

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, One end without connector,
	M12, Number of poles: 3, 10 m, pin, 90°,
	Shielded: No, LED: No, Sheath material: PUR,
	Halogen: No
Order No.	1108671000
Туре	SAIP-M12W-3-10U
GTIN (EAN)	4032248888702
Qty.	1 pc(s).



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Technical data

Dimensions and weights

Net weight 259 g

Environmental Product Compliance

REACH SVHC Lead 7439-92-1

Technical specifications for cable

Acceleration 5 m/s²			
Bending radius, min., moving 10 x cable diameter Bending radius, min., stationary 5 x cable diameter Cable length 10 m Colour coding brown, blue, black Cori na coordance with UL AWM style 10.493 (80 °C / 300 V) Halogen No Housing main material PUR Hydrolysis and microbe resistant Yes Insulation PP LABS-free Yes Number of poles 3 Number of poles 3 Outside diameter 4.3 ± 0.2 mm Outside diameter 4.3 ± 0.2 mm Outside diameter 4.3 mm ± 0.2 mm Resistance to oils in accordance with IEC 60811:404 Resistance to spread of flame In accordance with UL 1581 UL/ CUL FT1, in accordance with IEC 60332-1-2, in accordance with IEC 60332-2-2 Resistant to welding beads No Sheath material PUR Sheathing colour black Shielded No Speed 5 m/s Suitable for cable carriers Yes Guitable for cable carriers <t< td=""><td>Acceleration</td><td>5 m/s²</td><td></td></t<>	Acceleration	5 m/s ²	
Bending radius, min., stationary 5 x cable diameter Cable length 10 m Colour coding brown, blue, black Core (configurable cable length) No Core in accordance with UL AWM style 10493 (80 °C / 300 V) Halogen No Housing main material PUR Hydrolysis and microbe resistant Yes Insulation PP LABS-free Yes Number of poles 3 Number of poles 3 Number of poles 3 Outer cladding in accordance with UL 20233/21198 (80 °C / 300 V) AWM style 20233/21198 (80 °C / 300 V) Outer diameter 4.3 ± 0.2 mm Outside diameter 4.3 mm ± 0.2 mm Outside diameter 4.3 mm ± 0.2 mm Outside diameter 4.3 mm ± 0.2 mm Resistance to oils in accordance with IEC 60811:404 Resistance to spread of flame In accordance with UL 1581 UL/ CUL FT1, in accordance with IEC 60332-1-2, in accordance IEC 60332-1-3, in accordance with IEC 60332-2-2 Resistant to welding beads No Sheathing colour	Bending cycles	12 Mio	
Cable length 10 m Colour coding brown, blue, black Configurable cable length No Core cross-section 0.34 mm² Core in accordance with UL AWM style 10493 (80 °C / 300 V) Housing main material PUR Hydrolysis and microbe resistant Yes Insulation PP LABS-free Yes Number of poles 3 Number of poles 3 Outer cladding in accordance with UL AWM style 20233/21198 (80 °C / 300 V) Outer diameter 4.3 ± 0.2 mm Outside diameter 4.3 mm ± 0.2 mm Outside diameter 4.3 mm ± 0.2 mm Outside diameter 4.3 mm ± 0.2 mm Resistance to oils in accordance with IEC 60811:404 Resistance to spread of flame In accordance with UL 1581 UL/ CUL FT1, in accordance with IEC 60332-1-2, in accordance IEC 60332-1-3, in accordance with IEC 60332-2-2 Resistant to welding beads No Sheath material PUR Sheath material PUR Sheathing colour black Shielded No <	Bending radius, min., moving	10 x cable diameter	
Colour coding brown, 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 Housing main material PUR Hydrolysis and microbe resistant Yes Insulation PP LABS-free Yes Number of poles 3 Number of poles 3 Number of poles 3 Outer cladding in accordance with UL AWM style 20233/21198 (80 °C / 300 V) Outer diameter 4.3 ± 0.2 mm Outside diameter 4.3 mm ± 0.2 mm Outside diameter 4.3 mm ± 0.2 mm Outside diameter 4.3 mm ± 0.2 mm Resistance to oils in accordance with IEC 60811:404 Resistance to spread of flame In accordance with IEC 60811:404 Resistant to welding beads No Sheath material PUR Sheathing colour black Shielded No Speed 5 m/s Suitable for cable carriers	Bending radius, min., stationary	5 x cable diameter	
Configurable cable length No Core cross-section 0.34 mm² Core in accordance with UL AWM style 10493 (80 °C / 300 V) Halogen No Housing main material PUR Hydrolysis and microbe resistant Yes Insulation PP LABS-free Yes Number of poles 3 Number of poles 3 Number of poles 3 Outer cladding in accordance with UL 20233/21198 (80 °C / 300 V) AWM style 20233/21198 (80 °C / 300 V) Outside diameter 4.3 ± 0.2 mm Outside diameter 4.3 mm ± 0.2 mm Resistance to oils in accordance with IEC 60811:404 Resistance to spread of flame In accordance with UL1581 UL/ CUL FT1, in accordance with IEC 60332-1-2, in accordance EC 60332-1-3, in accordance with IEC 60332-2-2 Resistant to welding beads No Sheath material PUR Sheathing colour black <td>Cable length</td> <td>10 m</td> <td></td>	Cable length	10 m	
Core cross-section 0.34 mm² Core in accordance with UL AWM style 10493 (80 °C / 300 V) Halogen No Housing main material PUR Hydrolysis and microbe resistant Yes Insulation PP LABS-free Yes Number of poles 3 Number of poles 3 Outer cladding in accordance with UL AWM style 20233/21198 (80 °C / 300 V) Outer diameter 4.3 ± 0.2 mm Outside diameter 4.3 mm ± 0.2 mm Outside diameter 4.3 mm ± 0.2 mm Outside diameter 5 igns ± Diameter 4.3 mm Signs ± Tolerance 0.2 mm Resistance to oils in accordance with IEC 60811:404 Resistance to spread of flame In accordance with IEC 60832-2-2 Resistant to welding beads No Sheath material PUR Sheathing colour black Sheathing colour black Shielded No Speed 5 m/s <t< td=""><td>Colour coding</td><td>brown, blue, black</td><td></td></t<>	Colour coding	brown, blue, black	
Core in accordance with UL AWM style 10493 (80 °C / 300 V) Halogen No Housing main material PUR Hydrolysis and microbe resistant Yes Insulation PP LABS-free Yes Number of poles 3 Number of poles 3 Outer cladding in accordance with UL AWM style 20233/21198 (80 °C / 300 V) Outside diameter 4.3 ± 0.2 mm Outside diameter 4.3 mm ± 0.2 mm Outside diameter 4.3 mm ± 0.2 mm Outside diameter Diameter 4.3 mm Signs ± Tolerance 0.2 mm Resistance to oils in accordance with IEC 60811:404 Resistance to spread of flame In accordance with UL 1581 UL/ CUL FT1, in accordance with IEC 60332-1-2, in accordance IEC 60332-1-3, in accordance with IEC 60332-2-2 Resistant to welding beads No Sheath material PUR Sheathing colour black Sheathing colour black Shielded No Speed 5 m/s Suitable for cable car	Configurable cable length	No	
