

SAC-3P-M12MR/1,5-PUR/M 8FS

Order No.: 1668894



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Sensor/Actuator cable, 3-position, PUR halogen-free, Black-gray RAL 7021, Plug, angledLink:M12, A-coded, on Socket, straight M8, Cable length: 1.5 m

Commercial data

GTIN (EAN)	4 017918 135812
sales group	D130
Pack	1 pcs.
Customs tariff	85444290
Catalog page information	Page 122 (PC-2011)

Product notes

WEEE/RoHS-compliant since:
01/01/2005



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Technical data

General data

Rated current at 40°C	4 A
Rated voltage	60 V
Number of positions	3
Volume resistance	≤ 5 mΩ

Insulation resistance	$\geq 100 \text{ M}\Omega$
Length of cable	1.5 m
Ambient temperature (operation)	-25 °C ... 90 °C (Male connector / female connector)

General characteristics

Standards/regulations	M12 connector IEC 61076-2-101
	M8 connector IEC 61076-2-104
Coding	A - standard
Surge voltage category	II
Pollution degree	3
Degree of protection	IP65/67
Insertion/withdrawal cycles	≥ 100
Torque	0.4 Nm (M12 connector)
	0.2 Nm (M8 plug-in connectors)
Contact material	CuSn
Contact surface material	Ni/Au
Contact carrier material	TPU GF
Material of grip body	TPU, hardly inflammable, self-extinguishing
Material, knurls	Zinc die-cast, nickel-plated
Sealing material	NBR
Status display	No

Conductor data

Cable type	PUR halogen-free black
Cable type (abbreviation)	PUR
Cable abbreviation	Li9Y11Y-HF
UL AWM Style	20549
Conductor cross section	3x 0.25 mm ² (signal line)
AWG signal line	24
Conductor structure signal line	32 x 0.10 mm
Core diameter including insulation	1.17 mm $\pm$ 0.02 mm (signal line)
Thickness, insulation	$\geq 0.38 \text{ mm}$ (Core insulation)
	Approx. 0.9 mm (Outer cable sheath)
External cable diameter	4.4 mm $\pm$ 0.15 mm
Wire colors	brown, blue, black
External sheath, color	Black-gray RAL 7021

Insulation resistance	$\geq 100 \text{ G}\Omega \cdot \text{km}$ (at 20°C)
Conductor resistance	$\leq 78 \text{ }\Omega/\text{km}$ (at 20°C)
Nominal voltage, conductor	$\leq 300 \text{ V}$
Test voltage, conductor	$\geq 3000 \text{ V}$
Overall twist	3 wires, twisted
Length of twist, overall twist	40 mm
Outer sheath, material	PUR
Material conductor insulation	PP
Conductor material	Bare Cu litz wires
Cable weight	24 kg/km
Smallest bending radius, fixed installation	22 mm
Smallest bending radius, movable installation	44 mm
Number of bending cycles	4000000
Bending radius	44 mm
Traversing path	10 m
Traversing rate	3 m/s
Acceleration	10 m/s ²
Ambient temperature (operation)	-40 °C ... 80 °C (cable, fixed installation) -25 °C ... 80 °C (cable, flexible installation)
Special properties	Flexible cable conduit capable Silicone-free Free of substances which would hinder coating with paint or varnish
Flame resistance	in accordance with DIN UL-Style 20549
Halogen-free	in accordance with DIN VDE 0472 part 815
Resistance to oil	in accordance with DIN EN 60811-2-1
Other resistance	hydrolysis and microbe resistant Highly resistant to acids, alkaline solutions and solvents Resistant to salt water partly UV-resistant in accordance with DIN EN ISO 4892-2-A

