

1698983

https://www.phoenixcontact.com/us/products/1698983

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Sensor/actuator cable, 4-position, PUR, black, Plug straight M12, coding: A, on Socket straight M12, coding: A, cable length: 1.5 m, spiraled

Commercial data

Item number	1698983
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF18
Product key	AF1ICB
GTIN	4067923264458
Weight per piece (including packing)	298 g
Weight per piece (excluding packing)	298 g
Country of origin	US



1698983

https://www.phoenixcontact.com/us/products/1698983

Technical data

Notes

Trad	e r	20	ri	cti	on

CE note	The products are offered exclusively for export outside the EU
	and the European Economic Area.

Product properties

Product type	Sensor/actuator cable
Application	Standard, U.S. cables
Number of positions	4
No. of cable outlets	1
Special properties	Coil cords are rated to 500,000 cycles when extended no greater than three times the retracted length and not subject to any adverse or abusive conditions.
Shielded	no
Coding	A

Material specifications

Flammability rating according to UL 94	НВ
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
Outer sheath, material	PUR

Electrical properties

Insulation resistance	≥ 10 MΩ
Nominal voltage U _N	300 V AC
	300 V DC
Nominal current I _N	1.2 A

Mechanical properties

Mechanical data

Insertion/withdrawal cycles	≥ 100
insertion/withdrawai cycles	≥ 100

Signaling

Status display	no
Status display present	no

Connection data



1698983

https://www.phoenixcontact.com/us/products/1698983

Conductor connection

Tightening torque	0.4 Nm (M12 connector)
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Connector

Connection 1

Туре	Plug straight M12
Number of positions	4
Coding type	A

Connection 2

Туре	Socket straight M12
Number of positions	4
Coding type	A

Cable/line

Cable length 1.5 m

PUR black [570]

Dimensional drawing



Cable weight	33.7 kg/km
Number of positions	4
Shielded	no
Cable type	PUR black [570]
Conductor structure signal line	44x 0.10 mm
AWG signal line	22
Wire diameter incl. insulation	0.76 mm
External cable diameter	4.70 mm ±0.2 mm
Outer sheath, material	PUR
External sheath, color	black
Conductor material	Tin-plated Cu litz wires
Material, filler	Cotton
Material wire insulation	PVC
Single wire, color	brown, white, blue, black
Overall twist	4 wires, twisted
Max. conductor resistance	max. 66.6 Ω/km (20 °C)
Nominal voltage, cable	300 V
Minimum bending radius, flexible installation	6 x D



1698983

https://www.phoenixcontact.com/us/products/1698983

Smallest bending radius, movable installation	29 mm
Ambient temperature (operation)	-15 °C 105 °C (cable, fixed installation)

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP65
	IP67
Ambient temperature (operation) (male connector/female connector)	-25 °C 90 °C (Plug / socket)
Ambient temperature (operation) (Cable, fixed installation)	-15 °C 105 °C (cable, fixed installation)

Standards and regulations

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

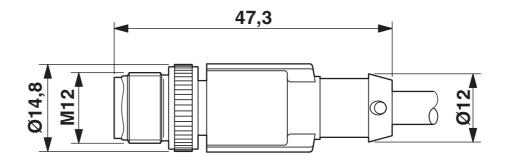


1698983

https://www.phoenixcontact.com/us/products/1698983

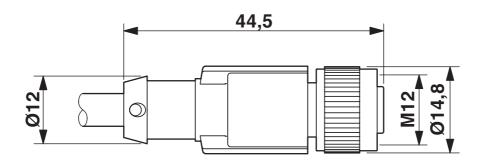
Drawings

Dimensional drawing

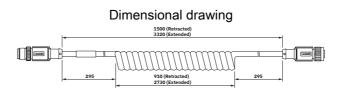


Plug, M12 x 1, straight, shielded

Dimensional drawing



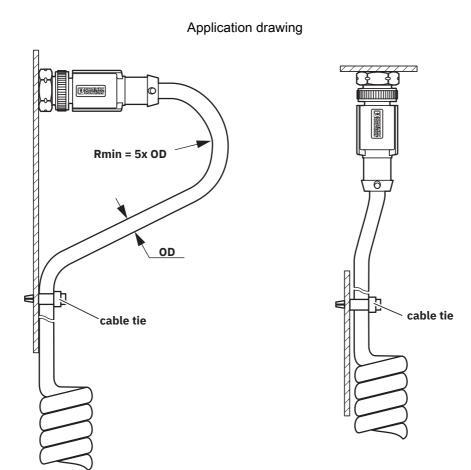
M12 x 1 socket, straight, shielded





1698983

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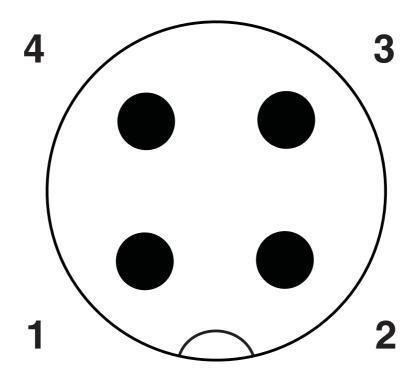




1698983

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Schematic diagram



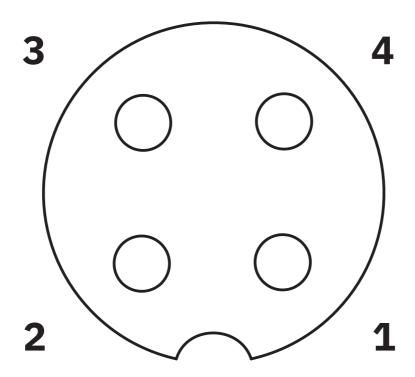
Pin assignment M12 plug, 4-pos., A-coded, view plug side



1698983

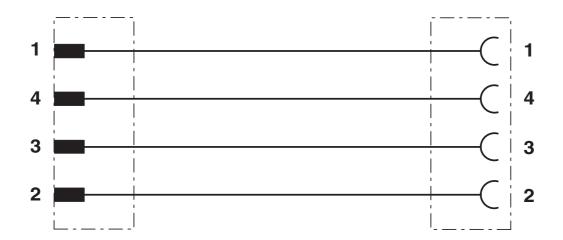
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Schematic diagram



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

Circuit diagram



Contact assignment of M8 plugs / M12 sockets



1698983

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Classifications

ECLASS

ECLASS-13.0 27060311



1698983

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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%

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