

SAC-4P-M12MR/1,5-PUR/M12FR D - Sensor/actuator cable



1696154

<https://www.phoenixcontact.com/us/products/1696154>

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, 4-position, PUR/PVC, yellow, Plug angled M12, coding: A, on Socket angled M12, coding: A, cable length: 1.5 m, DESINA

Your advantages

- Easy and safe: 100 % electrically tested plug-in components

Commercial data

Item number	1696154
Packing unit	1 pc
Note	Made to order (non-returnable)
Sales key	BF03
Product key	AF1CCA
GTIN	4017918181123
Weight per piece (including packing)	86.14 g
Weight per piece (excluding packing)	86.14 g
Customs tariff number	85444290
Country of origin	DE

SAC-4P-M12MR/1,5-PUR/M12FR D - Sensor/actuator cable



1696154

<https://www.phoenixcontact.com/us/products/1696154>

Technical data

Product properties

Product type	Sensor/actuator cable
Application	DESINA
Number of positions	4
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	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 angled M12
Number of positions	4
Coding type	A

Connection 2

SAC-4P-M12MR/1,5-PUR/M12FR D - Sensor/actuator cable



1696154

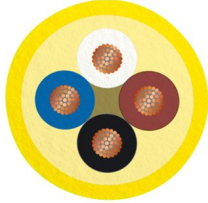
<https://www.phoenixcontact.com/us/products/1696154>

Type	Socket angled M12
Number of positions	4
Coding type	A

Cable/line

Cable length	1.5 m
--------------	-------

PUR/PVC yellow [140]

Dimensional drawing	
Cable weight	39 kg/km
UL AWM Style	20549
Number of positions	4
Shielded	no
Cable type	PUR/PVC yellow [140]
Conductor structure signal line	42x 0.10 mm
AWG signal line	22
Conductor cross-section	4x 0.34 mm ² (Signal line)
Wire diameter incl. insulation	1.5 mm ±0.05 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, white, blue, black
Thickness, insulation	approx. 0.30 mm (Core insulation) ≥ 0.38 mm (Outer cable sheath) approx. 0.35 mm (Inner sheath)
Overall twist	4 wires, twisted
Max. conductor resistance	max. 58 Ω/km (at 20 °C)
Insulation resistance	≥ 1 GΩ*km (at 20 °C)
Nominal voltage, cable	≤ 300 V
Test voltage	≥ 3000 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
Flame resistance	in accordance with DIN UL-Style 20549

SAC-4P-M12MR/1,5-PUR/M12FR D - Sensor/actuator cable



1696154

<https://www.phoenixcontact.com/us/products/1696154>

Ambient temperature (operation)	-25 °C ... 80 °C (cable, fixed installation)
	-5 °C ... 80 °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) (Cable, fixed installation)	-25 °C ... 80 °C (cable, fixed installation)
Ambient temperature (operation) (Cable, flexible installation)	-5 °C ... 80 °C (Cable, flexible installation)

SAC-4P-M12MR/1,5-PUR/M12FR D - Sensor/actuator cable

1696154

<https://www.phoenixcontact.com/us/products/1696154>

Drawings

Dimensional drawing



M12 x 1 male plug, angled, shielded

Dimensional drawing



M12 x 1 socket, angled, shielded

SAC-4P-M12MR/1,5-PUR/M12FR D - Sensor/actuator cable

1696154

<https://www.phoenixcontact.com/us/products/1696154>

Schematic diagram



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

SAC-4P-M12MR/1,5-PUR/M12FR D - Sensor/actuator cable

1696154

<https://www.phoenixcontact.com/us/products/1696154>

Schematic diagram



Pin assignment M12 socket, 12-pos., A-coded, view female side

Circuit diagram



Contact assignment of the M12 plug and the M12 socket

SAC-4P-M12MR/1,5-PUR/M12FR D - Sensor/actuator cable



1696154

<https://www.phoenixcontact.com/us/products/1696154>

Classifications

ECLASS

ECLASS-13.0	27060311
ECLASS-15.0	27060311

SAC-4P-M12MR/1,5-PUR/M12FR D - Sensor/actuator cable



1696154

<https://www.phoenixcontact.com/us/products/1696154>

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