SAC-HZ-4P-M12MR/0,5-542/M12FRSH - Sensor/actuator cable

1409548

https://www.phoenixcontact.com/us/products/1409548

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Sensor/actuator cable, 4-position, PVC, yellow, shielded, Plug angled M12, coding: A, on Socket angled M12, coding: A, cable length: 0.5 m

Commercial data

Item number	1409548
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Sales key	BF13
Product key	AF1IGB
GTIN	4055626018041
Weight per piece (including packing)	75.6 g
Weight per piece (excluding packing)	75.6 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	4
No. of cable outlets	1
Shielded	yes
Coding	A

Insulation characteristics

Overvoltage category	II
Degree of pollution	3

Material specifications

Material	TPE-U (Locking clip)
Flammability rating according to UL 94	HB
Material grommet GRP	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)

Connector

Connection 1

Type	Plug angled M12
Number of positions	4
Coding type	A

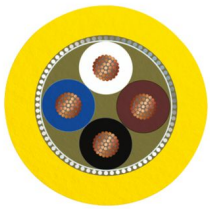
Connection 2

Type	Socket angled M12
Number of positions	4
Coding type	A

Cable/line

Cable length	0.5 m

PVC yellow 105 °C [542]

Dimensional drawing	
Cable weight	48 kg/km
UL AWM Style	2517 (105 °C / 300 V)
Number of positions	4
Shielded	yes
Cable type	PVC yellow 105 °C [542]
Conductor structure signal line	7x 0.25 mm
AWG signal line	22
Wire diameter incl. insulation	1.27 mm ±0.03 mm
External cable diameter	5.50 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, white
Overall twist	4 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	66 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
	IP68
Ambient temperature (operation) (male connector/female connector)	-25 °C ... 90 °C (Plug / socket)
Ambient temperature (operation) (Locking clip)	-40 °C ... 65 °C (Locking clip)

Approvals

Conformity/Approvals

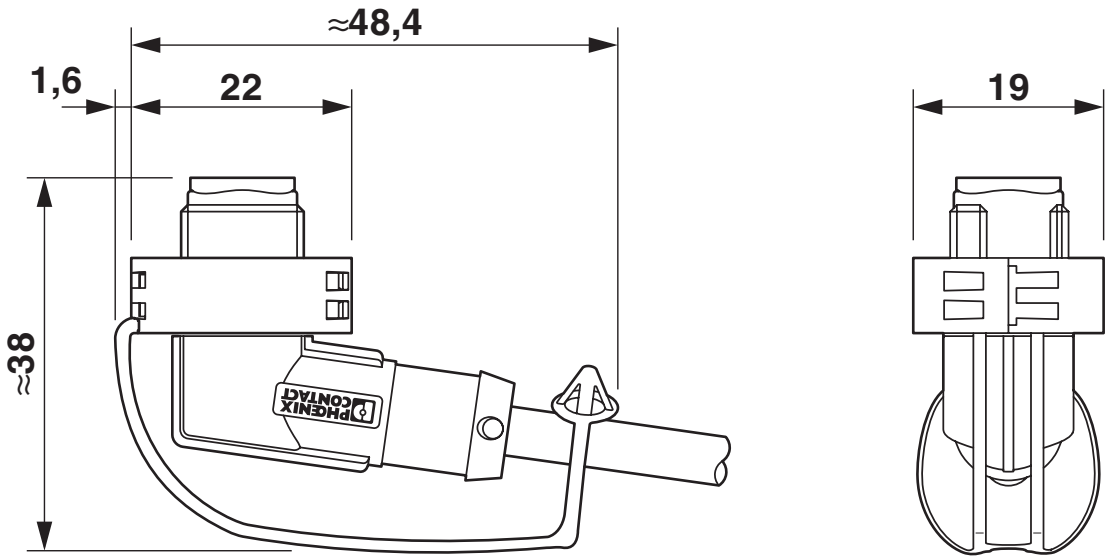
UL, USA / Canada	Class I, Div. 2, Groups A, B, C, D

