

1404358

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Sensor/actuator cable, 3-pos., PUR halogen-free, RAL 7021 black-gray, straight M12 socket, A-coded, to free M12 cable end, A-coded, cable length: 2.0 m

#### Commercial data

Item number	1404358
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Sales key	BF03
Product key	AF1COA
GTIN	4046356691468
Weight per piece (including packing)	99.2 g
Weight per piece (excluding packing)	99.2 g
Customs tariff number	85444290
Country of origin	PL



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### Technical data

#### Product properties

Product type	Distributor with cable	
Number of positions	3	
No. of cable outlets	2	
Shielded	no	
Coding	A	
Insulation characteristics		
Overvoltage category	II	
Degree of pollution	3	

#### 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
Conductor material	Bare Cu litz wires

#### Electrical properties

Insulation resistance	≥ 10 GΩ
Nominal voltage U <sub>N</sub>	48 V AC
	60 V DC
Nominal current I <sub>N</sub>	4 A
Max. conductor resistance	58 Ω/m

#### Mechanical properties

#### Mechanical data

Insertion/withdrawal cycles	≥ 100
Max. bending cycles	4000000

#### Signaling

Status display	no
Status display present	no

#### Connector

#### Connection 1

Туре	Socket straight M12
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Number of positions	3
Coding type	A
Connection 2	
Туре	free cable end
ble/line	
Cable length	2 m
PUR halogen-free black [PUR]	
Dimensional drawing	
Cable weight	23 kg/km
UL AWM Style	20549
Number of positions	3
Shielded	no
Cable type	PUR halogen-free black [PUR]
Conductor structure signal line	42x 0.10 mm
AWG signal line	22
Conductor cross section	3x 0.34 mm² (Signal line)
Wire diameter incl. insulation	1.27 mm ±0.02 mm (Signal line)
External cable diameter	3.85 mm ±0.15 mm
Outer sheath, material	PUR
External sheath, color	black-gray RAL 7021
Conductor material	Bare Cu litz wires
Material wire insulation	PP
Single wire, color	brown, blue, black
Thickness, insulation	≥ 0.21 mm (Core insulation)
	approx. 0.50 mm (Outer cable sheath)
Overall twist	3 wires, twisted
Max. conductor resistance	max. 58 Ω/km (at 20 °C)
Insulation resistance	≥ 100 GΩ*km (at 20 °C)
Nominal voltage, cable	≤ 300 V
Test voltage	≥ 3000 V
Smallest bending radius, fixed installation	19 mm
Smallest bending radius, movable installation	38 mm
Dynamic load capacity (bending)	Max. bending cycles: 10000000, Bending radius: 38 mm, Bending radius: 10 x D, Traversing path: 10 m, Traversing rate:

m/s, Acceleration: 10 m/s<sup>2</sup>



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Dynamic load capacity (torsion)	Torsion: ±180 °/m, Torsion cycles: ≥2000000, Torsional frequency: 35 cycles/min.
Halogen-free	in accordance with DIN VDE 0472 part 815
Flame resistance	in accordance with UL 758/1581 FT2
	DIN EN 60332-2-2 (20 s)
Resistance to oil	in accordance with DIN EN 60811-2-1
Other resistance	Highly resistant to acids, alkaline solutions and solvents
	hydrolysis and microbe resistant
	partly UV-resistant (in accordance with DIN EN ISO 4892-2-A)
Special properties	Flexible cable conduit capable
	Silicone-free
	Free of substances which would hinder coating with paint or varnish
Ambient temperature (operation)	-40 °C 80 °C (cable, fixed installation)
	-25 °C 80 °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)
	-40 °C 80 °C (cable, fixed installation)
	-5 °C 80 °C (Cable, flexible installation)

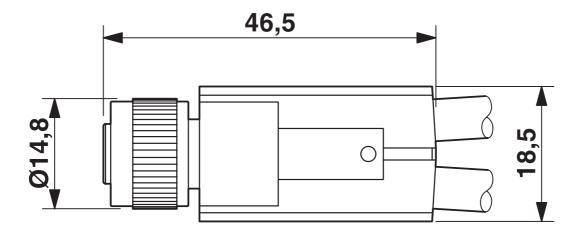


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## Drawings

#### Dimensional drawing



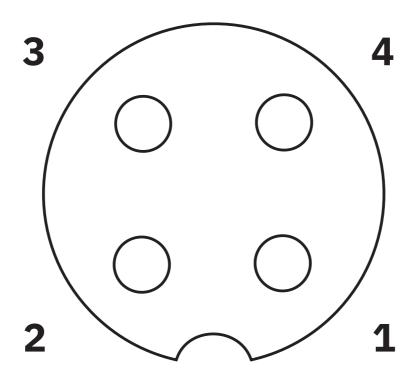
Socket M12 x 1, Y distributor



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#### Schematic diagram



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

# Circuit diagram BN BK (S1) BU BK (S2) BN BN BN BN BN BN BN BN BN

Contact assignment of the M12 Y connector



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## Classifications

#### **ECLASS**

	ECLASS-13.0	27060313
	ECLASS-15.0	27060313
ETIM		
LTIW		
	ETIM 9.0	EC001855
	ICDCC	
UNSPSC		
	UNSPSC 21.0	26121600



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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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