

SAIV-M12BG-4-5.0U

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

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www.weidmueller.com



Sensor/actuator cables are used for wiring sensors and actuators and for transmitting data or power in various applications. The moulded cable offers connected and tested connection of the plug-in connector to the cable ex-works. The cables may be exposed to a wide range of conditions, such as humidity, dust, heat, cold, shock or vibration.

Our developers have focused specifically on this issue and designed a host of different M8 and M12 sensor-actuator cables so you are bound to find the solution you need for your application.

The M12 sensor-actuator cables are supplied as standard with brass nickel-plated nuts. However if you are looking to use our products in an extremely harsh environment, we can also supply a variant with a stainless-steel nut. This enables use in environments where cables with nickel-plated M12 nuts would rust and cables with a plastic nut are unsuitable for mechanical reasons. Is there something you have not managed to find or you feel needs explanation? Talk to us!

General ordering data

Type	SAIV-M12BG-4-5.0U
Order No.	9457950500
Version	Sensor/actuator line, One end without connector, M12, Number of poles : 4, 5 m, Female socket, straight, Shielded: No, LED: No, Sheath material: PUR, Halogen: No
GTIN (EAN)	4032248229642
Qty.	1 pc(s).

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Technical data

Dimensions and weights

Net weight	165 g
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Temperatures

Operating temperature, max.	80 °C	Operating temperature, min.	-25 °C
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Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
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Technical specifications for cable

Number of poles	4	Core cross-section	0.34 mm ²
Outside diameter	4.7 mm ± 0.2 mm	Cable length	5 m
Shielded	No	Insulation	PP
Colour coding	brown, white, blue, black	Sheath material	PUR
Sheathing colour	black	Halogen	No
Temperature range, moving	-25...80 °C	Temperature range, stationary	-40...80 °C
Core in accordance with UL AWM style	10493 (80 °C / 300 V)	Outer cladding in accordance with UL AWM style	20233 (80 °C / 300 V)
Suitable for cable carriers	Yes	Torsion resistance	360 °/m
Bending radius, min., stationary	5 x cable diameter	Bending radius, min., moving	10 x cable diameter
Acceleration	5 m/s ²	Speed	5 m/s
Bending cycles	2 Mio	Resistant to welding beads	No
Configurable cable length	No	Hydrolysis and microbe resistant	Yes
LABS-free	Yes	Resistance to oils	in accordance with IEC 60811:404
Resistance to spread of flame	in accordance with IEC 60332-1-2, in accordance with IEC 60332-1-3, in accordance with IEC 60332-2-2, In accordance with UL1581 UL/ CUL FT1		

General technical data

AF size	12 mm	Version	Female socket, straight
Connection thread	M12	Housing main material	PUR
Threaded ring material	Stainless steel 1.4404 (316L)	Coding	A
Protection degree	IP65, IP66, IP67, IP68, when screwed in	Contact surface	Gold-plated
LED	No	Rated voltage	250 V
Rated current	4 A	Insulation strength	10 ⁸ Ω
Temperature range of housing	-25...+80 °C	Tightening torque	M12: 0.8 - 1.2 Nm
Plugging cycles jumpered	≥ 100	Pollution severity	3
	No		

Standards

Connector standard	IEC 61076-2-101	Certificate no. (cULus)	E307231
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Data sheet

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Classifications

ETIM 6.0	EC001855	ETIM 7.0	EC001855
eClass 9.0	27-06-03-11	eClass 9.1	27-06-03-11
eClass 10.0	27-06-03-11	UNSPSC	26-12-16-13

Approvals

Approvals



ROHS	Conform
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Downloads

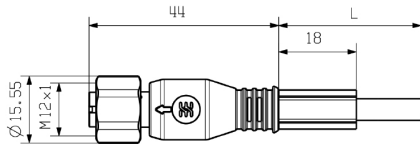
Brochure/Catalogue	FL FIELDWIRING EN
Engineering Data	EPLAN, WSCAD

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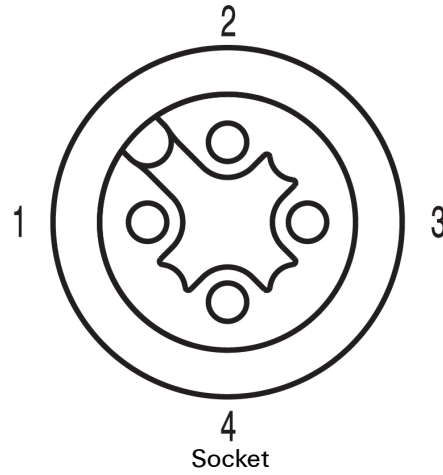
Drawings

Dimensioned drawing



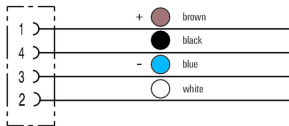
Straight socket

Pole scheme



Socket

Wiring diagram



The ideal tool: Screwty® with torque function



Light, securely screwed-in round plug-in connectors. Screwty set DM / VPE: 1 / Order No.: 1920000000 Adapters: M12, M12 F, M8, M8 F

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Accessories

Tool



Tools for stripping the sheathing from uncut power lines and outlet lines, plus screwdrivers for installing Pick-to-Light components.

