

Measurement Categories according to IEC/EN 61010-031:2008

To facilitate the assignment of test accessories to the appropriate applications, standard IEC/EN 61010-031 has established a number of categories which define where they can be used in the power supply network and to lay down appropriate requirements for each category.

Formerly (until 2002), the measurement categories now defined in standard IEC/EN 61010-031 were designated as overvoltage categories. This term origi-

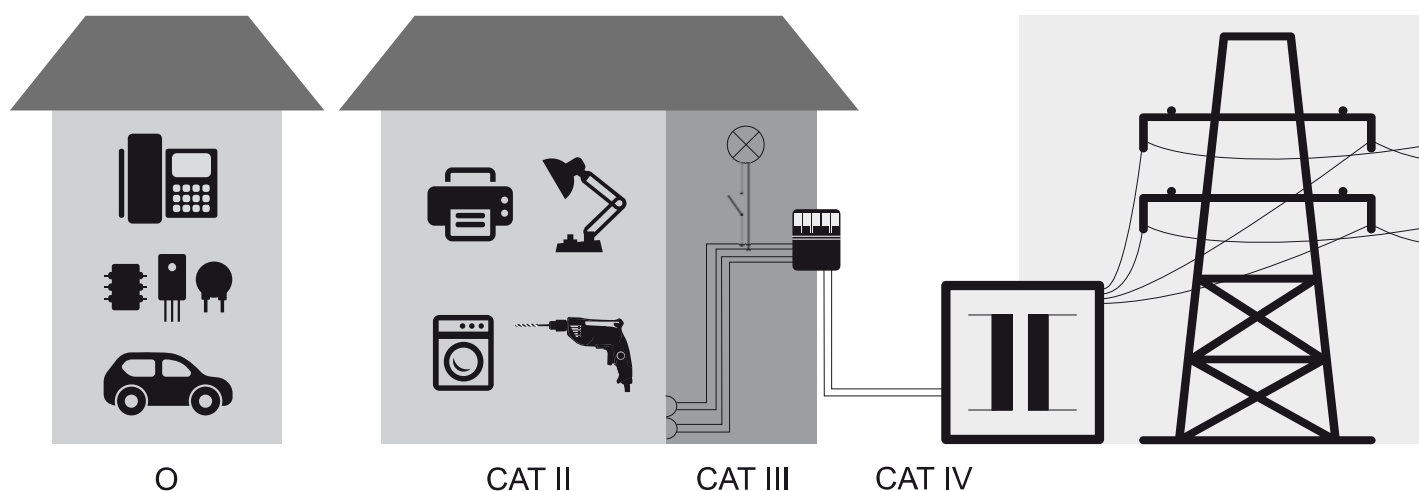
nated from the fact that the classification was based primarily upon the overvoltages (surges) that were likely to occur in the power grid.

Actually the measurement categories differ not so much in the level of the expected transient values as with regard to the available energy in each test category in the event of a short circuit.

In a higher measurement category more energy can be released than in a lower one,

with results that may even have an explosive-like character with very serious consequences for the user.

In standard EN 61010-031 there are four different test categories, abbreviated "CAT". The category CAT followed by a number from I to IV is stated in our catalogs with the rated voltage, and also marked on the products. As a general rule, the higher the CAT rating, the higher the safety requirement that applies to the product.



O Other circuits that are not directly connected to mains.

CAT II applies to measurements on equipment that is connected to the grid or supplied from the grid without constituting a part of the grid installation.

CAT III applies to measurements inside the house or building installation.

CAT IV applies to measurements at the supply source of the installation (input side).

Ø 2 MM SYSTEM

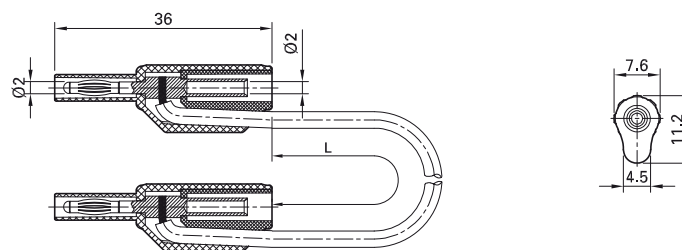
Ø 2 mm Test Leads

Test Lead SLK205-K...

Highly flexible, with insulation in PVC or silicone with assembled stackable Ø 2 mm

MULTILAM plugs with rigid insulating sleeve on both ends.

SLK205-K...

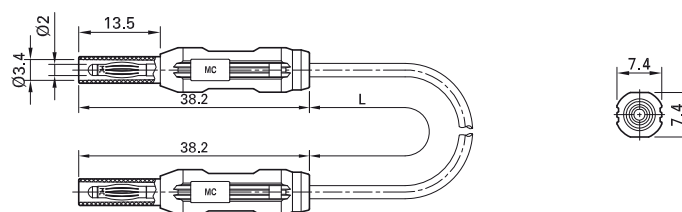


Order No.	Type	Rated voltage/current	Lead		Lead lengths L [cm] ¹⁾	*Colors ¹⁾
65.9179-□*	SLK205-K	600 V, CAT II / 10 A	PVC 0,5 mm ²	Au CE c UL US	030 060 100	21 22 23
65.9180-□*	SLK205-K/SIL	600 V, CAT II / 10 A	SIL 0,5 mm ²	Au CE c UL US	100	21 22 23

Test Lead SLK205-LA

Highly flexible, with insulation in PVC with assembled in-line Ø 2 mm MULTILAM plugs with rigid insulating sleeve on both ends.

SLK205-LA



Order No.	Type	Rated voltage/current	Lead		Lead lengths L [cm] ¹⁾	*Colors ¹⁾
65.3307-□*	SLK205-LA	600 V, CAT II / 10 A	PVC 0,5 mm ²	Au CE	100	21 22 23

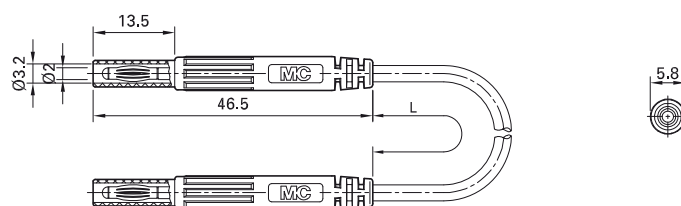
¹⁾ Other color and/or length combinations available on request.

Test Lead SLK205-L...

Highly flexible, with insulation in PVC or silicone with molded in-line Ø 2 mm MULTILAM

plugs with rigid insulating sleeve on both ends.

SLK205-L...



Order No.	Type	Rated voltage/current	Lead		Lead lengths L [cm] ¹⁾	*Colors ¹⁾
65.9173-□*	SLK205-L	600 V, CAT III / 10 A	PVC 0,5 mm ²	Au CE c UL us	100	21 22
65.9174-□*	SLK205-L/SIL	600 V, CAT III / 10 A	SIL 0,5 mm ²	Au CE c UL us	100	21 22

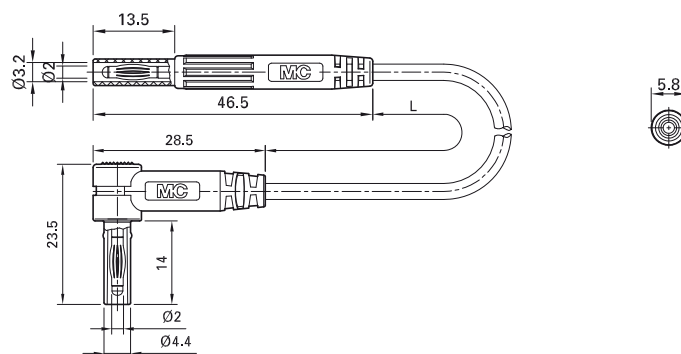
Test Lead SLK205-W/L...

Highly flexible, with insulation in PVC or silicone. One end with molded in-line Ø 2 mm

MULTILAM plug with rigid insulating sleeve. The other end with molded right-angled

Ø 2 mm MULTILAM plug with rigid insulating sleeve.

SLK205-W/L...



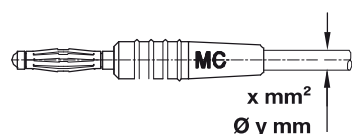
Order No.	Type	Rated voltage/current	Lead		Lead lengths L [cm] ¹⁾	*Colors ¹⁾
65.9577-□*	SLK205-W/L	600 V, CAT III / 10 A	PVC 0,5 mm ²	Au CE	100	21 22
65.9578-□*	SLK205-W/L/SIL	600 V, CAT III / 10 A	SIL 0,5 mm ²	Au CE	100	21 22

¹⁾ Other color and/or length combinations available on request.

Ø 2 mm Plugs and Sockets

This section contains plugs and sockets for self-assembled test leads. The information about each item includes details regarding connectable conductor

cross-sections and diameters, as well as regarding the available assembly instructions.



In the production of our test leads we use only high-quality multi-stranded cables of our own production. If you are interested

in our full range of stranded cables, please order the main catalog "Cables and Multistrand Wires".

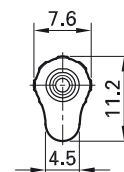
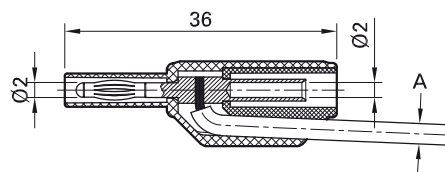
Plug SL205-K

Stackable, Ø 2 mm, with spring-loaded MULTILAM, for self-assembly of test leads.

With rigid insulating sleeve.

Solder connection.

SL205-K



Order No.	Type	Rated voltage/current	Cable (A)		*Colors ¹⁾
65.9182-*	SL205-K	600 V, CAT II / 10 A	<div>PVC</div> <div>SIL</div> <div>Ø 2,3 mm</div> <div>Ø 2,7 mm</div> <div>0,5 mm²</div>	<div>Au</div>	<div>21</div> <div>22</div> <div>23</div> <div>24</div>

¹⁾ Other colors available on request.

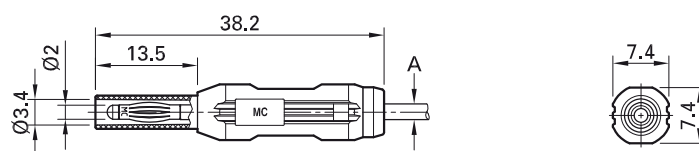


Plug SL205-LA

In-line, Ø 2 mm, with spring-loaded MULTILAM, for self-assembly of test leads.
With rigid insulating sleeve.

Crimp or solder connection.

SL205-LA



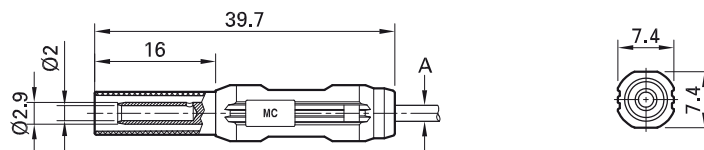
Order No.	Type	Rated voltage/current	Cable (A)		*Colors ¹⁾
65.3309-*	SL205-LA	600 V, CAT II / 10 A	max. Ø 2,7 mm 0,5 mm ²	Au	21 22 23 24 25

Socket SL205-BA

In-line, rigid, accepting spring-loaded Ø 2 mm plugs with rigid insulating sleeve, for self-assembly of test leads.

Crimp or solder connection.

SL205-BA



Order No.	Type	Rated voltage/current	Cable (A)		*Colors ¹⁾
65.3319-*	SL205-BA	600 V, CAT II / 10 A	max. Ø 2,7 mm 0,5 mm ²	Au	21 22 23

¹⁾ Other colors available on request.

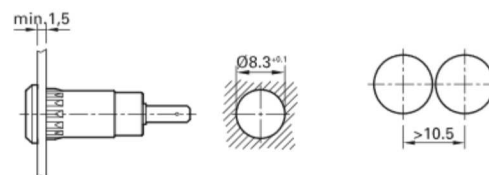
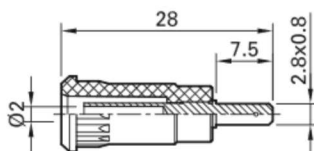


Press-in Socket SEB2-...

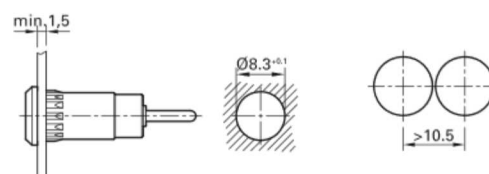
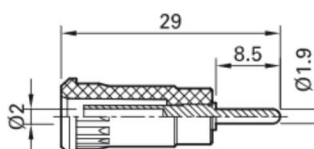
Insulated, rigid, accepting spring-loaded Ø 2 mm plugs with rigid insulating sleeve. The socket is pressed into pre-drilled panels of plastic, metal, etc.

Connection: Flat connecting tab 2.8 mm x 0.8 mm or round connecting pin Ø 1.9 mm.

SEB2-F2,8



SEB2-R



Order No.	Type	Rated voltage/current	Connection		*Colors
65.9099-*	SEB2-F2,8	600 V, CAT III / 10 A	Flat connecting tab 2.8 mm x 0.8 mm	Au	21 22 23 24 25 29
65.9193-*	SEB2-R	600 V, CAT III / 10 A	Round connecting pin Ø 1.9 mm	Au cULus	21 22 23 24 25 29



Flat connecting receptacle FSH2,8x0,8:

page 107

Press-in tool MB2-S: page 108



Assembly instructions MAH510

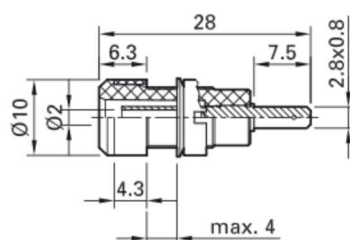
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Panel-mount Socket SLB2-...

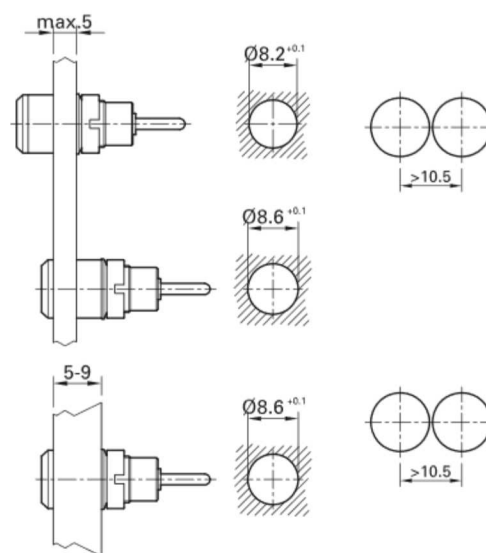
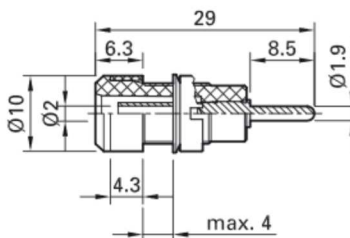
Insulated, rigid, accepting spring-loaded Ø 2 mm plugs with rigid insulating sleeve. The socket is surface-mounted or assembled flush into pre-drilled panels of plastic, metal, etc.

Connection: Flat connecting tab 2.8 mm x 0.8 mm or round connecting pin Ø 1.9 mm.

SLB2-F2,8



SLB2-R



Order No.	Type	Rated voltage/current	Connection		*Colors
65.9098-*	SLB2-F2,8	600 V, CAT III / 10 A	Flat connecting tab 2.8 mm x 0.8 mm	Au	21 22 23 24 25 29
65.9194-*	SLB2-R	600 V, CAT III / 10 A	Round connecting pin Ø 1.9 mm	Au cULus	21 22 23 24 25 29

Supplied assembly material

		Spacer sleeve for	SLB2-F2,8, SLB2-R
Page 104	MUR/M8x0,5	Round nut for	SLB2-F2,8, SLB2-R
Page 104	SP4	Washer for	SLB2-F2,8, SLB2-R



Flat connecting receptacle FSH2,8x0,8:

page 107

Tube spanners SS4, SS2-S: page 107



Assembly instructions MAH511

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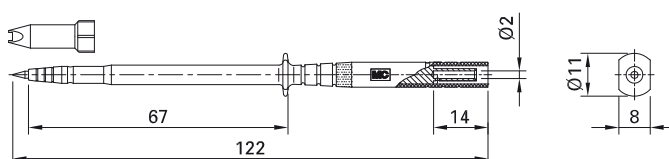
Ø 2 mm Test Probes and Test Clips, Test Clip Leads

Test Probe SPP2-S

With tapered, stainless steel rigid needle. Handle guard chamfered on both sides. Ø 2 mm rigid socket in handle accepting

spring-loaded Ø 2 mm plugs with rigid insulating sleeve. Supplied with protective cap.

SPP2-S



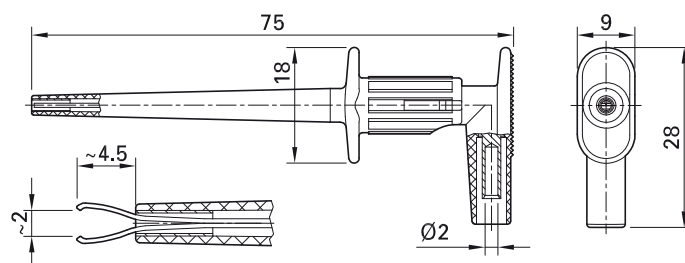
Order No.	Type	Rated voltage/current		*Colors
24.0239-*	SPP2-S	1000 V, CAT III / 1 A	CE	21 22

Test Clip MicroGrip-XB

With hardened spring wire grabber with gold-plated contact area. Ø 2 mm rigid

socket in handle accepting spring-loaded Ø 2 mm plugs with rigid insulating sleeve.

MicroGrip-XB



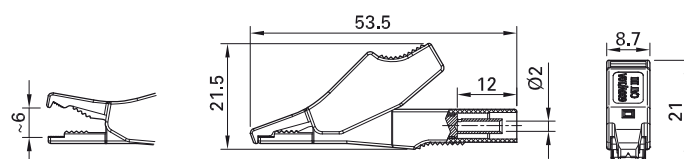
Order No.	Type	Rated voltage/current		*Colors
65.9187-*	MicroGrip-XB	300 V, CAT II / 1 A	Au CE cUL US	21 22

Test Clip XKK-200

Made of brass, with all-round insulation. Toothed gripping jaws with fine-wire clamping surface. Ø 2 mm rigid socket in insulator

accepting spring-loaded Ø 2 mm plugs with rigid insulating sleeve.

XKK-200



Order No.	Type	Rated voltage/current		*Colors
65.9188-*	XKK-200	600 V, CAT III / 10 A	Ni CE c UL US	21 22

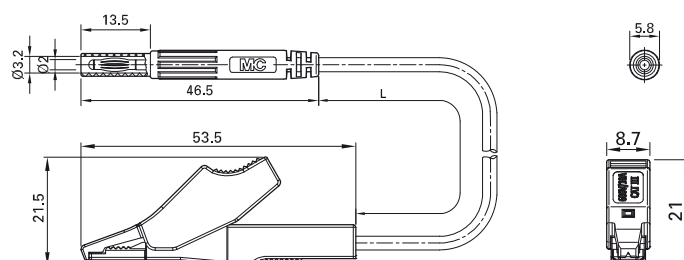


Test Clip Lead XALF

Highly flexible, with insulation in PVC. One end with test clip with all-round insulation and toothed gripping jaws with fine-

wire clamping surface. The other end with Ø 2 mm MULTILAM plug with rigid insulating sleeve.

XALF



Order No.	Type	Rated voltage/current	Lead		Lead lengths L [cm]	*Colors
65.9185-□*	XALF	600 V, CAT III / 10 A	PVC 0,75 mm ²	Ni CE c UL US	100	21 22

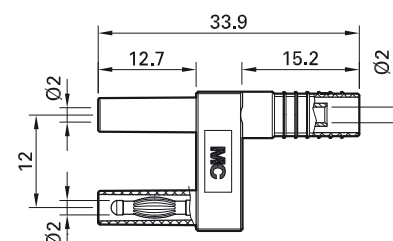
Ø 2 mm Jumper Plug

Connecting Plug SKS2-12L/1SA/N

Insulated, made of brass and with rigid insulating sleeves. Equipped with spring-loaded MULTILAM to ensure vibration-proof contacts – ideal, for instance, in the auto-

motive field for test drives and servicing. Ø 2 mm rigid socket in insulator accepting spring-loaded Ø 2 mm plugs with rigid insulating sleeve.

SKS2-12L/1SA/N



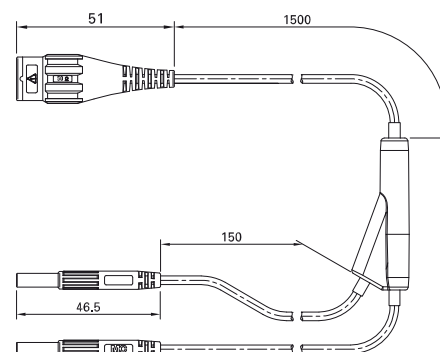
Order No.	Type	Rated voltage/current	Plug spacing		Color
65.9866-21	SKS2-12L/1SA/N	600 V, CAT II / 10 A	12 mm	Ni	21

Ø 2 mm / BNC Adapter Lead

Adapter Lead XLAM-205L

Highly flexible. One end with coaxial cable with touch-protected BNC male connector,

other end with in-line Ø 2 mm MULTILAM plugs with rigid insulating sleeve.



Order No.	Type	Rated voltage	Cable type		Lead length L [cm]
67.9565-150	XLAM-205L	600 V, CAT II 300 V, CAT III	PVC RG174 2x 0,5 mm²	UL US	150



Rating sheet RZ013

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Ø 4 MM SYSTEM

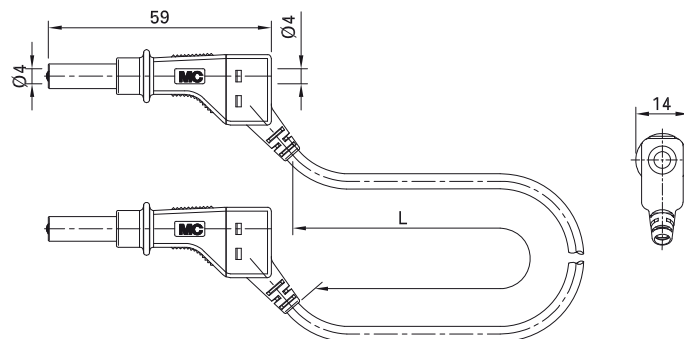
Ø 4 mm Test Leads

Test Lead XZG4...

