

SAC-5P-M12MS/3,0-150/M12FR-3L - Sensor/actuator cable



1563478

<https://www.phoenixcontact.com/us/products/1563478>

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



Sensor/actuator cable, 5-position, PUR halogen-free, irradiated, orange RAL 2003, Plug straight M12, coding: A, with 3 LEDs, on Socket angled M12, coding: A, with 3 LEDs, cable length: 3 m

Commercial data

Item number	1563478
Packing unit	5 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Sales key	BF03
Product key	AF1CDA
GTIN	4046356303958
Weight per piece (including packing)	165.75 g
Weight per piece (excluding packing)	152.2 g
Customs tariff number	85444290
Country of origin	PL

SAC-5P-M12MS/3,0-150/M12FR-3L - Sensor/actuator cable



1563478

<https://www.phoenixcontact.com/us/products/1563478>

Technical data

Product properties

Product type	Sensor/actuator cable
Number of positions	5
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
-----------------------------	------------

Signaling

Status display	3 LEDs
Status display present	yes

Connector

Connection 1

Type	Plug straight M12
Number of positions	5
Coding type	A

Connection 2

Type	Socket angled M12
Number of positions	5

SAC-5P-M12MS/3,0-150/M12FR-3L - Sensor/actuator cable



1563478

<https://www.phoenixcontact.com/us/products/1563478>

Coding type	A
-------------	---

Cable/line

Cable length	3 m
--------------	-----

PUR irradiated halogen-free orange [151]

Number of positions	5
Shielded	no
Cable type	PUR irradiated halogen-free orange [151]
Conductor structure signal line	42x 0.10 mm
AWG signal line	22
Conductor cross-section	0.34 mm ²
Wire diameter incl. insulation	1.05 mm ±0.05 mm
External cable diameter	5.90 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, white, blue, black, green-yellow
Overall twist	5 cores, twisted
Max. conductor resistance	≤ 57 Ω/km
Nominal voltage, cable	250 V (AC)
Test voltage	2000 V (50 Hz, 5 minutes)
Smallest bending radius, fixed installation	min. 25 mm
Smallest bending radius, movable installation	min. 40 mm
Dynamic load capacity (bending)	Max. bending cycles: 5000000, Bending radius: 59 mm, Traversing path: 10 m, Traversing rate: 3 m/s
Special properties	Irradiated
Ambient temperature (operation)	-50 °C ... 105 °C (cable, fixed installation) -40 °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) -50 °C ... 105 °C (cable, fixed installation) -40 °C ... 105 °C (Cable, flexible installation)

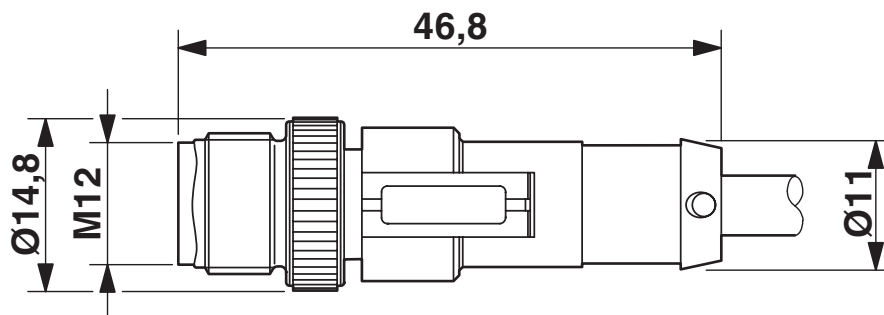
SAC-5P-M12MS/3,0-150/M12FR-3L - Sensor/actuator cable

