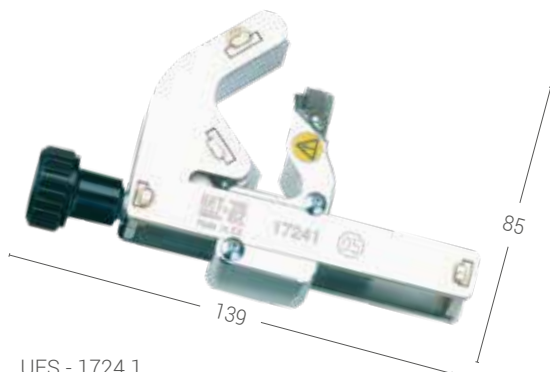
APPLICATION RANGE	Ø 15 - 60 mm
SUGGESTED APPLICATION	Any type of primary insulation

Technical characteristics:

- Designed for chamfered cuts of primary insulation of MV cables (2 x 45°)
- Positioning on the cable with a clamp system
- Tool fitted with PTFE plates ensuring optimal sliding on the cable without the use of silicone paste
- Replaceable blade
- Rotation diameter max. 130 mm
- This tool is not suitable for pencilling



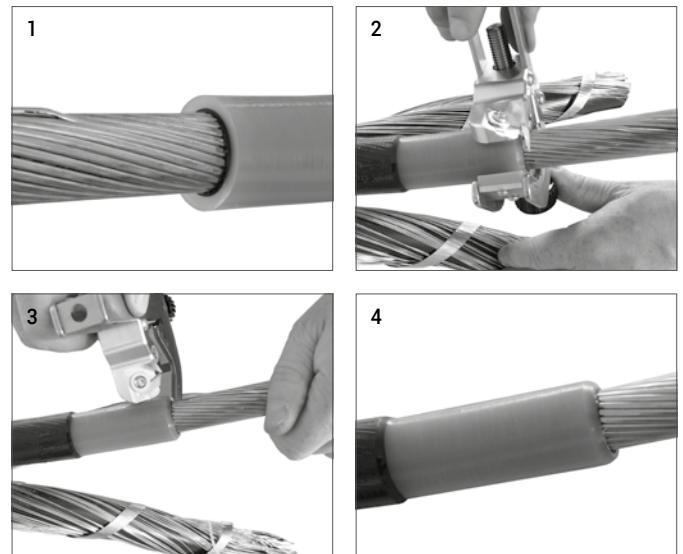
Norm: EN10020



UFS - 1724 1



UFS-Set - 1724 0



- SMALL SELFROTATING TO WORK ON LIMITED SPACE
- EASY HANDLING THROUGH 1 ADJUSTING KNOB
- UNIVERSAL UP TO 45 KV

Description	Order No.	Dimensions	Weight
Set: UFS	17240	170 x 100 x 50 mm	390 g
Spare blade	17242	-	-

■ ATTENTION: NOT SUITABLE FOR WORK UNDER VOLTAGE!

Set equipment:

- UFS - tool for chamfered cuts of primary insulation 1724 1
- 2,5 mm Allen wrench 1710 0
- Soft nylon case AB17130

CUTTING TOOL FOR ARMoured CABLE

2



Roller chains cutter - 1609076



Pressure spring RF5 - 126299

Available in different sizes
(cable Ø 6-92 mm) on request



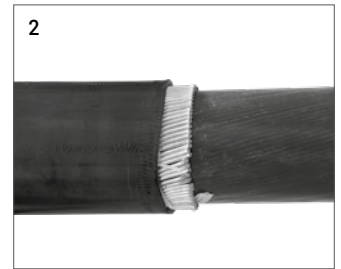
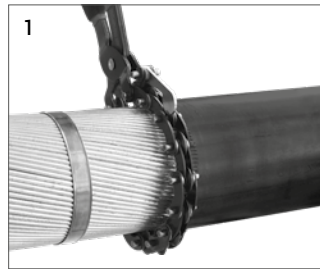
Soft nylon case - AB6230

Roller chains cutter

APPLICATION RANGE	Ø 20 - 76 mm
SUGGESTED APPLICATION	Armoured cables

Technical characteristics:

- Designed for effortless and fast settling of the F-armor
- Practical tool, works in hard-to-reach areas small space for turning



- PERFECT STRAIGHT CLEAN CUT
- QUICK SETTLING AROUND THE CABLE
- EASY HANDLING

Description	Order No.	Dimensions	Weight
Set roller chains cutter	1609076	260 x 140 x 65 mm	0,8 kg

■ ATTENTION: NOT SUITABLE FOR WORK UNDER VOLTAGE!

Set equipment:

- Roller chains cutter 1609076
- Pressure spring RF5 126299
- Soft nylon case AB6230

CUTTING TOOL FOR ARMOURED CABLE



Set - Stripping tools - 1799 001

Suitable to strip the outer sheaths, semiconductive layer and to remove the primary insulation. Optimal equipment for the realization of the entire stripping procedure of most diverse cable types.

Description	Order No.	Dimensions	Weight
Set: Stripping tools	1799001	390 x 340 x 100 mm	4,0 kg

Set equipment:

- AIS - cable stripper 1719 6
- Feed lever 1719 4
- 14 pieces of 10 colored indication washers -
- 2 spare screws to fasten the blade 1719 7
- FBS - cable stripper 1722 1
- IMS II - cable stripper 1723 1
- Tube of silicone grease AG1013
- 2,5 mm Allen wrench 1710 0
- Rigid resin case 1799 000



Set - Stripping tools - 1799 002

Suitable to strip the outer sheaths, semiconductive layer and to remove the primary insulation. Optimal equipment for the realization of the entire stripping procedure of most diverse cable types

Description	Order No.	Dimensions	Weight
Set: Stripping tools	1799002	390 x 340 x 100 mm	3,0 kg

Set equipment:

- Universal cable stripper - AMS AV6221
- IMS II - cable stripper 1723 1
- FBS - cable stripper 1722 1
- Cable knife AV3920
- Special electricians scissors 1601 0
- Tube of silicone grease AG1013
- 2,5 mm Allen wrench 1710 0
- Rigid resin case AG3000

Optional (to be ordered separately):

- Handle IMS 20kV AV6300
- 4 stripping inserts of your choice (see page xx) AV63...

2



Set - Stripping tools for MV cable

Suitable to strip the outer sheaths, semiconductive layer and to remove the primary insulation on 10 / 20 / 30 kV cables

Description	Order No.	Dimensions	Weight
Set: Stripping MV cable	1799004	390 x 340 x 100 mm	3,4 kg

Set equipment:

- AMX cable stripper 1730 0
- Feed lever 1719 4
- AMS cable stripper without case AV6221
- FBS wire stripper 1722 1
- Cable stripper IMS II 1723 1
- UFS - tool for chamfered cuts of primary insulation 1724 1
- Tube of silicone grease AG1013
- 2,5 mm Allen wrench 1710 0
- Rigid resin case AB17250



AMX - AIRBAG - Complete cable stripping tool set for AIRBAG-cable

Designed for complete stripping of individual sheaths from AIRBAG cables. AMX stripping pliers can also cut into the POLYLAM jacket without touching the semiconductive layer below

Description	Order No.	Dimensions	Weight
Set: AMX - AIRBAG	17210	390 x 340 x 100 mm	3,2 kg

Set equipment:

- AMX cable stripper 1730 0
- Feed lever 1719 4
- AMS cable stripper without case AV6221
- FBS wire stripper 1722 1
- Handle for IMS AV6300
- Spec. 70 mm² stripping insert 1716 012
- Spec. 185 mm² stripping insert 1716 010
- 3 spare blades for IMS insert AV6399
- Universal knife with blade guard AV3910
- 3 spare blades for universal knife AV3911
- Special electricians scissors 1601 0
- Round jacket spread 652 002
- Tube of silicone grease AG1013
- 2,5 mm Allen wrench 1710 0
- Rigid resin case AB17240



1716 010 - Stripping insert for reduced insulation - section 185 mm²



1716 012 - Stripping insert for reduced insulation - section 70 mm²



AIS - AIRBAG - Complete cable stripping tool set for AIRBAG-cable

Designed for complete stripping of individual sheaths from AIRBAG cables. AIS - AIRBAG stripping pliers can also cut into the POLYLAM jacket without touching the semiconductive layer below

Description	Order No.	Dimensions	Weight
Set: AIS - AIRBAG	17200	390 x 340 x 100 mm	3,2 kg
Set: AIS - AIRBAG red.	17201	390 x 340 x 100 mm	1,9 kg

Set equipment (1720 0):

- AIS - AIRBAG cable stripper 1719 8
- Feed lever 1719 4
- 2 blade fastening screws (spares) 1719 7
- Set of spare blades with washers 1719 9
- AMS cable stripper without case AV6221
- FBS wire stripper 1722 1
- Handle for IMS AV6300
- Spec. 70 mm² stripping insert 1716 012
- Spec. 185 mm² stripping insert 1716 010
- 3 spare blades for IMS insert AV6399
- Universal knife with blade guard AV3910
- 3 spare blades for universal knife AV3911
- Special electricians scissors 1601 0
- Round jacket spread 652 002
- Tube of silicone grease AG1013
- 2,5 mm Allen wrench 1710 0
- Rigid plastic case AB17200

Reduced equipment (1720 1):

- AIS - AIRBAG cable stripper 1719 8
- Feed lever 1719 4
- Blade fastening screws (spares) 1719 7
- Set of spare blades with washers -
- 2,5 mm Allen wrench 1710 1
- Rigid resin case AB17200



Set 1 - Stripping tools for armoured cables

Description	Order No.	Dimensions	Weight
Set 1	1799005	390 x 340 x 100 mm	3,2 kg

Set equipment:

- AMS cable stripper without case AV6221
- FBS wire stripper 1722 1
- Cable stripper IMS II 1723 1
- UFS - tool for chamfered cuts of primary insulation 1724 1
- Tube of silicone grease AG1013
- Roller chains cutter 1609076
- 2x pressure spring RF5 126299
- 2,5 mm Allen wrench 1710 0
- Rigid resin case AB17260

2



Set 2 - Stripping tools for armoured cables

Description	Order No.	Dimensions	Weight
Set 2	1799006	390 x 340 x 100 mm	3,9 kg

Set equipment:

- Cable stripper AMS-MAXI without case AV6240
- Cable stripper IMS II 1723 1
- FBS wire stripper 1722 1
- UFS - tool for chamfered cuts of primary insulation 1724 1
- Roller chains cutter 1609076
- 2x pressure spring RF5 126299
- Tube of silicone grease AG1013
- 2,5 mm Allen wrench 1710 0
- Rigid resin case AB17260



Set 3 - Stripping tools for armoured cables

Description	Order No.	Dimensions	Weight
Set 3	1799007	390 x 340 x 100 mm	3,7 kg

Set equipment:

- Cable stripper AMS-MAXI without case AV6240
- Cable stripper IMS II 1723 1
- UFS - tool for chamfered cuts of primary insulation 1724 1
- HLS - cable stripper AV6410
- Stop clamp AV6411
- Roller chains cutter 1609076
- 2x pressure spring RF5 126299
- Tube of silicone grease AG1013
- 2,5 mm Allen wrench 1710 0
- Rigid resin case AB17260



Set 4 - Stripping tools for armoured cables

Description	Order No.	Dimensions	Weight
Set 4	1799008	390 x 340 x 100 mm	3,0 kg

Set equipment:

- AMS cable stripper without case AV6221
- Cable stripper IMS II 1723 1
- UFS - tool for chamfered cuts of primary insulation 1724 1
- HLS - cable stripper AV6410
- Stop clamp AV6411
- Roller chains cutter 1609076
- 2x pressure spring RF5 126299
- Tube of silicone grease AG1013
- 2,5 mm Allen wrench 1710 0
- Rigid resin case AB17260



Stripping tools KIT

Description	Order No.	Dimensions	Weight
Set 5	1799013	390 x 340 x 100 mm	3,0 kg

Set equipment:

- AMS cable stripper without case AV6221
- Cable stripper IMS II 1723 1
- HLS - cable stripper AV6410
- Stop clamp AV6411
- Tube of silicone grease AG1013
- 2,5 mm Allen wrench 1710 0
- FBS wire stripper 1722 1
- Rigid resin case

CABLE JOINTERS CASE

2



Tool kit for cable jointers

Basic equipment (AG2020):

- Case AG2000
- 1/20 sliding caliper 150 mm AG1001
- Measuring rod 3 m 7406 030
- Steel brush for files AG1014
- Rasp without handle AG1005
- Half round file with handle AG1004
- Screwdriver slotted screws 3x100 mm FII 1301 030
- Screwdriver slotted screws 4x100 mm FII 1301 040
- Screwdriver slotted screws 5x125 mm FII 1301 055
- Ball-point screwdriver hex socket 6 mm FII 1305 060
- Mallet 300 g 7130 582
- Mallet Ø 35 mm AG1010
- Sheath spreader AG1011
- Special electricians' scissors 1601 1
- Cable knife with interch. blade AV3920
- Spare blade for AV3920 AV3921
- Knife with trapezoidal blade AV3910
- 3 spare blades for AV3910 AV3911
- High precision lens with light AG1012
- Universal pliers 180 mm AP0119 N
- Cable cutter 160 mm AP1017
- Tube of silicone grease AG1013
- 2,5 mm Allen wrench 1710 0



Codes for kit with additional tools:

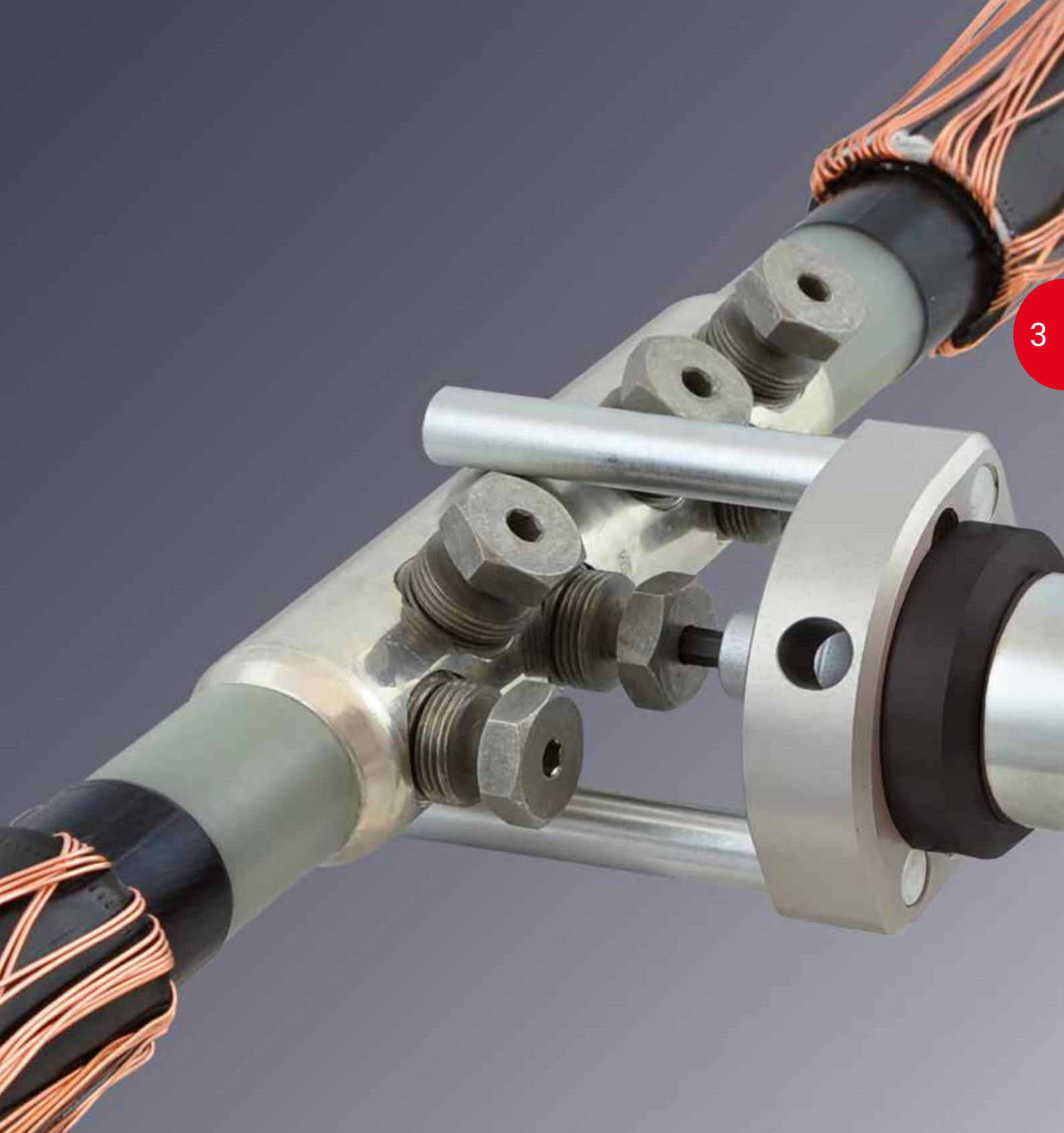
AG2020+...	A	B	C	D	E	F
	Ratchet cable cutter Ø 54 mm 	Cable stripper AMS (without case) (see page 69) 	Stripper MV cables IMS20kV (without case) (see page 78) 	Stripper non-vulcanized semiconductive - HLS (without case) (see page 77) 	Stripper vulcanized semiconductive - FBS (without case) (see page 76) 	Tool for chamfering primary insulation - UFS (without case) (see page 81)

Example of ordering: AG2020ADF

Equipment:

- AG2020 - standard case
- A - ratchet cutter
- D - HLS stripper
- F - UFS chamfering tool

Description	Order No.	Dimensions	Weight
Basic tool kit	AG2020	450 x 380 x 200 mm	6,3 kg
Individual tool kit	AG2020...	450 x 380 x 200 mm	-
Empty case	AG2000	450 x 380 x 200 mm	3,7 kg



3

TOOLS FOR MECHANICAL CONNECTORS

3



Clamp device for screw connectors

Description	Order No.	Dimensions	for screw connectors Ø	Weight
Clamp device for screw connectors all sizes	161910	310 mm	25 - 50 mm	540 g
Clamp device for screw connectors all sizes	161900	280 mm	14 - 32 mm	400 g
Clamp device for screw connectors to Ø 15 mm	161906	240 mm	0 - 15 mm	350 g

- For a better handling of screw connectors on the installation of connecting boxes
 - Infinitely adjustable
 - for screw connectors 16 mm² - 240 mm² (161910)
 - for screw connectors 2.5 mm² - 150 mm² (161900)
 - for screw connectors 1.5 mm² - 16 mm² (161906)
- maximum holding capacity Ø 15/32/50 mm

TOOLS FOR MECHANICAL CONNECTORS



Clamp device for screw connectors

Description	Order No.	Dimensions	Weight
Clamp device	22013	192 x 65 x 64 mm	350 g

Gives excellent clamping while screwing on screw connectors with diameters from 14 to 40mm.

Technical characteristics:

- Can work on live parts with voltages up to 1000V AC and 1500V DC
- Vice clamp system
- Usable with insulated and non-insulated connectors
- Insulated in compliance with IEC 60900/IEC900 Standards
- Tool designed for very low temperature work, down to -40°C

Standards:

- IEC 60900
- IEC 900
- EN10020

3



Set clamp device for screw connectors

Description	Order No.	Dimensions	Weight
Set clamp device	22010	192 x 140 x 40 mm	1,8 kg

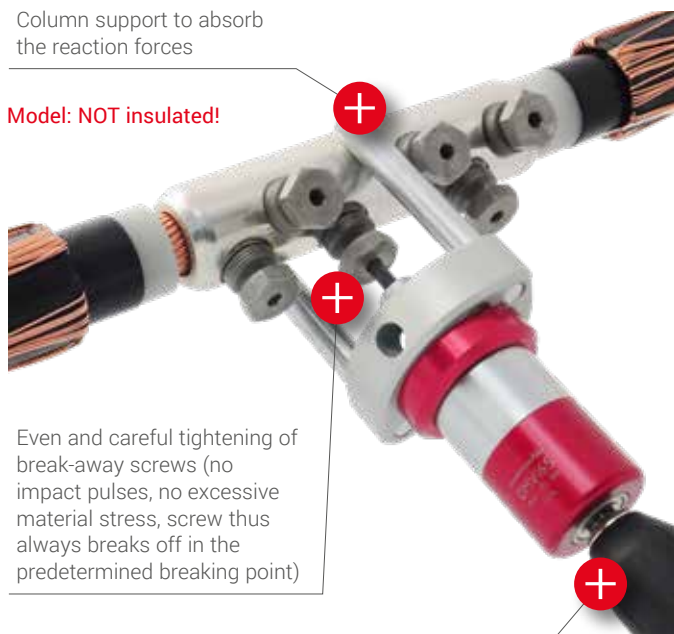
Set equipment:

- Clamp device 2201 3
- Insulated reversible ratchet wrench ½" 1502 1
- Insulated 12-point female socket 13 1504 113
- Insulated 12-point female socket 17 1504 117
- Insulated 12-point female socket 19 1504 119
- Insulated male hex socket 5 1505 105
- Insulated male hex socket 6 1505 106
- Insulated male hex socket 8 1505 108

TOOLS FOR MECHANICAL CONNECTORS

Column support to absorb the reaction forces

Model: NOT insulated!



Even and careful tightening of break-away screws (no impact pulses, no excessive material stress, screw thus always breaks off in the predetermined breaking point)

Cost saving compared to conventional impact wrenches (DMVI 65 can be used with any conventional cordless screwdriver)

Torque amplifier for screw connectors

For controlled tightening of break-away screws on screw connectors, usable with all standard cordless screwdrivers with a chuck holder up to min. Ø 14 mm

Description	Order No.	Dimensions	Weight
Set of torque amplifiers	DMVI65	370x245x115 mm	approx. 1925 g

Technical characteristics:

- Simple and precise handling
- Material-friendly tightening of the screws by means of a transmission multiplier
- Transmission ratio 1: 24
- Use with standard cordless screwdriver
- Load capacity up to 65 Nm
- 3-edge adapter for drill chucks min. Ø 14 mm
- Tool dimensions: 199 x 89 mm
- Tool weight: approx. 1050 g

ATTENTION: DO NOT USE IN COMBINATION WITH IMPACT WRENCHES!



Torque amplifier set for screw connectors

Set equipment:

- Torque amplifier DMVI65
- Allen wrench SW5
- Spanner sockets SW10, SW13, SW14, SW17, SW19, SW22, SW24
- Wrench inserts SW5, SW6, SW8, SW10
- Case
- Use instructions



Wrench inserts



Spanner sockets

Spare parts:

Spanner sockets:

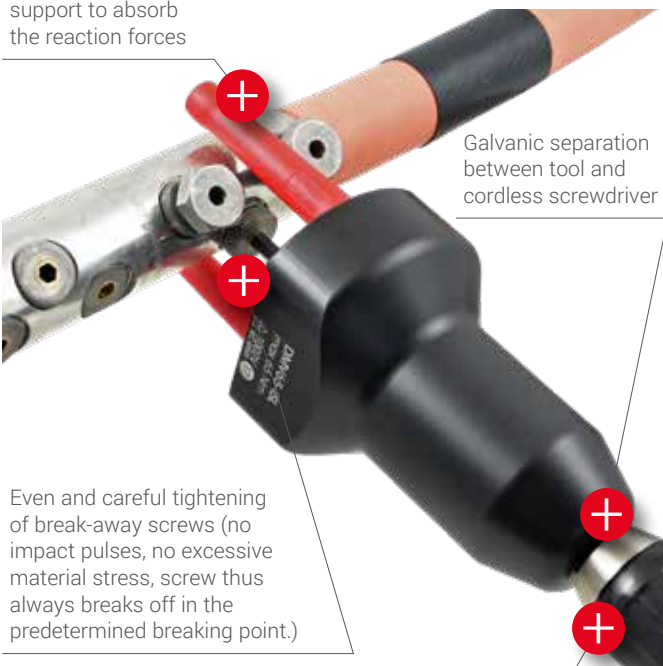
• SW10	109159
• SW13	109160
• SW14	109161
• SW17	109162
• SW19	109163
• SW22	109164
• SW24	109165

Wrench inserts:

• SW5	M3105
• SW6	M3106
• SW8	M3108
• SW10	M3110

TOOLS FOR MECHANICAL CONNECTORS

Insulated pillar support to absorb the reaction forces



Galvanic separation between tool and cordless screwdriver

Even and careful tightening of break-away screws (no impact pulses, no excessive material stress, screw thus always breaks off in the predetermined breaking point.)

Cost saving compared to conventional impact wrenches (DMVI 65 can be used with any conventional cordless screwdriver)



1000V
IEC 60900

Set of torque amplifiers electrically isolated - 1000V

Suitable for mounting screw connectors with voltage up to 1,000V

Description	Order No.	Dimensions	Weight
Set of torque amplifiers	DMVI-ISL	370x245x115 mm	approx. 3 kg

Technical characteristics:

- Simple and precise handling
- Insulated/ touch-protected pillar support to absorb the reaction forces
- 3-edge adapter for drill chucks min. Ø 14 mm
- Use with standard cordless screwdriver
- Material-friendly tightening of the screws by means of a transmission multiplier
- Transmission ratio 1: 24
- Load capacity up to 65 Nm
- Tool dimensions: 97 x 240 mm
- Tool weight: approx. 1050 g

ATTENTION: DO NOT USE IN COMBINATION WITH IMPACT WRENCHES!

Set equipment:

- Set DMV65-PTG
- Case with foam insert
- Insulated torque amplifier
- Angle screwdriver S5
- Allen screwdriver bit 1/2" - 05
- Allen screwdriver bit 1/2" - 06
- Allen screwdriver bit 1/2" - 08
- Allen screwdriver bit 1/2" - 10
- Wrench socket 1/2" x 10
- Wrench socket 1/2" x 13
- Wrench socket 1/2" x 14
- Wrench socket 1/2" x 17
- Wrench socket 1/2" x 19
- Wrench socket 1/2" x 22
- Wrench socket 1/2" x 24
- Operating instructions

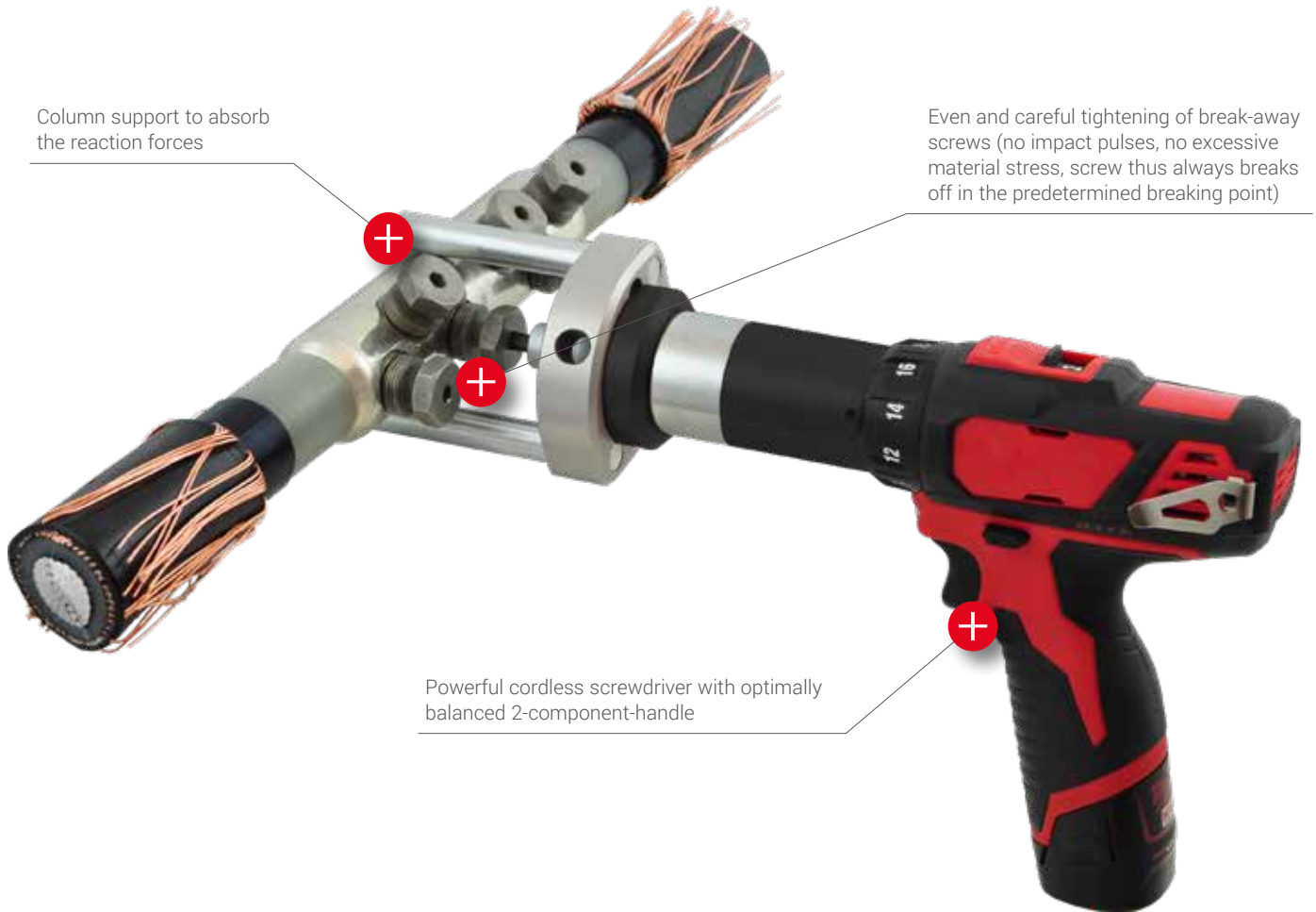


Wrench inserts



Spanner sockets

3



Column support to absorb the reaction forces

Even and careful tightening of break-away screws (no impact pulses, no excessive material stress, screw thus always breaks off in the predetermined breaking point)

Powerful cordless screwdriver with optimally balanced 2-component-handle



Battery operated torque amplifier for screw connectors

For controlled tightening of break-away screws on screw connectors

Description	Order No.	Dimensions	Weight
Set battery torque amplifier	DMVI65A	480x280x125 mm	approx. 4,6 kg

Technical characteristics:

- Simple and precise handling
- Material-friendly tightening of the screws by means of a transmission multiplier
- Metal parts in high strength alloy steel, aluminium body with anodized surface
- Cordless screwdriver-body made entirely of shock-resistant plastic material
- Handle in 2-components material with soft grip for fatigue-free working
- The device is very well balanced
- Transmission ratio 1:24
- Load capacity up to 65 Nm - 2 speed positions
- 1/2" connector for female and male hex socket
- Two positions for the bars: max. Ø 40 mm or max. Ø 53 mm
- Length bars: 80,5 mm
- Lithium-ion battery 12V-2,0 Ah - Charging time approx. 30 min
- Protection IP40 - Operating temperature -10°C - +40°C
- Tool dimensions 340 x 210 x 70 mm - Tool weight: approx. 2,1 kg

Set equipment

- Set DMV65-PTG
- Case with foam insert
- Insulated torque amplifier
- Angle screwdriver S5
- Allen screwdriver bit 1/2" - 05 / 06 / 08 / 10
- Wrench socket 1/2" x 10 / 13 / 14 / 17 / 19 / 22 / 24
- Operating instructions



CUTTING TOOLS

MECHANIC CUTTING TOOLS
HYDRAULIC CUTTING TOOLS
SAFETY CUTTING UNIT



Order No. 1623 032



ATTENTION: NOT SUITABLE FOR WORK UNDER VOLTAGE

Insulated front ratchet cutter D32

APPLICATION RANGE	Ø 32 mm / 240 mm ²
SUGGESTED APPLICATION	Copper and aluminium

Description	Order No.	Length	Weight
Ratchet cutter	1621032	315 mm	1200 g
Insulated ratchet cutter	1623032	315 mm	1300 g

- Comfortable one hand tool
- No jamming of the blade
- Cutting can be interrupted at any point in the cut
- Professional multi-layer dipped insulation
- Blades can be opened by acting on spring loaded lever

SUITABLE TO WORK UNDER VOLTAGE

Ratchet cutter ACSR (Al/Steel) D32

APPLICATION RANGE	Ø 32 mm / 240 mm ²
SUGGESTED APPLICATION	ACSR (Al/Steel)

Description	Order No.	Length	Weight
Ratchet cutter	1608032	346 mm	1400 g

- Replaceable cutting inserts
- High cutting capacity
- Low effort and small handle opening enable one-hand operation
- Progressive feed mechanism for cutting

SUITABLE TO WORK UNDER VOLTAGE

Insulated ratchet cable cutter D32/D54

	ORDER NO. 160... 5 032	... 5 054
APPLICATION RANGE	Ø 32 mm/260 mm ²	Ø 54 mm/480 mm ²
SUGGESTED APPLICATION	Copper and aluminium	

- High leverage ratchet mechanism for single handed cutting of copper and aluminium cables leaving no burrs or sharp edges
- Patented Two-step ratchet mechanism requires fewer strokes per cut
- Quick release opens blades easily in every cutting position (allows removal of the cable even before complete cut, if necessary)
- Hardened steel cutting blades for lasting strength and sharpness
- 1000 V Plastic covered handles with hand guards for comfort and firm grip
- Locking lever keeps handles closed for easy transport fits in a tool box or bag

Description	Order No.	Length	Weight
Ratchet cutter D32	1605032	265 mm	650 g
Ratchet cutter D54 short	1607054	285 mm	800 g
Ratchet cutter D54 long	1605054	320 mm	900 g
Ratchet cutter D54 long (non ins.)	1606054	320 mm	900 g



Cable shears in ratchet design

APPLICATION RANGE	Ø 100 mm	Ø 60 mm
SUGGESTED APPLICATION	Cooper and aluminium	

Description	Order No.	Length	Weight
Cable shears	MSR100	820 mm	6,2 kg
Cable shears	MSR60	720 mm	4,8 kg

- Suitable for cutting Al/Cu cables
- Two-hand operation with lever transmission
- Cutting range: up to max. Ø 100 mm / Ø 60 mm
- Not suitable for cutting steel and steel wire

■ ATTENTION: NOT SUITABLE FOR WORK UNDER VOLTAGE



Cable shears

Description	Order No.	Length	Weight
Cable shears	MS30	600 mm	2,2 kg

- Cable shears for cutting Al/Cu cable cutting area: 30 mm Ø, e.g. 4 x 35 mm² stranded

Accessories:
EK30 - replacement cutting head MS30

■ ATTENTION: NOT SUITABLE FOR WORK UNDER VOLTAGE

4



Cable cutter

Description	Order No.	Length	Weight
Cable cutter	MS50	770 mm	3,0 kg

- Compound leverage two-hand snips for cutting of Al/Cu cable
- Cutting area: Ø 50 mm
- Flat ground knives made of high-quality steel
- Sickle-shaped, rounded blades for a safe and precise cut
- Impact-resistant, hardened handle tubes

■ ATTENTION: NOT SUITABLE FOR WORK UNDER VOLTAGE

Cable cutter with telescopic handles

APPLICATION RANGE	185 mm ²
JAW OPENING	28 mm
SUGGESTED APPLICATION	Copper and aluminium

Description	Order No.	Length	Weight
Cable cutter	253260	350 - 500 mm	2000 g
Spare blades	253760	-	300 g

- For smooth cutting of copper and aluminium conductors
- Replaceable cutting head
- The razor-sharp cutters guarantee a smooth and effortless cut
- For copper and aluminium cables only
- Handles with multi-coated insulation

■ ATTENTION: NOT SUITABLE FOR WORK UNDER VOLTAGE

Cable cutter

ORDER NO. 2773...	... 46	... 61	... 80
JAW OPENING	30 mm	35 mm	60 mm
APPLICATION RANGE	120 mm ²	180 mm ²	500 mm ²
SUGGESTED APPLICATION	Copper and aluminium		

Description	Order No.	Length	Weight
Cable cutter	277346	460 mm	1430 g
Spare blades	277946		640 g
Cable cutter	277361	600 mm	2070 g
Spare blades	277961		660 g
Cable cutter	277380	800 mm	3800 g
Spare blades	277980		1140 g

- Cutting head made of oil-hardened steel
- The razor-sharp blades guarantee a smooth and effortless cut
- Light metal handles
- Professional multi-coated insulation



1000V
ENIEC60900:2004

Insulated wire rope cutter



C 1000V
EN/IEC60900:2004

ORDER NO. 277...	...4 46	...3 60
JAW OPENING	10 mm	20 mm
APPLICATION RANGE - STEEL (ROPE)	95 mm ²	150 mm ²
APPLICATION RANGE - STEEL (ROPE)	Ø 10 mm	Ø 12 mm
APPLICATION RANGE - STEEL (ROUND)	Ø 7 mm	Ø 9 mm
SUGGESTED APPLICATION	Copper, aluminium and steel	

Description	Order No.	Length	Weight
Wire rope cutter	277446	460 mm	1340 g
Spare blades	277846		475 g
Wire rope cutter	277360	600 mm	2710 g
Spare blades	277860		910 g

- Replaceable cutting head
- Cutting head made of special alloyed steel
- Square cut blades for the hardest steel wires
- Handles made of light metal
- Professional multi-coated insulation

Wire rope cutter



Description	Order No.	Length	Weight
Wire rope cutter C112	277562	730 mm	3600 g

- The elaborate transmission system of these tools develops amazing cutting power with little effort. This allows the separation of hardest wire ropes, bars and wires up to a Ø of 12.7 mm.
- All parts easily replaceable
- Light-metal mounting
- Case-hardened knives, for cutting very hard cables
- Handles made of forged aluminium
- Also available in insulation 23/5000

■ ATTENTION: NOT SUITABLE FOR WORK UNDER VOLTAGE

Insulated bolt cutter



1000V
EN/IEC60900:2004

ORDER NO. 2752...	... 46	... 61	... 76	... 91	... 95
APPLICATION RANGE Ø	7 mm	9 mm	11 mm	13 mm	15 mm
SUGGESTED APPLICATION	High tensile steel ropes / bolts				

Description	Order No.	Length	Weight
Bolt cutter insulated	275246	460 mm	1400 g
Spare blades	275047		1400 g
Bolt cutter insulated	275261	610 mm	2500 g
Spare blades	275062		1600 g
Bolt cutter insulated	275276	760 mm	4500 g
Spare blades	275077		1800 g
Bolt cutter insulated	275291	910 mm	6300 g
Spare blades	275092		1800 g

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Hacksaw

WIDTH OF BLADE	5 mm
THICKNESS OF BLADE	0,80 mm

Description	Order No.	Length	Weight
Hacksaw	424200	280 mm	230 g
Spare saw-blade	433010	150 mm	3 g

- Made of flat steel 10 x 5 mm, galvanized
- For 148 mm saw-blades
- With insulated rotary handle for blade tension
- Insulation of soft, non-brittle plastic

ATTENTION: NOT SUGGESTED FOR WORK UNDER VOLTAGE

4

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ENITEC60900:2004



Hacksaw

WIDTH OF BLADE	13 mm
THICKNESS OF BLADE	0,63 mm

Description	Order No.	Length	Weight
Hacksaw / saw-blade	424300	470 mm	660 g
Blade 22/32 teeth width 13 mm, thicken. 0,63 mm	421000	300 mm	17 g
Blade 18 teeth width 13 mm, thicken. 0,63 mm	421016	300 mm	17 g
Blade double-sided 22/32 teeth width 25 mm, thicken. 0,8 mm	421920	300 mm	40 g

- With insulated wing bold for blade tension
- Insulation of soft, non-brittle plastic

ATTENTION: NOT SUGGESTED FOR WORK UNDER VOLTAGE

1000V
ENITEC60900:2004



Insulated cable sheath saw

Description	Order No.	Length	Weight
Cable sheath saw (24 teeth, fine)	430302	250 mm	140 g
Saw-blade (14 teeth, coarse)	430801	120 mm	6 g
Saw-blade (24 teeth, fine)	430805	120 mm	6 g

- For steel strip armoured cable
- Adjustable stopper
- Replaceable saw-blade
- Coarse toothed saw-blade for soft materials
- Fine toothed saw-blade for sheet metal cutting, saw-blade no. 430805 - 24 teeth fine
- Insulation made of shock-proof material
- If desired, alternatively 14 saw blade teeth can be supplied

ATTENTION: NOT SUGGESTED FOR WORK UNDER VOLTAGE

BATTERY POWERED CUTTING TOOLS

The new battery operated hydraulic cutting tools are now more ergonomic, faster and more reliable than ever.

Reliable

3 years warranty



4

Clever

Easier work, thanks to the variable approach speed for precise positioning of the cutting tool

Always keep your sight

Integrated LED for illuminating the working area in poor light conditions


















Powerful

18V 3Ah Lithium-Ion battery for even more cuts during one battery life

Ergonomic

Effortless working and ease handling due to equilibrate 2-component handle

HYDRAULIC CUTTING TOOLS - OVERVIEW

	Cutting heads	Hand operated	Battery operated tools		Max. cutting diameter	Application range	
SERIES 25	 PS25	 HS25	 STILO-S25	 AS25	Ø 25 mm	<ul style="list-style-type: none"> • Steel • ACSR • Aluminium • Copper 	PAGE 103-105
SERIES 26			 STILO-S26		Ø 26 mm	<ul style="list-style-type: none"> • Steel • ACSR • Aluminium • Copper 	PAGE 106
SERIES 40			 STILO-S40		Ø 40 mm	<ul style="list-style-type: none"> • Aluminium • Copper 	PAGE 107
SERIES 45	 PS45	 HSI45		 AS45	Ø 45 mm	<ul style="list-style-type: none"> • Steel • ACSR • Aluminium • Copper 	PAGE 108-109
SERIES 50	 PS50	 HSI50		 AS50	Ø 50 mm	<ul style="list-style-type: none"> • Aluminium • Copper • Light armoured cables 	PAGE 110-111
SERIES 54			 STILO54		Ø 54 mm	<ul style="list-style-type: none"> • Aluminium • Copper 	PAGE 112
SERIES 65	 PS65			 AS65	Ø 65 mm	<ul style="list-style-type: none"> • Aluminium • Copper • Light armoured cables 	PAGE 113-114
SERIES 85	 PS85	 HSI85		 AS85	Ø 85 mm	<ul style="list-style-type: none"> • Aluminium • Copper • Light armoured cables 	PAGE 115-116
SERIES 95	 PS95			 AS95	Ø 95 mm	<ul style="list-style-type: none"> • Aluminium • Copper • Light armoured cables 	PAGE 117-118
SERIES 120-2	 PS120-2			 AS120-2	Ø 120 mm	<ul style="list-style-type: none"> • Aluminium • Copper • Light armoured cables 	PAGE 119-120
SERIES 120	 PS120 (SK160)				Ø 120 mm	<ul style="list-style-type: none"> • Aluminium • Copper • Heavy armoured cables 	PAGE 121

SERIES 25 - MAX. 25 MM CUTTING DIAMETER

Main characteristics PS25 - HS25 - STILO25 - AS25

CUTTING DIAMETER	max. Ø 25 mm
SUGGESTED APPLICATION	Steel, ACSR, copper and aluminium

CUTTING FORCE	60 kN
OPERATING PRESSURE	700 bar (70 MPa)

✓ SUITABLE TO CUT HEAVY DUTY WIRE ARMoured CABLES

PS25 - Hydraulic cutting head

The unit must be operated through max. 700 bar hydraulic pump (suggested operating pressure 700 bar/70 MPa) (pages 201-208).