Highly flexible, with insulation in PVC or silicone especially suitable for connecting electrical devices not (yet) equipped with safety sockets. With stackable Ø 4 mm

MULTILAM plugs on both ends with protective collar and retractable sleeve to prevent accidental touching.

XZG...



Order No.	Type	Rated voltage/ current	Lead	Rating sheet		Lead lengths L [cm] ¹⁾	*Colors ¹⁾
66.9405-□*	XZG410	600 V, CAT II / 19 A	PVC 1,0 mm ²	RZ073	Ni CE	050 100 150 200	21 22 23
66.9406-□*	XZG410/SIL	600 V, CAT II / 19 A	SIL 1,0 mm ²	RZ073	Ni CE	050 100 150 200	21 22 23
66.9407-□*	XZG425	600 V, CAT II / 32 A	PVC 2,5 mm ²	RZ074	Ni CE	050 100 150 200	20 21 22 23 24 25 26 27 28
66.9408-□*	XZG425/SIL	600 V, CAT II / 32 A	SIL 2,5 mm ²	RZ074	Ni CE	050 100 150 200	20 21 22 23 24 25 26 27 28

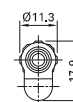
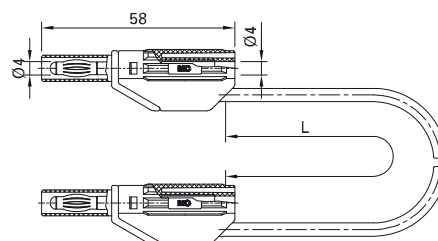
¹⁾ Other color and/or length combinations available on request.



Test Lead XV...-44...

Highly flexible, with insulation in PVC or silicone with stackable Ø4 mm MULTILAM plugs with rigid insulating sleeve on both ends.

XV...-44...



Order No.	Type	Rated voltage/current	Lead		Lead lengths L [cm] ¹⁾	*Colors ¹⁾
66.9738-□*	XVF-446	600 V, CAT II / 19 A	PVC 1,0 mm ²	Ni CE c UL US	025 050 100 200	21 22 23
66.9739-□*	XVS-446	600 V, CAT II / 19 A	SIL 1,0 mm ²	Ni CE c UL US	025 100 200	21 22 23
66.9736-□*	XVF-448	600 V, CAT II / 32 A	PVC 2,5 mm ²	Ni CE c UL US	025 100 150 200	21 22 23
66.9737-□*	XVS-448	600 V, CAT II / 32 A	SIL 2,5 mm ²	Ni CE c UL US	025 050 100 200	21 22 23

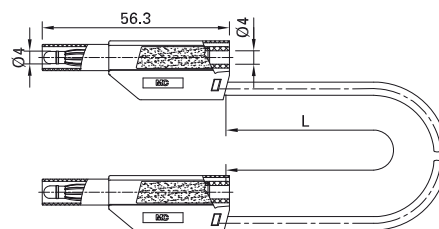
¹⁾ Other color and/or length combinations available on request.

Test Lead SLK4...-E...

Highly flexible, with insulation in PVC or silicone with stackable Ø 4 mm MULTILAM

plugs with rigid insulating sleeve on both ends.

SLK4...-E...



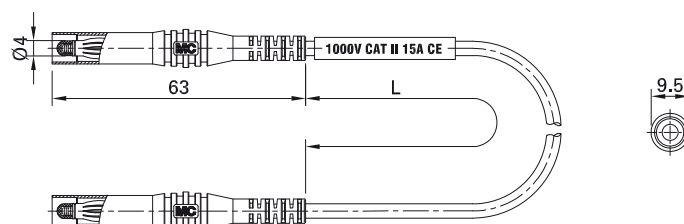
Order No.	Type	Rated voltage/current	Lead		Lead lengths L [cm] ¹⁾	*Colors ¹⁾
28.0127-□*	SLK4075-E/N	1000 V, CAT II / 15 A 600 V, CAT III / 15 A	PVC 0,75 mm ²	Ni CE c UL US	025 050 075 100 150 200	20 21 22 23 24 25 26 27 28 29
49.0126-□*	SLK410-E/N	1000 V, CAT II / 19 A 600 V, CAT III / 19 A	PVC 1,0 mm ²	Ni CE c UL US	025 050 075 100 150 200	20 21 22 23 24 25 26 27 28 29
28.0126-□*	SLK410-E/SIL	1000 V, CAT II / 19 A 600 V, CAT III / 19 A	SIL 1,0 mm ²	Au CE c UL US	025 050 075 100 150 200	21 22 23
49.0079-□*	SLK410-E/N SIL	1000 V, CAT II / 19 A 600 V, CAT III / 19 A	SIL 1,0 mm ²	Ni CE c UL US	025 050 075 100 150 200	20 21 22 23 24 25 26 27 28 29
28.0124-□*	SLK425-E	1000 V, CAT II / 32 A 600 V, CAT III / 32 A	PVC 2,5 mm ²	Au CE c UL US	025 050 075 100 150 200	20 21 22 23 24 25 26 27 28 29
28.0125-□*	SLK425-E/N	1000 V, CAT II / 32 A 600 V, CAT III / 32 A	PVC 2,5 mm ²	Ni CE c UL US	025 050 075 100 150 200	20 21 22 23 24 25 26 27 28 29

¹⁾ Other color and/or length combinations available on request.

Test Lead XM...-402

Highly flexible, with insulation in PVC or silicone with in-line Ø 4 mm MULTILAM plug with rigid insulating sleeve on both ends.

XM...-402



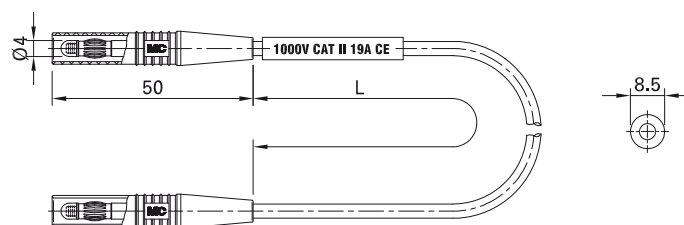
Order No.	Type	Rated voltage/current	Lead		Lead lengths L [cm] ¹⁾	*Colors ¹⁾
66.9634-□*	XMF-402	1000 V, CAT II / 15 A	PVC 0,75 mm ²	Ni CE c UL US	100 200	21 22 23
66.9635-□*	XMS-402	1000 V, CAT II / 15 A	SIL 0,75 mm ²	Ni CE c UL US	100 200	21 22 23

¹⁾ Other color and/or length combinations available on request.

Test Lead SLK4...-L...

Highly flexible, with in-line Ø 4 mm MULTILAM plug with rigid insulating sleeve on both ends.

SLK...-L...

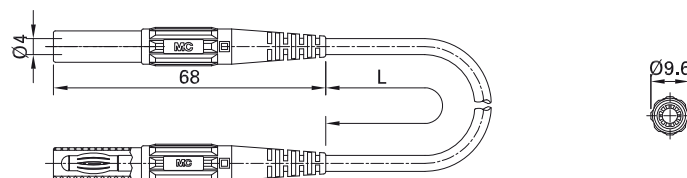


Order No.	Type	Rated voltage/current	Lead		Lead lengths L [cm]	*Colors
28.0083-□*	SLK410-L	1000 V, CAT II / 19 A	PVC 1,0 mm ²	Au CE	025 050 075 100 150 200	21 22 23 24 25 27
28.0103-□*	SLK425-L	1000 V, CAT II / 32 A	PVC 2,5 mm ²	Au CE	025 050 075 100 150 200	21 22 23 24 25 27
49.0105-□*	SLK425-L/N	1000 V, CAT II / 32 A	PVC 2,5 mm ²	Ni CE	025 050 075 100 150 200	21 22 23 24 25 27

Test Lead XM...-41...

Highly flexible, with insulation in PVC or silicone with in-line Ø 4 mm MULTILAM plug with rigid insulating sleeve on both ends.

XM...-41...



Order No.	Type	Rated voltage/current	Lead		Lead lengths L [cm] ¹⁾	*Colors ¹⁾
66.9013-□*	XMF-414	1000 V, CAT III / 19 A	PVC 1,0 mm ²	Ni CE c UL US	050 100 150 200	21 22 23
66.9014-□*	XMS-414	1000 V, CAT III / 19 A	SIL 1,0 mm ²	Ni CE c UL US	050 100 150 200	21 22 23
66.9303-□*	XMF-418	1000 V, CAT III / 32 A	PVC 2,5 mm ²	Ni CE	100 200	21 22 23
66.9304-□*	XMS-418	1000 V, CAT III / 32 A	SIL 2,5 mm ²	Ni CE	100 200	21 22 23

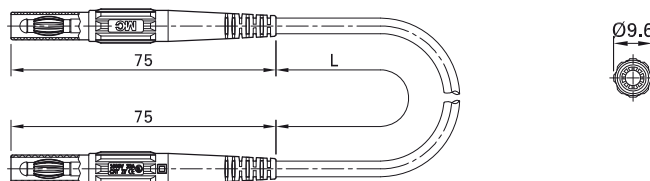
Test Lead XM...-419

Highly flexible, with insulation in PVC, TPE, or silicone with in-line Ø 4 mm MULTILAM plug with rigid insulating sleeve on both

ends. Due to the very high insulation resistance of the TPE insulation, the test lead

XMT-419 is excellently suited for measuring high resistances.

XM...-419



Order No.	Type	Rated voltage/current	Lead		Lead lengths L [cm] ¹⁾	*Colors ¹⁾
66.9391-□*	XMF-419	1000 V, CAT IV / 32 A	PVC 2,5 mm ²	Ni CE c UL US	100 200	21 22 23 27 28
66.9393-□*	XMT-419	1000 V, CAT IV / 32 A	TPE 2,5 mm ²	Ni CE	100	21 22 23
66.9392-□*	XMS-419	1000 V, CAT IV / 32 A	SIL 2,5 mm ²	Ni CE c UL US	100 150 200	21 22 23 27 28

¹⁾ Other color and/or length combinations available on request.

Fused Test Lead XSM...-419

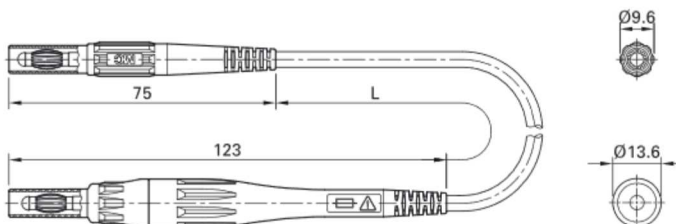
The test leads with integrated high breaking capacity fuses are designed for 1000 V, CAT IV in accordance with IEC/EN 61010-031 and allow for the use of Ø 4 mm standard safety probes and test clips for fuse-protected measurements.

To change the fuse, the two-part fused connector can be easily unscrewed.

Highly flexible, with insulation in PVC or silicone. With in-line Ø 4 mm MULTILAM plug with rigid insulating sleeve on both ends. The two-part screw connector accepts a high breaking capacity fuse measuring 6.3 x 32 mm.

The fuse is not supplied.

XSM...-419



Order No.	Type	Rated voltage/current	Lead		Lead lengths L [cm]	*Colors
66.9394-□*	XSMF-419	1000 V, CAT IV / max. 8 A ¹⁾	PVC 1,0 mm ²	Ni CE c UL us	100 150 200	21 22 23 24 25 26 27 28
66.9395-□*	XSMS-419	1000 V, CAT IV / max. 8 A ¹⁾	SIL 1,0 mm ²	Ni CE c UL us	100 150 200	21 22 23 24 25 26 27 28

¹⁾ Depends on the fuse used.



High breaking capacity fuse: page 110



Rating sheet RZ091

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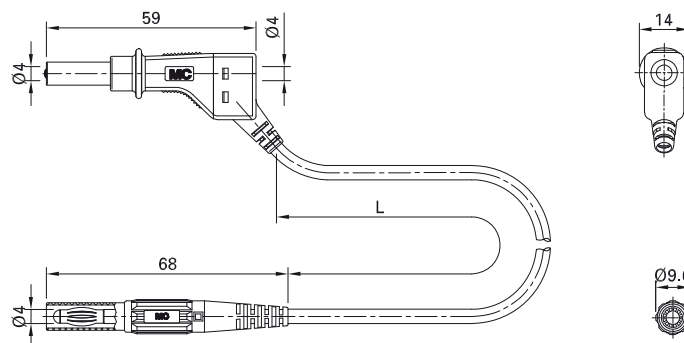
Test Lead XZG410-L

Highly flexible, with insulation in PVC. One end with stackable Ø 4 mm MULTILAM plug with protective collar and retractable sleeve

to prevent accidental touching especially suitable for connecting to electrical devices not (yet) equipped with safety sockets. The

other end with in-line Ø 4 mm MULTILAM plug with rigid insulating sleeve, e.g. for connecting probes or test clips.

XZG410-L



Order No.	Type	Rated voltage/current	Lead		Lead lengths L [cm] ¹⁾	*Colors ¹⁾
66.9411-□*	XZG410-L	600 V, CAT II / 19 A	PVC 1,0 mm ²	Ni CE	100 200	21 22 23



Rating sheet RZ073

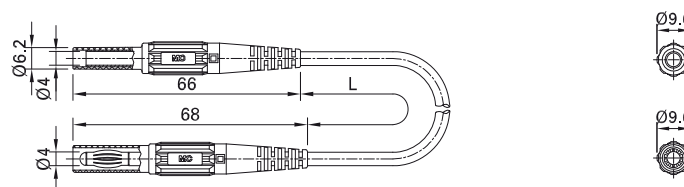
www.staubli.com/electrical

Extension Lead XK...-414

Highly flexible, with insulation in PVC or silicone. One end with Ø 4 mm MULTILAM plug

with rigid insulating sleeve, the other end with Ø 4 mm rigid socket with rigid insulating sleeve.

XK...-414



Order No.	Type	Rated voltage/current	Lead		Lead lengths L [cm] ¹⁾	*Colors ¹⁾
66.9011-□*	XKF-414	1000 V, CAT III / 19 A	PVC 1,0 mm ²	Ni CE cULus	050 100 150 200	21 22 23 24
66.9012-□*	XKS-414	1000 V, CAT III / 19 A	SIL 1,0 mm ²	Ni CE cULus	050 100 200	21 22 23

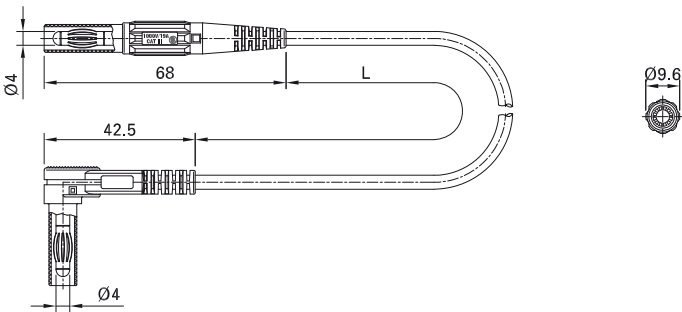
¹⁾ Other color and/or length combinations available on request.

Test Lead XM...-484

Highly flexible, with insulation in PVC or silicone. One end with in-line Ø 4 mm MULTILAM plug with rigid insulating sleeve.

The other end with right-angled Ø 4 mm MULTILAM plug with rigid insulating sleeve.

XM...-484



Order No.	Type	Rated voltage/current	Lead		Lead lengths L [cm] ¹⁾	*Colors ¹⁾
66.9005-□*	XMF-484	1000 V, CAT III / 19 A	PVC 1,0 mm ²	Ni CE c UL us	100 150 200	21 22 23 24 25
66.9006-□*	XMS-484	1000 V, CAT III / 19 A	SIL 1,0 mm ²	Ni CE c UL us	100 150 200	21 22 23 24 25

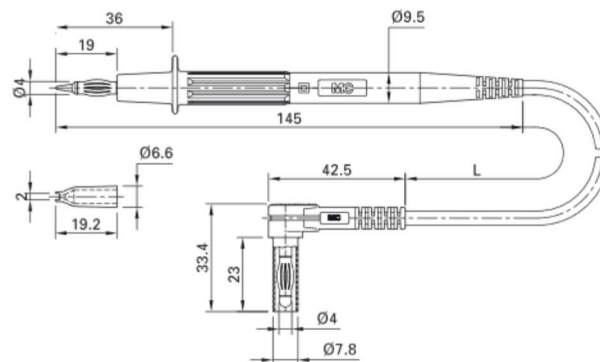
¹⁾ Other color and/or length combinations available on request.

Test Lead XP...-484

Highly flexible, with insulation in PVC or silicone. One end with Ø 4 mm test probe with spring-loaded MULTILAM, the other end

with right angled Ø 4 mm MULTILAM plug with rigid insulating sleeve. Supplied with protective cap.

XP...-484



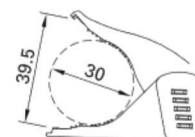
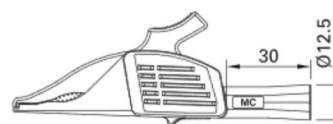
Order No.	Type	Rated voltage/current	Lead		Lead lengths L [cm]	*Colors
66.9008-□*	XPF-484	1000 V, CAT II / 20 A	PVC 1,0 mm ²	Ni CE c UL us	100 150	21 22 23
66.9007-□*	XPS-484	1000 V, CAT II / 20 A	SIL 1,0 mm ²	Ni CE c UL us	100 150 200	21 22 23



Pluggable accessories XDK-1033P, see below

Accessories

XDK-1033P



Dolphin Clip made of brass with all-round insulation. Toothed jaws for wide grip with surface for fine wire.

Note: Longer version especially designed to plug onto the Ø 4 mm probes of test leads XPF-484 and XPS-484, see above.

Order No.	Type	Rated voltage/current		*Colors
66.9521-*	XDK-1033P	1000 V, CAT II / 19 A	Ni CE c UL us	21 22

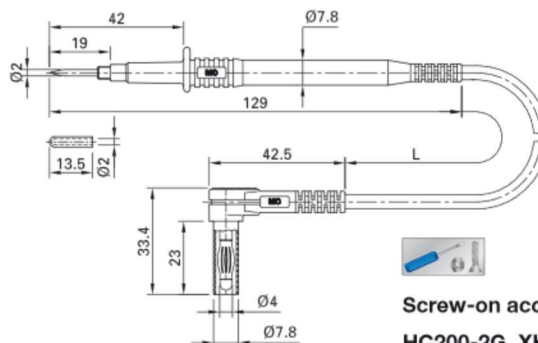
Test Lead XPF-480/2G

Highly flexible test leads. One end with Ø 2 mm test probe made of stainless steel with a thread for use with screw-on acces-

sories, offering various contacting possibilities. The other end with in-line or right angled

Ø 4 mm MULTILAM plug with rigid insulating sleeve. Supplied with protective cap.

XPF-480/2G



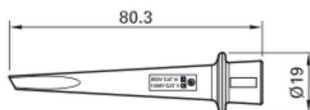
Screw-on accessories

HC200-2G, XKK-200-2G, see below

Order No.	Type	Rated voltage/current	Lead		Lead lengths L [cm]	*Colors
66.9645-□*	XPF-480/2G	1000 V, CAT II / 15 A	PVC 0,75 mm ²	Ni CE c UL us	100 150	21 22

Accessories

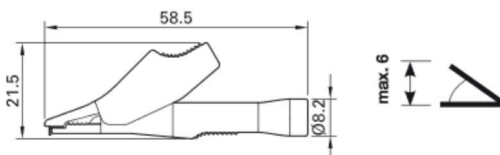
HC200-2G



Hook Clip with rigid hook. Grasped objects are pressed against the tip of the insulator under spring pressure. Internal thread for

attachment to the probes of the test leads XPF-480/2G, see above.

XKK-200-2G



Test Clip with all-round insulation. Toothed gripping jaws with fine-wire clamping surface.

Internal thread for attachment to the probes of the test leads XPF-480/2G, see above.

Order No.	Type	Rated voltage/current		*Colors
66.9473-*	HC200-2G	1000 V, CAT II / 5 A	Ni CE	21 22
66.9091-*	XKK-200-2G	600 V, CAT II / 10 A	Ni CE	21 22

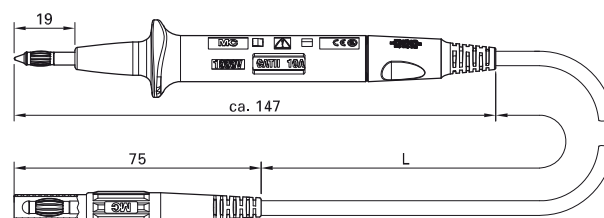
Ø 4 mm Test Leads with Test Probes

Test Lead XSPP-419...

Highly flexible, with PVC or silicone insulation. One end Ø 4 mm test probe with

spring-loaded MULTILAM, adjustable for use in different measurement categories,

other end in-line Ø 4 mm MULTILAM plug with rigid insulating sleeve.



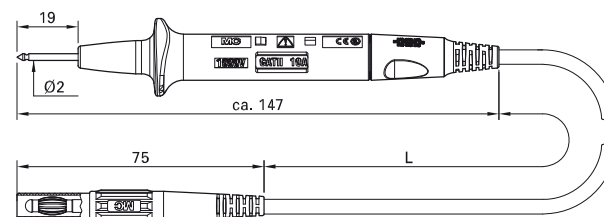
Order No.	Type	Rated voltage/current	Lead		Lead lengths L [cm] ¹⁾	*Colors ¹⁾
66.9315-□*	XSPP-419	1000 V, CAT II / 32 A 1000 V, CAT IV / 1 A	PVC 2,5 mm ²	Ni CE c UL US	100 150	21 22 23
66.9320-□*	XSPP-419/SIL	1000 V, CAT II / 32 A 1000 V, CAT IV / 1 A	SIL 2,5 mm ²	Ni CE c UL US	100 150	21 22 23

Test Lead XSPP-2R-419...

Highly flexible, with PVC or silicone insulation. One end Ø 2 mm test probe made of Monel®, adjustable for use in different

measurement categories, other end in-line Ø 4 mm MULTILAM plug with rigid insulating sleeve.

Monel® is a registered trademark of Special Metals Corporation.



