

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

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

Version	Sensor/actuator line, Connecting line, M12 / M8, Number of poles : 3, 3 m, pin, straight - socket, 90°, Shielded: No, LED: No, Sheath material: PUR, Halogen: No
Order No.	1220620300
Туре	SAIP-M12GM8W-3-3.0U
GTIN (EAN)	4050118009910
Qty.	1 pc(s).



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# **Technical data**

Net weight	64.24 g	

## **Technical specifications for cable**

Acceleration	5 m/s <sup>2</sup>	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, blue, black	Configurable cable length	No
Core cross-section	0.25 mm <sup>2</sup>	Core in accordance with UL AWM style	10493 (80 °C / 300 V)
Halogen	No	Hydrolysis and microbe resistant	Yes
Insulation	PP	Irradiation crosslinked	No
Length of torsion	1 m	Number of poles	3
Outer cladding in accordance with UL		Outside diameter	
AWM style	20549 (80 °C / 300 V)		11
AVVIVI Style	20049 (00 C / 300 V)		$4.1 \text{ mm} \pm 0.2 \text{ mm}$
Resistance to oils	in accordance with IEC 60811:404	Resistance to spread of flame	in accordance with IEC 60332-2-2, In accordance with UL1581 UL / CUL FT2
	in accordance with IEC	Resistance to spread of flame  Sheath material	in accordance with IEC 60332-2-2, In accordance with UL1581 UL / CUL
Resistance to oils	in accordance with IEC 60811:404		in accordance with IEC 60332-2-2, In accordance with UL1581 UL / CUL FT2
Resistance to oils  Resistant to welding beads	in accordance with IEC 60811:404 No	Sheath material	in accordance with IEC 60332-2-2, In accordance with UL1581 UL / CUL FT2 PUR
Resistance to oils  Resistant to welding beads Sheathing colour	in accordance with IEC 60811:404 No black	Sheath material Shielded	in accordance with IEC 60332-2-2, In accordance with UL1581 UL / CUL FT2 PUR No

#### **General technical data**

Coding	M12 = A-coded, $M8 =$	Connection thread	
	none	_	M12 / M8
Contact surface	Gold-plated	Housing main material	PUR
Insulation strength	10 <sup>8</sup> Ω	LED	No
Plugging cycles	≥ 100	Pollution severity	3
Protection degree	IP65, IP66, IP67, IP68,	Rated current	
	when screwed in		4 A
Rated voltage	60 V	Temperature range of housing	-25+85 °C
Threaded ring material		Tightening torque	M8: 0.5 - 0.6 Nm, M12
	Plastic		(plastic): 0.9 - 1.1 Nm
Version	pin, straight - socket,	jumpered	
	90°		No

#### **Electrical properties**

Insulation strength	10 <sup>8</sup> Ω	Rated voltage	60 V

### **General standards**

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

#### **Standards**

Connector standard	IEC 61076-2-101, IEC 61076-2-104	
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# **Technical data**

## Plug, left

Plug left M12, A-coded, IP69, male contact, straight, Plastic,

unshielded

## Plug, right

Plug right M8, IP69, female contact, angled 90°, Plastic, un-

shielded

#### Classifications

ETIM 6.0	EC001855	ETIM 7.0	EC001855
ETIM 8.0	EC001855	ETIM 9.0	EC001855
ETIM 10.0	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	ECLASS 12.0	27-06-03-11
ECLASS 13.0	27-06-03-11	ECLASS 14.0	27-06-03-11
ECLASS 15.0	27-06-03-11		

#### **Environmental Product Compliance**

RoHS Compliance Status	Compliant with exemption
RoHS Exemption (if applicable/known)	6c
REACH SVHC	Lead 7439-92-1
SCIP	1c533b66-fcff-4da5-b89f-fd55fbf5cb55

#### **Approvals**

Approvals



Approvals MAMID	https://mdcop.weidmueller.com/mediadelivery/rendition/900_319222/-T1z1mm-S800/ https://
	mdcop.weidmueller.com/mediadelivery/rendition/900_319260/-T1z1mm-S800/
ROHS	Conform

#### **Downloads**

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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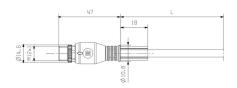
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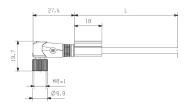
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## **Drawings**

## **Dimensioned drawing**

## **Dimensioned drawing**



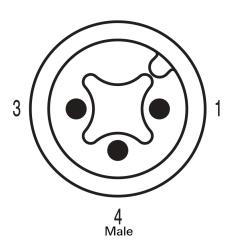


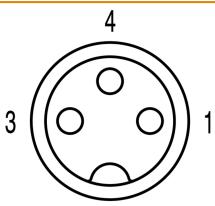
Male, straight

Angled socket

#### Pole scheme







Socket

## Wiring diagram

The ideal tool: Screwty <sup>®</sup> with torque function





Light, securely screwed-in round plug-in connectors. Screwty set DM / VPE: 1 / Order No.: 192000000 Adapters: M12, M12 F, M8, M8 F



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## **Accessories**

#### **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. 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 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-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**

Туре	TM-I 18 MC NE WS	Version
Order No.	<u>1718431044</u>	TM-I, Insert markers, 18 x 4 mm, white
GTIN (EAN)	4008190349011	
Qty.	320 pc(s).	
_		
Туре	TM-I 18 MC NE GE	Version
Type Order No.	TM-I 18 MC NE GE 1718431687	Version TM-I, Insert markers, 18 x 4 mm, yellow
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## Accessories

#### **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**

STRIPPER 6-16 RED-LINE Туре Order No.

9203110000

GTIN (EAN) 4032248541423 Qty.

1 pc(s).

Version

Stripping and cutting tool

#### **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 (KT 8 to KT 22) also come with VDE and GS-tested protective insulation up to 1,000 V in accordance with EN/IEC 60900.

## **General ordering data**

Туре Order No. 9002650000

4008190020163 GTIN (EAN)

Qty. 1 pc(s). Cutting tools, Cutting tool for one-hand operation



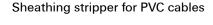
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## **Accessories**

#### **Tools**





### **General ordering data**

Type AM 12
Order No. 9030060000
GTIN (EAN) 4008190337827
Oty. 1 pc(s).

version

Tools, Sheathing strippers

## 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**

Туре	SCREWTY-M12-DM	Version	Packaging	
Order No.	<u>1900001000</u>	Cable gland tool for moulded M12 lines	Cardboard	
GTIN (EAN)	4032248436408		box	
Qty.	1 pc(s).			
Туре	SAI-SCREWTY BOX	Version	Packaging	
Order No.	<u>1939180000</u>	Bolting tool	Plastic case	
GTIN (EAN)	4032248615506		+ form	
Qty.	1 pc(s).		insert	