SAC-5P-M12MS/ 1,0-PUR/M12FR3LVW - Sensor/actuator cable

1693953

https://www.phoenixcontact.com/us/products/1693953

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Sensor/actuator cable, 5-position, PUR halogen-free, irradiated, orange RAL 2003, Plug straight M12, coding: A, with 3 LEDs, on Socket angled M12, coding: A, with 3 LEDs, cable length: 1 m, Customer-specific version

Commercial data

Item number	1693953
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF03
Product key	AF1CDA
GTIN	4017918481728
Weight per piece (including packing)	60.2 g
Weight per piece (excluding packing)	58.2 g
Customs tariff number	85444290
Country of origin	PL

Technical data

Product properties

Product type	Sensor/actuator cable
Number of positions	5
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
Seal material	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

Rated voltage in acc. with IEC 61076-2-101	60 V
Insulation resistance	≥ 100 MΩ
Nominal voltage U_N	24 V
Nominal current I_N	4 A

Mechanical properties

Mechanical data

Insertion/withdrawal cycles	≥ 100

Signaling

Status display	3 LEDs
Status display present	yes

Connector

Connection 1

Type	Plug straight M12
Number of positions	5
Coding type	A

Connection 2

Type	Socket angled M12
Number of positions	5
Coding type	A

Cable/line

Cable length	1 m

PUR irradiated halogen-free orange [150]

Dimensional drawing	
Number of positions	5
Shielded	no
Cable type	PUR irradiated halogen-free orange [150]
Conductor structure signal line	42x 0.10 mm
AWG signal line	22
Conductor structure, voltage supply	24x 0.15 mm
AWG power supply	20
Conductor cross-section	4x 0.34 mm² (Signal line)
	1x 0.5 mm² (PE connection)
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, green-yellow
Overall twist	5 cores, twisted
Max. conductor resistance	≤ 57.5 Ω/km (with 0.34 mm² conductor cross-section)
	≤ 39 Ω/km (with 0.5 mm² conductor cross-section)
Nominal voltage, cable	250 V (AC)
Test voltage	2000 V (50 Hz, 5 minutes)
Smallest bending radius, fixed installation	20 mm
Smallest bending radius, movable installation	30 mm
Dynamic load capacity (bending)	Max. bending cycles: 5000000, Bending radius: 52 mm, Traversing path: 10 m, Traversing rate: 3 m/s
Halogen-free	The cable is halogen-free
Flame resistance	DIN VDE 0472 part 804, test type B

Other resistance	hydrolysis and microbe resistant
	UV 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)

