SAC-4P-M12MS/ 5,0-150/M12FS - Sensor/actuator cable

1546660

https://www.phoenixcontact.com/us/products/1546660

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As shown in the illustration but with an orange conductor

Sensor/actuator cable, 4-position, PUR halogen-free, irradiated, welding sputter-resistant, orange RAL 2003, Plug straight M12, coding: A, on Socket straight M12, coding: A, cable length: 5 m

Commercial data

Item number	1546660
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF03
Product key	AF1CCA
GTIN	4046356128810
Weight per piece (including packing)	197.2 g
Weight per piece (excluding packing)	194.2 g
Customs tariff number	85444290
Country of origin	PL

Technical data

Product properties

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

Insulation characteristics

Overvoltage category	II
Degree of pollution	3

Material specifications

Flammability rating according to UL 94	HB
Material grommet GRP	NBR
Material of grip body	TPU, hardly inflammable, self-extinguishing
Contact material	CuSn
Contact surface material	Ni/Au
Contact carrier material	TPU GF
Material for screw connection	Zinc die-cast, nickel-plated

Electrical properties

Insulation resistance	≥ 100 MΩ
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

Connector

Connection 1

Type	Plug straight M12
Number of positions	4
Coding type	A

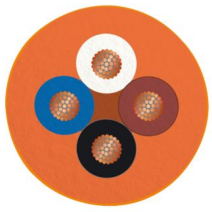
Connection 2

Type	Socket straight M12
Number of positions	4
Coding type	A

Cable/line

Cable length	5 m

PUR irradiated halogen-free orange [150]

Dimensional drawing	
Number of positions	4
Shielded	no
Cable type	PUR irradiated halogen-free orange [150]
Conductor structure signal line	19x 0.15 mm
AWG signal line	22
Conductor cross-section	4x 0.34 mm² (Signal line)
Wire diameter incl. insulation	1.05 mm ±0.05 mm (Signal line)
External cable diameter	5.20 mm ±0.2 mm
Outer sheath, material	PUR
External sheath, color	orange RAL 2003
Conductor material	Bare Cu litz wires
Material wire insulation	PE
Single wire, color	brown, white, blue, black
Overall twist	4 wires, twisted
Length of twist, overall twist	27 mm
Max. conductor resistance	max. 57 Ω/km
Nominal voltage, cable	320 V (AC)
Test voltage	2500 V (50 Hz, 5 minutes)
Smallest bending radius, fixed installation	min. 15 mm
Smallest bending radius, movable installation	min. 30 mm
Dynamic load capacity (bending)	Max. bending cycles: 5000000, Bending radius: 52 mm, Traversing path: 10 m, Traversing rate: 3 m/s
Dynamic load capacity (torsion)	Torsion: ±360 °/m
Halogen-free	The cable is halogen-free

Other resistance	hydrolysis and microbe resistant
	Resistant to welding splashes
Special properties	Silicone-free
	Irradiated
Ambient temperature (operation)	-50 °C ... 105 °C (cable, fixed installation)
	-40 °C ... 105 °C (Cable, flexible installation)

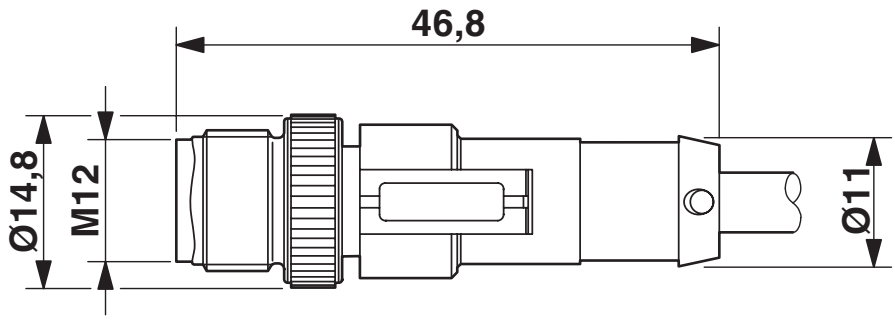
Environmental and real-life conditions

Ambient conditions

Degree of protection	IP65
	IP67
	IP68
Ambient temperature (operation)	-25 °C ... 90 °C (Plug / socket)
	-50 °C ... 105 °C (cable, fixed installation)
	-40 °C ... 105 °C (Cable, flexible installation)

