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Sensor/actuator cable - SAC-4P- 3,5-PUR/M12FS

1533589

https://www.phoenixcontact.com/gb/products/1533589

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Sensor/actuator cable, 4-position, PUR halogen-free, black-gray RAL 7021, free cable end, on Socket straight M12, coding: A, cable length: 3.5 m

Commercial Data

Item number	1533589
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to Order (non-returnable)
Sales Key	BF1CCA
Product Key	BF1CCA
GTIN	4017918992125
Weight per Piece (including packing)	100.4 g
Weight per Piece (excluding packing)	100.4 g
Customs tariff number	85444290
Country of origin	DE

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Technical Data

Product properties

Number of positions	4
No. of cable outlets	1
Shielded	no
Coding	A - standard

Insulation characteristics

Overvoltage category	II
Degree of pollution	3

Electrical properties

Contact resistance	≤ 5 mΩ
Insulation resistance	≥ 100 MΩ
Nominal voltage U_N	250 V AC
	250 V DC
Nominal current I_N	4 A

LED signaling

Status display	No
Status display present	No

Material specifications

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

Connector

Insertion/withdrawal cycles	≥ 100

Connection 1

Head design	free cable end

Head 2

Head design	Socket
Head cable outlet	straight
Head thread type	M12
Coding	A

Cable / line

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Cable length	3.5 m
Cable weight	30 kg/km
UL AWM Style	20549 / 10493 (80°C/300 V)
Number of positions	4
Shielded	no
Cable type	PUR halogen-free black [PUR]
Conductor structure signal line	42x 0.10 mm
AWG signal line	22
Conductor cross section	4x 0.34 mm²
Wire diameter incl. insulation	1.27 mm ±0.02 mm
External cable diameter	4.2 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, white, blue, black
Thickness, insulation	≥ 0.21 mm
Thickness, outer sheath	approx. 0.5 mm
Overall twist	4 wires, twisted
Max. conductor resistance	≤ 58 Ω/km
Insulation resistance	≥ 1 GΩ*km
Nominal voltage, cable	≤ 300 V
Test voltage	≥ 3000 V
Minimum bending radius, fixed installation	5 x D
Minimum bending radius, flexible installation	10 x D
Max. bending cycles	10000000
Halogen-free	in accordance with DIN VDE 0472 part 815
	in accordance with DIN EN 50267-2-1
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
	Low adhesion
	abrasion-resistant
Special properties	Flexible cable conduit capable
	Silicone-free
	Free of substances which would hinder coating with paint or varnish
	flexible
Ambient temperature (operation)	-40 °C ... 80 °C (cable, fixed installation)
	-25 °C ... 80 °C (Cable, flexible installation)
Cable weight	30 kg/km

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Cable structure

Cable abbreviation	Li9Y11Y-HF
Cable type	PUR halogen-free black
External cable diameter	4.70 mm
Outer sheath, material	PUR
External sheath, color	black-gray RAL 7021
Conductor material	Bare Cu litz wires
Conductor structure signal line	42x 0.10 mm
AWG signal line	22
Material wire insulation	PP
Thickness, insulation	approx. 0.21 mm (Core insulation)
Wire diameter incl. insulation	1.27 mm ±0.02 mm
Single wire, color	brown, white, blue, black
Overall twist	4 wires, twisted

Electrical properties

Nominal voltage, cable	300 V
Test voltage, cable	3000 V
Conductor resistance	≤ 58 Ω/km
Cable insulation resistance	≥ 100 MΩ*km

Mechanical properties

Smallest bending radius, movable installation	47 mm
Number of bending cycles	4000000
Bending radius	47 mm
Traversing path	10 m
Traversing rate	3 m/s

Bending cycles

Smallest bending radius, movable installation	47 mm
Number of bending cycles	4000000
Bending radius	47 mm
Traversing path	10 m
Traversing rate	3 m/s

