SAC-HZ-3P-5,0-542/FS SH SCO BK - Sensor/actuator cable

1409499

https://www.phoenixcontact.com/us/products/1409499

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Sensor/actuator cable, 3-position, PVC, yellow, shielded, free cable end, on Socket straight M12, coding: A, cable length: 5 m

Commercial data

Item number	1409499
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Sales key	BF13
Product key	BF1IGA
GTIN	4055626017365
Weight per piece (including packing)	247 g
Weight per piece (excluding packing)	247 g
Customs tariff number	85444290
Country of origin	US

Technical data

Notes

General	These cable assemblies are UL/cUL listed for use in Class I, Division 2 (CID2) hazardous locations.

Product properties

Product type	Sensor/actuator cable
Application	U.S. cables for hazardous locations
Number of positions	3
No. of cable outlets	1
Shielded	yes
Coding	A

Insulation characteristics

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
Outer sheath, material	PVC

Electrical properties

Insulation resistance	≥ 100 MΩ
Nominal voltage U_N	48 V AC
	60 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 (M12 connector)

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Connector

Connection 1

Type	free cable end

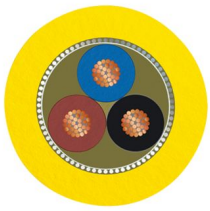
Connection 2

Type	Socket straight M12
Number of positions	3
Coding type	A

Cable/line

Cable length	5 m

PVC yellow 105 °C [542]

Dimensional drawing	
Cable weight	40 kg/km
UL AWM Style	2517 (105 °C / 300 V)
Number of positions	3
Shielded	yes
Cable type	PVC yellow 105 °C [542]
Conductor structure signal line	30x 1.30 mm
AWG signal line	22
Wire diameter incl. insulation	1.27 mm ±0.03 mm
External cable diameter	5.20 mm ±0.2 mm
Outer sheath, material	PVC
External sheath, color	yellow
Conductor material	Tin-plated Cu litz wires
Material wire insulation	PVC
Single wire, color	brown, blue, black
Overall twist	3 wires, twisted
Optical shield covering	85 %
Max. conductor resistance	max. 50.5 Ω/km (20 °C)
Insulation resistance	≥ (550 M Ohms/m @ 500V)
Nominal voltage, cable	300 V
Minimum bending radius, flexible installation	12 x D
Smallest bending radius, movable installation	63 mm
Flame resistance	FT4

Other resistance	UV resistant
Special properties	UL standards PLTC and ITC
Ambient temperature (operation)	-30 °C ... 105 °C (cable, fixed installation)
	-5 °C ... 105 °C (Cable, flexible installation)

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP65
	IP67
Ambient temperature (operation)	-25 °C ... 90 °C (Plug / socket)

Approvals

Conformity/Approvals

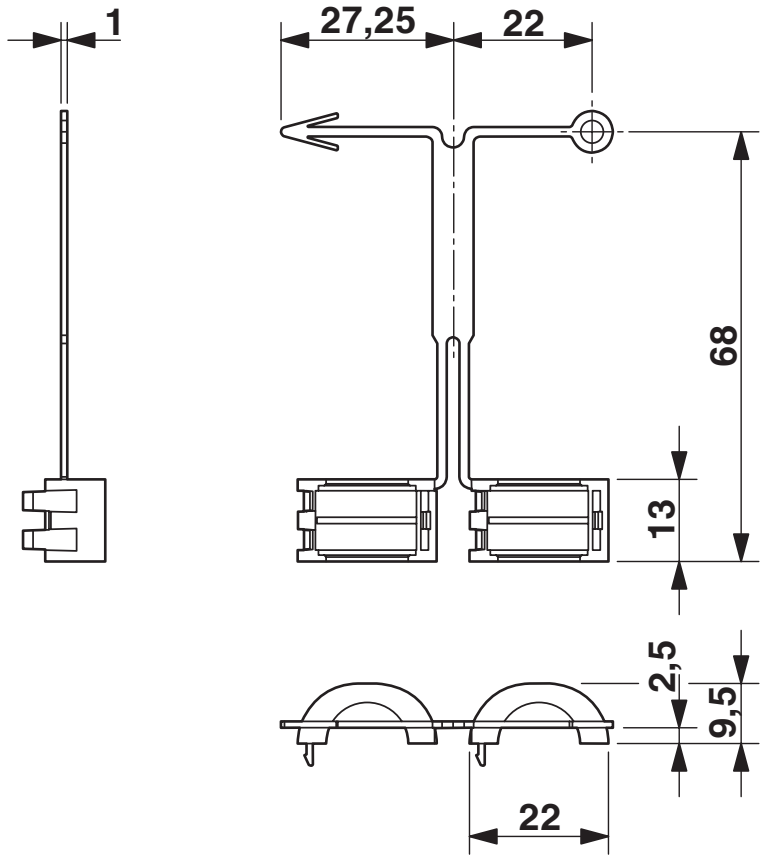
UL, USA / Canada	Class I, Div. 2, Groups A, B, C, D

