

SAC-5P-M12MR/ 1,5-PUR SH - Sensor/actuator cable



1682757

<https://www.phoenixcontact.com/be/products/1682757>

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, black-gray RAL 7021, shielded (Tinned copper braided shield), Plug angled M12, coding: A, on free cable end, cable length: 1.5 m

Your advantages

- Easy and safe: 100 % electrically tested plug-in components
- Reliable signal transmission – 360° shielding in environments with electromagnetic interference

Commercial data

Item number	1682757
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF1CKA
Product key	BF1CKA
Catalog page	Page 204 (C-2-2019)
GTIN	4017918169060
Weight per piece (including packing)	83,7 g
Weight per piece (excluding packing)	78,2 g
Customs tariff number	85444290
Country of origin	PL

SAC-5P-M12MR/ 1,5-PUR SH - Sensor/actuator cable



1682757

<https://www.phoenixcontact.com/be/products/1682757>

Technical data

Product properties

Product type	Sensor/actuator cable
Number of positions	5
Application	Standard
No. of cable outlets	1
Shielded	yes
Coding	A
	A

Insulation characteristics

Overvoltage category	II
Degree of pollution	3

Material specifications

Flammability rating according to UL 94	HB
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	48 V AC
	60 V DC
Nominal current I_N	4 A
Protective circuit	unwired

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

SAC-5P-M12MR/ 1,5-PUR SH - Sensor/actuator cable



1682757

<https://www.phoenixcontact.com/be/products/1682757>

Connection 1

Type	Plug angled M12
Number of positions	5
Coding type	A

Connection 2

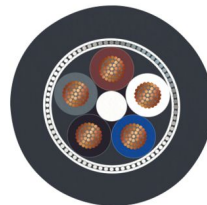
Type	free cable end
------	----------------

Cable/line

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

PUR halogen-free black [PUR]

Dimensional drawing



Cable weight	43 kg/km
UL AWM Style	20549 / 10493 (80°C/300 V)
Number of positions	5
Shielded	yes
Cable type	PUR halogen-free black [PUR]
Conductor structure signal line	42x 0.10 mm
AWG signal line	22
Conductor cross section	5x 0.34 mm ² (Signal line)
Wire diameter incl. insulation	1.27 mm ± 0.02 mm (Signal line)
External cable diameter	5.25 mm ± 0.2 mm
Outer sheath, material	PUR
External sheath, color	black-gray RAL 7021
Conductor material	Bare Cu litz wires
Material wire insulation	PP
Single wire, color	brown, white, blue, black, gray
Thickness, insulation	≥ 0.21 mm
Thickness, outer sheath	approx. 0.50 mm
Overall twist	5 wires around filler to the core
Optical shield covering	80 %
Max. conductor resistance	max. 57 Ω/km (at 20 °C)
Insulation resistance	70 GΩ*km (at 20 °C)
Nominal voltage, cable	300 V (at 20 °C)
Test voltage Core/Core	3000 V (at 20 °C)
Smallest bending radius, fixed installation	26 mm

SAC-5P-M12MR/ 1,5-PUR SH - Sensor/actuator cable



1682757

<https://www.phoenixcontact.com/be/products/1682757>

Smallest bending radius, movable installation	52 mm (up to +60 °C)
Max. bending cycles	10000000
Halogen-free	in accordance with DIN VDE 0472 part 815 in accordance with DIN EN 50267-2-1
Flame resistance	in accordance with UL 758/1581 FT2 DIN EN 60332-2-2 (20 s)
Resistance to oil	in accordance with DIN EN 60811-2-1
Other resistance	Highly resistant to acids, alkaline solutions and solvents hydrolysis and microbe resistant Resistant to salt water partly UV-resistant (in accordance with DIN EN ISO 4892-2-A) abrasion-resistant
Special properties	Flexible cable conduit capable Silicone-free Free of substances which would hinder coating with paint or varnish Low adhesion surface
Ambient temperature (operation)	-40 °C ... 80 °C (cable, fixed installation) -25 °C ... 80 °C (Cable, flexible installation)

Environmental and real-life conditions

Ambient conditions

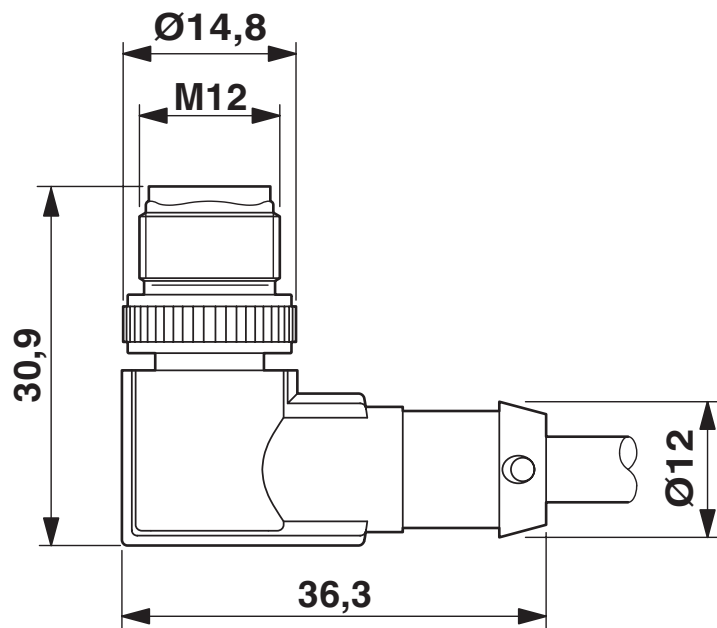
Degree of protection	IP65 IP67
Ambient temperature (operation)	-25 °C ... 90 °C (Plug / socket) -25 °C ... 80 °C (cable, fixed installation) -5 °C ... 80 °C (Cable, flexible installation)

