

SAC-4P-M12MR-1L/ 2,0-PUR/M12FR - Sensor/actuator cable



1520233

<https://www.phoenixcontact.com/us/products/1520233>

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



Sensor/actuator cable, PUR halogen-free, black-gray RAL 7021, cable length: 2 m

Commercial data

Item number	1520233
Packing unit	5 pc
Minimum order quantity	1 pc
Product key	AF1CCA
GTIN	4046356020244
Weight per piece (including packing)	89.78 g
Weight per piece (excluding packing)	89.78 g
Country of origin	PL

SAC-4P-M12MR-1L/ 2,0-PUR/M12FR - Sensor/actuator cable

1520233

<https://www.phoenixcontact.com/us/products/1520233>

Technical data

Product properties

Product type	Sensor/actuator cable
Shielded	no

Material specifications

Outer sheath, material	PUR
Conductor material	Bare Cu litz wires

Electrical properties

Nominal voltage U_N	250 V AC
	250 V DC
Max. conductor resistance	58 Ω /km

Mechanical properties

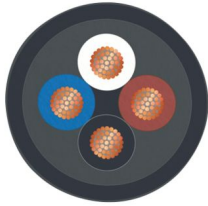
Mechanical data

Insertion/withdrawal cycles	≥ 100
Max. bending cycles	4000000

Cable/line

Cable length	2 m
--------------	-----

PUR halogen-free black [PUR]

Dimensional drawing	
Cable weight	30 kg/km
UL AWM Style	20549 / 10493 (80°C/300 V)
Number of positions	4
Shielded	no
Cable type	PUR halogen-free black [PUR]
Conductor structure signal line	42x 0.10 mm
AWG signal line	22
Conductor cross-section	4x 0.34 mm ² (Signal line)
Wire diameter incl. insulation	1.27 mm \pm 0.02 mm
External cable diameter	4.20 mm \pm 0.15 mm
Outer sheath, material	PUR

SAC-4P-M12MR-1L/ 2,0-PUR/M12FR - Sensor/actuator cable



1520233

<https://www.phoenixcontact.com/us/products/1520233>

External sheath, color	black-gray RAL 7021
Conductor material	Bare Cu litz wires
Material wire insulation	PP
Single wire, color	brown, white, blue, black
Thickness, insulation	≥ 0.21 mm
Thickness, outer sheath	approx. 0.50 mm
Overall twist	4 wires, twisted
Max. conductor resistance	≤ 58 Ω/km
Insulation resistance	≥ 1 GΩ*km
Nominal voltage, cable	≤ 300 V
Test voltage	≥ 3000 V
Minimum bending radius, fixed installation	5 x D
Minimum bending radius, flexible installation	10 x D
Smallest bending radius, fixed installation	21 mm
Smallest bending radius, movable installation	42 mm
Dynamic load capacity (bending)	Max. bending cycles: 10000000, Bending radius: 42 mm, Bending radius: 10 x D, Traversing path: 10 m, Traversing rate: 3 m/s, Acceleration: 10 m/s ²
Dynamic load capacity (torsion)	Torsion: ±180 °/m, Torsion cycles: ≥5000000, Torsional frequency: 35 cycles/min.
Halogen-free	in accordance with DIN VDE 0472 part 815
	in accordance with DIN EN 50267-2-1
Flame resistance	in accordance with UL 758/1581 FT2
	DIN EN 60332-2-2 (20 s)
Resistance to oil	in accordance with DIN EN 60811-2-1
Other resistance	Highly resistant to acids, alkaline solutions and solvents
	hydrolysis and microbe resistant
	partly UV-resistant (in accordance with DIN EN ISO 4892-2-A)
	Low adhesion
	abrasion-resistant
Special properties	Flexible cable conduit capable
	Silicone-free
	Free of substances which would hinder coating with paint or varnish
	flexible
Ambient temperature (operation)	-40 °C ... 80 °C (cable, fixed installation)
	-25 °C ... 80 °C (Cable, flexible installation)

Environmental and real-life conditions

Ambient conditions

Ambient temperature (operation)	-25 °C ... 90 °C (Plug / socket)
	-40 °C ... 80 °C (cable, fixed installation)
	-5 °C ... 80 °C (Cable, flexible installation)

SAC-4P-M12MR-1L/ 2,0-PUR/M12FR - Sensor/actuator cable

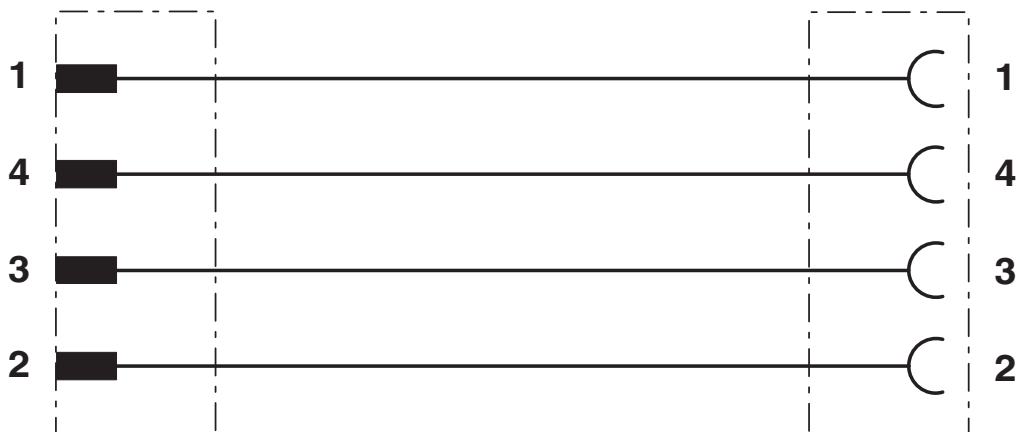


1520233

<https://www.phoenixcontact.com/us/products/1520233>

Drawings

Circuit diagram



SAC-4P-M12MR-1L/ 2,0-PUR/M12FR - Sensor/actuator cable



1520233

<https://www.phoenixcontact.com/us/products/1520233>

Classifications

ECLASS

ECLASS-13.0	27060311
ECLASS-15.0	27060311

SAC-4P-M12MR-1L/ 2,0-PUR/M12FR - Sensor/actuator cable



1520233

<https://www.phoenixcontact.com/us/products/1520233>

Environmental product compliance

China RoHS

Environment friendly use period (EFUP)	EFUP-50 An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.
--	--

EU REACH SVHC

REACH candidate substance (CAS No.)	No substance above 0.1 wt%
-------------------------------------	----------------------------

Phoenix Contact 2026 © - all rights reserved
<https://www.phoenixcontact.com>

Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com