Standards and regulations

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

Drawings

Dimensional drawing



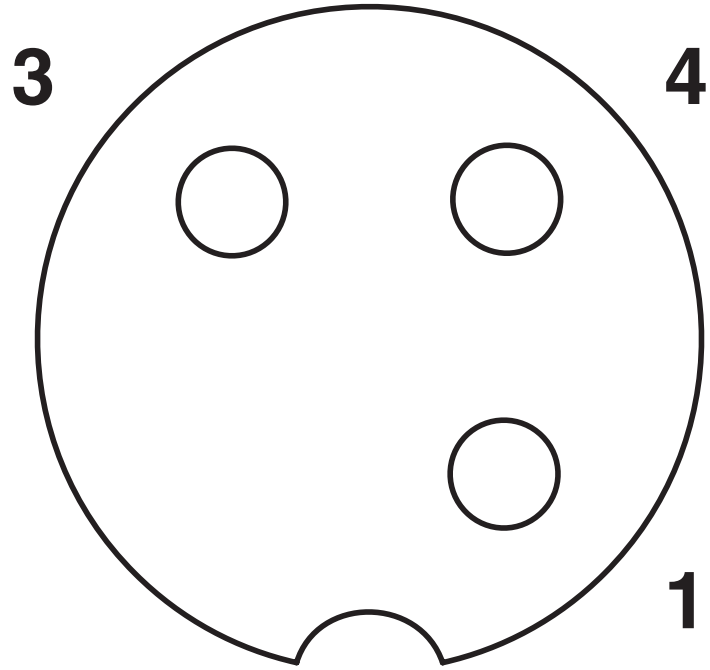
EXCLIP socket

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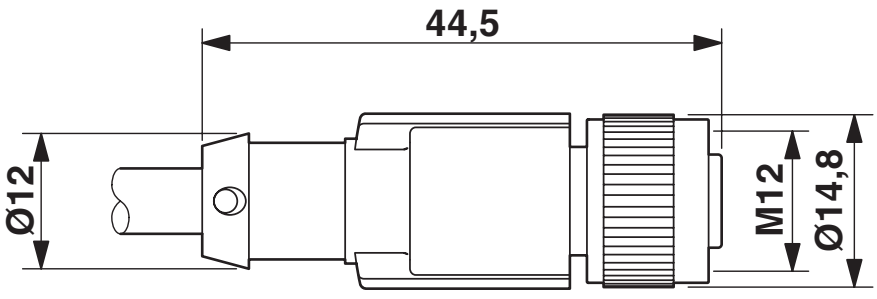
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Schematic diagram



