

SAC-3P-M12MS/ 1,0-150/M12FR-2L - Sensor/actuator cable



1546576

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Sensor/actuator cable, 3-position, PUR halogen-free, irradiated, orange RAL 2003, Plug straight M12, coding: A, with 2 LEDs, on Socket angled M12, coding: A, with 2 LEDs, cable length: 1 m

As shown in the illustration but with an orange conductor

Commercial data

Item number	1546576
Packing unit	1 pc
Minimum order quantity	1 pc
Product key	AF1CBA
GTIN	4046356128711
Weight per piece (including packing)	44.9 g
Weight per piece (excluding packing)	44.9 g
Country of origin	PL

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Technical data

Product properties

Product type	Sensor/actuator cable
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

Electrical properties

Insulation resistance	$\geq 100 \text{ M}\Omega$
Nominal voltage U_N	24 V
Nominal current I_N	4 A

Mechanical properties

Mechanical data

Insertion/withdrawal cycles	≥ 100
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Signaling

Status display	2 LEDs
Status display present	yes

Connector

Connection 1

Type	Plug straight M12
Number of positions	3
Coding type	A

Connection 2

Type	Socket angled M12
Number of positions	3

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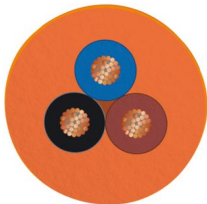
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Coding type	A
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Cable/line

Cable length	1 m
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PUR irradiated halogen-free orange [150]

Dimensional drawing	
Number of positions	3
Shielded	no
Cable type	PUR irradiated halogen-free orange [150]
Conductor structure signal line	42x 0.10 mm
AWG signal line	22
Conductor cross-section	3x 0.34 mm ² (Signal line)
Wire diameter incl. insulation	1.05 mm ±0.05 mm (Signal line)
External cable diameter	4.40 mm ±0.2 mm
Outer sheath, material	PUR
External sheath, color	orange RAL 2003
Conductor material	Bare Cu litz wires
Material wire insulation	PE
Single wire, color	brown, blue, black
Overall twist	3 wires, twisted
Max. conductor resistance	max. 57 Ω/km
Nominal voltage, cable	250 V (AC)
Test voltage	2000 V (50 Hz, 5 minutes)
Smallest bending radius, fixed installation	13.5 mm
Smallest bending radius, movable installation	53 mm
Dynamic load capacity (bending)	Max. bending cycles: 5000000, Bending radius: 44 mm, Traversing path: 10 m, Traversing rate: 3 m/s, Acceleration: 10 m/s ²
Flame resistance	according to DIN VDE 0472 Part 804
Other resistance	UV resistant
Special properties	Silicone-free Irradiated
Ambient temperature (operation)	-50 °C ... 105 °C (cable, fixed installation) -40 °C ... 105 °C (Cable, flexible installation)

Environmental and real-life conditions

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Ambient conditions

Degree of protection	IP65
	IP67
	IP68
Ambient temperature (operation)	-25 °C ... 90 °C (Plug / socket)
	-50 °C ... 105 °C (cable, fixed installation)
	-40 °C ... 105 °C (Cable, flexible installation)

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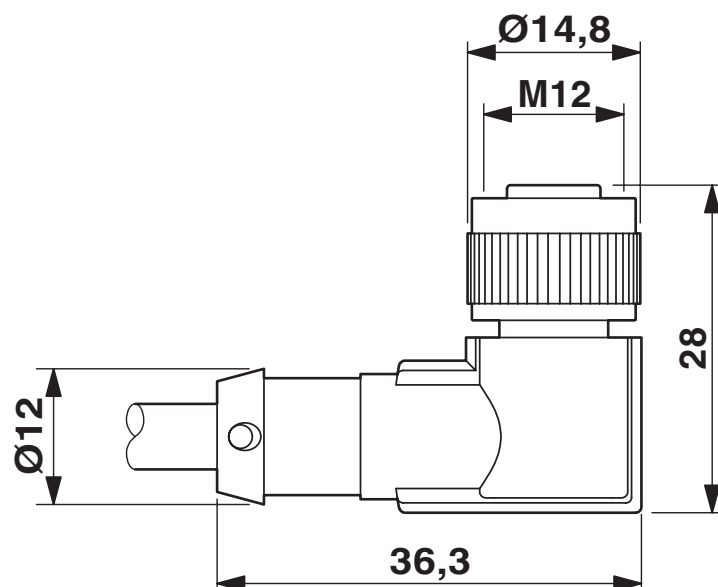
Drawings