Standards and regulations

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

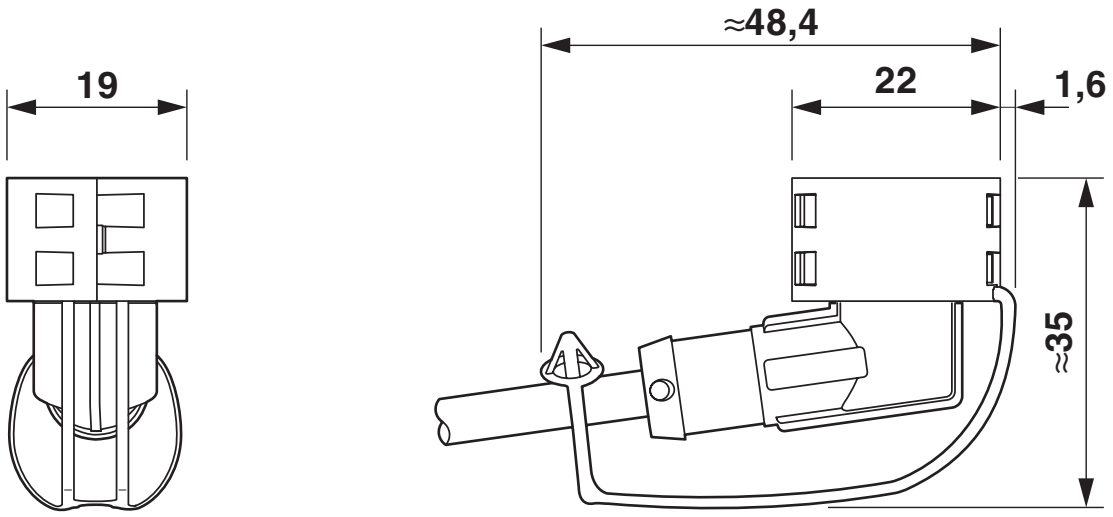
Drawings

Dimensional drawing



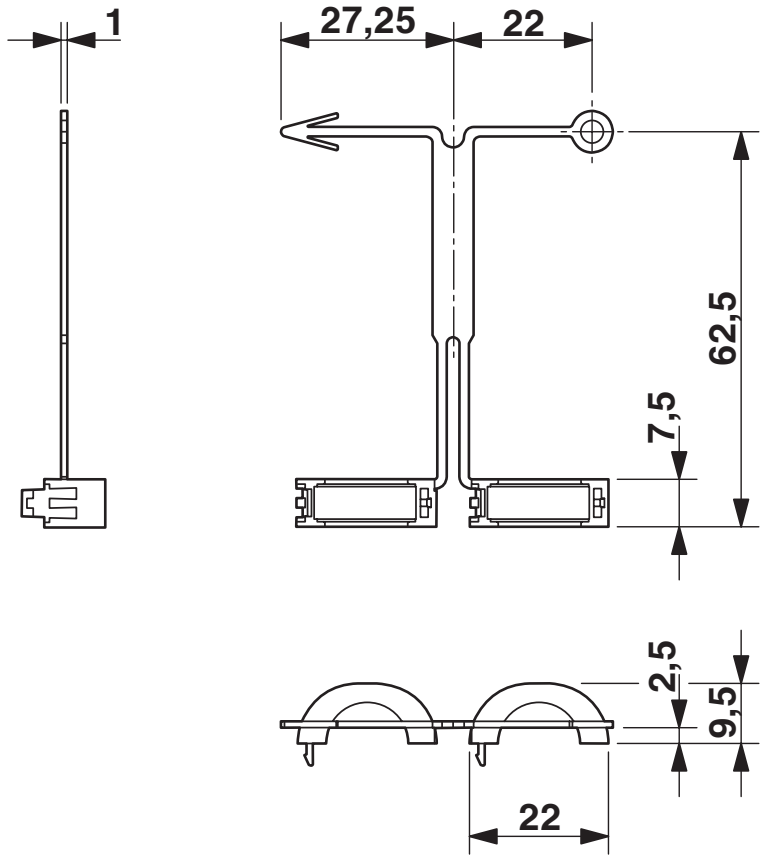
EXCLIP mounted plug

Dimensional drawing



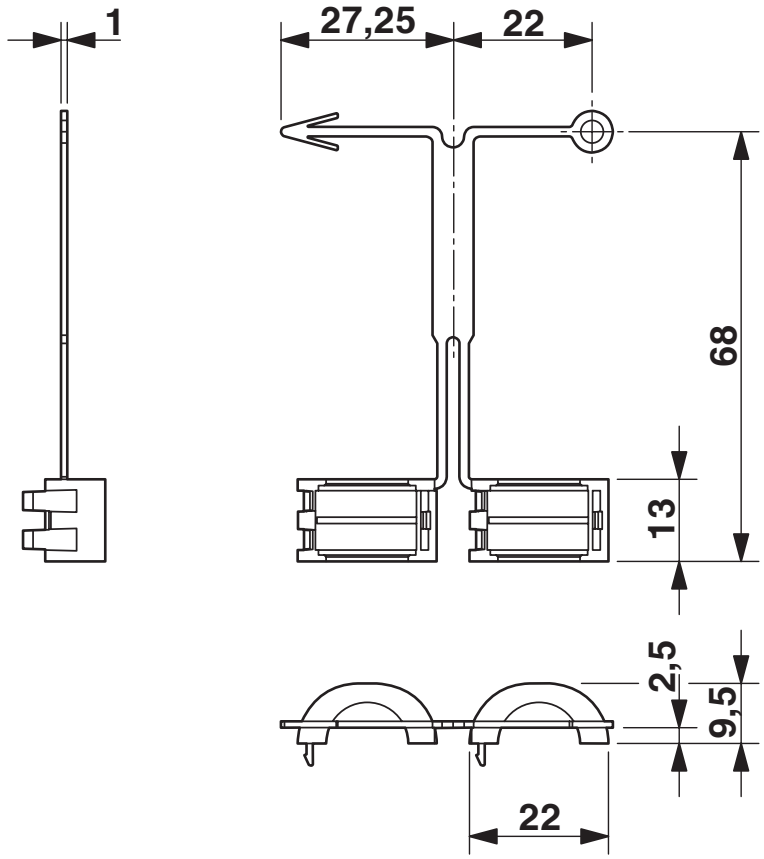
