SAIP-M12BG-4-3.0U

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 M8 and 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 plastic nut. This enables use in environments where cables with nickel-plated M8 and M12 nuts would rust.

Is there something you have not managed to find or you feel needs explanation? Talk to us!

General ordering data

Version	Sensor/actuator line, One end without connector, M12, Number of poles : 4, 3 m, Female socket, straight, Shielded: No, LED: No, Sheath material: PUR, Halogen: No
Order No.	1108740300
Type	SAIP-M12BG-4-3.0U
GTIN (EAN)	4032248888443
Qty.	1 pc(s).

SAIP-M12BG-4-3.0U

Technical data

Dimensions and weights

Net weight	101 g

Environmental Product Compliance

REACH SVHC	Lead 7439-92-1

Technical specifications for cable

Acceleration	5 m/s²	Bending cycles	12 Mio
Bending cycles at torsion	> 5 Mio.	Bending radius, min., moving	10 x cable diameter
Bending radius, min., stationary	5 x cable diameter	Cable length	3 m
Colour coding	brown, white, blue, black	Configurable cable length	No
Core cross-section	0.34 mm²	Core in accordance with UL AWM style	10493 (80 °C / 300 V)
Halogen	No	Hydrolysis and microbe resistant	Yes
Insulation	PP	LABS-free	Yes
Length of torsion	1 m	Number of poles	4
Outer cladding in accordance with UL AWM style	20233 (80 °C / 300 V)	Outside diameter	4.7 mm ± 0.2 mm
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
Resistant to welding beads	No	Sheath material	PUR
Sheathing colour	black	Shielded	No
Speed	5 m/s	Suitable for cable carriers	Yes
Temperature range, moving	-25...80 °C	Temperature range, stationary	-40...80 °C
Torsion resistance	360 °/m		

General technical data

AF size	12 mm	Coding	A
Connection thread	M12	Contact surface	Gold-plated
Housing main material	PUR	Insulation strength	10^8 Ω
LED	No	Plugging cycles	≥ 100
Pollution severity	3	Protection degree	IP65, IP66, IP67, IP68, when screwed in
Rated current	4 A	Rated voltage	250 V
Temperature range of housing	-40 ... +85 ° C	Threaded ring material	Plastic
Tightening torque	M12 (plastic nut): 0.6 - 0.8 Nm	Version	Female socket, straight
jumpered	No		

Electrical properties

Insulation strength	10^8 Ω	Rated voltage	250 V

General standards

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

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SAIP-M12BG-4-3.0U

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Technical data

Standards

Connector standard	IEC 61076-2-101

Classifications

ETIM 6.0	EC001855	ETIM 7.0	EC001855
ETIM 8.0	EC001855	ECLASS 9.0	27-06-03-11
ECLASS 9.1	27-06-03-11	ECLASS 10.0	27-06-03-11
ECLASS 11.0	27-06-03-11		

Approvals

Approvals

ROHS	Conform
UL File Number Search	E307231

Downloads

Engineering Data	CAD data – STEP
Engineering Data	EPLAN, WSCAD
Product Change Notification	Technical change to M12 plastic nuts - EN
	Technical change to M12 plastic nuts - DE
Catalogues	Catalogues in PDF-format
Brochures	FL FIELDWIRING EN

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SAIP-M12BG-4-3.0U

Drawings

Dimensioned drawing

Straight socket

Pole scheme

Socket

Wiring diagram

1	+	brown	
4		black	
3	–	blue	
2		white	

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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SAIP-M12BG-4-3.0U

Accessories

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	Bolting tool	
GTIN (EAN)	4032248615506		
Qty.	1 pc(s).		
Type	SCREWTY-M12-DM	Version	
Order No.	1900001000	Cable gland tool for moulded M12 lines	
GTIN (EAN)	4032248436408		
Qty.	1 pc(s).		
Type	SCREWTY SW12		
Order No.	2598970000		
GTIN (EAN)	4050118781151		
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
GTIN (EAN)	4032248541423	
Qty.	1 pc(s).	

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Weidmüller ∃Ξ

SAIP-M12BG-4-3.0U

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
D-32758 Detmold
Germany

www.weidmueller.com

Accessories

Tools

Sheathing stripper for PVC cables

General ordering data

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

Blank

TM-I is an acknowledged and accredited marker type for traffic engineering applications. There are various 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 PrintJet CONNECT, plotter 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 WS	Version	
Order No.	1718431044	TM-I, Insert markers, 18 x 4 mm, white	
GTIN (EAN)	4008190349011		
Qty.	320 pc(s).		

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Accessories

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).		

Cutting tools

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).		

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Mouser Electronics

Authorized Distributor

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