

SAC-5P-M12MR/5,0-500 FB - Sensor/actuator cable



1420996

<https://www.phoenixcontact.com/us/products/1420996>

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, PVC, gray RAL 7001, Plug angled M12, coding: A, on free cable end, cable length: 5 m, with high-grade steel knurl

Your advantages

- Easy and safe: 100 % electrically tested plug-in components
- Contamination can be detected quickly – thanks to the light color

Commercial data

Item number	1420996
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Sales key	BF03
Product key	AF1CDA
GTIN	4055626250267
Weight per piece (including packing)	224.89 g
Weight per piece (excluding packing)	215.85 g
Customs tariff number	85444290
Country of origin	PL

1420996

<https://www.phoenixcontact.com/us/products/1420996>

Technical data

Product properties

Product type	Sensor/actuator cable
Application	Food processing industry
Number of positions	5
No. of cable outlets	1
Shielded	no
Coding	A

Insulation characteristics

Overvoltage category	II
Degree of pollution	3

Material specifications

Material of grip body	PP
Contact material	CuSn
Contact surface material	Ni/Au
Contact carrier material	PP
Material for screw connection	Stainless steel

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

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	5
Coding type	A

Connection 2

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

SAC-5P-M12MR/5,0-500 FB - Sensor/actuator cable



1420996

<https://www.phoenixcontact.com/us/products/1420996>

Cable/line

Cable length	5 m
PVC gray [500]	
Dimensional drawing	
Cable weight	51 kg/km
UL AWM Style	2464 / 1729 (80°C/300 V)
Number of positions	5
Shielded	no
Cable type	PVC gray [500]
Conductor structure signal line	19x 0.15 mm
AWG signal line	22
Conductor cross section	5x 0.34 mm ² (Signal line)
Wire diameter incl. insulation	1.26 mm ±0.05 mm
External cable diameter	5.00 mm ±0.15 mm
Outer sheath, material	PVC
External sheath, color	gray RAL 7001
Conductor material	Bare Cu litz wires
Material wire insulation	PVC
Single wire, color	brown, white, blue, black, green-yellow
Thickness, insulation	≥ 0.23 mm (Core insulation)
Thickness, outer sheath	≥ 0.76 mm
Overall twist	5 wires around filler to the core
Max. conductor resistance	max. 57 Ω/km (at 20 °C)
Insulation resistance	≥ 200 MΩ*km (at 20 °C)
Nominal voltage, cable	≤ 300 V
Test voltage	≥ 3000 V
Minimum bending radius, fixed installation	5 x D
Minimum bending radius, flexible installation	10 x D
Smallest bending radius, fixed installation	25 mm
Smallest bending radius, movable installation	50 mm
Flame resistance	As per UL-Style 2464
Ambient temperature (operation)	-40 °C ... 80 °C (cable, fixed installation) -25 °C ... 80 °C (Cable, flexible installation)

Environmental and real-life conditions

SAC-5P-M12MR/5,0-500 FB - Sensor/actuator cable



1420996

<https://www.phoenixcontact.com/us/products/1420996>

Ambient conditions

Degree of protection	IP65
	IP67
	IP68
	IP69K
Ambient temperature (operation) (male connector/female connector)	-25 °C ... 90 °C (Plug / socket)

Standards and regulations

M12

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

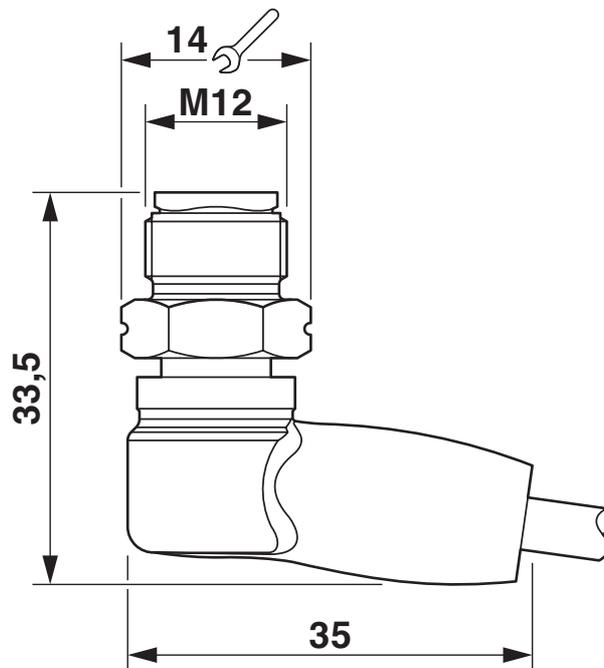
SAC-5P-M12MR/5,0-500 FB - Sensor/actuator cable

1420996

<https://www.phoenixcontact.com/us/products/1420996>

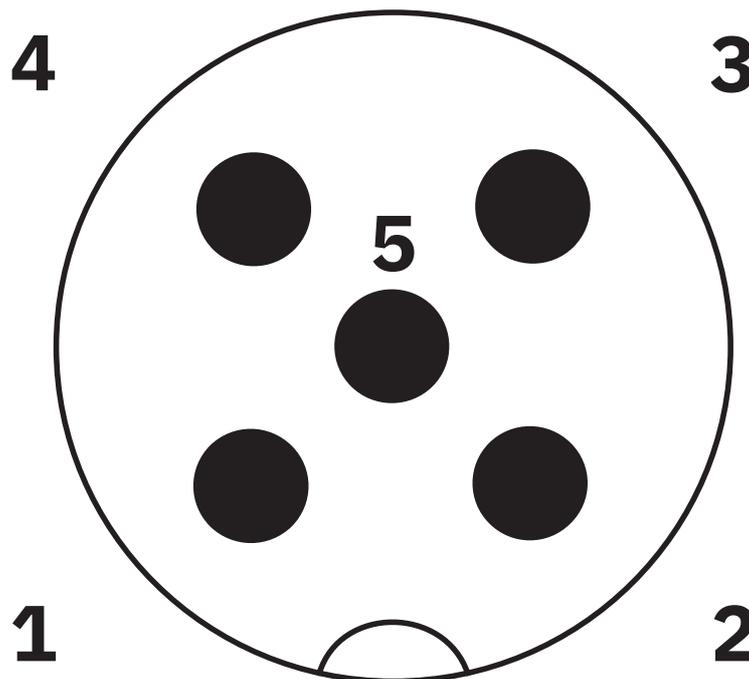
Drawings

Dimensional drawing



M12 x 1 male plug, angled

Schematic diagram



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

SAC-5P-M12MR/5,0-500 FB - Sensor/actuator cable



1420996

<https://www.phoenixcontact.com/us/products/1420996>

Circuit diagram



Contact assignment of the M12 plug

SAC-5P-M12MR/5,0-500 FB - Sensor/actuator cable



1420996

<https://www.phoenixcontact.com/us/products/1420996>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1420996>

 UL Listed Approval ID: FILE E 221474				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine				
	48 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
keine				
	48 V	4 A	-	-

SAC-5P-M12MR/5,0-500 FB - Sensor/actuator cable



1420996

<https://www.phoenixcontact.com/us/products/1420996>

Classifications

ECLASS

ECLASS-13.0	27060311
ECLASS-15.0	27060311

ETIM

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

UNSPSC

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

SAC-5P-M12MR/5,0-500 FB - Sensor/actuator cable



1420996

<https://www.phoenixcontact.com/us/products/1420996>

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.)	6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol(CAS: 119-47-1)
SCIP	289a2f35-e123-4183-91fc-a49cf3d26847

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