EXCLIP mounted socket

Dimensional drawing



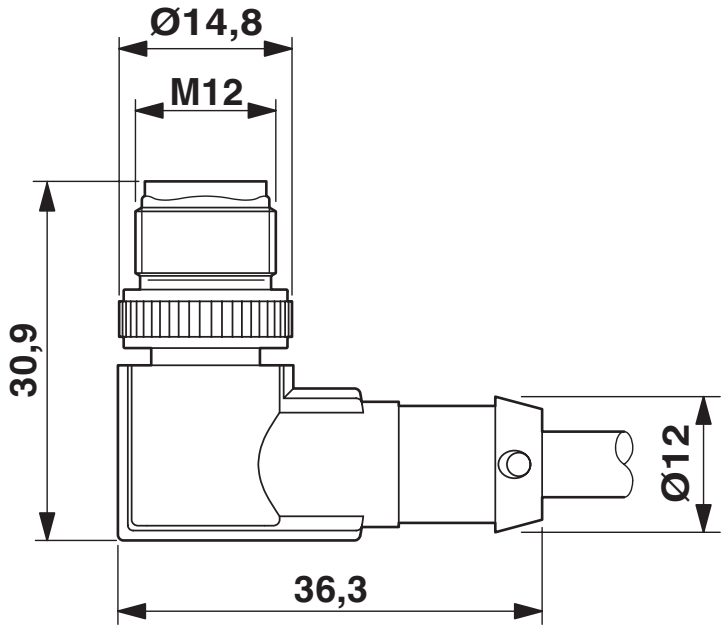
EXCLIP plug

Dimensional drawing



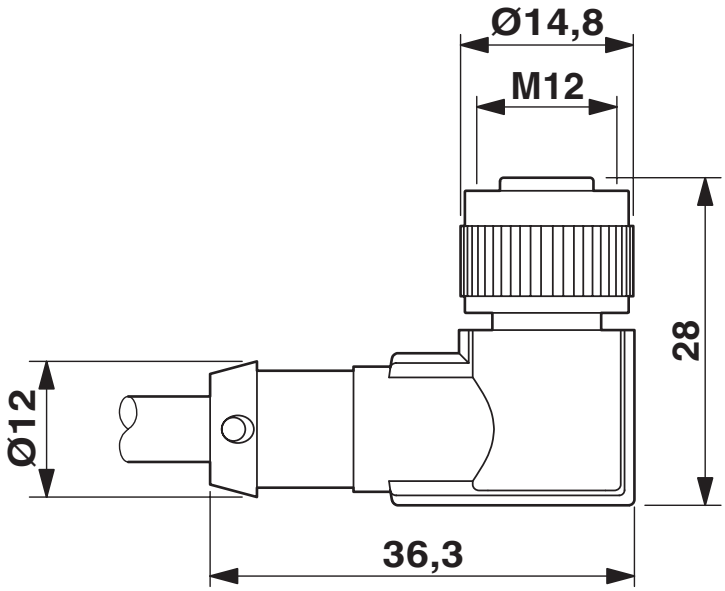
EXCLIP socket

Dimensional drawing



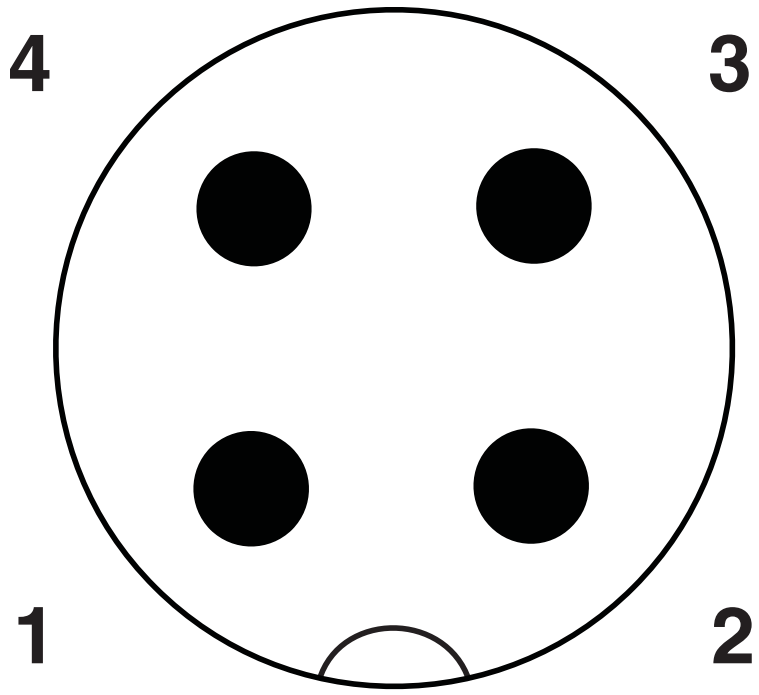
Plug, M12 x 1, angled, shielded

Dimensional drawing