Order No.	Type	Rated voltage/current	Lead		Lead lengths L [cm]	*Colors
66.9335-□*	XSPP-2R-419	1000 V, CAT II / 10 A 1000 V, CAT IV / 1 A	PVC 2,5 mm ²	CE	100 150	21 22 23
66.9336-□*	XSPP-2R-419/SIL	1000 V, CAT II / 10 A 1000 V, CAT IV / 1 A	SIL 2,5 mm ²	CE	100 150	21 22 23

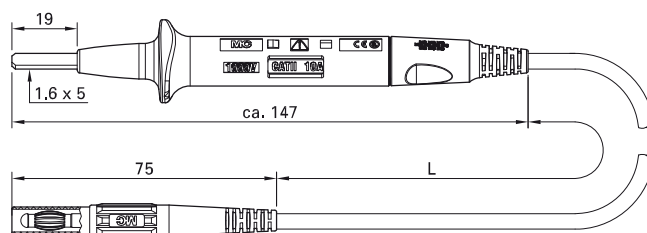
¹⁾ Other color and/or length combinations available on request.



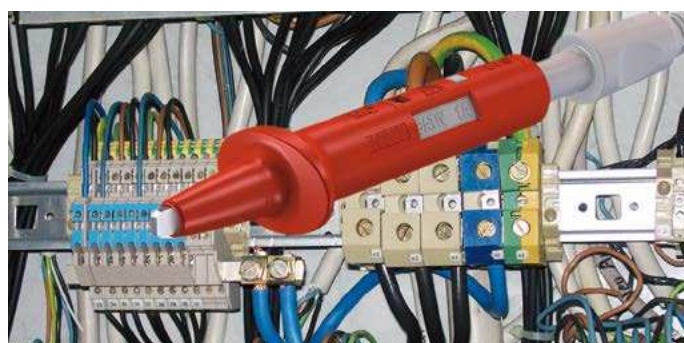
Test Lead XSPP-2F-419...

Highly flexible, with PVC or silicone insulation. One end test probe with flat tip 1,6 mm x 5 mm, made of nickel-plated brass, for contact to US power sockets,

etc., adjustable for use in different measurement categories, other end in-line Ø 4 mm MULTILAM plug with rigid insulating sleeve.



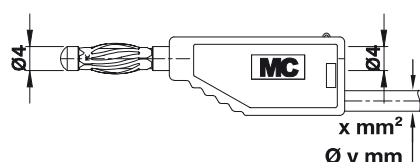
Order No.	Type	Rated voltage/current	Lead		Lead lengths L [cm]	*Colors
66.9338-□*	XSPP-2F-419	1000 V, CAT II / 10 A 1000 V, CAT IV / 1 A	PVC 2,5 mm ²	Ni C E	100 150	21 22 23
66.9339-□*	XSPP-2F-419/SIL	1000 V, CAT II / 10 A 1000 V, CAT IV / 1 A	SIL 2,5 mm ²	Ni C E	100 150	21 22 23



Ø 4 mm Plugs and Sockets

This section contains plugs and sockets for self-assembled test leads. The information about each item includes details regarding connectable conductor

cross-sections and diameters, as well as regarding the available assembly instructions.



In the production of our test leads we use only high-quality multi-stranded cables of our own production. If you are interested in

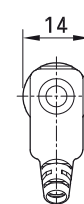
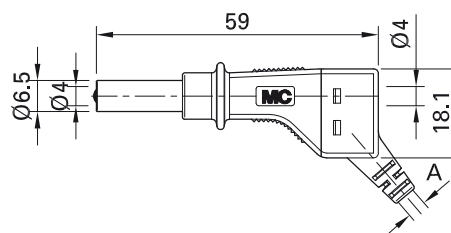
our full range of stranded cables, please ask for a copy of our main catalog "Cables and Multistrand Wires".

Plug XZGL-...

Stackable, Ø 4 mm, with spring-loaded MULTILAM, for self-assembly of test leads. With retractable sleeve to prevent accidental touching. As a result of the protective collar,

the clearances and creepage distances allow test leads equipped with this plug also to be safely connected to older test instruments not yet fitted with safety sockets up to 600 V,

CAT II in accordance with the standards. **Screw connection.**



Order No.	Type	Rated voltage/current	Cable (A)		Assembly instructions		*Colors ¹⁾
66.9327-*	XZGL-410	600 V, CAT II / 19 A	min. Ø 3,4 mm max. Ø 3,9 mm	1,0 mm²	MAH557	<div>Ni</div>	<div><div>20</div><div>21</div><div>22</div><div>23</div><div>24</div></div> <div><div>25</div></div>
66.9328-*	XZGL-425	600 V, CAT II / 32 A	min. Ø 3,4 mm max. Ø 3,9 mm	2,5 mm²	MAH558	<div>Ni</div>	<div><div>20</div><div>21</div><div>22</div><div>23</div><div>24</div></div> <div><div>25</div><div>26</div><div>27</div><div>28</div></div>

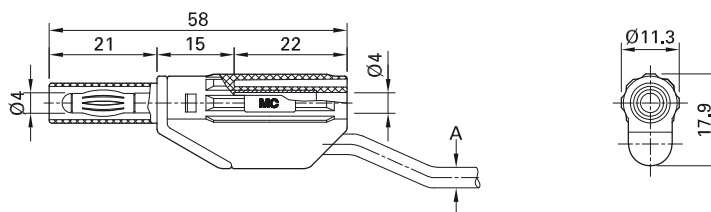
¹⁾ Other colors available on request.



Plug XL-446

Stackable, Ø 4 mm, with spring-loaded MULTILAM, for self-assembly of test leads.
With rigid insulating sleeve.

Screw connection.



Order No.	Type	Rated voltage/current	Cable (A)		*Colors
66.9706-*	XL-446	600 V, CAT II / 32 A	max. Ø 3,9 mm max. 2,5 mm ²	Ni	<div>20 21 22 23 24</div> <div>25 26 27 29</div>



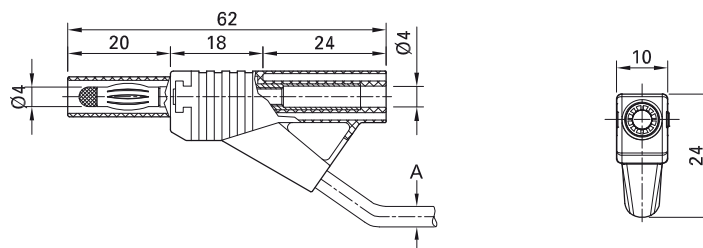
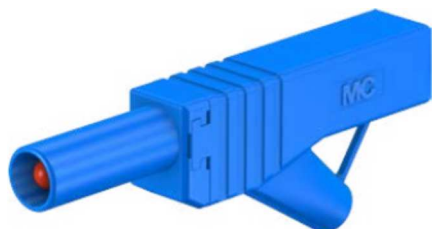
Assembly instructions MAH501

www.staubli.com/electrical

Plug XL-459/30

Stackable, Ø 4 mm, with spring-loaded MULTILAM, for self-assembly of test leads.
With rigid insulating sleeve. With 30° cable outlet.

Screw connection.



Order No.	Type	Rated voltage/current	Cable (A)		*Colors
66.9649-*	XL-459/30	1000 V, CAT II / 32 A 600 V, CAT III / 32 A	max. Ø 3,9 mm max. 2,5 mm ²	Ni	<div>21 22 23 24 25</div> <div>26 27</div>



Assembly instructions MAH502

www.staubli.com/electrical

Plug SLS425-SE...

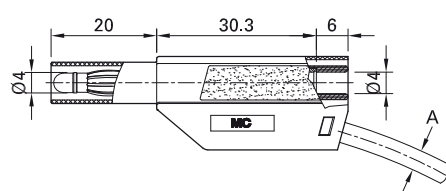
Stackable, Ø 4 mm, with spring-loaded MULTILAM, for self-assembly of test leads. With rigid insulating sleeve. Nickel-plated and gold-plated versions available.

Various types of connection:

SLS425-SE/M: Screw connection

SLS425-SE/(N): Cylindrical soldering surface

SLS425-SE/Q/(N): Cross hole for solder connection



Order No.	Type	Rated voltage/current	Cable (A)		*Colors
22.2656-*	SLS425-SE/M	1000 V, CAT II / 32 A 600 V, CAT III / 32 A	~ Ø 3,9 mm 0,75 ... 2,5 mm ²	Au	20 21 22 23 24 25 26 27 28 29
22.2655-*	SLS425-SE	1000 V, CAT II / 32 A 600 V, CAT III / 32 A	~ Ø 3,9 mm 0,75 ... 2,5 mm ²	Au	20 21 22 23 24 25 26 27 28 29
22.2654-*	SLS425-SE/N	1000 V, CAT II / 32 A 600 V, CAT III / 32 A	~ Ø 3,9 mm 0,75 ... 2,5 mm ²	Ni	20 21 22 23 24 25 26 27 28 29
22.2658-*	SLS425-SE/Q	1000 V, CAT II / 32 A 600 V, CAT III / 32 A	~ Ø 3,9 mm 0,75 ... 2,5 mm ²	Au	20 21 22 23 24 25 26 27 28 29
22.2657-*	SLS425-SE/Q/N	1000 V, CAT II / 32 A 600 V, CAT III / 32 A	~ Ø 3,9 mm 0,75 ... 2,5 mm ²	Ni	20 21 22 23 24 25 26 27 28 29

Component parts

22.2380-*	KT425-SE	Insulator (*Colors see: SLS425-SE/M)
22.1027	LS425-SE/M	Plug suitable for: SLS425-SE/M
22.1047	LS425-SE	Plug suitable for: SLS425-SE
22.1048	LS425-SE/N	Plug suitable for: SLS425-SE/N
22.1203	LS425-SE/Q	Plug suitable for: SLS425-SE/Q
22.1204	LS425-SE/Q/N	Plug suitable for: SLS425-SE/Q/N



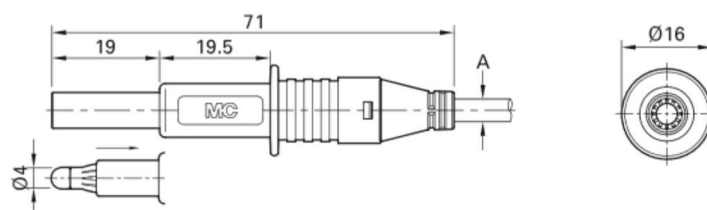
Plug X-GL-438

In-line, Ø 4 mm, with spring-loaded MULTILAM, for self-assembly of test leads. With retractable sleeve to prevent accidental touching. As a result of the protective col-

lar, the clearances and creepage distances allow test leads equipped with this plug also to be safely connected to older test instruments not yet fitted with safety sockets

up to 600 V, CAT II in accordance with the standards.

Screw connection.



Order No.	Type	Rated voltage/current	Cable (A)		*Colors
66.9584-*	X-GL-438	600 V, CAT II / 32 A	max. Ø 3,9 mm max. 2,5 mm ²	Ni	21 22 23



Assembly instructions MAH547

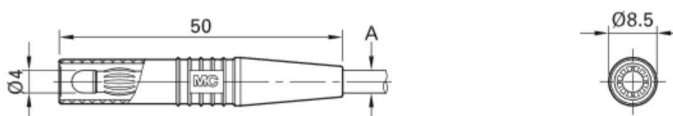
www.staubli.com/electrical

Plug SLS425-SL...

In-line, Ø 4 mm, with spring-loaded MULTILAM, for self-assembly of test leads.

With rigid insulating sleeve. Nickel-plated and gold-plated versions available.

Solder connection.



Order No.	Type	Rated voltage/current	Cable (A)		*Colors
22.2663-*	SLS425-SL	1000 V, CAT II / 32 A	max. Ø 4,1 mm 2,5 mm ²	Au	21 22 23
22.2665-*	SLS425-SL/N	1000 V, CAT II / 32 A	max. Ø 4,1 mm 2,5 mm ²	Ni	21 22 23

Component parts

22.2260	KT425-SL	Insulator (*Colors see SLS425-SL)
22.1025	LS425-SL	Plug suitable for: SLS425-SL
22.1032	LS425-SL/N	Plug suitable for: SLS425-SL/N



Assembly instructions MA106

www.staubli.com/electrical



Recommended mounting tool

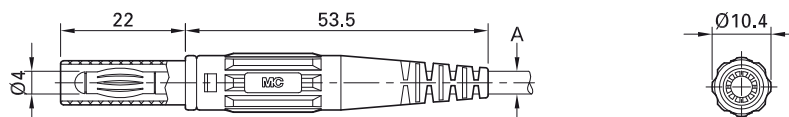
Crimping pliers PZK3, page 109

Plug XL-410

In-line, Ø 4 mm, with spring-loaded MULTILAM, for self-assembly of test leads.

With rigid insulating sleeve.

Screw connection.



Order No.	Type	Rated voltage/current	Cable (A)			*Colors										
66.9196-*	XL-410	1000 V, CAT II / 32 A 600 V, CAT III / 32 A	max. Ø 3,9 mm	max. 2,5 mm²	Ni	<table><tr><td>21</td><td>22</td><td>23</td><td>24</td><td>25</td></tr><tr><td>26</td><td>27</td><td>29</td><td></td><td></td></tr></table>	21	22	23	24	25	26	27	29		
21	22	23	24	25												
26	27	29														



Assembly instructions MAH503

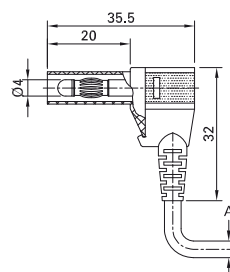
www.staubli.com/electrical

Plug SLS425-SW...

Right-angled, Ø 4 mm, with spring-loaded MULTILAM, for self-assembly of test leads.
With rigid insulating sleeve. Nickel-plat-

ed and gold-plated versions available.

Solder connection.



Order No.	Type	Rated voltage/current	Cable (A)			*Colors
22.2667-*	SLS425-SW	500 V, CAT II / 32 A	max. 3,9 mm	max. 2,5 mm ²	Ni	<div><div>20</div><div>21</div><div>22</div><div>23</div><div>24</div><div>25</div><div>26</div></div>
22.2668-*	SLS425-SW/A	500 V, CAT II / 32 A	max. 3,9 mm	max. 2,5 mm ²	Au	<div><div>20</div><div>21</div><div>22</div><div>23</div><div>24</div><div>25</div><div>26</div></div>

Component parts

22.2370-*	KT425-SW	Insulator (*Colors see SLS425-SW)
22.1042	LS425-SW	Plug suitable for: SLS425-SW
22.1045	LS425-SW/A	Plug suitable for: SLS425-SW/A



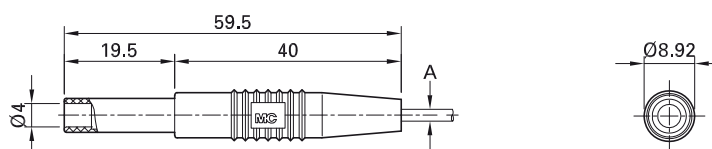
Assembly instructions MA107

www.staubli.com/electrical

Socket SLS410-BK

In-line, rigid, Ø 4 mm, accepting spring-loaded Ø 4 mm plugs with rigid insulating sleeve, for self-assembly of test leads.

Solder connection.



Order No.	Type	Rated voltage/current	Cable (A)		*Colors
22.2672-*	SLS410-BK	600 V, CAT II / 19 A	Ø 2,9 mm 1,0 mm ²	Au	21 22

Component parts

22.2250-*	KT410-BK	Insulator (*Colors see SLS410-BK)
22.1037	LS410-BK-I	Socket suitable for: SLS410-BK



Assembly instructions MA129

www.staubli.com/electrical



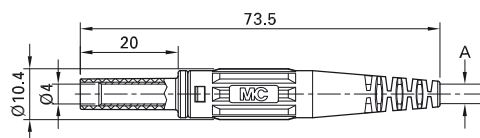
Rating sheet RZ200

www.staubli.com/electrical

Socket XK-410

In-line, rigid, Ø 4 mm, accepting spring-loaded Ø 4 mm plugs with rigid insulating sleeve, for self-assembly of test leads.

Screw connection.



Order No.	Type	Rated voltage/current	Cable (A)		*Colors
66.9155-*	XK-410	1000 V, CAT II / 32 A 600 V, CAT III / 32 A	max. Ø 3,9 mm max. 2,5 mm ²	Ni	21 22 23 24 25 26



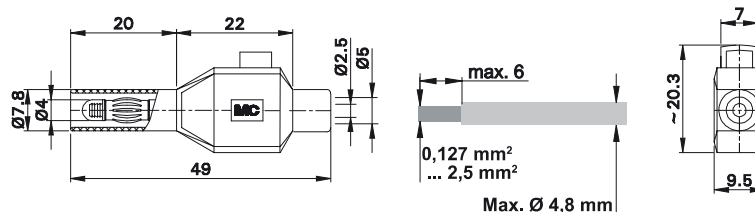
Assembly instructions MAH548

www.staubli.com/electrical

Plug SKLS4

Ø 4 mm, with spring-loaded MULTILAM, for clamp-connecting stranded wires. With rigid insulating sleeve.

Clamp connection.



Order No.	Type	Rated voltage/current		*Colors
22.3007-*	SKLS4	600 V, CAT II / 10 A ¹⁾	Ni	21 22

¹⁾ During installation of this clip-on plug, the terminal must not be connected to the supply.

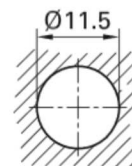
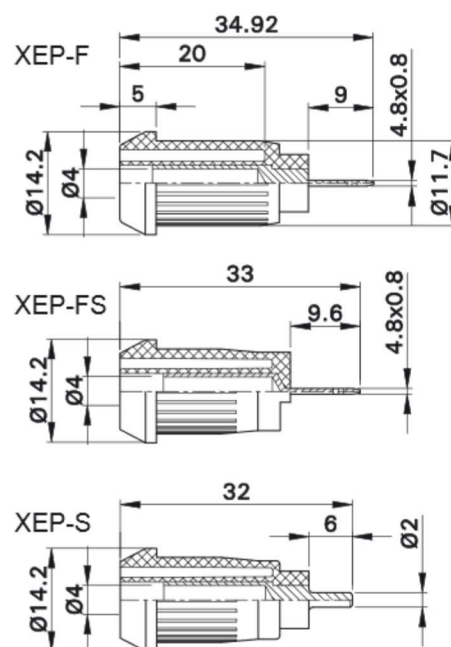
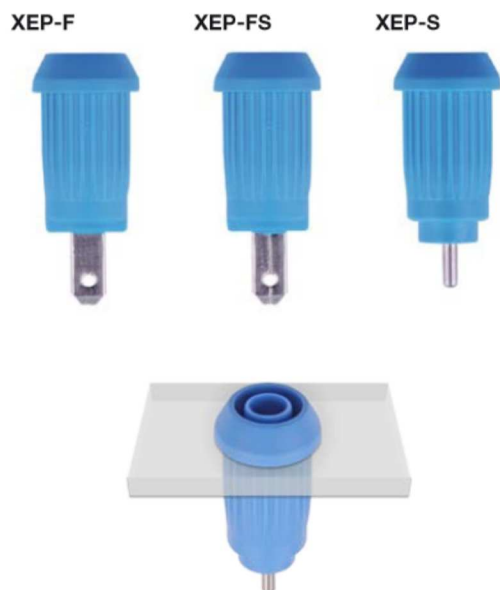


Press-in Socket XEP-...

Insulated, rigid, Ø 4 mm, accepting spring-loaded Ø 4 mm plugs with rigid insulating sleeve. The socket is pressed into

pre-drilled panels of plastic, metal, etc.

Various metal parts/connections.



Order No.	Type	Rated voltage/current	Connection		*Colors ¹⁾
66.9682-*	XEP-F	1000 V, CAT III / 20 A	Machined brass/Flat connecting tab 4.8 mm x 0.8 mm	Ni c US	21 22 23 24
66.9685-*	XEP-FS	1000 V, CAT III / 20 A	Brass sheet, rolled/Flat connecting tab 4.8 mm x 0.8 mm	Ni c US	21 22 23
66.9681-*	XEP-S	1000 V, CAT III / 20 A	Machined brass/Solder pin Ø 2.0 mm	Ni c US	21 22 23

¹⁾ Other colors available on request.



Flat connecting receptacles FSH4,8x0,8,
page 107

Press-in tool MB4-S, page 108



Assembly instructions MAH505

www.staubli.com/electrical

Press-in Socket SEB4-F...

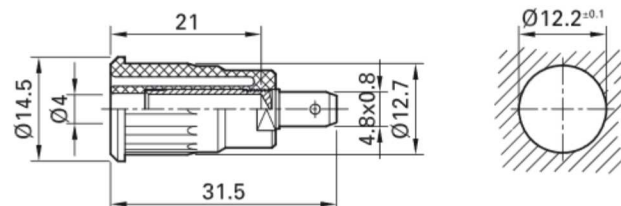
Insulated, rigid, Ø 4 mm, accepting spring-loaded Ø 4 mm plugs with rigid insulating sleeve. Machined brass. The socket

is pressed into pre-drilled panels of plastic, metal, etc.

Connection: Flat connecting tab.

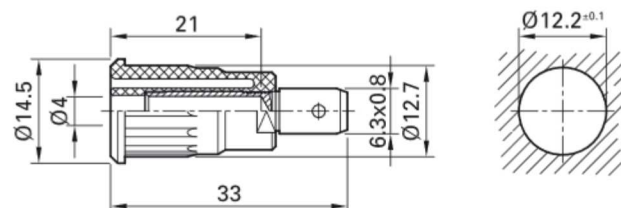
SEB4-F

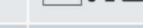
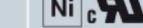

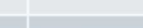
SEB4-F/N



SEB4-F6,3

SEB4-F6,3/N



Order No.	Type	Rated voltage/current	Connection		*Colors										
23.3120-*	SEB4-F	1000 V, CAT III / 24 A	Flat connecting tab 4,8 mm × 0,8 mm		<table><tr><td>20</td><td>21</td><td>22</td><td>23</td><td>24</td></tr><tr><td>25</td><td>27</td><td>28</td><td></td><td></td></tr></table>	20	21	22	23	24	25	27	28		
20	21	22	23	24											
25	27	28													
49.7079-*	SEB4-F/N	1000 V, CAT III / 24 A	Flat connecting tab 4,8 mm × 0,8 mm		<table><tr><td>20</td><td>21</td><td>22</td><td>23</td><td>24</td></tr><tr><td>25</td><td>27</td><td>28</td><td></td><td></td></tr></table>	20	21	22	23	24	25	27	28		
20	21	22	23	24											
25	27	28													
23.3150-*	SEB4-F6,3	1000 V, CAT III / 32 A	Flat connecting tab 6,3 mm × 0,8 mm		<table><tr><td>20</td><td>21</td><td>22</td><td>23</td><td>24</td></tr><tr><td>25</td><td>27</td><td>28</td><td></td><td></td></tr></table>	20	21	22	23	24	25	27	28		
20	21	22	23	24											
25	27	28													
49.7073-*	SEB4-F6,3/N	1000 V, CAT III / 32 A	Flat connecting tab 6,3 mm × 0,8 mm		<table><tr><td>20</td><td>21</td><td>22</td><td>23</td><td>24</td></tr><tr><td>25</td><td>27</td><td>28</td><td></td><td></td></tr></table>	20	21	22	23	24	25	27	28		
20	21	22	23	24											
25	27	28													



Flat connecting receptacles FSH...,

page 107

Press-in tool MB4-S, page 108



Assembly instructions MA104

www.staubli.com/electrical

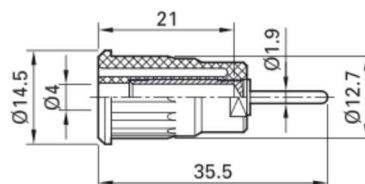
Press-in Socket SEB4-...