Standards and regulations

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

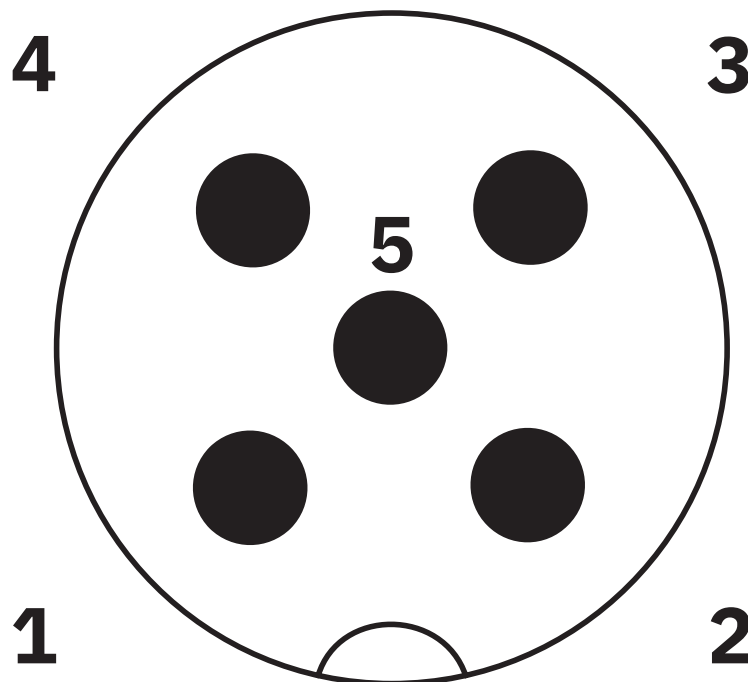
Drawings

Dimensional drawing



M12 x 1 male plug, angled, shielded

Schematic diagram

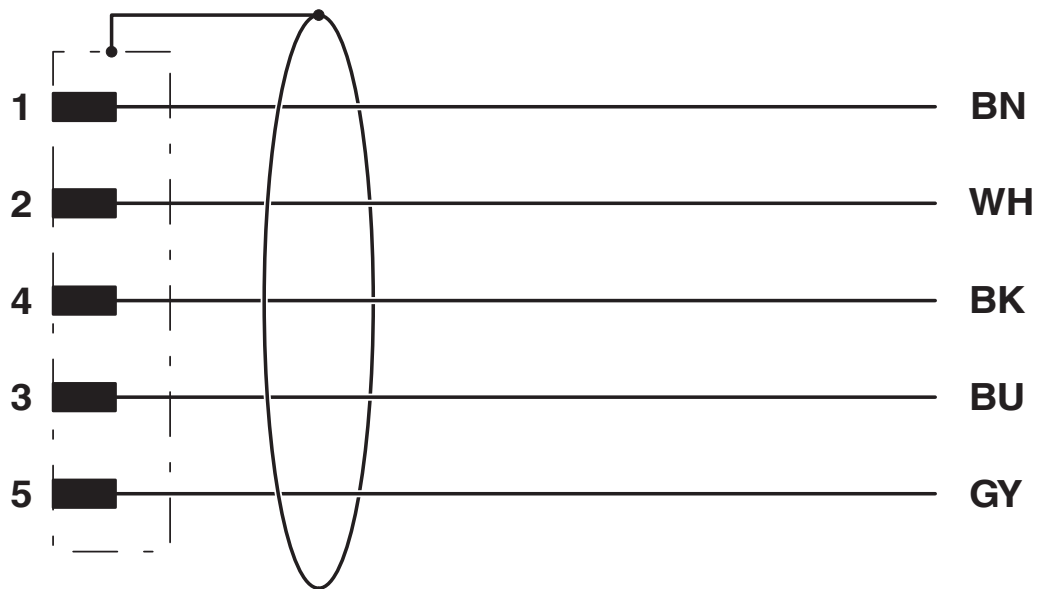


Pin assignment M12 male connector, 5-pos., A-coded, male side

1682757

<https://www.phoenixcontact.com/be/products/1682757>

Circuit diagram



SAC-5P-M12MR/ 1,5-PUR SH - Sensor/actuator cable



1682757

<https://www.phoenixcontact.com/be/products/1682757>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/be/products/1682757>

	UL Listed Approval ID: FILE E 221474			
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
	125 V	4 A	-	-

	cUL Listed Approval ID: FILE E 221474			
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
	125 V	4 A	-	-

	EAC-RoHS Approval ID: RU D-DE.HB35.B.00387			

cULus Listed				
---------------------	--	--	--	--

SAC-5P-M12MR/ 1,5-PUR SH - Sensor/actuator cable



1682757

<https://www.phoenixcontact.com/be/products/1682757>

Classifications

ECLASS

ECLASS-11.0	27060311
ECLASS-12.0	27060311
ECLASS-13.0	27060311

ETIM

ETIM 9.0	EC001855
----------	----------

UNSPSC

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

SAC-5P-M12MR/ 1,5-PUR SH - Sensor/actuator cable



1682757

<https://www.phoenixcontact.com/be/products/1682757>

Environmental product compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

Phoenix Contact 2024 © - all rights reserved
<https://www.phoenixcontact.com>

PHOENIX CONTACT nv/sa
Minervastraat 10-12
1930 Zaventem-Keiberg II
+32 (0)2/723 98 11
info@phoenixcontact.be