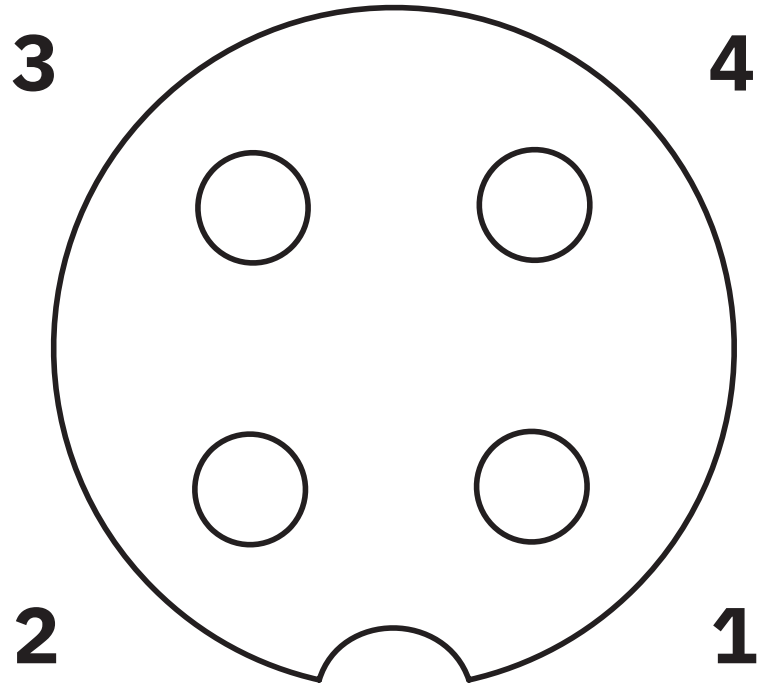
M12 x 1 socket, angled, shielded

Schematic diagram



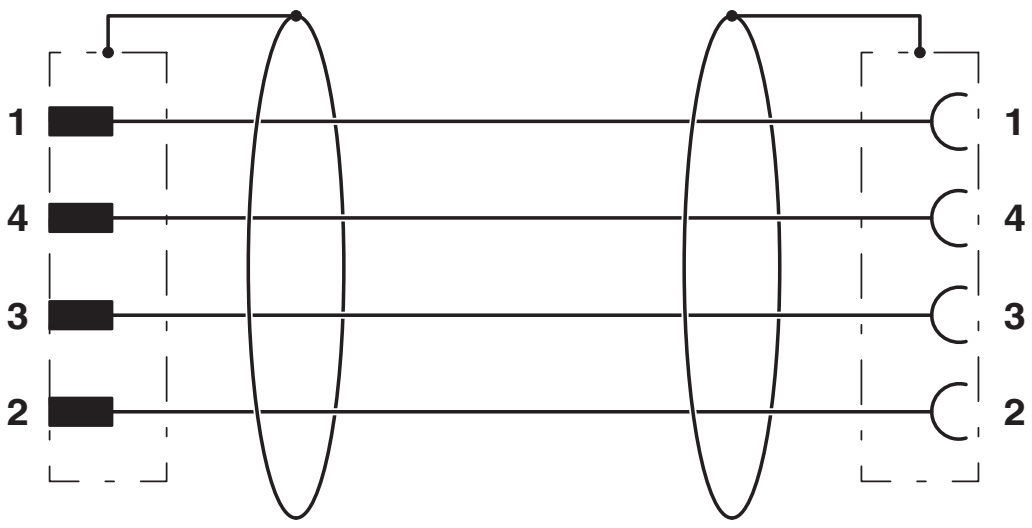
Pin assignment M12 plug, 4-pos., A-coded, view plug side

Schematic diagram



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

Circuit diagram



Contact assignment of the M12 plug and the M12 socket

Classifications

ECLASS

ECLASS-13.0	27060311
ECLASS-15.0	27060311

ETIM

ETIM 9.0	EC001855

UNSPSC

UNSPSC 21.0	26121600

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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