Insulated, rigid, Ø 4 mm, accepting spring-loaded Ø 4 mm plugs with rigid in-

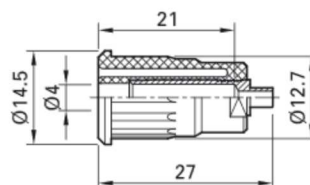
ulating sleeve. Machined brass. The socket is pressed into pre-drilled panels of plastic, metal, etc. **Connection: Various.**

SEB4-R

SEB4-R/N

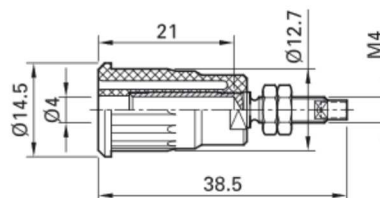
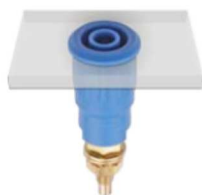


SEB4-E



SEB4-G

SEB4-G/N-X



Order No.	Type	Rated voltage/current	Connection		*Colors
23.3130-*	SEB4-R	1000 V, CAT III / 24 A	Round connecting pin Ø 1.9 mm	Au c us	20 21 22 23 24 25 27 28
49.7080-*	SEB4-R/N	1000 V, CAT III / 24 A	Round connecting pin Ø 1.9 mm	Ni c us	20 21 22 23 24 25 27 28
49.7091-*	SEB4-E	1000 V, CAT III / 24 A	Solder connection	Ni c us	20 21 22 23 24 25 27 28
23.3140-*	SEB4-G	1000 V, CAT III / 24 A	Threaded bolt M4 and soldering hole	Au c us	20 21 22 23 24 25 27 28
49.7092-*	SEB4-G/N-X	1000 V, CAT III / 24 A	Threaded bolt M4 and soldering hole	Ni c us	20 21 22 23 24 25 27

Supplied assembly material

Page 103	MU0,8D/M4	2 hexagon nuts for	SEB4-G
Page 104	U/M4	2 washers for	SEB4-G
Page 105	FS/M4	Spring washer for	SEB4-G

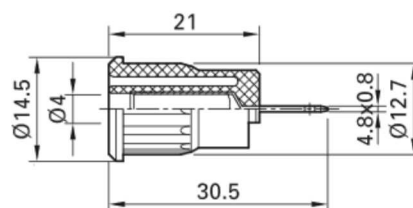



Press-in Socket SEB4-F/A

Insulated, rigid, Ø 4 mm, accepting spring-loaded Ø 4 mm plugs with rigid insulating sleeve. Brass sheet. The socket is

pressed into pre-drilled panels of plastic, metal, etc.

Connection: Flat connecting tab 4.8 mm × 0.8 mm, can be bent to 90°, once only.



Order No.	Type	Rated voltage/current		*Colors
23.3160-*	SEB4-F/A	1000 V, CAT III / 24 A	Ni c  us	<div>20 21 22 23 24</div> <div>25</div>



Assembly instructions MA104
www.staubli.com/electrical



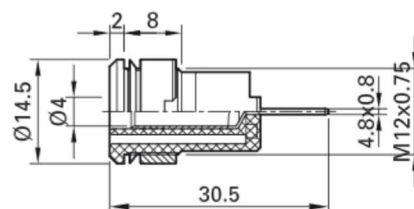
Flat connecting receptacles FSH4,8x0,8,
 page 107
 Press-in tool MB4-S, page 108


Panel-mount Socket SLB4-F/A

Insulated, rigid, Ø 4 mm, accepting spring-loaded Ø 4 mm plugs with rigid insulating sleeve. Brass sheet. The socket is

screwed into pre-drilled panels of plastic, metal, etc.

Connection: Flat connecting tab 4.8 mm × 0.8 mm, can be bent to 90°, once only.



Order No.	Type	Rated voltage/current		*Colors
23.3070-*	SLB4-F/A	1000 V, CAT III / 24 A	Ni c  us	<div>20 21 22 23 24</div> <div>25 26 27 28 29</div>

Supplied assembly material

Page 104	MUR/M12x0,75	Round nut
Page 104	SSP4	Washer



Assembly instructions MA152
www.staubli.com/electrical



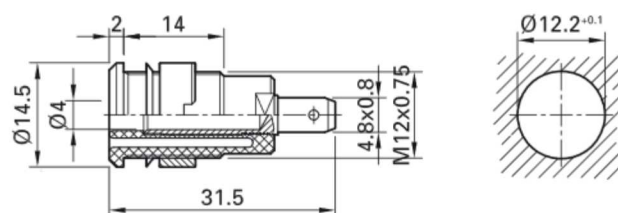
Flat connecting receptacles FSH4,8x0,8, page 107
 Tube spanners SS2, SS425, page 107

Panel-mount Socket SLB4-F...

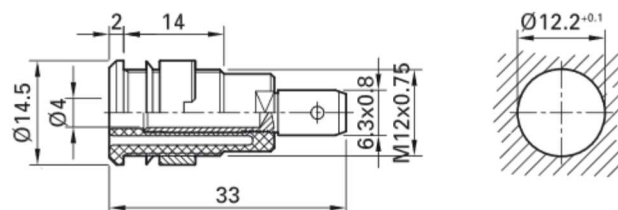
Insulated, rigid, Ø 4 mm, accepting spring-loaded Ø 4 mm plugs with rigid insulating sleeve. Machined brass. The socket





is screwed into pre-drilled panels of plastic, metal, etc. **Connection: Flat connecting tab.**

SLB4-F SLB4-F/N-X



SLB4-F6,3 SLB4-F6,3/N-X



Order No.	Type	Rated voltage/current	Connection		*Colors										
23.3000-*	SLB4-F	1000 V, CAT III / 24 A	Flat connecting tab 4.8 mm × 0.8 mm	Au c  us	<table><tr><td>20</td><td>21</td><td>22</td><td>23</td><td>24</td></tr><tr><td>25</td><td>26</td><td>27</td><td>28</td><td>29</td></tr></table>	20	21	22	23	24	25	26	27	28	29
20	21	22	23	24											
25	26	27	28	29											
49.7044-*	SLB4-F/N-X	1000 V, CAT III / 24 A	Flat connecting tab 4.8 mm × 0.8 mm	Ni c  us	<table><tr><td>20</td><td>21</td><td>22</td><td>23</td><td>24</td></tr><tr><td>25</td><td>26</td><td>27</td><td>28</td><td>29</td></tr></table>	20	21	22	23	24	25	26	27	28	29
20	21	22	23	24											
25	26	27	28	29											
23.3060-*	SLB4-F6,3	1000 V, CAT III / 32 A	Flat connecting tab 6.3 mm × 0.8 mm	Au c  us	<table><tr><td>20</td><td>21</td><td>22</td><td>23</td><td>24</td></tr><tr><td>25</td><td>26</td><td>27</td><td>28</td><td>29</td></tr></table>	20	21	22	23	24	25	26	27	28	29
20	21	22	23	24											
25	26	27	28	29											
49.7046-*	SLB4-F6,3/N-X	1000 V, CAT III / 32 A	Flat connecting tab 6.3 mm × 0.8 mm	Ni c  us	<table><tr><td>20</td><td>21</td><td>22</td><td>23</td><td>24</td></tr><tr><td>25</td><td>26</td><td>27</td><td>28</td><td>29</td></tr></table>	20	21	22	23	24	25	26	27	28	29
20	21	22	23	24											
25	26	27	28	29											

Supplied assembly material

Page 104	MUR/M12x0,75	Round nut, suitable for	SLB4-F, SLB4-F/N-X, SLB4-F6,3, SLB4-F6,3/N-X
Page 104	SSP4	Washer, suitable for	SLB4-F, SLB4-F6,3



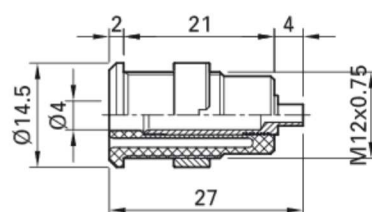
Panel-mount Socket SLB4-...

Insulated, rigid, Ø 4 mm, accepting spring-loaded Ø 4 mm plugs with rigid insulating sleeve. Machined brass. The socket

is screwed into pre-drilled panels of plastic, metal, etc.

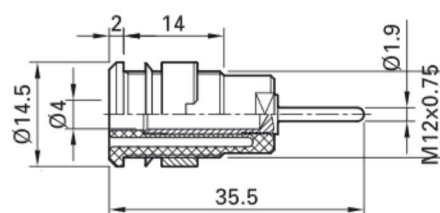
Connection: Various.

SLB4-E



SLB4-R

SLB4-R/N-X



Order No.	Type	Rated voltage/current	Connection		*Colors
49.7049-*	SLB4-E	1000 V, CAT III / 24 A	Solder connection	<div>Ni</div>	<div><div>2021222324</div><div>2526272829</div></div>
23.3010-*	SLB4-R	1000 V, CAT III / 24 A	Round connecting pin Ø 1.9 mm	<div>Au</div> <div><div>c</div><div></div><div>us</div></div>	<div><div>2021222324</div><div>2526272829</div></div>
49.7048-*	SLB4-R/N-X	1000 V, CAT III / 24 A	Round connecting pin Ø 1.9 mm	<div>Ni</div> <div><div>c</div><div></div><div>us</div></div>	<div><div>2021222324</div><div>25</div></div>

Supplied assembly material

Page 104	MUR/M12x0,75	Round nut for	SLB4-E, SLB4-R, SLB4-R/N-X
Page 104	SSP4	Washer	SLB4-R



Tube spanners SS2, SS425, page 107



Assembly instructions MA152

www.staubli.com/electrical

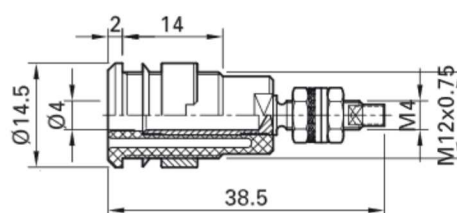
Panel-mount Socket SLB4-G...

Insulated, rigid, Ø 4 mm, accepting spring-loaded Ø 4 mm plugs with rigid insulating sleeve. Machined brass. The socket

is screwed into pre-drilled panels of plastic, metal, etc. **Connection: Threaded bolt M4 and soldering hole.**

SLB4-G

SLB4-G/N-X



Order No.	Type	Rated voltage/current		*Colors										
23.3020-*	SLB4-G	1000 V, CAT III / 32 A	Au c  us	<table border="1"> <tr><td>20</td><td>21</td><td>22</td><td>23</td><td>24</td></tr> <tr><td>25</td><td>26</td><td>27</td><td>28</td><td>29</td></tr> </table>	20	21	22	23	24	25	26	27	28	29
20	21	22	23	24										
25	26	27	28	29										
49.7043-*	SLB4-G/N-X	1000 V, CAT III / 32 A	Ni c  us	<table border="1"> <tr><td>20</td><td>21</td><td>22</td><td>23</td><td>24</td></tr> <tr><td>25</td><td>26</td><td>27</td><td>28</td><td>29</td></tr> </table>	20	21	22	23	24	25	26	27	28	29
20	21	22	23	24										
25	26	27	28	29										

Supplied assembly material

Page 103	MU0,8D/M4	2 hexagon nuts, suitable for	SLB4-G
Page 103	MU0,8D/M4N	2 hexagon nuts, suitable for	SLB4-G/N-X
Page 104	MUR/M12x0,75	Round nut, suitable for	SLB4-G, SLB4-G/N-X
Page 104	SSP4	Washer, suitable for	SLB4-G
Page 104	U/M4	2 washers, suitable for	SLB4-G
Page 105	FS/M4	Spring washer, suitable for	SLB4-G



Tube spanners SS2, SS425, page 107



Assembly instructions MA152

www.staubli.com/electrical

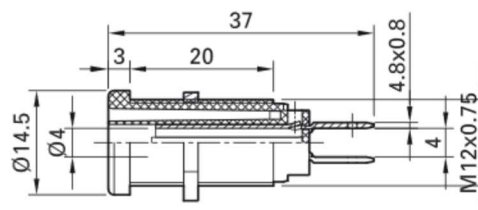
Panel-mount Socket XEB-1...

Insulated, rigid, Ø 4 mm, accepting spring-loaded Ø 4 mm plugs with rigid insulating sleeve. Brass sheet. The socket consists of two insulated, semi-circular

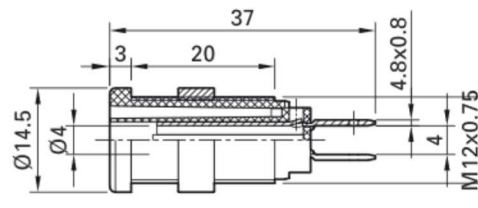
contacts, which are connected to each other when a plug is inserted (switch function). The socket is screwed into pre-drilled panels of plastic, metal, etc.


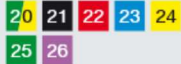


Connection: 2x Flat connecting tab 4.8 mm x 0.8 mm.

XEB-1R



XEB-1RR



Order No.	Type	Rated voltage/current	Connection		*Colors ¹⁾
66.9131-*	XEB-1R	1000 V, CAT IV / 20 A	2 x Flat connecting tab 4,8 mm x 0,8 mm	Ni c  us	
66.9850-*	XEB-1RR	1000 V, CAT IV / 20 A	2 x Flat connecting tab 4,8 mm x 0,8 mm	Ni c  us	

Supplied assembly material

Page 103	GEW.12-MUTTER	Hexagon nut for XEB-1R
Page 104	MUR/M12x0,75	Round nut for XEB-1RR

¹⁾ Other colors available on request.



Flat connecting receptacles FSH4,8x0,8,
page 107

Tube spanners SS2, SS425, page 107



Assembly instructions MAH506, MAH509

www.staubli.com/electrical

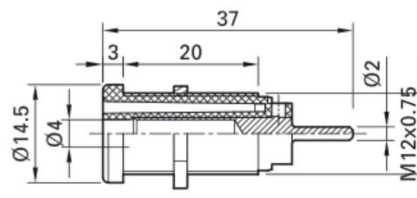
Panel-mount Socket XE...-1...

Insulated, rigid, Ø 4 mm, accepting spring-loaded Ø 4 mm plugs with rig-

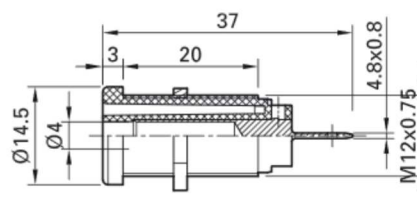
id insulating sleeve. Machined brass. The sockets are screwed into pre-

drilled panels of plastic, metal, etc. Various metal parts/connections.

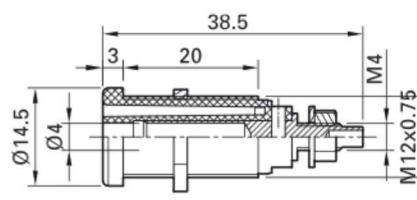
XES-1R



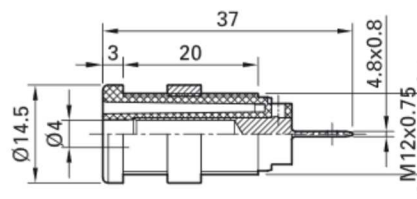
XEF-1R







XEG-1R



XEF-1RR



Order No.	Type	Rated voltage/current	Connection		*Colors ¹⁾
66.9661-*	XES-1R	1000 V, CAT IV / 24 A	Solder pin Ø 2,0 mm	Ni c  us	21 22 23
66.9665-*	XEF-1R	1000 V, CAT IV / 24 A	Flat connecting tab 4.8 mm x 0.8 mm	Ni c  us	20 21 22 23 24
66.9136-*	XEG-1R	1000 V, CAT IV / 20 A	Threaded bolt M4	Ni c  us	20 21 22 23
66.9854-*	XEF-1RR	1000 V, CAT IV / 24 A	Flat connecting tab 4.8 mm x 0.8 mm	Ni c  us	21 22 23

Supplied assembly material

Page 103	GEW.12-MUTTER	Hexagon nut for	XES-1R, XEF-1R, XEG-1R
Page 104	MUR/M12x0,75	Round nut for	XEF-1RR



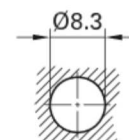
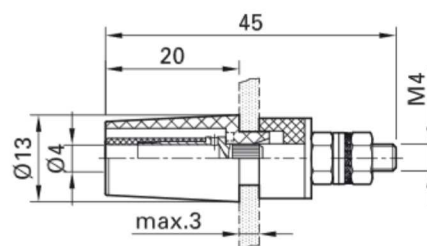
Mounting Socket SAB4-G...

Insulated, rigid, Ø 4 mm, accepting spring-loaded Ø 4 mm plugs with rigid insulating sleeve. Machined brass. The socket

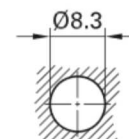
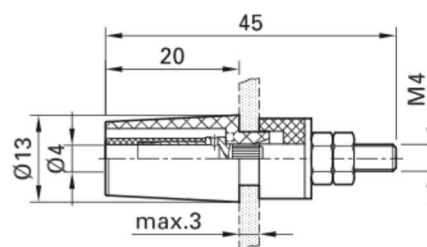
is surface-mounted in pre-drilled panels of plastic, metal, etc.


Connection: Threaded bolt M4.

SAB4-G



SAB4-G/N-X



Order No.	Type	Rated voltage/current		*Colors										
23.3050-*	SAB4-G	600 V, CAT II / 32 A	Au c  us	<table border="1"> <tr> <td>20</td><td>21</td><td>22</td><td>23</td><td>24</td> </tr> <tr> <td>25</td><td>26</td><td>27</td><td>28</td><td>29</td> </tr> </table>	20	21	22	23	24	25	26	27	28	29
20	21	22	23	24										
25	26	27	28	29										
49.7042-*	SAB4-G/N-X	600 V, CAT II / 32 A	Ni	<table border="1"> <tr> <td>20</td><td>21</td><td>22</td><td>23</td><td>24</td> </tr> <tr> <td>25</td><td>26</td><td>27</td><td>28</td><td>29</td> </tr> </table>	20	21	22	23	24	25	26	27	28	29
20	21	22	23	24										
25	26	27	28	29										

Supplied assembly material

Page 103	MU0,8D/M4	2 hexagon nuts for	SAB4-G
Page 103	MU0,8D/M4N	2 hexagon nuts for	SAB4-G/N-X
Page 104	U/M4	2 washers for	SAB4-G
Page 104	U/4,3x12	Washer for	SAB4-G, SAB4-G/N-X
Page 105	FS/M4	Spring washer	SAB4-G
Page 106	ID-SAB4-G	Spacer sleeve for	SAB4-G, SAB4-G/N-X



Tube spanner SS2, page 107



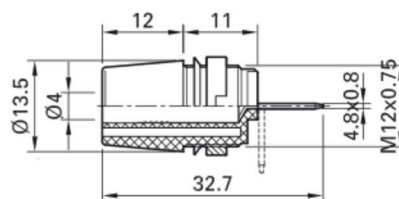
Assembly instructions MA153


www.staubli.com/electrical

Mounting Socket SAB4-F/A

Insulated, rigid, Ø 4 mm, accepting spring-loaded Ø 4 mm plugs with rigid insulating sleeve. Brass sheet. The socket is surface-mounted in pre-drilled panels of plastic,

metal, etc. **Flat connecting tab 4.8 mm x 0.8 mm**, can be bent to 90°, once only.



Order No.	Type	Rated voltage/current		*Colors
23.3110-*	SAB4-F/A	1000 V, CAT II / 20 A	Ni c  us	<div>20 21 22 23 24</div> <div>25</div>

Supplied assembly material

Page 104	MUR-S/M12x0,75	Round nut
Page 104	SSP4	Washer



Flat connecting receptacle FSH4,8x0,8,
page 107

Tube spanners SS2, SS425, page 107



Assembly instructions MA152

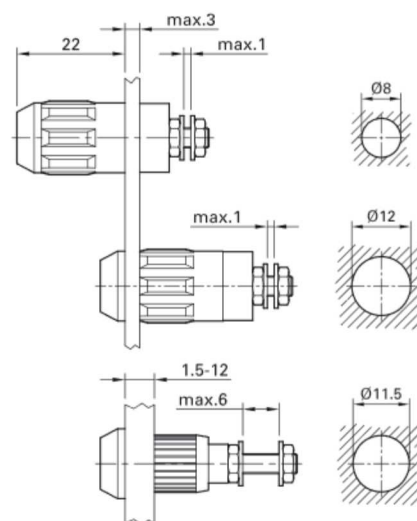
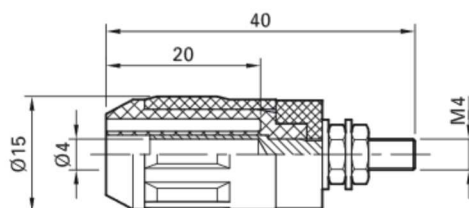
www.staubli.com/electrical

Universal Socket XUB-G

Insulated, rigid, Ø 4 mm, accepting spring-loaded Ø 4 mm plugs with rigid insulating sleeve. Machined brass. The socket is surface-mounted, assembled flush, or

pressed into pre-drilled panels of plastic, metal, etc. **Connection: Threaded bolt M4.**

Optional: Protective cap SD-XUB to cover up unplugged, unused sockets (Protection degree IP67).