Technical characteristics:

- Light and compact structure
- Cutting head with snap closure and blade guide
- Quick male connector with automatic lock system and dust cap

Tool dimensions: 81 x 206 x 54 mm

Tool weight: 1,9 kg

Description	Order No.	Dimensions	Weight
Set cutting head PS25	PS25	140 x 230 x 60 mm	2,2 kg
Fixed cutting blade	GMPS25	-	200 g
Movable cutting blade	SMPS25	-	40 g

Set equipment:

- Hydraulic cutting head
- Soft nylon case for cutting head

HS25 - Hand operated hydraulic cutting tool

Technical characteristics:

- Light and compact structure
- Cutting head with snap closure and blade guide, rotates 360°
- Quick feed with double hydraulic cylinder
- Automatic pressure safety valve
- Manual return in any position

Tool dimensions: 165 x 393 x 54 mm

Tool weight: 2,9 kg

Description	Order No.	Dimensions	Weight
Set cutting tool HS25	HS25	440 x 190 x 80 mm	4,0 kg
Fixed cutting blade	GMPS25	-	200 g
Movable cutting blade	SMPS25	-	40 g

Set equipment:

- Test report
- Manual hydraulic cutting tool
- Rigid plastic case





Spare blades



Set STILO-S25

STILO-S25 - Battery operated cutting tool

The STILO-S25 battery powered hydraulic cable cutter is suitable for cutting through hard steel up to a thickness of 25mm

Technical characteristics:

- Right or left hand ergonomic non-slip cushioned grip
- Latch head design
- 360° tool head rotation
- Lightweight and compact design
- Extremely fast work due to triple axial piston pump
- DataTrack mini USB-port for connectivity
- Cutting curve and error message output
- No aborted cutting cycles due to ongoing monitoring of the remaining battery running time
- Multifunction LED indicator lights even to indicate the maintenance intervals
- LED battery charge indicator
- Heavy duty blades
- Soft start and quick stop increase the service life
- Manual return possible in any position
- Shutdown and automatic return after completion of a cutting cycle
- Automatic energy-saving mode after approx. 5 minutes

Tool dimensions: 380 x 63 x 76 mm

Tool weight (with battery): 3,7 kg

Description	Order No.	Dimensions	Weight
Set cutting tool STILO-S25	STILO-S25	450 x 500 x 140 mm	6,5 kg
Fixed cutting blade	GMPS25	-	200 g
Movable cutting blade	SMPS25	-	40 g

Accessories see page 209-212

Set equipment:

- Test report
- Battery-operated hydraulic cutting tool
- Battery 18 V/1,5 Ah Li-Ion (RA12)
- Battery charger (LG8)
- USB-cable
- Software (CD)
- Rigid plastic case



AS25 - Battery operated hydraulic cutting tool

Technical characteristics:

- 3 years of warranty or 20.000 work cycles
- Light and compact structure
- Latch head design
- 360° tool head rotation
- High speed feed with double hydraulic cylinder
- Pressure release button with single handed operation (on both sides, for left and right handed operators)
- Fastening ring for shoulder strap
- Ergonomic grip for weight balance to ensure an easy and safe operation
- Plastic housing, grip and pressure release button, insulating and shock resistant
- Powerful LED for working space illumination

Tool dimensions: 331 x 359 x 75 mm
 Tool weight (with battery): 4,2 kg

Description	Order No.	Dimensions	Weight
Set cutting tool AS25	AS25	580 x 470 x 115 mm	7,6 kg
Fixed cutting blade	GMPS25	-	200 g
Movable cutting blade	SMPS25	-	40 g

Accessories see page 209-212

Set equipment:

- Test report
- Battery-operated hydraulic cutting tool
- Battery 18 V/3,0 Ah Li-Ion (RA11)
- Battery charger (LG8)
- Rigid plastic case
- Shoulder strap (TG2)



Set AS25



GMPS25

SMPS25

Spare blades

CUTTING RANGE TABLE PS25 - HS25 - STILO-S25 - AS25

Sector of use:	Tensile strength N/mm ²	<Ø 9 mm	Ø 10 mm	Ø 11 mm	Ø 12 mm	Ø 13 mm	Ø 14 mm	Ø 15 mm	Ø 16 mm	Ø 17 mm	Ø 18 mm	Ø 19 mm	Ø 20 mm	Ø 21 mm	Ø 22 mm	Ø 23 mm	Ø 24 mm	Ø 25 mm	Ø 26 mm	
		Copper	Rope and cable	<410																
	Bar	<250																		
	Bar	<300																		
Aluminium	Rope and cable	<200																		
	Bar	<160																		
	Bar	<340																		
Aldrey	Cable	<340																		
Alu/Steel	Rope	<1800																		
Steel	Rope (>200 wires)	<180																		
	Bar	<420																		
	Bar	<600																		
	Rope	<2200																		

SERIES 26 - MAX. 26 MM CUTTING DIAMETER

Main characteristics STILO-S26

CUTTING DIAMETER max. Ø 26 mm

SUGGESTED APPLICATION Steel, ACSR, copper and aluminium

4



CE

STILO-S26 - Battery operated cutting tool

The STILO-S26 battery powered hydraulic cable cutter is suitable for cutting through hard steel up to a thickness of 26 mm

Technical characteristics:

- Right or left hand ergonomic non-slip cushioned grip
- Open cutting head design
- 360° tool head rotation
- Lightweight and compact design
- Extremely fast work due to triple axial piston pump
- DataTrack mini USB-port for connectivity
- Cutting curve and error message output
- No aborted cutting cycles due to ongoing monitoring of the remaining battery running time
- Multifunction LED indicator lights even to indicate the maintenance intervals
- LED battery charge indicator
- Heavy duty blades
- Soft start and quick stop increase the service life
- Manual return possible in any position
- Shutdown and automatic return after completion of a cutting cycle
- Automatic energy-saving mode after approx. 5 minutes

Tool dimensions: 457 x 126 x 82 mm
 Tool weight (with battery): 4,2 kg

Description	Order No.	Dimensions	Weight
Set cutting tool STILO-S26	STILO-S26	450 x 500 x 140 mm	6,9 kg
Cutting insert Steel	SM26	-	40 g

Accessories see page 209-212

Set equipment:

- Test report
- Battery-operated hydraulic cutting tool
- Battery 18 V/1,5 Ah Li-Ion (RA12)
- Battery charger (LG8)
- USB-cable
- Software (CD)
- Rigid plastic case

CUTTING RANGE TABLE STILO-S26

Sector of use:		Tensile strength N/mm ²	<Ø 9 mm	Ø 10 mm	Ø 11 mm	Ø 12 mm	Ø 13 mm	Ø 14 mm	Ø 15 mm	Ø 16 mm	Ø 17 mm	Ø 18 mm	Ø 19 mm	Ø 20 mm	Ø 21 mm	Ø 22 mm	Ø 23 mm	Ø 24 mm	Ø 25 mm	Ø 26 mm
Copper	Rope and cable	<410																		
	Bar	<250																		
	Bar	<300																		
Aluminium	Rope and cable	<200																		
	Bar	<160																		
	Bar	<340																		
Aldrey	Cable	<340																		
Alu/Steel	Rope	<1800																		
Steel	Rope (>200 wires)	<180																		
	Bar	<420																		
	Bar	<600																		
	Rope	<2200																		

SERIES 40 - MAX. 40 MM CUTTING DIAMETER

Main characteristics STILO-S40

CUTTING DIAMETER	max. Ø 40 mm
SUGGESTED APPLICATION	Copper and aluminium

CUTTING FORCE	50 kN
OPERATING PRESSURE	550 bar (55 MPa)



CE

STILO-S40 - Battery operated hydraulic cutting tool DN 40mm

The Stilo-S40 battery powered hydraulic cable cutter is suitable for cutting thin and multi-core aluminium and copper cables up to 40 mm in diameter.

Technical characteristics:

- Open cutting head with endless rotation
- Cutting blades in alloyed and hardened tool steel with special coating for wear reduction
- Light, compact and resistant design
- Extremely fast work due to triple axial piston pump
- Electronic control and monitoring of the cutting process
- Service-friendly blade change due to simplified innovative design
- Patented cutting detection: automatic opening of the cutting edges and engine shutdown after completed cutting process
- Manual head opening possible in any position
- Multifunction electronics with sleep mode, maintenance indicator and service control
- 3-color LED for display of service, battery and cycle messages
- Readout of all cycles and service data via USB
- Charge level display directly on the battery
- Integrated service management with software updates via USB
- Fast head opening due to patented return system

Tool dimensions: 457 x 130 x 82 mm
 Tool weight (with battery): 3,1 kg

Application area:

- AL-single coremax. 4 x 120mm²
- AL-multi coremax. 4 x 120mm²
- CU-multi coremax. 4 x 95mm²
- Fine stranded cables Class 5

Description	Order No.	Dimensions	Weight
Set cutting tool STILO-S40	STILO-S40	450 x 500 x 140 mm	6,3 kg
Spare blades	SM40	-	500 g

Accessories see page 209-212

Set equipment:

- Test report
- Battery-operated hydraulic cutting tool
- Battery 18 V/1,5 Ah Li-Ion (RA20)
- Battery charger (LG8)
- USB-cable
- Software (CD)
- Rigid plastic case



Set STILO-S40

CUTTING RANGE TABLE STILO-S40

Sector of use:		Tensile strength N/mm ²	<Ø 30 mm	Ø 35 mm	Ø 40 mm	Ø 45 mm	Ø 50 mm	Ø 55 mm	Ø 60 mm	Ø 65 mm	Ø 70 mm	Ø 75 mm	Ø 80 mm	Ø 85 mm	Ø 90 mm	Ø 95 mm	Ø 100 mm	Ø 105 mm	Ø 110 mm	Ø 115 mm	Ø 120 mm	Ø 125 mm	
Copper	Cable		<410																				
Aluminium	Cable	<210																					

SERIES 45 - MAX. 45 MM CUTTING DIAMETER

Main characteristics PS45 - HSI45 - AS45

CUTTING DIAMETER	max. Ø 45 mm
SUGGESTED APPLICATION	Steel, ACSR, copper and aluminium

CUTTING FORCE	60 kN
OPERATING PRESSURE	700 bar (70 MPa)

✓ SUITABLE TO CUT HEAVY DUTY WIRE ARMoured CABLES



PS45 - Hydraulic cutting head

The unit must be operated through max. 700 bar hydraulic pump (suggested operating pressure 700 bar/70 MPa) (pages 201-208).

Technical characteristics:

- Light and compact structure
- Cutting head with snap closure and blade guide
- Quick male connector with automatic lock system and dust cap

Tool dimensions 98 x 305 x 69 mm
Tool weight: 3,7 kg

Description	Order No.	Dimensions	Weight
Cutting head with case	PS45	380 x 145 x 70 mm	3,0 kg
Fixed cutting blade	GMPS45	-	120 g
Movable cutting blade	SMPS45	-	100 g

Set equipment:

- Hydraulic cutting head
- Soft nylon case for cutting head



HSI45 - Hand operated hydraulic cutting tool

Technical characteristics:

- Light and compact structure
- Cutting head with snap closure and blade guide, rotates 270°
- Quick feed with double hydraulic cylinder
- Single hand use by innerside handle
- Automatic pressure safety valve
- Manual return in any position

Tool dimensions: 184 x 601 x 69 mm
Tool weight: 5,7 kg

Description	Order No.	Dimensions	Weight
Set cutting tool	HSI45	700 x 260 x 105 mm	7,4 kg
Fixed cutting blade	GMPS45	-	120 g
Movable cutting blade	SMPS45	-	100 g

Set equipment:

- Test report
- Manual hydraulic cutting tool
- Plastic case



AS45 - Battery operated hydraulic cutting tool

Technical characteristics:

- 3 years of warranty or 20.000 work cycles
- Light and compact structure
- Cutting head with snap closure, rotates 360°
- High speed feed with double hydraulic cylinder
- Pressure release button with single handed operation (on both sides, for left and right handed operators)
- Fastening ring for shoulder strap
- Ergonomic grip for weight balance to ensure an easy and safe operation
- Plastic housing, grip and pressure release button, insulating and shock resistant
- Powerful led for working space illumination

Tool dimensions: 331 x 434 x 75 mm

Tool weight (with battery): 5,4 kg

Description	Order No.	Dimensions	Weight
Set cutting tool AS45	AS45	580 x 470 x 115 mm	8,8 kg
Fixed cutting blade	GMPS45	-	120 g
Movable cutting blade	SMPS45	-	100 g

Accessories see page 209-212

Set equipment:

- Test report
- Battery-operated hydraulic cutting tool
- Battery 18 V/3,0 Ah Li-Ion (RA11)
- Battery charger (LG8)
- Rigid plastic case
- Shoulder strap (TG2)



Spare blades



Set AS45

CUTTING RANGE TABLE PS45 - HSI45 - AS45

Sector of use:		Tensile strength N/mm ²	<Ø 28 mm	Ø 29 mm	Ø 30 mm	Ø 31 mm	Ø 32 mm	Ø 33 mm	Ø 34 mm	Ø 35 mm	Ø 36 mm	Ø 37 mm	Ø 38 mm	Ø 39 mm	Ø 40 mm	Ø 41 mm	Ø 42 mm	Ø 43 mm	Ø 44 mm	Ø 45 mm	Ø 46 mm	
Copper	Rope and cable	<410																				
Aluminium	Rope and cable	<200																				
	Bar	<340																				
Alu/Steel	Rope	<1800																				

Sector of use:		Tensile strength N/mm ²	Ø 9 mm	Ø 11 mm	Ø 12 mm	Ø 13 mm	Ø 14 mm	Ø 15 mm	Ø 16 mm	Ø 17 mm	Ø 18 mm	Ø 19 mm	Ø 20 mm	Ø 21 mm	Ø 22 mm	Ø 23 mm	Ø 24 mm	Ø 25 mm	Ø 26 mm	Ø 27 mm	Ø 28 mm	
Copper	Bar	<250																				
	Bar	<300																				
Aluminium	Bar	<160																				
Aldrey	Cable	<340																				
	Rope (>200 wires)	<180																				
Steel	Bar	<420																				
	Bar	<600																				
	Rope	<2200																				

SERIES 50 - MAX. 50 MM CUTTING DIAMETER

Main characteristics PS50 - HSI50 - AS50

CUTTING DIAMETER	max. Ø 50 mm
SUGGESTED APPLICATION	Copper and aluminium

CUTTING FORCE	60 kN
OPERATING PRESSURE	700 bar (70 MPa)

PS50 - Hydraulic cutting head

The unit must be operated through max. 700 bar hydraulic pump (suggested operating pressure 700 bar/70 MPa) (pages 201-208).

Technical characteristics:

- Light and compact structure
- Cutting head with snap closure and blade guide
- Quick male connector with automatic lock system and dust cap

Tool dimensions 110 x 317 x 55 mm
Tool weight: 2,9 kg

Description	Order No.	Dimensions	Weight
Cutting head with case	PS50	380 x 140 x 70 mm	3,0 kg
Fixed cutting blade	GMPS50	-	320 g
Movable cutting blade	SMPS50	-	150 g

Set equipment:

- Hydraulic cutting head
- Soft case for cutting head

NOTE:

By adding "F" to the end of the order code (e.g. PS50F), you will order the tool equipped with sharper blades, suitable for very "F"ine stranded cables



HSI50 - Hand operated hydraulic cutting tool

Technical characteristics:

- Light and compact structure
- Cutting head with snap closure and blade guide, rotates 270°
- Quick feed with double hydraulic cylinder
- Single hand use by innerside handle
- Automatic pressure safety valve
- Manual return in any position

Tool dimensions: 195 x 612 x 58 mm
Tool weight: 5,1 kg

Description	Order No.	Dimensions	Weight
Set cutting tool	HSI50	700 x 260 x 105 mm	6,8 kg
Fixed cutting blade	GMPS50	-	320 g
Movable cutting blade	SMPS50	-	150 g

Set equipment:

- Test report
- Manual hydraulic cutting tool
- Plastic case

NOTE:

By adding "F" to the end of the order code (e.g. HSI50F), you will order the tool equipped with sharper blades, suitable for very "F"ine stranded cables





AS50 - Battery operated hydraulic cutting tool

Technical characteristics:

- 3 years of warranty or 20.000 work cycles
- Light and compact structure
- Cutting head with snap closure, rotates 360°
- High speed feed with double hydraulic cylinder
- Pressure release button with single handed operation (on both sides, for left and right handed operators)
- Fastening ring for shoulder strap
- Ergonomic grip for weight balance to ensure an easy and safe operation
- Plastic housing, grip and pressure release button, insulating and shock resistant
- Powerful LED for working space illumination

Tool dimensions: 331 x 445 x 75 mm

Tool weight (with battery): 5,4 kg

Description	Order No.	Dimensions	Weight
Set cutting tool AS50	AS50	580 x 470 x 115 mm	8,8 kg
Fixed cutting blade	GMPS50	-	320 g
Movable cutting blade	SMPS50	-	150 g

Accessories see page 209-212

Set equipment:

- Test report
- Battery-operated hydraulic cutting tool
- Battery 18 V/3,0 Ah Li-Ion (RA11)
- Battery charger (LG8)
- Rigid plastic case
- Shoulder strap (TG2)

NOTE:

By adding "F" to the end of the order code (e.g. AS50F), you will order the tool equipped with sharper blades, suitable for very "F"ine stranded cables



Spare blades



Set AS50

CUTTING RANGE TABLE PS50 - HSI50 - AS50

Sector of use:		Tensile strength N/mm ²	<Ø 30 mm	Ø 35 mm	Ø 40 mm	Ø 45 mm	Ø 50 mm	Ø 55 mm	Ø 60 mm	Ø 65 mm	Ø 70 mm	Ø 75 mm	Ø 80 mm	Ø 85 mm	Ø 90 mm	Ø 95 mm	Ø 100 mm	Ø 105 mm	Ø 110 mm	Ø 115 mm	Ø 120 mm	Ø 125 mm	
Copper	Cable		<410																				
Aluminium	Cable	<210																					

SERIES 54 - MAX. 54 MM CUTTING DIAMETER

Main characteristics STILO-S54

CUTTING DIAMETER max. Ø 54 mm

SUGGESTED APPLICATION Copper and aluminium



Set STILO-S54

STILO-S54 - Battery operated cutting tool

The STILO-S54 battery powered hydraulic cable cutter is suitable for cutting through thin and multi-core aluminium and copper cables up to a thickness of 54 mm

Technical characteristics:

- Open cutting head with endless rotation
- Cutting blades in alloyed and hardened tool steel with special coating for wear reduction
- Light, compact and resistant design
- Extremely fast work due to triple axial piston pump
- Electronic control and monitoring of the cutting process
- Service-friendly blade change due to simplified innovative design
- Patented cutting detection: automatic opening of the cutting edges and engine shutdown after completed cutting process
- Manual head opening possible in any position
- Multifunction electronics with sleep mode, maintenance indicator and service control
- 3-color LED for display of service, battery and cycle messages
- Readout of all cycles and service data via USB
- Charge status display directly on the battery
- Integrated service management with software updates via USB
- Fast head opening due to patented return system

- Tool dimensions:493 x 140 x 82 mm
- Tool weight (with battery):3,90 kg

Application area:

- CU/AL round multi core.....max. 1 x 240mm²
- AL-single core.....max. 4 x 150mm²
- AL-multi core.....max. 4 x 185mm²
- CU-multi core.....max. 4 x 120mm²
- Specially designed for power and underground cables

Description	Order No.	Dimensions	Weight
Set cutting tool STILO-S54	STILO-S54	450 x 500 x 140 mm	6,5 kg
Movable cutting blade	-	-	-

Accessories see page 209-212

Set equipment:

- Hydraulic cutting tool
- Sturdy transport case with deep-drawing insert
- RED-Li-Ion battery
- Battery charger
- Instruction manual
- Software
- USB cable

CUTTING RANGE TABLE STILO-S54

Sector of use:		Tensile strength N/mm ²	<Ø 30 mm	Ø 35 mm	Ø 40 mm	Ø 45 mm	Ø 50 mm	Ø 54 mm	Ø 60 mm	Ø 65 mm	Ø 70 mm	Ø 75 mm	Ø 80 mm	Ø 85 mm	Ø 90 mm	Ø 95 mm	Ø 100 mm	Ø 105 mm	Ø 110 mm	Ø 115 mm	Ø 120 mm	Ø 125 mm	
Copper	Cable		<410																				
Aluminium	Cable	<210																					

Main characteristics PS65 - AS65

CUTTING DIAMETER	max. Ø 65 mm
SUGGESTED APPLICATION	Copper and aluminium

CUTTING FORCE	44 kN
OPERATING PRESSURE	700 bar (70 MPa)



PS65 - Hydraulic cutting head

The unit must be operated through max. 700 bar hydraulic pump (suggested operating pressure 700 bar/70 MPa) (pages 201-208).

Technical characteristics:

- Light and compact structure
- Open cutting head with guide blade
- Easy handling through open cutting head
- Quick male connector with automatic lock system and dust cap

Tool dimensions 146 x 372 x 88 mm
 Tool weight: 4,7 kg

Description	Order No.	Dimensions	Weight
Cutting head with case	PS65	400 x 330 x 140 mm	6,3 kg
Movable cutting blade	SMI65	-	450 g
Knife guiding plate	MFI65	-	70 g

Set equipment:

- Hydraulic cutting head
- Plastic case



Set PS65



Spare blade and blade guide





AS65 - Battery operated hydraulic cutting tool

Technical characteristics:

- 3 years of warranty or 20.000 work cycles
- Light and compact structure
- Cutting head with snap closure, rotates 360°
- High speed feed with double hydraulic cylinder
- Pressure release button with single handed operation (on both sides, for left and right handed operators)
- Fastening ring for shoulder strap
- Ergonomic grip for weight balance to ensure an easy and safe operation
- Plastic housing, grip and pressure release button, insulating and shock resistant
- Powerful LED for working space illumination

Tool dimensions: 331 x 502 x 88 mm
 Tool weight (with battery): 7,6 kg

Description	Order No.	Dimensions	Weight
Set cutting tool AS65	AS65	580 x 470 x 115 mm	11 kg
Movable cutting blade	SMI65	-	450 g
Knife guiding plate	MFI65	-	70 g

Accessories see page 209-212

Set equipment:

- Test report
- Battery-operated hydraulic cutting tool
- Battery 18 V/3,0 Ah Li-Ion (RA11)
- Battery charger (LG8)
- Rigid plastic case
- Shoulder strap (TG2)



Set AS65

SMI65



Spare blade and blade guide

MFI65

CUTTING RANGE TABLE PS65 - AS65

Sector of use:		Tensile strength N/mm ²	<Ø 30 mm	Ø 35 mm	Ø 40 mm	Ø 45 mm	Ø 50 mm	Ø 55 mm	Ø 60 mm	Ø 65 mm	Ø 70 mm	Ø 75 mm	Ø 80 mm	Ø 85 mm	Ø 90 mm	Ø 95 mm	Ø 100 mm	Ø 105 mm	Ø 110 mm	Ø 115 mm	Ø 120 mm	Ø 125 mm	
Copper	Cable		<410																				
Aluminium	Cable	<210																					

Main characteristics PS85 - HSI85 - AS85

CUTTING DIAMETER	max. Ø 85 mm
SUGGESTED APPLICATION	Copper and aluminium

CUTTING FORCE	70 kN
OPERATING PRESSURE	700 bar (70 MPa)

PS85 - Hydraulic cutting head

The unit must be operated through max. 700 bar hydraulic pump (suggested operating pressure 700 bar/70 MPa) (pages 201-208).

Technical Characteristics:

- Light and compact structure
- Cutting head with snap closure and blade guide
- Quick male connector with automatic lock system and dust cap

Tool dimensions: 135 x 391 x 70 mm
 Tool weight: 4,5 kg

Description	Order No.	Dimensions	Weight
Cutting head with case	PS85	465 x 370 x 110 mm	5,8 kg
Fixed cutting blade	GMPS85	-	600 g
Movable cutting blade	SMPS85	-	400 g

Set equipment:

- Hydraulic cutting head
- Plastic case



Set PS85

GMPS85

SMPS85

Spare blades

HSI85 - Hand Operated Hydraulic Cutting Tool

Technical Characteristics:

- Light and compact structure
- Cutting head with snap closure and blade guide, rotates 270°
- Quick feed with double hydraulic cylinder
- Single hand use by innerside handle
- Automatic pressure safety valve
- Manual return in any position

Tool dimensions: 203 x 697 x 64 mm
 Tool weight: 7,3 kg

Description	Order No.	Dimensions	Weight
Set Cutting Tool	HSI85	700 x 230 x 75mm	13,1 kg
Fixed Cutting Blade	GMPS85	-	600 g
Movable Cutting Blade	SMPS85	-	400 g

Set equipment:

- Test report
- Manual hydraulic cutting tool
- Plastic case



Set HSI85

GMPS85

SMPS85

Spare blades

SERIES 85 - MAX. 85 MM CUTTING DIAMETER



AS85 - Battery operated hydraulic cutting tool

Technical characteristics:

- 3 years of warranty or 20.000 work cycles
- Light and compact structure
- Cutting head with snap closure; rotates 360°
- High speed feed with double hydraulic cylinder
- Pressure release button with single handed operation (on both sides, for left and right handed operators)
- Fastening ring for shoulder strap
- Ergonomic grip for weight balance to ensure an easy and safe operation
- Plastic housing, grip and pressure release button, insulating and shock resistant
- Powerful LED for working space illumination

Tool dimensions: 331 x 522 x 75 mm
 Tool weight (with battery): 7,2 kg



Set AS85

Description	Order No.	Dimensions	Weight
Set cutting tool AS85	AS85	580 x 470 x 115 mm	10,7 kg
Fixed cutting blade	SMPS85	-	600 g
Movable cutting blade	SMPS85	-	500 g

Accessories see page 209-212

Set equipment:

- Test report
- Battery-operated hydraulic cutting tool
- Battery 18 V/3,0 Ah Li-Ion (RA11)
- Battery charger (LG8)
- Rigid plastic case
- Shoulder strap (TG2)



GMPS85

SMPS85

Spare blades

CUTTING RANGE TABLE PS85 - HSI85 - AS85

Sector of use:		Tensile strength N/mm ²	<Ø 30 mm	Ø 35 mm	Ø 40 mm	Ø 45 mm	Ø 50 mm	Ø 55 mm	Ø 60 mm	Ø 65 mm	Ø 70 mm	Ø 75 mm	Ø 80 mm	Ø 85 mm	Ø 90 mm	Ø 95 mm	Ø 100 mm	Ø 105 mm	Ø 110 mm	Ø 115 mm	Ø 120 mm	Ø 125 mm	
Copper	Cable	<410																					
Aluminium	Cable	<210																					

Main characteristics PS95 - AS95

CUTTING DIAMETER	max. Ø 95 mm
SUGGESTED APPLICATION	Copper and Aluminium

CUTTING FORCE	65 kN
OPERATING PRESSURE	700 bar (70 MPa)

PS95 - Hydraulic cutting head

The unit must be operated through max. 700 bar hydraulic pump (suggested operating pressure 700 bar/70 MPa) (pages 201-208).

Technical characteristics:

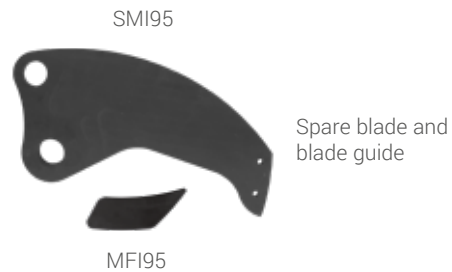
- Light and compact structure
- Open cutting head with guide blade
- Easy handling by open cutting head
- Quick male connector with automatic lock system and dust cap

Tool dimensions: 200 x 472 x 88 mm
 Tool weight: 7,5 kg

Description	Order No.	Dimensions	Weight
Cutting head with case	PS95	610 x 400 x 140 mm	10,1 kg
Movable cutting blade	SMI95	-	900 g
Knife guiding plate	MFI95	-	80 g

Set equipment:

- Hydraulic cutting head
- Plastic case



Set PS95





AS95 - Battery operated hydraulic cutting tool

Technical characteristics:

- 3 years of warranty or 20.000 work cycles
- Light and compact structure
- Cutting head with snap closure, rotates 360°
- High speed feed with double hydraulic cylinder
- Pressure release button with single handed operation (on both sides, for left and right handed operators)
- Fastening ring for shoulder strap
- Ergonomic grip for weight balance to ensure an easy and safe operation
- Plastic housing, grip and pressure release button, insulating and shock resistant
- Powerful LED for working space illumination

Tool dimensions: 344 x 603 x 91 mm
 Tool weight (with battery): 9,8 kg



4

Description	Order No.	Dimensions	Weight
Set cutting tool AS95	AS95	725 x 480 x 170 mm	13,9 kg
Movable cutting blade	SMI95	-	900 g
Knife guiding plate	MFI95	-	80 g

Accessories see page 209-212

Set equipment:

- Test report
- Battery-operated hydraulic cutting tool
- Battery 18 V/3,0 Ah Li-Ion (RA11)
- Battery charger (LG8)
- Rigid plastic case
- Shoulder strap (TG2)



Set AS95

SMI95



Spare blade and blade guide

MFI95

CUTTING RANGE TABLE PS95 - AS95

Sector of use:		Tensile strength N/mm ²	<Ø 30 mm	Ø 35 mm	Ø 40 mm	Ø 45 mm	Ø 50 mm	Ø 55 mm	Ø 60 mm	Ø 65 mm	Ø 70 mm	Ø 75 mm	Ø 80 mm	Ø 85 mm	Ø 90 mm	Ø 95 mm	Ø 100 mm	Ø 105 mm	Ø 110 mm	Ø 115 mm	Ø 120 mm	Ø 125 mm	
Copper	Cable	<410																					
Aluminium	Cable	<210																					

SERIES 120-2 - MAX. 120 MM CUTTING DIAMETER

Main characteristics PS120-2 - AS120-2

CUTTING DIAMETER	max. Ø 120 mm
SUGGESTED APPLICATION	Copper and aluminium

CUTTING FORCE	60 kN
OPERATING PRESSURE	700 bar (70 MPa)

PS120-2 - Hydraulic cutting head

The unit must be operated through max. 700 bar hydraulic pump (suggested operating pressure 700 bar/70 MPa) (pages 201-208).

Technical characteristics:

- Light and compact structure
- Open cutting head with guide blade
- Easy handling by open cutting head
- Quick male connector with automatic lock system and dust cap

Tool dimensions: 239 x 508 x 88 mm
 Tool weight: 8,2 kg

Description	Order No.	Dimensions	Weight
Cutting head with case	PS120-2	610 x 400 x 140 mm	10,7 kg
Movable cutting blade	SMI120-2	-	1300 g
Knife guiding plate	MF120-2	-	140 g

Set equipment:

- Hydraulic cutting head
- Plastic case



Set PS120-2

SMI120-2



Spare blade and blade guide

MF120-2





AS120-2 - Battery operated hydraulic cutting tool

Technical characteristics:

- 3 years of warranty or 20.000 work cycles
- Light and compact structure
- Cutting head with snap closure, rotates 360°
- High speed feed with double hydraulic cylinder
- Pressure release button with single handed operation (on both sides, for left and right handed operators)
- Fastening ring for shoulder strap
- Ergonomic grip for weight balance to ensure an easy and safe operation
- Plastic housing, grip and pressure release button, insulating and shock resistant
- Powerful LED for working space illumination

Tool dimensions: 359 x 639 x 91 mm

Tool weight (with battery): 10,5 kg



Set AS120-2

Description	Order No.	Dimensions	Weight
Set cutting tool AS120-2	AS120-2	725 x 480 x 170mm	14,6 kg
Movable cutting blade	SMI120-2	-	1300 g
Knife guiding plate	MFI120-2	-	140 g

Accessories see page 209-212

Set equipment:

- Test report
- Battery-operated hydraulic cutting tool
- Battery 18 V/3,0 Ah Li-Ion (RA11)
- Battery charger (LG8)
- Rigid plastic case
- Shoulder strap (TG2)

SMI120-2



Spare blade and blade guide

MFI120-2

CUTTING RANGE TABLE PS120-2 - AS120-2

Sector of use:		Tensile strength N/mm ²	\varnothing 30 mm	\varnothing 35 mm	\varnothing 40 mm	\varnothing 45 mm	\varnothing 50 mm	\varnothing 55 mm	\varnothing 60 mm	\varnothing 65 mm	\varnothing 70 mm	\varnothing 75 mm	\varnothing 80 mm	\varnothing 85 mm	\varnothing 90 mm	\varnothing 95 mm	\varnothing 100 mm	\varnothing 105 mm	\varnothing 110 mm	\varnothing 115 mm	\varnothing 120 mm	\varnothing 125 mm
Copper	Cable		<410																			
Aluminium	Cable	<210																				

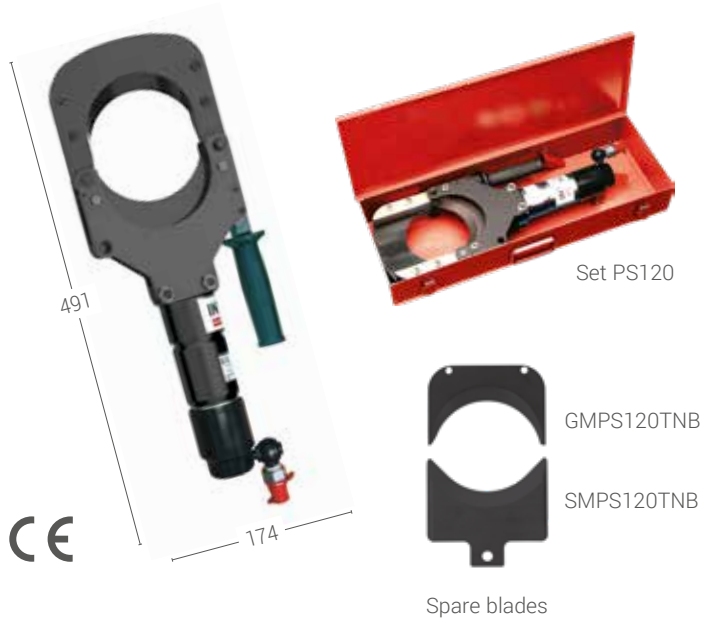
SERIES 120 - MAX. 120 MM CUTTING DIAMETER

Main characteristics PS120 - PS120-SK160

CUTTING DIAMETER	max. Ø 120 mm
SUGGESTED APPLICATION	Copper, aluminium, armoured cables

CUTTING FORCE	100 kN (PS120)/135 kN (PS120-SK160)
OPERATING PRESSURE	700 bar (70 MPa)

✓ SUITABLE TO CUT HEAVY DUTY STEEL WIRE ARMoured CABLES



PS120 - Hydraulic cutting head

The unit must be operated through max. 700 bar hydraulic pump (suggested operating pressure 700 bar/70 MPa) (pages 201-208).

Technical characteristics:

- Light and compact structure
- Blades made of high strength treated steel
- Quick male connector with automatic lock system and non detachable dust cap
- Head can be opened for easy cable insertion

Tool dimensions: 174 x 491 x 89 mm
Tool weight: 9,6 kg

Description	Order No.	Dimensions	Weight
Cutting head with case	PS120	610 x 400 x 140 mm	14,8 kg
Fixed cutting blade	GMPS120TNB	-	1240 g
Movable cutting blade	SMPS120TNB	-	940 g

Set equipment:

- Hydraulic cutting head
- Metal case



PS120-SK160 - Hydraulic cutting head (for wire armoured aluminium and copper cables)

The unit is suggested to 700 bar hydraulic pump (max operating pressure 850 bar/85 MPa) (pages 201-208).

Technical characteristics:

- Light and compact structure
- The blades are made of high strength treated tool steel
- Head can be opened for easy cutting
- Cutting force 135 kN (700 bar) resp. 160 kN (850 bar)

Tool dimensions: 174 x 491 x 89 mm
Tool weight: 11 kg

Description	Order No.	Dimensions	Weight
Cutting head with case	PS120-SK160	600 x 220 x 90 mm	16 kg
Fixed cutting blade	GMPS120	-	2,55 kg
Movable cutting blade	SMPS120	-	940 g

Set equipment:

- Hydraulic cutting head
- Metal case

CUTTING RANGE TABLE PS120 - SK160

Sector of use:		Tensile strength N/mm ²	<Ø 30 mm	Ø 35 mm	Ø 40 mm	Ø 45 mm	Ø 50 mm	Ø 55 mm	Ø 60 mm	Ø 65 mm	Ø 70 mm	Ø 75 mm	Ø 80 mm	Ø 85 mm	Ø 90 mm	Ø 95 mm	Ø 100 mm	Ø 105 mm	Ø 110 mm	Ø 115 mm	Ø 120 mm	Ø 125 mm	
Copper	Cable		<410																				
Aluminium	Cable	<210																					
Armoured	Cable	<200																					

Electric Arc in a Test Shortcircuit

Photo:

The photographs below show the development of an electric arc during an experimental short circuit, and show clearly the danger that may threaten operators in the case of work done under tension. Personal injury can be avoided only by using insulated cable cutters.



Photo 1: 200 ms



Photo 2: 800 ms



Photo 3: 1.200 ms



Photo 4: 1.600 ms

Insulated Cable Shears

Description of the insulated cable shears:

The insulated cable cutter is a device for safe cable cutting when the cable may be live and the absence of tension cannot be checked with complete safety. Such a check is particularly difficult in metallic screened cables. Therefore, before proceeding with any cutting operations, it is essential to take adequate measures to guarantee the operator's safety. One such measure is the use of an insulated cable cutter. This device – conforming to DIN EN 50340 (VDE 0682 part 661) – is made up essentially of a hydraulic pump and a cutting head to which a high pressure non-metallic hose of length 10.5 m is connected by a steady fitting.

Field of application:

According to § 6.2 of the safety regulations “Electric Systems and Materials” (BGV A 2, ex VGB 4) and § 6.2 of EN 50 110 standard (VDE 0105 part 100), before carrying out any work on grounding systems for voltages up to 60kV the absence of tension must be guaranteed for the entire duration of the operations. As it is not always possible to make sure there is no tension at the point where we must operate, especially for ground cables, it is essential to avoid the problem by cutting the cable with a special insulated cable cutter and at the same time carrying out a check at the point of interruption, e.g. by checking at the main switchboard.

Equipotential connection - Grounding:

For insulated cable cutters the DIN EN 50340 standard requires grounding the cutter head and establishing an equipotential connection between the pump and the ground. These regulations must however be implemented while respecting directives currently applicable in single countries. According to the “BGI 845-ZH1 / 437” directives, for instance, in Germany the cutting head cannot be individually grounded because the networks themselves are already grounded. There must be however an equipotential connection between the pump and the ground.



BATTERY OPERATED SAFETY CUTTING UNIT

with remote control

Highest safety level and easy handling even in rough working conditions. Guaranteed safe Cutting of copper and aluminium cables up to a max. diameter of 120mm and 60kV nominal voltage (Single core cables up to 110kV/60Hz)

4

Light and Robust

Through the inset of resistant materials

Compact

Fibreglass plastic case -
4,5 kg - 290 x 190 x 205 mm



Remote control

For a ordinary handling

Powerful

Increased batterypower through a
18V-Lithium-Ionen battery 3Ah



Tested for safety

△60.000V

SAFETY CUTTING UNIT



4

SSA - Safety cutting unit with hydraulic pump and accumulator

Ideal for safe cutting of copper and aluminium cables up to the maximum allowable diameter for the head being used (see table below)

Technical characteristics:

- Very light, compact and robust structure of the pump and cutting heads, through the inset from fibreglass plastic and corrosion resistant materials
- Double piston technology for rapid high pressure feed
- Remote control
- Multifunktion LED to maintenance and battery state control
- Rotary quick coupling with dust cap
- Protection IP43

Operating pressure: 625 bar (62.5 MPa)
 Low pressure (< 100 bar) Pump capacity: 1,5 l / min
 High pressure (up to 700 bar) Pump capacity: 0,1 l / min
 Tank capacity: 1200 ml
 Operating temperature: -20°C to +40°C

	SSA85-CP	SSA95-CP	SSA120S-CP	SSA120-2-CP
Cutting range	Ø 85 mm	Ø 95 mm	Ø 120 mm	Ø 120 mm
Cutting force	63 kN	58 kN	90 kN	54 kN
Working pressure	625 bar	625 bar	625 bar	625 bar
Headtype	close	open with blade guide	close	open with blade guide
Accumulator voltage	18 V	18 V	18 V	18 V
Tool weight	12,2 kg	14,8 kg	17,2 kg	15,6 kg
Dimensions pump	354 x 187 x 204 mm	354 x 187 x 204 mm	354 x 187 x 204 mm	354 x 187 x 204 mm
Dimensions head	345 x 135 x 65 mm	426 x 200 x 88 mm	491 x 190 x 80 mm	461 x 239 x 88 mm
Set with case	800 x 450 x 360 mm / 22 kg	800 x 450 x 360 mm / 24,6 kg	800 x 450 x 360 mm / 27 kg	800 x 450 x 360 mm / 25,4 kg



GROUNDING DEVICE:
to be ordered separately



SSA-ERD3

Set equipment

- Pump CP625-SSA
- Equipotential earthing rod with connection cable
- Hydraulic cutting head with flexible high pressure hose length 10,5 m
- Remote control with 1,5 m cable
- Transporting bag for CP625SSA
- Battery 18 V/3,0 Ah Li-Ion (RA11)
- Battery charger (LG8)
- Shoulder strap (TG3)
- USB-cable
- Plastic case with integral handle and wheels for easy transport of the entire equipment

Description	Order No.	Dimensions	Weight
Set: Grounding SSA120-CP, SSA85-CP	SSA-ERD1	length 1100 mm	4,6 kg
Set: Grounding SSA95-CP, SSA120-2-CP	SSA-ERD4	length 1100 mm	5,8 kg

Set equipment SSA-ERD:

- Earthing rod 1,1m
- Insulated earthing cable 6 m

SSA - Safety cutting unit

Ideal for safe cutting of copper and aluminium cables up to the maximum allowable diameter for the head being used (see table below)

Technical characteristics:

- Light and compact structure
- Reduced weight due to the use of light alloys and corrosion resistant materials
- Easy use and high stability due to the ergonomic pedal and the non-slip base
- Fast feeds by means of a double hydraulic cylinder
- Pressure control by pressure gauge
- Manual return in any position
- Rotary quick coupling with dust cap

Operating pressure: 625 bar (62.5 MPa)
 Low pressure pump capacity: 18,3 cm³ / stroke
 High pressure pump capacity: 2 cm³ / stroke
 Tank capacity: 1200 ml
 Operating temperature: -20°C to +40°C



60.000V

SSA95

4

	SSA85	SSA95	SSA120	SSA120-2
Cutting range	Ø 85 mm	Ø 95 mm	Ø 120 mm	Ø 120 mm
Cutting force	63 kN	58 kN	90 kN	54 kN
Working pressure	625 bar	625 bar	625 bar	625 bar
Headtype	close	open with blade guide	close	open with blade guide
Tool weight	15,4 kg	17,4 kg	20,4 kg	18,7 kg
Dimensions pump	570 x 230 x 209 mm	570 x 230 x 209 mm	570 x 230 x 209 mm	570 x 230 x 209 mm
Dimensions head	345 x 135 x 65 mm	426 x 200 x 88 mm	491 x 190 x 80 mm	461 x 239 x 88 mm
Set with case	800 x 450 x 360 / 24 kg	800 x 450 x 360 / 26 kg	800 x 450 x 360 / 29,4 kg	800 x 450 x 360 / 27 kg



Set SSA

Set equipment

- Foot operated pump - FPI 63-SSA
- Equipotential earthing rod with connection cable
- Hydraulic cutting head with flexible high pressure hose length 10,5m
- Plastic case with integral handle and wheels for easy transport of the entire equipment (metal case available on request)

Description	Order No.	Dimensions	Weight
Set: Grounding SSA120, SSA85	SSA-ERD1	length 1100 mm	4,6 kg
Set: Grounding SSA95, SSA120-2	SSA-ERD4	length 1100 mm	5,8 kg

Set equipment SSA-ERD:

- Earthing rod 1,1m
- Insulated earthing cable 6 m

GROUNDING DEVICE:
to be ordered separately



SSA-ERD3

SAFETY CUTTING UNIT



 60.000V

Adapter for insulated hydraulic cutting units proofed and certified according to GS-ET-23

Suitable for creating an insulated hydraulic cutting unit with the hydraulic battery pump CP700 / CP700EC. The adapter reduces the pressure of the hydraulic battery pump CP700 from 700 bar to the cutting heads of the insulated hydraulic cutting unit to 625 bar. It also ensures that between the safety cutting head and the hydraulic pump CP700 the oil doesn't mix and thus no "conductive contamination" gets into the insulating hose.