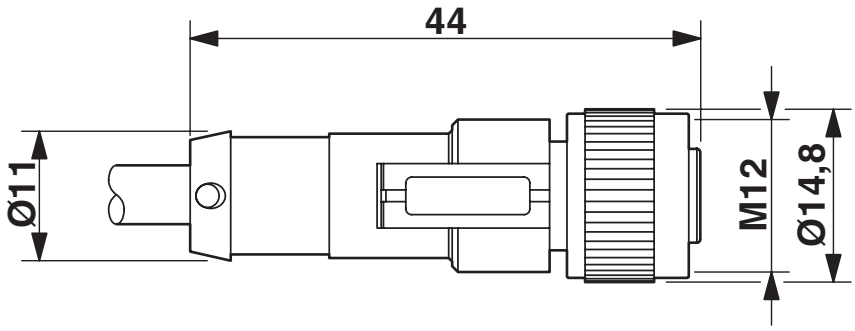
Drawings

Dimensional drawing



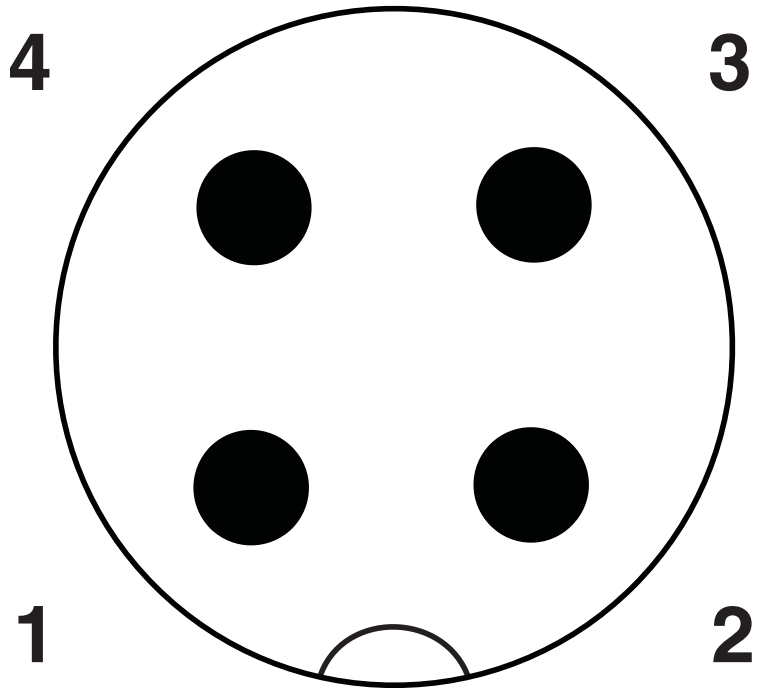
Plug, M12 x 1, straight, shielded

Dimensional drawing



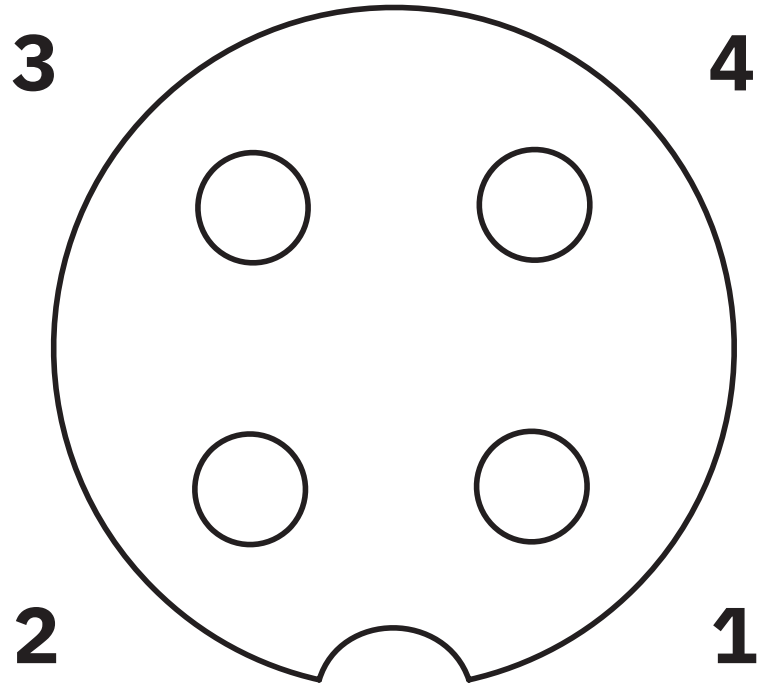
M12 x 1 socket, straight

Schematic diagram



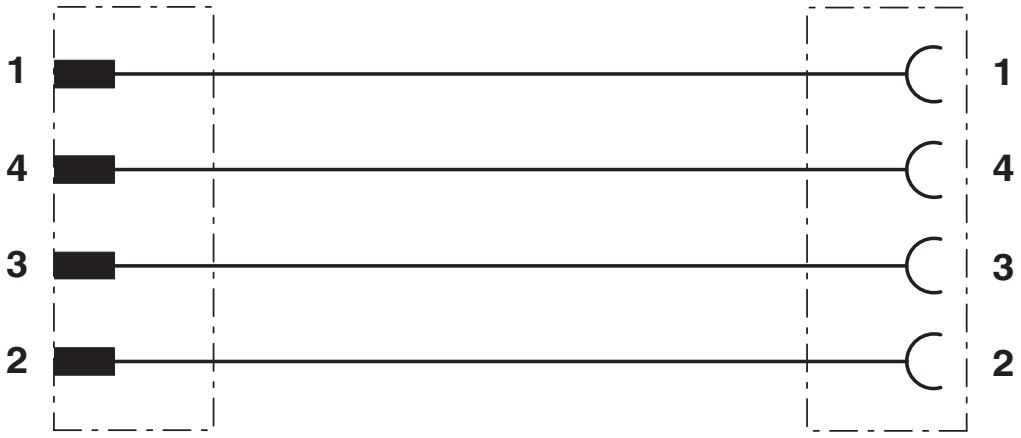
Pin assignment M12 plug, 4-pos., A-coded, view plug side

Schematic diagram



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

Circuit diagram



Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1546660

UL Listed
Approval ID: FILE E 221474

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine				
	300 V	4 A	-	-

cUL Listed
Approval ID: FILE E 221474

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine				
	300 V	4 A	-	-

EAC-RoHS
Approval ID: RU D-DE.HB35.B.00387

Classifications

ECLASS

ECLASS-13.0	27060311
ECLASS-15.0	27060311

ETIM

ETIM 10.0	EC001855

UNSPSC

UNSPSC 21.0	26121600

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%

EF3.1 Climate Change

CO2e kg	3.399 kg CO2e

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