Order No.	Type	Rated voltage/current		*Colors ¹⁾
66.9684-*	XUB-G	600 V ²⁾ , CAT II / 20 A 1000 V ³⁾ , CAT II / 20 A	Ni c us	<div>20 21 22 23 24</div> <div>25 29</div>

¹⁾ Other colors available on request.

²⁾ Surface-mounted

³⁾ Assembled flush or pressed in



Protective cap SD-XUB, page 105

Press-in tool MB4-S, page 108



Assembly instructions MAH507

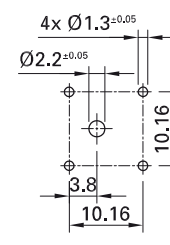
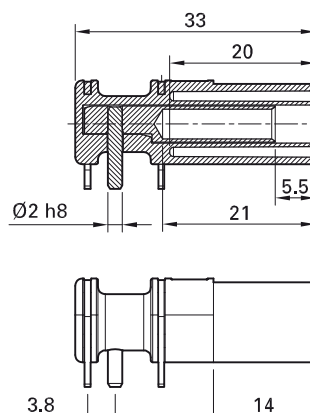
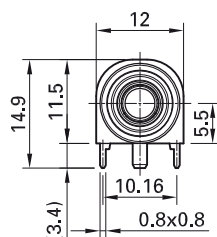
www.staubli.com/electrical

Angled Socket XELW-4

For mounting on printed circuit boards, touch-protected according to IEC/EN 61010-1. The socket is directly soldered onto printed circuit boards.

The right-angled configuration minimizes the force transmitted to the printed circuit board through the plugged-in test lead. Right-angled Ø 4 mm rigid socket accept-

ing spring-loaded Ø 4 mm plugs with rigid insulating sleeve. Machined brass. **Connection: Ø 2 mm round pin and contacts for mounting on printed circuit boards.**



Panel drilling

Order No.	Type	Rated voltage/current		*Colors
66.9040-*	XELW-4	1000 V, CAT III / 24 A 600 V, CAT IV / 24 A	Au c  us	21 22 23



Assembly instructions MAH561

www.staubli.com/electrical

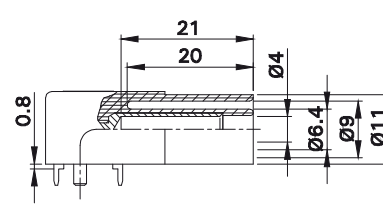
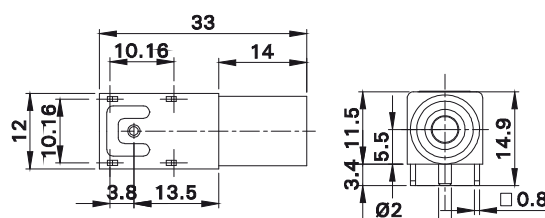
Angled Socket SLB4-I/90

Insulated, right-angled Ø 4 mm rigid socket accepting spring-loaded Ø 4 mm plugs with

rigid insulating sleeve. Machined brass.

Connection: Ø 2 mm round pin and con-

tacts for mounting on printed circuit boards.



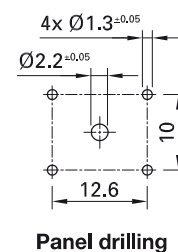
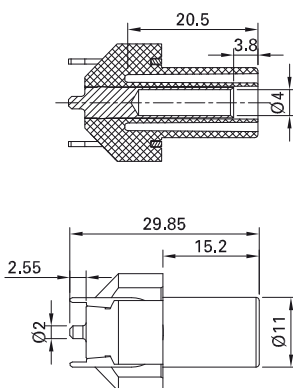
Order No.	Type	Rated voltage/current		*Colors
23.3200-*	SLB4-I/90	1000 V, CAT III / 24 A	Au	21 22

In-line Socket XELA-4

For mounting on vertical printed circuit boards, touch-protected and insulated according to IEC/EN 61010-1. The socket is directly soldered

onto printed circuit boards. Fixed Ø 4 mm socket, to fit spring-loaded Ø 4 mm plugs with rigid insulating sleeve. Machined brass.

Connection: Ø 2 mm round pin and contacts for mounting on printed circuit boards.



Order No.	Type	Rated voltage/current		*Colors
66.9032-*	XELA-4	1000 V, CAT III / 24 A 600 V, CAT IV / 24 A	Au	21 22

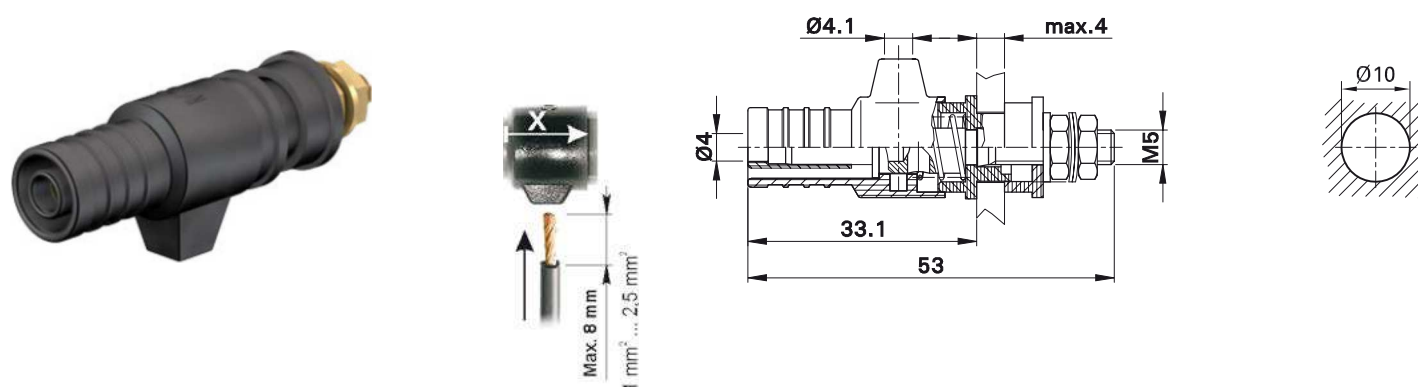
Ø 4 mm Binding Posts

Binding Post SPK4

Insulated, with Ø 4 mm rigid socket accepting spring-loaded Ø 4 mm plugs with rigid insulating sleeve. Ø 3.2 mm cross hole for quick wire connection. Brass. The binding

post is screwed into pre-drilled panels of plastic, metal, etc.

Connection: Threaded bolt M5.



Order No.	Type	Rated voltage/current		*Colors
23.0410-*	SPK4	600 V, CAT II / 32 A	Au	21 22



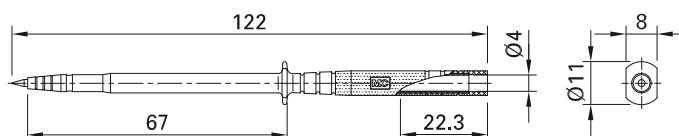
Ø 4 mm Test Probes

Test Probe SPP4-S

Test probe with tapered, stainless steel rigid needle and with handle guard chamfered on

both sides. Ø 4 mm rigid socket in handle accepting spring-loaded Ø 4 mm plugs with

rigid insulating sleeve. Supplied with protective cap.



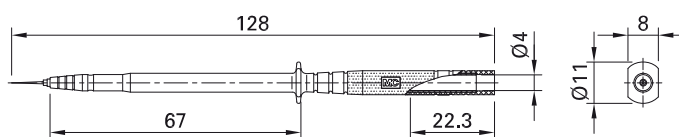
Order No.	Type	Rated voltage/current		*Colors
24.0235-*	SPP4-S	1000 V, CAT III / 1 A	CE	21 22

Test Probe SPP4-S/F

Spring-loaded stainless steel needle which reacts resiliently under light pressure. Specially suited for sensitive printed circuits.

Test probe with handle guard chamfered on both sides. Ø 4 mm rigid socket in handle accepting spring-loaded Ø 4 mm plugs with

rigid insulating sleeve. Supplied with protective cap.



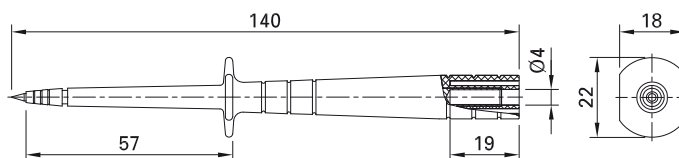
Order No.	Type	Rated voltage/current		*Colors
24.0238-*	SPP4-S/F	1000 V, CAT II / 1 A	CE	21 22

Test Probe SPP4

Test probe with tapered, stainless steel rigid needle. Handle guard chamfered on both

sides. Ø 4 mm rigid socket in handle accepting spring-loaded Ø 4 mm plugs with

rigid insulating sleeve. Supplied with protective cap.



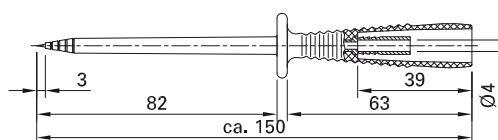
Order No.	Type	Rated voltage/current		*Colors
24.0231-*	SPP4	1000 V, CAT III / 1 A 600 V, CAT IV / 1 A	CE	21 22

Test Probe HP-150/A

With sharply pointed stainless steel tip, e.g. for piercing insulation and paint. Ø 4 mm rigid socket in handle accepting spring-loaded

Ø 4 mm plugs with rigid insulating sleeve. For increased safety the Ø 4 mm rigid socket of HP-150/A is sunk into the handle, ac-

cepting in-line Ø 4 mm plugs. Supplied with protective cap.



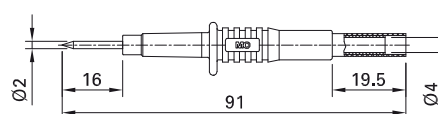
Order No.	Type	Rated voltage/current		*Colors ¹⁾
66.9113-*	HP-150/A	1000 V, CAT III / 1 A 600 V, CAT IV / 1 A	CE c UL US	21 22

Test Probe XPP-80/2-16

Polished Ø 2 mm stainless steel tips. Handle guard flattened on one side to prevent rolling. Also allows for close side-by-side

plugging of probes. Ø 4 mm rigid socket in insulator accepting spring-loaded Ø 4 mm

plugs with rigid insulating sleeve. Supplied with protective cap.



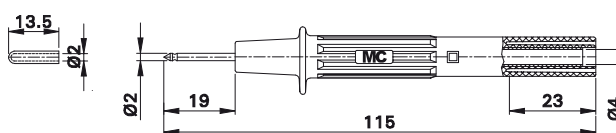
Order No.	Type	Rated voltage/current		*Colors ¹⁾
66.9640-*	XPP-80/2-16	1000 V, CAT II / 10 A	CE c UL US	21 22

Test Probe PP-115/2

Polished Ø 2 mm stainless steel tip. Handle guard flattened on one side to prevent rolling. Also allows for close side-by-side

plugging of probes. Ø 4 mm rigid socket in insulator accepting spring-loaded Ø 4 mm

plugs with rigid insulating sleeve. Supplied with protective cap.



Order No.	Type	Rated voltage/current		*Colors
66.9115-*	PP-115/2	1000 V, CAT II / 10 A	CE c UL US	21 22 23

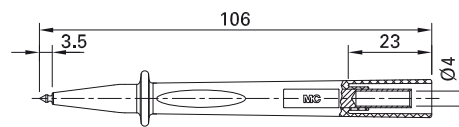
¹⁾ Other colors available on request.

Test Probe BT400

Ø 2 mm, made of Monel®. Ø 4 mm rigid socket in insulator accepting spring-loaded

Ø 4 mm plugs with rigid insulating sleeve.

Monel® is a registered trademark of Special Metals Corporation.

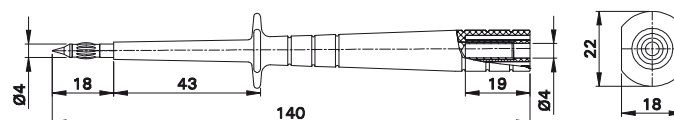


Order No.	Type	Rated voltage/current		*Colors ¹⁾
66.9390-*	BT400	1000 V, CAT IV / 1 A	CE  US	21 22 23

Test Probe SPP4-L

Ø 4 mm, with spring-loaded MULTILAM. Handle guard chamfered on both sides. Ø 4 mm rigid socket in handle accepting

spring-loaded Ø 4 mm plugs with rigid insulating sleeve. Supplied with protective cap.



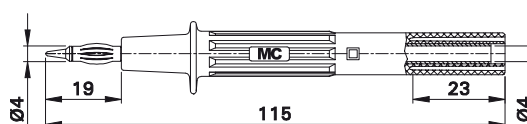
Order No.	Type	Rated voltage/current		*Colors
24.0232-*	SPP4-L	1000 V, CAT II / 32 A	CE	21 22 23

Test Probe PP-115/4

Ø 4 mm, with spring-loaded MULTILAM. Handle guard flattened on one side to prevent rolling. Also allows for close side-

by-side plugging of probes. Ø 4 mm rigid socket in insulator accepting spring-loaded

Ø 4 mm plugs with rigid insulating sleeve. Supplied with protective cap.



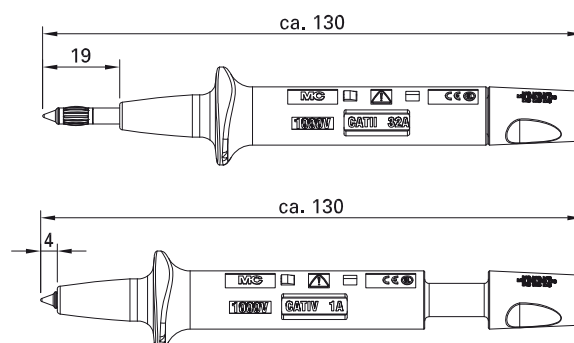
Order No.	Type	Rated voltage/current		*Colors
66.9112-*	PP-115/4	1000 V, CAT II / 32 A	CE  US	21 22 23 24

¹⁾ Other colors available on request.

Test Probe XSAP-4

Ø 4 mm, with spring-loaded MULTILAM, adjustable for use in different measurement categories. Fixed Ø 4 mm socket in insulator,

to fit spring-loaded Ø 4 mm plug with rigid insulating sleeve.



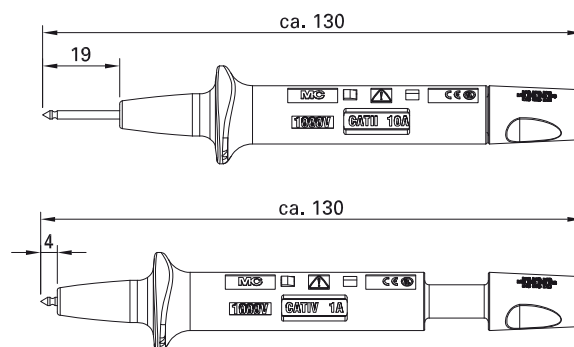
Order No.	Type	Rated voltage/current		*Colors
66.9313-*	XSAP-4	1000 V, CAT II / 32 A 1000 V, CAT IV / 1 A	Ni CE c UL us	21 22 23

Test Probe XSAP-2R

Ø 2 mm, made of Monel®, adjustable for use in different measurement categories. Fixed Ø 4 mm socket in insulator, to fit

spring-loaded Ø 4 mm plug with rigid insulating sleeve.

Monel® is a registered trademark of Special Metals Corporation.



Order No.	Type	Rated voltage/current		*Colors
66.9330-*	XSAP-2R	1000 V, CAT II / 10 A 1000 V, CAT IV / 1 A	CE	21 22 23



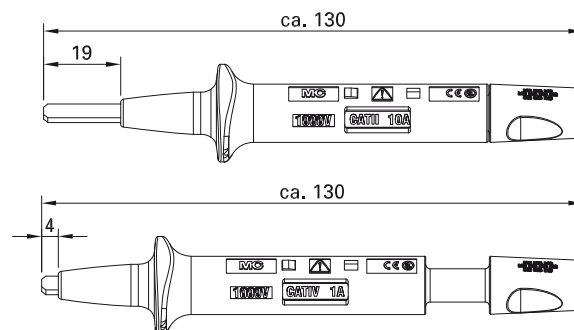
Rating sheet RZ106

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Test Probe XSAP-2F

Test probe with flat tip 1,6 mm × 5 mm, made of nickel-plated brass, for contact to US power sockets, etc., adjustable for use in different measurement categories. Fixed

Ø 4 mm socket in insulator, to fit spring-loaded
Ø 4 mm plug with rigid insulating sleeve.



Order No.	Type	Rated voltage/current		*Colors
66.9332-*	XSAP-2F	1000 V, CAT II / 10 A 1000 V, CAT IV / 1 A	Ni CE	21 22 23

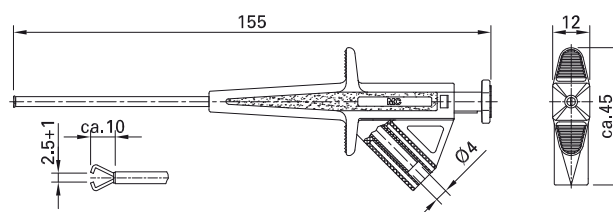
Ø 4 mm Test Clips

Test Clip SKPS-4

With flexible shaft and spring wire grabber (stainless steel) for a good contact to pins and wires in inaccessible places. Especially suitable for measuring voltages. The shaft is

silicone insulated and guarantees good heat resistance and flexibility even at low temperatures. Ø 4 mm rigid socket in handle

accepting spring-loaded Ø 4 mm plugs with rigid insulating sleeve.



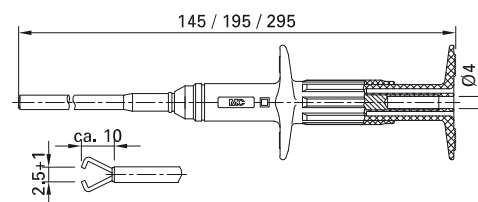
Order No.	Type	Rated voltage/current		*Colors ¹⁾
24.0224-*	SKPS-4	1000 V, CAT III / 4 A	CE c UL US	21 22 23

Test Clip GRIP-B...

With flexible shaft and spring wire grabber (stainless steel) for a good contact to pins and wires in inaccessible places. Especially suitable for measuring voltages. The shaft

is silicone insulated and guarantees good heat resistance and flexibility even at low temperatures. Ø 4 mm rigid socket in handle accepting spring-loaded Ø 4 mm plugs

with rigid insulating sleeve. Versions with different shaft lengths are available.



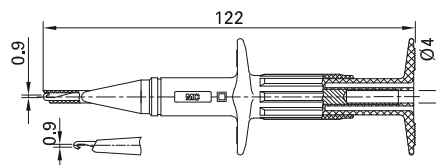
Order No.	Type	Rated voltage/current	Length of shaft / clip		*Colors ¹⁾
66.9120-*	GRIP-B/50	1000 V, CAT III / 1 A	50 mm / 145 mm	CE c UL US	21 22 23
66.9117-*	GRIP-B/100	1000 V, CAT III / 1 A	100 mm / 195 mm	CE c UL US	21 22 23
66.9118-*	GRIP-B/200	1000 V, CAT III / 1 A	200 mm / 295 mm	CE c UL US	21 22 23

¹⁾ Other colors available on request.

Test Clip GRIP-A

With rigid hook clip made of steel for hooking onto wires. Ø 4 mm rigid socket in handle

accepting spring-loaded Ø 4 mm plugs with rigid insulating sleeve.



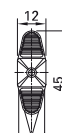
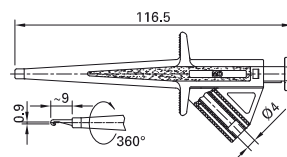
Order No.	Type	Rated voltage/current		*Colors
66.9116-*	GRIP-A	1000 V, CAT III / 3 A	CE c UL US	21 22 23

Test Clip SKPS-4/A

With rigid hook clip made of steel for hooking onto wires. Rotatable through

360° around the longitudinal axis of the test probe. Ø 4 mm rigid socket in handle

accepting spring-loaded Ø 4 mm plugs with rigid insulating sleeve.



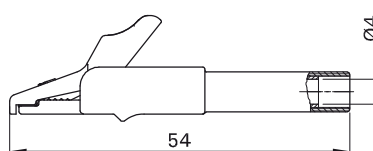
Order No.	Type	Rated voltage/current		*Colors ¹⁾
66.9416-*	SKPS-4/A	1000 V, CAT III / 4 A	Ni CE c UL US	21 22 23

Crocodile Clip SAGK4-K

Small, slim, made of brass with all-round insulation. Toothed jaws for wide grip with

surface for fine wire. Ø 4 mm rigid socket in insulator accepting spring-loaded Ø 4 mm

plugs with rigid insulating sleeve.



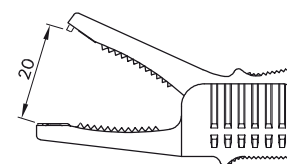
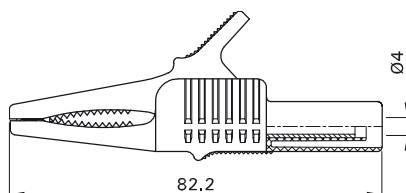
Order No.	Type	Rated voltage/current		*Colors
24.0157-*	SAGK4-K	300 V, CAT II / 15 A	Ni CE	21 22 23

¹⁾ Other colors available on request.

Crocodile Clip XKK-1001

Made of brass with all-round insulation. Toothed jaws for wide grip with surface for fine wire. Ø 4 mm rigid socket in insulator

accepting spring-loaded Ø 4 mm plugs with rigid insulating sleeve.