Technical characteristics:

- Functional parts made of high-quality steel with burnished surface
- Base made of stainless steel with aluminium tubes and high quality plastic plates for increased stability
- Pressure reduction from 700 bar to 625 bar
- Avoidance of oil mixing of the hydraulic unit to the cutting heads
- Position control and oil loss indicator
- Pressure gauge for pressure indication and control of the cutting process
- Connection for equipotential bonding

4

	AD-SSA85	AD-SSA95	AD-SSA120S	AD-SSA120-2
				
Cutting range	Ø 85 mm	Ø 95 mm	Ø 120 mm	Ø 120 mm
Cutting force	63 kN	58 kN	90 kN	54 kN
Working pressure	625 bar	625 bar	625 bar	625 bar
Headtype	close	open with blade guide	close	open with blade guide
Dimensions head	345 x 135 x 65 mm	426 x 200 x 88 mm	491 x 190 x 80 mm	461 x 239 x 88 mm
Set with case	800 x 450 x 360 / 24 kg	800 x 450 x 360 / 27 kg	800 x 450 x 360 / 29,5 kg	800 x 450 x 360 / 28 kg



Set SSA

Set equipment

- Foot operated pump - FPI 63-SSA
- Equipotential earthing rod with connection cable
- Hydraulic cutting head with flexible high pressure hose length 10,5m
- Plastic case with integral handle and wheels for easy transport of the entire equipment (metal case available on request)

Description	Order No.	Dimensions	Weight
Set: Grounding AD-SSA85, AD-SSA120S	SSA-ERD1	length 1100 mm	4,6 kg
Set: Grounding AD-SSA95, AD-SSA120-2	SSA-ERD4	length 1100 mm	5,8 kg

Set equipment SSA-ERD:

- Earthing rod 1,1m
- Insulated earthing cable 6 m

GROUNDING DEVICE:
to be ordered separately



SSA-ERD3



5

CRIMPING TOOLS

MECHANICAL CRIMPING TOOLS
HYDRAULICAL CRIMPING TOOLS
CRIMPING TOOLS

NEXT GENERATION OF MECHANICAL CRIMPING TOOLS

5



Releasable ratchet ensures the complete crimp process

Low handle force thanks to an optimal force transmission

Lightweight

Ergonomic

Ergonomic soft-handles with slip-off protection



Set mechanical crimping tool with interchangeable dies

Description	Order No.	Dimensions	Weight
Set: Mechanic crimping tool	PM-TRE	220 mm	0,74 kg

Set equipment:

- Mechanic crimping tool
- Rigid resin case
- Crimping die for insulated cable connections 0,5 - 6 mm² - UEIQ6
- Crimping die for wire end sleeves 0,5 - 10 mm² - UEQ10
- Crimping die for wire end sleeves 0,14 - 10 mm² - UEAE10T

Technical characteristics:

- By 2 additional slots in the handle it is workable to transport up to 3 inserts directly in the tool
- Outstanding crimpings are reached due to a side crimping mechanism
- Inserts can be changed easily and without effort
- Further inserts are available from intercable to cover many different applications

Included dies

Crimping die for insulated cable connections

CRIMPING TYPE	Oval
CROSS-SECTION	0,5 - 6 mm ²

Description	Order No.
Crimping die for insulated cable connections	UEIQ6

Crimping die for brazed seam and pin terminals

CRIMPING TYPE	Indent
CROSS-SECTION	0,5 - 10 mm ²

Description	Order No.
Crimping die for brazed seam and pin terminals	UEQ10

Crimping die for end sleeves

CRIMPING TYPE	Trapezoid crimping
CROSS-SECTION	0,14 - 10 mm ²

Description	Order No.
Crimping die for insulated cable connections	UEAE10T

Set mechanical crimping tool with interchangeable dies

Description	Order No.	Dimensions	Weight
Set: Mechanic crimping tool	MPUSET-2	440 x 230 x 80 mm	0,9 kg

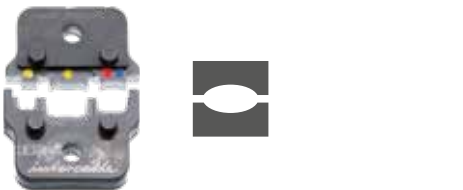
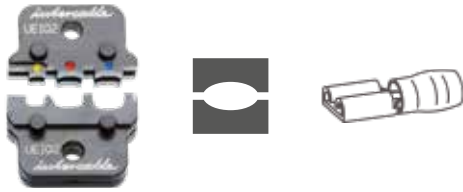
Set equipment:

- Mechanic crimping tool
- Rigid resin case
- Crimping die for insulated cable connections 0,5 - 6 mm² - UEIQ6
- Crimping die for wire end sleeves 0,14 - 2,5 mm² - UEAE2R
- Crimping die for wire end sleeves 4 - 16 mm² - UEAE16R



MECHANICAL CRIMPING TOOLS

Crimping dies for basic tool MPU + MPU-L



Crimping die for insulated cable connections

CRIMPING TYPE	Oval
CROSS-SECTION	0,1 - 2,5 mm ²
CRIMPING	Double crimping

Description	Order No.
Crimping die for insulated cable connections	UEIQ2

Crimping die for insulated cable connections

CRIMPING TYPE	Oval
CROSS-SECTION	0,5 - 6 mm ²
CRIMPING	Double crimping

Description	Order No.
Crimping die for insulated cable connections	UEIQ6

Crimping die for insulated flag female disconnects

CRIMPING TYPE	Oval
CROSS-SECTION	0,5 - 2,5 mm ²


Description	Order No.
Crimping die for insulated flag female disconnects	UEIQ2WF

Crimping die for insulated thermo-shrinking connector

CRIMPING TYPE	Oval
CROSS-SECTION	0,14 - 6 mm ²
CRIMPING	Einfachverpressung


Description	Order No.
Crimping die for insulated thermo-shrinking connector	UEIQ6WS

Crimping die for end sleeves

CRIMPING TYPE	Round  crimping
CROSS-SECTION	0,14 - 2,5 mm ² , 2 x 0,25 - 2 x 1,5 mm

Description	Order No.
Crimping die for end sleeves	UEAE2R

Crimping die for end sleeves

CRIMPING TYPE	Round  crimping
CROSS-SECTION	4 - 16 mm ² , 2 x 2,5 mm

Description	Order No.
Crimping die for end sleeves	UEAE16R



Crimping die for end sleeves

CRIMPING TYPE	Round <i>i</i> crimping
CROSS-SECTION	25 - 35 mm ²

Description	Order No.
Crimping die for end sleeves	UEAE35R



Crimping die for end sleeves

CRIMPING TYPE	Round <i>i</i> crimping
CROSS-SECTION	50 mm ²

Description	Order No.
Crimping die for end sleeves	UEAE50R



Crimping die for twin end-sleeves

CRIMPING TYPE	Round <i>i</i> crimping
CROSS-SECTION	2 x 4 - 2 x 16 mm ²

Description	Order No.
Crimping die for twin end-sleeves	UEAE2X16R



Crimping die for brazed seam and pin terminals

CRIMPING TYPE	Indent
CROSS-SECTION	0,5 - 10 mm ²

Description	Order No.
Crimping die for brazed seam and pin terminals	UEQ10



Crimping die for tubular cable lugs, R-series

CRIMPING TYPE	Double indent
CROSS-SECTION	0,5 - 2,5 mm ²

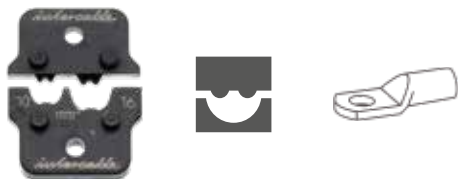
Description	Order No.
Crimping die for tubular cable lugs, R-series	UER2



Crimping die for tubular cable lugs, R-series

CRIMPING TYPE	Double indent
CROSS-SECTION	4 - 10 mm ²

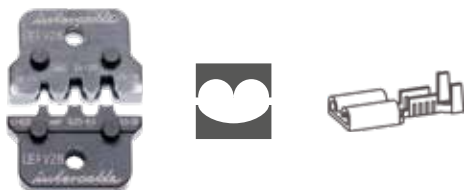
Description	Order No.
Crimping die for tubular cable lugs, R-series	UER10



Crimping die for tubular cable lugs, R-series

CRIMPING TYPE	Double indent
CROSS-SECTION	10 - 16 mm ²

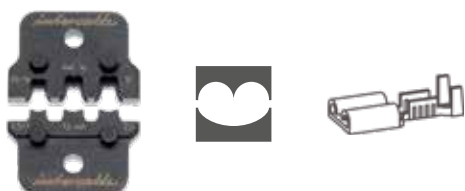
Description	Order No.
Crimping die for tubular cable lugs, R-series	UER16



Crimping die for non-insulated open barrel terminals

CRIMPING TYPE	Double crimping
TAB WIDTH	2,8 mm
CROSS-SECTION	0,1 - 1 mm ²

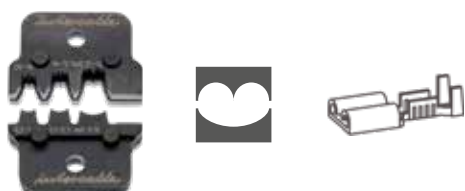
Description	Order No.
Crimping die for non-insulated open barrel terminals	UEFV28



Crimping die for non-insulated open barrel terminals

CRIMPING TYPE	Double crimping
TAB WIDTH	4,8 mm
CROSS-SECTION	0,5 - 2,5 mm ²

Description	Order No.
Crimping die for non-insulated open barrel terminals	UEFV48



Crimping die for non-insulated open barrel terminals

CRIMPING TYPE	Double crimping
TAB WIDTH	6,3 mm
CROSS-SECTION	0,5 - 6 mm ²

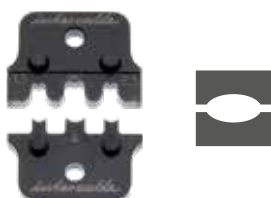
Description	Order No.
Crimping die for non-insulated open barrel terminals	UEFV63



Crimping die non-insulated open barrel terminals flag type

CRIMPING TYPE	Double crimping
TAB WIDTH	6,3 mm
CROSS-SECTION	0,5 - 2,5 mm ²

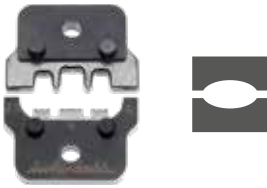
Description	Order No.
Crimping die non-insulated open barrel terminals flag type	UEFVS63



Crimping die for photovoltaics

CRIMPING TYPE	Oval
CONTACT TYPE	MC4
CROSS-SECTION	1,5 - 4 mm ²

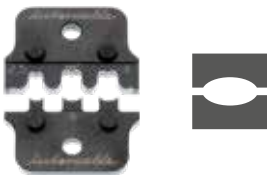
Description	Order No.
Crimping die for photovoltaics	UEMC41



Crimping die for photovoltaics

CRIMPING TYPE	Oval
CONTACT TYPE	MC3
CROSS-SECTION	2,5 - 6 mm ²

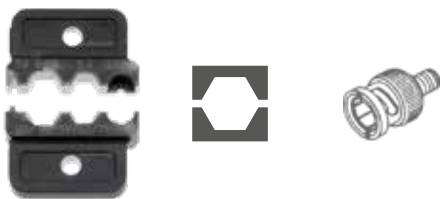
Description	Order No.
Crimping die for photovoltaics	UEMC3



Crimping die for photovoltaics

CRIMPING TYPE	Oval
CONTACT TYPE	MC4
CROSS-SECTION	2,5 - 6 mm ²

Description	Order No.
Crimping die for photovoltaics	UEMC4



Crimping die for Koax-connectors for BNC-cables

CRIMPING TYPE	Oval
	RG 58 / 59 / 62 / 71

Description	Order No.
Crimping die Koax-connectors for BNC-cables	UEBNC



Mechanical crimping tool for end sleeves

CRIMPING TYPE	Trapezoidal
APPLICATION RANGE	0,25 - 2,5 mm ²
SUGGESTED APPLICATION	End sleeves

Description	Order No.	Length	Weight
Crimping tool	MPAE2T	160 mm	170 g

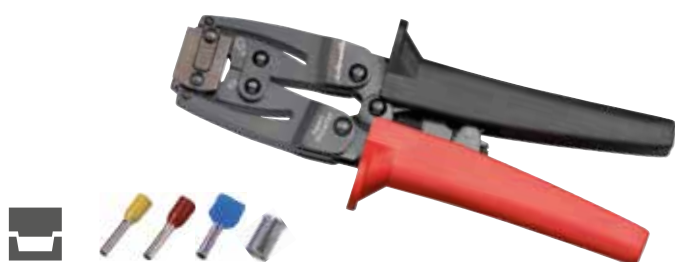


Mechanical crimping tool for end sleeves

CRIMPING TYPE	Indent
APPLICATION RANGE	0,5 - 16 mm ²
SUGGESTED APPLICATION	End sleeves

Description	Order No.	Length	Weight
Crimping tool	MPAE16K	190 mm	250 g

MECHANICAL CRIMPING TOOLS



Mechanical crimping tool for end sleeves

CRIMPING TYPE	Trapezoidal - Front
APPLICATION RANGE	0,14 - 6 mm ² / 2x0,5 - 2x2,5 mm ²
SUGGESTED APPLICATION	End sleeves

Description	Order No.	Length	Weight
Crimping tool	MPAE6TF	210 mm	525 g



Mechanical crimping tool for end sleeves

CRIMPING TYPE	Trapezoidal - Front
APPLICATION RANGE	6 - 16 mm ² / 2x4 - 2x6 mm ²
SUGGESTED APPLICATION	End sleeves

Description	Order No.	Length	Weight
Crimping tool	MPAE16TF	210 mm	690 g



Mechanical crimping tool for end sleeves

CRIMPING TYPE	Trapezoidal
APPLICATION RANGE	0,14 - 16 mm ²
SUGGESTED APPLICATION	End sleeves

Description	Order No.	Length	Weight
Crimping tool	MPAE16T	230 mm	485 g



Mechanical crimping tool for end sleeves

CRIMPING TYPE	Trapezoidal
APPLICATION RANGE	10 - 50 mm ²
SUGGESTED APPLICATION	End sleeves

Description	Order No.	Length	Weight
Crimping tool	PMT50	304 mm	600 g



Mechanical crimping tool for end sleeves

CRIMPING TYPE	Square
APPLICATION RANGE	0,08 - 10 mm ²
SUGGESTED APPLICATION	End sleeves

Description	Order No.	Length	Weight
Crimping tool	MPAE10V	195 mm	320 g



Mechanical crimping tool for end sleeves

CRIMPING TYPE	Hexagonal
APPLICATION RANGE	0,08 - 16 mm ²
SUGGESTED APPLICATION	End sleeves

Description	Order No.	Length	Weight
Crimping tool	MPAE16S	215 mm	450 g

- Automatic adjustment to the cross section from 0,08 to 16 mm² without setting
- Movable locator for a precise location of small cross sections

MECHANICAL CRIMPING TOOLS

Mechanical crimping tool for end sleeves

CRIMPING TYPE	Round <i>i</i> crimping
APPLICATION RANGE	0,14 - 2,5 mm ²
SUGGESTED APPLICATION	End sleeves

Description	Order No.	Length	Weight
Crimping tool	MPAE2R	195 mm	320 g

Mechanical crimping tool for end sleeves

CRIMPING TYPE	Round <i>i</i> crimping
APPLICATION RANGE	1,5 - 6 mm ²
SUGGESTED APPLICATION	End sleeves

Description	Order No.	Length	Weight
Crimping tool	MPAE6R	195 mm	320 g

Mechanical crimping tool for end sleeves

CRIMPING TYPE	Round <i>i</i> crimping
APPLICATION RANGE	10 - 16 mm ²
SUGGESTED APPLICATION	End sleeves

Description	Order No.	Length	Weight
Crimping tool	MPAE16R	190 mm	320 g

Mechanical crimping tool for end sleeves

CRIMPING TYPE	Round <i>i</i> crimping
APPLICATION RANGE	10 - 25 mm ²
SUGGESTED APPLICATION	End sleeves

Description	Order No.	Length	Weight
Crimping tool	MPAE25R	195 mm	350 g

Mechanical crimping tool for end sleeves

CRIMPING TYPE	Round <i>i</i> crimping
APPLICATION RANGE	10 - 50 mm ²
SUGGESTED APPLICATION	End sleeves

Description	Order No.	Length	Weight
Crimping tool	MPAE50R	300 mm	700 g

Mechanical crimping tool for end sleeves

CRIMPING TYPE	Round <i>i</i> crimping
APPLICATION RANGE	50 - 95 mm ²
SUGGESTED APPLICATION	End sleeves

Description	Order No.	Length	Weight
Crimping tool	MPAE95R	300 mm	700 g



MECHANICAL CRIMPING TOOLS



Mechanical crimping tool for insulated terminals

CRIMPING TYPE	Oval / double crimping
APPLICATION RANGE	0,5 - 6 mm ²
SUGGESTED APPLICATION	Insulated terminals

Description	Order No.	Length	Weight
Crimping tool	MPIQ6	220 mm	480 g

• Crimping of conductor and insulation in one step



Mechanical crimping tool for insulated terminals

CRIMPING TYPE	Oval
APPLICATION RANGE	6 - 16 mm ²
SUGGESTED APPLICATION	Insulated terminals

Description	Order No.	Length	Weight
Crimping tool	MPIQ16	285 mm	710 g

• Crimping of conductor and insulation in one step



Mechanical crimping tool for heat shrinkable butt-splice and insulated closed end connectors

CRIMPING TYPE	Oval
APPLICATION RANGE	0,5 - 6 mm ²
SUGGESTED APPLICATION	Heat shrinkable butt-splice and insulated closed end connectors

Description	Order No.	Length	Weight
Crimping tool	PMGI6	220 mm	480 g



Mechanical crimping tool for non-insulated open barrel terminals

CRIMPING TYPE	Double indent
APPLICATION RANGE	0,25 - 6 mm ²
SUGGESTED APPLICATION	Non-insulated open barrel terminals

Description	Order No.	Length	Weight
Crimping tool	MPFV	220 mm	475 g



Mechanical crimping tool for non-insulated cable connectors

CRIMPING TYPE	Double indent
APPLICATION RANGE	10 - 16 mm ²
SUGGESTED APPLICATION	Non-insulated cable connectors

Description	Order No.	Length	Weight
Crimping tool	PMC16	285 mm	700 g

MECHANICAL CRIMPING TOOLS



Mechanical crimping tool for non-insulated cable connectors

CRIMPING TYPE	Double indent
APPLICATION RANGE	0,5 - 16 mm ²
SUGGESTED APPLICATION	Non-insulated cable connectors

Description	Order No.	Length	Weight
Crimping tool	PMCL16	280 mm	700 g



Mechanical crimping tool for non-insulated cable connectors

CRIMPING TYPE	Hexagonal
APPLICATION RANGE	10 - 25 mm ²
SUGGESTED APPLICATION	Non-insulated cable connectors

Description	Order No.	Length	Weight
Crimping tool	PMC25	270 mm	700 g



EPU-SET Electromechanical battery crimping tool 12V

Suitable to crimp insulated and non-insulated cable lugs and connectors as well as end-sleeves.

Description	Order No.	Length	Weight
Battery crimping tool 12V	EPU-SET	-	-

Characteristics:

- Electromechanically driven handheld device with lithium ion battery
- Light, slim and robust construction
- Due to a parallel closure of the jaws an optimal crimp result will be achieved without any violation of the insulation
- Tap-operation for exact positioning of the contacts
- Cost-effective in operation due to low susceptibility and long maintenance intervals
- Emergency release and reset-function
- Fast engine stop, no risk of overshoot
- Low noise generation
- Automatic rewind after the completed crimping
- Process monitoring by multifunction display:
 - Battery level
 - Service interval
 - Warning function against overheating / overload

Set equipment:

- Electromechanical battery crimping tool 12V
- Crimping die for insulated cable lugs and connectors 0,5-1,0/1,5-2,5/4-6mm²
- Lithium ion battery with charger
- Allen wrench
- Resin case with foam insert

*Further crimping dies on request



Crimping die for insulated terminals

Crimping die for end sleeves

MECHANICAL CRIMPING TOOLS



Mechanical crimping tool for non-insulated tubular cable lugs and connectors, R series

CRIMPING TYPE	i crimping
APPLICATION RANGE	10 - 25 mm ²
SUGGESTED APPLICATION	Non-insulated R series

Description	Order No.	Length	Weight
Crimping tool	MPR25i	270 mm	700 g

Mechanical crimping tool for non-insulated tubular cable lugs and connectors

Description	Order No.	Length	Weight
Crimping tool 6-50 ² (I series)	MPR-1	380 mm	1,5 kg
Crimping tool 6-50 ² (R series)	MPR50i	380 mm	1,5 kg
Crimping tool 10-70 ² (F series)	MPF70i	515 mm	2,1 kg
Crimping tool 25-150 ² (I series)	MPR-2	550 mm	3,7 kg
Crimping tool 10-120 ² (R series)	MPR120i	550 mm	3,7 kg

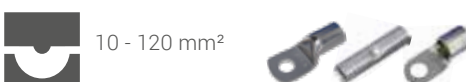
- Crimping type: i crimp
- Reduces crimping force
- Die selection with revolver system

Mechanical crimping tool for non-insulated tubular cable lugs and connectors

Description	Order No.	Length	Weight
Crimping tool 6-50 ² (DIN series)	MPD50S	380 mm	1,5 kg
Crimping tool 6-50 ² (British series)	MPB50	380 mm	1,5 kg
Crimping tool 10-120 ² (DIN series)	MPD120S	550 mm	3,7 kg
Crimping tool 10-120 ² (British series)	MPB120	550 mm	3,7 kg

- Crimping type: Hexagon crimp
- Reduces crimping force
- Die selection with revolver system

Mechanical crimping tool for non-insulated tubular cable lugs and connectors standard type 10 - 120 mm²



Description	Order No.	Length	Weight
Mechanical crimping tool	MPR-3	535 mm	3,1 kg

- Crimping type: Indent

 **NOTE:**
For the crimp of insulated terminals please order MPR-4

MPR-2

MPR-1

MPR120i
MPD120S
MPB120

MMPR50i
MPD50S
MPB50
MPF70i

MP60-1 - Mechanical crimping tool 60 kN

CRIMPING SECTION	max 240 mm ²
MAXIMUM STROKE	20 mm
CRIMPING FORCE	60 kN

Technical characteristics:

- Light and compact structure
- Telescopic handles adjustable from 560 to 860 mm
- Snap closure crimping head, rotates 360°

Tool dimensions: 160 x 560 x 50 mm

Tool weight: 2.9 kg

Description	Order No.	Dimensions	Weight
Set crimping tool	MP60-1	700 x 260 x 105 mm	4,6 kg

Set equipment:

- Mechanical crimping tool

For the crimping dies of tool MP60-1 an additional opening spring (order ref. OEF1) is also required.



SELECTION OF CRIMPING DIES	Pages 166 - 170
PLASTIC CASE FOR DIES	Page 170
ADAPTER FOR CRIMPING DIES	Page 170



MP60-3 - Mechanical crimping tool 60 kN

CRIMPING SECTION	max 240 mm ²
MAXIMUM STROKE	20 mm
CRIMPING FORCE	60 kN

Technical characteristics:

- Light and compact structure
- Telescopic handles adjustable from 560 to 860 mm
- Snap closure crimping head, rotates 360°

Tool dimensions: 154 x 550 x 44 mm

Tool weight: 3,6 kg

Description	Order No.	Dimensions	Weight
Set crimping tool	MP60-3	700 x 260 x 105 mm	5,3 kg

Set equipment:

- Mechanical crimping tool
- Nylon case



5

SELECTION OF CRIMPING DIES	Pages 166 - 170
PLASTIC CASE FOR DIES	Page 170
ADAPTER FOR CRIMPING DIES	Page 170

MP60-2 - Mechanical crimping tool - 60 kN

CRIMPING SECTION	max 300 mm ²
MAXIMUM STROKE	19 mm
CRIMPING FORCE	60 kN

Technical characteristics:

- Light and compact structure
- Telescopic handles adjustable from 560 to 860 mm
- Snap closure crimping head, rotates 360°

Tool dimensions: 154 x 552 x 44 mm

Tool weight: 3,6 kg

Description	Order No.	Dimensions	Weight
Set crimping tool	MP60-2	700 x 260 x 105 mm	5,3 kg

Set equipment:

- Mechanical crimping tool
- Nylon case



SELECTION OF CRIMPING DIES	Pages 171 - 174
PLASTIC CASE FOR DIES	Page 174



MPSF6-1

507

160



Set MPSF6-1



MPSF6-6 lose



MKGR1

MPSF6 - Manual mechanical tool for SF6-insulated MT-switchboard terminals

Designed for assembly and disassembly of the connector for external cone terminals of MT cables operate at voltages from 12 to 36kV.

Technical characteristics:

- Mechanical tool with symmetrical operation
- Removable compression head
- Telescopic handles 350 - 560 mm
- Maximum stroke: 10 mm
- Maximum threaded terminal travel: 30 mm
- Crimping force: 60 kN
- Handgrip opening angle: 120°

Tool dimensions: 160 x 507 x 85 mm
Tool weight: 3,1 kg

Application range

Head size	Voltage range	Amperage	Cross section
1	12 kV, 24 kV, 36 kV	630 A	25 mm ² - 240 mm ²
2	12 kV, 24 kV, 36 kV	800 A	50 mm ² - 300 mm ²
3	12 kV, 24 kV, 36 kV, 52 kV	1.250 A	150 mm ² - 630 mm ²

Description	Order No.	Dimensions	Weight
Set: Mechanical tool for SF6 System size 1	MPSF6-1	570 x 155 x 75 mm	5,5 kg
Set: Mechanical tool for SF6 System size 2	MPSF6-2	570 x 155 x 75 mm	5,1 kg
Set: Mechanical tool for SF6 System size 3	MPSF6-3	630 x 155 x 95 mm	7,4 kg

Set equipment MPSF6-X:

- Mechanical crimping tool
- Terminal dies
- Metallic case (BKMPSF6)

Description	Order No.	Dimensions	Weight
Mechanical tool for SF6 system without terminals and case	MPSF6-lose	515 x 155 x 73 mm	3,1 kg
Terminal dies size 1 SF6 system	MKGR1	125 x 65 x 65 mm	1,9 kg
Terminal dies size 2 SF6 system	MKGR2	125 x 65 x 65 mm	1,7 kg
Terminal dies size 3 SF6 system	MKGR3	185 x 95 x 95 mm	4,0 kg

STILO60

THE STILO PRODUCT FAMILY CONTINUES TO GROW

Manageable

Rotating crimping head 360° for optimal crimping in any position

Ergonomic

Effortless working and easy handling thanks to equilibrate 2-component handle

Powerful

18V 1,5 Ah Lithium-Ion battery for even more pressings during one battery life

Automatic return
























At the end of the crimping cycle

Intelligent

Multifunction LED to indicate the maintenance intervals (20.000 cycles)



HYDRAULIC CRIMPING TOOLS - OVERVIEW

	Heads	Hand operated	Battery operated	max. Crimping section *	Crimping force		
SERIES 45		 HP45	 STILO45	150 mm ²	45 kN	PAGE 145-146	
SERIES 50		 HP50	 STILO50	240 mm ²	50 kN	PAGE 147-148	
SERIES 60-2/4	 PP60-1	 HP60-3		 AP60-1	240 mm ²	60 kN	PAGE 149-150
SERIES 60-2/4	 PP60-2	 HP60-4	 STILO60	 AP60-2	300 mm ²	60 kN	PAGE 151-152
SERIES 130-C	 PP130-C	 HPI130-C		 AP130-C	400 mm ²	130 kN	PAGE 153-154
SERIE 130-C2	 PP130-C2	 HPI130-C2		 AP130-C2	400 mm ²	130 kN	PAGE 155-156
SERIES 130-H	 PP130-H	 HPI130-H		 AP130-H	400 mm ²	130 kN	PAGE 157-158
SERIE 230	 PP230-630 PP230				630 mm ²	230 kN	PAGE 159
SERIES 520	 PP520				1.000 mm ²	520 kN	PAGE 161
SERIES 600	 PP600				1.600 mm ²	600 kN	PAGE 162

*depending on type and size of terminals used

MAIN CHARACTERISTICS HP45

CRIMPING SECTION	max. 150 mm ²
MAXIMUM STROKE	16 mm

CRIMPING FORCE	45 kN
OPERATING PRESSURE	470 bar (47 MPa)



HP45 - Hand operated hydraulic crimping tool

Technical characteristics:

- Light and compact structure
- Pump body in light alloy
- Snap closure crimping head, rotates 180°
- Automatic pressure safety valve
- Manual return at any position by turning the main handle

Tool dimensions: 157 x 375 x 54 mm

Tool weight: 2,5 kg

Description	Order No.	Dimensions	Weight
Set crimping tool	HP45	440 x 190 x 80 mm	3,5 kg

Set equipment:

- Test report
- Manual crimping tool
- Plastic case for manual hydraulic tool and maximum 15 crimping dies



Set HP45





STILO45 - Battery operated hydraulic crimping tool

Technical characteristics:
see page 143

Tool dimensions: 124 x 369 x 81 mm

Tool weight (incl. battery): 2,3 kg

Description	Order No.	Dimensions	Weight
Set crimping tool	STILO45	560 x 375 x 118 mm	5,1 kg

Accessories see page 209 - 212

Set equipment:

- Test report
- Battery-operated hydraulic crimping tool
- Battery 18 V/1,5 Ah Li-Ion (RA12)
- Battery charger (LG8)
- USB-cable
- Software (CD)
- Rigid plastic case



Set STILO45

5

CE

MAIN CHARACTERISTICS HP50

CRIMPING SECTION	max. 240 mm ²
MAXIMUM STROKE	16 mm

CRIMPING FORCE	50 kN
OPERATING PRESSURE	520 bar (52 MPa)



HP50 - Hand operated hydraulic crimping tool

Technical characteristics:

- Light and compact structure
- Pump body in light alloy
- Snap closure crimping head, rotates 180°
- Quick feed with double hydraulic cylinder
- Automatic pressure safety valve
- Manual return at any position by turning the main handle

Tool dimensions: 157 x 398 x 54 mm
 Tool weight: 2,7 kg

Description	Order No.	Dimensions	Weight
Set crimping tool	HP50	440 x 190 x 80 mm	3,7 kg

Set equipment:

- Test report
- Manual crimping tool
- Plastic case for manual hydraulic tool and maximum 15 crimping dies



Set HP50





STILO50 - Battery operated hydraulic crimping tool

Technical characteristics:
see page 143

Tool dimensions: 120 x 403 x 75 mm

Tool weight (incl. battery): 2,3 kg

Description	Order No.	Dimensions	Weight
Set crimping tool	STILO50	560 x 375 x 118 mm	5,3 kg

Accessories see page 209 - 212

Set equipment:

- Test report
- Battery-operated hydraulic crimping tool
- Battery 18 V/1,5 Ah Li-Ion (RA12)
- Battery charger (LG8)
- USB-cable
- Software (CD)
- Rigid plastic case

CE



Set STILO50

SELECTION OF CRIMPING DIES	Pages 166 - 170
PLASTIC CASE FOR DIES	Page 170
ADAPTER FOR CRIMPING DIES	Page 170

MAIN CHARACTERISTICS PP60-1 - HP60-3 - AP60-1

CRIMPING SECTION	max. 240 mm ²
MAXIMUM STROKE	17 mm

CRIMPING FORCE	60 kN
OPERATING PRESSURE	700 bar (70 MPa)



Set PP60-1

PP60-1 - Hydraulic crimping head

The unit must be operated through 700 bar hydraulic pump to reach crimping force of 60 kN (pages 201 - 208).

Technical characteristics:

- Sturdy and compact structure
- Openable head to make it easy to position and insert the crimping dies
- Quick make snap lock connection and non detachable dust cap

Tool dimensions: 74 x 198 x 54 mm
 Tool weight: 1,6 kg

Description	Order No.	Dimensions	Weight
Set crimping head	PP60-1	320 x 260 x 75 mm	2,1 kg

Set equipment:

- Hydraulic crimping head
- Plastic case for crimping head and maximum 18 crimping dies



Set HP60-3

HP60-3 - Hand operated hydraulic crimping Tool

Technical characteristics:

- Sturdy and compact structure
- Snap closure crimping head, rotates 180°
- Quick feed with double hydraulic cylinder
- Automatic pressure safety valve
- Manual return at any position by turning the main handle

Tool dimensions: 168 x 392 x 54 mm
 Tool weight: 2,5 kg

Description	Order No.	Dimensions	Weight
Set Crimping Tool	HP60-3	440 x 190 x 80 mm	3,7 kg

Set equipment:

- Test report
- Manual crimping tool
- Plastic case for manual hydraulic tool and maximum 15 crimping dies



Insulated version on request



Set AP60-1

AP60-1 - Battery operated hydraulic crimping tool

Technical characteristics:

- 3 years of warranty or 20.000 work cycles
- Light and compact structure
- Crimping head with snap closure, rotates 360°
- High speed feed with double hydraulic cylinder
- Pressure release button with single handed operation (on both sides, for left- and right handed operators)
- Fastening ring for shoulder strap
- Ergonomic grip for weight balance to ensure an easy and safe operation
- Plastic housing, grip and pressure release button, insulating and shock resistant
- Powerful LED for working space illumination

Tool dimensions: 329 x 331 x 75 mm
 Tool weight: 4,3 kg

Description	Order No.	Dimensions	Weight
Set crimping tool	AP60-1	580 x 470 x 115 mm	7,7 kg

Accessories see page 209 - 212

Set equipment:

- Test report
- Battery-operated hydraulic crimping tool
- Battery 18 V/3,0 Ah Li-Ion (RA11)
- Battery charger (LG8)
- Rigid plastic case for crimping tool and maximum 18 crimping dies
- Shoulder strap (TG2)

SELECTION OF CRIMPING DIES	Pages 166 - 170
PLASTIC CASE FOR DIES	Page 170
ADAPTER FOR CRIMPING DIES	Page 170

MAIN CHARACTERISTICS PP60-2 - HP60-4 - STILO-60 - AP60-2

CRIMPING SECTION	max. 300 mm ²
MAXIMUM STROKE	17 mm

CRIMPING FORCE	60 kN
OPERATING PRESSURE	700 bar (70 MPa)

PP60-2 - Hydraulic crimping head

The unit must be operated through 700 bar hydraulic pump to reach crimping force of 60 kN (pages 201 - 208).

Technical characteristics:

- Sturdy and compact structure
- Openable head to make it easy to position and insert the crimping dies
- Quick make snap lock connection and non detachable dust cap

Tool dimensions: 93 x 198 x 93 mm
Tool weight: 1,7 kg

Description	Order No.	Dimensions	Weight
Set crimping head	PP60-2	320 x 260 x 75 mm	2,3 kg

Set equipment:

- Hydraulic crimping head
- Plastic case for crimping head and maximum 18 crimping dies

HP60-4 - Hand operated hydraulic crimping tool

Technical characteristics:

- Sturdy and compact structure
- Snap closure crimping head, rotates 180°
- Quick feed with double hydraulic cylinder
- Automatic pressure safety valve
- Manual return at any position by turning the main handle

Tool dimensions 176 x 396 x 54 mm
Tool weight: 2,8 kg

Description	Order No.	Dimensions	Weight
Set crimping tool	HP60-4	700 x 260 x 105 mm	4,6 kg

Set equipment:

- Test report
- Manual crimping tool
- Plastic case for crimping tool and 21 crimping dies

STILO60 - Battery operated hydraulic crimping tool

Technical characteristics:

see page 143

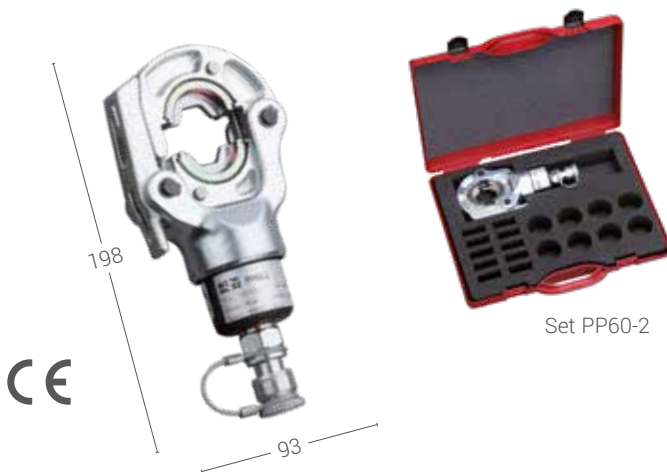
Tool dimensions: 124 x 383 x 81 mm
Tool weight: 3,3 kg (incl. battery)

Description	Order No.	Dimensions	Weight
Set crimping tool	STILO60	560 x 357 x 118 mm	6,3 kg

Accessories see page 209 - 212

Set equipment:

- Test report
- Battery-operated hydraulic crimping tool
- Battery 18 V/1,5 Ah Li-Ion (RA12)
- Battery charger (LG8)
- USB-cable
- Software (CD)
- Rigid plastic case





AP60-2 - Battery operated hydraulic crimping tool

Technical characteristics:

- 3 years of warranty or 20.000 work cycles
- Light and compact structure
- Crimping head with snap closure, rotates 360°
- High speed feed with double hydraulic cylinder
- Pressure release button with single handed operation (on both sides, for left- and right handed operators)
- Fastening ring for shoulder strap
- Ergonomic grip for weight balance to ensure an easy and safe operation
- Plastic housing, grip and pressure release button, insulating and shock resistant
- Powerful LED for working space illumination

Tool dimensions: 331 x 334 x 75 mm

Tool weight: 4,4 kg

Description	Order No.	Dimensions	Weight
Set Crimping Tool	AP60-2	580 x 470 x 115 mm	7,8 kg

Accessories see page 209 - 212

Set equipment:

- Test report
- Battery-operated hydraulic crimping tool
- Battery 18 V/3,0 Ah Li-Ion (RA11)
- Battery charger (LG8)
- Rigid plastic case for crimping tool and maximum 18 crimping dies
- Shoulder strap (TG2)



Set AP60-2

MAIN CHARACTERISTICS PP130-C - HPI130-C - AP130-C

CRIMPING SECTION	max. 400 mm ²
MAXIMUM STROKE	30 mm

CRIMPING FORCE	130 kN
OPERATING PRESSURE	700 bar (70 MPa)

HEAD OPENING: 29 mm



PP130-C - Hydraulic crimping head

The unit must be operated through 700 bar hydraulic pump to reach crimping force of 130 kN (pages 201 - 208).

Technical characteristics:

- Sturdy and compact structure
- C head for easy positioning of dies
- Quick make snap lock connection and non detachable dust cap

Tool dimensions: 128 x 254 x 78 mm
 Tool weight: 4,1 kg

Description	Order No.	Dimensions	Weight
Set crimping head	PP130-C	400 x 350 x 130 mm	5,6 kg

Set equipment:

- Hydraulic crimping head
- Plastic case for crimping head and 14 crimping dies

HPI130-C - Hand operated hydraulic crimping tool

Technical characteristics:

- Sturdy and compact structure
- C-shaped crimping head, rotates 270°
- Quick feed with double hydraulic cylinder
- Single hand use by innerside handle
- Automatic pressure safety valve
- Manual return at any position by turning the main handle

Tool dimensions: 222 x 561 x 78 mm
 Tool weight: 6,6 kg

Description	Order No.	Dimensions	Weight
Set Crimping Tool	HPI130-C	700 x 260 x 105 mm	8,2 kg

Set equipment:

- Test report
- Manual crimping tool
- Plastic case for crimping tool and 9 crimping dies



AP130-C - Battery operated hydraulic crimping tool

Technical characteristics:

- 3 years of warranty or 20.000 work cycles
- Light and compact structure
- C-shaped crimping head, rotates 360°
- High speed feed with double hydraulic cylinder
- Pressure release button with single handed operation (on both sides, for left- and right handed operators)
- Fastening ring for shoulder strap
- Ergonomic grip for weight balance to ensure an easy and safe operation
- Plastic housing, grip and pressure release button, insulating and shock resistant
- Powerful LED for working space illumination

Tool dimensions: 331 x 401 x 79 mm
 Tool weight: 6,7 kg

Description	Order No.	Dimensions	Weight
Set crimping tool	AP130-C	580 x 470 x 115 mm	10,1 kg

Accessories see page 209 - 212

Set equipment:

- Test report
- Battery-operated hydraulic crimping tool
- Battery 18 V/3,0 Ah Li-Ion (RA11)
- Battery charger (LG8)
- Rigid plastic case for crimping tool and maximum 18 crimping dies
- Shoulder strap (TG2)



Set AP130-C

SELECTION OF CRIMPING DIES	Pages 175 - 179
PLASTIC CASE FOR DIES	Page 179

MAIN CHARACTERISTICS PP130-C2 - AP130-C2

CRIMPING SECTION	max. 400 mm ²
MAXIMUM STROKE	42 mm

CRIMPING FORCE	130 kN
OPERATING PRESSURE	700 bar (70 MPa)

HEAD OPENING: 42 mm



PP130-C2 - Hydraulic crimping head

The unit must be operated through 700 bar hydraulic pump to reach crimping force of 130 kN (pages 201 - 208).

Technical characteristics:

- Sturdy and compact structure
- C head for easy positioning of dies
- Quick make snap lock connection and non detachable dust cap

Tool dimensions: 129 x 271 x 78 mm
 Tool weight: 4,4 kg

Description	Order No.	Dimensions	Weight
Set crimping head	PP130-C2	400 x 350 x 130 mm	5,9 kg

Set equipment:

- Hydraulic crimping head
- Plastic case for crimping head and 14 crimping dies



HPI130-C2 - Hand operated hydraulic crimping tool

Technical characteristics:

- Sturdy and compact structure
- C-shaped crimping head, rotates 270°
- Quick feed with double hydraulic cylinder
- Single hand use by innerside handle
- Automatic pressure safety valve
- Manual return at any position by turning the main handle

Tool dimensions: 225 x 577 x 78 mm
 Tool weight: 6,5 kg

Description	Order No.	Dimensions	Weight
Set Crimping Tool	HPI130-C2	700 x 260 x 105 mm	8,2 kg

Set equipment:

- Test report
- Manual crimping tool
- Plastic case for crimping tool and 9 crimping dies



AP130-C2 - Battery operated hydraulic crimping Tool

Technical characteristics:

- 3 years of warranty or 20.000 work cycles
- Light and compact structure
- C-shaped crimping head, rotates 360°
- High speed feed with double hydraulic cylinder
- Pressure release button with single handed operation (on both sides, for left- and right handed operators)
- Fastening ring for shoulder strap
- Ergonomic grip for weight balance to ensure an easy and safe operation
- Plastic housing, grip and pressure release button, insulating and shock resistant
- Powerful LED for working space illumination

Tool dimensions: 331 x 417 x 79 mm
 Tool weight: 6,8 kg

Description	Order No.	Dimensions	Weight
Set crimping tool	AP130-C2	580 x 470 x 115 mm	10,6 kg

Accessories see page 209 - 212

Set equipment:

- Test report
- Battery-operated hydraulic crimping tool
- Battery 18 V/3,0 Ah Li-Ion (RA11)
- Battery charger (LG8)
- Rigid plastic case for crimping tool and maximum 18 crimping dies
- Shoulder strap (TG2)



Set AP130-C2

SELECTION OF CRIMPING DIES	Pages 175 - 179
PLASTIC CASE FOR DIES	Page 179

MAIN CHARACTERISTICS PP130-H - HPI130-H - AP130-H

CRIMPING SECTION	max. 400 mm ²
MAXIMUM STROKE	30 mm

CRIMPING FORCE	130 kN
OPERATING PRESSURE	700 bar (70 MPa)

HEAD OPENING: 35 mm



Set PP130-H



Adapters and punch for deep indent crimping on request

PP130-H - Hydraulic crimping head

The unit must be operated through 700 bar hydraulic pump to reach crimping force of 130 kN (pages 201 - 208).

