

SAC-12P-MR/ 3,0-PVC SCO - Sensor/actuator cable



1554827

<https://www.phoenixcontact.com/us/products/1554827>

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, 12-position, PVC, black RAL 9005, Plug angled M12 SPEEDCON, coding: A, on free cable end, cable length: 3 m

Your advantages

- Easy and safe: 100 % electrically tested plug-in components
- Save time, thanks to installation with SPEEDCON fast locking system
- Save space – with high-pos. connectors

Commercial data

Item number	1554827
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF03
Product key	AF1CGA
GTIN	4046356176439
Weight per piece (including packing)	164.5 g
Weight per piece (excluding packing)	164.1 g
Customs tariff number	85444290
Country of origin	DE

SAC-12P-MR/ 3,0-PVC SCO - Sensor/actuator cable



1554827

<https://www.phoenixcontact.com/us/products/1554827>

Technical data

Product properties

Product type	Sensor/actuator cable
Application	Standard
Number of positions	12
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
Material of grip body	TPU, hardly inflammable, self-extinguishing
Contact material	CuZn
Contact surface material	Ni/Au
Contact carrier material	TPU GF
Material for screw connection	Zinc die-cast, nickel-plated

Electrical properties

Insulation resistance	$\geq 10 \text{ M}\Omega$
Nominal voltage U_N	30 V AC
	30 V DC
Nominal current I_N	1.5 A

Signaling

Status display	no
Status display present	no

Connection data

Conductor connection

Tightening torque	0.4 Nm (M12 connector)
-------------------	------------------------

Connector

Connection 1

Type	Plug angled M12 SPEEDCON
Number of positions	12
Locking type	SPEEDCON
Coding type	A

Connection 2

SAC-12P-MR/ 3,0-PVC SCO - Sensor/actuator cable



1554827

<https://www.phoenixcontact.com/us/products/1554827>

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

Cable/line

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

PVC black [PVC]

Dimensional drawing	
Number of positions	12
Shielded	no
Cable type	PVC black [PVC]
Conductor structure signal line	18x 0.10 mm
AWG signal line	26
Conductor cross-section	12x 0.14 mm ² (Signal line)
Wire diameter incl. insulation	1 mm ±0.05 mm (Signal line)
External cable diameter	5.80 mm
Outer sheath, material	PVC
External sheath, color	black RAL 9005
Conductor material	Bare Cu litz wires
Material wire insulation	PVC
Single wire, color	white, brown, green, yellow, gray, pink, blue, red, black, violet, gray/pink, red/blue
Overall twist	12 wires twisted in layers
Max. conductor resistance	≤ 142 Ω/km (at 20 °C)
Insulation resistance	> 10 MΩ*km
Nominal voltage, cable	250 V
Test voltage Core/Core	1500 V AC
Smallest bending radius, fixed installation	29 mm
Smallest bending radius, movable installation	87 mm
Flame resistance	DIN EN 50265-2-1
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

SAC-12P-MR/ 3,0-PVC SCO - Sensor/actuator cable



1554827

<https://www.phoenixcontact.com/us/products/1554827>

Ambient temperature (operation) (male connector/female connector)	-25 °C ... 85 °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)

Standards and regulations

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

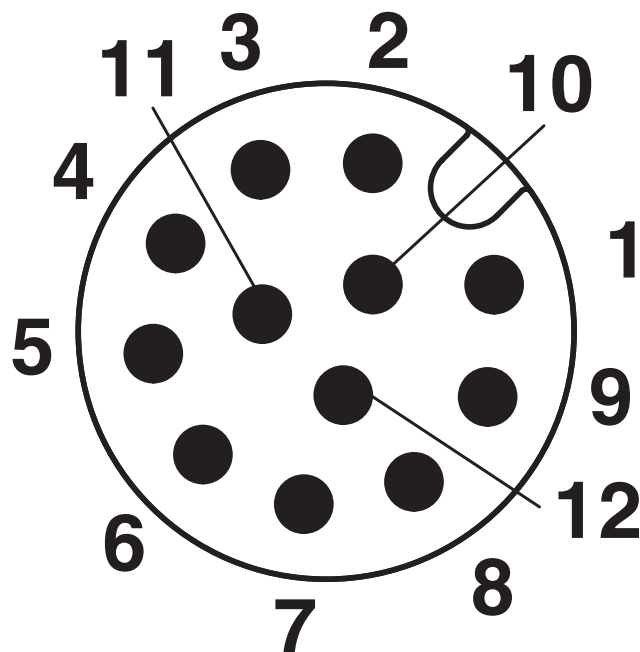
Drawings

Dimensional drawing



M12 SPEEDCON plug, angled

Schematic diagram



Pin assignment M12 male connector, 12-pos., male side view

SAC-12P-MR/ 3,0-PVC SCO - Sensor/actuator cable



1554827

<https://www.phoenixcontact.com/us/products/1554827>

Circuit diagram



Contact assignment of the M12 plug

SAC-12P-MR/ 3,0-PVC SCO - Sensor/actuator cable



1554827

<https://www.phoenixcontact.com/us/products/1554827>

Approvals

🔗 To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1554827>

 UL Listed Approval ID: E221474				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine				
	30 V	1 A	-	-

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

SAC-12P-MR/ 3,0-PVC SCO - Sensor/actuator cable



1554827

<https://www.phoenixcontact.com/us/products/1554827>

Classifications

ECLASS

ECLASS-13.0	27060311
ECLASS-15.0	27060311

ETIM

ETIM 10.0	EC001855
-----------	----------

UNSPSC

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

SAC-12P-MR/ 3,0-PVC SCO - Sensor/actuator cable



1554827

<https://www.phoenixcontact.com/us/products/1554827>

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

EF3.1 Climate Change

CO2e kg	2.971 kg CO2e
---------	---------------

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