Certificates / Approvals



Certification

CUL Listed, GOST, UL Listed

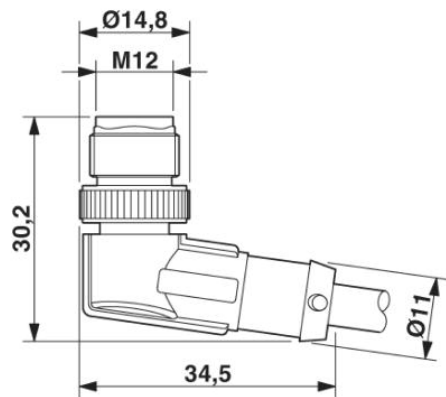
Accessories

Item	Designation	Description
Fuse		
1558988	SAC-M12-EXCLIP-M	Fuse clip for the pin side of various M12 sensor/actuator connectors prevents plug-in connections being interrupted without using a tool
Marking		
1051993	B-STIFT	Marker pen, for manual labeling of unprinted Zack strips, smear-proof and waterproof, line thickness 0.5 mm
1013944	PABA RD/15	Insert label, red, Unlabeled, Can be labeled with: Plotter, Mounting type: Thread on, Lettering field: 15 mm
1013151	PABA WH/15	Insert label, white, Unlabeled, Can be labeled with: Plotter, Mounting type: Thread on, Lettering field: 15 mm
1013698	PABA YE/15	Insert label, yellow, Unlabeled, Can be labeled with: Plotter, Mounting type: Thread on, Lettering field: 15 mm
1013122	PATO 2/15	Conductor marker carrier, transparent, Unlabeled, Mounting type: Clip on, Cable diameter: 2.8-5 mm, Lettering field: 4 x 15 mm
1013135	PATO 3/15	Conductor marker carrier, transparent, Unlabeled, Mounting type: Clip on, Cable diameter: 5-8 mm, Lettering field: 4 x 15 mm
1013148	PATO 4/15	Conductor marker carrier, transparent, Unlabeled, Mounting type: Clip on, Cable diameter: 8-10 mm, Lettering field: 4 x 15 mm
Protection and sealing elements		
1430860	PROT-M 8 MS-PA-CHAIN	M8 sealing cap made of plastic with fixing band for sensor cables, for M8 sockets
1430873	PROT-M12 FS-PA-CHAIN	M12 sealing cap made of plastic with fixing band, for sensor cables, for free M12 sockets
Tools		
1208432	SAC BIT M12-D15	Nut for assembling sensor/actuator cables with M12 connector and for M12 connectors with QUICKON fast connection technology, for 4 mm hexagonal drive
1208461	SAC BIT M8-D10	Nut for assembling sensor/actuator cables with M8 connector and for M8 connectors with QUICKON fast connection technology, for 4 mm hexagonal drive
1208487	TSD 02 SAC	Torque screwdriver, with preset torque of 0.2 Nm and 4 mm hexagonal drive for M8 connectors
1208429	TSD 04 SAC	Torque screwdriver, with preset torque of 0.4 Nm and 4 mm hexagonal drive for M12 connectors

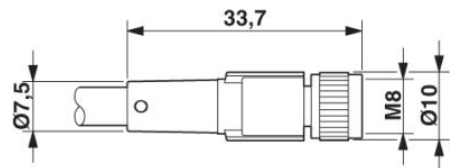
1212224	TSD-M 1,2NM	Torque screw driver, accuracy as per EN ISO 6789 standard, adjustable from 0.3 - 1.2 Nm
1212600	TSD-M SAC-BIT ADAPTER	Adapter bit for TSD-M...torque tools, E6.3-1/4" drive with 4 mm hexagon to accommodate SAC bits

Diagrams/Drawings

Dimensioned drawing

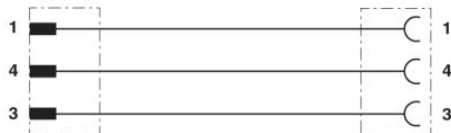


M12 x 1 male connector, angled



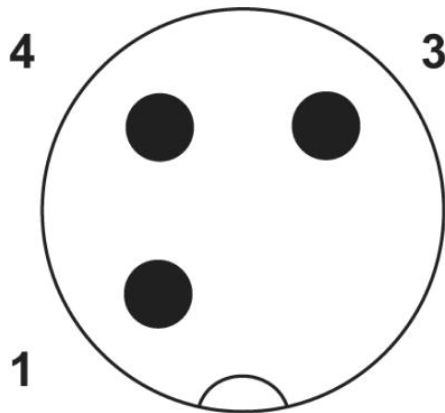
Socket M8 x 1, straight

Circuit diagram

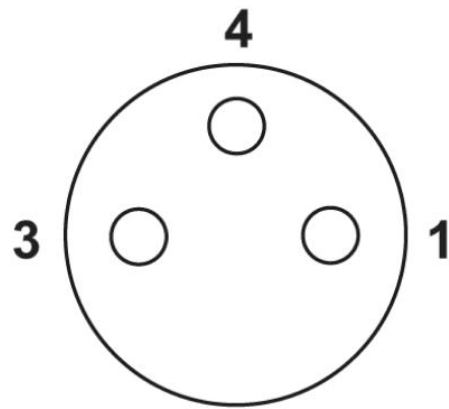


Contact assignment of M12 plugs / M8 sockets

Schematic diagram

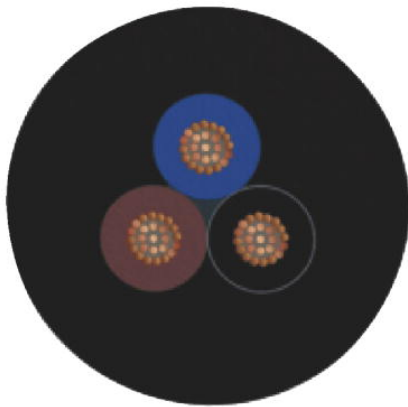


Pin assignment M12 plug, 3-pos., A-coded, view male side



Pin assignment M8 socket, 3-pos., view female side

PUR halogen-free black [PUR]



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