Technical characteristics:

- Sturdy and compact structure
- Openable head to make it easy to position and insert the crimping dies
- Quick make snap lock connection and non detachable dust cap
- Adapters and punch for deep indent crimping

Head opening: 35 mm
 Tool dimensions: 78 x 263 x 70 mm
 Tool weight: 3,4 kg

Description	Order No.	Dimensions	Weight
Set crimping head	PP130-H	410 x 360 x 135 mm	5,1 kg

Set equipment:

- Hydraulic crimping head
- Plastic case for crimping head and 14 crimping dies

HPI130-H - Hand operated hydraulic crimping tool

Technical characteristics:

- Sturdy and compact structure
- Crimping H-head, rotates 270°
- Quick feed with double hydraulic cylinder
- Single hand use by innerside handle
- Automatic pressure safety valve
- Manual return in any position
- Adapters and punch for deep indent compression

Tool dimensions: 174 x 569 x 78 mm
 Tool weight: 5,8 kg

Description	Order No.	Dimensions	Weight
Set crimping tool	HPI130-H	700 x 260 x 105 mm	7,6 kg

Set equipment:

- Test report
- Manual crimping tool
- Plastic case for crimping tool and 11 crimping dies



Set HPI130-H



Adapters and punch for deep indent crimping on request



5 Adapters and punch for deep indent crimping on request



AP130-H - Battery operated hydraulic crimping tool

Technical characteristics:

- 3 years of warranty or 20.000 work cycles
- Light and compact structure
- Crimping head rotates 360°
- High speed feed with double hydraulic cylinder
- Pressure release button with single handed operation (on both sides, for left- and right handed operators)
- Fastening ring for shoulder strap
- Ergonomic grip for weight balance to ensure an easy and safe operation
- Plastic housing, grip and pressure release button, insulating and shock resistant
- Powerful LED for working space illumination

Tool dimensions: 331 x 409 x 75 mm
 Tool weight: 6,2 kg

Description	Order No.	Dimensions	Weight
Set crimping tool	AP130-H	580 x 470 x 115 mm	10,0 kg

Accessories see page 209 - 212

Set equipment:

- Test report
- Battery-operated hydraulic crimping tool
- Battery 18 V/3,0 Ah Li-Ion (RA11)
- Battery charger (LG8)
- Rigid plastic case for crimping tool and maximum 18 crimping dies
- Shoulder strap (TG2)



Set AP130-H

SELECTION OF CRIMPING DIES	Pages 175 - 179
PLASTIC CASE FOR DIES	Page 179

Main characteristics PP230

CRIMPING SECTION	max. 630 mm ²
MAXIMUM STROKE	28 mm

CRIMPING FORCE	230 kN
OPERATING PRESSURE	700 bar (70 MPa)



PP230 - Hydraulic crimping head

The unit must be operated through 700 bar hydraulic pump to reach crimping force of 230 kN (pages 201 - 208).

Technical characteristics:

- Sturdy and compact structure
- Openable head to make it easy to position and insert the crimping dies
- Quick make snap lock connection and non detachable dust cap

Tool dimensions: 121 x 286 x 88 mm

Tool weight: 5,5 kg

Description	Order No.	Dimensions	Weight
Set crimping head	PP230	410 x 360 x 135 mm	7,2 kg

Set equipment:

- Hydraulic crimping head
- Plastic case for crimping head and two crimping dies and one adapter



Set PP230



SELECTION OF CRIMPING DIES	Pages 180 - 181
ADAPTER FOR CRIMPING DIES	Page 182

SERIES 230 - 230 KN

MAIN CHARACTERISTICS PP230-630

CRIMPING SECTION	max. 630 mm ²
MAXIMUM STROKE	60 mm

CRIMPING FORCE	230 kN
OPERATING PRESSURE	700 bar (70 MPa)



PP230-630 - Hydraulic crimping head

The unit must be operated through 700 bar hydraulic pump to reach crimping force of 230 kN (pages 201 - 208).

Technical characteristics:

- Sturdy and compact structure
- The H - Bail allows simple inlaying from the cables
- This pressing tool can be used to crimp aluminium and bimetallic connectors by deep-step indent system

Tool dimensions: 105 x 365 x 50 mm

Tool weight: 8,5 kg

Description	Order No.	Dimensions	Weight
Set crimping head	PP230-630	440 x 270 x 150 mm	15 kg

Set equipment:

- Hydraulic crimping head
- Metal case



Set PP230-630

SERIES 520 - 520 KN

MAIN CHARACTERISTICS PP520

CRIMPING SECTION	max. 1.000 mm ²
MAXIMUM STROKE	25 mm

CRIMPING FORCE	520 kN
OPERATING PRESSURE	700 bar (70 MPa)

PP520 - Hydraulic crimping head

The unit must be operated through 700 bar hydraulic pump to reach crimping force of 520 kN (pages 201 - 208).

Technical characteristics:

- Sturdy and compact structure
- Openable head to make it easy to position and insert the crimping dies
- Quick make snap lock connection and non detachable dust cap
- Tilting system for coupler

Tool dimensions: 218 x 261 x 124 mm

Tool weight: 13,2 kg

Description	Order No.	Dimensions	Weight
Set crimping head	PP520	410 x 360 x 135 mm	15,4 kg

Set equipment:

- Hydraulic crimping head
- Plastic case for crimping head and two crimping dies



Set PP520



SELECTION OF CRIMPING DIES	Page 183
ADAPTER FOR CRIMPING DIES	Page 183

SERIES 600 - 600 KN

Main characteristics PP600

CRIMPING SECTION	max. 1.600 mm ²
MAXIMUM STROKE	30 mm

CRIMPING FORCE	600 kN
OPERATING PRESSURE	700 bar (70 MPa)



PP600 - Hydraulic Crimping Head - 600 kN

The unit must be operated through 700 bar hydraulic pump to reach crimping force of 600 kN (pages 201 - 208).

Technical characteristics:

- Sturdy and compact structure
- Openable head to make it easy to position and insert the crimping dies
- Quick make snap lock connection and non detachable dust cap

Tool dimensions: 200 x 335 x 130 mm

Tool weight: 17 kg

Description	Order No.	Dimensions	Weight
Set crimping head	PP600	400 x 260 x 360 mm	26 kg

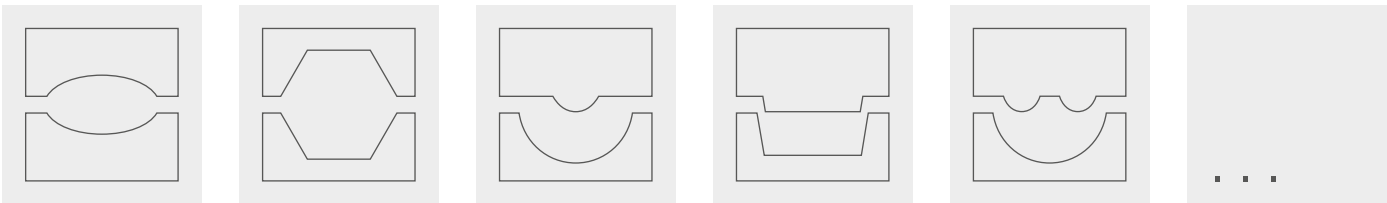
Set equipment:

- Hydraulic crimping head
- Metal case for crimping head



Set PP600

SELECTION OF CRIMPING DIES	Page 184
METAL CASE FOR DIES	Page 184



CRIMPING DIES

CRIMPING DIES - SERIES 45

SERIES 45



HP45



STILO45



DIN STANDARD

Hexagon crimping dies according to DIN 48083

Copper

cable lugs (DIN 46235) - connectors (DIN 46267, part 1)



Aluminium

cable lugs (DIN 46239 - connectors (DIN 46267, part 2)



Cross section (mm ²)	Code No.	Compr. width (mm)	Order No.	Code No.	Compr. width (mm)	Order No.
6	5	5	MK5-45			
10	6	5	MK6-45	10	7	MK10B-45
16	8	5	MK8-45	12	7	MK12B-45
25	10	5	MK10-45	14	7	MK14B-45
35	12	5	MK12-45	16	7	MK16B-45
50	14	5	MK14-45	18	7	MK18B-45
70	16	5	MK16-45	22	7	MK22B-45
95	18	5	MK18-45			
120	20	5	MK20-45			
150	22	5	MK22-45			



DIN STANDARD

Hexagon crimping dies according to DIN 48083

Aluminum-Steel connectors

Code No.	Width (mm)	Cross section (mm ²)		Order No.
		Al-connectors	Steel - connectors	
6	5		16/2,5 25/4 35/6	MK6-45
7	5		50/8	MK7-45
9	5		70/12 95/15	MK9-45
	5			
13	7	16/2,5 25/4		MK12B-45
15	7	35/6		MK14B-45
17	7	50/8		MK16B-45
19	7	70/12		MK18B-45
22	7	95/15		MK22B-45



I-SERIES CABLE LUGS

Hexagon crimping dies for I-series type cable lugs and connectors



Cross section (mm ²)		Compr. width (mm)	Order No.
Rigid	Flexible		
10		7	U4-K07M
16		7	U4-K08M
25		7	U4-K10M
35	35	7	U4-K11M
50	50	7	U4-K13M
70	70	7	U4-K14
95	95	7	U4-K17M
120	120	7	U4-K18
150	150	7	U4-K20D



R-SERIES CABLE LUGS

Hexagon crimping dies for R-series type cable lugs and connectors



Cross section (mm ²)	Compr. width (mm)	Order No.
6	5	MH6-45
10	7	MH10-45
16	7	MH16-45
25	7	MH25-45
35	7	MH35-45
50	7	MH50-45
70	7	MH70-45
95	7	MH95-45
120	7	MH120-45
150	7	MH150-45

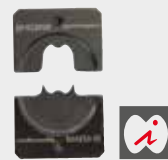


WIRE END SLEEVES

Trapezoid crimping dies for wire end sleeve



Cross section (mm ²)	Compr. width (mm)	Order No.
10	20	MTT10-45
16	20	MTT16-45
25	20	MTT25-45
35	20	MTT35-45
50	20	MTT50-45
70	20	MTT70-45
95	20	MTT95-45



WIRE END SLEEVES

Circular I-CRIMP crimping dies for wire end sleeve



Cross section (mm ²)	Compr. width (mm)	Order No.
6	18	MIAE6-45
10	18	MIAE10-45
16	18	MIAE16-45
25	18	MIAE25-45
35	18	MIAE35-45
50	18	MIAE50-45
70	18	MIAE70-45
95	18	MIAE95-45
120	18	MIAE120-45
150	18	MIAE150-45



Round dies to round off copper and aluminum sector shaped conductor

Type

SE*

SM**

Cross section (mm ²)	Compr. width (mm)	Compr. width (mm)	Order No.
10	20		MR4,1-45
16	20		MR5,1-45
25	20	MR5,1-45	MR6,3-45
35	20	MR6,3-45	MR7,5-45
50	20	MR7,5-45	MR9,0-45
70	20	MR9,0-45	MR10,5-45
95	20	MR10,5-45	MR12,5-45
120	20	MR12,5-45	MR14,0-45
150	20	MR14,0-45	MR15,7-45
185	20	MR15,7-45	

Plastic case for crimping dies

Description	Order No.	Dimensions	Weight
Case for dies 45kN-60kN	KKPE-45-50	250 x 170 x 50 mm	200 g



Plastic case - KKPE-45-50

* SE sector solid

** SM sector multi-stranded

CRIMPING DIES - SERIES 50 - SERIES 60-1/3



Cross section (mm ²)	Copper			Aluminum		
	Code No.	Compr. width (mm)	Order No.	Code No.	Compr. width (mm)	Order No.
6	5	5	MK5-50			
10	6	5	MK6-50	10	7	MK10B-50
16	8	5	MK8-50	12	7	MK12B-50
25	10	5	MK10-50	14	7	MK14B-50
35	12	5	MK12-50	16	7	MK16B-50
50	14	5	MK14-50	18	7	MK18B-50
70	16	5	MK16-50	22	7	MK22B-50
95	18	5	MK18-50	25	7	MK25B-50
120	20	5	MK20-50	28	7	MK28B-50
150	22	5	MK22-50	32	5	MK32-50V
185	25	5	MK25-50			
240	28	5	MK28-50			


Code No.	Width (mm)	Cross section (mm ²)		Order No.
		Al-connectors	Steel - connectors	
6	5		16/2,5 25/4 35/6	MK6-50
7	5		50/8	MK7-50
9	5		70/12 95/15	MK9-50
11	5		25	MK11-50
12	7	16/2,5 25/4		MK12B-50
13	5		120/20 150/25	MK13-50
14	7	35/6		MK14B-50
16	7	50/8		MK16B-50
22	7	95/15		MK22B-50
25	7	44/32 50/30 120/20		MK25B-50
28	7	125/30 150/25		MK28B-50

For the compression dies of tool MP60-1 Opening Spring (Order ref. OEF1) is also required

CRIMPING DIES - SERIES 50 - SERIES 60-1/3

I-SERIES CABLE LUGS


Hexagon crimping dies for I-series type cable lugs and connectors



Cross section (mm ²)		Compr. width (mm)	Order No.
Rigid	Flexible		
10		7	U5-K07M
16		7	U5-K08M
25		7	U5-K10M
35	35	7	U5-K11M
50	50	7	U5-K13M
70	70	7	U5-K14
95	95	7	U5-K17M
120	120	7	U5-K18
150	150	7	U5-K20D
185	185	7	U5-K22D
240	240	7	U5-K25M

I-SERIES CABLE LUGS


Hexagon I-CRIMP crimping dies for I-series type cable lugs and connectors



Cross section (mm ²)	Compr. width (mm)	Order No.
10	7	U5-I10
16	7	U5-I16
25	7	U5-I25
35	7	U5-I35
50	7	U5-I50
70	7	U5-I70
95	7	U5-I95
120	7	U5-I120
150	7	U5-I150
185	7	U5-I185
240	7	U5-I240

R-SERIES CABLE LUGS


Hexagon crimping dies for R-series type cable lugs and connectors



Cross section (mm ²)	Compr. width (mm)	Order No.
6	5	MH6-50
10	7	MH10-50
16	7	MH16-50
25	7	MH25-50
35	7	MH35-50
50	7	MH50-50
70	7	MH70-50
95	7	MH95-50
120	7	MH120-50
150	7	MH150-50
185	7	MH185-50
240	5	MH240-50

INSULATED CABLE LUGS

Oval crimping dies for insulated cable lugs



Cross section (mm ²)	Compr. width (mm)	Order No.
10	9	U5-P10
16	9	U5-P16
25	9	U5-P25
35	9	U5-P35
50	9	U5-P50
70	9	U5-P70
95	7	U5-P95
120	7	U5-P120

TERMINALS


Indent crimping dies for terminals DIN 46234 pin terminals - DIN 46230, solderless conn. DIN 46341, steel cable lug



Cross section (mm ²)	Order No.
10	MD10-50
16	MD16-50
25	MD25-50
35	MD35-50
50	MD50-50
70	MD70-50
95	MD95-50

FINE WIRE

Indent crimping dies for fine wire conductors F-series



Cross section (mm ²)	Order No.
10	MDF10-50
16	MDF16-50
25	MDF25-50
35	MDF35-50
50	MDF50-50

CRIMPING DIES - SERIES 50 - SERIES 60-1/3



WIRE END SLEEVES

Trapezoid crimping dies for wire end sleeve



Cross section (mm ²)	Compr. width (mm)	Order No.
10	20	MTT10-50
16	20	MTT16-50
25	20	MTT25-50
35	20	MTT35-50
50	20	MTT50-50
70	20	MTT70-50
95	20	MTT95-50




WIRE END SLEEVES

Circular I-CRIMP crimping dies for wire end sleeve



Cross section (mm ²)	Compr. width (mm)	Order No.
10	18	U5-T10
16	18	U5-T16
25	18	U5-T25
35	18	U5-T35
50	18	U5-T50
70	18	U5-T70
95	18	U5-T95
120	18	U5-T120



C- CLAMP

Oval crimping dies for C-branch terminals



Cross section (mm ²)		Order No.
Main	Branch	
6 ÷ 2,5	6 ÷ 1,5	U5-DC6
10	10 ÷ 1,5	U5-DC10
16	16 ÷ 1,5	U5-DC25
25	25 ÷ 16	U5-DC35
35	16 ÷ 1,5	U5-DC35
35	35 ÷ 25	U5-DC35
50	25 ÷ 6	U5-DC70
70 ÷ 50	35 ÷ 6	U5-DC70
70 ÷ 50	70 ÷ 35	U5-DC70




MV CABLE LUGS

Hexagon crimping dies for medium voltage type copper cable lugs and connectors




Cross section (mm ²)	Order No.
25	U5-E96
35	U5-E118
50 RC	U5-E118
50 S	U5-E118
70	U5-E158
95 RC	U5-E173
120 ÷ 95 S	U5-E173
150 RC ÷ 120 S ÷ 125 C	U5-E190




LV OVERHEAD CABLE LUGS

Hexagon crimping dies for Al/Cu lugs and uninsulated/insulated connectors type cable lugs and connectors for low voltage overhead cables




Cross section (mm ²)		Order No.	
		Uninsulated	Insulated
35 Al			U5-E173
35 Al	25 Cu	U5-E113	
35 Al	35 Al	U5-E113	
54,6 Aldr.		U5-E173	
54,6 Aldr.	25 Cu	U5-E173	
70 Al			
70 Al	35 Al	U5-E173	
70 Al	50 Cu	U5-E173	
70 Al	70 Al	U5-E173	




FULL TENSION CONNECTORS

Hexagon crimping dies for Al and Cu full tension connectors for low voltage overhead cables



Cross section (mm ²)	Order No.
10 Cu	U5-E70
16 Cu	U5-E75
25 Cu	U5-E96
35 Al	U5-E118
35 Cu	U5-E118
54,6 Aldr.	U5-E140
70 Al	U5-E158
70 Cu	U5-E158

CRIMPING DIES - SERIES 50 - SERIES 60-1/3

		Oval crimping dies for the compression of dead-ends and oval connectors according to DIN 48217 and H branch terminals (not for MP60-3)			
		Dead end clamps and oval connectors			H-Clamp Copper
		Copper	Aluminum	Steel	
Cross section (mm ²)	Compr. width (mm)	Order No.	Order No.	Order No.	Order No.
6RE*	5	MO7-50			
6	5				MO10-50
10	5				
10RE*	5	MO8-50	MO10-50		
10RM**	5	MO10-50			
16RE*	5				
16	5	MO12-50	MO12-50		MO16-50
25	5	MO16-50	MO16-50		MO18-50
35	5	MO18-50	MO18-50	MO18-50	MO21-50
50	5	MO20-50	MO20-50	MO20-50	
70	5	MO22-50	MO22-50	MO22-50	
95	5	MO24-50	MO24-50		
120	5		MO26-50		

5

		NOTCH CONNECTOR		
		Oval crimping dies for notch connector (not for MP60-3)		
		Cu-Conductor	Al-Conductor	Al-Steel-rope
Cross section (mm ²)	Order No.	Order No.	Order No.	
10	MK010-50CU			
16	MK016-50CU			
25	MK025-50CU	MK025-50AL		
35/6			MK035/6-50	
35	MK035-50CU	MK035-50AL		
50	MK050-50CU	MK050-50AL		
50/8			MK050/8-50	
50/30			MK050/30-50	
70	MK070-50CU	MK070-50AL		
70/12			MK070/12-50	
95	MK095-50CU	MK095-50AL		
120	MK0120-50CU	MK0120-50AL		

* SE sector solid

** SM sector multi-stranded

CRIMPING DIES - SERIES 50 - SERIES 60-1/3



Round dies to round off copper and aluminum sector shaped conductor

Type			
SE*		SM**	
Cross section (mm ²)	Compr. width (mm)	Order No.	Order No.
10	20		MR4,1-50
16	20		MR5,1-50
25	20		MR6,3-50
35	20	MR6,3-50	MR7,5-50
50	20	MR7,5-50	MR9,0-50
70	20	MR9,0-50	MR10,5-50
95	20	MR10,5-50	MR12,5-50
120	20	MR12,5-50	MR14,0-50
150	20	MR14,0-50	MR15,7-50
185	20	MR15,7-50	MR17,5-50
240	20	MR17,5-50	MR20,2-50
300°	20	MR20,2-50°	




I-SERIES CABLE LUGS

Indent crimping dies for I-series cablelugs and connectors



CI-M... CI-M...90 CI-M...45 CTT... CI-M...CL CI-M...SF


Die reference	Indent	Cross section mm ²		No. of crimpings
		rigid	flexible	
U5-S6	U5-PZ6	4-16		1
U5-S16	U5-PZ25	10		1
U5-S25		16		1
U5-S35	U5-PZ50	25	25	1
U5-S50		35	35	
		50	50	1
U5-S70	U5-PZ95	50	70	1
U5-S95		70	70	1
	95	95		
U5-S120	U5-PZ120	95	120	1
		120		



STRIP OFF ACSR


Strip off Aluminum part of ACSR cables***

Cross section (mm ²)	Order No.
25/4	AL-ST25/4-50
35/6	AL-ST35/6-50
50/8	AL-ST50/8-50
70/12	AL-ST70/12-50
95/15	AL-ST95/15-50
120/20	AL-ST120/20-50



I-SERIES CABLE LUGS

I crimping dies for the compression of tubular cablelugs for flexible conductor / class 5 / 6



CI-M...SF

Die reference	Cross section mm ²	Width	No. of crimpings
U5-FI35	35	7	1
U5-FI50	50	7	2
U5-FI70	70	7	2
U5-FI95	95	7	2
U5-FI120	120	7	2
U5-FI150	150	7	3
U5-FI185	185	7	3



Plastic case - KKPE-45-50

Adapter for crimping dies 45 kN

Allows use of all dies for the tool 45kN on models HP50, HP60-3, PP60-1 and AP60-1, except MIAEXX-45

Description	Order No.	Dimensions	Weight
Adapter	AD50-45	45 kN	50 g

Plastic case for crimping dies

Description	Order No.	Dimensions	Weight
Case for dies 45kN-60kN	KKPE-45-50	250 x 170 x 50 mm	200 g

* SE sector solid
 ** SM sector multi-stranded
 *** depending on type and size of joining accessories
 ° not for HP50

SERIES 50



MP60-2



PP60-2



HP60-4



STILO60



AP60-2



DIN STANDARD

Hexagon crimping dies according to DIN 48083

Copper

cable lugs (DIN 46235) - connectors (DIN 46267, part 1)



ICD ICD_90 ICD_V ICD_VL

Aluminum

cable lugs (DIN 46239) - connectors (DIN 46267, part 2)



ICAL_LD ICAL_LD_V ICAL ICAL_V ICAL_V30 ICALCU ICALCU_V

Cross section (mm ²)	Code No.	Compr. width (mm)	Order No.	Code No.	Compr. width (mm)	Order No.
6	5	5	MK5-CK			
10	6	5	MK6-CK	10	7	MK10B-CK
16	8	5	MK8-CK	12	7	MK12B-CK
25	10	5	MK10-CK	14	7	MK14B-CK
35	12	5	MK12-CK	16	7	MK16B-CK
50	14	5	MK14-CK	18	7	MK18B-CK
70	16	5	MK16-CK	22	7	MK22B-CK
95	18	5	MK18-CK	25	7	MK25B-CK
120	20	5	MK20-CK	28	7	MK28B-CK
150	22	5	MK22-CK	32	7	MK32B-CK
185	25	5	MK25-CK	34	5	MK34-CK
240	28	5	MK28-CK			
300	32	5	MK32-CK			



DIN STANDARD


Hexagon crimping dies according to DIN 48083

Aluminum-Steel connectors

Code No.	Width (mm)	Cross section (mm ²)		Order No.
		Al-connectors	Steel - connectors	
6	5		16/2,5 25/4 35/6	MK6-CK
7	5		50/8	MK7-CK
9	5		70/12 95/15	MK9-CK
12	7	16/2,5 25/4		MK11B-CK
13	5		120/20 150/25	MK13-CK
14	7	35/6		MK14B-CK
16	7	50/8		MK16B-CK
18	7	70/12		MK18B-CK
22	7	95/15		MK22B-CK
25	7	44/32 50/30 120/20		MK25B-CK
28	7	125/30 150/25		MK28B-CK

5

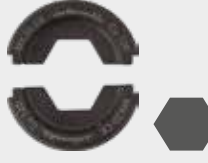
CRIMPING DIES - SERIES 60-2/4



R-SERIES CABLE LUGS
Hexagon *i*crimping dies for R-series type cable lugs and connectors

ICR ICR_G ICR_90 ICR_45 ICR_LS ICR_V ICR_T


Cross section (mm ²)	Compr. width (mm)	Order No.
6	5	MI6-CK
10	5	MI10-CK
16	5	MI16-CK
25	5	MI25-CK
35	5	MI35-CK
50	5	MI50-CK
70	5	MI70-CK
95	5	MI95-CK
120	5	MI120-CK
150	5	MI150-CK
185	5	MI185-CK
240	5	MI240-CK
300	5	MI300-CK



R-SERIES CABLE LUGS
Hexagon crimping dies for R-series type cable lugs and connectors

ICR ICR_G ICR_90 ICR_45 ICR_LS ICR_V ICR_T

Cross section (mm ²)	Compr. width (mm)	Order No.
6	5	MH6-CK
10	5	MH10-CK
16	5	MH16-CK
25	5	MH25-CK
35	5	MH35-CK
50	5	MH50-CK
70	5	MH70-CK
95	5	MH95-CK
120	5	MH120-CK
150	5	MH150-CK
185	5	MH185-CK
240	5	MH240-CK
300	5	MH300-CK



FINE WIRE
Hexagon *i*crimping dies for F-series type cable lugs and connectors

ICF ICF_90 ICF_S ICF_90S ICF_V


Cross section (mm ²)	Compr. width (mm)	Order No.
10	5	MFI10-CK
16	5	MFI16-CK
25	5	MFI25-CK
35	5	MFI35-CK
50	5	MFI50-CK
70	5	MFI70-CK
95	5	MFI95-CK
120	5	MFI120-CK
150	5	MFI150-CK
185	5	MFI185-CK
240	5	MFI240-CK
300	5	MFI300-CK



FINE WIRE
Indent crimping dies for fine wire conductors F-series

ICF ICF_90 ICF_S ICF_90S ICF_V

Cross section (mm ²)	Order No.
10	MDF10-CK
16	MDF16-CK
25	MDF25-CK
35	MDF35-CK
50	MDF50-CK
70	MDF70-CK



I-SERIES CABLE LUGS
Hexagon *i*crimp crimping dies for I-series type cable lugs and connectors

CI CL_90 CL_45 CTT CL_CL CL_PR

Cross section (mm ²)	Compr. width (mm)	Order No.
10	7	U6-I10
16	7	U6-I16
25	9	U6-I25
35	5	U6-I35
50	5	U6-I50
70	5	U6-I70
95	5	U6-I95
120	5	U6-I120
150	5	U6-I150
185	5	U6-I185
240	5	U6-I240
300	5	U6-I300



INSULATED TERMINALS

Circular crimping dies for insulated terminals DIN 46237 and insulated pin terminals DIN 46231



Cross section (mm ²)	Order No.
10	MIQ10-CK
16	MIQ16-CK
25	MIQ25-CK
35	MIQ35-CK
50	MIQ50-CK
70	MIQ70-CK
95	MIQ95-CK



TERMINALS

Indent crimping dies for terminals DIN 46234 pin terminals - DIN 46230, solderless conn. DIN 46341, steel cable lug



Cross section (mm ²)	Order No.
10	MD10-CK
16	MD16-CK
25	MD25-CK
35	MD35-CK
50	MD50-CK
70	MD70-CK



WIRE END SLEEVES

Trapezoid crimping dies for wire end sleeve



Cross section (mm ²)	Compr. width (mm)	Order No.
10	20	MTT10-CK
16	20	MTT16-CK
25	20	MTT25-CK
35	20	MTT35-CK
50	20	MTT50-CK
70	20	MTT70-CK
95	20	MTT95-CK
120	20	MTT120-CK
150	20	MTT150-CK
185	20	MTT185-CK
240	20	MTT240-CK




WIRE END SLEEVES

Circular I-CRIMP crimping dies for wire end sleeve



Cross section (mm ²)	Compr. width (mm)	Order No.
10	18	MIAE10-CK
16	18	MIAE16-CK
25	18	MIAE25-CK
35	18	MIAE35-CK
50	18	MIAE50-CK
70	18	MIAE70-CK
95	18	MIAE95-CK
120	18	MIAE120-CK
150	18	MIAE150-CK
185	18	MIAE185-CK
240	18	MIAE240-CK

CRIMPING DIES - SERIES 60-2/4

 NOTCH CONNECTOR Oval crimping dies for notch connector			
	Cu-Conductor	Al-Conductor	Al-Steel-rope
Cross section (mm ²)	Order No.	Order No.	Order No.
10	MK010-CK-CU		
16	MK016-CK-CU		
25	MK025-CK-CU	MK025-CK-AL	
35	MK035-CK-CU	MK035-CK-AL	
50	MK050-CK-CU	MK050-CK-AL	
50/8			MK050/8-CK
50/30			MK050/30-CK
70	MK070-CK-CU	MK070-CK-AL	
70/12			MK070/12-CK
95/15			MK095/15-CK

 Round dies to round off copper and aluminum sector shaped conductor			
Cross section (mm ²)		Compr. width (mm)	Type
			SE* SM**
		Order No.	Order No.
10	20		MR4,1-CK
16	20		MR5,1-CK
25	20		MR6,3-CK
35	20	MR6,3-CK	MR7,5-CK
50	20	MR7,5-CK	MR9,0-CK
70	20	MR9,0-CK	MR10,5-CK
95	20	MR10,5-CK	MR12,5-CK
120	20	MR12,5-CK	MR14,0-CK
150	20	MR14,0-CK	MR15,7-CK
185	20	MR15,7-CK	MR17,5-CK
240	20	MR17,5-CK	MR20,2-CK
300	20	MR20,2-CK	

Plastic case for crimping dies

Description	Order No.	Dimensions	Weight
Case for 24 crimping dies for 60kN	KKPE-C-CK	410 x 360 x 110 mm	1,4 kg



Plastic case - KKPE-C-CK

 H BRANCH TERMINALS Oval crimping dies for H branch terminals			 TWIN CABLE LUGS Oval crimping dies for twin cable lugs	
Cross section (mm ²)	Compr. width (mm)	Order No.	Compr. width (mm)	Order No.
2 x 50	5	MRH22-CK	5	MRD22-CK
2 x 70	5	MRH26-CK	5	MRD24-CK

* SE sector solid

** SM sector multi-stranded

SERIES 130



Cross section (mm ²)	Copper			Aluminum		
	Code No.	Compr. width (mm)	Order No.	Code No.	Compr. width (mm)	Order No.
10	6	5	MK6-C			
16	8	14	MK8-C			
25	10	14	MK10-C	12	14	MK12-C
35	12	14	MK12-C	14	14	MK14-C
50	14	14	MK14-C	16	14	MK16-C
70	16	14	MK16-C	18	14	MK18-C
95	18	14	MK18-C			
120	20	14	MK20-C	22	14	MK22-C
150	22	14	MK22-C	25	14	MK25-C
185	25	14	MK25-C	28	14	MK28L-C
240	28	10	MK28-C	32	17	MK32L-C
300	32	7	MK32-C	34	17	MK34L-C

Code No.	Width (mm)	Cross section (mm ²)		Order No.
		Al-connectors	Steel - connectors	
6	5		16/2,5 25/4 35/6	MK6-C
7	5		50/8	MK7-C
9	5		70/12 95/15	MK9-C
12	14	16/2,5 25/4		MK12-C
13	12		120/20 150/25	MK13-C
14	14	35/6		MK14-C
15	12		44/32 50/30 125/30 170/40 185/30 210/35 230/30 240/40 265/35 305/40 340/30 385/35 450/40 495/35 570/40	MK15-C
16	14	50/8		MK16-C
17	12		210/50 300/50 380/50 510/45 560/50 650/45	MK17-C
18	14	70/12		MK18-C
19	12		95/55 435/55	MK19-C
25	14	44/32 50/30 120/20		MK25-C
28	14	125/30 150/25		MK28L-C
30	14	95/55 170/40 185/30		MK30L-C
34	17	105/75 120/70 210/35 210/50 230/30 240/40		MK34L-C

5

CRIMPING DIES - SERIES 130



R-SERIES CABLE LUGS

Hexagon crimping dies for R-series type cable lugs and connectors



ICR ICR_G ICR_90 ICR_45 ICR_S ICR_V ICR_T

Cross section (mm ²)	Compr. width (mm)	Order No.
10	8	MH10-C
16	8	MH16-C
25	10	MH25-C
35	14	MH35-C
50	14	MH50-C
70	14	MH70-C
95	14	MH95-C
120	14	MH120-C
150	14	MH150-C
185	14	MH185-C
240	14	MH240-C
300	7	MH300-C
400	7	MH400-C



I-SERIES CABLE LUGS

Hexagon crimping dies for I-series type cable lugs and connectors



CI CL_90 CL_45 CTT CL_CL CL_PR

Cross section (mm ²)	Compr. width (mm)	Order No.
10	7	U13-K07M
16	7	U13-K08M
25	12	U13-K10M
35	12	U13-K11M
50	12	U13-K13M
70	12	U13-K14
95	12	U13-K17M
120	12	U13-K18
150	12	U13-K20D
185	14	U13-K22D
240	14	U13-K25M
300	7	U13-K28D
400	7	U13-K34D



BRITISH STANDARD

Hexagon crimping dies according British Standard or equivalent

Copper

Cross section (mm ²)	Compr. width (mm)	Order No.
10	10	BS10-C
16	10	BS16-C
25	10	BS25-C
35	14	BS35-C
50	14	BS50-C
70	16	BS70-C
95	16	BS95-C
120	16	BS120-C
150	16	BS150-C
185	16	BS185-C
240	14	BS240-C
300	7	BS300-C
400	7	BS400-C



FINE WIRE

Indent crimping dies for fine wire conductors F-series



ICF ICF_90 ICF_S ICF_90S ICF_V

Cross section (mm ²)	Order No.
16	MDF16-C
25	MDF25-C
35	MDF35-C
50	MDF50-C
70	MDF70-C
95	MDF95-C
120	MDF120-C
150	MDF150-C



INSULATED TERMINALS

Circular crimping dies for insulated terminals DIN 46237 and insulated pin terminals DIN 46231



Cross section (mm ²)	Order No.
10	MIQ10-C
16	MIQ16-C
25	MIQ25-C
35	MIQ35-C
50	MIQ50-C
70	MIQ70-C
95	MIQ95-C
120	MIQ120-C




TERMINALS

Indent crimping dies for terminals DIN 46234 pin terminals - DIN 46230, solderless conn. DIN 46341, steel cable lug



ICQ ICQ_G ICQ_ST ICQ_PV ICQ_PVL ICVA/ICNI


Cross section (mm ²)	Order No.
16	MD16-C
25	MD25-C
35	MD35-C
50	MD50-C
70	MD70-C
95	MD95-C
120	MD120-C
150	MD150-C



INSULATED CABLE LUGS

Oval crimping dies for insulated cable lugs


Cross section (mm ²)	Compr. width (mm)	Order No.
10	9	U13-P10
16	9	U13-P16
25	9	U13-P25
35	9	U13-P35
50	9	U13-P50
70	9	U13-P70
95	16	U13-P95
120	16	U13-P120
150	16	U13-P150



INSULATED CABLE LUGS

Oval crimping dies for insulated cable lugs


Cross section (mm ²)	Compr. width (mm)	Order No.
16	20	MTT16-C
25	20	MTT25-C
35	20	MTT35-C
50	26	MTT50-C
70	26	MTT70-C
95	26	MTT95-C
120	26	MTT120-C
150	26	MTT150-C
185	26	MTT185-C
240	28	MTT240-C



MV CABLE LUGS

Hexagon crimping dies for medium voltage type copper cable lugs and connectors

Cross section (mm ²)	Order No.
25	MMT25-C
35	MMT50-C
50 RC	
50 S	
70	MMT95-C
95 RC	
120 ÷ 95 S	
150 ÷ 95 S	MMT200-C
150 RC ÷ 120 S ÷ 125C	
240 RC ÷ 185 S	
300 RC ÷ 300 S	MMT315-C
300 S	
400 RC	



LV OVERHEAD CABLE LUGS

Hexagon crimping dies for Al/Cu lugs and uninsulated/insulated connectors type cable lugs and connectors for low voltage overhead cables


Cross section (mm ²)	Order No.	
	Uninsulated	Insulated
35 Al	U13-E113	U13-E173
35 Al 25 Cu		
35 Al 35 Al		
54,6 Aldr.	U13-E173	
54,6 Aldr. 25 Cu		
70 Al	U13-E173	
70 Al 35 Al		
70 Al 50 Cu		
70 Al 70 Al		



FULL TENSION CONNECTORS

Hexagon crimping dies for Al and Cu full tension connectors for low voltage overhead cables

Cross section (mm ²)	Order No.
10 Cu	U13-E70
16 Cu	U13-E75
25 Cu	U13-E96
35 Al	U13-E118
35 Cu	
54,6 Aldr.	U13-E140
70 Al	U13-E158
70 Cu	




AL-ALLOY OVERHEAD CABLE LUGS

Hexagon crimping dies for Al/Cu type cable lugs for low Al-alloy overhead cables


Cross section (mm ²)	Order No.
35 Al	U13-E118
70 Al	U13-E158
150 Al	U13-E215

CRIMPING DIES - SERIES 130





Oval crimping dies for the compression of compression dead-ends and oval connector according to DIN 48217 and H branch terminals

		Dead end clamps and oval connectors			H-Clamp
		Copper	Aluminum	Steel	Copper
Cross section (mm ²)	Compr. width (mm)	Order No.	Order No.	Order No.	Order No.
10	5	MO10-C	MO10-C		
16	5	MO12-C	MO12-C		MO16-C
25	5	MO16-C	MO16-C		MO18-C
35	5	MO18-C	MO18-C	MO18-C	MO21-C
50	5	MO20-C	MO20-C	MO20-C	
70	5	MO22-C	MO22-C	MO22-C	
95	5	MO24-C	MO24-C	MO25-C	
120	5	MO26-C	MO26-C		



H BRANCH TERMINALS


Oval crimping dies for H branch terminals

TWIN CABLE LUGS


Oval crimping dies for twin cable lugs

Cross section (mm ²)	Compr. width (mm)	Order No.	Compr. width (mm)	Order No.
2 x 50	30	MRH22-C	12	MRD22-C
2 x 70	30	MRH26-C	12	MRD24-C
2 x 95	30	MRH30-C	12	MRD29-C
2 x 120	2x5	MRH32-C	12	MRD32-C




C CONNECTORS

Oval crimping dies for copper C connectors for Italian type or equivalent



Cross section (mm ²)		Order No.
Run	Tap	
10	10 ÷ 1,5	U13-DC10
16	16 ÷ 1,5	
25 ÷ 16	10 ÷ 1,5	U13-DC25
25	25 ÷ 16	
40 ÷ 35	16 ÷ 1,5	
40 ÷ 35	40 ÷ 25	U13-DC35
50	25 ÷ 10	
70 ÷ 63	25 ÷ 1,5	
50	25 ÷ 4	
50	50 ÷ 35	U13-DC70
70 ÷ 50	40 ÷ 4	
70 ÷ 50	70 ÷ 35	
100 ÷ 95	40 ÷ 4	
100 ÷ 95	70 ÷ 40	U13-DC95
100 ÷ 95	100 ÷ 63	
125 ÷ 110	125 ÷ 25	
160 ÷ 150	125 ÷ 25	U13-DC185
150	150 ÷ 63	
185	100 ÷ 16	



Round dies to round off copper and aluminum sector shaped conductor

		Type	
		SE	SM
Cross section (mm ²)	Compr. width (mm)	Order No.	Order No.
10	35		MR4,1-C
16	35		MR5,1-C
25	35	MR5,1-C	MR6,3-C
35	35	MR6,3-C	MR7,5-C
50	35	MR7,5-C	MR9,0-C
70	35	MR9,0-C	MR10,5-C
95	35	MR10,5-C	MR12,5-C
120	35	MR12,5-C	MR14,0-C
150	35	MR14,0-C	MR15,7-C
185	35	MR15,7-C	MR17,5-C
240	35	MR17,5-C	MR20,2-C
300	35	MR20,2-C	MR22,5-C



STRIP OFF ACSR

Strip off Aluminum part of ACSR cables***

Cross section (mm ²)	Order No.
50/8	AL-ST 50/8-C
50/30	AL-ST 50/30-C
70/12	AL-ST 70/12-C
95/15	AL-ST 95/15-C
95/55	AL-ST 95/55-C
120/20	AL-ST 120/20-C
150/25	AL-ST 150/25-C
170/40	AL-ST 170/40-C
185/30	AL-ST 185/30-C
210/35	AL-ST 210/35-C
240/40	AL-ST 240/40-C
265/35	AL-ST 265/35-C



I-SERIES CABLE LUGS

Indent crimping dies for I-series cablelugs and connectors



CI-M... CI-M...90 CI-M...45 CTT... CI-M...CL CI-M...PR

Die reference	Indent	Cross section mm ²		No. of crimpings
		rigid	flexible	
U13-S6	U13-PZ6	4-6		1
U13-S16	U13-PZ25	10		1
U13-S25		16		1
U13-S35	U13-PZ50	25	25	1
U13-S50		35	35	1
		50	50	
U13-S70	U13-PZ95	70	50	1
U13-S95		70	70	1
	U13-S120	U13-PZ120	95	70
120			95	
U13-S150	U13-PZ240	120	120	1
U13-S185		150	150	
		185	150	
U13-S240		185	185	
U13-S300	U13-PZ300	240	185	1
		240	240	
		300	240	



Plastic case - KKPE-C-CK



Plastic case - KKPE-TN

Plastic cases for crimping dies

Description	Order No.	Dimensions	Weight
Case for 24 crimping dies for 130kN	KKPE-C-CK	410 x 360 x 110 mm	1,4 kg
Case for deep indent dies	KKPE-TN	410 x 360 x 110 mm	1,4 kg

* SE sector solid

** SM sector multi-stranded

*** depending on type and size of joining accessories

CRIMPING DIES - SERIES 230

SERIES 230



PP230



DIN STANDARD

Hexagon crimping dies according to DIN 48083

Copper

cable lugs (DIN 46235) - connectors (DIN 46267, part 1)



Aluminum

cable lugs (DIN 46239) - connectors (DIN 46267, part 2)



Cross section (mm ²)	Code No.	Compr. width (mm)	Order No.	Code No.	Compr. width (mm)	Order No.
16				12	14	MK12-230
25	10	14	MK10-230			
35	12	14	MK12-230	14	14	MK14-230
50	14	14	MK14-230	16	14	MK16-230
70	16	14	MK16-230	18	12	MK18-230
95	18	12	MK18-230			
120	20	14	MK20-230	22	40	MK22B-230
150	22	14	MK22-230	25	40	MK25B-230
185	25	14	MK25-230	28	40	MK28B-230
240	28	14	MK28-230	32	25	MK32B-230
300	32	17	MK32-230	34	25	MK34B-230
400	38	17	MK38-230	38	25	MK38B-230
500	42	17	MK42-230	44	17	MK44-230
630	44	17	MK44-230	46	25	MK46B-230