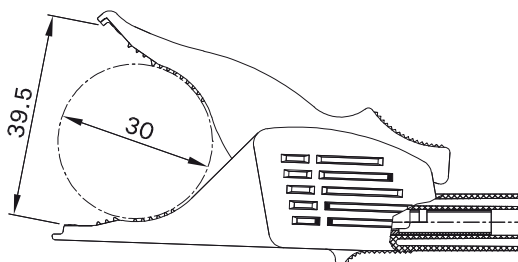
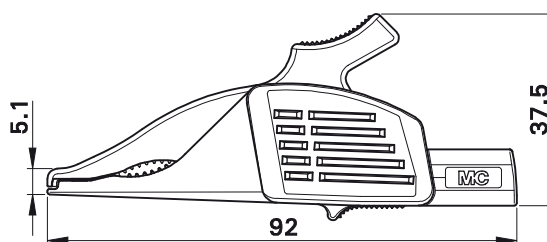


Order No.	Type	Rated voltage/current		*Colors										
66.9755-*	XKK-1001	1000 V, CAT II / 32 A	Ni CE c UL US	<table border="1"> <tr> <td>20</td><td>21</td><td>22</td><td>23</td><td>24</td></tr> <tr> <td>25</td><td>26</td><td>27</td><td>29</td><td></td></tr> </table>	20	21	22	23	24	25	26	27	29	
20	21	22	23	24										
25	26	27	29											

Dolphin Clip XDK-1033

Made of brass with all-round insulation. Toothed jaws for wide grip with surface for fine wire. Ø 4 mm rigid socket in insulator

accepting spring-loaded Ø 4 mm plugs with rigid insulating sleeve.

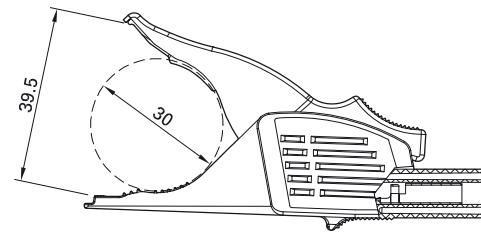
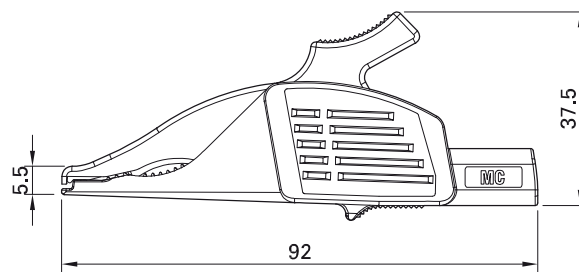


Order No.	Type	Rated voltage/current		*Colors										
66.9575-*	XDK-1033	1000 V, CAT III / 32 A	Ni CE c UL US	<table border="1"> <tr> <td>20</td><td>21</td><td>22</td><td>23</td><td>24</td></tr> <tr> <td>25</td><td>26</td><td>27</td><td>29</td><td></td></tr> </table>	20	21	22	23	24	25	26	27	29	
20	21	22	23	24										
25	26	27	29											

Dolphin Clip XDK-1033/I-2

With all-round insulation. The upper jaw is non-conductive to prevent accidental short-circuits on contact with the mouth open. This development of our established dolphin clip features a soft TPE inlay in the top jaw, facilitating an especially strong

adhesion grip. The insulation in this version also allows it to be used in the measurement category CAT IV.



Order No.	Type	Rated voltage/current		*Colors										
66.9561-*	XDK-1033/I-2	1000 V, CAT III / 19 A 600 V, CAT IV / 19 A	Ni CE c UL us	<table border="1"> <tr> <td>20</td><td>21</td><td>22</td><td>23</td><td>24</td></tr> <tr> <td>25</td><td>26</td><td>27</td><td>29</td><td></td></tr> </table>	20	21	22	23	24	25	26	27	29	
20	21	22	23	24										
25	26	27	29											

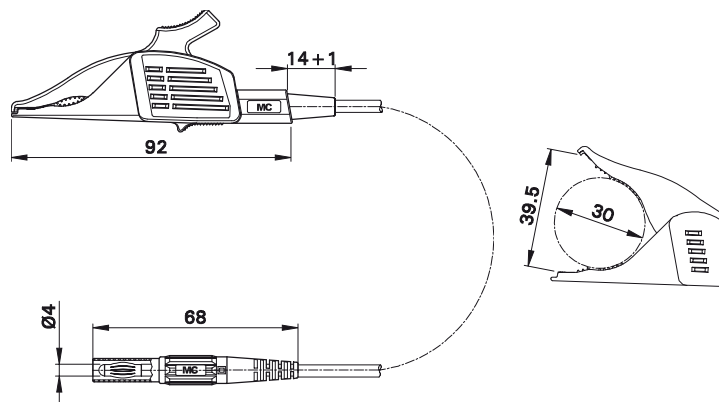


The varied grip options for our dolphin clips.

Test Clip Lead XDLS-418

Highly flexible. One end with dolphin clip with all-round insulation, toothed jaws for wide grip and surface for fine wire. The other

end with Ø 4 mm MULTILAM plug with rigid insulating sleeve.

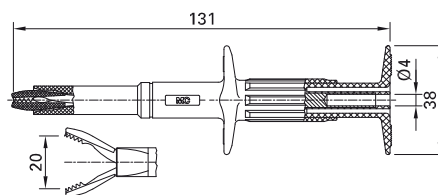


Order No.	Type	Rated voltage/current	Lead		Lead length [cm]	*Colors
66.9531-150*	XDLS-418	1000 V, CAT III / 32 A	PVC 2,5 mm ²	Ni CE	150	20 21 22 23 24 25

Test Clip GRIP-CI

With steel jaws especially for connections to ground rails and thick cables. For increased safety when making connections, the jaws

are insulated on the outside. Ø 4 mm rigid socket in handle accepting spring-loaded Ø 4 mm plugs with rigid insulating sleeve.



Order No.	Type	Rated voltage/current		*Colors ¹⁾
66.9121-*	GRIP-CI	1000 V, CAT III / 16 A	Ni CE c UL US	20 21 22 23 24 25

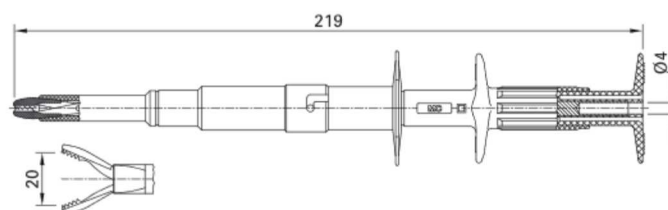
¹⁾ Other colors available on request.

Test Clip GRIP-DI

With steel jaws especially for connections to ground rails and thick cables. For increased safety when making connections, the jaws are insulated on the outside. Ø 4 mm rigid socket in handle accepting spring-loaded

Ø 4 mm plugs with rigid insulating sleeve. Transparent fuse holder sleeve to accept a high-rating fuse 10 mm x 38 mm.

The fuse is not supplied.



Order No.	Type	Rated voltage/current		*Colors
66.9266-*	GRIP-DI	1000 V, CAT III / max. 16 A ¹⁾	Ni CE c UL ²⁾ US	<div>21 22 23 24 25</div> <div>26</div>



¹⁾ Depends on the fuse used.

²⁾ Only if used with UL approved fuses.



High breaking capacity fuse: page 110



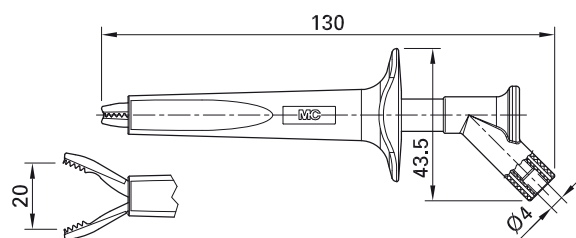
Rating sheet RZ068

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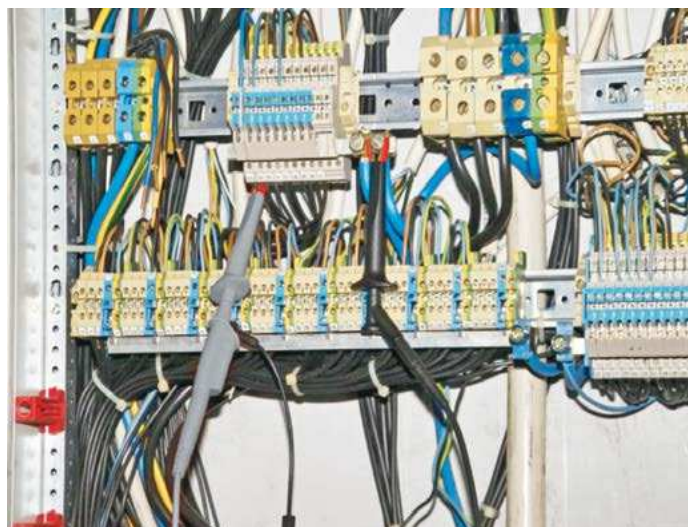
Test Clip AB200

With steel jaws especially for connections to ground rails and thick cables. For increased safety when making contacts, the jaws

are insulated on the outside. Ø 4 mm rigid socket in handle accepting spring-loaded Ø 4 mm plugs with rigid insulating sleeve.



Order No.	Type	Rated voltage/current		*Colors ¹⁾
66.9474-*	AB200	1000 V, CAT IV / 16 A	Ni CE c UL US	21 22 23



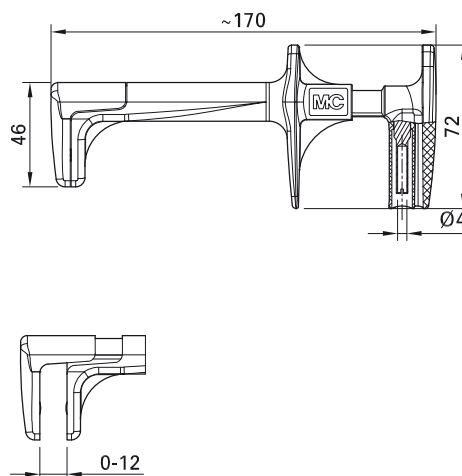
¹⁾ Other colors available on request.

Flat Test Clip GRIP-FMA

For fast and safe contacting on busbars, for example for the synchronization for stand-by power units. Powerful contacting on the

front and rear of the busbars by means of our established MULTILAM. Fixed Ø 4 mm socket in the pressure grip handle section,

to fit spring-loaded Ø 4 mm plugs with rigid insulating sleeve.

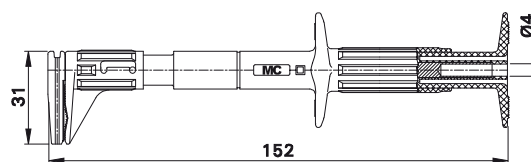
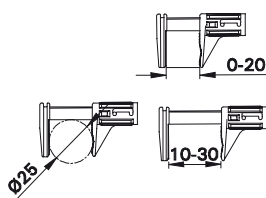


Order No.	Type	Rated voltage/current		Color
66.9435-21	GRIP-FMA	1000 V, CAT IV / 32 A	CE	21

Flat Test Clip GRIP-F

For making quick, secure contact during voltage measurements. With adjustable stop. Ø 4 mm rigid socket in handle accept-

ing spring-loaded Ø 4 mm plugs with rigid insulating sleeve.



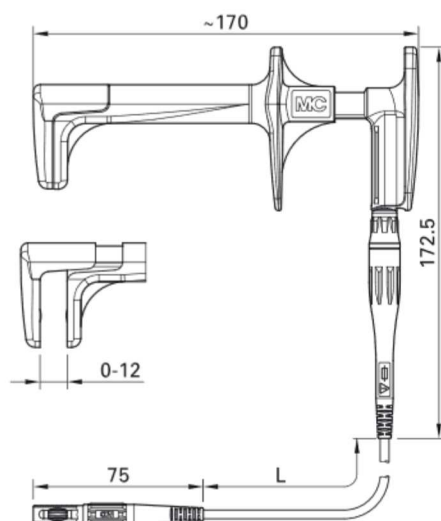
Order No.	Type	Rated voltage/current		*Colors
66.9829-*	GRIP-F	600 V, CAT III / 5 A	Ni CE c UL US	21 22 23 24 25 26









Fused Test Clip Lead GRIP-FMA/XSM...-419

Highly flexible, with insulation in PVC or silicone, on one end with a flat test clip for quick and safe contacting, on the other end an in-line Ø 4 mm MULTILAM plug with rigid insulation sleeve.

The two-part screw connector accepts a high breaking capacity fuse measuring 6.3 x 32 mm.

The fuse is not supplied, see page 110.



Order No.	Type	Rated voltage/current	Lead		Lead lengths L [cm]	Color
66.9429-15021	GRIP-FMA/XSMF-419	1000 V, CAT IV / max. 8 A ¹⁾	 1,0 mm ²			
66.9430-15021	GRIP-FMA/XSMS-419	1000 V, CAT IV / max. 8 A ¹⁾	 1,0 mm ²			

¹⁾ Depends on the fuse used.



High Breaking Capacity Fuses: page 110



Rating sheet RZ111

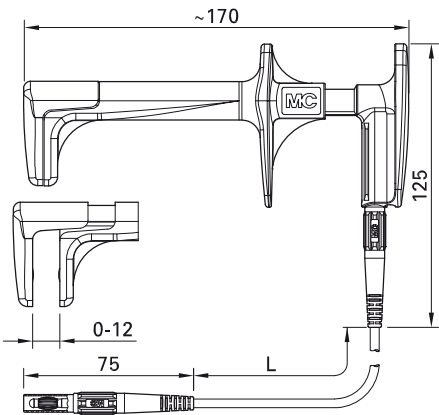
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Test Clip Lead GRIP-FMA/XM...-419

Highly flexible, with insulation in PVC or silicone, on one end with a flat test clip for quick and safe contacting, on the other end

an in-line Ø 4 mm MULTILAM plug with rigid insulation sleeve.



Order No.	Type	Rated voltage/current	Lead		Lead lengths L [cm]	Color
66.9377-15021	GRIP-FMA/XMF-419	1000 V, CAT IV / 32 A	PVC 2,5 mm ²	CE	150	21
66.9378-15021	GRIP-FMA/XMS-419	1000 V, CAT IV / 32 A	SIL 2,5 mm ²	CE	150	21

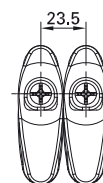
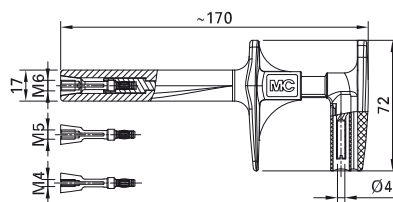
Single-collet Plier GRIP-ESZ...

For fast and safe contacting to M4, M5, or M6 threaded bolts, for example on motor connections (contact depth 3 to 6 mm). Fixed Ø 4 mm socket in the pressure section,

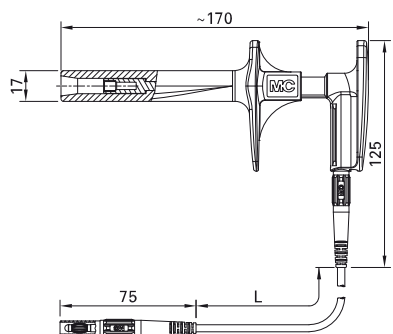
to fit spring-loaded Ø 4 mm plugs with rigid insulating sleeve or as a lead outlet with in-line Ø 4 mm MULTILAM plug and rigid insulating sleeve. Thread inserts are replaceable

and available separately. The current depends on the thread insert.

GRIP-ESZ...



GRIP-ESZ/XM...-419



Rating sheet RZ112

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Order No.	Type	Rated voltage/current	Plier insert	Thread	Lead lengths L [cm]		Color
66.9446-21	GRIP-ESZ4	1000 V, CAT IV / 20 A	Z4	M4	–	CE	21
66.9447-21	GRIP-ESZ5	1000 V, CAT IV / 30 A	Z5	M5	–	CE	21
66.9448-21	GRIP-ESZ6	1000 V, CAT IV / 32 A	Z6	M6	–	CE	21
66.9445-21	GRIP-ESZ	1000 V, CAT IV / max. 32 A	without	–	–	CE	21
66.9436-15021	GRIP-ESZ/XMF-419	1000 V, CAT IV / max. 32 A	without	–	150	PVC CE	21
66.9437-15021	GRIP-ESZ/XMS-419	1000 V, CAT IV / max. 32 A	without	–	150	SIL CE	21

Individual parts

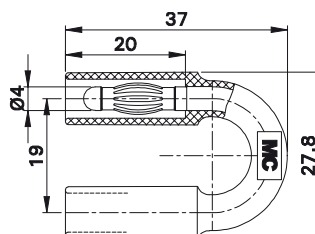


10.0804	Z4	20 A	Plier insert	M4
10.0805	Z5	30 A	Plier insert	M5
10.0806	Z6	32 A	Plier insert	M6
10.0807	ESZ-WZ	–	Cross-slotted screwdriver	

Ø 4 mm Connecting Plugs and Sockets

Connecting Plug SKS4-19L

Insulated, Ø 4 mm, made of brass. Plugs with spring-loaded MULTILAM and rigid insulating sleeves.



Order No.	Type	Rated voltage/current	Plug spacing		Color
24.0023-21	SKS4-19L	1000 V, CAT II / 32 A	19 mm	Au CE	21

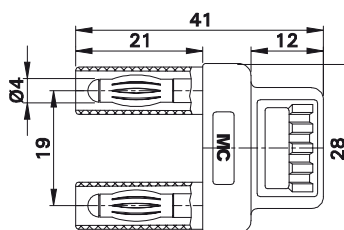


Rating sheet RZ006

www.staubli.com/electrical

Connecting Plug XVB-4/19

Insulated Ø 4 mm, made of brass. Plugs with spring-loaded MULTILAM and rigid insulating sleeves. With insulated grip.



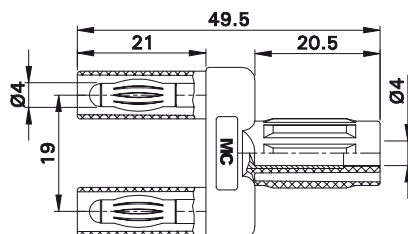
Order No.	Type	Rated voltage/current	Plug spacing		*Colors
66.9171-*	XVB-4/19	1000 V, CAT II / 32 A	19 mm	Ni CE	21 22 23

Connecting Plug XVBB-4/19

Insulated, Ø 4 mm, made of brass. Plugs with spring-loaded MULTILAM and rigid

insulating sleeves. Insulated grip with integrated Ø 4 mm rigid socket accepting

spring-loaded Ø 4 mm plugs with rigid insulating sleeve.

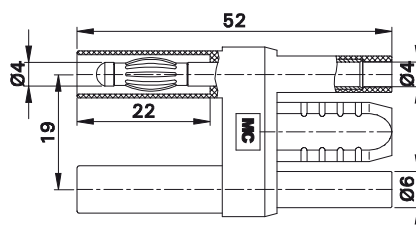


Order No.	Type	Rated voltage/current	Plug spacing		*Colors
66.9172-*	XVBB-4/19	1000 V, CAT II / 32 A	19 mm	Ni CE	21 22 23

Connecting Plug SKS4-19L/1

Insulated, Ø 4 mm, made of brass. Plugs with spring-loaded MULTILAM and rigid insulating sleeves. With insulated grip and

with two in-line Ø 4 mm rigid sockets accepting spring-loaded Ø 4 mm plugs with rigid insulating sleeve.



Order No.	Type	Rated voltage/current	Plug spacing		Color
24.0028-21	SKS4-19L/1	1000 V, CAT II / 32 A	19 mm	Ni CE	21



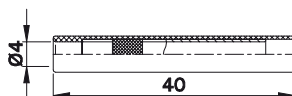
Rating sheet RZ006

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Lead Coupler KK4/4

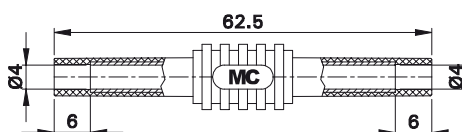
Insulated, made of brass. Both ends suitable for accepting spring-loaded Ø 4 mm plugs with rigid insulating sleeve.



Order No.	Type	Rated voltage/current		*Colors
24.0142-*	KK4/4	1000 V, CAT II / 32 A	Au CE	21 22 23 24

Lead Coupler XHK

Insulated, made of brass. Both ends suitable for accepting spring-loaded Ø 4 mm plugs with rigid insulating sleeve.



Order No.	Type	Rated voltage/current		*Colors ¹⁾
66.9123-*	XHK	1000 V, CAT II / 32 A	CE cUL US	21 22 23 24 25

¹⁾ Other colors available on request.

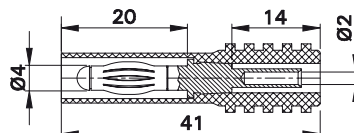


Ø 4 mm Adapters

Reducer Adapter XA-2/4

Ø 4 mm plug, made of brass, with spring-loaded MULTILAM and with rigid insulating sleeve. Ø 2 mm rigid socket in insu-

lator accepting spring-loaded Ø 2 mm plugs with rigid insulating sleeve.



Order No.	Type	Rated voltage/current		*Colors
65.9192-*	XA-2/4	600 V, CAT III / 10 A	Ni CE	21 22 23



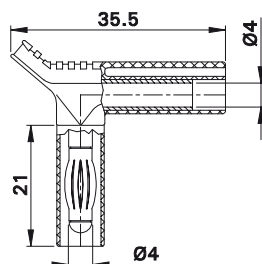
Rating sheet RZ001

www.staubli.com/electrical

Right-angle Plug Adapter XWA-4/19

Insulated, made of brass. Ø 4 mm plug with spring-loaded MULTILAM and with rigid insulating sleeve and Ø 4 mm rigid socket accepting spring-loaded Ø 4 mm plugs with rigid insulating sleeve. This right-angle

plug adapter is suitable in particular for instruments with front panel sockets where the lead can be fitted with the maximum of convenience.



Order No.	Type	Rated voltage/current		*Colors ¹⁾
66.9694-*	XWA-4/19	1000 V, CAT II / 20 A 600 V, CAT III / 20 A	Ni CE	21 22 23

¹⁾ Other colors available on request.

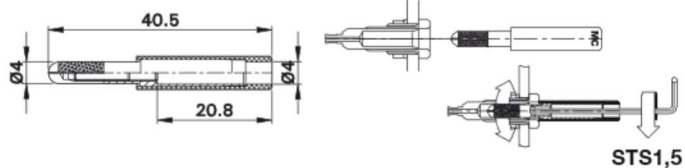
Screw-clamping Adapter A-SLK4...

Adapter, made of brass can be screw-mounted into Ø 4 mm sockets. The expandable Ø 4 mm plug of this adapter can be locked

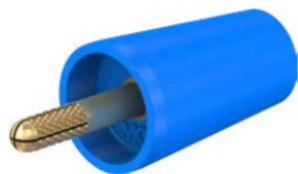
into the socket by tightening the grub screw. Assembled, the adapter offers complete touch-proof protection. Ø 4 mm rigid

socket in insulator accepting spring-loaded Ø 4 mm plugs with rigid insulating sleeve.

