

### Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold

Germany

Fon: +49 5231 14-0 Fax: +49 5231 14-292083 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 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

Туре	SAIP-M12GM8W-3-3.0U
Order No.	1220620300
Version	Sensor/actuator line, Connecting line, M12 / M8, Number of poles : 3, 3 m, pin, straight, Socket, angled, Shielded: No, LED: No, Sheath material: PUR, Halogen: No
GTIN (EAN)	4050118009910
Oty.	1 pc(s).



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## **Technical data**

## **Dimensions and weights**

Net weight	76 g

### **Environmental Product Compliance**

REACH SVHC Lead 7439-92-1

## **Technical specifications for cable**

Number of poles	3
Outside diameter	4.1 mm ± 0.2 mm
Shielded	No
Colour coding	brown, blue, black
Sheathing colour	black
Temperature range, moving	-2580 °C
Core in accordance with UL AWM style	
·	10493 (80 °C / 300 V)
Suitable for cable carriers	Yes
Bending radius, min., stationary	5 x cable diameter
Acceleration	5 m/s <sup>2</sup>
Bending cycles	2 Mio
Configurable cable length	No
Resistance to oils	·
Resistance to oils	

Core cross-section	0.25 mm <sup>2</sup>
Cable length	3 m
Insulation	PP
Sheath material	PUR
Halogen	No
Temperature range, stationary	-4080 °C
Outer cladding in accordance with UL AWM style	20233/21198 (80 °C / 300 V)
Torsion resistance	360 °/m
Bending radius, min., moving	10 x cable diameter
Speed	5 m/s
Resistant to welding beads	No
Hydrolysis and microbe resistant	Yes
Resistance to spread of flame	In accordance with UL1581 UL/ CUL FT1,

in accordance with IEC 60811:404

in accordance with IEC 60332-1-2, in accordance with IEC 60332-1-3, in accordance with IEC 60332-2-2

### **General technical data**

AF size		Version	pin, straight, Socket,
	12 mm		angled
Connection thread	M12 / M8	Housing main material	PUR
Threaded ring material	Plastic	Coding	M12 = A, M8 = none
Protection degree	IP65, IP66, IP67, IP68,	Contact surface	
	when screwed in		Gold-plated
LED	No	Rated voltage	60 V
Rated current	4 A	Insulation strength	10 <sup>8</sup> Ω
Temperature range of housing		Tightening torque	M8: 0.5 - 0.6 Nm, M12
	-25+80 °C	_	(plastic): 0.9 - 1.1 Nm
Plugging cycles	≥ 100	Pollution severity	3
jumpered	No		

## **Standards**

Connector standard	IEC 61076-2-101, IEC
	61076-2-104

### 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		



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# **Technical data**

### **Approvals**

Approvals



## **Downloads**

Brochure/Catalogue	FL FIELDWIRING EN
Engineering Data	EPLAN, WSCAD
Product Change Notification	Technical change to M12 plastic nuts - EN
	Technical change to M12 plastic nuts - DE



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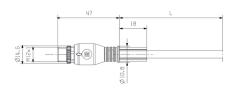
Germany

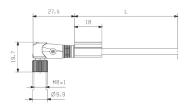
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## **Drawings**

## Dimensioned drawing

## **Dimensioned drawing**



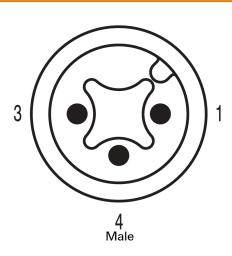


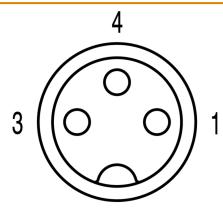
Male, straight

Pole scheme

Angled socket

### Pole scheme

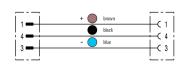




Socket

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



Version

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
Order No. 1900001000
GTIN (EAN) 4032248436408

4032248436408 1 pc(s). Tools, Cable gland tool for moulded M12 lines

### **Tools**

Qty.



- 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

<u>9203110000</u>

GTIN (EAN) 4032248541423

Qty. 1 pc(s).

Order No.

Version

Stripping and cutting tool, 16mm<sup>2</sup>



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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
Order No. 9002650000
GTIN (EAN) 4008190020163
Oty. 1 pc(s).

Version

Cutting tools ,Cutting tool for one-hand operation

#### 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. Preattachment 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-lnk 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
Order No. 1718431687
GTIN (EAN) 4008190349028
Qty. 320 pc(s).

Version

TM-I, Insert markers, 18 x 4 mm, yellow



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## **Accessories**

Type TM-I 18 MC NE WS
Order No. 1718431044
GTIN (EAN) 4008190349011
Oty. 320 pc(s).

Version

TM-I, Insert markers, 18 x 4 mm, white

### **Tools**

Qty.

### Sheathing stripper for PVC cables



## General ordering data

Type AM 12
Order No. 9030060000
GTIN (EAN) 4008190337827

1 pc(s).

Version

Tools, Sheathing strippers, UTP and STP data cables

## 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
Order No. 1939180000
GTIN (EAN) 4032248615506

Version

Tools, Bolting tool

Qty. 1 pc(s).