DIN STANDARD

Hexagon crimping dies according to DIN 48083

Aluminum-Steel connectors

Code No.	Width (mm)	Cross section (mm ²)		Order No.
		Al-connectors	Steel - connectors	
12	14	16/2,5 25/4		MK12-230
13	14		120/20 150/25	MK13-230
14	14	35/6		MK14-230
15	14		44/32 50/30 125/30 170/40 185/30 210/35 230/30 240/40 265/35 305/40 340/30 385/35 450/40 495/35 570/40	MK15-230
16	14	50/8		MK16-230
17	14		210/50 300/50 380/50 510/45 560/50 650/45	MK17-230
18	14	70/12		MK18-230
19	14		95/55 435/55	MK19-230
21	14		105/75 120/70 490/65 550/70	MK21-230
22	40	95/15		MK22B-230
23	14		680/85	MK23-230
25	40	44/32 50/30 120/20		MK25B-230
28	40	125/30 150/25		MK28B-230
30	25	95/55 170/40 185/30		MK30B-230
34	25	105/75 120/70 210/35 210/50 230/30 240/40		MK34B-230
38	25	265/35 300/50 305/40 340/30		MK38B-230
42	25	380/50 385/35		MK42B-230




R-SERIES CABLE LUGS
Hexagonal crimping dies for R-series type cable lugs and connectors




ICR ICR_G ICR_90 ICR_45 ICR_S ICR_V ICR_T

Cross section (mm ²)	Compr. width (mm)	Order No.
120	14	MH120-230
150	14	MH150-230
185	14	MH185-230
240	17	MH240-230
300	17	MH300-230
400	17	MH400-230
500	17	MH500-230
630	17	MH625-230




FINE WIRE
Indent crimping dies for fine wire conductors F-series



CI CL90 CL45 CTT CLCL CLPR

Cross section (mm ²)	Order No.
120	MDF120-230
150	MDF150-230
185	MDF185-230
240	MDF240-230
300	MDF300-230



NOTCH CONNECTOR
Oval crimping dies for notch connector

	Cu-Conductor	Al-Conductor	Al-Steel-rope
Cross section (mm²)	Order No.	Order No.	Order No.
10	MK010-230-CU		
16	MK016-230-CU		
25	MK025-230-CU	MK025-230-AL	
35	MK035-230-CU	MK035-230-AL	
50	MK050-230-CU	MK050-230-AL	
50/8			MK050/8-230
50/30			MK050/30-230
70	MK070-230-CU	MK070-230-AL	
70/12			MK070/12-230
95	MK095-230-CU	MK095-230-AL	
95/15			MK095/15-230
120	MK0120-230-CU	MK0120-230-AL	
120/21			MK0120/21-230
125/30			MK0125/30-230
150	MK0150-230-CU	MK0150-230-AL	
150/25			MK0150/25-230
185		MK0185-230-AL	
185/32			MK0185/32-230
240		MK0240-230-AL	
210/36			MK0210/36-230
210/50			MK0210/50-230
240/40			MK0240/40-230

CRIMPING DIES - SERIES 230

H BRANCH TERMINALS			TWIN CABLE LUGS	
Oval crimping dies for H branch terminals			Oval crimping dies for twin cable lugs	
				
				
Cross section (mm ²)	Compr. width (mm)	Order No.	Compr. width (mm)	Order No.
2 x 50	40	MRH22-230	40	MRD22-230
2 x 70	40	MRH26-230	40	MRD24-230
2 x 95	40	MRH30-230	40	MRD29-230
2 x 120	40	MRH32-230	40	MRD32-230
2 x 150	40	MRH34-230		

5



Adapter for crimping dies 130 kN

Allows use of all dies up to 185² (C-shape) for the tool 130kN on model PP230

Description	Order No.	For Dies	Weight
Adapter	AD230-130	130 kN	0,82 kg

SERIES 520



PP520



DIN STANDARD

Hexagon crimping dies according to DIN 48083

Copper

cable lugs (DIN 46235) - connectors (DIN 46267, part 1)



Aluminum

cable lugs (DIN 46239) - connectors (DIN 46267, part 2)



Cross section (mm ²)	Code No.	Compr. width (mm)	Order No.	Code No.	Compr. width (mm)	Order No.
16				12	14	MK12-520
25						
35	12	14	MK12-520	14	14	MK14-520
50	14	14	MK14-520	16	14	MK16-520
70	16	14	MK16-520	18	14	MK18-520
95	18	14	MK18-520			
120	20	14	MK20-520	22	40	MK22B-520
150	22	14	MK22-520	25	40	MK25B-520
185	25	14	MK25-520	28	40	MK28B-520
240	28	14	MK28-520	32	40	MK32B-520
300	32	17	MK32-520	34	40	MK34B-520
400	38	17	MK38-520	38	40	MK38B-520
500	42	17	MK42-520	44	40	MK44B-520
630	44	17	MK44-520	52	40	MK52B-520
800	52	25	MK52-520	58	25	MK58-520
1000	58	25	MK58-520	60	25	MK60-520



DIN STANDARD

Hexagon crimping dies according to DIN 48083

Aluminum-Steel connectors

Code No.	Width (mm)	Cross section (mm ²)		Order No.
		Al-connectors	Steel - connectors	
12	14	16/2,5 25/4		MK12-520
13	14		120/20 150/25	MK13-520
21	14		105/75 120/70 490/65 550/70	MK21-520
22	40	95/15		MK22B-520
23	14		680/85	MK23-520
25	40	44/32 50/30 120/20		MK25B-520
28	40	125/30 150/25		MK28B-520
30	40	95/55 170/40 185/30		MK30B-520
34	40	105/75 120/70 210/35 210/50		MK34B-520
38	40	230/30 240/40		
38	40	265/35 300/50 305/40 340/30		MK38B-520
42	40	380/50 385/35		MK42B-520
46	40	435/55 450/40		MK46B-520
50	40	495/35 510/45 490/65		MK50B-520
52	40	570/40 580/50 550/70		MK52B-520
58	25	650/45 680/85		MK58-520



Adapter for crimping dies 130 kN

Allows use of all dies (C-shape) for the tool 130kN on model PP520

Description	Order No.	For Dies	Weight
Adapter	AD520-130	130 kN	1,78 kg

5

CRIMPING DIES - SERIES 600

SERIES 600



PP600



DIN STANDARD

Hexagon crimping dies according to DIN 48083

Copper

cable lugs (DIN 46235) - connectors (DIN 46267, part 1)



Aluminum

cable lugs (DIN 46239) - connectors (DIN 46267, part 2)



Cross section (mm ²)	Code No.	Compr. width (mm)	Order No.	Code No.	Compr. width (mm)	Order No.
16				12	14	MK12-600
25	10	14	MK10-600			
35	12	14	MK12-600	14	14	MK14-600
50	14	14	MK14-600	16	14	MK16-600
70	16	14	MK16-600	18	14	MK18-600
95	18	14	MK18-600			
120	20	14	MK20-600	22	40	MK22B-600
150	22	14	MK22-600	25	40	MK25B-600
185	25	14	MK25-600	28	40	MK28B-600
240	28	14	MK28-600	32	40	MK32B-600
300	32	17	MK32-600	34	40	MK34B-600
400	38	17	MK38-600	38	40	MK38B-600
500	42	17	MK42-600	44	40	MK44B-600
630	44	17	MK44-600	52	40	MK52B-600
800	52	25	MK52-600	58	25	MK58-600
1000	58	25	MK58-600	60	25	MK60-600
1200	60	25	MK60-600			
1600	70	25	MK70-600			

Dies for full tension and Aluminum-Steel, ACSR available on request

5



6

PUNCHING TOOLS

PUNCHING/STAMPING/ELECTRIC BUS BAR PROCESSING UNIT

HP60-BL - Hand-operated hydraulic hole punching tool 60 kN

Suitable for punching round, square, and rectangular holes through materials up to a max. thickness of 3 mm

Technical characteristics:

- Light, compact, and rugged construction
- Head can be pivoted/rotated by 360°
- Hydraulic head made of high-strength aluminium
- Fast feed due to double-piston hydraulics
- Automatic pressure limiter
- Manual return possible in any position by turning the handle
- Application temperature range: -10°C / +40°C.
- Punching force: 60 kN
- Operating pressure: 700 bar

Punching capacity (max. sheet thicknesses):

- Up to Ø 63.5 mm: 3.0 mm steel / 2.5 mm stainless steel
- Up to Ø 68.0 x 68.0 mm: 3.0 mm steel / 1.5 mm stainless steel
- Up to Ø 92.0 x 92.0 mm: 2.5 mm steel / 1.5 mm stainless steel
- Larger than 92.0 x 92.0 mm, up to 138.0 x 138.0 mm 2 mm steel



Order No.	Description	Dimensions	Weight
HP60-BL	Hand-operated hydraulic hole punching tool 60 kN	700 x 260 x 105 mm	4.2 kg

Set equipment:

- Hand-operated hydraulic hole punching tool
- 1 draw stud 9.5 x 19.0 mm
- 1 draw stud 19.0 x 125.0 mm
- 1 spacer sleeve
- 1 tube of anti-wear paste
- 1 HSS-E step drill
- Operating instructions, safety and maintenance instructions
- Carrying case for the tool and accessories as well as 8 pairs of round hole inserts

Dimensions:

- Tool alone 430 x 166 x 67 mm

Weight:

- Alone approx 2.8 kg
- As a set 4.2 kg

STILO-BL - Battery-operated hydraulic hole punching tool 18V

Suitable for punching round, square, and rectangular holes through materials up to a max. thickness of 3 mm.

Technical characteristics:

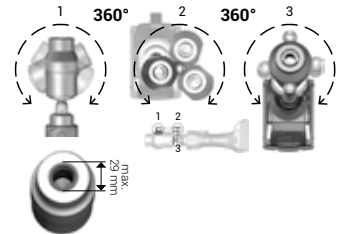
- Light, compact, and rugged construction
- Ergonomic 2-component handle allows fatigue-free working
- Head can be pivoted/rotated by 360°
- Hydraulic head made of high-strength aluminium
- Fast feed due to 3-stage axial piston pump
- Pressure monitored by an electronic pressure sensor
- Fast tool returns due to patented return valve
- Manual return possible in any position
- Automatic pressure limiter and monitor with pressure sensor
- Punch detection, automatic return after releasing the start switch when punching cycle complete
- Powerful Li-ion battery
- Fall protection provided by wrist strap
- Application temperature range: -10°C / +40°C.
- Punching force: 60 kN
- Battery voltage: 18V DC
- Battery capacity: 1.5 Ah (2.0 Ah)
- Battery charging time: approx. 30 - 40 min

Punching capacity (max. sheet thicknesses):

- Up to Ø 63.5 mm: 3.0 mm steel / 2.5 mm stainless steel
- Up to Ø 68.0 x 68.0 mm: 3.0 mm steel / 1.5 mm stainless steel
- Up to Ø 92.0 x 92.0 mm: 2.5 mm steel / 1.5 mm stainless steel
- Larger than 92.0 x 92.0 mm, up to 138.0 x 138.0 mm 2 mm steel



Pivoting/rotating head



Order No.	Description	Dimensions	Weight
Stilo-BL	Battery-operated hydraulic hole punching tool 18V	540 x 360 x 120 mm	6.3 kg

Set equipment:

- Battery-operated hydraulic hole punching tool
- Li-ion battery 18V - 1.5Ah
- Battery charger LG8
- 1 draw stud 9.5 x 19.0 mm
- 1 draw stud 19.0 x 125.0 mm
- 1 spacer sleeve
- 1 tube of anti-wear paste
- 1 HSS-E step drill
- USB cable
- CD-ROM (software)
- Operating instructions, safety and maintenance instructions
- Carrying case for the tool, spare batteries, charger, and 8 pairs of round hole inserts

Dimensions:

- Alone with battery 398 x 126 x 82 mm

Weight:

- With battery 2.3 kg
- Without battery 1.7 kg

PUNCHING/STAMPING/ELECTRIC BUS BAR PROCESSING UNIT

PBL60 - Hydraulic hole punching tool 700 bar

Suitable for punching round, square, and rectangular holes through materials up to a max. thickness of 3 mm

Technical characteristics:

- Small, compact design
- Burnished surface
- Operating pressure: 700 bar
- The punch head can be operated with a hydraulic pump (maximum pressure 700 bar / 70 MPa), see pages 204-207, hydraulic pumps

Punching capacity (max. sheet thicknesses):

- Up to Ø 63.5 mm: 3.0 mm steel / 2.5 mm stainless steel
- Up to Ø 68.0 x 68.0 mm: 3.0 mm steel / 1.5 mm stainless steel
- Up to Ø 92.0 x 92.0 mm: 2.5 mm steel / 1.5 mm stainless steel
- Larger than 92.0 x 92.0 mm, up to 138.0 x 138.0 mm 2 mm steel

Dimensions:

- Tool alone 150 x 73 mm

Weight:

- Alone ca. 2.5 kg

Scope of delivery: Hydraulic cylinder (without draw bolts - see page 195-196).

Order No.	Description	Dimensions	Weight
PBL60	Hydraulic hole punching tool	150 x 73 mm	2.5 kg



6

Keyway punch

Quick and simple punching of keyways 3.2 mm and 4.8 mm wide in max. 2.0 mm thick steel. Makes the time-consuming sawing and filing of the anti-twist keyways on pushbuttons unnecessary.

Order No.	Description	Dimensions	Weight
KNZ	Keyway punch	400 x 120 x 30 mm	1.4 kg



PUNCHING/STAMPING/ELECTRIC BUS BAR PROCESSING UNIT

TRE SPLIT hole punching tool (Steel)

The splitter hole punching system TRE SPLIT for ST 37 sheet steel splits the slug into 3 parts. This prevents the slug from getting stuck on the draw bolt and/or in the die. This in turn enables fast and burr-free hole punching.



Max. ST steel thicknesses:

- 2 mm with 9.5 mm draw bolt/draw stud
- 3 mm with 19 mm draw bolt/draw stud

Technical characteristics:

- The hole punches are suitable for manual and hydraulic operation.
- Due to the special cutting geometry of the TRE SPLIT punch, the cutting pressure required is reduced, which means less force is required when manually punching with ball bearing draw studs. This also means less stress on the hydraulic tool.
- The anti-wear paste protects against wear and seizing.

Universal accessories / spare parts

- DB22 - Spacer sleeve 22 mm - short
- STB21 - HSS-E step drill \varnothing 9, 11, 12, 15, 17, 19, 21 mm
- AVP - Anti-wear paste

Hole dimensions			Order No.				Hole dimensions	
\varnothing of hole	Standard size	Weight gr.	Set punch die Order No.	Hydraulic operation/ draw stud Order No.	Manual operation/ draw stud with ball bearing Order No.	Replacement punch Order No.	Weight gr.	Thread / punch mm
16,2	M16	77	BLTM16	9,5x19 ZB9,5x19	9,5x50 ZSKL9,5x50	BLTM16S	35	9,5
20,4	M20	108	BLTM20	9,5x19 ZB9,5x19	9,5x50 ZSKL9,5x50	BLTM20S	47	9,5
25,4	M25	145	BLTM25	9,5x19 ZB9,5x19	9,5x50 ZSKL9,5x50	BLTM25S	65	9,5
32,5	M32	241	BLTM32	19x125 ZB19x125	19x55 ZSKL19x55	BLTM32S	97	19,0
40,5	M40	391	BLTM40	19x125 ZB19x125	19x55 ZSKL19x55	BLTM40S	173	19,0
50,5	M50	681	BLTM50	19x125 ZB19x125	19x75 ZSKL19x75	BLTM50S	287	19,0
63,5	M63	1011	BLTM63	19x125 ZB19x125	19x75 ZSKL19x75	BLTM63S	432	19,0
15,2	PG9	74	BLTPG9	9,5x19 ZB9,5x19	9,5x50 ZSKL9,5x50	BLTPG9S	32	9,5
18,6	PG11	84	BLTPG11	9,5x19 ZB9,5x19	9,5x50 ZSKL9,5x50	BLTPG11S	40	9,5
20,4	PG13	108	BLTPG13	9,5x19 ZB9,5x19	9,5x50 ZSKL9,5x50	BLTPG13S	47	9,5
22,5	PG16	108	BLTPG16	9,5x19 ZB9,5x19	9,5x50 ZSKL9,5x50	BLTPG16S	54	9,5
28,3	PG21	192	BLTPG21	9,5x19 ZB9,5x19	9,5x50 ZSKL9,5x50	BLTPG21S	80	9,5
37,0	PG29	359	BLTPG29	19x125 ZB19x125	19x75 ZSKL19x75	BLTPG29S	149	19,0
47,0	PG36	520	BLTPG36	19x125 ZB19x125	19x75 ZSKL19x75	BLTPG36S	250	19,0
54,0	PG42	671	BLTPG42	19x125 ZB19x125	9,5x50 ZSKL9,5x50	BLTPG42S	324	19,0
60,0	PG48	899	BLTPG48	19x125 ZB19x125	19x75 ZSKL19x75	BLTPG48S	377	19,0
30,5	-	192	BLTN30,5	9,5x19 ZB9,5x19	9,5x50 ZSKL9,5x50	BLTN30,5S	96	9,5

Bigger sizes with standard punching dies on request

VA SPLIT hole punching tool (INOX)

This hole punching tool for stainless steel splits the slug into in 2 pieces. This prevents the slug from getting stuck on the draw bolt and/or in the die.

Max. ST steel thicknesses:

- 2 mm with 9.5 mm draw bolt/draw stud
- 3 mm with 19.0 mm draw bolt/draw stud

Technical characteristics:

- For manual and hydraulic operation
- We recommend the use of a hand-operated hydraulic tool
- Working with a ball bearing draw stud is possible, but is not recommended
- The used high-alloyed tool steel and the thermal treatment guarantee a long tool life

Universal accessories / spare parts

- DB22 - Spacer sleeve 22 mm - short
- STB21 - HSS-E step drill Ø 9, 11, 12, 15, 17, 19, 21 mm
- AVP - Anti-wear paste



Hole dimensions			Order No.				Hole dimensions	
Ø of hole	Standard size	Weight gr.	Set punch die Order No.	Hydraulic operation/draw stud Order No.	Manual operation/draw stud with ball bearing Order No.	Replacement punch Order No.	Weight gr.	Thread / punch mm
16,2	M16	76	BLVAM16	11,1x19 ZB11,1x19		BLVAM16S	35	11,1
20,4	M20	112	BLVAM20	11,1x19 ZB11,1x19		BLVAM20S	53	11,1
25,5	M25	155	BLVAM25	11,1x19 ZB11,1x19		BLVAM25S	80	11,1
32,5	M32	265	BLVAM32	19x125 ZB19x125		BLVAM32S	97	19,0
40,5	M40	300	BLVAM40	19x125 ZB19x125		BLVAM40S	157	19,0
50,5	M50	780	BLVAM50	19x125 ZB19x125		BLVAM50S	378	19,0
63,5	M63	1200	BLVAM63	19x125 ZB19x125		BLVAM63S	580	19,0
15,2	PG9	66	BLVAPG9	11,1x19 ZB11,1x19		BLVAPG9S	32	11,1
18,6	PG11	95	BLVAPG11	11,1x19 ZB11,1x19		BLVAPG11S	47	11,1
20,4	PG13	112	BLVAPG13	11,1x19 ZB11,1x19		BLVAPG13S	64	11,1
22,5	PG16	117	BLVAPG16	11,1x19 ZB11,1x19		BLVAPG16S	64	11,1
28,3	PG21	179	BLVAPG21	11,1x19 ZB11,1x19		BLVAPG21S	69	11,1
37,0	PG29	377	BLVAPG29	19x125 ZB19x125		BLVAPG29S	147	19,0
47,0	PG36	515	BLVAPG36	19x125 ZB19x125		BLVAPG36S	275	19,0
54,0	PG42	780	BLVAPG42	19x125 ZB19x125		BLVAPG42S	430	19,0
60,0	PG48	870	BLVAPG48	19x125 ZB19x125		BLVAPG48S	550	19,0
30,5	-	227	BLVAN30,5	11,1x19 ZB11,1x19		BLVAN30,5S	82	11,1

Draw bolt with ball bearing

To extend the life of the draw bolts we recommend to lubricate the draw bolts with our anti-wear paste AVP

Order No.	Description	Dimensions	Weight
ZSKL19X55	Draw bold with ball bearing	19 x 55 mm	0,24 kg

Order No.	Description	Dimensions	Weight
ZSKL19xX75	Draw bold with ball bearing	19 x 75 mm	0,28 kg

Order No.	Description	Dimensions	Weight
ZSKL9,5X50	Draw bold with ball bearing	9,5 x 50 mm	0,06 kg

Draw stud for hydraulics

To extend the life of the draw bolts we recommend to lubricate the draw bolts with our anti-wear paste AVP

Order No.	Description	Ø	Weight
ZB11,1x19	Draw stud for hydraulics	11,1 X 19 mm	0,11 kg

Order No.	Description	Ø	Weight
ZB19x125	Draw stud for hydraulics	19 x 125 mm	0,26 kg

Order No.	Description	Ø	Weight
ZB9,5x19	Draw stud for hydraulics	9,5 x 19 mm	0,10 kg

Order No.	Description	Ø	Weight
ZB9,5x72	Draw stud for hydraulics	9,5 x 72 mm	0,04 kg





Set TRE SPLIT M16-M40

TRE SPLIT triple splitter hole punching tool for St steels 5 sizes. Delivered in a plastic case.

Equipment:

- 1 punch of each size: M 16 - M 20 - M 25 - M 32 - M 40
- 2 ball bearing draw studs 9.5 × 50.0 mm
- 1 ball bearing draw stud 19.0 × 55.0 mm
- 1 tube of anti-wear paste
- 1 HSS-Co pilot drill bit (multi-step drill)
- Plastic case with foam liner

Order No.	Description	Dimensions	Weight
SETBLTM40	Set TRE SPLIT M16-M40	340 x 275 mm	2.25 kg

Other accessories available on request



Set TRE SPLIT M16-M63

TRE SPLIT triple splitter hole punching tool for St steels 7 sizes. Delivered in a plastic case.

Equipment:

- 1 punch of each size: M 16 - M 20 - M 25 - M 32 - M 40 - M 50 - M 63
- 2 ball bearing draw studs 9.5 × 50.0 mm
- 1 ball bearing draw stud 19.0 × 55.0 mm
- 1 ball bearing draw stud 19.0 × 75.0 mm
- 1 tube of anti-wear paste
- 1 HSS-Co pilot drill bit (multi-step drill)
- Plastic case with foam liner

Order No.	Description	Dimensions	Weight
SETBLTM63	Set TRE SPLIT M16-M63	340 x 275 mm	3.85 kg

Other accessories available on request



Set TRE SPLIT M16-M40

VA SPLIT double splitter hole punching tool for VA steels 5 sizes. Delivered in a plastic case.

Equipment:

- 1 punch of each size: M 16 - M 20 - M 25 - M 32 - M 40
- 1 tube of anti-wear paste
- 1 HSS-Co pilot drill bit (multi-step drill)
- Plastic case with foam liner

Order No.	Description	Dimensions	Weight
SETBLVAM40	Set VA SPLIT M16-M40	340 x 275 mm	1.55 kg

Other accessories available on request

6

PUNCHING/STAMPING/ELECTRIC BUS BAR PROCESSING UNIT



Set VA SPLIT M16-M63

VA SPLIT double splitter hole punching tool for VA steels 7 sizes. Delivered in a plastic case.

Equipment:

- 1 punch of each size: M 16 - M 20 - M 25 - M 32 - M 40 - M 50 - M 63
- 1 tube of anti-wear paste
- 1 HSS-Co pilot drill bit (multi-step drill)
- Plastic case with foam liner

Order No.	Description	Dimensions	Weight
SETBLVAM63	Set VA SPLIT M16-M63	340 x 275 mm	3.45 kg

Other accessories available on request



Rectangular/shaped hole punch tool for heavy connectors with 2 centering tips integrated into the die

Workable with St steels - equipped with centering tips integrated into the matrix for marking the mounting holes. Only for hydraulic operations.

Equipment:

- Shaped hole punch
- Draw stud
- Locknut
- Plastic case with foam inlay

Size mm	Max. sheet thickness	Order No.	Pole	Axle	Weight
24,0 x 42,0	3,0 mm	BLF24x42	6	B	0,85 kg
24,0 x 65,0	3,0 mm	BLF24x65	10	B	1,81 kg
24,0 x 86,0	3,0 mm	BLF24x86	16	B	1,87 kg
24,0 x 112,0	3,0 mm	BLF24x112	24	B	2,52 kg

Other sizes available on request

Universal accessories / spare parts see page xxx

Accessories / spare parts:

Draw stud 19 mm flattened on two sides for shaped hole punch



Order No.	Description	Dimensions	Weight
ZA19X14X120	Draw stud 19 mm	14 x 120 mm	0,24 kg

Locknut for shaped hole punch

Order No.	Description	Ø	Weight
KM19	Locknut	19 mm	0,13 kg





Square / shape punch for St steels

Very long service life of the tool due to special protective gas hardening. The CAD-optimized cutting geometry of the punch reduces the need for cutting pressure and thus the effort of work. When using a hand-held hydraulic device, the reduced pressure requirement reduces the pressure on the seals.

- Equipment:**
- Shaped hole punch
 - Draw stud
 - Locknut
 - Plastic case with foam liner

Size mm	Max. sheet thickness mm	Order No.		Weight
45,0 x 45,0	3,0	BLF45x45	✓	2,30 kg
46,0 x 46,0	3,0	BLF46x46	✓	2,30 kg
68,0 x 68,0	3,0	BLF68x68	✓	3,35 kg
92,0 x 92,0	3,0	BLF92x92	✓	5,05 kg

Other sizes available on request
 Universal accessories / spare parts see page 196



Rectangular/shaped hole punch tool for heavy connectors with 4 centering tips integrated into the die

For St steels - equipped with centering tips integrated into the matrix for marking the mounting holes. Only for hydraulic operations.

- Equipment:**
- Shaped hole punch
 - Draw stud
 - Locknut
 - Plastic case with foam liner

Size mm	Max. sheet thickness	Order No.		Pole	Axle	Weight
36,0 x 52,0	3,0 mm	BLF36x52	✓	6	B	1,78 kg
36,0 x 65,0	3,0 mm	BLF36x65	✓	10	B	2,14 kg
36,0 x 86,0	3,0 mm	BLF36x86	✓	16	B	2,55 kg
36,0 x 112,0	3,0 mm	BLF36x112	✓	24	B	3,05 kg

Other sizes available on request
 Universal accessories / spare parts see page 196

Accessories / spare parts:

Draw stud 25 mm flattened on two sides for shaped hole punch

Order No.	Description	Dimensions	Weight
ZA25X21X150	Draw stud 25 mm	21 x 150 mm	0,38 kg

Locknut for shaped hole punch

Order No.	Description	Ø	Weight
KM19	Locknut	19 mm	0,13 kg



PUNCHING/STAMPING/ELECTRIC BUS BAR PROCESSING UNIT



Rectangular/shaped hole punching tool for St steels

Very long service life of the tool due to special protective gas hardening. The CAD-optimized cutting geometry of the punch reduces the need for cutting pressure and thus the effort of work. When using a hand-held hydraulic device, the reduced pressure requirement reduces the pressure on the seals.

Equipment:

- Shaped hole punch
- Draw stud
- Locknut
- Ball bearing pressure nut
- Adapter
- Plastic case with foam inlay

Size mm	Max. sheet thickness mm	Order No.			Weight
22,0 x 42,0	2,0	BLF22x42	✓	✓	0,73 kg
22,0 x 45,0	2,0	BLF22x45	✓	✓	0,73 kg

Other sizes available on request

Universal accessories / spare parts see page 196

Accessories / spare parts:

Draw stud 13 mm flattened on one side for shaped hole punch



Order No.	Description	Dimensions	Weight
ZA13X11X105	Draw stud 13 mm	11 x 105 mm	0,09 kg

Locknut for shaped hole punch




Order No.	Description	Ø	Weight
KM12,7	Locknut	12,7 mm	0,02 kg

Ball bearing pressure nut for hole punch (manual operation)



Order No.	Description	Ø	Weight
KMKL12,7	Ball bearing pressure	12,7 mm	0,10 kg

 manual application

 hydraulic application

Universal accessories / spare parts:



Adapter for hydraulics Ø 19,0 x 48 mm

Order No.	Description	Inside thread Ø	Weight
ZBA19x9,5	Adapter Ø 19,0 x 48 mm	9,5 mm	0,07 kg



Spacer sleeve 22 mm - short

Order No.	Description	Lenght	Weight
DB22	Spacer sleeve - short	22 mm	0,16 kg



HSS-E step drill

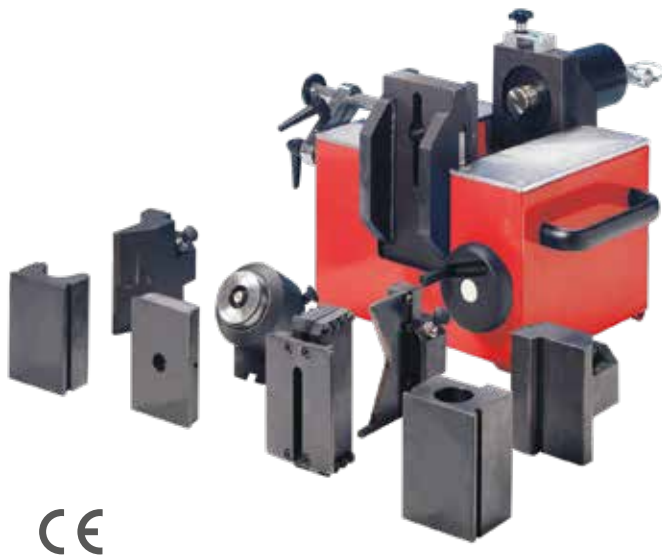
Order No.	Description	Ø mm	Weight
STB21	HSS-E step drill	9, 11, 12, 15, 17, 19, 21	0,05 kg



Anti-wear paste

Order No.	Description	Weight
AVP	Anti-wear paste	0,01 kg

PUNCHING/STAMPING/ELECTRIC BUS BAR PROCESSING UNIT



BLS120 - Power rail work station

Designed to bend, punch, cut and crimp bus bars in copper or aluminium up to 120 x 12 mm. The work station must be combined with a hydraulic pump (max. pressure 700bar/70MPa). (s. pages 201-208, Hydraulic Pumps)

Technical characteristics:

- Sturdy and compact, suitable for use in workshops and on construction sites
- Composed of a base unit and a variety of work tools, interchangeable tools depending on the task being performed
- Simple and quick tool changing
- The electrical proximity switch guarantees 100% bending repeatability
- The work bench adjusts in height with a side stop to make holes without tracing and measuring
- Quick automatic-lock connection of hydraulics and undetachable dust cap
- Cutting tool for clean burr-free cuts due to special shape of the blade
- Exact dimensional bending of bow in one operation
- Perforates and cuts laminated power rails and earthing strips

Force generated: max. 185 kN
 Operating pressure: 700bar (70 MPa)
 Bus bar width: up to 120 mm
 Bus bar thickness: up to 12 mm

Order No.	Description	Dimensions	Weight
BLS-120	Power rail work station	480x500x360 mm	53 kg

Accessories:

Order No.	Description	Power rail dimensions	Weight
BLS-M	Bending female die	up to 120 x 12 mm	3,3 kg

Order No.	Description	Bending radius	Bending angle	Weight
BLS-R5	Bending tool	R5 mm	up to 110°	4 kg
BLS-R8	Bending tool	R8 mm	up to 110°	4,1 kg
BLS-R10	Bending tool	R10 mm	up to 110°	4,4 kg
BLS-R20	Bending tool	R20 mm	up to 110°	5 kg
BLS-R	Back pending die			3,8 kg

Attention: The necessary bending female die BLS-M must be ordered separately

Order No.	Description	Power rail dimensions	Weight
BLS-S	Cutting tool for massive power rails	up to 120 x 12 mm	5,8 kg

Order No.	Description	Power rail dimensions	Weight
BLS-SL	Cutting tool for laminated power rails	up to 120 x 12 mm	9,0 kg

Order No.	Description	Power rail dimensions	Weight
BLS-K	Offset shaping tool	up to 120 x 12 mm	11,0 kg



PUNCHING/STAMPING/ELECTRIC BUS BAR PROCESSING UNIT



Technical characteristics:

- For solid and laminated bus bars
- Perforation near the isolation possible (min. 5 mm) by step in the tool
- Round hole: \varnothing 6.5 to 21.0 mm
- Longitudinal slot: 6.5 x 13 to 17 x 20 mm

Order No.	Description	Power rail dimensions	Weight
BLS-L4	Perforation tool IV for laminated and solid rails	up to 120 x 12 mm	4,3 kg



Description	\varnothing	Female die	Punch	Stripper
Round hole punch and female dies for laminated and solid bus bars	6,5 mm	LS4R06,5M	LS4R06,5S	LS4R06,5N
	7,0 mm	LS4R07,0M	LS4R07,0S	LS4R07,0N
	8,5 mm	LS4R08,5M	LS4R08,5S	LS4R08,5N
	9,0 mm	LS4R09,0M	LS4R09,0S	LS4R09,0N
	10,0 mm	LS4R10,0M	LS4R10,0S	LS4R10,0N
	10,5 mm	LS4R10,5M	LS4R10,5S	LS4R10,5N
	11,0 mm	LS4R11,0M	LS4R11,0S	LS4R11,0N
	12,0 mm	LS4R12,0M	LS4R12,0S	LS4R12,0N
	13,0 mm	LS4R13,0M	LS4R13,0S	LS4R13,0N
	14,0 mm	LS4R14,0M	LS4R14,0S	LS4R14,0N
	14,5 mm	LS4R14,5M	LS4R14,5S	LS4R14,5N
	15,0 mm	LS4R15,0M	LS4R15,0S	LS4R15,0N
	17,0 mm	LS4R17,0M	LS4R17,0S	LS4R17,0N
	18,0 mm	LS4R18,0M	LS4R18,0S	LS4R18,0N
	19,0 mm	LS4R19,0M	LS4R19,0S	LS4R19,0N
	21,0 mm	LS4R21,0M	LS4R21,0S	LS4R21,0N

6



Description	\varnothing	Female die	Punch	Stripper
Long hole punch and female dies for laminated and solid bus bars on request	6,5x13,0	LS4L06,5x13,0M	LS4L06,5x13,0S	LS4L06,5x13,0N
	10,5x13,0	LS4L10,5x13,0M	LS4L10,5x13,0S	LS4L10,5x13,0N
	8,5x16,0	LS4L08,5x16,0M	LS4L08,5x16,0S	LS4L08,5x16,0N
	6,5x21,0	LS4L06,5x21,0M	LS4L06,5x21,0S	LS4L06,5x21,0N
	8,0x20,0	LS4L08,0x20,0M	LS4L08,0x20,0S	LS4L08,0x20,0N
	9,0x20,0	LS4L09,0x20,0M	LS4L09,0x20,0S	LS4L09,0x20,0N
	13,0x20,0	LS4L13,0x17,0M	LS4L13,0x17,0S	LS4L13,0x17,0N
	11,0x20,0	LS4L11,0x20,0M	LS4L11,0x20,0S	LS4L11,0x20,0N
	13,0x20,0	LS4L13,0x20,0M	LS4L13,0x20,0S	LS4L13,0x20,0N
	14,0x20,0	LS4L14,0x20,0M	LS4L14,0x20,0S	LS4L14,0x20,0N
	17,0x20,0	LS4L17,0x20,0M	LS4L17,0x20,0S	LS4L17,0x20,0N



Plastic case for BLS tools and dies (Accessories)

Accessories:

Description	Order No.	Dimensions	Weight
Trolley for BLS	BLS-W	800x500x750 mm	ca. 45 kg
Trestle for BLS	BLS-B	800x440 mm	ca. 5 kg
Plastic case for BLS	ACBLSWZG	400x250x250	6,5 kg
Spray Metalflux	SPRAY-M	400 ml	ca. 450 g



Spray for cutting and punching



Trolley/Trestle for positioning the Bus Bar Work Station in ergonomic high

PUNCHING/STAMPING/ELECTRIC BUS BAR PROCESSING UNIT

LSK120 - Hydraulic punching head

Designed to punch bus bars rails (dimensions up to 120 x 12mm) made of copper, aluminium or steel with tensile strength up to 470N/mm². The hydraulic punching head must be combined with a hydraulic pump (Maximum pressure 700bar/70MPa) (s. pages 201-208, Hydraulic Pumps)

Technical characteristics:

- Strong and compact structure
- "C" head for easy positioning of the power rails
- Easy insertion of inserts (die and punch)
- Also useable on mounted bus bars without disassembly
- Quick automatic-lock connection and undetachable dust cap
- Centrally punched holes in bars up to 120 mm wide
- Functional range for the following bars:

12 mm Cu/Al max. Ø 21,0 mm
 8 mm steel max. Ø 21,0 mm
 9 mm steel max. Ø 19,5 mm
 12 mm steel max. Ø 14,0 mm
 Punching force: max. 218 kN
 Operating pressure: 700bar (70MPa)

Description	Order No.	Dimensions	Weight
Hydraulic punching head	LSK120	234x174x88 mm	ca. 9,3 kg
Rigid case	KKLSK120	400x365x135 mm	ca. 1,8 kg



CE



Description	Ø	Punch	Stripper
Round hole punch and female dies for solid rails	6,0 mm	LSR06,0M	LSR06,0S
	6,5 mm	LSR06,5M	LSR06,5S
	7,0 mm	LSR07,0M	LSR07,0S
	8,0 mm	LSR08,0M	LSR08,0S
	8,5 mm	LSR08,5M	LSR08,5S
	9,0 mm	LSR09,0M	LSR09,0S
	10,0 mm	LSR10,0M	LSR10,0S
	10,5 mm	LSR10,5M	LSR10,5S
	11,0 mm	LSR11,0M	LSR11,0S
	12,0 mm	LSR12,0M	LSR12,0S
	12,5 mm	LSR12,5M	LSR12,5S
	13,0 mm	LSR13,0M	LSR13,0S
	13,5 mm	LSR13,5M	LSR13,5S
	14,0 mm	LSR14,0M	LSR14,0S
	14,5 mm	LSR14,5M	LSR14,5S
	15,0 mm	LSR15,0M	LSR15,0S
	16,0 mm	LSR16,0M	LSR16,0S
	17,0 mm	LSR17,0M	LSR17,0S
	18,0 mm	LSR18,0M	LSR18,0S
	18,5 mm	LSR18,5M	LSR18,5S
	19,0 mm	LSR19,0M	LSR19,0S
19,5 mm	LSR19,5M	LSR19,5S	
20,0 mm	LSR20,0M	LSR20,0S	
21,0 mm	LSR21,0M	LSR21,0S	

Already fan of *intercable* ?





7

HYDRAULIC PUMPS

SERIES CP700

- **Small** - 205 x 290 x 190 mm
- **Light** - 4,5 kg
- **Powerful** - 700 bar / LP= 1,2 lit/min. / HP= 0,2 lit/min.

i-Drive

Several setting possibilities, selection through setting knob.

- hold function (CP700 version only)
- pressure adjustment (CP700 version only)
- selectable piston return

USB Port

Direct USB-port on the pump allows special settings and detailed reporting of your daily work

Comfort

Light, compact and robust structure

Reliable

Long lifetime, the first maintenance is not necessary before 20,000 cycles



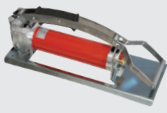









Powerful

Powerful and replaceable 18V lithium-ion battery with own management controlled by the pump for max. safe and efficient working.

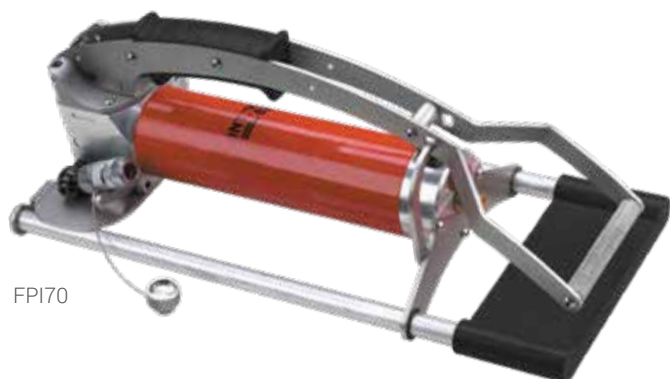
Resistant

Body made of polyamide reinforced with fibreglass, completely insulating and shock resistant



	Pump	Operation	Set equipment (pump + ...)	
FPI70	 FPI70	Foot	<ul style="list-style-type: none"> • Metal case • Pressure gauge 	PAGE 204
FPI AS85 70S	 FPI70S	Foot	<ul style="list-style-type: none"> • Flexible hose 3m • Metal case • Pressure gauge 	PAGE 204
FPI70 EC	 FPI70 EC	Foot	<ul style="list-style-type: none"> • Metal case 	PAGE 204
FPI70S EC	 FPI70S EC	Foot	<ul style="list-style-type: none"> • Flexible hose 3m • Metal case 	PAGE 204
CP700	 CP700	Battery ↳ Main adapter available	<ul style="list-style-type: none"> • Battery and charger • Flexible hose 1,5 m • Remote control 1,5 m • USB-cable • Nylon bag with shoulder strap 	PAGE 205
CP700 EC	 CP700 EC	Battery ↳ Main adapter available	<ul style="list-style-type: none"> • Battery and charger • Flexible hose 1,5 m • Remote controle 1,5 m • USB-Cable • Nylon bag with shoulder strap 	PAGE 205
ANP24/220	 ANP24/220	Battery or Mains	<ul style="list-style-type: none"> • Remote controle 5 m • Power cord 3 m • Shoulder strap 	PAGE 206
NP220	 NP220	Mains	<ul style="list-style-type: none"> • Remote control 5 m • Power cord 3 m 	PAGE 206
90404	 90404	Mains	<ul style="list-style-type: none"> • Remote control 5 m • Power cord 3 m 	PAGE 207
90418	 90418	Mains	<ul style="list-style-type: none"> • Remote control 5 m • Power cord 3 m 	PAGE 207
90415	 90415	Mains	<ul style="list-style-type: none"> • Remote control 5 m • Power cord 3 m 	PAGE 208
91421	 91421	Mains	<ul style="list-style-type: none"> • Remote control 5 m • Power cord 3 m 	PAGE 208

HYDRAULIC PUMPS



FPI70



Pressure gauge and tilting coupling is standard on FPI70 and FPI70s models (not on models "-EC")



FPI70S



FPI70S EC



FPI70 EC

Hose must be ordered separately



Set FPI70

FPI70 / FPI70-EC – Foot operated hydraulic pump

Designed to operate hydraulic tools up to 700bar (70MPa).

Technical characteristics:

- Compact dimensions
- Lightweight due to use of light alloys and corrosion-resistant materials
- Handy and stable due to a firm fitting pedal and sturdy non slip base
- Automatic two speed device (fast advancing under no-load and slow under load)
- Tilting system for coupler (not on models "-EC")
- Pressure monitoring by oil pressure gauge (not on models "-EC")
- Manual pressure release at any time
- High mounted quick release coupling with dust cap
- Operating pressure: 700 bar (70 MPa)
- Low pressure pump capacity: 18,3 cm³/stroke
- High pressure pump capacity: 2 cm³/stroke
- Amount of oil: 1200 ml
- Operating temperature: -20°C to a +40°C

Tool dimensions:

- FPI70 570 x 230 x 209 mm
- FPI70S 570 x 230 x 209 mm
- FPI70 EC 545 x 212 x 198 mm
- FPI70S EC 545 x 212 x 198 mm

Tool weight:

- FPI70 9,6 kg
- FPI70S 10,9 kg
- FPI70 EC 9,6 kg
- FPI70S EC 10,3 kg

Description	Order No.	Dimensions	Weight
Set: Foot pump	FPI70	650 x 240 x 220 mm	19 kg
Set: Foot pump with flexible hose 3 m	FPI70S	650 x 240 x 220 mm	21 kg
Set: Foot pump EC	FPI70 EC	650 x 240 x 220 mm	19 kg
Set: Foot pump EC with flexible hose 3 m	FPI70S EC	750 x 300 x 220 mm	24 kg

Accessories see pages 209 - 212

On request special models with different operating-pressures up to a maximum of 850bar (85MPa).

Set equipment FPI70:

- Foot operated pump with oil pressure gauge
- Metal case

Set equipment FPI70S:

- Foot operated pump with oil pressure gauge
- Flexible hose 3 m
- Metal case

Set equipment FPI70 EC:

- Foot operated pump
- Metal case

Set equipment FPI70S EC:

- Foot operated pump
- Flexible hose 3 m
- Metal case



CP700EC



CP700 - Compact hydraulic pump with battery

Designed to operate hydraulic tools up to 700bar (70MPa).

