

SAC-HZ-3P-M12MR/ 0,5-542/M12FR - Sensor/actuator cable



1409528
<https://www.phoenixcontact.com/us/products/1409528>

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Sensor/actuator cable, 3-position, PVC, yellow, Plug angled M12 SPEEDCON, coding: A, on
Socket angled M12 SPEEDCON, coding: A, cable length: 0.5 m



Commercial data

Item number	1409528
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Sales key	BF13
Product key	BF1IGA
GTIN	4055626017822
Weight per piece (including packing)	22.22 g
Weight per piece (excluding packing)	22.22 g
Customs tariff number	85444290
Country of origin	US

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Technical data

Notes

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

Product type	Sensor/actuator cable
Application	U.S. cables for hazardous locations
Number of positions	3
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
Outer sheath, material	PVC

Electrical properties

Insulation resistance	$\geq 100 \text{ M}\Omega$
Nominal voltage U_N	250 V AC
	250 V DC
Nominal current I_N	4 A

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

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Type	Plug angled M12 SPEEDCON
Number of positions	3
Locking type	SPEEDCON
Coding type	A

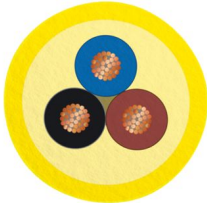
Connection 2

Type	Socket angled M12 SPEEDCON
Number of positions	3
Locking type	SPEEDCON
Coding type	A

Cable/line

Cable length	0.5 m
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PVC yellow 105 °C [542]

Dimensional drawing	
Cable weight	30 kg/km
UL AWM Style	2517 (105 °C / 300 V)
Number of positions	3
Shielded	no
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	4.70 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
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	8 x D
Smallest bending radius, movable installation	38 mm
Flame resistance	FT4
Other resistance	UV resistant

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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
	IP68
Ambient temperature (operation)	-25 °C ... 90 °C (Plug / socket)

Approvals

Conformity/Approvals

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

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

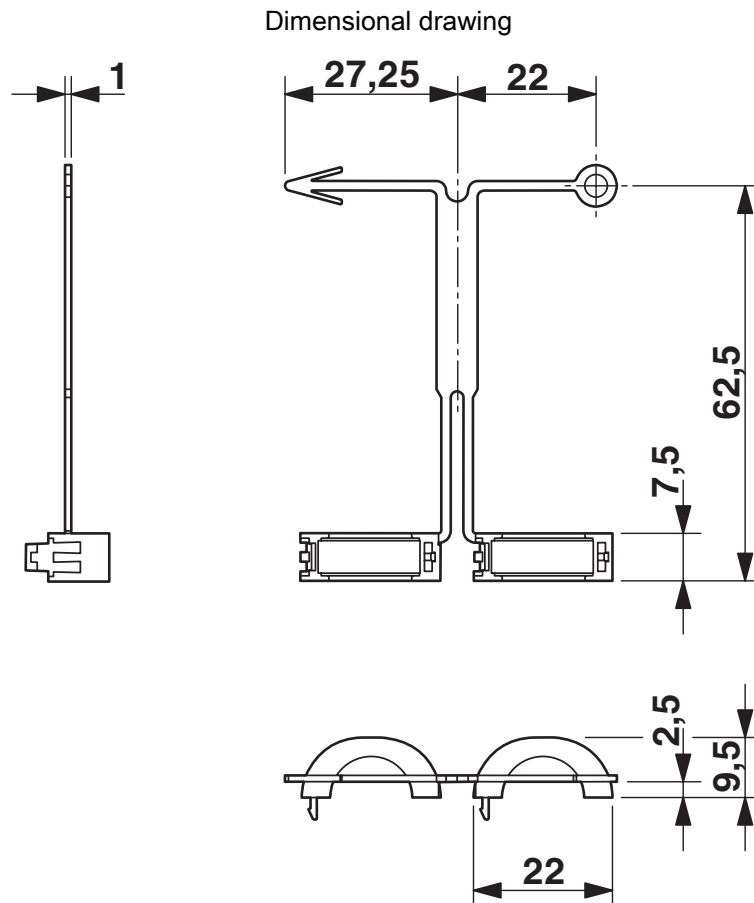
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Drawings



