

SAC-4P-M12MR/ 1,0-28X/M12FR OD - Sensor/actuator cable



1419488

<https://www.phoenixcontact.com/us/products/1419488>

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, 4-position, PE-X halogen-free, black-gray RAL 7021, for outdoor applications, with high-grade steel knurl

The figure shows a version with a straight conductor

Your advantages

- Easy and safe: 100 % electrically tested plug-in components
- Robust throughout: resistant to oil, UV, and ozone, withstands temperatures from -40°C ... +105°C

Commercial data

Item number	1419488
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Sales key	BF19
Product key	AF1CCA
GTIN	4055626166537
Weight per piece (including packing)	72.9 g
Weight per piece (excluding packing)	67.35 g
Customs tariff number	85444290
Country of origin	PL

SAC-4P-M12MR/ 1,0-28X/M12FR OD - Sensor/actuator cable

1419488

<https://www.phoenixcontact.com/us/products/1419488>

Technical data

Product properties

Product type	Sensor/actuator cable
Application	External areas
Number of positions	4

Insulation characteristics

Overvoltage category	II
Degree of pollution	3

Material specifications

Flammability rating according to UL 94	V0
--	----

Electrical properties

Nominal voltage U_N	250 V AC
	250 V DC
Nominal current I_N	4 A

Signaling

Status display	no
Status display present	no

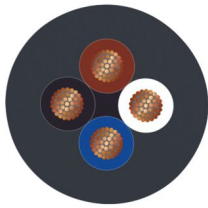
Connection data

Conductor connection

Tightening torque	0.4 Nm
-------------------	--------

Cable/line

PE-X black [28X]

Dimensional drawing	
Cable weight	44 kg/km
Number of positions	4
Shielded	no
Cable type	PE-X black [28X]
Conductor structure signal line	28x 0.15 mm
AWG signal line	20

SAC-4P-M12MR/ 1,0-28X/M12FR OD - Sensor/actuator cable



1419488

<https://www.phoenixcontact.com/us/products/1419488>

Conductor cross-section	4x 0.5 mm ² (Signal line)
Wire diameter incl. insulation	1.6 mm ±0.05 mm (Signal line)
External cable diameter	5.20 mm ±0.2 mm
Outer sheath, material	PE-X
External sheath, color	black-gray RAL 7021
Conductor material	Bare Cu litz wires
Material wire insulation	PE-X
Single wire, color	brown, white, blue, black
Thickness, insulation	approx. 0.30 mm (Core insulation) approx. 0.60 mm (Outer cable sheath)
Overall twist	4 wires, twisted
Length of twist, overall twist	61.6 mm
Max. conductor resistance	≤ 39 Ω/km (at 20 °C)
Insulation resistance	≥ 100 MΩ*km (at 20 °C)
Nominal voltage, cable	≤ 300 V AC
Test voltage	≥ 3000 V AC
Smallest bending radius, fixed installation	26 mm
Smallest bending radius, movable installation	52 mm
Dynamic load capacity (bending)	Max. bending cycles: 2000000, Bending radius: 52 mm, Traversing path: 10 m, Traversing rate: 3 m/s, Acceleration: 10 m/s ²
Halogen-free	in accordance with DIN VDE 0472 part 815
Flame resistance	according to DIN 60332-1-2 according to DIN EN 50266-2-5 according to IEC 60332-3-25 (bunched fire test)
Fume corrosiveness	according to IEC 60754
Concentration of fumes	according to DIN EN 61034
Resistance to oil	in accordance with DIN EN 60811-2-1
Other resistance	UV resistant (according to DIN VDE 0276-605)
Special properties	Irradiated
Ambient temperature (operation)	-40 °C ... 105 °C (cable, fixed installation) -15 °C ... 105 °C (Cable, flexible installation) 120 °C (at 48 h - see test report 19233) 180 °C (at 48 h - see test report 19233)

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP65 IP67
----------------------	--------------

Standards and regulations

M12

Standard designation	M12 connector
Standards/specifications	IEC 61076-2-101

SAC-4P-M12MR/ 1,0-28X/M12FR OD - Sensor/actuator cable

1419488

<https://www.phoenixcontact.com/us/products/1419488>

Drawings

Schematic diagram



Pin assignment M12 plug, 4-pos., A-coded, view plug side

SAC-4P-M12MR/ 1,0-28X/M12FR OD - Sensor/actuator cable

1419488

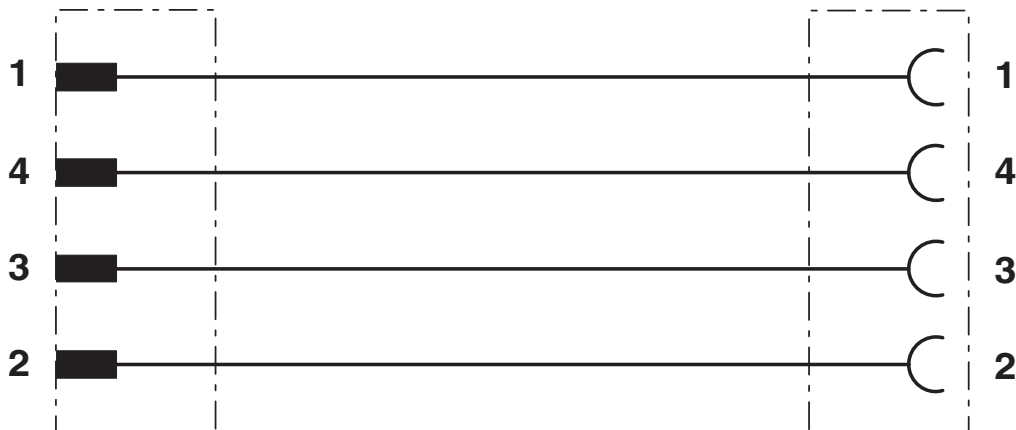
<https://www.phoenixcontact.com/us/products/1419488>

Schematic diagram



Pin assignment M12 socket, 4-pos., A-coded, view female side

Circuit diagram



Contact assignment of the M12 connector and the M12 socket

SAC-4P-M12MR/ 1,0-28X/M12FR OD - Sensor/actuator cable



1419488

<https://www.phoenixcontact.com/us/products/1419488>

Classifications

ECLASS

ECLASS-13.0	27060311
ECLASS-15.0	27060311

SAC-4P-M12MR/ 1,0-28X/M12FR OD - Sensor/actuator cable



1419488

<https://www.phoenixcontact.com/us/products/1419488>

Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
---	--------------------

China RoHS

Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits

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