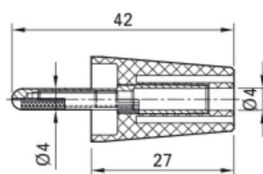
A-SLK4-S



A-SLK4



A-SLK4-N



Order No.	Type	Rated voltage/current	Rating sheet		*Colors
24.0163-*	A-SLK4-S	1000 V, CAT II / 25 A	RZ011	Ni	21 22 23 24
24.0160-*	A-SLK4	1000 V, CAT II / 32 A	RZ010	Au	20 21 22 23 24 25 26 27 28 29
24.0161-*	A-SLK4-N	1000 V, CAT II / 32 A	RZ010	Ni	20 21 22 23 24 25 26 27 28 29



Hexagon wrench STS1,5: page 108



Rating sheet RZ010, RZ011

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Assembly instructions MA115

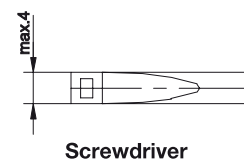
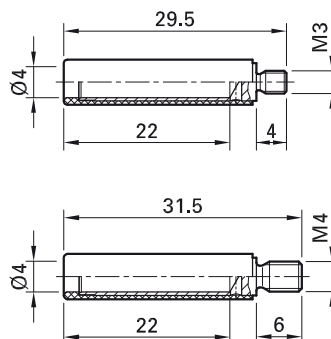
www.staubli.com/electrical

Screw-in Adapter B4-E-M...

Insulated, with external thread for screw connection to threaded holes. Machined brass.

Ø 4 mm rigid socket in insulator accepting spring-loaded Ø 4 mm plugs with rigid

insulating sleeve. Socket with internal slot for screwdriver.



Order No.	Type	Rated voltage/current	Thread		*Colors
23.1031-*	B4-E-M3-I	600 V, CAT II / 32 A	M3	Ni	21 22 23 24
23.1033-*	B4-E-M4-I	600 V, CAT II / 32 A	M4	Ni	21 22 23 24

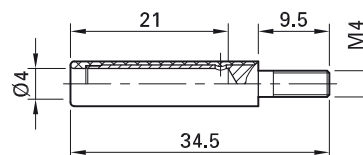
Component parts

24.5012-*	I-A2/4	Insulator (*Colors see B4-E-M...)
23.5076	B4-E-M3	Socket suitable for: B4-E-M3-I
23.5082	B4-E-M4	Socket suitable for: B4-E-M4-I

Screw-in Adapter LB4-G/M4

Insulated, with external thread for screw connection to threaded holes. Machined brass. Ø 4 mm rigid socket in insulator

accepting spring-loaded Ø 4 mm plugs with rigid insulating sleeve.



Order No.	Type	Rated voltage/current	Thread		*Colors
23.0280-*	LB4-G/M4	600 V, CAT II / 32 A	M4	Ni	21 22 23 24



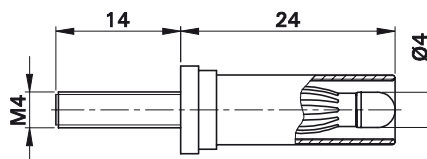
Rating sheet RZ119

www.staubli.com/electrical

Screw-in Adapter SA400-VI

Insulated, with M4 threaded bolt for screw connection to threaded holes. Machined brass. Ø 4 mm MULTILAM plug with rigid

insulating sleeve. The adapter is supplied without fastening material.

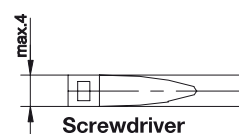
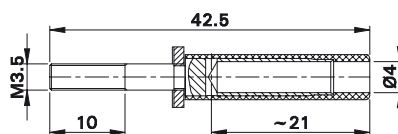


Order No.	Type	Rated voltage/current		*Colors
24.0117-*	SA400-VI	600 V, CAT II / 32 A	Au	<div>21 22 23 24 25</div> <div>26 27 28 29</div>

Screw-in Adapter A-SLK4-RS

Insulated, with M3.5 external thread for connecting to rail mounted terminals with M3.5 threaded holes. Machined brass. Ø 4 mm rigid socket in insulator accepting

spring-loaded Ø 4 mm plugs with rigid insulating sleeve. Socket with internal slot for screwdriver.



Order No.	Type	Rated voltage/current		*Colors
24.0168-*	A-SLK4-RS	1000 V, CAT II / 25 A	Ni	<div>21 22 23 24</div>



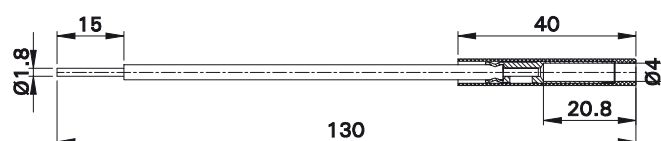
Rating sheet RZ009

www.staubli.com/electrical

Adapter A-SLK4-R

Insulated flexible copper conductor, suitable for many types of screw clamp connections, e.g. rail mounted terminals. Ø 4 mm rigid

socket in insulator, made of brass, accepting spring-loaded Ø 4 mm plugs with rigid insulating sleeve.



Order No.	Type	Rated voltage/current		Color
24.0162-21	A-SLK4-R	1000 V, CAT II / 32 A	Ni	21

Adapter XRKA

Insulated flexible copper conductor, suitable for many types of screw clamp connections, e.g. rail mounted terminals. Ø 4 mm rigid

socket in insulator, made of brass, accepting spring-loaded Ø 4 mm plugs with rigid insulating sleeve.



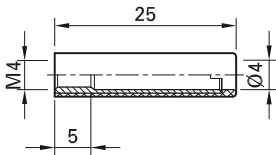
Order No.	Type	Rated voltage/current		*Colors
66.9135-*	XRKA	1000 V, CAT II / 32 A	Ni	<div> <div>21</div> <div>22</div> <div>23</div> <div>24</div> <div>25</div> <div>26</div> <div>27</div> <div>29</div> </div>



Screw-on Adapter B4-E-IM4-I

Insulated, with M4 internal thread for screw connection to threaded bolts. Machined brass. Ø 4 mm rigid socket in insulator accepting spring-loaded Ø 4 mm plugs with

rigid insulating sleeve. Socket with slotted head for screwdriver.



Order No.	Type	Rated voltage/current		*Colors
23.1035-*	B4-E-IM4-I	600 V, CAT II / 32 A	Ni	21 22 23 24

Component parts

24.5012-*	I-A2/4	Insulator (*Colors see B4-E-M...)
23.5088	B4-E-IM4	Uninsulated adapter



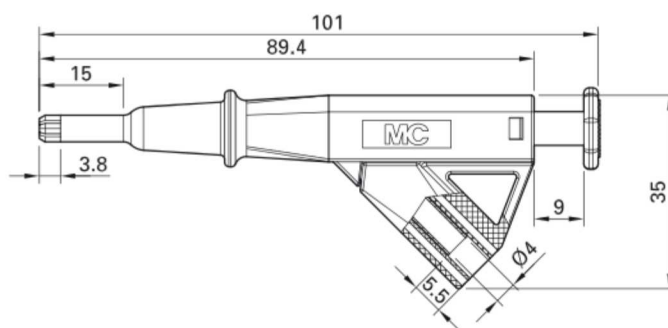
Screw-clamping Adapter VARIOGRIP-...

For fast, safe connection to screws/bolts with internal hexagon. Twisting the button on the back of the handle spreads the hexagonal tip so that the adapter fits firmly into internal hexagons with 5 mm or 6 mm wrench size. This results in multiple contact

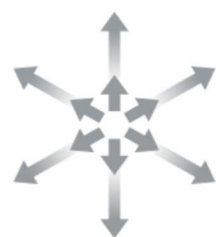
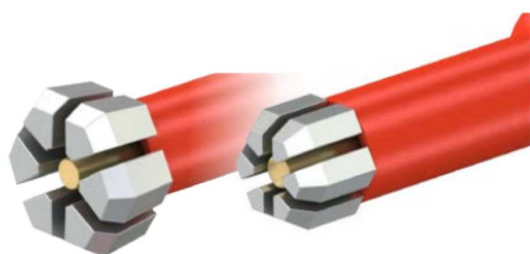
points that enable low contact resistance. The adapter can also be operated by hand when under load. The fixed Ø 4 mm socket in insulator is suitable for fitting spring-loaded Ø 4 mm plugs with rigid insulating sleeve.

Two different designs:

- 5 mm design with gray button
- 6 mm design with black button



Order No.	Type	Rated voltage/current	Internal hexagon		*Colors
66.9055-*	VARIOGRIP-5	600 V, CAT IV / 24 A	5 mm	Ni CE	21 22 23
66.9056-*	VARIOGRIP-6	600 V, CAT IV / 24 A	6 mm	Ni CE	21 22 23

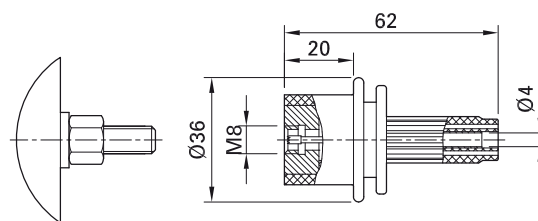


Screw-on Adapters GBSA/M...

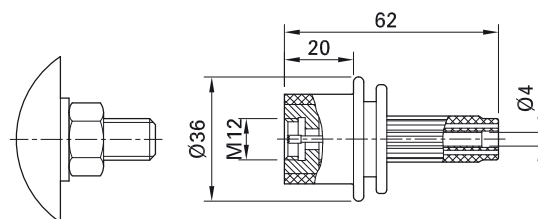
Insulated, with internal thread for rapid and safe contact to threaded bolts. Contact is made by a spring-loaded tip. Ø 4 mm rigid socket in insulator accepting spring-loaded

Ø 4 mm plugs with rigid insulating sleeve. Machined brass. Body nickel-plated, connecting socket and contact tip gold-plated.

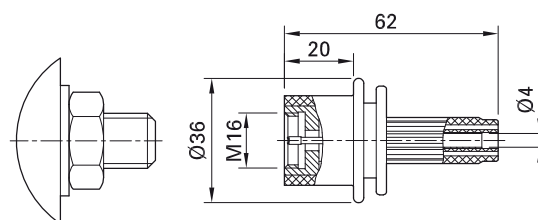
GBSA/M8



GBSA/M12



GBSA/M16

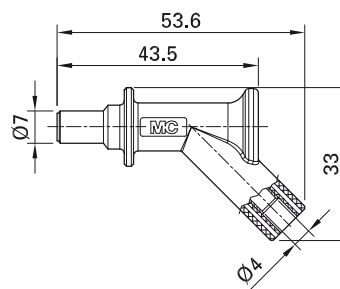


Order No.	Type	Rated voltage/current	Thread		*Colors (only color ring)
20.2040-*	GBSA/M8	1000 V, CAT IV / 1 A	M8	<div>AuNi</div> <div>CE</div>	<div><div>2021222324</div><div>2526272829</div></div>
20.2000-*	GBSA/M12	1000 V, CAT IV / 1 A	M12	<div>AuNi</div> <div>CE</div>	<div><div>2021222324</div><div>2526272829</div></div>
20.2010-*	GBSA/M16	1000 V, CAT IV / 1 A	M16	<div>AuNi</div> <div>CE</div>	<div><div>2021222324</div><div>2526272829</div></div>

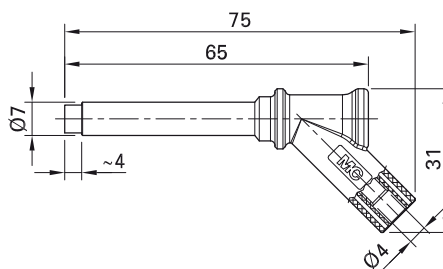
Magnetic Adapter XMA-...

For connection of screw heads with rigid Ø 4 mm socket in insulator, suitable for mating with spring-loaded Ø 4 mm plugs with rigid insulating sleeve.

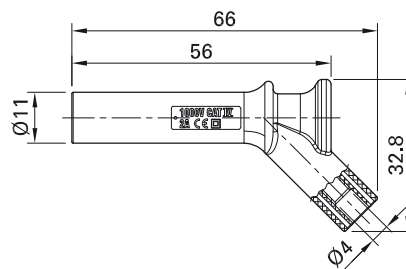
XMA-7



XMA-7L



XMA-11

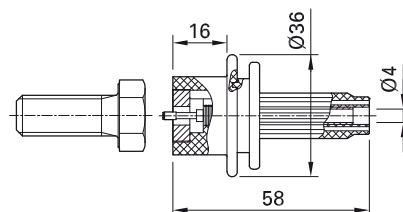


Order No.	Type	Rated voltage/current	Diameter of magnet		*Colors
66.9516-*	XMA-7	1000 V, CAT III / 2 A 600 V, CAT IV / 2 A	Ø 7 mm	Ni CE	21 22 23
66.9509-*	XMA-7L	1000 V, CAT IV / 2 A	Ø 7 mm	Ni CE	21 22 23
66.9515-*	XMA-11	1000 V, CAT IV / 2 A	Ø 11 mm	Ni CE	21 22 23

Magnetic Adapter MSA

Magnetic contact with spring-loaded tip to be used with magnetic steel bolts. Ø 4 mm rigid socket in insulator, made of brass, ac-

cepting spring-loaded Ø 4 mm plugs with rigid insulating sleeve. Connecting socket and contact tip are gold-plated.



Order No.	Type	Rated voltage/current		*Colors (only color ring)										
20.2020-*	MSA	1000 V, CAT IV / 1 A	Au CE	<table border="1"> <tr> <td>20</td><td>21</td><td>22</td><td>23</td><td>24</td></tr> <tr> <td>25</td><td>26</td><td>27</td><td>28</td><td>29</td></tr> </table>	20	21	22	23	24	25	26	27	28	29
20	21	22	23	24										
25	26	27	28	29										



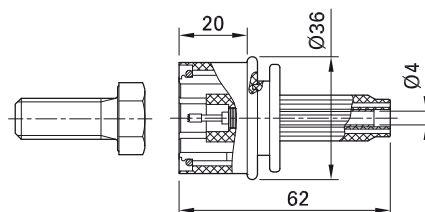
Rating sheet RZ034

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Self-gripping Adapter GKSA/M12

With spring-loaded tip for M12 hex. screw heads. Ø 4 mm rigid socket in insulator,

made of brass, accepting spring-loaded Ø 4 mm plugs with rigid insulating sleeve.

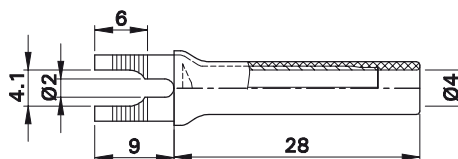


Order No.	Type	Rated voltage/current		*Colors (only color ring)										
20.2030-*	GKSA/M12	1000 V, CAT IV / 1 A	Au CE	<table border="1"> <tr> <td>20</td><td>21</td><td>22</td><td>23</td><td>24</td></tr> <tr> <td>25</td><td>26</td><td>27</td><td>28</td><td>29</td></tr> </table>	20	21	22	23	24	25	26	27	28	29
20	21	22	23	24										
25	26	27	28	29										

Cable Lug Adapter B4-I/KS

Made of brass for permanent installation, e.g. for connecting screw terminals. Ø 4 mm rigid socket in insulator accepting

spring-loaded Ø 4 mm plugs with rigid insulating sleeve. Fork lug can be bent once to 90°.



Order No.	Type	Rated voltage/current		*Colors
23.0480-*	B4-I/KS	1000 V, CAT II / 20 A	Ni	21 22 23 24



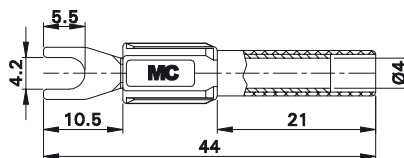
Rating sheet RZ011


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Cable Lug Adapter XKS-4

Made of brass. Fork is made of tin-plated copper. For permanent installation, e.g. for connecting screw terminals. Ø 4 mm rigid

socket in insulator accepting spring-loaded Ø 4 mm plugs with rigid insulating sleeve.



Order No.	Type	Rated voltage/current		*Colors ¹⁾
66.9690-*	XKS-4	1000 V, CAT II / 20 A	Sn c  ²⁾	21 22 23

¹⁾ Other colors available on request.

²⁾ UL-Listing up to 10 A!



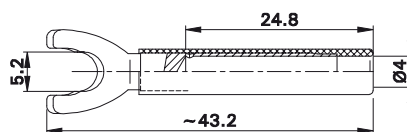
Rating sheet RZ011

www.staubli.com/electrical

Cable Lug Adapter B4-I/KA

Made of brass for permanent installation, e.g. for connecting screw terminals. Ø 4 mm rigid socket in insulator accepting

spring-loaded Ø 4 mm plugs with rigid insulating sleeve. Fork lug bent to an angle of 45°.



Order No.	Type	Rated voltage/current		*Colors
23.0440-*	B4-I/KA	1000 V, CAT II / 20 A	Au	21 22 23 24



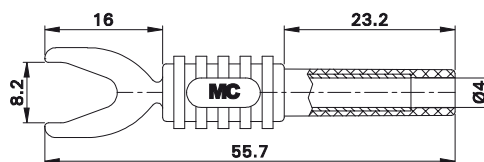
Rating sheet RZ011

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Cable Lug Adapter XKS-A

Made of brass for permanent installation, e.g. for connecting screw terminals. Ø 4 mm rigid socket in insulator accepting

spring-loaded Ø 4 mm plugs with rigid insulating sleeve. Fork lug can be bent once to 45°.



Order No.	Type	Rated voltage/current		*Colors ¹⁾
66.9126-*	XKS-A	1000 V, CAT II / 20 A	Ni	21 22 23

¹⁾ Other colors available on request.



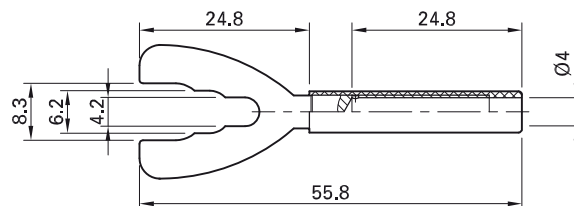
Rating sheet RZ011

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Cable Lug Adapter B4-I/K

Made of brass for permanent installation, e.g. for connecting screw terminals.
Ø 4 mm rigid socket in insulator accepting

spring-loaded Ø 4 mm plugs with rigid insulating sleeve.



Order No.	Type	Rated voltage/current		*Colors
23.5065-*	B4-I/K	1000 V, CAT II / 32 A	Au	21 22 23 24



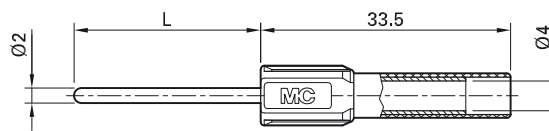
Rating sheet RZ010

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Round Brass Pin ZPS-20/...

Solid, especially suitable for the screw connection to electricity meter clips.
Ø 4 mm rigid socket in insulator, accepting spring-loaded Ø 4 mm plugs with rigid

insulating sleeve. Available in different pin diameters D and lengths L.



Order No.	Type	Rated voltage/current	Length (L)		*Colors
66.9076-*	ZPS-20/25	600 V, CAT II / 19 A	25 mm	Ni	21 22 23 24 25 26 27
66.9082-*	ZPS-20/40	600 V, CAT II / 19 A	40 mm	Ni	21 22 23 24 25 26 27



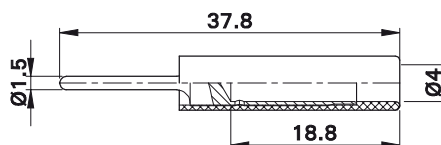
Rating sheet RZ004

www.staubli.com/electrical

Round Brass Pin B4-I/S1,5

Solid, especially suitable for the screw connection to electricity meter clips. Can be bent once to 90°. Ø 4 mm rigid socket in

insulator, accepting spring-loaded Ø 4 mm plugs with rigid insulating sleeve.



Order No.	Type	Rated voltage/current		*Colors
23.0240-*	B4-I/S1,5	1000 V, CAT II / 20 A	Ni	21 22 23 24



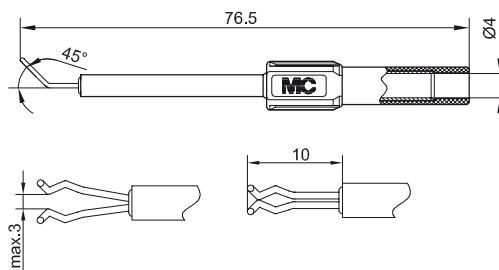
Rating sheet RZ011

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Spring Clip ZPK-45

For the quick connection to electricity meter clips. Spring clip bent to an angle of 45°. The shaft is insulated by a shrink-on sleeve.

Ø 4 mm rigid socket in insulator, accepting spring-loaded Ø 4 mm plugs with rigid insulating sleeve.



Order No.	Type	Rated voltage/current		*Colors ¹⁾
66.9044-*	ZPK-45	600 V, CAT II / 1 A	Ni	21 22

¹⁾ Other colors available on request.



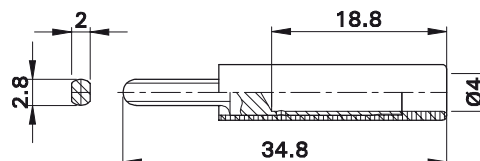
Rating sheet RZ018

www.staubli.com/electrical

Brass Pin B4-I/S2,8x2

Solid, especially suitable for connecting to narrow-type relays. Ø 4 mm rigid socket in insulator, accepting spring-loaded Ø 4 mm

plugs with rigid insulating sleeve.
Connecting pin: 2.8 mm x 2 mm.



Order No.	Type	Rated voltage/current		*Colors
20.0010-*	B4-I/S2,8x2	1000 V, CAT II / 20 A	Ni	21 22 23 24



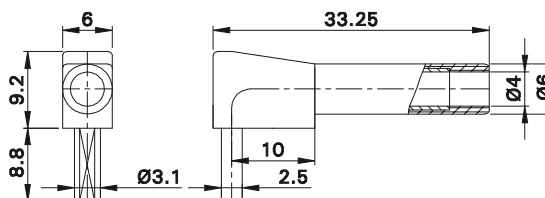
Rating sheet RZ011

www.staubli.com/electrical

Connecting Pin SLB4-I/90-S

Rigid, right-angled to screw on to relay housings, distributor boxes etc. Conforms to protection class IP2X when installed. Ø 4 mm rigid socket in insulator, accept-

ing spring-loaded Ø 4 mm plugs with rigid insulating sleeve.
Connecting pin: Ø 3.1 mm x 2.5 mm.