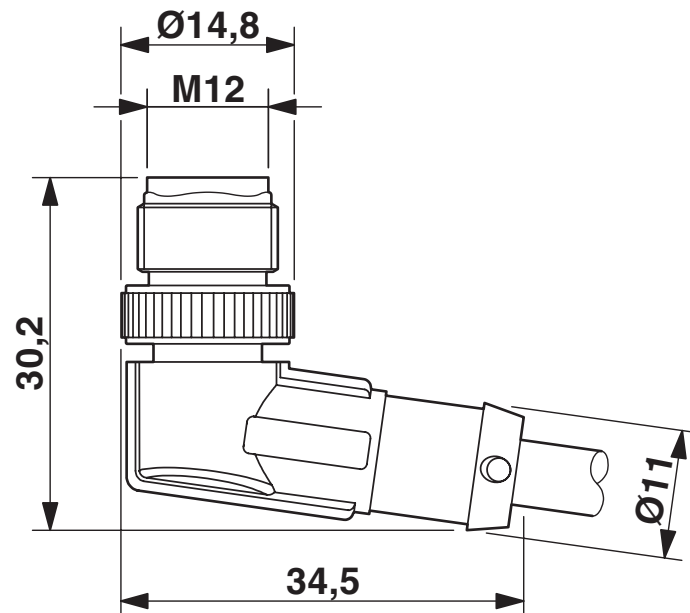
EXCLIP plug

SAC-HZ-3P-M12MR/ 0,5-542/M12FR - Sensor/actuator cable

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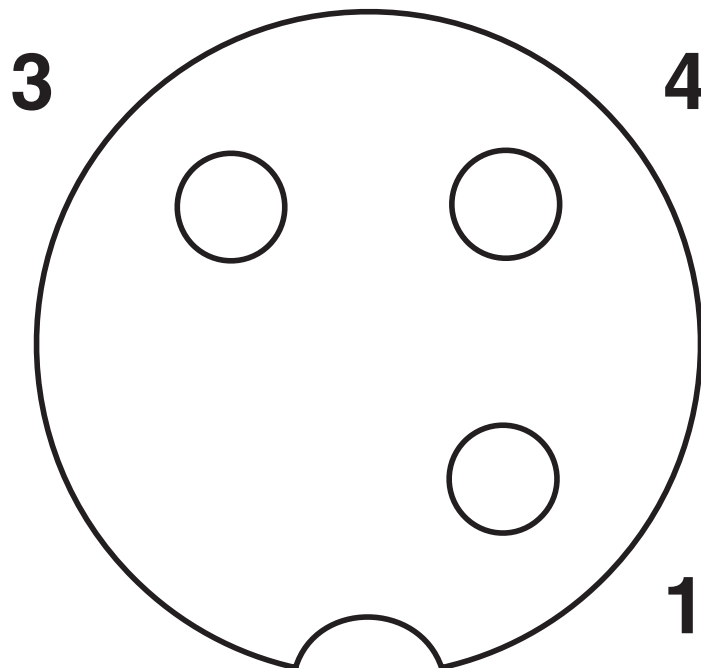
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Dimensional drawing



M12 x 1 male plug, angled

Schematic diagram



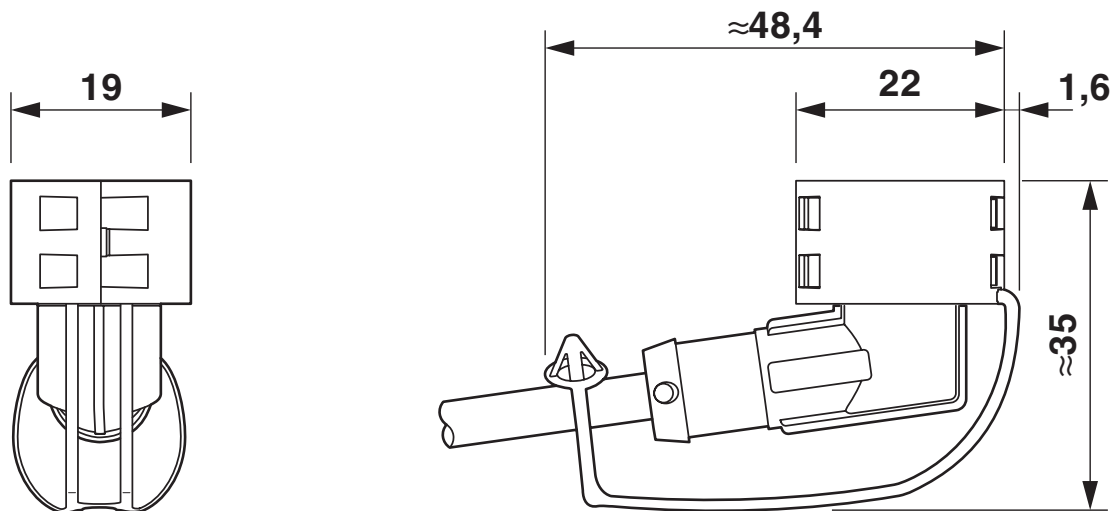
Pin assignment M12 socket, 3-pos., A-coded, view female side