1563478

<https://www.phoenixcontact.com/us/products/1563478>

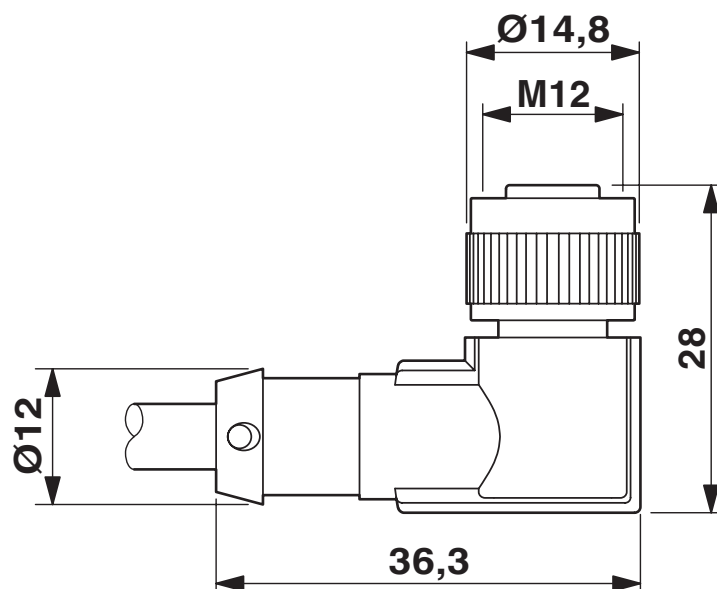
Drawings

Dimensional drawing



Plug, M12 x 1, straight, shielded

Dimensional drawing



Socket M12 x 1, angled, with LED

SAC-5P-M12MS/3,0-150/M12FR-3L - Sensor/actuator cable

1563478

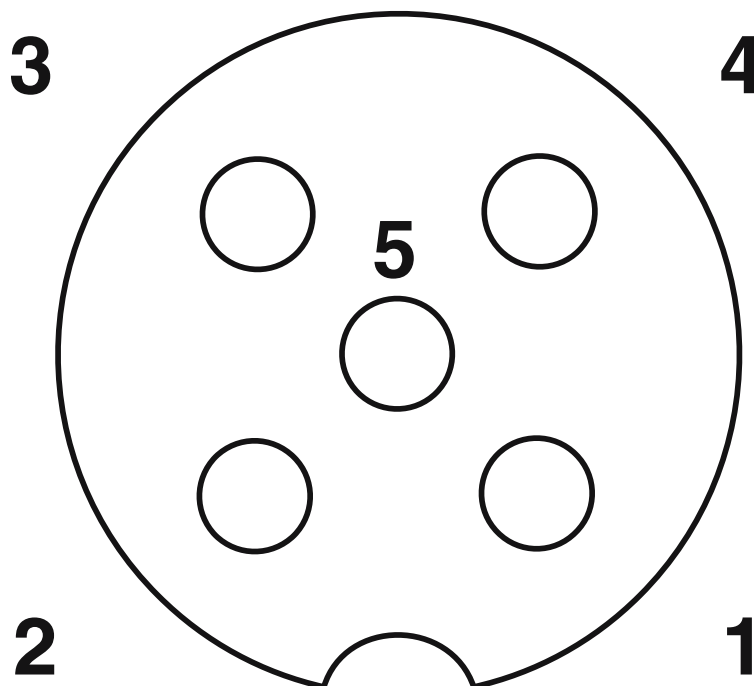
<https://www.phoenixcontact.com/us/products/1563478>

Schematic diagram



Pin assignment M12 male connector, 5-pos., A-coded, male side

Schematic diagram



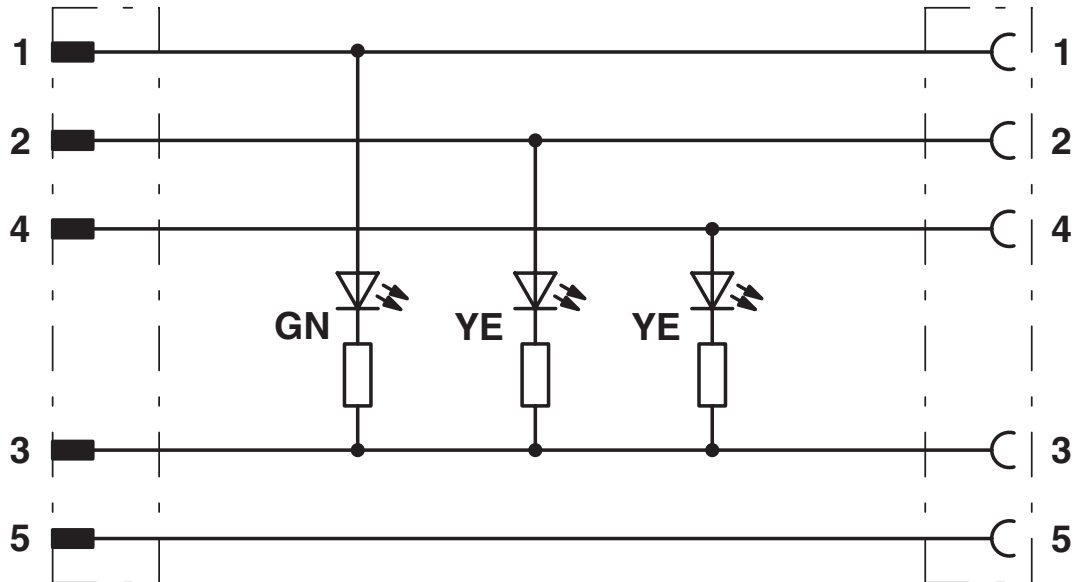
Pin assignment M12 socket, 5-pos., A-coded, socket side view

SAC-5P-M12MS/3,0-150/M12FR-3L - Sensor/actuator cable

1563478

<https://www.phoenixcontact.com/us/products/1563478>

Circuit diagram



Contact assignment of M12 plugs / sockets with 3 LEDs

SAC-5P-M12MS/3,0-150/M12FR-3L - Sensor/actuator cable



1563478

<https://www.phoenixcontact.com/us/products/1563478>

Classifications

ECLASS

ECLASS-13.0	27060311
ECLASS-15.0	27060311

UNSPSC

UNSPSC 21.0	26121600
-------------	----------

SAC-5P-M12MS/3,0-150/M12FR-3L - Sensor/actuator cable



1563478

<https://www.phoenixcontact.com/us/products/1563478>

Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
---	--------------------

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%
-------------------------------------	----------------------------

Phoenix Contact 2026 © - all rights reserved
<https://www.phoenixcontact.com>

Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com