Dimensional drawing



Plug, M12 x 1, straight, shielded

Dimensional drawing



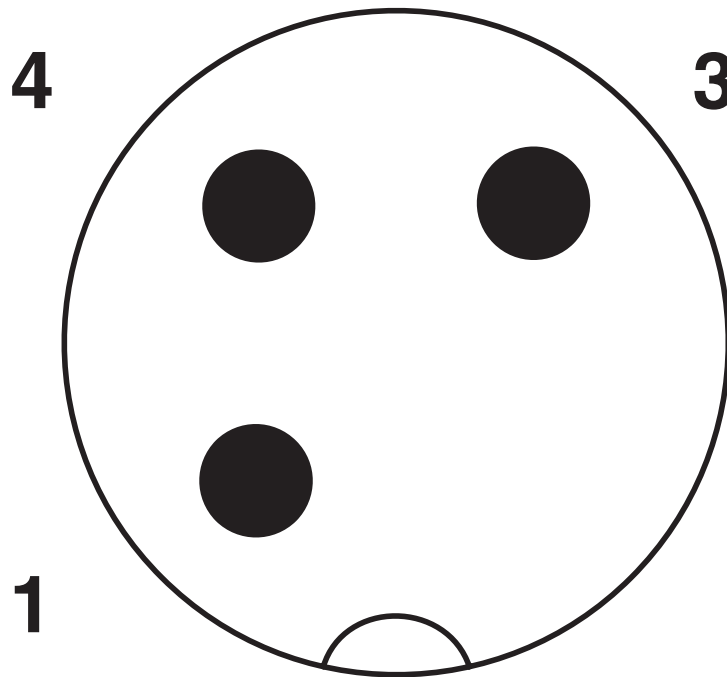
Socket M12 x 1, angled, with LED

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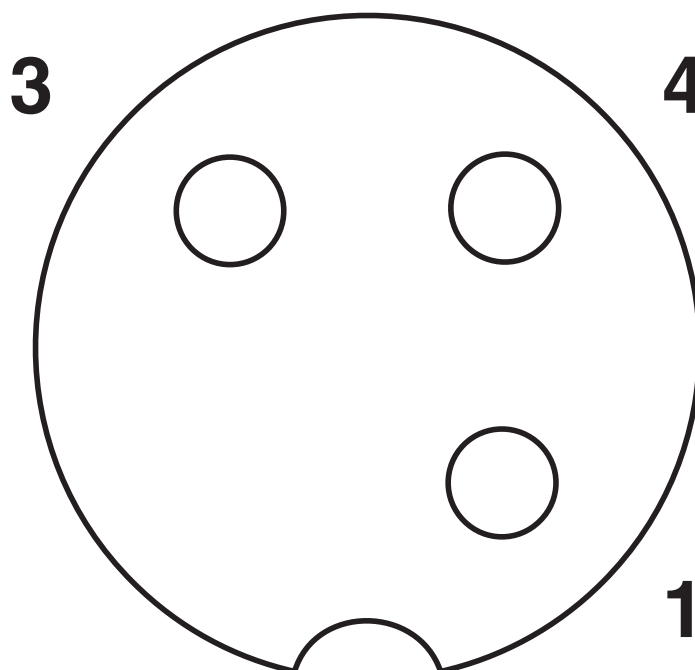
<https://www.phoenixcontact.com/us/products/1546576>

Schematic diagram



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

Schematic diagram



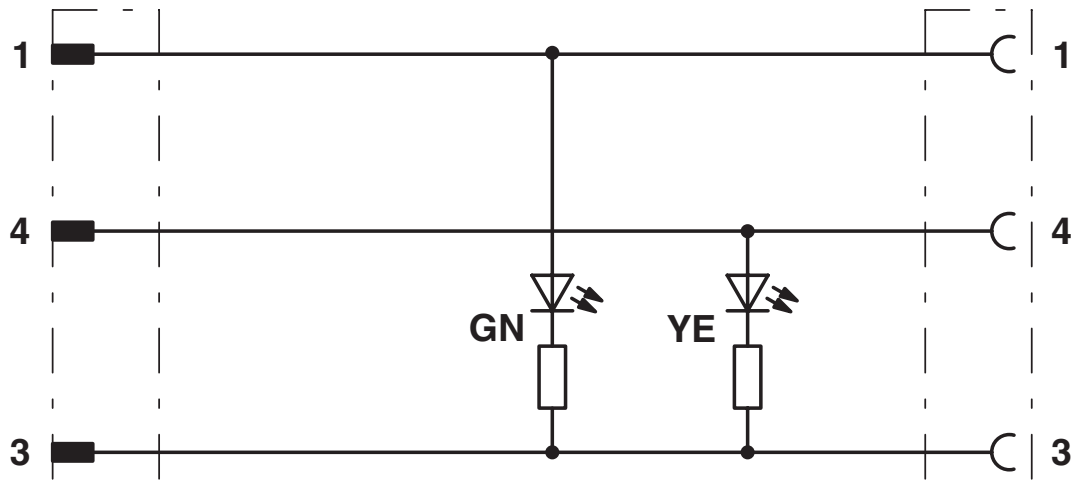
Pin assignment M12 socket, 3-pos., A-coded, view female side

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Circuit diagram



Contact assignment of M12 plugs / sockets with 3 LEDs

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Approvals

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 UL Listed Approval ID: FILE E 221474				
	Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
keine				
	24 V	4 A	-	-

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Classifications

ECLASS

ECLASS-13.0	27060311
ECLASS-15.0	27060311

ETIM

ETIM 10.0	EC001855
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UNSPSC

UNSPSC 21.0	26121600
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Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
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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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Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com