

SAC-4P-MR/ 0,5-28X OD - Sensor/actuator cable



1410824

<https://www.phoenixcontact.com/us/products/1410824>

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, Plug angled M12, coding: A, on free cable end, cable length: 0.5 m, for outdoor applications, with high-grade steel knurl

Commercial data

Item number	1410824
Packing unit	1 pc
Minimum order quantity	50 pc
Product key	AF1CCA
GTIN	4046356932981
Weight per piece (including packing)	37.7 g
Weight per piece (excluding packing)	33.675 g
Country of origin	PL

SAC-4P-MR/ 0,5-28X OD - Sensor/actuator cable



1410824

<https://www.phoenixcontact.com/us/products/1410824>

Technical data

Product properties

Product type	Sensor/actuator cable
Application	External areas
Number of positions	4
No. of cable outlets	1
Shielded	no
Coding	A

Insulation characteristics

Degree of pollution	3
---------------------	---

Material specifications

Flammability rating according to UL 94	V0
Seal material	FPM
Material of grip body	PP
Contact material	CuSn
Contact surface material	Ni/Au
Contact carrier material	PP
Material for screw connection	Stainless steel

Electrical properties

Insulation resistance	$\geq 100 \text{ M}\Omega$
Nominal voltage U_N	250 V AC
	250 V DC
Nominal current I_N	4 A

Mechanical properties

Mechanical data

Insertion/withdrawal cycles	≥ 100
-----------------------------	------------

Signaling

Status display	no
Status display present	no

Connection data

Conductor connection

Tightening torque	0.4 Nm (M12 connector)
-------------------	------------------------

Connection assignment

Contact Color (signal designation) Contact (optional)	1 (Plug) BN
	2 (Plug) WH
	4 (Plug) BK

SAC-4P-MR/ 0,5-28X OD - Sensor/actuator cable



1410824

<https://www.phoenixcontact.com/us/products/1410824>

3 (Plug) | BU

Connector

Connection 1

Type	Plug angled M12
Number of positions	4
Coding type	A

Connection 2

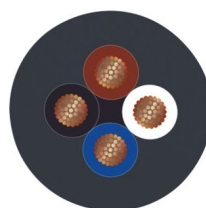
Type	free cable end
------	----------------

Cable/line

Cable length	0.5 m
--------------	-------

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
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

SAC-4P-MR/ 0,5-28X OD - Sensor/actuator cable



1410824

<https://www.phoenixcontact.com/us/products/1410824>

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
	IP68
	IP69K
Ambient temperature (operation) (male connector/female connector)	-40 °C ... 105 °C (Plug / socket)

Standards and regulations

M12

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

SAC-4P-MR/ 0,5-28X OD - Sensor/actuator cable

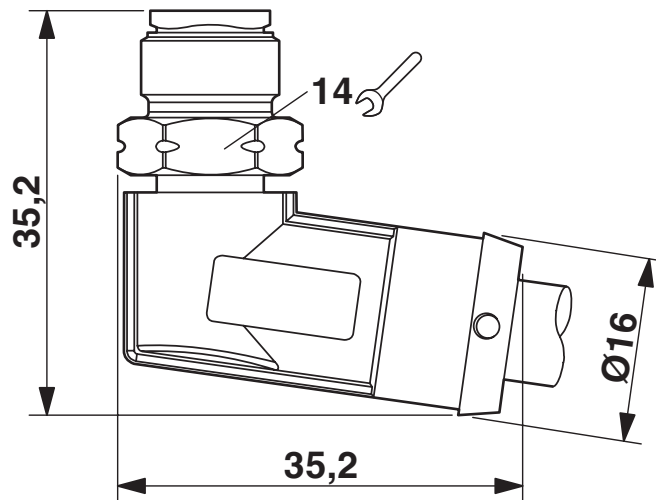
1410824

<https://www.phoenixcontact.com/us/products/1410824>



Drawings

Dimensional drawing



M12 x 1 male plug, angled

Schematic diagram



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

Circuit diagram



Contact assignment of the M12 plugs

SAC-4P-MR/ 0,5-28X OD - Sensor/actuator cable



1410824

<https://www.phoenixcontact.com/us/products/1410824>

Classifications

ECLASS

ECLASS-13.0	27060311
ECLASS-15.0	27060311

SAC-4P-MR/ 0,5-28X OD - Sensor/actuator cable



1410824

<https://www.phoenixcontact.com/us/products/1410824>

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