Technical characteristics:

- Light, compact and robust structure
- Ergonomic design for right or left handers
- Optional transportation bag with pockets, with a shoulder strap or attached to a belt (optional)
- Manual or automatic return
- Rapid return of piston due to high return capacity
- Free pressure calibration (only model CP700)
- Freely programmable pump (only model CP700)
- Preinstalled standard programs for cutting and crimping
- Maintenance program (only model CP700)
- Possibility to set up maintenance times (only model CP700)
- Electronic sensor pressure control
- High performance lithium ion battery
- Charge indicator on the battery
- Double piston technology for rapid high pressure feed
- Flow range at low pressures < 100 bar: 1.2 lit./min.
- Flow range at pressures up to 700 bar: 0.2 lit./min.
- Operating pressure: 700 bar (70 MPa)
- Power: 200 W
- Battery voltage: 18,0 V DC
- Battery capacity: 3,0 Ah
- Range of use: -20°C / +55°C (integrated cooling system)
- Remote control (1.5 m) two buttons and LED indicator
- Possibility to attach the remote control to the unit with the integrated magnet
- A belt or shoulder strap can be added through a clamp support
- Anti-scratch and shock resistant display protection (only model CP700)
- Current and required pressure visible on display (only model CP700)
- Error indication
- Possibility of reading the curves on the pump (only model CP700) and on PC
- Possibility of reading all the cycles and error indications by USB
- Including software

Tool dimensions: 290 x 190 x 205 mm
 Tool weight: 4,5 kg

Description	Order No.	Dimensions	Weight
Set: Hydraulic pump	CP700	480 x 250 x 250 mm	7,7 kg
Set: Hydraulic pump	CP700EC	480 x 250 x 250 mm	7,7 kg

Accessories see pages 209 - 212

On request special models with different operating-pressures up to a maximum of 850bar (85MPa).

Set equipment:

- Compact hydraulic pump
- Battery 18 V/3,0 Ah lithium-ion (RA11)
- Battery charger (LG8)
- Flexible high pressure hose – length 1,5 m
- Remote control 1,5 m (CP-F)
- Shoulder strap (TG3)
- USB cable + software
- Comfortable sturdy nylon bag

Application:



Top version CP700
(with display):



Standard version
CP700EC:



- Selectable piston return
- Hold function
- Free pressure calibration
- Patented cable cutting detection
- Installed cutting / crimping programmes
- Freely programmable
- Possibility of reading all cycles and error indications directly on the pump and on the PC by USB

- Selectable piston return
- Patented cable cutting detection
- Installed cutting / crimping programmes
- Possibility of reading all cycles and error indications on the PC by USB



CE

ANP 24/220 - Combined electro hydraulic battery and mains pump

Designed to operate hydraulic tools up to 700bar (70MPa).

Technical characteristics:

- Battery-operated or mains-operated
- High pump performance in 2 stages (fast and slow)
- Remote control
- Manual pressure release at any time
- Automatic pressure release when maximum force is achieved
- Engine brake operates when pressure released
- Fitted battery charger with battery condition indicator
- Quick automatic-lock hydraulic connection and undetachable dustcap
- Compact design, light weight
- Pump capacity: 0,4 l/min - 0,7 l/min
- Mains voltage: 230 V (50/60 Hz)
- Cell Voltage: 2 x 12 V
- Motor rating: 360 W
- Protection class: IP43
- Operating temperature: -10°C to +40°C

Description	Order No.	Dimensions	Weight
Electro hydraulic battery pump	ANP24/220	550 x 350 x 180 mm	20 kg

Accessories see pages 209 - 212

On request special models with different mains voltage.

Set equipment ANP24/220:

- Electro-hydraulic battery-mains pump
- Remote control with 5m connecting cable
- Power cord 3m
- Carrying shoulder strap with shoulder pads

NP220-1 and NP220-2 mains operated hydraulic pump

Designed to operate hydraulic tools up to 700bar (70MPa).

Technical characteristics:

- Mains-operated
- High pump performance (fast and slow in 2 stages only NP220-2)
- High pump performance in application of large cross-sections and power rails processing
- Protection support
- Remote control
- Oil check by external sensor
- Engine brake operates when pressure released
- Quick automatic-lock connection and undetachable dust cap
- Pump capacity: 0.6 l/min (NP220-1) 0.6 - 1.1 l/min (NP220-2)
- Mains voltage: 230 V (50/60 Hz)
- Motor rating: 750 W
- Protection class: IP54
- Operating temperature: -10°C to +40°C

Description	Order No.	Dimensions	Weight
Pump 1 stage	NP220-1	370 x 185 x 490 mm	25 kg
Pump 2 stage	NP220-2	370 x 185 x 490 mm	25 kg

Accessories see pages 209 - 212

On request special models (NP220-1; NP220-2) with different mains voltage.

Set equipment:

- Mains-operated hydraulic pump – NP220-1 or NP220-2
- Remote control push-button with 5m connecting cable
- Power cord 3m



CE

Electro-hydraulic 3-cylinder-radial-piston-pump with transport cart

Our electro-hydraulic pumps are delivered completely with an electrical control, pressure control valve, magnet valve, oil sight glass and a 3 meter high-pressure hose. The operating pressure is normally set to 700 bar. The control is effected with a foot pedal. The pedal is equipped with a high-quality 3-point-safety wiring. All our pumps are delivered without cutting and crimping tool.

The following variants are deliverable:

- Operating pressure:max. 700 bar (70 MPa)
- Operating voltage/pump delivery volume: 230V 50Hz / 0.64 l/min. 3 x 400V 50Hz / 0.82 l/min.
- With transport cart or with rack
- Foot pedal with one switch = version without positioning
- Foot pedal with two switches = version with positioning

The version with positioning should be used at the power rail work station and the hydraulic puncher (catalogue pages xx). The positioning guaranteed a save and point exactly work. We recommend to use the pump (art.-no. 91421) if you buy the power rail work station BLS 120 (page 195). This tool combination ensures you a high precision.

Further components and special solutions are available on request



Art.-no.: 90404

Description	Order No.	Weight
Electro-hydraulic 3-cylinder-radial-piston-pump	90404	31,0 kg

- Transport cart, with positioning
- Nominal capacity:0.75 kW
- Voltage: 3 x 400V 50Hz
- Delivery rate: 0.82 l/min.

Description	Order No.	Weight
Electro-hydraulic 3-cylinder-radial-piston-pump	90417	31,0 kg

- Transport cart, with positioning and automatic pressure shutdown
- Nominal capacity:0.75 kW
- Voltage: 3 x 400V 50 Hz
- Delivery rate: 0.82 l/min.

Description	Order No.	Weight
Electro-hydraulic 3-cylinder-radial-piston-pump	90407	30,4 kg

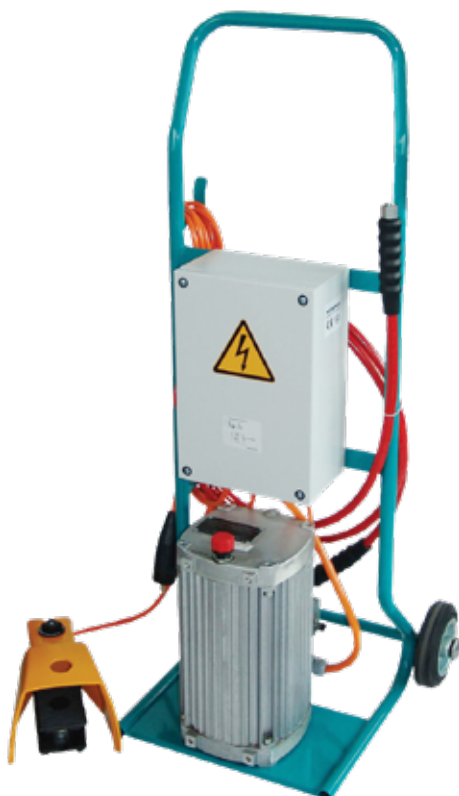
- Transport cart
- Nominal capacity:0.75 kW
- Voltage: 3 x 400V 50 Hz
- Delivery rate: 0.82 l/min.

Description	Order No.	Weight
Electro-hydraulic 3-cylinder-radial-piston-pump	90413	33,0 kg

- Transport cart, with positioning
- Nominal capacity:0.75 kW
- Voltage: 230V 50 Hz
- Delivery rate: 0.64 l/min.

Description	Order No.	Weight
Electro-hydraulic 3-cylinder-radial-piston-pump	90418	33,0 kg

- Transport cart
- Nominal capacity:0.75 kW,
- Voltage: 230V 50 Hz
- Delivery rate: 0.64 l/min.



Art.-no.: 90418



Art.-no.: 90415

Electro-hydraulic 3-cylinder-radial-piston-pump with rack

Description	Order No.	Weight
Electro-hydraulic 3-cylinder-radial-piston-pump	99962	24,0 kg

- Rack, with positioning
- Nominal capacity: 0.75 kW
- Voltage: 3 x 400V 50Hz
- Delivery rate: 0.82 l/min.

Description	Order No.	Weight
Electro-hydraulic 3-cylinder-radial-piston-pump	90406	24,0 kg

- Rack
- Nominal capacity: 0.75 kW
- Voltage: 3 x 400V 50Hz
- Delivery rate : 0.82 l/min.

Description	Order No.	Weight
Electro-hydraulic 3-cylinder-radial-piston-pump	90416	30,0 kg

- Rack, with positioning
- Nominal capacity: 0.75 kW
- Voltage: 230V 50Hz
- Delivery rate: 0.64 l/min.

Description	Order No.	Weight
Electro-hydraulic 3-cylinder-radial-piston-pump	90415	24,0 kg

- Rack
- Nominal capacity: 0.75 kW
- Voltage: 230V 50Hz,
- Delivery rate: 0.64 l/min.



Art.-no.: 91421

Description	Order No.	Weight
Electro-hydraulic 3-cylinder-radial-piston-pump	91421	24,0 kg

- rack, with positioning,
- nominal capacity: 0.75 kW, with automatical pressure switching-off and connection for end switch (for BLS120), voltage 3 x 400V 50Hz, delivery rate 0.82 l/min.



8

ACCESSORIES

ACCESSORIES



Strap

Description	Order No.	Weight
Shoulder strap for ANP 24/220	TG1	150 g
Shoulder strap (for hydraulic battery operated tools)	TG2	90 g
Shoulder strap for CP700 / CP700-EC	TG3	90 g



Adapter

Description	Order No.	Weight
Adapter 18V for mains operation 230V AC/ 115V A	NG3	800 g



Storage batteries

Description	Order No.	Weight
Storage battery 18 V / 2.1 Ah Li-Ion	RA13	680 g
Storage battery 18 V / 4.1 Ah Li-Ion	RA14	680 g
Storage battery 18 V / 5.1 Ah Li-Ion	RA15	680 g
Storage battery 18 V / 2.0 Ah Li-Ion	RA20	680 g
Storage battery 18 V / 5.0 Ah Li-Ion	RA50	680 g



Battery charger

Description	Order No.	Weight
Battery charger	LG8	700 g
Vehicle battery charger (12 V source) - 18V	LGZ3	580 g

Battery charger	Tension						Battery										
	4,8 V	7,2 V	9,6 V	12,0 V	14,4 V	18 V	RA 4	RA 5	RA 6	RA 7	RA 9	RA 10	RA 11	RA 12	RA 12	RA 13	RA 14
LG8						•							✓	✓	✓	✓	✓
LGZ3						•							✓	✓	✓	✓	✓



Set PP130-C

Flexible hose

Description	Order No.	Dimensions	Weight
Hose without armour	SCH1,5	1,5 m	0,60 kg
	SCH3	3 m	1,19 kg
	SCH5	5 m	1,45 kg
	SCH10	10 m	2,29 kg
Hose with armour	SCHA3	3 m	1,19 kg
	SCHA5	5 m	1,7 kg
	SCHA10	10 m	3,8 kg

- Flexible High Pressure Hoses for connecting heads to pumps
- Cannot be used with insulated cable shears
- Quick male and female automatic locking connections mounted on the ends and with related protective plugs



Battery 24V - EA24-1

Storage battery for hydraulic pump

Description	Order No.	Weight
Storage battery for ANP24/220 (24V) ANP24/220)	EA24-1	4,5 kg



Voltage transformer (for hydraulic pump ANP24/220)

Description	Order No.	Weight
Voltage transformer 12 V DC to 230 V AC (50/60Hz)	SW12/230	0,8 kg

- to power the hydraulic pump ANP24/220 from an external 12V-source



Remote control (for pump CP700/CP700-EC)

Description	Order No.	Weight
Remote control, 1,5 m	CP-F	150 g
Remote control, 3 m	CP-F3	230 g
Remote control, 5 m	CP-F5	320 g

ACCESSORIES



Foot operated switch – FS01



Foot operated switch – FS02

Electric bus bar processing units

Description	Order No.	Weight
Foot operated switch for ANP 24/220, NP 220 and BLS	FS01	1,6 kg
Foot operated switch for CP700 /CP700-EC	FS02	4,2 kg



Remote control extension Cable

Description	Order No.	Weight
Remote control extension cable, 5 m	KABEL5	120 g

- Extension cable for hand or foot operation



USB cable (for CP700/CP700-EC)

Description	Order No.	Weight
USB cable, 2 m	CP-USB	70 g

8



Bag for CP700 / CP700-EC - TTCP01



Accessory bag - TTPZ01

Accessory bags

Description	Order No.	Weight
Bag for CP700 / CP700-EC	TTCP01	1,2 kg
Accessory bag for hydraulic tools	TTPZ01	1,0 kg

- for hydraulic hose, storage battery and other accessories



ELECTROTECHNICAL EQUIPMENT

9



Standards:

- EN/CEI 60900
- EN/CEI 61010-2-31 (if applicable)
- EN/CEI 10020

Insulated D8mm pin

Designed to connect up a variety of electrotechnical equipment (for example: Shunt devices, current tapplings, connection cables, etc.)

Technical characteristics:

- For application on contacts with hole diameter 8 mm (e.g. insulated terminals D8 mm, perforated insulation terminals or terminal strips)
- Spreader pin can be spread open up to a \varnothing of 8.5 mm
- Contact protection of the contact pin by means of a springy insulating sleeve
- Clamping device for connecting the conductor (max. 35 mm²) inside the pin
- Identification of terminals with phase colour coding
- Elbow form
- Protection against short circuits 8kA for 0,2 sec. or 1,3kA for 60 sec.
- For currents up to 200A for 60 min. or 250A for 15 min.
- Nominal voltage up to 600V AC / DC (50-60 Hz)
- Slip protection according to EN CEI 60900

Description	Order No.	Dimensions	Weight
Pin D8 black neutral	21011	110x105x30 mm	160 g
Pin D8 grey R	21014	110x105x30 mm	160 g
Pin D8 brown S	21013	110x105x30 mm	160 g
Pin D8 black T	21012	110x105x30 mm	160 g
Pin D8 blue N	21015	110x105x30 mm	160 g



Strudy case - AB4712

Connection cable with D8mm pin

Suitable for bridging a phase under load in LV systems (e.g. replacing / changing fuses, Connecting /disconnecting lines, etc.).

Technical characteristics:

- Connection by means of insulated spreader pins D8
- Flexible cable with double insulation according to IEC 228 standards
- Cable length 3 m
- Rated voltage of the cable up to U/U0 1.8 /3 kV
- Designed for a load of 200A for 60 min. or 250A for 15 min.
- Rated voltage up to 600V AC / DC (50-60Hz)
- Short-circuit strength 8kA for sec. or 1.3kA for 60 sec.

Description	Order No.	Color/Descrip.	Cable cross sect.
Connection cable	21195	black / L3	25 mm ²
Connection cable	21192	blue / N	25 mm ²
Connection cable	21196	brown / L2	25 mm ²
Connection cable	21197	grey / L1	25 mm ²

Set equipment:

- Connection cable - 2119...
- Strudy case

Other lenghts on request



Clamp 10 - 95 mm² - 2103 1



Clamp 70 - 240 mm² - 2103 4



Phases identified



Sturdy case - 2103 0

Insulated perforation clamp

Designed to connect up a variety of electrotechnical equipment (for example: Shunt devices, current tapplings, connection cables, etc.)

Technical characteristics:

- Connection by perforation of the insulating covering
- Size 10 - 95 for NS cables from 10 to approx. 95 mm² (outer diameter max.16 mm)
- Size 95 - 240 for NS-cable up to 240 mm²
- **Note:** Maximum thickness of the insulation wall 3 mm
- Shock protection for the perforating point by spring loaded insulating sleeve
- Identification of terminals with phase colour coding, definable by grip rotation
- Nominal voltage up to 600V AC / DC (50-60Hz)
- Insulation and slip protection based on EN / IEC 60900: 2004
- Contact protection based on DIN EN 61010-034
- Connection socket D4mm according to DIN EN 61010-034 designed for one load by max. 16A (see picture D4)
- Connection socket D8 designed for a load of 200A for 60 min. or 250A 15 min.
- Rated voltage up to 600V AC / DC (50-60Hz)
- Slip protection according to EN CEI 60900

Standards:

EN/CEI 60900
EN/CEI 61010-2-31
EN/CEI 10020

Description	Order No.	Dimensions	Weight
Set 10-95	21030	200x170x75 mm	878 g
Insulated perforation clamp 10-95	21033	175x35x42 mm	187 g
Set 95-240	21040	200x170x80 mm	1300 g
Insulated perforation clamp 95-240	21034	185x38x50 mm	300 g

Set equipment:

- 4 insulated perforation clamps
- Sturdy case



Socket D4 mm for current take-off and electric measurements



Socket D8 mm with D8 Intercable plug for shunts and current take-off



Set of D4mm adapter for measurement kit

Used to connect up test or measurement instruments and equipment on hex or cylindrical heads and threaded bars or pins.

Technical characteristics:

- D4mm contact hole in compliance with standards EN CEI 61010-2-31
- Permanent use up to 32A
- Insulated terminals with 600V/Cat. III operating voltages

Standards:

EN/CEI 60900
EN/CEI 10020
EN/CEI 61010-2-31

Description	Order No.	Dimensions	Weight
Set: Measurement kit D6	22305	345x265x65 mm	1,8 kg
Case: empty	2209080	345x265x65 mm	-

Insulated clamp D4 mm
2130 003



Insulated clamp D4 mm
2130 002



Insulated clamp D4 mm
2130 001



Insulated clamp D4 mm
2130 005



Insulated clamp D4 mm
2130 004





Model Version A



Model Version B



Insulated grip D8 mm - 2201 1



Allows adjustment of the connection torque of 10Nm via a torque wrench



Insulated D8 mm clamp - 2202 1

Set adapters D8 mm for electrotechnical equipment

Adapter for current shunts and electrical measurements (e.g. shunts, current take-off devices, connection cables, measuring instruments, etc.) from hexagonal head bolts and socket head screws, studs, bolts and cylindrical plugs.

Technical characteristics:

- Connect the adapters or inserts using an insulated attachment handle
- Current capacity 200A for 60 min., 250A for 15 min.
- Nominal voltage up to 600 V AC / DC (50-60 Hz)

Description	Order No.	Dimensions
Set adapters with D6 (Vers. A) 1 pol.	22202	320x115x45 mm
Set adapters with D6 (Vers. A) 2 pol.	22204	320x115x45 mm
Set adapters with D6 (Vers. B) 3 pol.	22206	230x210x55 mm
Set adapters with D6 (Vers. B) 4 pol.	22208	230x210x55 mm
Set adapters with D6L (Vers. A) 1 pol.	22212	320x115x45 mm
Set adapters with D6L (Vers. A) 2 pol.	22214	320x115x45 mm
Set adapters with D6L (Vers. B) 3 pol.	22216	230x210x55 mm
Set adapters with D6L (Vers. B) 4 pol.	22218	230x210x55 mm
Version A empty: Transparent case	D990112	320x115x45 mm
Version B empty: Rigid case	AB22208	230x210x45 mm

- Short circuit protection 8 kA for 0,2 sec. or 1,3 kA for 60 sec.
- Slip protection according to IEC 60900

Set equipment: (*depending on the number of poles)

- 1 insulated grip - 2101 1
- * insulated clamp - 2202 1
- * Hex tightening inserts 13/17/19 mm - 2203 0...
- * Standard tightening insert D6 - 2203 106 or 2104 106
- Rigid case A or B



Protection ultra-rapid AC waR

• For screw fuse holder Item No. 073326

Description	Order No.	Dimensions	Tension
Protection ultra-rapid AC aR	07343081	27 x 60 mm	12 A
	07343083	27 x 60 mm	32 A
	07343086	27 x 60 mm	63 A
	07343087	27 x 60 mm	100 A
	07343088	27 x 60 mm	125 A
	07343089	27 x 60 mm	160 A
	07343090	27 x 60 mm	200 A
	07343091	27 x 60 mm	250 A



Insulated grip

• For assembly of insulated terminals D4mm/D8mm
• To standards EN/IEC 60900

Description	Order No.	Dimensions	Weight
Insulated grip	22011	180 x 55 mm	164 g



Insulated D4mm clamp for electrical measurements

• Connector D4mm to standards DIN EN 61010-031 for maximum current 16A
• Nominal voltage up to 600V AC / DC (50-60Hz)
• Over-volt protection category III



Description	Order No.	Color	Weight
Insulated clamp D4 mm	2130001	black	62 g
Insulated clamp D4 mm	2130002	green	64 g
Insulated clamp D4 mm	2130003	red	63 g
Insulated clamp D4 mm	2130004	blue	64 g
Insulated clamp D4 mm	2130005	yellow/green	62 g



Standard D6 tightening insert

- For use only in combination with insulated terminals D4/D8
- The internal expansion mechanism guarantees perfect connection to the socket head screws
- Current load 200A for 60 min. or 250A for 15 min.
- Short circuit protection 8kA for 0,2 sec. or 1,3kA for 60 sec.

Description	Order No.	Dimensions	Weight
Insert D6	2203106	21 x 19 mm	18 g



Hex tightening insert SW8-SW22 for insulated terminals

- For use only in combination with insulated terminals D4/D8
- The internal expansion mechanism guarantees perfect connection to the socket head screw
- Current load 200A for 60 min. or 250 A for 15 min.
- Short circuit protection 8kA for 0,2 sec. or 1,3kA for 60 sec.

Description	Order No.	Hex wrench	Weight
Insert SW8	2203008	SW8	16 g
Insert SW10	2203010	SW10	16 g
Insert SW11	2203011	SW11	16 g
Insert SW13	2203013	SW13	16 g
Insert SW14	2203014	SW14	12 g
Insert SW16	2203016	SW16	14 g
Insert SW17	2203017	SW17	14 g
Insert SW18	2203018	SW18	16 g
Insert SW19	2203019	SW19	28 g



Tightening insert for allen screws

- For use only in combination with insulated terminals D4/D8
- The internal expansion mechanism guarantees perfect connection to the socket head screw
- Current load 200A for 60 min. or 250 A for 15 min.
- Short circuit protection 8kA for 0,2 sec. or 1,3kA for 60 sec..

Description	Order No.	Size	Dimensions	Weight
Insert I-S8	2208080	SW 8	35 x 20 mm	24 g



Insulated clamp D8mm

- For shunts, current take-off devices, connection cables, etc.
- Connection socket D8mm
- Max. current load 200A for 60 min. or 250A for 15 min.
- Short circuit protection 8kA for 0,2 sec. or 1,3kA for 60 sec.
- Nominal voltage up to 600V AC / DC (50-60Hz)

Description	Order No.	Dimensions	Weight
Insulated clamp D8 mm	22021	45 x 39 mm	60 g



Insert for hexagonal socket screws with insulated shank

- For use only in combination with insulated terminals D4/D8
- The internal expansion mechanism guarantees perfect connection to the socket head screws
- Current load 200A for 60 min. or 250A for 15 min.
- Short circuit protection: SW 5 = 5kA for 0,2 sec.
SW 6 = 6kA for 0,2 sec.
SW 10 = 7kA for 0,2 sec.
- Shank insulation in plastic material

Description	Order No.	Size	Dimensions	Weight
Insert I-S5L	2208050	SW 5	56 x 20 mm	30 g
Insert I-S6L	2208060	SW 6	56 x 20 mm	34 g
Insert I-S10L	2208100	SW 10	56 x 20 mm	40 g



Insert for D8mm holes

- For use only in combination with insulated terminals D4/D8
- The internal expansion mechanism guarantees perfect connection to the socket head screws
- Current load 200A for 60 min. or 250A for 15 min.
- Short circuit protection 7kA for 0,2 sec.

Description	Order No.	Dimensions	Weight
Adapter D8	2209080	8 mm	approx. 40 g



Hex cap nut SW13

- Used to make contact with threaded bolts M8, M10, M12 using SW13
- To allow correct assembly and disassembly, use an adapter for cap nuts and an insulated handle
- Current load 200A for 60 min. or 250A for 15 min.
- Short circuit protection 8kA for 0,2 sec. or 1,3kA for 60 sec.

Description	Order No.	Inside thread	Weight
Hex cap nut SW 13-M8	2206008	M8	10 g
Hex cap nut SW 13-M10	2208010	M10	8 g
Hex cap nut SW 13-M12	2208012	M12	4 g



Insulated hex cap nut SW13

- Use exclusively in combination with isolated handle (Item No. 22011) and Intercable cap nut SW13
- To fasten the SW13 cap nut on threaded rods and bolts
- Electrocutation protection through plastic bushing

Description	Order No.	Dimensions	Weight
Hex cap nut	22051	-	38 g



Magnetic adapter Ø 6,6 mm

Suitable for connecting measuring analyzers, e.g. for applications on machines, contact with magnet.

Technical characteristics:

- Overvoltage category 1000V CATIII / 600V CAT IV
- Completely isolated from touch
- Connection of measuring device by means of D4 mm socket
- Maximum current carrying capacity 4A

Standards:

IEC 61010-031

Description	Order No.	Dimensions	Weight
Magnet adapter	DA606/6,6	60x50x16 mm	approx. 18 g



Clamp 10 - 95 mm² - 2105 0

⚡1000V

Perforation alligator clip

Suitable for measuring voltage by means of perforation directly on the cable.

Technical characteristics:

- Connection of measuring tips by means of a hole, lockable via a fixing screw
- Low perforation of the insulation on the cable

Standards:

EN/CEI 61010-031

Description	Order No.	Dimensions	Weight
Clamp 10 - 95 mm ²	21050	-	approx. 44 g
Clamp 50 - 300 mm ²	21051	-	approx. 52 g



Clamp 50 - 300 mm² - 2105 1

⚡1000V

Example of use:

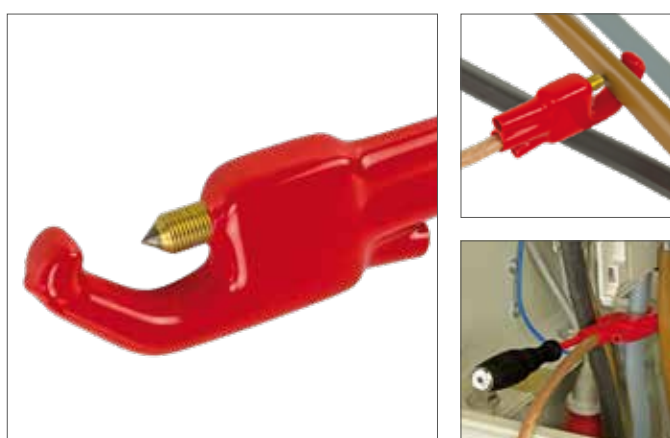




PEN - Clamp compact for rails up to 10 mm

Very narrow insulated version for attaching to the PEN rail. Due to the clamping range up to 10 mm, it is ideally suited to the current rails.

Description	Order No.	Weight
PEN - Clamp compact for rails up to 10 mm	07311102	100 g



Insulated perforation clamp up to 240 mm²

Very slim and compact design, especially for cramped connection conditions in the distribution cabinet or house connection box.

Description	Order No.	Weight
Insulated perforation clamp up to 240 mm ²	073474	140 g

Adapter extension D8

Suitable as a connection element for bridging devices and current collecting devices, especially in hard-to-reach places in various cable distribution systems.

Technical characteristics:

- For currents of 200A for 60 min and/or 250A for 15 min
- Nominal voltage 600 V AC/DC (50-60 Hz)
- Protection against short circuit 8kA/0,2 sec.
- Extra flexible cable with double insulation, cable cross section 35 mm²
- Socket D8mm for connecting the spreading systems (ship lifting devices)
- Adapter D8 for holding all clamping inserts
- Can only be used with insulated handle - 2201 1

Description	Order No.	Length	Weight
Adapter extension	21211	404 mm	ca. 24 g

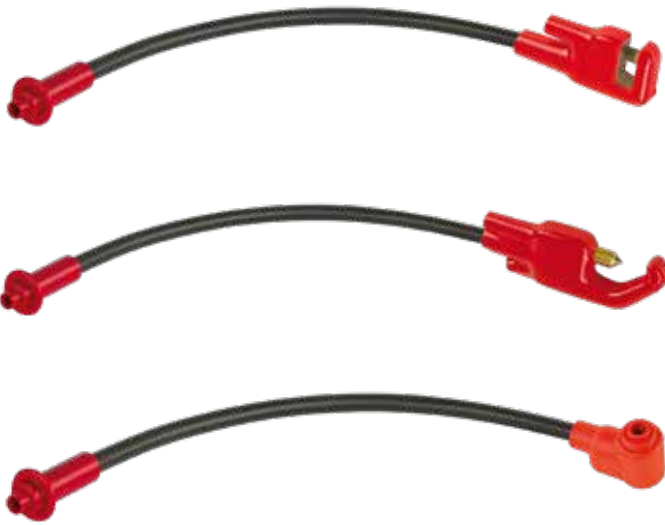
Flexible connections for temporary connections 35 mm²

Application range:

- Input for current loads 63 amps at 230V AC
- Connection via insulated screw connector for 50 mm²

Description	Order No.	Cable length
Earthing screw cap E27 with cable and screw connector	073333	400 mm
Earthing screw cap E33 with cable and screw connector	073334	400 mm





Flexible connections for temporary connections 35 mm²

Application range:

- For shunt device, current collection set and connection cable
- For current loads 250A for 3 min or 150A continuous load at 230V AC
- Connection via socket for insulated expansion pin D8 mm
- Fastening with hexagon socket screw SW4 mm to PEN and perforation clamp (Allen screwdriver SW4 Nr.: 2115304)

Description	Order No.	Cable length
Isolated PEN terminal with cable and D8 connector for expanding pin	07332302	400 mm
Insulated perforation clamp and D8 connection for expanding pin	073323	400 mm
Insulated terminal D8 mm with cable and D8 connection for expansion pin	073322	400 mm



Flexible connections for temporary connections 35 mm²

Application range:

- For shunt device, current collection set and connection cable
- Taps with internal fuse Ultra Rapid AC 660V aR for current loads 250A for 3 min. or 150A continuous load at 230V AC
- Connection via socket for insulated expansion pin D8 mm
- Fuse must be ordered separately (No. 073430xx)

Description	Order No.	Cable length
Screw securing holder with terminal D8 mm	073325	400 mm



Flexible connections for temporary connections 35 mm²

Application range:

- Connection cable (bypass) for connecting phase - phase or PEN - PEN
- For cable distribution systems for temporary bridging
- Taps with internal fuse Ultra Rapid AC 660V aR for current loads 250A for 3 min. or 150A continuous load at 230V AC
- Connection via D8m jack for adapter system for frame, clamp and V terminals Current load 250A for 15 min., 200A 60 min. and continuous load 150A, nominal voltage up to 600V AC / DC (50 - 60 Hz)
- Fuse must be ordered separately (No. 073430xx)

Description	Order No.	Cable length
Connecting cable with 2 perforation clamps and screw securing holder	073324	1500 mm
Connecting cable with 2 perforation clamps	073327	1500 mm
Connection cable with 2x D8 terminal 35 mm ² and screw fuse holder	073468	2000 mm



A= with pin

B= with bush
cable terminal

C= with PEN
connection terminal



Current tapping device 230V

Designed for two-pole tapping of currents up to 16A to power electrical equipment.

Technical characteristics:

- Protection contact sockets IP44, 2x16A-230V
- Rubber cover insulation grade IP44
- 2 connection cables 16 mm², length 1500 mm
- Connection cable with double insulation; nominal voltage U/U0 1,8/3kV
- Overload switch 16A characteristic C, short circuit current 25kA
- Differential switch 0,03A
- Nominal voltage 230V AC / DC (50-60Hz)
- Short circuit protection 8kA for 0,2 sec or 1,3kA for 60 sec

Set equipment:

- Current tapping device
- Plastic case to contain the device housing

Standards (Housing):

- EN 61009
- EN 60493/4
- IEC 309

Description	Order No.	Connection	Weight
Current tapping device	2320212	2 x A	approx. 4,8 kg
Current tapping device	2320213	2 x B	approx. 4,8 kg
Current tapping device	-	A + C	approx. 4,8 kg
Current tapping device	-	B + C	approx. 4,8 kg





Current tapping device 380V/16A three phase current

4 pole device for current take-off up to 16A for supply of electro-technical device.

Technical characteristics:

- 5 pole CEE three-phase sockets (3pol + N + PE) 380V/16a IP44
- Rubber cover protection grade IP44
- 4 connection cables 16 mm², length 1500 mm
- Connection cable with double insulation; nominal voltage U/U0 1,8/3 kV
- Overload switch 16A characteristic C, short circuit current 25 kA
- Differential switch 0,03A
- Nominal voltage 380/400V AC / DC (50-60Hz)
- Short circuit protection 8 kA for 0,2 sec. or 1,3 kA for 60 sec.

Set equipment:

- Current tapping device
- Plastic case to contain the device housing

Standards (Housing):

- EN 61009
- EN 60493/4
- IEC 309

Description	Order No.	Dimensions	Connection	Weight
Current tapping device	2320221	500x380x190 mm	3xB + 1xC	approx. 8 kg



Single-pole Shunt device

For opening and closing circuit breaker bridges in lines under load in low voltage systems (e.g. to replace fuses, connect/disconnect electric connections etc).

Technical characteristics:

- Red LED to signal polarity inversion
- Connection by insulated plug D8mm
- Cover protection grade IP44
- Connection cable 16 mm², Length 1500 mm
- Connection cable with double insulation; nominal tension U/U0 1,8/3 kV
- With fixed overload cut-out level
- Nominal automatic switch current 160A; short circuit current 25 kA,
- Current load 160A for 30 min.
- Nominal tension max. 600V AC / DC (50-60Hz)
- Short circuit protection 8 kA for 0,2 sec. or 1,3 kA for 60 sec.

Set equipment:

- Single-pole Shunt device
- Plastic case to contain the Shunt device

Assembly option accessories for insulated terminal D8 + dies or insulation perforation terminal see page .xxx

Description	Order No.	Dimensions	Weight
Shunt device	21201160	430x310x120 mm	approx. 5,1 kg



Multi-pole Shunt device

Suitable for 3-pole bridging of external conductors under load in LV systems up to 230 / 400V AC - 50Hz (e.g. replacement / replacement of intact fuses or fuse strips, connection / disconnection of cables, etc.) without interrupting the power supply.

Technical characteristics:

- Protection against polarity inversion for correct phase connection
- Digital counter for number of operation cycles
- Connection by insulated pin D8 mm
- Cover protection grade IP44
- Connection cable 35 mm², length 6x1.800 mm
- Connection cable with double insulation, nominal tension U/U0-470/750V
- Circuit-breaker T3N-250-TMD (ABB) with thermomagnetic overcurrent release (TMD) 3-pole, rated current 200A. Rated operational voltage 380-415V AC, breaking capacity ICU 36kA, utilization category A acc.
- Max current load (maximum duration of use) of the bridging device: Current load (maximum operating time) of the bridging device: 200A for 60 minutes or 250A for 15 minutes at an ambient temperature of -5° C / + 40° C
- Short circuit protection 8kA for 0,2 sec. or 1,3kA for 60 sec.
- Integrated meter in the electronics for determining the maintenance intervals
- Display showing the phases (load supply side), faults, hazard warnings and prompts
- Push button green: Push button with integrated green light which signals that everything has been connected correctly and that the bridging can now be started by activating the circuit breaker
- Button: to acknowledge the buzzer in case of error message (approx. 5 sec.), as well as to acknowledge the message "Expiry of max. recommended circuits"
- LED red: Attention error, see display.
- Buzzer: electronic buzzer which sounds in the event of a fault during the bridging (if contacting of a spreader pin faulty, voltage drop)
- Electronic polarity reversal protection

Set equipment:

- Three-pole bridging device with electronic reverse polarity protection
- Plastic case to contain the Shunt device

Assembly option accessories for insulated terminal D8 and dies or insulation perforation terminal: see page 215.

Description	Order No.	Dimensions	Weight
Shunt 3-pole	212703250	430x310x200 mm	approx. 19,1 kg



PERSONAL PROTECTIVE EQUIPMENT



- UNI EN 340:2004
- UNI EN 11612/09 A1B1C1
- UNI EN 1149-5:2008
- IEC 61482-2/09
- IEC 61482-1-2/08

Electric arc flame and heat protection clothing 7kA

The electric arc protection clothing are usable in low voltage areas in order to protect people against the danger of an electric arc.

Description	Order No.	Size	Weight
Electric arc flame and heat protection safety jacket	AI0301	44	690 g
	AI0302	46	750 g
	AI0303	48	950 g
	AI0304	50	980 g
	AI0305	52	860 g
	AI0306	54	900 g
	AI0307	56	930 g
	AI0308	58	1130 g
	AI0309	60	1150 g
	AI0310	62	990 g
Electric arc flame and heat protection safety trousers	AI0401	44	560 g
	AI0402	46	600 g
	AI0403	48	670 g
	AI0404	50	870 g
	AI0405	52	710 g
	AI0406	54	720 g
	AI0407	56	750 g
	AI0408	58	940 g
	AI0409	60	970 g
	AI0410	62	800 g

Other sizes available on request

Tested and produced according following norms:

- UNI EN 340:2004
- UNI EN 11612/09 A1B1C1
- UNI EN 1149-5:2008
- IEC 61482-2/09
- IEC 61482-1-2/08
- Material: 87% cotton, 12% nylon, 1% antistatic fiber
- Colour: blue royal



- UNI EN ISO 13688:2013
- UNI EN ISO 1149-5:2008
- UNI EN ISO 20471:2013 (cl. 2)
- UNI EN ISO 11612 A1A2B1C1E1
- UNI EN ISO 13034 tipo 6
- IEC 61482-2/09 4kA (cl. 1)

Safety vest 4kA

Appropriate for wearing over electric arc flame and heat protection clothing.

Description	Order No.	Size	Weight
Safety vest	AI0701	M	xx g
	AI0702	L	xx g
	AI0703	XL	xx g
	AI0704	XXL	xx g

- High visibility
- Covered zipper closure
- Left breast pocket with Velcro® closure and flap
- Two side pockets with covered zipper closure
- Encircling, reflective stripes, height 7 cm

Tested and produced according to the following norms:

- UNI EN ISO 13688:2013
- UNI EN ISO 1149-5:2008
- UNI EN ISO 20471:2013 (cl. 2)
- UNI EN ISO 11612 A1A2B1C1E1
- UNI EN ISO 13034 tipo 6
- IEC 61482-2/09 4kA (cl. 1)
- Materials: 87% cotton, 12% nylon, 1% conductive fiber
- Color: bright yellow



 EN 345
 EN 50321
 VDE 0680 part 1



Insulated electrical safety boots

Description	Order No.	Size	Weight
Electrical safety boots	661341	41	2,2 kg
	661342	42	2,3 kg
	661343	43	2,4 kg
	661344	44 / 45	2,5 kg
	661346	46	2,7 kg
	661347	47	2,8 kg

- Tested and produced according to EN 345 / EN 50321
- Safety Boots with steel toe cap
- Legs and soles are resistant to oil, petrol, grease, alkaline solution and acid complying with VDE 0680 Part 1
- Colour: Shaft white, sole: blue





 EN 60903 / IEC 903
 VDE 0682 part 311

Insulated electrical safety gloves

Description	Order No.	Operating Voltage	Test Voltage	Thickness	Size
Safety gloves class 00	AV4711	500 V	2.500 V	0,5 mm	8
	AV4712	500 V	2.500 V	0,5 mm	9
	AV4713	500 V	2.500 V	0,5 mm	10
Safety gloves class 0	AV4720	1.000 V	5.000 V	1 mm	8
	AV4721	1.000 V	5.000 V	1 mm	9
	AV4722	1.000 V	5.000 V	1 mm	10
Safety gloves class 1	AV4731	7.500 V	10.000 V	1,35 mm	9
	AV4732	7.500 V	10.000 V	1,35 mm	10
Safety gloves class 2	AV4741	17.000 V	20.000 V	2 mm	9
	AV4742	17.000 V	20.000 V	2 mm	10
Safety gloves class 3	AV4750	26.500 V	30.000 V	2,6 mm	9
	AV4751	26.500 V	30.000 V	2,6 mm	10

- Tested and produced according to EN 60903 / IEC 903, VDE 0682 part 311
- For work on live MV/LV parts
- Material: natural latex
- Length: 360mm
- Smooth inside/outside
- Color: beige



EN 60903 / IEC 903
EN 61482-1-2
VDE 0682 part 311

Insulated electrical arc 7kA protection gloves

Description	Order No.	Operating Voltage	Test Voltage	Size
Gloves class 0	AV4701	1000V - 7kA	5.000 V	8
Gloves class 0	AV4702	1000V - 7kA	5.000 V	9
Gloves class 0	AV4703	1000V - 7kA	5.000 V	10

- Tested and produced according to norm EN 61482-1-2 / class II (resistant to electric arc 7kA/0,5 seconds) norm EN 60903 / class 0 (suitable to work under voltage 1000 V) VDE 0682 part 31
- Mechanical protection
- Material: natural latex
- Length: 360 mm
- Color: red



Safety fuse (NH fuse) withdrawal glove

Description	Order No.	Dimensions	Weight
Withdrawal glove	659001	385x220 mm	460 g
Withdrawal glove long	659004	445x220 mm	460 g
↳ Leather cover	659302	360x220 mm	210 g
↳ Safety fuse hold.	659500	40x125 mm	250 g

The fuse withdrawal glove is suitable for removing or fitting fuses or other pieces of equipment such as earthing and short circuit protection devices, dummy fuse components etc. to protect the operator's hand and lower part of the arm. The operators limbs are under severe risk from the effects of power arcing.

- For removal of NH fuses sizes 00 - 3



Shockproof resin container

Description	Order No.	Dimensions	Weight
Resin container	AB4700	420x170x50 mm	350 g

- To contain and protect insulated gloves



Nylon case

Description	Order No.	Dimensions	Weight
Nylon case	AB4710	380x170x40 mm	170 g

- To carry insulated gloves at the belt



Pump for testing insulated gloves

Description	Order No.	Dimensions	Weight
Pump	631800	140 x Ø -130 mm	800 g

- To inflate insulating gloves and check for any leaks.
- Material: thermoplastic resin, light alloy, anti-oxidation metal and other equivalent material.



