

SAC-3P-M12MS/ 1,0-140/M12FS - Sensor/actuator cable



1502497
<https://www.phoenixcontact.com/us/products/1502497>

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, 3-position, PUR/PVC, yellow, Plug straight M12, coding: A, on Socket straight M12, coding: A, cable length: 1 m

Commercial data

Item number	1502497
Packing unit	20 pc
Minimum order quantity	1 pc
Product key	AF1CBA
GTIN	4017918815134
Weight per piece (including packing)	50.85 g
Weight per piece (excluding packing)	50.85 g
Country of origin	DE

SAC-3P-M12MS/ 1,0-140/M12FS - Sensor/actuator cable



1502497

<https://www.phoenixcontact.com/us/products/1502497>

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	≥ 100 MΩ
Nominal voltage U_N	250 V AC
	250 V DC
Nominal current I_N	4 A

Mechanical properties

Mechanical data

Insertion/withdrawal cycles	≥ 100
-----------------------------	-------

Signaling

Status display	no
Status display present	no

Connector

Connection 1

Type	Plug straight M12
Number of positions	3
Coding type	A

Connection 2

Type	Socket straight M12
------	---------------------

SAC-3P-M12MS/ 1,0-140/M12FS - Sensor/actuator cable



1502497

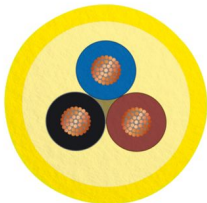
<https://www.phoenixcontact.com/us/products/1502497>

Number of positions	3
Coding type	A

Cable/line

Cable length	1 m
--------------	-----

PUR/PVC yellow [140]

Dimensional drawing	
Cable weight	37 kg/km
Number of positions	3
Shielded	no
Cable type	PUR/PVC yellow [140]
Conductor structure signal line	42x 0.10 mm
AWG signal line	22
Conductor cross section	0.34 mm²
Wire diameter incl. insulation	1.52 mm ±0.02 mm
External cable diameter	5.20 mm ±0.2 mm
Outer sheath, material	PUR
External sheath, color	yellow
Conductor material	Bare Cu litz wires
Material wire insulation	PVC
Single wire, color	brown, blue, black
Thickness, insulation	≥ 0.23 mm (Core insulation) ≥ 0.38 mm (Outer cable sheath) approx. 0.45 mm (Inner sheath)
Overall twist	3 wires, twisted
Max. conductor resistance	max. 57.3 Ω/km (at 20 °C)
Insulation resistance	≥ 100 MΩ*km (at 20 °C)
Nominal voltage, cable	300 V
Test voltage	2500 V
Smallest bending radius, fixed installation	52 mm
Smallest bending radius, movable installation	52 mm
Dynamic load capacity (bending)	Max. bending cycles: 2000000, Bending radius: 52 mm, Traversing path: 5 m, Traversing rate: 3 m/s
Ambient temperature (operation)	-25 °C ... 80 °C (cable, fixed installation) -5 °C ... 80 °C (Cable, flexible installation)

Environmental and real-life conditions

SAC-3P-M12MS/ 1,0-140/M12FS - Sensor/actuator cable



1502497

<https://www.phoenixcontact.com/us/products/1502497>

Ambient conditions

Degree of protection	IP65
	IP67
	IP68
Ambient temperature (operation)	-25 °C ... 90 °C (Plug / socket)
	-25 °C ... 80 °C (cable, fixed installation)
	-5 °C ... 80 °C (Cable, flexible installation)

SAC-3P-M12MS/ 1,0-140/M12FS - Sensor/actuator cable

1502497

<https://www.phoenixcontact.com/us/products/1502497>

Drawings

Dimensional drawing



Plug, M12 x 1, straight, shielded

Dimensional drawing



M12 x 1 socket, straight

SAC-3P-M12MS/ 1,0-140/M12FS - Sensor/actuator cable

1502497

<https://www.phoenixcontact.com/us/products/1502497>

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

SAC-3P-M12MS/ 1,0-140/M12FS - Sensor/actuator cable



1502497

<https://www.phoenixcontact.com/us/products/1502497>

Circuit diagram



Contact assignment of M12 connector/socket

SAC-3P-M12MS/ 1,0-140/M12FS - Sensor/actuator cable



1502497
<https://www.phoenixcontact.com/us/products/1502497>

Classifications

ECLASS

ECLASS-13.0	27060311
ECLASS-15.0	27060311

SAC-3P-M12MS/ 1,0-140/M12FS - Sensor/actuator cable



1502497

<https://www.phoenixcontact.com/us/products/1502497>

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 2025 © - 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