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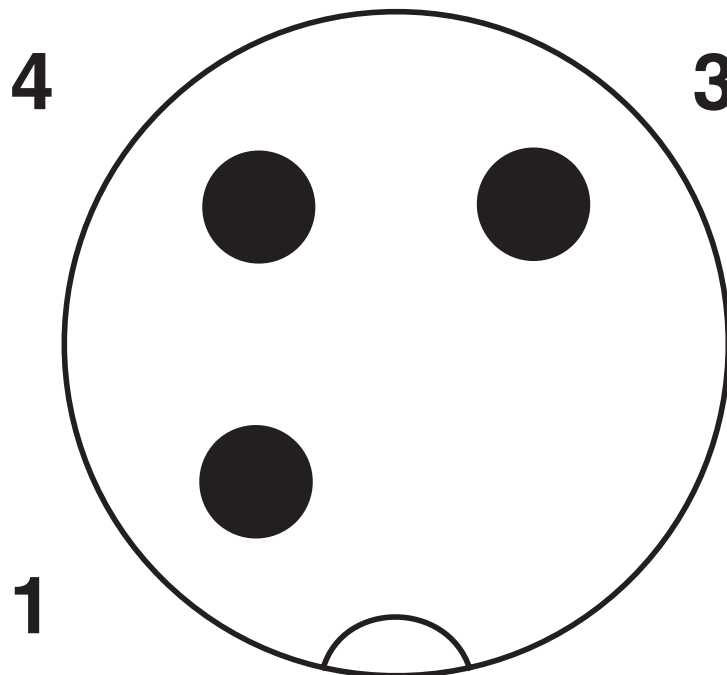
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Dimensional drawing



EXCLIP mounted plug

Schematic diagram



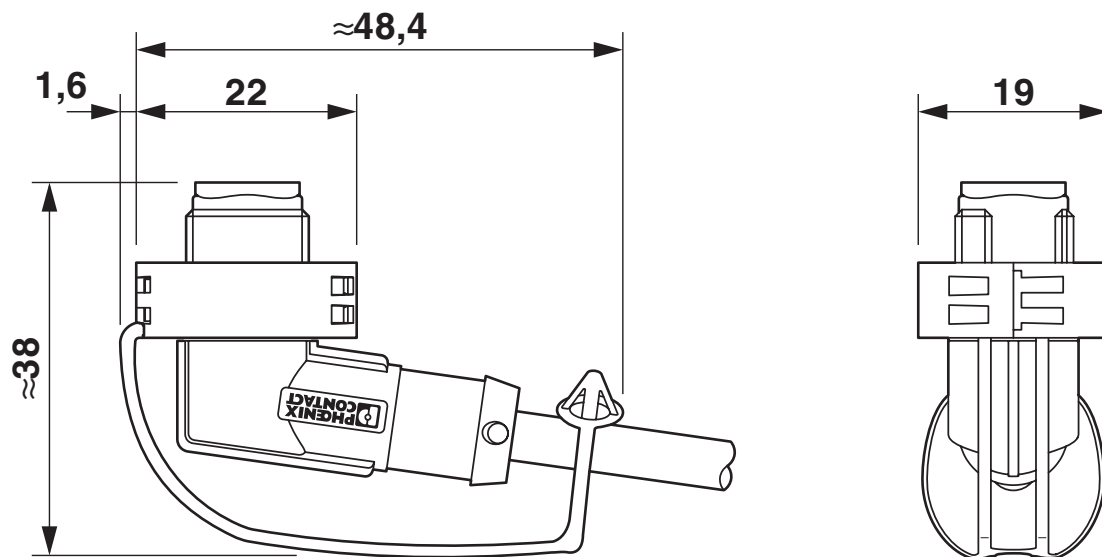
Pin assignment M12 plug, 3-pos., A-coded, view male side