Halogen	Core cross-section	0.34 mm ²	
Housing main material PUR	Core in accordance with UL AWM style	10493 (80 °C / 300 V)	
Hydrolysis and microbe resistant Yes Insulation PP LABS-free Yes Number of poles 3 Outer cladding in accordance with UL AWM style 20233/21198 (80 °C / 300 V) AWM style 20233/21198 (80 °C / 300 V) Outside diameter 4.3 ± 0.2 mm Outside diameter 4.3 mm ± 0.2 mm Outside diameter Diameter 4.3 mm Signs	Halogen	No	
Insulation	Housing main material	PUR	
Number of poles 3	Hydrolysis and microbe resistant	Yes	
Number of poles 3 Number of poles 3 Outer cladding in accordance with UL AWM style 20233/21198 (80 °C / 300 V) Outside diameter 4.3 ± 0.2 mm Outside diameter biameter Diameter 4.3 mm Signs ± Tolerance 0.2 mm Resistance to oils in accordance with IEC 60811:404 Resistance to spread of flame In accordance with UL1581 UL/ CUL FT1, in accordance with IEC 60332-1-2, in accordance with IEC 60332-2-2 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 -2580 °C Temperature range, moving, max. 80 °C	Insulation	PP	
Number of poles 3 Outer cladding in accordance with UL AWM style 20233/21198 (80 °C / 300 V) Outside diameter 4.3 ± 0.2 mm Outside diameter 4.3 mm ± 0.2 mm Outside diameter Diameter 4.3 mm Signs ± Tolerance 0.2 mm Resistance to oils in accordance with IEC 60811:404 Resistance to spread of flame In accordance with UL 1581 UL/ CUL FT1, in accordance with IEC 60332-1-2, in accordance IEC 60332-1-3, in accordance with IEC 60332-2-2 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 -2580 °C Temperature range, moving, max. 80 °C	LABS-free	Yes	
Outer cladding in accordance with UL AWM style Outer diameter Outside diameter Outside diameter Diameter Signs Tolerance In accordance with IEC 60811:404 Resistance to spread of flame Resistant to welding beads No Sheath material PUR Sheathing colour Sheed Sheed Sheed Sheed Sheed Sheed Sums Signs Diameter 4.3 mm Signs Diameter 4.3 mm Signs Diameter 4.3 mm Signs Diameter O.2 mm In accordance with IEC 60811:404 Resistance to spread of flame In accordance with UL 1581 UL/ CUL FT1, in accordance with IEC 60332-1-2, in accordance with IEC 60332-1-3, in accordance with IEC 60332-2-2 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 -2580 °C Temperature range, moving, max. 80 °C	Number of poles	3	
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Outside diameter Outside diameter Diameter Signs Tolerance In accordance with IEC 60811:404 Resistance to spread of flame In accordance with UL1581 UL/ CUL FT1, in accordance with IEC 60332-1-2, in accordance IEC 60332-1-3, in accordance with IEC 60332-2-2 Resistant to welding beads No Sheath material PUR Sheathing colour Shielded No Speed 5 m/s Suitable for cable carriers Temperature range, moving -2580 °C Temperature range, moving, max. Diameter 4.3 mm 4.3 mm 5.3 mm 6.3		20233/21198 (80 °C / 300 V)	
Outside diameter Diameter	Outer diameter	4.3 ± 0.2 mm	
Signs ± Tolerance 0.2 mm Resistance to oils in accordance with IEC 60811:404 Resistance to spread of flame In accordance with UL1581 UL/ CUL FT1, in accordance with IEC 60332-1-2, in accordance with IEC 60332-2-2 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 -2580 °C Temperature range, moving, max. 80 °C	Outside diameter	4.3 mm ± 0.2 mm	
Tolerance 0.2 mm Resistance to oils in accordance with IEC 60811:404 Resistance to spread of flame IEC 60332-1-2, in accordance with IEC 60332-1-2, in accordance with IEC 60332-2-2 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 -2580 °C Temperature range, moving, max. 80 °C	Outside diameter	Diameter 4.3	mm
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Resistance to spread of flame In accordance with UL1581 UL/ CUL FT1, in accordance with IEC 60332-1-2, in accordance lEC 60332-1-3, in accordance with IEC 60332-2-2 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 -2580 °C Temperature range, moving, max. 80 °C		Tolerance 0.2	mm
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 -2580 °C Temperature range, moving, max.	Resistance to oils	in accordance with IEC 60811:404	
Sheath material PUR Sheathing colour black Shielded No Speed 5 m/s Suitable for cable carriers Yes Temperature range, moving -2580 °C Temperature range, moving, max. 80 °C	Resistance to spread of flame		ance with IEC 60332-1-2, in accordance with
Sheathing colour black Shielded No Speed 5 m/s Suitable for cable carriers Yes Temperature range, moving -2580 °C Temperature range, moving, max. 80 °C	Resistant to welding beads	No	
Shielded No Speed 5 m/s Suitable for cable carriers Yes Temperature range, moving -2580 °C Temperature range, moving, max. 80 °C	Sheath material	PUR	
Speed 5 m/s Suitable for cable carriers Yes Temperature range, moving -2580 °C Temperature range, moving, max. 80 °C	Sheathing colour	black	
Suitable for cable carriers Yes Temperature range, moving -2580 °C Temperature range, moving, max. 80 °C	Shielded	No	
Temperature range, moving -2580 °C Temperature range, moving, max. 80 °C	Speed	5 m/s	
Temperature range, moving, max. 80 °C	Suitable for cable carriers	Yes	
	Temperature range, moving	-2580 °C	
Temperature range, moving, min25 °C	Temperature range, moving, max.	0° 08 °C	
	Temperature range, moving, min.	-25 °C	
Temperature range, stationary -4080 °C	Temperature range, stationary	-4080 °C	
Temperature range, stationary, max. 80 °C	Temperature range, stationary, max.	80 °C	
Temperature range, stationary, min40 °C	Temperature range, stationary, min.	-40 °C	
Torsion resistance 360 °/m	Torsion resistance	360 °/m	