Pin assignment M12 socket, 3-pos., A-coded, view female side

Dimensional drawing



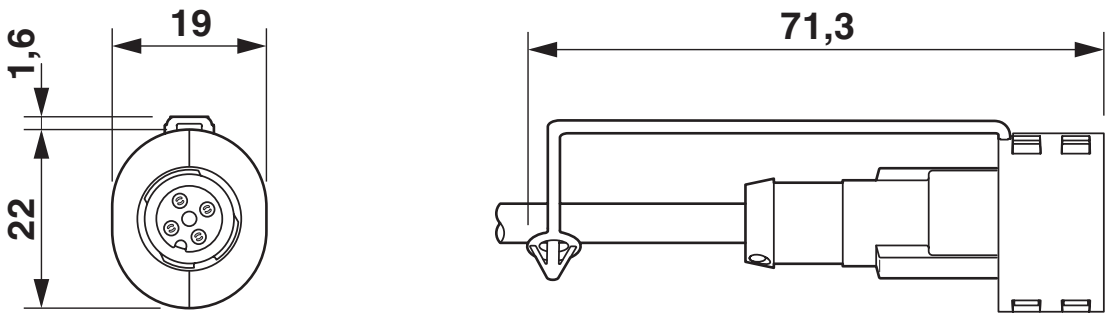
M12 x 1 socket, straight, shielded

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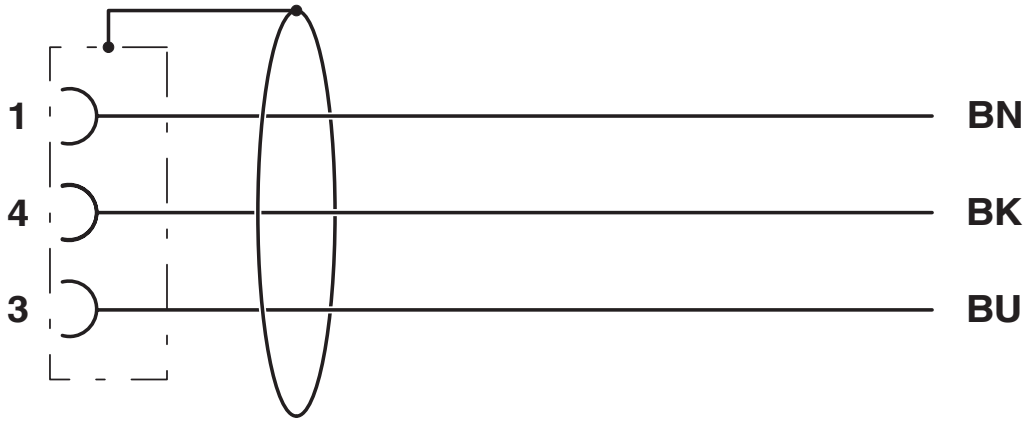
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Dimensional drawing



EXCLIP mounted plug

Circuit diagram



Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1409499

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

cUL Listed
Approval ID: FILE E 359524

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

UL Listed
Approval ID: FILE E 359524

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

cULus Listed

Classifications

ECLASS

ECLASS-11.0	27060311
ECLASS-12.0	27060311
ECLASS-13.0	27060311

ETIM

ETIM 9.0	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-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.

EU REACH SVHC

REACH candidate substance (CAS No.)	No substance above 0.1 wt%

Accessories

PROT-M12 MS-PA-CHAIN - Screw plug

1430899

https://www.phoenixcontact.com/us/products/1430899

M12 sealing cap with fixing band, for sensor cables, for free M12 sockets



SAC-M12-EXCLIP-F - Locking clip

1558991

https://www.phoenixcontact.com/us/products/1558991

Locking clip for the socket side of sensor/actuator cables with M12 connector and M12 connectors for assembly, for knurl diameter: 15 mm or for Allen key with a wrench size of 14 mm, prevents the disconnection of plug-in connections without tools



TSD 04 SAC - Torque screwdriver

1208429

https://www.phoenixcontact.com/us/products/1208429



Torque screwdriver, with preset torque of 0.4 Nm and 4 mm hexagonal drive for M12 connectors

TSD-M 1,2NM - Torque screwdriver

1212224

https://www.phoenixcontact.com/us/products/1212224



Torque screw driver, accuracy as per EN ISO 6789 standard, adjustable from 0. 3 - 1.2 Nm

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TSD-M SAC-BIT ADAPTER - Adapter insert

1212600

https://www.phoenixcontact.com/us/products/1212600



Adapter bit for TSD-M...torque tools, E6.3-1/4" drive with 4 mm hexagon to accommodate SAC bits

SAC BIT M12-D15 - Tool

1208432

https://www.phoenixcontact.com/us/products/1208432



Nut for assembling sensor/actuator cables with M12 connector and M12 connectors for assembly, with a knurl diameter of 15 mm, for 4 mm hexagonal drive

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