Anti-perspiration gloves

Description	Order No.	Size	Weight
Gloves	631000	Single	30 g

- Inner glove for insulating gloves to absorb skin perspiration
- Material: highly elastic interlock cotton
- Color: white



Protective gloves

Description	Order No.	Size	Weight
Protective gloves	AV4771	9	200 g
Protective gloves	AV4772	10	200 g
Protective gloves	AV4773	11	200 g

- Tested and produced according to EN 420 / EN 388
- Overglove to protect the insulating glove.
- Material: water-repellent silicone-treated grain leather



EN 420
EN 388



400V AC

EN 50362
EN 397



Safety helmet for electricians

Description	Order No.	Color	Weight
Helmet	AV9305	white	305 g

- Tested and produced according to EN 50362 / EN 397
- Adjustable headband
- Material: polyethylene
- Color: white



Visor for safety helmet

Description	Order No.	Dimensions	Weight
Visor	AV9306	395 x 240 mm	300 g

- Face screen to protect against electric arcs
- Shell: polycarbonate
- Protection against UV rays and short circuit



CE
EN 166



Safety goggles

Description	Order No.	Weight
Safety goggles	666000	27 g

- Tested and produced according to EN 166 3-1.21F
- Light weight and comfortable
- Clear scratch-resistant spectacle glass
- Modern design

Safety helmet with built-in visor for electricians

Description	Order No.	Color	Weight
Safety helmet	AV9303W	white	740 g
Safety helmet	AV9303R	red	740 g

- Tested and produced according to EN 397, VDE 0680 part 1
- Protective helmet with built-in visor for working under live LV electrical systems
- Suitable for work on live parts
- Protection against electric arc
- Built-in visor: 1.2mm thick
- Adjustable headband from size 52 to 66 (rack-adjustment), neck strap with Velcro® closure
- Helmet material: polyethylene
- Visor material: scratchproof polycarbonate
- Color: white, red

Safety helmet with built-in visor for electricians 7kA

Description	Order No.	Color	Weight
Safety helmet	662555	white	740 g

- The safety helmet for electricians is a helmet constructed according the current insights of head protection development, which was designed especially for professional use in live electrical systems.
- The helmet has a visor that completely covers the face and can be retracted completely into the double-wall helmet as needed.
- The helmet has a single-handed screw cap that allows the modification of the headband without requiring the wearer to remove the helmet.
- With built-in, retractable visor that provides complete protection for the entire face area
- For protection against electric arcs up to 7 kA when working on live electrical systems
- Helmet material: HD polypropylene, UV stabilized, white
- Double wall helmet for increased protection and for storing the built-in visor and its safety cloth
- Interior helmet equipment: Adjustable 6-point textile band for all head sizes, sweatband, adjustable 4-point chin strap
- Visor made of high-impact, tinted polycarbonate with infrared filter and special surface treatment against fogging
- Aramid-base safety cloth, orange
- Minimum durability: 5 years
- Norms:
- Visor: EN 166, 170, ASTM F2178, GS-ET-29/ IEC 61482-1-2
- Class 2: 7kA electric arcs / 0.5 sec. light transition, 75% (Class 0 in accordance with GS-ET-29)
- Helmet: EN 397, EN 50365, ANSI Z89.1
- Safety cloth: IEC 61482-1-2 Class 2, ASTM F1959, 1506 NFPA 70E
- Identification, Visor: 2C-1,2 XXX 1 B 8-2-0 3 CE 0497

CE



1000V
IEC 60900

400V AC

EN 397
VDE 0680 part 1



1000V





⚡ 1000V

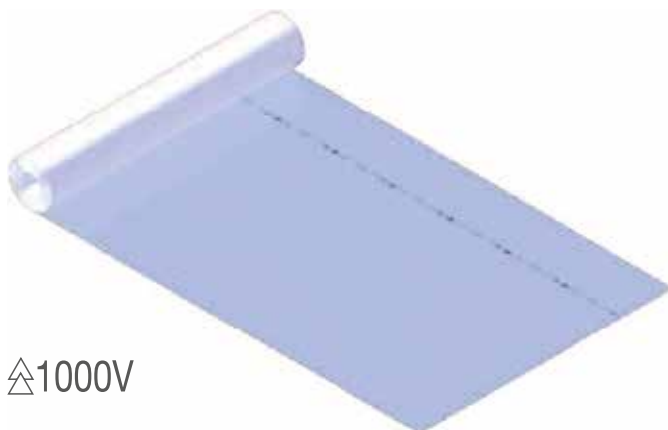


IEC 61111:2009
VDE 0680 part 1

⚡ 1000V



⚡ 1000V



⚡ 1000V

Rubber insulating matting

Description	Order No.	Dimensions	Weight
Insulating matting	AV4301	1 x 1 m	ca. 4,6 kg
Insulating matting	AV4303	3 x 1 m	ca. 12,0 kg
Insulating matting	AV4310	10 x 1 m	ca. 43,8 kg

Other dimensions available on request

- To insulate high-risk zones when making joints on LV-MV cables in trenches
- Non-slip surface
- Thickness: 4mm – 1.20g/cm² (53 Shore)
- Material: natural rubber or vulcanized synthesis rubber
- Color: gray

Rubber insulating matting

Description	Order No.	Dimensions	Weight
Insulating matting	642415	1,5 x 1 m	5,0 kg
Insulating matting	642410	10 x 1 m	33,5 kg

Other dimensions available on request

- Tested and produced according to VDE 0680 part 1
- To insulate high-risk zones when making joints on LV-MV cables in trenches
- Non-slip surface
- Thickness: 3mm – 166g/cm² (56 Shore)
- Material: Chloroprene mixture
- Resistance: Mechanical Puncture, Oil, Acid, Slip and Ageing
- Flame Retardancy
- Color: gray

Rubber cover material

Description	Order No.	Dimensions	Weight
Rubber cover material	AV4102	0,60 x 0,60 m	ca. 0,7 kg
Rubber cover material	AV4104	1 x 1 m	ca. 2,1 kg
Rubber cover material	AV4110	10 x 1 m	ca. 20,6 kg
Rubber cover material	AV4111	1 x 1,20 m	ca. 2,3 kg
Rubber cover material	AV4120	10 x 1,20 m	ca. 25,1 kg

Other dimensions available on request

- Tested and produced according to VDE 0680 part 1
- For temporary protection of live uninsulated components of LV systems
- Resistant to oils and acids
- Self-extinguishing
- Thickness: 1.6mm - 1.21g/cm² (44 Shore)
- Material: high quality neoprene
- Color: orange

Cover transparent

Description	Order No.	Dimensions	Weight
Cover	641960	10000 x 1400 mm	8000 g
Cover	641952	2000 x 1400 mm	1600 g
Cover	641951	1000 x 1400 mm	800 g
Cover	641949	600 x 600 mm	220 g
Cover	641948	250 x 350 mm	50 g
Cover	641947	130 x 230 mm	20 g
Cover	641946	120 x 120 mm	10 g

- In accordance with DIN EN 61112 (VDE 0682-511) : 2010-03
- EN/IEC 61112 : 2009
- Highly flexible, cold resistant
- Materials: UV-stabilized film
- Thickness: 0.5 mm



CE

30.000V

IEC 61111:2009
VDE 0680 part 1



CE

50.000V

VDE 0303



30.000V / 45.000V



Tappeto isolante 30.000V

Description	Order No.	Dimensions	Weight
Safety carpet	AV4331	1 x 1 m	ca. 4,0 kg
Safety carpet	AV4335	5 x 1 m	ca. 11,0 kg
Safety carpet	AV4330	10 x 1 m	ca. 40,0 kg

Other dimensions available on request

- Tested and produced according to VDE 0303
- For permanent insulation in cabins or rooms that require a high degree of Insulation
- Non-slip pavement side / ribbed non-slip support side (top)
- Thickness: 4,5mm
- Material: natural rubber or vulcanized synthesis rubber
- Color: gray

Safety rubber carpet 50.000V

Description	Order No.	Dimensions	Weight
Safety carpet	AV4341	1 x 1m	5,6 kg
Safety carpet	AV4350	10 x 1m	57 kg
Safety carpet	AV4351	1 x 1.20m	6,8 kg
Safety carpet	AV4360	10 x 1.20m	69 kg

Other dimensions available on request

- Tested and produced according to VDE 0303
- For permanent insulation in cabins or rooms that require a high degree of Insulation
- Non-slip pavement side / ribbed non-slip support side (top)
- Thickness: 4,5mm - 1.65g/cm² (77 Shore)
- Material: natural rubber or vulcanized synthesis rubber
- Color: gray

30kV/45kV insulating platform

Description	Order No.	Dimensions	Weight
Platform 30.000V	AV5000	500 x 500 x 260 mm	3,2 kg
Platform 45.000V	AV5001	500 x 500 x 310 mm	4,2 kg

- To insulate workers from the pavement when working
- Material: glass-fiber reinforced plastic resin
- Non-slip surface
- 30.000V/45.000V operating insulating level

Thermal blanket

Description	Order No.	Dimensions	Weight
Thermal blanket	HSD1	1800 x 1800 mm	3,8 kg
Thermal blanket	HSD2	1200 x 900 mm	1,3 kg
Thermal blanket	HSD3	450 x 600 mm	0,3 kg

- Free of asbestos and other dangerous ingredients
- Composed 98% of silicone oxide (amorphous SiO₂)
- Usable for temperatures up to 1260°C
- Melting temperature above 1600°C
- Non-toxic product



1000V
IEC 60900

Sheath spreader

Description	Order No.	Height	Dimensions	Weight
Sheath spreader	652002	30 to 0mm	165 x 20 mm	43 g

- Reinforced polyamide material
- Lightweight model



1000V
IEC 60900

Sheath spreader

Description	Order No.	Height	Dimensions	Weight
Sheath spreader	652003	10 to 0mm	170 x 20 mm	100 g

- Reinforced polyamide material
- Designed for assembly of branch terminals



1000V
IEC 60900

Bordering chisel

Description	Order No.	Diameter	Length	Weight
Bordering chisel	654000	Ø 25 mm	140 mm	63 g

- For NKBA-Cable
- Tape 70 mm with 30 mm radius
- Non brittle red plastic


1000V
 IEC 60900
 VDE 0680



Insulating safety clamp short

Description	Order No.	Dimensions	Weight
Insulating clamp	651409	140 x 85 mm	52 g

- Tested and produced according to VDE 0680
- For fastening insulating sheets in cramped quarters
- Rubber inserts inside the jaws
- Material: shockproof thermoplastic resin
- Opening: 45 mm


1000V
 IEC 60900
 VDE 0680



Insulating safety clamp small

Description	Order No.	Dimensions	Weight
Insulating clamp	651406	80 x 40 mm	40 g

- Tested and produced according to VDE 0680
- For fastening insulating sheets in cramped quarters
- Rubber inserts inside the beaks
- Material: shockproof thermoplastic resin
- Opening: 25 mm


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 IEC 60900
 VDE 0680



Insulating safety clamp with hook

Description	Order No.	Dimensions	Weight
Insulating clamp	651402	165 x 130 mm	60 g

- Tested and produced according to VDE 0680
- For fastening insulating sheets in cramped quarters
- Rubber inserts inside the beaks
- Material: shockproof thermoplastic resin
- Opening: 45 mm


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 IEC 60900
 VDE 0680



Insulating safety clamp without hook

Description	Order No.	Dimensions	Weight
Insulating clamp	651407	175 x 110 mm	76 g

- Tested and produced according to VDE 0680
- For fastening insulating sheets in cramped quarters
- Rubber inserts inside the beaks
- Material: shockproof thermoplastic resin
- Opening: 40 mm

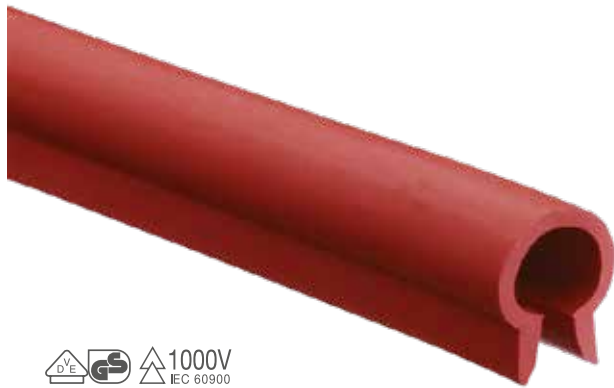

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 IEC 60900
 VDE 0680



Insulating safety clamp large opening

Description	Order No.	Dimensions	Weight
Insulating clamp	651412	160 x 115 mm	70 g

- Tested and produced according to VDE 0680
- For fastening insulation sheets in cramped quarters
- Rubber inserts inside the beaks
- Material: shockproof thermoplastic resin
- Opening: 65 mm

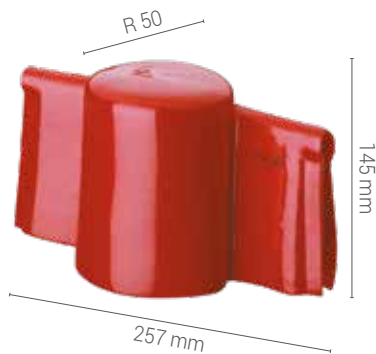
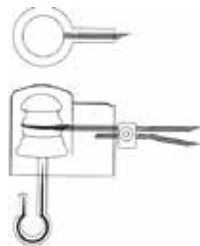




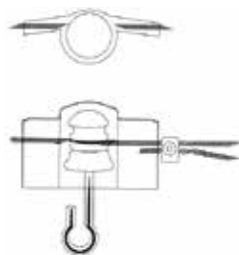

1000V
 IEC 60900
 EN 60529




1000V
 IEC 60900




1000V
 IEC 60900




1000V
 IEC 60900
 VDE 0680

Protecting tube

Description	Order No.	Length	Ø Conductor
Protective shaped profiles up to 10mm	AV4410	1m	up to 10mm
	AV4413	3m	up to 10mm
	AV4418	18m roll	up to 10mm
Protective shaped profiles up to 14mm	AV4510	1m	up to 14mm
	AV4513	3m	up to 14mm
	AV4518	18m roll	up to 14mm

Other lengths available on request

- Tested and produced according to EN 60529
- For temporary insulation of bare aerial LV lines carrying up to 1000V of live voltage
- Material: natural rubber or synthetic vulcanized elastomer
- Weight per meter: approx. 350g
- Color: red
- Other lengths on request

Insulator cap with single outlet

Description	Order No.	Version	Weight
Insulator cap	AV4401	1 Outlet	350g

Other insulator caps available on request

- Suitable for long-term operations
- Simple and robust design to slide over
- Material: flexible plastic resin
- Color: red

Insulator cap with double outlet

Description	Order No.	Version	Weight
Insulator cap	AV4402	2 Outlets	450g

Other insulator caps available on request

- Suitable for long-term operations
- Simple and robust design to slide over
- Material: flexible plastic resin
- Color: red

Insulating safety caps

Description	Order No.	Ø	Length
Insulating caps	AV4094	8 - 13 mm	60mm
	AV4095	13 - 20 mm	80mm

- Tested and produced according to VDE 0680
- To protect rigid cables
- Material: rigid thermoplastic resin
- Color: red

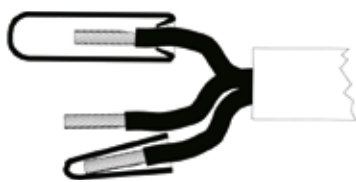
CABLE INSULATION



- Slip over side
- with grip



VDE 0680



Push on cover with grip

Description	Order No.	Length	Opening	Suitable for	Weight
Push on cover with grip	646004	40 mm	10 mm	1 - 25 mm ²	4 g
	646006	60 mm	10 mm	6 - 35 mm ²	14 g
	646010	100 mm	10 mm	6 - 35 mm ²	21 g
	646015	100 mm	15 mm	10 - 50 mm ²	31 g
	646020	110 mm	20 mm	35 - 95 mm ²	40 g
	646030	130 mm	30 mm	95 - 185 mm ²	70 g
	646040	150 mm	40 mm	185 - 240 mm ²	135 g
	646050	185 mm	50 mm	240 - 400 mm ²	140 g
	646060	185 mm	60 mm	240 - 500 mm ²	220 g
	646070	210 mm	70 mm	300 - 500 mm ²	300 g
	646090	255 mm	90 mm	- 630 mm ²	550 g
	646120	240 mm	120 mm	- 800 mm ²	700 g

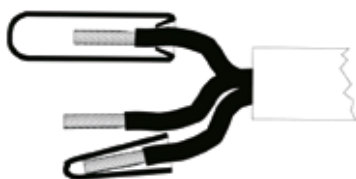
- Tested and produced according to VDE 0680
- For temporary insulation of the ends of live LV single-pole cables
- Also suitable for protecting cables with cable terminals
- Material: flexible thermoplastic resin
- Color: red



- Slip over side
- without grip



VDE 0680



Push on cover conical

Description	Order No.	Length	Opening	Suitable for	Weight
Push on cover conical	647030	30 mm	10 mm	10 - 25 mm ²	10 g
	645006	50 mm	10 mm	10 - 25 mm ²	10 g
	647010	60 mm	10 mm	6 - 25 mm ²	15 g
	645000	100 mm	10 mm	10 - 35 mm ²	7 g
	645001	100 mm	20 mm	120 - 150 mm ²	19 g

Transparent conical push on covers available on request

- Tested and produced according to VDE 0680
- For temporary insulation of the ends of live LV single-pole cables
- Also suitable for protecting cables with cable terminals
- Material: flexible thermoplastic resin
- Color: red



EN 57680
VDE 0680

Insulating safety sleeve

Description	Order No.	Ø	Length
Insulating sleeve	AV4082	5 - 12 mm	117 mm
Insulating sleeve	AV4083	12 - 21 mm	159 mm
Insulating sleeve	AV4084	21 - 30 mm	190 mm

- Tested and produced according to EN 57680, VDE 0680
- To protect ends of electric conductors
- Optimized holding force with the screw joint
- Material: Safety sleeve made out of flexible shock-resistant plastics
- Screw joint made out of a red transparent prim plastics
- Color: red



Safety bag with tools

Description	Order No.	Dimensions	Weight
Safety bag with tools	AB7712	560x360x320mm	ca. 7,7 kg
Safety bag without tools	AB7710	560x360x320mm	ca. 1,7 kg

Equipment:

- 1 pair of insulated electrical safety gloves – size 10 AV4722
- 1 pair of safety goggles 6660 00
- 1 safety helmet with build in visor AV9303W
- 1 rubber insulating matting 1000 x 1000 x 4 mm AV4301
- 1 pair of anti-perspiration gloves 6130 00
- 1 shockproof resin container AB4700

Optionals:

- 7 kA protection clothing (see page 42)
- 7 kA protection gloves (see page 43)



Bag with tools to work on LV

Description	Order No.	Dimensions	Weight
Bag with tools	AB7721	560x360x320 mm	ca. 6,1 kg
Bag without tools	AB7720E	560x360x320 mm	ca. 1,7 kg

Equipment:

- 1 transparent cover material 560 x 560 mm AV4102E
- 1 transparent cover material 910 x 910 mm AV4104E
- 8 insulating safety clamps 6514 09
- 8 push on covers with grip, opening 15 mm 6460 15
- 8 push on covers with grip, opening 20 mm 6460 20
- 8 push on covers with grip, opening 30 mm 6460 30
- 1 insulating mastic 1033 74

Protective cover for distribution cabinets

Description	Order No.	Dimensions	Weight
Prot. cover DIN Gr.00, F3, F3/1	06614710	1100x550x440 mm	3,3 kg
Prot. cover DIN Gr.0, F4	06614810	1100x700x440 mm	3,8 kg
Prot. cover DIN Gr.1, F5	06614510	1100x900x440 mm	4,5 kg
Prot. cover DIN Gr.2, F6	06614610	1100x1300x440 mm	5,8 kg
Prot. cover DIN Gr.3	06614910	1100x1600x440 mm	7,0 kg

- The protective cover serves to cover damaged distribution cabinets temporarily.
- Increased 1,100 mm height, suitable for also covering the base
- A belt has been inserted under the lower edge of the cover for securing the cover, when drawn tight.
- The protective cover has two layers, which have been permanently welded together.
- The internal layer consists of a 0.5 mm thick, highly flexible and transparent cloth
- The external layer is made of a PVC-coated, UV and weather resistant polyester fabric.
- Both layers are highly flexible and cold-resistant.
- Color: signal yellow and printed with the "Caution: Dangerous Electrical Voltage"



1000V
IEC 60900

WE

LOVE

TOOLS



ADDITIONAL RANGE

ADDITIONAL RANGE



Universal cabinet key in pocket format

Description	Order No.	Dimensions	Weight
Universal Key	QUATTRO	91 x 26 x 15 mm	95 g
Universal Key - D	QUATTRO-D	91 x 26 x 15 mm	95 g
Universal kKey - S	QUATTRO-S	91 x 26 x 15 mm	103 g

- Designed to use in opening and closing electric panels and the most common systems of closure
- Suitable for all common electrical panels and cabinets
- Five different key profiles
- The magnetic attachment gives the possibility to use the key with any type of bit

Order No.	Additional Bit	Standard Bits
QUATTRO	11,5 x 6 mm Triangular Key	
QUATTRO-D	10 x 7,4 x 2 mm Square Key	10 x 6,5 mm 6.3 Bit magnetic Attachment
QUATTRO-S	10 x 7 mm Daimler Benz Key	14 x 8 mm Square Key insert
		14 x 9 mm Triangular Key insert
		14 x 9 x 2 mm 2 x 14 Key Insert



Switch cabinet spanner

					Order No.
8/9	14/8	12/7	9/5	6/9	AV9312

- With 1/4" bits adapter and two screwdriver inserts dimensions: 90 x 62 mm
- Weight approx. 65 g



Universal key - Sub key

						Order No.
1/4"	7-8	5	9	7	3-5	AV9314

- With 1/4" bits adapter and two screwdriver inserts
- For all current systems of technical closures



Universal key

				Order No.
12/6,2	14/9	14/8	9/5	AV9310



Key set

Measures	Order No.
1,5 - 2 - 2,5 - 3 - 4 - 5 - 6 - 8 - 10	7110592

- Chrome vanadium steel



Key set **TORX®**

Measures	Order No.
9 - 10 - 15 - 20 - 25 - 27 - 30 - 40	7409002



Allen wrench set

Measures	Order No.
2,5 - 3 - 4 - 5 - 6 - 8	7401002



Allen wrench set

Measures	Order No.
2,5 - 3 - 4 - 5 - 6 - 8	7401202

- Easy opening via a lever integrated in the handle
- Shock-resistant resin handle
- Chrome-vanadium keys according DIN 911, galvanic coating

ADDITIONAL RANGE



Assortment of 1/4" socket wrenches (39 pcs)

Equipment	Order No.
Hexagonal sockets from mm 4 - 4.5 - 5 - 5.5 - 6 - 7 - 8 - 9 - 10 - 11 - 12 - 13 - 14 Inserts PH1 - PH2, Inserts PZ1 - PZ2 Slotted inserts mm 4 - 5.5 - 7 Hexagonal inserts mm 3 - 4 - 5 - 6 - 7 - 8 Torx inserts T10 - T15 - T20 - T25 - T27 - T30 - T40 1 adapter screwdriver 1 torsion bar 2 extensions of 50 mm and 100 mm 1 jointed adapter 1 reversible jack	7113104



Assortment of 1/2", 1/4" socket wrenches (108 pcs)

Equipment	Order No.
Sockets 1/2" mm 10-11-12-13-14-15-16-17-18-19-20-21-22-24-27-30-32 Sockets 1/4" mm 4-4,5-5-5,5-6-7-8-9-10-11-12-13-14 Ratchets 1/2" + 1/4" Joint 1/2" + 1/4" Sockets 1/2" for spark plugs (16+21 mm) Extensions 1/2" (125+250 mm) Extensions 1/4" (50+100 mm) Long sockets 1/4" mm 6-7-8-9-10-11-12-13 Long sockets 1/2" mm 13-15-17-19-22 Claw hammer handle with sliding panel 1/4" Claw hammer handle 1/2" Adapter 1/2" for inserts 5/16" Connector 1/4" Sockets 1/2" Torx E 10-11-12-14-16-18-20-24, Sockets 1/4" Torx E 4-5-6-7-8 Inserts 5/16" hex (7-8-10-12-14) TG (8-10-12) PH (3-4) PZ (3-4) Torx (T40-45-50-55-60) Bent male hex keys 1.5-2-2.5 Sockets chrome 1/4" + inserts hex (3-4-5-6) TG (4-5-5-6-5) PH (1-2) PZ (1-2) Torx (T8-10-15-20-25-27-30)	7113152



Combined wrenches

Equipment	Order No.
17 pieces: measures from 6 to 22	7112315

- DIN 3113
- Chrome vanadium steel
- Polished chrome plating



Assortment of double fork wrenches

Equipment	Order No.
8 pieces: 6x7 - 8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19 - 20x22	7112310
12 pieces: 6x7 - 8x9 - 10x11 - 12x13 - 14x15 - 16x17 - 18x19 - 20x22 - 21x23 - 24x27 - 25x28 - 30x32	7112312

- DIN 3110
- Chrome vanadium steel
- Polished chrome plating



Gripper universal key

Equipment	Order No.
Ratchet and compass set included of drill adapter	7410001
Compass	7410002

- Ratchet and compass set included of drill adapter
- The compass adapts perfectly to any screw or nut up to a diameter of 8 mm - 19 mm



Pipe wrenches

Length	Order No.
245 mm	7101237
180 mm	7101180

- Chrome vanadium steel
- With clamp
- closed zipper
- Handles with protection
- Finger anti-crushing



Precision screwdriver set

Dimensions	Order No.
1,0 1,5 1,8 2,3 2,9 3,6	7111810

- For slotted screws
- Nickel-plated handle
- Metal case

ADDITIONAL RANGE



Measuring tape

Length	Width	Order No.
3	16 mm	7406030
5	19 mm	7406050
8	25 mm	7406080

- Accuracy class 2
- Sturdy ABS case
- Double black graduation on a yellow background



Universal knife

Length	Order No.
135 mm	7120081
Replacement blade	7120082

- Very light two-component handle
- Pre-set sliding and adjustable blade



Universal scissors

Length	Order No.
190 mm	7120122

- Stainless steel
- Shockproof handle
- For cables and sheet metal
- Leather, plastic material etc.



Universal tube cutter

Length	Ø tube	Order No.
200 mm	max. 29 mm	7120450
replacement blade		Order No.
For hard PVC pipes		7120452
For rubber hoses		7120453

- With two types of interchangeable blades
- For insulating pipes, PVC pipes
- Hard and rubber hoses



Pipe cutter for resin pipes

Length	Order No.
For pipes with Ø from 6 to 35 mm	7120410
Replacement blade 135 mm	7120412



Set - EnerGrip

Equipment	Order No.
4 EnerGrip (AV8902)	AS8902

- Cable glands for excellent grip (Ø 3-12 mm)



Universal Marker

Color	Content	Order No.
Red	400 ml	7212110
Blue	400 ml	7212120
Black	400 ml	7212130

- Long lasting tracker, ideal for all markings



Gel / Liquid lubricant for cables (1 litro)

	Order No.
Liquid	7142160
Gel	7142161

ADDITIONAL RANGE



NYLON FISHTAPES PA6
 Ø4 mm with interchangeable terminals M5, flexible head (mod. 7142145) and eyelet head (mod. 714148)

Ø mm	Colour	length m	Order No.
4		5	FTN4-05
		10	FTN4-10
		15	FTN4-15
		20	FTN4-20
		25	FTN4-25
		30	FTN4-30



PERLON® FISHTAPES PA6
 Ø4 mm with interchangeable terminals M5, flexible head (mod. 7142145) and eyelet head (mod. 714148)

Ø mm	Colour	length m	Order No.
4		5	FTE4-05
		10	FTE4-10
		15	FTE4-15
		20	FTE4-20
		25	FTE4-25
		30	FTE4-30



THREE-WIRE POLYESTER FISHTAPES
 Ø 4,2 mm with interchangeable terminals, flexible head (mod. 7142145) and eyelet head (mod. 714148)

Ø mm	Colour	length m	Order No.
4,2		10	FTP4-10
		15	FTP4-15
		20	FTP4-20
		25	FTP4-25
		30	FTP4-30
		40	FTP4-40
		50	FTP4-50
		60	FTP4-60



SINGLE-WIRE POLYESTER FISHTAPES
 Ø 3,3 mm with fixed terminals, flexible head and eyelet head.

Ø mm	Colour	length m	Order No.
3,3		10	FTP3-10
		15	FTP3-15
		20	FTP3-20
		25	FTP3-25
		30	FTP3-30



CABLE DUCT RODDING SYSTEM WITH THREE-WIRE POLYESTER
 Ø 4,2 mm with interchangeable terminals, flexible head (mod. 7142145) and eyelet head (mod. 714148)

Ø mm	Colour	length m	Order No.
4,2		10	FTP4-10AV
		15	FTP4-15AV
		20	FTP4-20AV
		25	FTP4-25AV
		30	FTP4-30AV

Description		Order No.
Flexible head with rolling ferrule Ø 7 mm		7142141
Flexible head with eyelet 4,8 x 3 mm		7142145
Flexible head with eyelet 8,5 x 3 mm		7142146
Flexible head Ø 6 mm		7142143
Pulling eyelet 6,5 x 3 mm		7142148
Pulling eyelet 10 x 3 mm		7142149



Cabinet level

Length	Width	Heigh	Order No.
250 mm	20 mm	40 mm	7211440

- Made of impact-resistant plastic



Aluminium level

Length	Order No.
400 mm	7211420
600 mm	7211422



PUK pocket saw

Length	Order No.
150 mm	7120502
Spare saw blade PUK pocket saw	7120506



Ultralight handy metal sawframe

Length	Order No.
300 mm	7120600
spare blade for metal HSS	7120610

- Ergonomical structural shape
- 2 component plastic handle, glass fiber reinforced
- Integrated clamping key and integrated blade magazine



ADDITIONAL RANGE



Foldable pocket knife with wooden handle

Length	Order No.
200 (110) mm	282001

- Extra strong blade with half round wire scraper
- Sturdy iron mountings



Folding ruler

Length	Order No.
2000 mm	525004

- Folding ruler made of fiberglass
- 10 links



Sledge- / engineer's hammer with wooden grip

Weight	Order No.
1.250g	7130602
300g	7130582

- According to DIN1041 and DIN6475 with polished wooden handle
- Hammer head hardened and ground



Electrician chisel

Slot width	Length	Diameter body	Order No.
12 mm	250 mm	8 x 8	7130008
29 mm	300 mm	23 x 13	7130024

• Made of chrome vanadium steel



Painter's spatula

Width	Length	Order No.
50 mm	205 mm	7131326

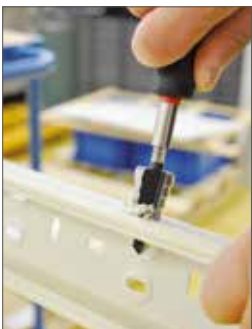
• Made of steel, ground spade with wooden grip



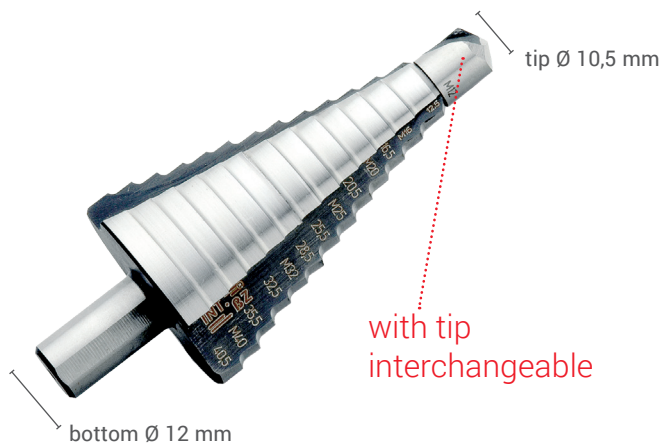
Set of multi diameter and conical drill bits with handle

	Order No.
Multi diameter drill set with handle	74130

- Ergonomic handle with magnetic attachment for bits 1/4"
- Multi diameter tip for through holes with Ø 9, 11, 12, 15, 17, 19, 21 mm
- Multi diameter tip for through holes with Ø 4, 6, 8, 10, 12 mm
- Conical tip Ø 3 - 14 mm
- 90° conical tip with 20.5 mm head diameter



ADDITIONAL RANGE



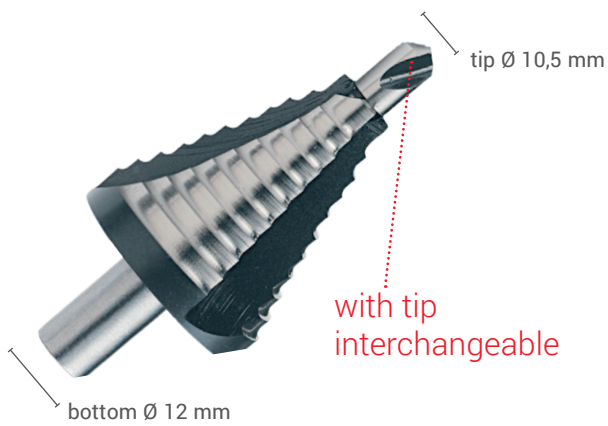
Multi diameter tips for cable glands with metric thread

Metric multi diameter tip	Clearance hole	Ø core hole mm	Order No.
M12-M40	M12, M16, M20, M25, M32, M40	12,5, 16,5, 20,5, 25,5, 28,5, 32,5, 35,5, 40,5	74121
Interchangeable tip M12			74129



Multi diameter tips for cable glands with metric thread

Metric multidiameter tip	Clearance hole	Ø core hole mm	Order No.
M12-M40	M12, M16, M20, M25, M32, M40	10,5, 14,5, 18,5, 23,5, 30,5, 38,5	74110



Multi diameter tips for cable glands with metric thread (HSS)

PG multi diameter tip	Ø core hole mm	Order No.
PG7 - PG29	PG7, PG9, PG11, PG13,5, PG16, PG21, PG29	7201200
Interchangeable tip		7201273



Multi diameter tips for cable glands with metric thread (HSS)

PG multi diameter tip	Ø core hole mm	Order No.
PG7 - PG29	PG7, PG9, PG11, PG13,5, PG16, PG21, PG29	7201100

- Multi diameter HSS steel tips for metal sheet, plastic, wood or other material up to a thickness of 3 mm
- Bottom diameter Ø 12 mm



PCS chisels with SDS-plus connection

Equipment	Order No.
3 pieces	7212000

- High precision chisels
- Kit consisting of 3 pieces:
 - flat chisel
 - pointed chisel
 - wide flat chisel
- Reduced length (140 mm) to facilitate use

SDS-plus wall tips



Ø drill	Length	Order No.
5,0 mm	50/110 mm	98035601
5,0 mm	100/160 mm	98035602
6,0 mm	50/110 mm	98035603
6,0 mm	100/160 mm	98035604
8,0 mm	50/110 mm	98035606
8,0 mm	100/160 mm	98035607
8,0 mm	150/210 mm	98035608
8,0 mm	200/260 mm	98035609
10,0 mm	100/160 mm	98035610
10,0 mm	150/210 mm	98035611
10,0 mm	200/260 mm	98035612
12,0 mm	100/160 mm	98035613
12,0 mm	150/210 mm	98035614
12,0 mm	200/260 mm	98035615
12,0 mm	400/450 mm	98035616
14,0 mm	150/210 mm	98035617
14,0 mm	200/260 mm	98035618
16,0 mm	150/210 mm	98035619
16,0 mm	400/450 mm	98035634
18,0 mm	250/300 mm	98035621
20,0 mm	250/300 mm	98035623



Assortment of hammer drills

Ø drill	Order No.
5, 6, 8, 10, 12 x 100/160	93304001

- Carbide tips of special quality
- With SDS-PLUS connection



Bit box - Phillips, pozidriv and Torx inserts

Equipment	Order No.
32 pieces: PH 1-3, PZ 1-3, T 15-40	98041903

ADDITIONAL RANGE



5 Bit box - Phillips, pozidriv and slotted inserts

Equipment	Order No.
10 pieces: PH 0-2, PZ 0-2, slotted head 4 -5,5-7	7114604



Assortment of twist drills

Pieces	Length mm	Thickness mm	Order No.
19	1-10	0,5	7201352

• With metal case

Range of holesawss

Ø mm	Order No.
20 22 25 29 35 40 51 60	74200

- Spindle M34
- Spindle M46PS
- Spare tip
- Storage box



Accessories (optional)

	Order No.
Holesaw 16	74216
Holesaw 20	74220
Holesaw 21	74221
Holesaw 22	74222
Holesaw 25	74225
Holesaw 29	74229
Holesaw 32	74232
Holesaw 35	74235
Holesaw 38	74238
Holesaw 40	74240
Holesaw 51	74251
Holesaw 60	74260
Holesaw 64	74264
Holesaw 67	74267
Holesaw 70	74270
Saw shaft 14-30	74280
Saw shaft 32-152	74284
Tip for product 7428 0	74290
Tip for product 7428 4	74292



Gas equipment for welding and heat shrinking

Equipment	Order No.
Two-component piezoelectric handle 8001001	80010
Hot air burner 8001002	
Soft flame burner 8001003	
Burner for welding / brazing 8001004	
Burner with pointed and precise flame 8001005	
Copper tip for welding / brazing 8001006	
Flexible hose 8001007	
Safety valve unit and pressure reducer 8001008/8001009	
Open-end spanners E17, E19, E25, Resin case with foam insert	

Technical characteristics:

- Piezoelectric handle in two-component material
- Bayonet quick coupling for burners
- Rotary knob on the handle for opening / closing and adjusting the flame
- Gas supply interruption when the burners are removed
- Burners in steel / brass material with chrome-plated surface treatment
- Hose connected with two metal spiral protection reinforcements
- Length 4 meters
- Safety valve and pressure reducer with adjustable angle connection
- Resin case with foam insert

Dimensions: 460 x 370 x 105 mm



8001 001



8001 002



8001 003



8001 004



8001 005



8001 006

Accessories	Order No.
Handle with piezoelectric device	8001001
Burner for soft flame	8001002
Burner for wide flame	8001003
Burner for welding	8001004
Burner for sharp-pointed/precise flame	8001005
Copper tip Ø 18 (to be used with 8001 005)	8001006
Flexible hose 4 m	8001007
Safety valve	8001008
Brass pressure reducer	8001009
Rigid plastic case	8001010

ADDITIONAL RANGE



Gas / cartridge equipment for welding and heat shrinking

Equipment	Order No.
Piezoelectric handle 80024 - 2x Ultragas cartridges 80023 - Burner hot air for shrinking 80022 - Pin point burner for soldering 80025 - Soldering Iron Resin case with foam insert	80020

Technical characteristics:

- Shockproof plastic handle
- Bayonet quick coupling for burners
- Rotary knob on the handle for opening / closing and adjusting the flame
- Gas supply interruption in rest position and / or after extraction of the burners
- Holder for safe depositing
- Burners in steel / brass material with chrome-plated surface treatment
- Cartridges with propane / butane and propene gas mixture
- Resin case with foam insert

Dimensions: 460 x 370 x 105 mm



8002 4



8002 1



8002 5



8002 2



8002 3

Accessories	Order No.
Ultragas cartridge 210 gr.	80024
Piezoelectric handle	80021
Fine flame burner	80022
Copper stick with burner	80025
Burner for soft flame	80023
Rigid plastic case	8002020

Order No.....page	Order No.....page	Order No.....page	Order No.....page	Order No.....page
11091.....28	19321.....60	74267.....254	131913.....43	135512.....49
11092.....28	19330.....56	74270.....254	131915.....43	135513.....49
11094.....28	19331.....56	74280.....254	131918.....43	135514.....49
11095.....28	19400.....56	74284.....254	131931.....43	135515.....49
13020.....13	19401.....56	74290.....254	131937.....43	135517.....49
13023.....13	19500.....59	74292.....254	131938.....43	135518.....49
13024.....13	19501.....59	80010.....255	132030.....53	135519.....49
13030.....13	19600.....57	80020.....256	132031.....53	135520.....49
13033.....13	19601.....57	80021.....256	132095.....53	135522.....49
13090.....21	21011.....214	80022.....256	132096.....53	135523.....49
13091.....21	21012.....214	80023.....256	132185.....53	135524.....49
13131.....14	21013.....214	80024.....256	132186.....53	135526.....49
13132.....14	21014.....214	80025.....256	132238.....44	135527.....49
13142.....14	21015.....214	90404.....207	135110.....46	135530.....49
15011.....42	21030.....215	90406.....208	135111.....46	135532.....49
15012.....42	21033.....215	90407.....207	135112.....46	135610.....50
15021.....42	21034.....215	90413.....207	135113.....46	135614.....50
15022.....42	21040.....215	90415.....208	135114.....46	135617.....50
16011.....30	21050.....221	90416.....208	135115.....46	135619.....50
16012.....30	21051.....221	90417.....207	135116.....46	135622.....50
16029.....30	21192.....214	90418.....207	135117.....46	135624.....50
16032.....32	21195.....214	91421.....208	135118.....46	135627.....50
17130.....69	21196.....214	99962.....208	135119.....46	135630.....50
17142.....76	21197.....214	110059.....67	135120.....46	135632.....50
17145.....76	21211.....222	116303.....39	135121.....46	135712.....46
17170.....74	22010.....91	116304.....39	135122.....46	135713.....46
17179.....74	22011.....218	116305.....39	135206.....45	135714.....46
17190.....73	22013.....91	116306.....39	135207.....45	135717.....46
17195.....73	22021.....219	116308.....39	135209.....45	135718.....46
17200.....85	22051.....220	116310.....39	135215.....45	135719.....46
17201.....85	22202.....217	116325.....39	135220.....45	135721.....46
17210.....84	22204.....217	116505.....39	135221.....45	135722.....46
17220.....76	22206.....217	116506.....39	135224.....45	135724.....46
17230.....80	22208.....217	117303.....39	135308.....45	135727.....46
17232.....80	22212.....217	117304.....39	135309.....45	135813.....50
17235.....80	22214.....217	117305.....39	135310.....45	135814.....50
17240.....81	22216.....217	117306.....39	135311.....45	135817.....50
17242.....81	22218.....217	117325.....39	135312.....45	135819.....50
17300.....72	22305.....216	117331.....40	135313.....45	135824.....50
17301.....72	73322.....223	117335.....40	135314.....45	135830.....50
19120.....54	73323.....223	117336.....40	135315.....45	135832.....50
19122.....54	73324.....223	117338.....40	135316.....45	137410.....38
19130.....54	73325.....223	117504.....39	135317.....45	137411.....38
19132.....54	73327.....223	117505.....39	135318.....45	137412.....38
19140.....55	73333.....222	117506.....39	135319.....45	137413.....38
19142.....55	73334.....222	117508.....39	135320.....45	137414.....38
19150.....54	73468.....223	117510.....39	135321.....45	137416.....38
19152.....54	73474.....222	117513.....39	135322.....45	137417.....38
19160.....58	74110.....525	117970.....40	135323.....45	137418.....38
19162.....58	74121.....525	117972.....40	135324.....45	137419.....38
19163.....61	74129.....525	117973.....40	135327.....45	137420.....38
19170.....58	74130.....251	119300.....16	135408.....49	137422.....38
19172.....58	74200.....254	121399.....44	135409.....49	137424.....38
19180.....58	74216.....254	121400.....44	135415.....49	138410.....38
19182.....58	74220.....254	121401.....38	135416.....49	138411.....38
19190.....58	74221.....254	121402.....38	135418.....49	138412.....38
19192.....58	74222.....254	121403.....38	135420.....49	138413.....38
19199.....58	74225.....254	121404.....38	135421.....49	138414.....38
19199.....58	74229.....254	121405.....38	135423.....49	138416.....38
19230.....55	74232.....254	121406.....38	135425.....49	138417.....38
19231.....55	74235.....254	121407.....38	135426.....49	138418.....38
19280.....59	74238.....254	121408.....38	135430.....49	138419.....38
19281.....59	74240.....254	121409.....38	135508.....49	138420.....38
19310.....60	74251.....254	130434.....49	135509.....49	138422.....38
19311.....60	74260.....254	131911.....43	135510.....49	138424.....38
19320.....60	74264.....254	131912.....43	135511.....49	140105.....47