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Technical data

General technical data

AF size	12 mm	Coding	Α
Connection thread	M12	Contact surface	Gold-plated
Housing main material	PUR	Insulation strength	10 ⁸ Ω
LED	No	Plugging cycles	≥ 100
Pollution severity		Protection degree	IP65, IP66, IP67, IP68,
	3		when screwed in
Rated current	4 A	Rated voltage	250 V
Temperature range of housing	-25+80 °C	Threaded ring material	Plastic
Tightening torque	M12 (plastic nut): 0.6 - 0.8	Version	
	Nm		pin, 90°
jumpered	No		

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	ECLASS 11.0	27-06-03-11

Approvals

Approvals



ROHS	Conform
UL File Number Search	E307231

Downloads

Engineering Data	<u>STEP</u>
Engineering Data	EPLAN, WSCAD
Product Change Notification	Technical change to M12 plastic puts - DE



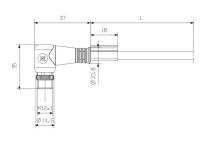
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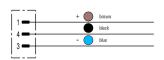
Drawings

Dimensioned drawing

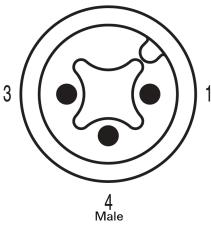


Male, angled

Wiring diagram



Pole scheme



The ideal tool: Screwty ® 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