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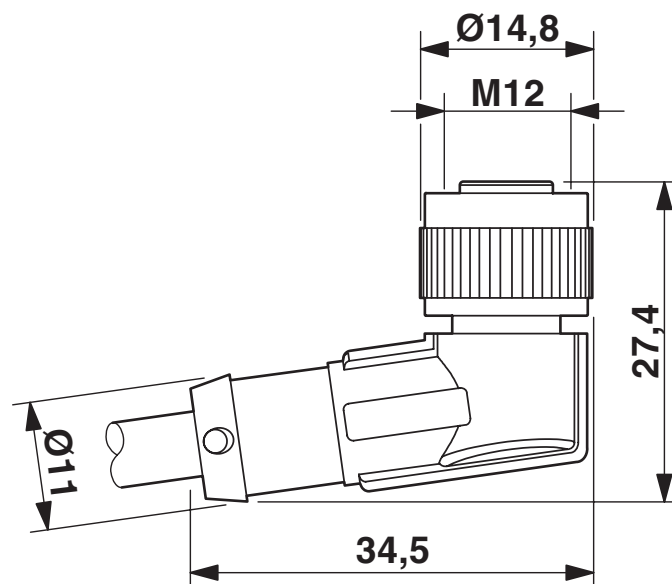
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Dimensional drawing



EXCLIP mounted plug

Dimensional drawing



M12 x 1 socket, angled

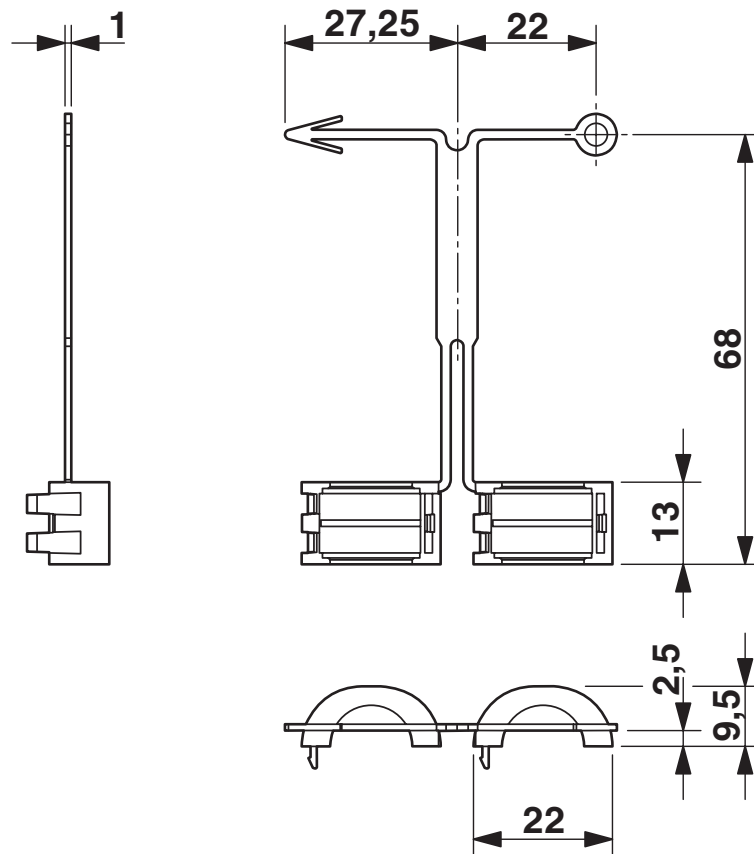
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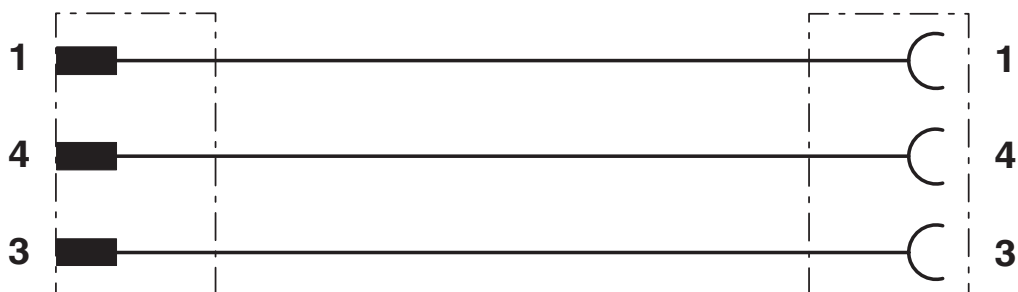
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Dimensional drawing



EXCLIP socket

Circuit diagram



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Classifications

ECLASS

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

ETIM

ETIM 9.0	EC001855
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UNSPSC

UNSPSC 21.0	26121600
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Environmental product compliance

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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