ORDER NUMBER INDEX

Order No.....page	Order No.....page	Order No.....page	Order No.....page	Order No.....page
140106.....47	161314.....37	641948.....233	1304060.....15	1505208.....47
140108.....47	161315.....37	641949.....233	1304080.....15	1506104.....51
140110.....47	161316.....37	641951.....233	1305025.....15	1506105.....51
140302.....47	161317.....37	641952.....233	1305030.....15	1506106.....51
140303.....47	161318.....37	641960.....233	1305040.....15	1506108.....51
140304.....47	161319.....37	642410.....233	1305050.....15	1506110.....51
140305.....47	161320.....37	642415.....233	1305060.....15	1506204.....47
140306.....47	161321.....37	645000.....238	1305080.....15	1506205.....47
140307.....47	161322.....37	645001.....238	1306040.....15	1506206.....47
140308.....47	161324.....37	645006.....238	1306050.....15	1506208.....47
140309.....47	161327.....37	646004.....238	1306055.....15	1508008.....42
140310.....47	161330.....37	646006.....238	1306060.....15	1508010.....42
140311.....47	161332.....37	646010.....238	1306070.....15	1508012.....42
140312.....47	161334.....37	646015.....238	1306080.....15	1508015.....42
140313.....47	161336.....37	646020.....238	1306090.....15	1508020.....42
140314.....47	161410.....37	646030.....238	1306100.....15	1508025.....42
140325.....47	161412.....37	646040.....238	1306110.....15	1509007.....43
140507.....51	161413.....37	646050.....238	1306120.....15	1509008.....43
140512.....51	161414.....37	646060.....238	1306130.....15	1509010.....43
140514.....51	161417.....37	646070.....238	1307015.....14	1509012.....43
140705.....47	161418.....37	646090.....238	1307020.....14	1509015.....43
140706.....47	161419.....37	646120.....238	1307025.....14	1509020.....43
140708.....47	161420.....37	647010.....238	1307030.....14	1509025.....43
140710.....47	161422.....37	647030.....238	1308804.....20	1598001.....48
140805.....51	161424.....37	651402.....236	1308808.....20	1598002.....48
140806.....51	161430.....37	651406.....236	1308811.....21	1598004.....48
140808.....51	161900.....90	651407.....236	1399001.....17	1598009.....48
140810.....51	161906.....90	651409.....236	1399002.....18	1598010.....48
151306.....36	161910.....90	651412.....236	1399003.....17	1599001.....52
151307.....36	253260.....98	652002.....235	1399004.....18	1599002.....52
151308.....36	253760.....98	652003.....235	1399005.....17	1599005.....52
151309.....36	275047.....99	654000.....235	1399006.....18	1602160.....32
151310.....36	275062.....99	659001.....230	1399010.....19	1602200.....32
151311.....36	275077.....99	659004.....230	1399011.....19	1605032.....96
151312.....36	275092.....99	659302.....230	1399012.....19	1605054.....96
151313.....36	275246.....99	659500.....230	1399013.....19	1606054.....96
151314.....36	275261.....99	661341.....229	1504110.....49	1607054.....96
151315.....36	275276.....99	661342.....229	1504111.....49	1608032.....96
151316.....36	275291.....99	661343.....229	1504112.....49	1609076.....82
151317.....36	277346.....98	661344.....229	1504113.....49	1621032.....96
151318.....36	277360.....99	661346.....229	1504114.....49	1623032.....96
151319.....36	277361.....98	661347.....229	1504117.....49	1799001.....83
151320.....36	277380.....98	662555.....232	1504119.....49	1799002.....83
151321.....36	277446.....99	666000.....232	1504122.....49	1799004.....84
151322.....36	277562.....99	1110250.....26	1504124.....49	1799005.....85
151324.....36	277846.....99	1201160.....25	1504127.....49	1799006.....86
151327.....36	277860.....99	1201180.....25	1504132.....49	1799007.....86
151330.....36	277946.....98	1201200.....25	1504208.....45	1799008.....87
151332.....36	277961.....98	1202160.....26	1504210.....45	1799013.....87
151334.....36	277980.....98	1202160.....32	1504211.....45	2130001.....218
151336.....36	282001.....250	1203160.....25	1504212.....45	2130002.....218
151904.....36	288700.....31	1203200.....25	1504213.....45	2130003.....218
151906.....36	421000.....100	1204160.....25	1504214.....45	2130004.....218
151908.....36	421016.....100	1204200.....25	1504216.....45	2130005.....218
151910.....36	421920.....100	1205160.....26	1504217.....45	2203008.....219
151912.....36	424200.....100	1206160.....25	1504218.....45	2203010.....219
151915.....36	424300.....100	1207160.....26	1504219.....45	2203011.....219
151918.....36	430302.....100	1301025.....13	1504222.....45	2203013.....219
161306.....37	430801.....100	1301030.....13	1505104.....51	2203014.....219
161307.....37	430805.....100	1301080.....13	1505105.....51	2203016.....219
161308.....37	433010.....100	1301100.....13	1505106.....51	2203017.....219
161309.....37	525004.....250	1304020.....15	1505108.....51	2203018.....219
161310.....37	631000.....231	1304025.....15	1505110.....51	2203019.....219
161311.....37	631800.....231	1304030.....15	1505204.....47	2203106.....219
161312.....37	641946.....233	1304040.....15	1505205.....47	2206008.....220
161313.....37	641947.....233	1304050.....15	1505206.....47	2208010.....220

ORDER NUMBER INDEX

Order No.....page	Order No.....page	Order No.....page	Order No.....page	Order No.....page
2208012.....220	7343087.....218	16020-F1.....30	AI0406.....228	AV4083.....238
2208050.....220	7343088.....218	7410001.....245	AI0407.....228	AV4084.....238
2208060.....220	7343089.....218	AB16.....68	AI0408.....228	AV4094.....237
2208080.....219	7343090.....218	AB22208.....217	AI0409.....228	AV4095.....237
2208100.....220	7343091.....218	AB4700.....230	AI0410.....228	AV4102.....233
2209080.....216	7401002.....234	AB4710.....230	AI0701.....228	AV4104.....233
2209080.....220	7401202.....234	AB7710.....239	AI0702.....228	AV4110.....233
2320212.....224	7406030.....246	AB7712.....239	AI0703.....228	AV4111.....233
2320213.....224	7406050.....246	AB7720E.....239	AI0704.....228	AV4120.....233
2320221.....225	7406080.....246	AB7721.....239	AL-ST 120/20-C.....179	AV4301.....233
6614510.....239	7409002.....234	AB11.....67	AL-ST 150/25-C.....179	AV4303.....233
6614610.....239	7410002.....245	AC1501.....22	AL-ST 170/40-C.....179	AV4310.....233
6614710.....239	8001001.....255	AC1502.....22	AL-ST 185/30-C.....179	AV4330.....234
6614810.....239	8001002.....255	AC1503.....22	AL-ST 210/35-C.....179	AV4331.....234
6614910.....239	8001003.....255	AC1504.....22	AL-ST 240/40-C.....179	AV4335.....234
7101180.....245	8001004.....255	AC1505.....22	AL-ST 265/35-C.....179	AV4341.....234
7101237.....245	8001005.....255	AC1506.....22	AL-ST 50/30-C.....179	AV4350.....234
7110592.....234	8001006.....255	AC1507.....22	AL-ST 50/8-C.....179	AV4351.....234
7111810.....245	8001007.....255	AC1600.....22	AL-ST 70/12-C.....179	AV4360.....234
7112310.....245	8001008.....255	AC1601.....22	AL-ST 95/15-C.....179	AV4401.....237
7112312.....245	8001009.....255	AC1602.....22	AL-ST 95/55-C.....179	AV4402.....237
7112315.....244	8001010.....255	AC1603.....22	AL-ST120/20-50.....170	AV4410.....237
7113104.....244	8002020.....256	AC1604.....22	AL-ST25/4-50.....170	AV4413.....237
7113152.....244	15031125.....44	AC1610.....22	AL-ST35/6-50.....170	AV4418.....237
7114604.....254	15031238.....44	AC1611.....22	AL-ST50/8-50.....170	AV4510.....237
7120081.....246	15031250.....44	AC1612.....22	AL-ST70/12-50.....170	AV4513.....237
7120082.....246	15032125.....44	AC1613.....22	AL-ST95/15-50.....170	AV4518.....237
7120122.....246	15032250.....44	AC1614.....22	ANP24/220.....206	AV4701.....230
7120410.....247	21201160.....225	AC3708.....42	AO0108.....62	AV4702.....230
7120412.....247	93304001.....253	AC3710.....42	AO0108B.....62	AV4703.....230
7120450.....246	98035601.....253	AC3712.....42	AO0511.....61	AV4711.....229
7120452.....246	98035602.....253	AC3715.....42	AP0116N.....34	AV4712.....229
7120453.....246	98035603.....253	AC3720.....42	AP0119N.....34	AV4713.....229
7120502.....249	98035604.....253	AC3725.....42	AP0216N.....35	AV4720.....229
7120506.....249	98035606.....253	AC3807.....43	AP0316N.....35	AV4721.....229
7120600.....249	98035607.....253	AC3808.....43	AP0416N.....34	AV4722.....229
7120610.....249	98035608.....253	AC3810.....43	AP0420N.....34	AV4731.....229
7130008.....251	98035609.....253	AC3812.....43	AP0516N.....34	AV4732.....229
7130024.....251	98035610.....253	AC3815.....43	AP0520N.....34	AV4741.....229
7130582.....250	98035611.....253	AC3820.....43	AP0616N.....34	AV4742.....229
7130602.....250	98035612.....253	AC3825.....43	AP130-C.....154	AV4750.....229
7131326.....251	98035613.....253	ACBLSWZG.....198	AP130-C2.....156	AV4751.....229
7142141.....248	98035614.....253	AD230-130.....182	AP130-H.....158	AV4771.....231
7142143.....248	98035615.....253	AD50-45.....170	AP60-1.....151	AV4772.....231
7142145.....248	98035616.....253	AD520-130.....183	AP60-2.....152	AV4773.....231
7142146.....248	98035617.....253	AE6200.....75	AS1001.....35	AV5000.....234
7142148.....248	98035618.....253	AE6210.....71	AS120-2.....120	AV5001.....234
7142149.....248	98035619.....253	AE6219.....71	AS2001.....23	AV6104.....16
7142160.....247	98035621.....253	AG2000.....88	AS2002.....23	AV6105.....16
7142161.....247	98035623.....253	AG2020.....88	AS2003.....23	AV6220.....69
7201100.....525	98035634.....253	AG2020.....88	AS2004.....23	AV6240.....70
7201200.....525	98041903.....253	AI0301.....228	AS25.....105	AV6299.....69
7201273.....525	212703250.....226	AI0302.....228	AS45.....109	AV6299.....70
7201352.....254	1301035.....13	AI0303.....228	AS50.....111	AV6310.....78
7211420.....249	1301040.....13	AI0304.....228	AS50F.....111	AV6320.....78
7211422.....249	1301045.....13	AI0305.....228	AS65.....114	AV63300.....79
7211440.....249	1301055.....13	AI0306.....228	AS85.....116	AV63400.....79
7212000.....253	1301065.....13	AI0307.....228	AS8902.....247	AV6399.....78
7212110.....247	13021.....13	AI0308.....228	AV3755.....52	AV6400.....77
7212120.....247	13022.....13	AI0309.....228	AV3760.....52	AV6499.....77
7212130.....247	13031.....13	AI0310.....228	AV3910.....31	AV8203.....68
7311102.....222	13032.....13	AI0401.....228	AV3911.....31	AV9303R.....232
7332302.....223	1305020.....15	AI0402.....228	AV3920.....31	AV9303W.....232
7343081.....218	1307010.....14	AI0403.....228	AV3921.....31	AV9305.....231
7343083.....218	13141.....14	AI0404.....228	AV3930.....31	AV9306.....231
7343086.....218	16020-CF1.....30	AI0405.....228	AV4082.....238	AV9310.....242

ORDER NUMBER INDEX

Order No.....page	Order No.....page	Order No.....page	Order No.....page	Order No.....page
AV9312.....242	BLVAM20.....190	FTE4-10.....248	KKPE-TN.....179	LS4R13,0N.....198
AV9314.....242	BLVAM20S.....190	FTE4-15.....248	KM12,7.....195	LS4R13,0S.....198
AVP.....196	BLVAM25.....190	FTE4-20.....248	KM19.....193	LS4R14,0M.....198
BLF22x42.....195	BLVAM25S.....190	FTE4-25.....248	KM19.....194	LS4R14,0N.....198
BLF22x45.....195	BLVAM32.....190	FTE4-30.....248	KMKL12,7.....195	LS4R14,0S.....198
BLF24x112.....193	BLVAM32S.....190	FTN4-05.....248	KNZ.....188	LS4R14,5M.....198
BLF24x42.....193	BLVAM40.....190	FTN4-10.....248	LG8.....210	LS4R14,5N.....198
BLF24x65.....193	BLVAM40S.....190	FTN4-15.....248	LGZ3.....210	LS4R14,5S.....198
BLF24x86.....193	BLVAM50.....190	FTN4-20.....248	LS4L06,5x13,0M.....198	LS4R15,0M.....198
BLF36x112.....194	BLVAM50S.....190	FTN4-25.....248	LS4L06,5x13,0N.....198	LS4R15,0N.....198
BLF36x52.....194	BLVAM63.....190	FTN4-30.....248	LS4L06,5x13,0S.....198	LS4R15,0S.....198
BLF36x65.....194	BLVAM63S.....190	FTP3-10.....248	LS4L06,5x21,0M.....198	LS4R17,0M.....198
BLF36x86.....194	BLVAN30,5.....190	FTP3-15.....248	LS4L06,5x21,0N.....198	LS4R17,0N.....198
BLF45x45.....194	BLVAN30,5S.....190	FTP3-20.....248	LS4L06,5x21,0S.....198	LS4R17,0S.....198
BLF46x46.....194	BLVAPG11.....190	FTP3-25.....248	LS4L08,0x20,0M.....198	LS4R18,0M.....198
BLF68x68.....194	BLVAPG11S.....190	FTP3-30.....248	LS4L08,0x20,0N.....198	LS4R18,0N.....198
BLF92x92.....194	BLVAPG13.....190	FTP4-10.....248	LS4L08,0x20,0S.....198	LS4R18,0S.....198
BLS-120.....197	BLVAPG13S.....190	FTP4-10AV.....248	LS4L08,5x16,0M.....198	LS4R19,0M.....198
BLS-B.....198	BLVAPG16.....190	FTP4-15.....248	LS4L08,5x16,0N.....198	LS4R19,0N.....198
BLS-K.....197	BLVAPG16S.....190	FTP4-15AV.....248	LS4L08,5x16,0S.....198	LS4R19,0S.....198
BLS-L4.....198	BLVAPG21.....190	FTP4-20.....248	LS4L09,0x20,0M.....198	LS4R21,0M.....198
BLS-M.....197	BLVAPG21S.....190	FTP4-20AV.....248	LS4L09,0x20,0N.....198	LS4R21,0N.....198
BLS-R.....197	BLVAPG29.....190	FTP4-25.....248	LS4L09,0x20,0S.....198	LS4R21,0S.....198
BLS-R10.....197	BLVAPG29S.....190	FTP4-25AV.....248	LS4L10,5x13,0M.....198	LSK120.....199
BLS-R20.....197	BLVAPG36.....190	FTP4-30.....248	LS4L10,5x13,0N.....198	LSR06,0M.....199
BLS-R5.....197	BLVAPG36S.....190	FTP4-30AV.....248	LS4L10,5x13,0S.....198	LSR06,0S.....199
BLS-R8.....197	BLVAPG42.....190	FTP4-40.....248	LS4L11,0x20,0M.....198	LSR06,5M.....199
BLS-S.....197	BLVAPG42S.....190	FTP4-50.....248	LS4L11,0x20,0N.....198	LSR06,5S.....199
BLS-SL.....197	BLVAPG48.....190	FTP4-60.....248	LS4L11,0x20,0S.....198	LSR07,0M.....199
BLS-W.....198	BLVAPG48S.....190	GM85.....115	LS4L13,0x17,0M.....198	LSR07,0S.....199
BLTM16.....189	BLVAPG9.....190	GM85.....116	LS4L13,0x17,0N.....198	LSR08,0M.....199
BLTM16S.....189	BLVAPG9S.....190	GMPS120.....121	LS4L13,0x17,0S.....198	LSR08,0S.....199
BLTM20.....189	BS10-C.....176	GMPS120TNB.....121	LS4L13,0x20,0M.....198	LSR08,5M.....199
BLTM20S.....189	BS120-C.....176	GMPS25.....103	LS4L13,0x20,0N.....198	LSR08,5S.....199
BLTM25.....189	BS150-C.....176	GMPS25.....103	LS4L13,0x20,0S.....198	LSR09,0M.....199
BLTM25S.....189	BS16-C.....176	GMPS25.....104	LS4L14,0x20,0M.....198	LSR09,0S.....199
BLTM32.....189	BS185-C.....176	GMPS25.....105	LS4L14,0x20,0N.....198	LSR10,0M.....199
BLTM32S.....189	BS240-C.....176	GMPS45.....108	LS4L14,0x20,0S.....198	LSR10,0S.....199
BLTM40.....189	BS25-C.....176	GMPS45.....108	LS4L17,0x20,0M.....198	LSR10,5M.....199
BLTM40S.....189	BS300-C.....176	GMPS45.....109	LS4L17,0x20,0N.....198	LSR10,5S.....199
BLTM50.....189	BS35-C.....176	GMPS50.....110	LS4L17,0x20,0S.....198	LSR11,0M.....199
BLTM50S.....189	BS400-C.....176	GMPS50.....110	LS4R06,5M.....198	LSR11,0S.....199
BLTM63.....189	BS50-C.....176	GMPS50.....111	LS4R06,5N.....198	LSR12,0M.....199
BLTM63S.....189	BS70-C.....176	GMPS85.....115	LS4R06,5S.....198	LSR12,0S.....199
BLTN30,5.....189	BS95-C.....176	HP45.....149	LS4R07,0M.....198	LSR12,5M.....199
BLTN30,5S.....189	CP-F.....211	HP50.....149	LS4R07,0N.....198	LSR12,5S.....199
BLTPG11.....189	CP-F3.....211	HP60-3.....149	LS4R07,0S.....198	LSR13,0M.....199
BLTPG11S.....189	CP-F5.....211	HP60-4.....151	LS4R08,5M.....198	LSR13,0S.....199
BLTPG13.....189	CP-USB.....212	HP60-BL.....186	LS4R08,5N.....198	LSR13,5M.....199
BLTPG13S.....189	CP700.....205	HPI130-C.....153	LS4R08,5S.....198	LSR13,5S.....199
BLTPG16.....189	CP700EC.....205	HPI130-C2.....155	LS4R09,0M.....198	LSR14,0M.....199
BLTPG16S.....189	D990112.....217	HPI130-H.....157	LS4R09,0N.....198	LSR14,0S.....199
BLTPG21.....189	DA606/6,6.....221	HS25.....103	LS4R09,0S.....198	LSR14,5M.....199
BLTPG21S.....189	DB22.....196	HSD1.....234	LS4R10,0M.....198	LSR14,5S.....199
BLTPG29.....189	DMVH-SL.....93	HSD2.....234	LS4R10,0N.....198	LSR15,0M.....199
BLTPG29S.....189	DMVI65.....92	HSD3.....234	LS4R10,0S.....198	LSR15,0S.....199
BLTPG36.....189	DMVI65A.....94	HSI45.....108	LS4R10,5M.....198	LSR16,0M.....199
BLTPG36S.....189	EA24-1.....211	HSI50.....110	LS4R10,5N.....198	LSR16,0S.....199
BLTPG42.....189	EPU-SET.....137	HSI50F.....110	LS4R10,5S.....198	LSR17,0M.....199
BLTPG42S.....189	FPI70.....204	HSI85.....115	LS4R11,0M.....198	LSR17,0S.....199
BLTPG48.....189	FPI70 EC.....204	KABEL5.....212	LS4R11,0N.....198	LSR18,0M.....199
BLTPG48S.....189	FPI70S.....204	KKLSK120.....199	LS4R11,0S.....198	LSR18,0S.....199
BLTPG9.....189	FPI70S EC.....204	KKPE-45-50.....165	LS4R12,0M.....198	LSR18,5M.....199
BLTPG9S.....189	FS01.....212	KKPE-45-50.....170	LS4R12,0N.....198	LSR18,5S.....199
BLVAM16.....190	FS02.....212	KKPE-C-CK.....174	LS4R12,0S.....198	LSR19,0M.....199
BLVAM16S.....190	FTE4-05.....248	KKPE-C-CK.....179	LS4R13,0M.....198	LSR19,0S.....199

ORDER NUMBER INDEX

Order No.....page	Order No.....page	Order No.....page	Order No.....page	Order No.....page
LSR19,5M.....199	MFI95-CK.....172	MI50-CK.....172	MK14-230.....180	MK20-C.....175
LSR19,5S.....199	MH10-45.....165	MI6-CK.....172	MK14-230.....180	MK20-CK.....171
LSR20,0M.....199	MH10-50.....167	MI70-CK.....172	MK14-45.....164	MK21-230.....180
LSR20,0S.....199	MH10-C.....176	MI95-CK.....172	MK14-50.....166	MK21-520.....183
LSR21,0M.....199	MH10-CK.....172	MIAE10-CK.....173	MK14-520.....183	MK22-230.....180
LSR21,0S.....199	MH120-230.....181	MIAE120-CK.....173	MK14-520.....183	MK22-45.....164
MD10-50.....167	MH120-45.....165	MIAE150-CK.....173	MK14-600.....184	MK22-50.....166
MD10-CK.....173	MH120-50.....167	MIAE16-CK.....173	MK14-600.....184	MK22-520.....183
MD120-C.....176	MH120-C.....176	MIAE185-CK.....173	MK14-C.....175	MK22-600.....184
MD150-C.....176	MH120-CK.....172	MIAE240-CK.....173	MK14-C.....175	MK22-C.....175
MD16-50.....167	MH150-230.....181	MIAE25-CK.....173	MK14-C.....175	MK22-C.....175
MD16-C.....176	MH150-45.....165	MIAE35-CK.....173	MK14-CK.....171	MK22-CK.....171
MD16-CK.....173	MH150-50.....167	MIAE50-CK.....173	MK14B-45.....164	MK22B-230.....180
MD25-50.....167	MH150-C.....176	MIAE70-CK.....173	MK14B-45.....164	MK22B-230.....180
MD25-C.....176	MH150-CK.....172	MIAE95-CK.....173	MK14B-50.....166	MK22B-45.....164
MD25-CK.....173	MH16-45.....165	MIQ10-C.....176	MK14B-50.....166	MK22B-45.....164
MD35-50.....167	MH16-50.....167	MIQ10-CK.....173	MK14B-CK.....171	MK22B-50.....166
MD35-C.....176	MH16-C.....176	MIQ10-CK.....173	MK14B-CK.....171	MK22B-50.....166
MD35-CK.....173	MH16-CK.....172	MIQ120-C.....176	MK15-230.....180	MK22B-520.....183
MD50-50.....167	MH185-230.....181	MIQ16-C.....176	MK15-C.....175	MK22B-520.....183
MD50-C.....176	MH185-50.....167	MIQ16-CK.....173	MK16-230.....180	MK22B-600.....184
MD50-CK.....173	MH185-C.....176	MIQ25-C.....176	MK16-230.....180	MK22B-CK.....171
MD70-50.....167	MH185-CK.....172	MIQ25-CK.....173	MK16-230.....180	MK22B-CK.....171
MD70-C.....176	MH240-230.....181	MIQ35-C.....176	MK16-45.....164	MK23-230.....180
MD70-CK.....173	MH240-50.....167	MIQ35-CK.....173	MK16-50.....166	MK23-520.....183
MD95-50.....167	MH240-C.....176	MIQ50-C.....176	MK16-50.....166	MK25-230.....180
MD95-C.....176	MH240-CK.....172	MIQ50-CK.....173	MK16-520.....183	MK25-50.....166
MDF10-50.....167	MH25-45.....165	MIQ70-C.....176	MK16-520.....183	MK25-520.....183
MDF10-CK.....172	MH25-50.....167	MIQ70-CK.....173	MK16-600.....184	MK25-520.....183
MDF120-230.....181	MH25-C.....176	MIQ95-C.....176	MK16-600.....184	MK25-600.....184
MDF120-C.....176	MH25-CK.....172	MIQ95-CK.....173	MK16-C.....175	MK25-C.....175
MDF150-230.....181	MH300-230.....181	MK10-230.....180	MK16-C.....175	MK25-C.....175
MDF150-C.....176	MH300-C.....176	MK10-45.....164	MK16-C.....175	MK25-C.....175
MDF16-50.....167	MH300-CK.....172	MK10-50.....166	MK16-CK.....171	MK25-CK.....171
MDF16-C.....176	MH35-45.....165	MK10-600.....184	MK16B-45.....164	MK25B-230.....180
MDF16-CK.....172	MH35-50.....167	MK10-C.....175	MK16B-45.....164	MK25B-230.....180
MDF185-230.....181	MH35-C.....176	MK10-CK.....171	MK16B-50.....166	MK25B-50.....166
MDF240-230.....181	MH35-CK.....172	MK10B-45.....164	MK16B-50.....166	MK25B-50.....166
MDF25-50.....167	MH400-230.....181	MK10B-50.....166	MK16B-CK.....171	MK25B-520.....183
MDF25-C.....176	MH400-C.....176	MK10B-CK.....171	MK16B-CK.....171	MK25B-520.....183
MDF25-CK.....172	MH50-45.....165	MK11-50.....166	MK17-230.....180	MK25B-600.....184
MDF300-230.....181	MH50-50.....167	MK11B-CK.....171	MK17-C.....175	MK25B-CK.....171
MDF35-50.....167	MH50-C.....176	MK12-230.....180	MK18-230.....180	MK25B-CK.....171
MDF35-C.....176	MH50-CK.....172	MK12-230.....180	MK18-230.....180	MK28-230.....180
MDF35-CK.....172	MH500-230.....181	MK12-45.....164	MK18-230.....180	MK28-50.....166
MDF50-50.....167	MH6-45.....165	MK12-50.....166	MK18-45.....164	MK28-520.....183
MDF50-C.....176	MH6-50.....167	MK12-520.....183	MK18-50.....166	MK28-600.....184
MDF50-CK.....172	MH6-CK.....172	MK12-520.....183	MK18-520.....183	MK28-C.....175
MDF70-C.....176	MH625-230.....181	MK12-600.....184	MK18-520.....183	MK28-CK.....171
MDF70-CK.....172	MH70-45.....165	MK12-600.....184	MK18-600.....184	MK28B-230.....180
MDF95-C.....176	MH70-50.....167	MK12-C.....175	MK18-600.....184	MK28B-230.....180
MFI10-CK.....172	MH70-C.....176	MK12-C.....175	MK18-C.....175	MK28B-50.....166
MFI120-2.....120	MH70-CK.....172	MK12-C.....175	MK18-C.....175	MK28B-50.....166
MFI120-CK.....172	MH95-45.....165	MK12-CK.....171	MK18-C.....175	MK28B-520.....183
MFI150-CK.....172	MH95-50.....167	MK12-CK.....171	MK18-CK.....171	MK28B-520.....183
MFI16-CK.....172	MH95-C.....176	MK12B-45.....164	MK18B-45.....164	MK28B-600.....184
MFI185-CK.....172	MH95-CK.....172	MK12B-45.....164	MK18B-45.....164	MK28B-CK.....171
MFI240-CK.....172	MII10-CK.....172	MK12B-50.....166	MK18B-50.....166	MK28B-CK.....171
MFI25-CK.....172	MII20-CK.....172	MK12B-50.....166	MK18B-CK.....171	MK28L-C.....175
MFI300-CK.....172	MII50-CK.....172	MK12B-CK.....171	MK18B-CK.....171	MK28L-C.....175
MFI35-CK.....172	MII6-CK.....172	MK13-230.....180	MK19-230.....180	MK30B-230.....180
MFI50-CK.....172	MII185-CK.....172	MK13-50.....166	MK19-C.....175	MK30B-520.....183
MFI65.....113	MI240-CK.....172	MK13-520.....183	MK20-230.....180	MK30L-C.....175
MFI65.....114	MI25-CK.....172	MK13-C.....175	MK20-45.....164	MK32-230.....180
MFI70-CK.....172	MI300-CK.....172	MK13-CK.....171	MK20-50.....166	MK32-50V.....166
MFI95.....117	MI35-CK.....172	MK14-230.....180	MK20-520.....183	MK32-520.....183
			MK20-600.....184	MK32-600.....184

ORDER NUMBER INDEX

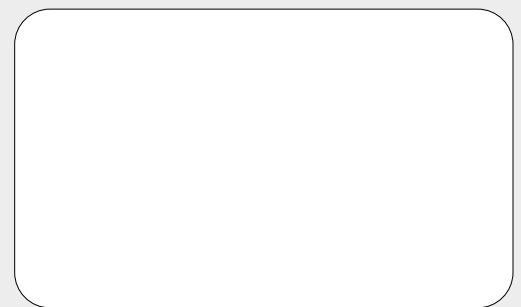
Order No.....page	Order No.....page	Order No.....page	Order No.....page	Order No.....page
MK32-C.....175	MK8-45.....164	MKO95-230-AL.....181	MPAE16T.....134	MR20,2-50°.....170
MK32-CK.....171	MK8-50.....166	MKO95-230-CU.....181	MPAE16TF.....134	MR20,2-C.....178
MK32B-230.....180	MK8-C.....175	MKO95-50AL.....169	MPAE25R.....135	MR20,2-C.....178
MK32B-520.....183	MK8-CK.....171	MKO95-50CU.....169	MPAE2R.....135	MR20,2-CK.....174
MK32B-600.....184	MK9-45.....164	MKO95/15-230.....181	MPAE2T.....133	MR20,2-CK.....174
MK32B-CK.....171	MK9-50.....166	MKO95/15-CK.....174	MPAE50R.....135	MR22,5-C.....178
MK32L-C.....175	MK9-C.....175	MKS200.....33	MPAE6R.....135	MR4,1-45.....165
MK34-CK.....171	MK9-CK.....171	MMT200-C.....177	MPAE6TF.....134	MR4,1-50.....170
MK34B-230.....180	MKGR1.....142	MMT25-C.....177	MPAE95R.....135	MR4,1-C.....178
MK34B-230.....180	MKGR2.....142	MMT315-C.....177	MPB120.....138	MR4,1-CK.....174
MK34B-520.....183	MKGR3.....142	MMT50-C.....177	MPB50.....138	MR5,1-45.....165
MK34B-600.....184	MKO10-230-CU.....181	MMT95-C.....177	MPD120S.....138	MR5,1-45.....165
MK34L-C.....175	MKO10-50CU.....169	MO10-50.....169	MPD50S.....138	MR5,1-50.....170
MK34L-C.....175	MKO10-CK-CU.....174	MO10-50.....169	MPF70i.....138	MR5,1-C.....178
MK38-230.....180	MKO120-230-AL.....181	MO10-50.....169	MPFV.....136	MR5,1-C.....178
MK38-520.....183	MKO120-230-CU.....181	MO10-C.....178	MPIQ16.....136	MR5,1-CK.....174
MK38-600.....184	MKO120-50AL.....169	MO10-C.....178	MPIQ6.....136	MR6,3-45.....165
MK38B-230.....180	MKO120-50CU.....169	MO12-50.....169	MPR-1.....138	MR6,3-45.....165
MK38B-230.....180	MKO120/21-230.....181	MO12-50.....169	MPR-2.....138	MR6,3-50.....170
MK38B-520.....183	MKO125/30-230.....181	MO12-C.....178	MPR-3.....138	MR6,3-50.....170
MK38B-520.....183	MKO150-230-AL.....181	MO12-C.....178	MPR120i.....138	MR6,3-C.....178
MK38B-600.....184	MKO150-230-CU.....181	MO16-50.....169	MPR25i.....138	MR6,3-C.....178
MK42-230.....180	MKO150/25-230.....181	MO16-50.....169	MPR50i.....138	MR6,3-CK.....174
MK42-520.....183	MKO16-230-CU.....181	MO16-50.....169	MPSF6-1.....142	MR6,3-CK.....174
MK42-600.....184	MKO16-50CU.....169	MO16-C.....178	MPSF6-2.....142	MR7,5-45.....165
MK42B-230.....180	MKO16-CK-CU.....174	MO16-C.....178	MPSF6-3.....142	MR7,5-45.....165
MK42B-520.....183	MKO185-230-AL.....181	MO16-C.....178	MPSF6-lose.....142	MR7,5-50.....170
MK44-230.....180	MKO185/32-230.....181	MO18-50.....169	MR10,5-45.....165	MR7,5-50.....170
MK44-230.....180	MKO210/36-230.....181	MO18-50.....169	MR10,5-45.....165	MR7,5-C.....178
MK44-520.....183	MKO210/50-230.....181	MO18-50.....169	MR10,5-50.....170	MR7,5-C.....178
MK44-600.....184	MKO240-230-AL.....181	MO18-50.....169	MR10,5-50.....170	MR7,5-CK.....174
MK44B-520.....183	MKO240/40-230.....181	MO18-C.....178	MR10,5-C.....178	MR7,5-CK.....174
MK44B-600.....184	MKO25-230-AL.....181	MO18-C.....178	MR10,5-C.....178	MR9,0-45.....165
MK46B-230.....180	MKO25-230-CU.....181	MO18-C.....178	MR10,5-CK.....174	MR9,0-45.....165
MK46B-520.....183	MKO25-50AL.....169	MO18-C.....178	MR10,5-CK.....174	MR9,0-50.....170
MK5-45.....164	MKO25-50CU.....169	MO20-50.....169	MR12,5-45.....165	MR9,0-50.....170
MK5-50.....166	MKO25-CK-AL.....174	MO20-50.....169	MR12,5-45.....165	MR9,0-C.....178
MK5-CK.....171	MKO25-CK-CU.....174	MO20-50.....169	MR12,5-50.....170	MR9,0-C.....178
MK50B-520.....183	MKO35-230-AL.....181	MO20-C.....178	MR12,5-50.....170	MR9,0-CK.....174
MK52-520.....183	MKO35-230-CU.....181	MO20-C.....178	MR12,5-C.....178	MR9,0-CK.....174
MK52-600.....184	MKO35-50AL.....169	MO20-C.....178	MR12,5-C.....178	MRD22-230.....182
MK52B-520.....183	MKO35-50CU.....169	MO21-50.....169	MR12,5-CK.....174	MRD22-C.....178
MK52B-600.....184	MKO35-CK-AL.....174	MO21-50.....169	MR12,5-CK.....174	MRD22-CK.....174
MK58-520.....183	MKO35-CK-CU.....174	MO22-50.....169	MR14,0-45.....165	MRD24-230.....182
MK58-520.....183	MKO35/6-50.....169	MO22-50.....169	MR14,0-45.....165	MRD24-C.....178
MK58-600.....184	MKO50-230-AL.....181	MO22-50.....169	MR14,0-50.....170	MRD24-CK.....174
MK58-600.....184	MKO50-230-CU.....181	MO22-C.....178	MR14,0-50.....170	MRD29-230.....182
MK6-45.....164	MKO50-50AL.....169	MO22-C.....178	MR14,0-C.....178	MRD29-C.....178
MK6-45.....164	MKO50-50CU.....169	MO22-C.....178	MR14,0-C.....178	MRD32-230.....182
MK6-50.....166	MKO50-CK-AL.....174	MO24-50.....169	MR14,0-CK.....174	MRD32-C.....178
MK6-50.....166	MKO50-CK-CU.....174	MO24-50.....169	MR14,0-CK.....174	MRH22-230.....182
MK6-C.....175	MKO50/8-230.....181	MO24-C.....178	MR15,7-45.....165	MRH22-C.....178
MK6-C.....175	MKO50/8-50.....169	MO24-C.....178	MR15,7-45.....165	MRH22-CK.....174
MK6-CK.....171	MKO50/8-CK.....174	MO25-C.....178	MR15,7-50.....170	MRH26-230.....182
MK6-CK.....171	MKO70-230-AL.....181	MO26-50.....169	MR15,7-50.....170	MRH26-C.....178
MK60-520.....183	MKO70-230-CU.....181	MO26-C.....178	MR15,7-C.....178	MRH26-CK.....174
MK60-600.....184	MKO70-50AL.....169	MO26-C.....178	MR15,7-C.....178	MRH30-230.....182
MK60-600.....184	MKO70-50CU.....169	MO26-C.....178	MR15,7-CK.....174	MRH30-C.....178
MK7-45.....164	MKO70-CK-AL.....174	MO7-50.....169	MR15,7-CK.....174	MRH32-230.....182
MK7-50.....166	MKO70-CK-CU.....174	MP60-1.....139	MR17,5-50.....170	MRH32-C.....178
MK7-C.....175	MKO70/12-230.....181	MP60-2.....141	MR17,5-50.....170	MRH34-230.....182
MK7-CK.....171	MKO70/12-50.....169	MP60-3.....140	MR17,5-C.....178	MS30.....97
MK70-600.....184	MKO70/12-CK.....174	MPAE10V.....134	MR17,5-C.....178	MS50.....98
		MPAE16K.....133	MR17,5-CK.....174	MSA180.....33
		MPAE16R.....135	MR17,5-CK.....174	MSR100.....97
		MPAE16S.....134	MR20,2-50.....170	MSR60.....97

Order No.....page	Order No.....page	Order No.....page	Order No.....page	Order No.....page
MTT10-45.....165	QUATTRO-S.....242	U13-E113.....177	U5-DC35.....168	U5-T70.....168
MTT10-50.....168	RA13.....210	U13-E118.....177	U5-DC6.....168	U5-T95.....168
MTT10-CK.....173	RA14.....210	U13-E118.....177	U5-DC70.....168	U6-I10.....172
MTT120-C.....177	RA15.....210	U13-E140.....177	U5-E113.....168	U6-I120.....172
MTT120-CK.....173	RA20.....210	U13-E158.....177	U5-E118.....168	U6-I150.....172
MTT150-C.....177	RA50.....210	U13-E158.....177	U5-E118.....168	U6-I16.....172
MTT150-CK.....173	SCH1,5.....211	U13-E173.....177	U5-E140.....168	U6-I185.....172
MTT16-45.....165	SCH10.....211	U13-E173.....177	U5-E158.....168	U6-I240.....172
MTT16-50.....168	SCH3.....211	U13-E173.....177	U5-E158.....168	U6-I25.....172
MTT16-C.....177	SCH5.....211	U13-E215.....177	U5-E173.....168	U6-I300.....172
MTT16-CK.....173	SCHA10.....211	U13-E70.....177	U5-E173.....168	U6-I35.....172
MTT185-C.....177	SCHA3.....211	U13-E75.....177	U5-E173.....168	U6-I50.....172
MTT185-CK.....173	SCHA5.....211	U13-E96.....177	U5-E173.....168	U6-I70.....172
MTT240-C.....177	SET-SMI-S.....107	U13-K07M.....176	U5-E190.....168	U6-I95.....172
MTT240-CK.....173	SETBLTM40.....192	U13-K08M.....176	U5-E70.....168	UEAE10T.....129
MTT25-45.....165	SETBLTM63.....192	U13-K10M.....176	U5-E75.....168	UEAE16R.....130
MTT25-50.....168	SETBLVAM40.....192	U13-K11M.....176	U5-E96.....168	UEAE2R.....130
MTT25-C.....177	SETBLVAM63.....193	U13-K13M.....176	U5-E96.....168	UEAE2X16R.....131
MTT25-CK.....173	SM26.....106	U13-K14.....176	U5-FI120.....170	UEAE35R.....131
MTT35-45.....165	SM85.....115	U13-K17M.....176	U5-FI150.....170	UEAE50R.....131
MTT35-50.....168	SM85.....116	U13-K18.....176	U5-FI185.....170	UEBNC.....133
MTT35-C.....177	SMI120-2.....120	U13-K20D.....176	U5-FI35.....170	UEFV28.....132
MTT35-CK.....173	SMI65.....113	U13-K22D.....176	U5-FI50.....170	UEFV48.....132
MTT50-45.....165	SMI65.....114	U13-K25M.....176	U5-FI70.....170	UEFV63.....132
MTT50-50.....168	SMI95.....117	U13-K28D.....176	U5-FI95.....170	UEFVS63.....132
MTT50-C.....177	SMPS120.....121	U13-K34D.....176	U5-I10.....167	UEIQ2.....130
MTT50-CK.....173	SMPS120TNB.....121	U13-K34D.....177	U5-I120.....167	UEIQ2WF.....130
MTT70-45.....165	SMPS25.....103	U13-P10.....177	U5-I150.....167	UEIQ6.....129
MTT70-50.....168	SMPS25.....103	U13-P120.....177	U5-I16.....167	UEIQ6.....130
MTT70-C.....177	SMPS25.....104	U13-P150.....177	U5-I185.....167	UEIQ6WS.....130
MTT70-CK.....173	SMPS25.....105	U13-P16.....177	U5-I240.....167	UEMC3.....133
MTT95-45.....165	SMPS45.....108	U13-P25.....177	U5-I25.....167	UEMC4.....133
MTT95-50.....168	SMPS45.....108	U13-P35.....177	U5-I35.....167	UEMC41.....132
MTT95-C.....177	SMPS45.....109	U13-P50.....177	U5-I50.....167	UEQ10.....129
MTT95-CK.....173	SMPS50.....110	U13-P70.....177	U5-I70.....167	UEQ10.....131
NG3.....210	SMPS50.....110	U13-P95.....177	U5-I95.....167	UER10.....131
NP220-1.....206	SMPS50.....111	U13-PZ120.....179	U5-K07M.....167	UER16.....132
NP220-2.....206	SMPS85.....115	U13-PZ240.....179	U5-K08M.....167	UER2.....131
PBL60.....188	SPRAY-M.....198	U13-PZ25.....179	U5-K10M.....167	ZA13X11X105.....195
PM-TRE.....129	SSA-ERD1.....124	U13-PZ300.....179	U5-K11M.....167	ZA19X14X120.....193
PMC16.....136	SSA-ERD1.....125	U13-PZ50.....179	U5-K13M.....167	ZA25X21X150.....194
PMC25.....137	SSA-ERD1.....126	U13-PZ6.....179	U5-K14.....167	ZB11,1x19.....191
PMCL16.....137	SSA-ERD4.....124	U13-PZ95.....179	U5-K17M.....167	ZB19x125.....191
PMGI6.....136	SSA-ERD4.....125	U13-S120.....179	U5-K18.....167	ZB9,5x19.....191
PMT50.....134	SSA-ERD4.....126	U13-S150.....179	U5-K20D.....167	ZB9,5x72.....191
PP130-C.....153	STB21.....196	U13-S16.....179	U5-K22D.....167	ZBA19x9,5.....196
PP130-C2.....155	Stilo-BL.....187	U13-S185.....179	U5-K25M.....167	ZSKL19X55.....191
PP130-H.....157	STILO-S25.....104	U13-S240.....179	U5-P10.....167	ZSKL19xX75.....191
PP230.....159	STILO-S26.....106	U13-S25.....179	U5-P120.....167	ZSKL9,5X50.....191
PP230-630.....160	STILO-S40.....107	U13-S300.....179	U5-P16.....167	
PP520.....161	STILO-S54.....112	U13-S35.....179	U5-P25.....167	
PP60-1.....149	STILO45.....149	U13-S50.....179	U5-P35.....167	
PP60-2.....151	STILO50.....149	U13-S6.....179	U5-P50.....167	
PP600.....162	STILO60.....151	U13-S70.....179	U5-P70.....167	
PS120.....121	SW12/230.....211	U13-S95.....179	U5-P95.....167	
PS120-SK160.....121	TG1.....210	U4-K07M.....165	U5-PZ120.....170	
PS25.....103	TG2.....210	U4-K08M.....165	U5-PZ25.....170	
PS45.....108	TG3.....210	U4-K10M.....165	U5-PZ50.....170	
PS50.....110	TTCP01.....212	U4-K11M.....165	U5-PZ6.....170	
PS50F.....110	TTPZ01.....212	U4-K13M.....165	U5-PZ95.....170	
PS65.....113	U13-DC10.....178	U4-K14.....165	U5-T10.....168	
PS85.....115	U13-DC185.....178	U4-K17M.....165	U5-T120.....168	
PS95.....117	U13-DC25.....178	U4-K18.....165	U5-T16.....168	
PTS4.....68	U13-DC35.....178	U4-K20D.....165	U5-T25.....168	
QUATTRO.....242	U13-DC70.....178	U5-DC10.....168	U5-T35.....168	
QUATTRO-D.....242	U13-DC95.....178	U5-DC25.....168	U5-T50.....168	



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