General ordering data

Type	SCREWTY-M12-DM	Version
Order No.	1900001000	Tools, Cable gland tool for moulded M12 lines
GTIN (EAN)	4032248436408	
Qty.	1 pc(s).	

Tools



- Stripping tools with automatic self-adjustment
- For flexible and solid conductors
- Ideally suitable for mechanical and plant engineering, railway and rail traffic, wind energy, robot technology, explosion protection as well as marine, offshore and ship building sectors
- Stripping length adjustable via end stop
- Automatic opening of clamping jaws after stripping
- No fanning-out of individual conductors
- Adjustable to diverse insulation thicknesses
- Double-insulated cables in two process steps without special adjustment
- No play in self-adjusting cutting unit
- Long service life
- Optimised ergonomic design

General ordering data

Type	STRIPPER 6-16 RED-LINE	Version
Order No.	9203110000	Stripping and cutting tool, 16mm ²
GTIN (EAN)	4032248541423	
Qty.	1 pc(s).	

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Accessories

Cutting tools for outside diameters up to 22 mm



Cutting tools for conductors up to 8 mm, 12 mm, 14 mm and 22 mm outside diameter. The special blade geometry allows pinch-free cutting of copper and aluminium conductors with minimum physical effort. The cutting tools also come with VDE and GS-tested protective insulation up to 1,000 V in accordance with EN/IEC 60900.

General ordering data

Type	KT 8	Version
Order No.	9002650000	Cutting tools ,Cutting tool for one-hand operation
GTIN (EAN)	4008190020163	
Qty.	1 pc(s).	

Blank



TM-I is an acknowledged and accredited marker type for traffic engineering applications. There are five different tag lengths available for individual labelling with long character strings. Easy handling of separation and installation thanks to the project marker field. Pre-attachment of sleeves and retrofitting of tags offer excellent versatility

The special contour of TM-I allows easy assembly and secures firm positioning. They are compatible with a number of commercially available sleeves. Thanks to the MultiCard format, the tags can be printed quickly and conveniently with the SMark laser printer, PrintJet ADVANCED, plotter, MC-Mobilo or the STI pen.

- Easy handling of separation and installation thanks to the project marker field.
- Acknowledged and accredited marker for traffic engineering applications
- Pre-attachment of sleeves and retrofitting of tags offer excellent versatility
- Not suited for labelling with P-Ink or STI pen in connection with CLI T sleeves

For custom printing: Please send us a file of our labeling software M-Print PRO or M-Print PRO Online (without installation) for your labeling specifications.

General ordering data

Type	TM-I 18 MC NE GE	Version
Order No.	1718431687	TM-I, Insert markers, 18 x 4 mm, yellow
GTIN (EAN)	4008190349028	
Qty.	320 pc(s).	

Data sheet

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Accessories

Type	TM-I 18 MC NE WS	Version
Order No.	1718431044	TM-I, Insert markers, 18 x 4 mm, white
GTIN (EAN)	4008190349011	
Qty.	320 pc(s).	

Tools

Sheathing stripper for PVC cables



General ordering data

Type	AM 12	Version
Order No.	9030060000	Tools, Sheathing strippers, UTP and STP data cables
GTIN (EAN)	4008190337827	
Qty.	1 pc(s).	

Screwty® cable gland tool with torque function



The ideal tool for any application

Screwty® is the ideal, all-purpose tool for tightening all common sensor and actuator cables. Even difficult-to-reach round plugs are accessible using the Screwty®. A simple turning movement tightens and loosens the connectors without the need for excessive force. The Screwty® is a unique and global solution since it fits with most cables and plugs from other vendors (over 90 %). The Screwty® consists of a handle with a conventional 1/4" adapter. Thus it can be used for all sizes: for M12 and M8 round plug-in connectors, and for M12F and M8F customisable plugs and sockets, as well as for all M23 plugs and sockets.

General ordering data

Type	SAI-SCREWTY BOX	Version
Order No.	1939180000	Tools, Bolting tool
GTIN (EAN)	4032248615506	
Qty.	1 pc(s).	
Type	SCREWTY SW12	
Order No.	2598970000	
GTIN (EAN)	4050118781151	
Qty.	1 pc(s).	