Order No.	Type	Rated voltage/current		*Colors
49.7093-*	SLB4-I/90-S	1000 V, CAT II / 32 A	Ni	21 22 23



Rating sheet RZ010

www.staubli.com/electrical



Fuse Adapter PF/S4-...

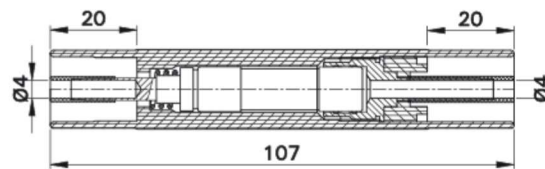
For voltage measurement and for protection of electrical equipment in high energy low voltage systems. The adapter can be equipped with an efficient low voltage fuse which reliably isolates the circuit from the power grid in the event of excessively high-current load. Transparent fuse holder sleeve to accept a high-rating fuse 10 x 38 mm.

The fuse is not supplied.

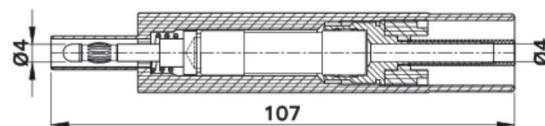
PF/S4-10x38-S: Two Ø 4 mm rigid sockets as terminal connection, accepting spring-loaded Ø 4 mm plugs with rigid insulating sleeve.

PF/S4-BS-10x38-S: One Ø 4 mm plug with rigid insulating sleeve and one rigid Ø 4 mm socket, to accept spring-loaded Ø 4 mm plugs with rigid insulating sleeve.

PF/S4-10x38-S



PF/S4-BS-10x38-S



Order No.	Type	Rated voltage/current		*Colors
50.0295-*	PF/S4-10x38-S	600 V, CAT III / 20 A ¹⁾	CE	21 22
50.0296-*	PF/S4-BS-10x38-S	600 V, CAT III / 20 A ¹⁾	CE	21 22

¹⁾ Depends on the fuse used.



High breaking capacity fuse: page 110



Rating sheet RZ069

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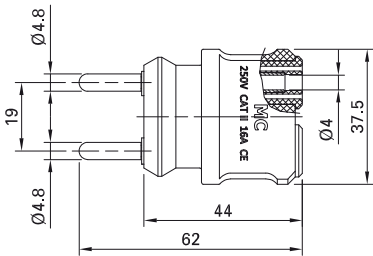
Assembly instructions MA114

www.staubli.com/electrical

Adapter A-NETZ/SLK4

For connecting standard power sockets. For connecting phase and neutral conductor, this adapter has two Ø 4 mm rigid sockets at

rear, accepting spring-loaded Ø 4 mm plugs with rigid insulating sleeve.



Order No.	Type	Rated voltage/current		Color
24.0145-28	A-NETZ/SLK4	250 V, CAT II / 16 A	CE	28

Ø 4 mm Adapters Component Holders

SKP4-...P/38

Component holders for safe use in the laboratory and in education. The system consists of the experimental circuit board SET4 for mounting the component holders SKP4-... The components are visible

in the transparent housing of the component holders.

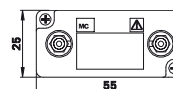
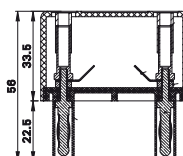
- Ø 4 mm plug connection system
- Protection degree IP2X
- Simple assembly

Component Holder SKP4-2P/38

Two-pole, to plug onto the experimental board SET4 (socket spacing: 38 mm). With Ø 4 mm sockets at the rear. The individual components are soldered in place. Printed circuit boards made by the customer can

also be screw-mounted (for dimensions see assembly instructions). Simple assembly with standard tool.

Touch protection IP2X.



Order No.	Type	Rated voltage/current		Color
50.0031-33	SKP4-2P/38	600 V, CAT II / 5 A	Ni	33



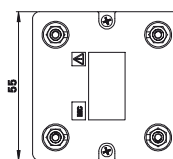
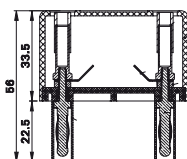
Component Holder SKP4-4P/38

Four-pole, to plug onto the experimental board SET4 (socket spacing: 38 mm). With Ø 4 mm sockets at the rear. The individual

components are soldered in place. Printed circuit boards made by the customer can also be screw-mounted (for dimensions see

assembly instructions). Simple assembly with standard tool.

Touch protection IP2X.



Assembly instructions MA551

www.staubli.com/electrical

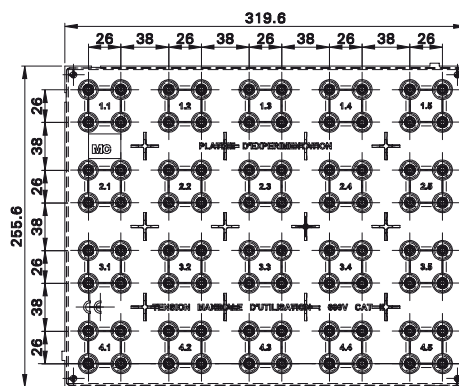
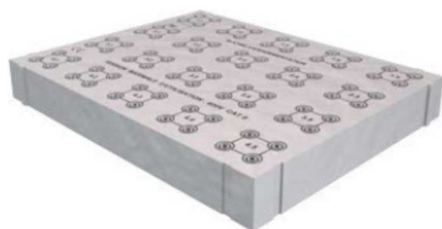
Order No.	Type	Rated voltage/current		Color
50.0032-33	SKP4-4P/38	600 V, CAT II / 5 A	Ni	33

Safety Experimental Circuit Board SET4

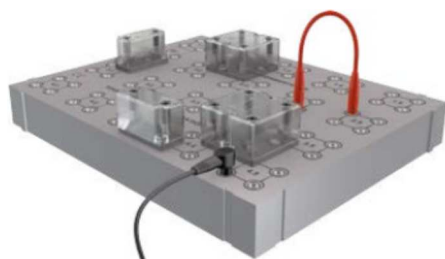
With 80 Ø 4 mm sockets (20 contacts, each with 4 sockets) for mounting the component holders SKP4-..P/38 or for plugging-in test leads with spring-loaded Ø 4 mm plugs with

rigid insulating sleeve. Several boards can be mounted together.

Touch protection IP2X.



Order No.	Type	Rated voltage/current		Color
50.0033-29	SET4	600 V, CAT II / 5 A	Ni CE	29

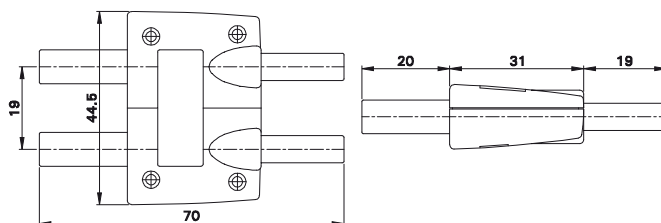


Component Holder XKH-4/19/...

To connect individual components with Ø 4 mm test leads. The components are clearly visible in the transparent adapter housing, which is therefore ideally suited for

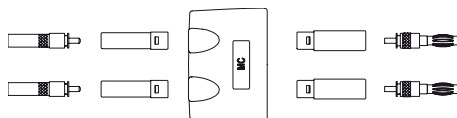
instructional use. The components in the adapter casing are provided with soldered connections, and the casing is screwed together. Available in various versions with

combinations of Ø 4 mm plugs and sockets. Metal parts made of brass.



Component Holder XKH-4/19/A

Version with two spring-loaded Ø 4 mm plugs with rigid insulating sleeve and two rigid sockets.

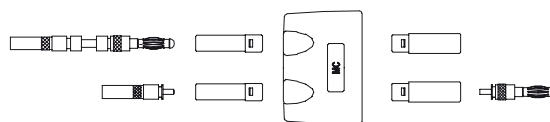


Order No.	Type	Rated voltage/current		Color
66.9045-33	XKH-4/19/A	600 V, CAT II / ¹⁾	Ni	33

¹⁾ Dependent on the component inserted.

Component Holder XKH-4/19/B

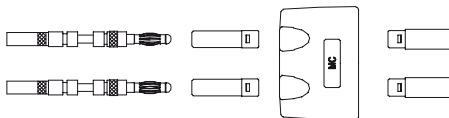
Version with one spring-loaded Ø 4 mm plug with rigid insulating sleeve, one rigid socket,



Order No.	Type	Rated voltage/current		Color
66.9046-33	XKH-4/19/B	600 V, CAT II / ¹⁾	Ni	33

Component Holder XKH-4/19/C

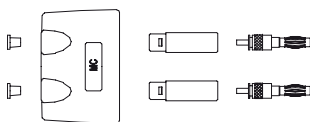
Version with two plug sockets, each consisting of a spring-loaded Ø 4 mm plug with rigid insulating sleeve and a Ø 4 mm rigid socket at rear.



Order No.	Type	Rated voltage/current		Color
66.9047-33	XKH-4/19/C	600 V, CAT II / ¹⁾	Ni	33

Component Holder XKH-4/19/D

Version with two spring-loaded Ø 4 mm plugs with rigid insulating sleeve and two stoppers.



Order No.	Type	Rated voltage/current		Color
66.9049-33	XKH-4/19/D	600 V, CAT II / ¹⁾	Ni	33

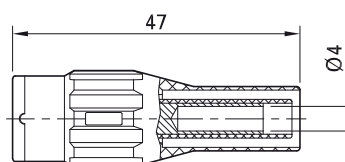


Ø 4 mm / BNC Adapters

Adapter XM-B

One-pole, with touch-protected BNC male connector linked to a Ø 4 mm rigid socket, accepting spring-loaded Ø 4 mm plugs with

rigid insulating sleeve. The contact pin of the BNC plug connector is in gold-plated brass.



Order No.	Type	Rated voltage/current		*Colors
67.9799-*	XM-B	600 V, CAT II 300 V, CAT III	Au Ni CE	21 22

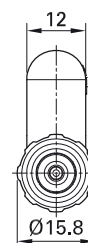
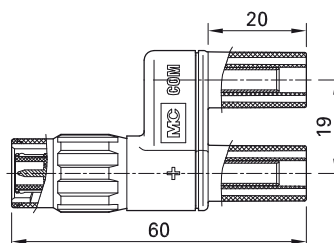
Adapter X.../4

Two-pole touch-protected adapters with Ø 4 mm connectors linked to the BNC system. Versions with BNC male or female

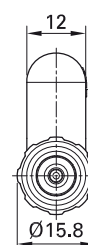
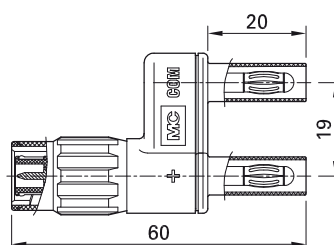
connector and rigid Ø 4 mm sockets or Ø 4 mm MULTILAM plugs with rigid insulating sleeve. The contact pins and sockets of

the inner conductor of the BNC plug connector are in gold-plated brass.

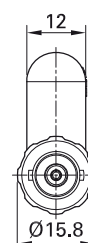
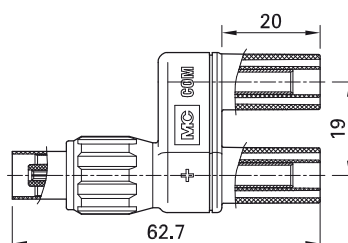
XM-BB/4



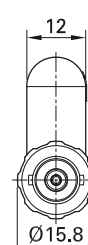
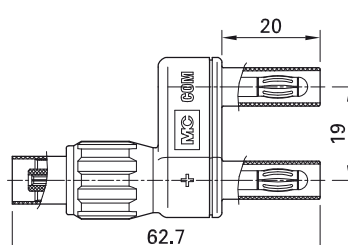
XM-SS/4



XF-BB/4



XF-SS/4



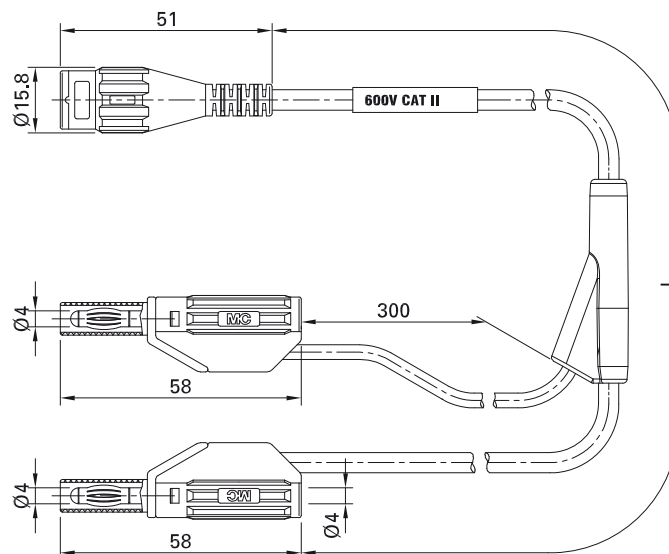
Order No.	Type	Rated voltage	BNC connectors	Ø 4 mm connectors		Color
67.9536-21	XM-BB/4	1000 V, CAT II 600 V, CAT III	BNC male connector	Ø 4 mm sockets	Au Ni CE UL	21
67.9535-21	XM-SS/4	1000 V, CAT II 600 V, CAT III	BNC male connector	Ø 4 mm plugs	Au Ni CE UL	21
67.9538-21	XF-BB/4	1000 V, CAT II 600 V, CAT III	BNC female connector	Ø 4 mm sockets	Au Ni CE UL	21
67.9537-21	XF-SS/4	1000 V, CAT II 600 V, CAT III	BNC female connector	Ø 4 mm plugs	Au Ni CE UL	21

Ø 4 mm / BNC Leads

Adapter Lead XLAM-446/SC...

Highly flexible, fully shielded adapter leads. One end with coaxial cable with touch-protected BNC male connector, other end with

stackable Ø 4 mm MULTILAM plugs with rigid insulating sleeve.

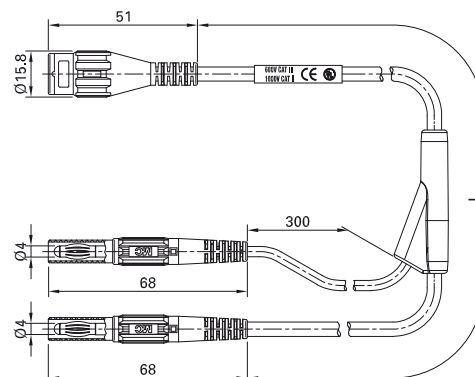


Order No.	Type	Rated voltage	Lead		Lead lengths L [cm]
67.9800-□	XLAM-446/SC	600 V, CAT II 300 V, CAT III	PVC RG58	Au Ni CE UL	100 160
67.9868-□	XLAM-446/SC/SIL	600 V, CAT II 300 V, CAT III	SIL SILI-SC 0,5/1,0	Au Ni CE UL	100 160

Adapter Lead XLAM-414/SC...

Highly flexible, fully shielded adapter leads.
One end with coaxial cable with touch-protected BNC male connector, other end with

in-line Ø 4 mm MULTILAM plugs with rigid insulating sleeve.

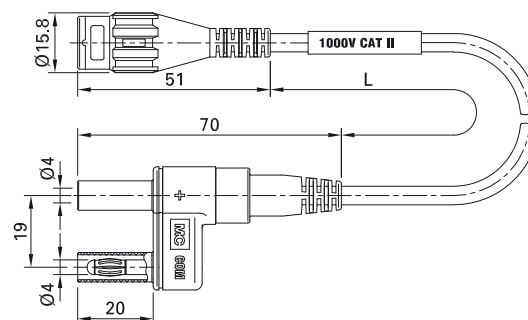


Order No.	Type	Rated voltage	Lead		Lead lengths L [cm]
67.9842-□	XLAM-414/SC	1000 V, CAT II 600 V, CAT III	PVC RG58	Au Ni CE UL	100 160
67.9867-□	XLAM-414/SC/SIL	1000 V, CAT II 600 V, CAT III	SIL SILI-SC 0,5/1,0	Au Ni CE UL	100 160

Adapter Lead XDS-BS/...

Highly flexible, fully shielded adapter leads.
One end with coaxial cable with touch-protected BNC male connector, other end with

Ø 4 mm MULTILAM plugs with rigid insulating sleeve, two-pole version.



Order No.	Type	Rated voltage	Lead		Lead lengths L [cm]	Color
67.9539-□21	XDS-BS/58	1000 V, CAT II 600 V, CAT III	PVC RG58	Au Ni CE	100 160	21
67.9540-□21	XDS-BS/SIL	1000 V, CAT II 600 V, CAT III	SIL SILI-SC 0,5/1,0	Au Ni CE	100 160	21

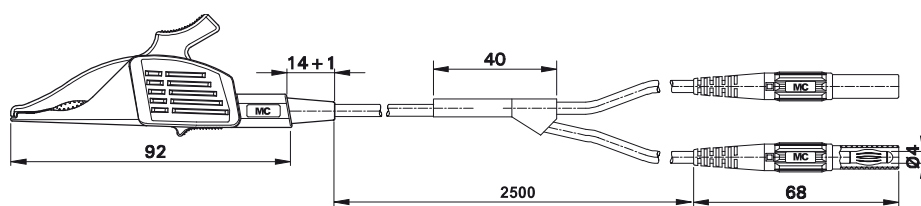
Ø 4 mm Kelvin Test Leads

Kelvin Test Lead XDK-KELVIN

One end with Kelvin dolphin clip with all-round insulation, robust, strong-jawed and

with surface for fine wire, offering a versatile range of connecting possibilities. The other

end with Ø 4 mm MULTILAM plugs with rigid insulating sleeve. Highly flexible, silicone-insulated coaxial cable.

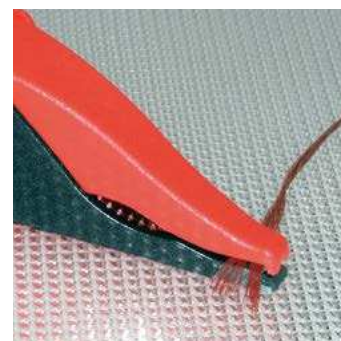


Order No.	Type	Rated voltage	Lead		Lead length L [cm]
66.9795-250	XDK-KELVIN	1000 V, CAT II / 20 A	SIL 2x 1,0 mm ²	Ni CE	250



Rating sheet RZ058

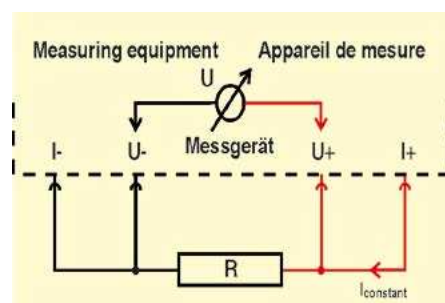
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Principle of the Four-wire or Kelvin Measurement

A defined current I_{constant} flows through the resistance R , coming from a constant current source. The voltage U over the resistance R can be very accurately measured,

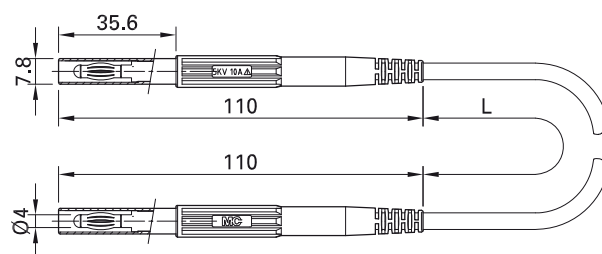
as due to the high inner resistance of the voltmeter, the voltage drop on the circuits can be disregarded (see sketch). According to Ohm's law $R = U / I_{\text{constant}}$.



Special Test Accessories for Use with Insulation Testing Instruments up to 5 kV

Test Lead XHM-5000

Highly flexible, with in-line Ø 4 mm MULTILAM plug with rigid insulating sleeve on both ends.



Order No.	Type	Rated voltage/current	Lead		Lead length [cm]	*Colors
66.9425-150*	XHM-5000	1000 V, CAT IV 5 kV ¹⁾ / 10 A	TPE 0,5 mm ²	Ni CE	150	21 22 23

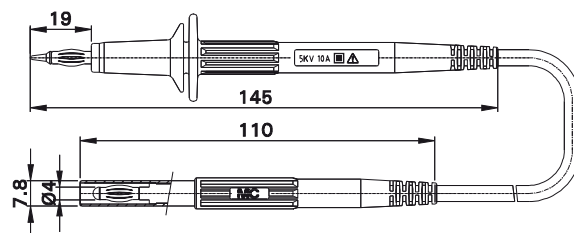


Rating sheet RZ079

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Test Lead XHL-5000

Highly flexible. One end with Ø 4 mm test probe with spring-loaded MULTILAM, the other end with in-line Ø 4 mm MULTILAM plug with rigid insulating sleeve. Supplied with protective cap.



Order No.	Type	Rated voltage/current	Lead		Lead length [cm]	*Colors
66.9426-150*	XHL-5000	5 kV ¹⁾ / 10 A	TPE 0,5 mm ²	Ni CE	150	21 22 23

¹⁾ Output voltage of test instruments, e.g. insulation testers



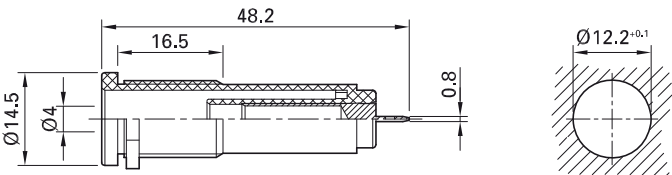
Rating sheet RZ109

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Socket XHB-5000

Insulated, rigid, Ø 4 mm for high voltages, to accept test leads XHM-5000 and XHL-5000. For safety reasons, the socket is not compat-

ible with any other Ø 4 mm plugs in our range.
Flat connecting tab 4.8 mm x 0.8 mm.



Order No.	Type	Rated voltage/current		*Colors
66.9427-*	XHB-5000	1000 V, CAT IV 5 kV ¹⁾ / 10 A	Au	21 22 23

¹⁾ Output voltage of test instruments, e.g. insulation testers