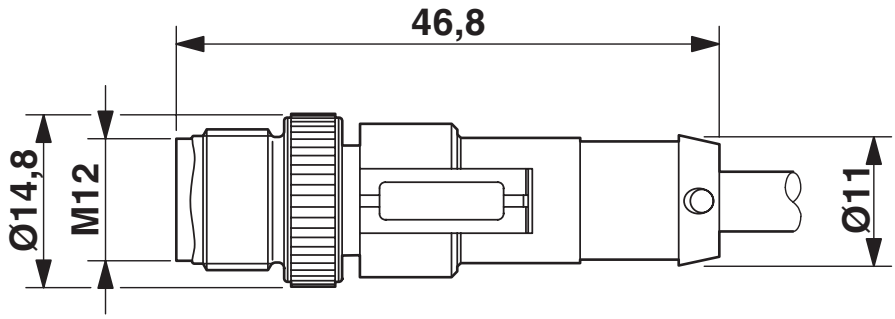
Environmental and real-life conditions

Ambient conditions

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

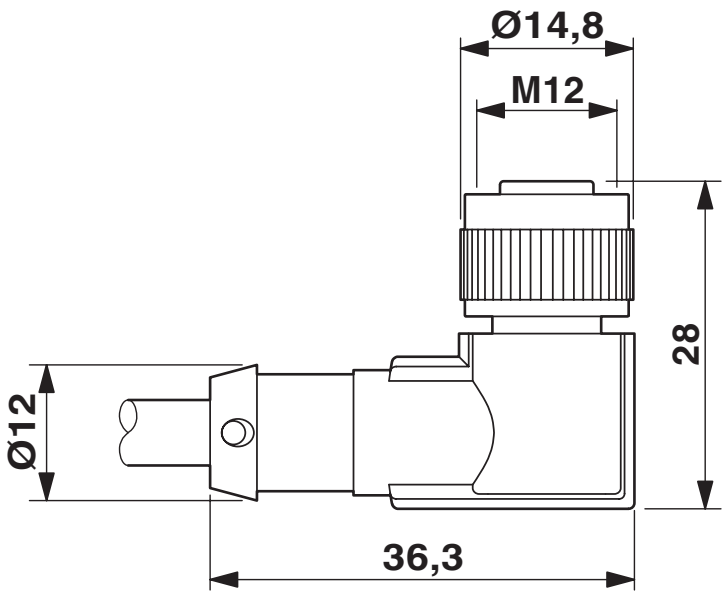
Drawings

Dimensional drawing



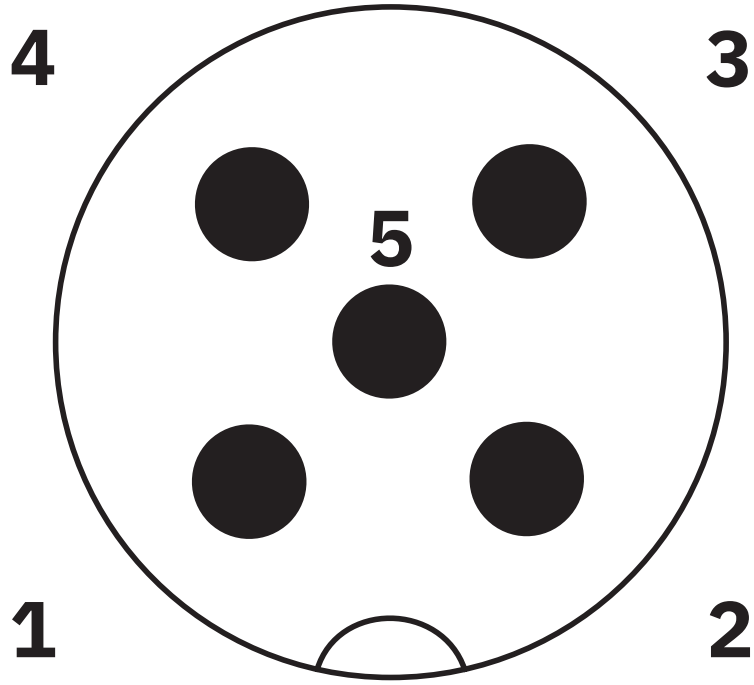
Plug, M12 x 1, straight, shielded

Dimensional drawing



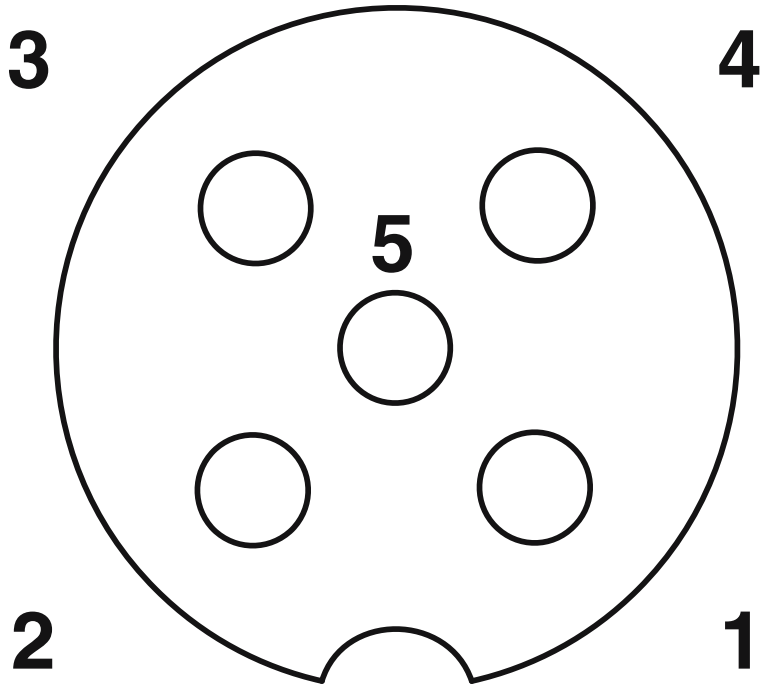
M12 x 1 socket, angled

Schematic diagram



Pin assignment M12 male connector, 5-pos., A-coded, male side

Schematic diagram



Pin assignment M12 socket, 5-pos., A-coded, socket side view

Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1693953

UL Listed
Approval ID: FILE E 221474

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

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

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	3.474 kg CO2e

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