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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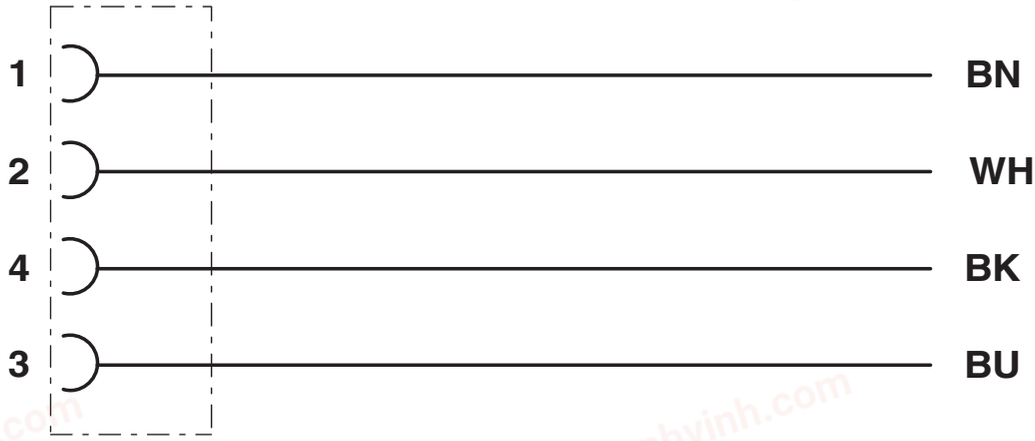
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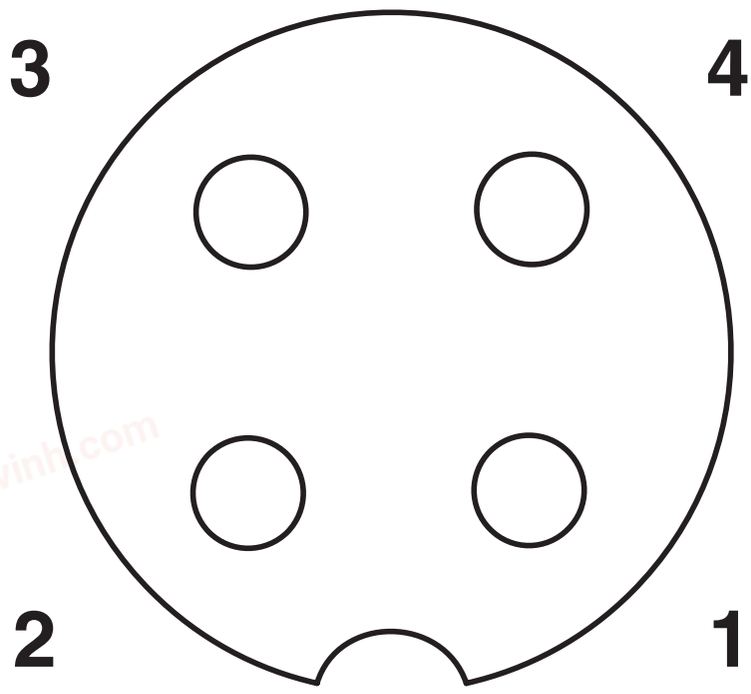
Drawings

Circuit diagram



Contact assignment of the M12 socket

Schematic diagram



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

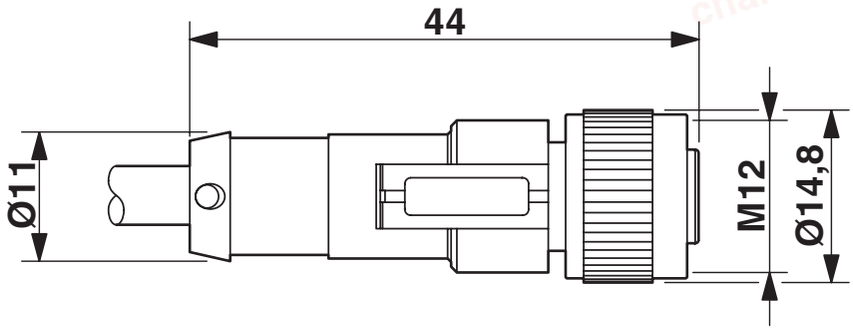
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Dimensional drawing



M12 x 1 socket, straight

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Approvals

EAC

UL Listed

	Nominal Voltage U_N	Nominal Current I_N	Cross Section AWG	Cross Section mm^2
	300 V	4 A	-	-

cUL Listed

	Nominal Voltage U_N	Nominal Current I_N	Cross Section AWG	Cross Section mm^2
	300 V	4 A	-	-

EAC

cULus Listed

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Classifications

ECLASS

ECLASS-9.0	27060311
ECLASS-10.0.1	27060311
ECLASS-11.0	27060311

ETIM

ETIM 8.0	EC001855

UNSPSC

UNSPSC 21.0	26121600

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Environmental Product Compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

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