

SAC-4P-MS/5,0-647/FS SCO BK - Sensor/actuator cable

1415145
<https://www.phoenixcontact.com/us/products/1415145>

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, TPE, yellow, Plug straight M12 SPEEDCON, coding: A, on Socket straight M12 SPEEDCON, coding: A, cable length: 5 m

Commercial data

Item number	1415145
Packing unit	1 pc
Note	Made to order (non-returnable)
Sales key	BF13
Product key	BF1IFB
GTIN	4055626050607
Weight per piece (including packing)	22.22 g
Weight per piece (excluding packing)	22.22 g
Customs tariff number	85444290
Country of origin	US

SAC-4P-MS/5,0-647/FS SCO BK - Sensor/actuator cable



1415145

<https://www.phoenixcontact.com/us/products/1415145>

Technical data

Product properties

Product type	Sensor/actuator cable
Application	Standard, U.S. cables
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
Outer sheath, material	TPE

Electrical properties

Nominal voltage U_N	250 V AC
	250 V DC
Nominal current I_N	4 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 straight M12 SPEEDCON
Number of positions	4
Locking type	SPEEDCON
Coding type	A

SAC-4P-MS/5,0-647/FS SCO BK - Sensor/actuator cable



1415145

<https://www.phoenixcontact.com/us/products/1415145>

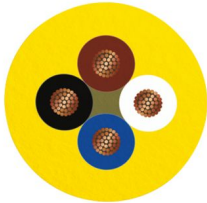
Connection 2

Type	Socket straight M12 SPEEDCON
Number of positions	4
Locking type	SPEEDCON
Coding type	A

Cable/line

Cable length	5 m
--------------	-----

TPE yellow 105 °C [647]

Dimensional drawing	
Cable weight	31 kg/km
UL AWM Style	20327 (105 °C / 300 V)
Number of positions	4
Shielded	no
Cable type	TPE yellow 105 °C [647]
Conductor structure signal line	41x 0.16 mm
AWG signal line	18
Wire diameter incl. insulation	1.8 mm
External cable diameter	6.00 mm ±0.25 mm
Outer sheath, material	TPE
External sheath, color	yellow
Material wire insulation	PVC
Thickness, insulation	0.23 mm
Thickness, outer sheath	0.89 mm
Overall twist	4 wires, twisted
Nominal voltage, cable	300 V
Flame resistance	According to FT1
Resistance to oil	OIL RES I according to UL 2256
Other resistance	UV resistant (720 h) (to UL 2256)
Ambient temperature (operation)	-30 °C ... 105 °C (cable, fixed installation)

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP65
	IP67

SAC-4P-MS/5,0-647/FS SCO BK - Sensor/actuator cable



1415145
<https://www.phoenixcontact.com/us/products/1415145>

	IP68
Ambient temperature (operation)	-25 °C ... 90 °C (Plug / socket)

Standards and regulations

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

SAC-4P-MS/5,0-647/FS SCO BK - Sensor/actuator cable

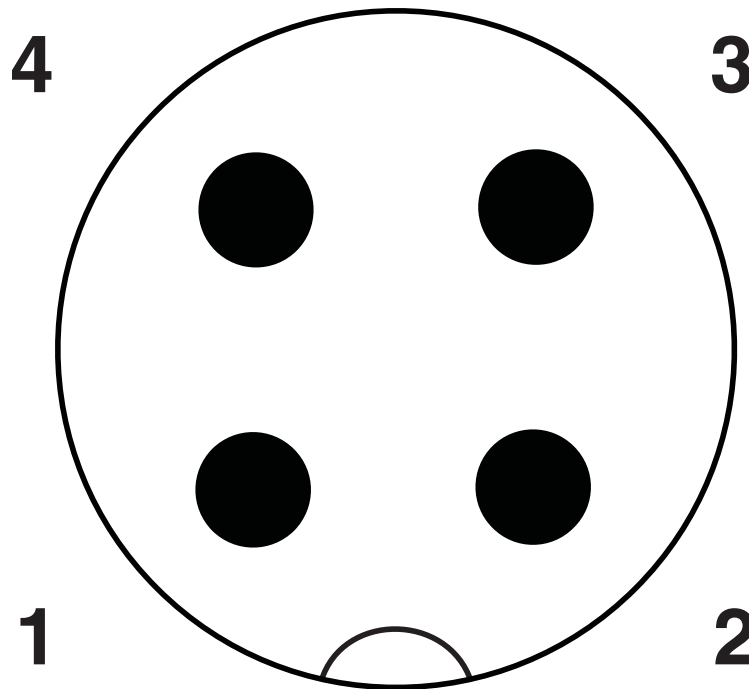


1415145

<https://www.phoenixcontact.com/us/products/1415145>

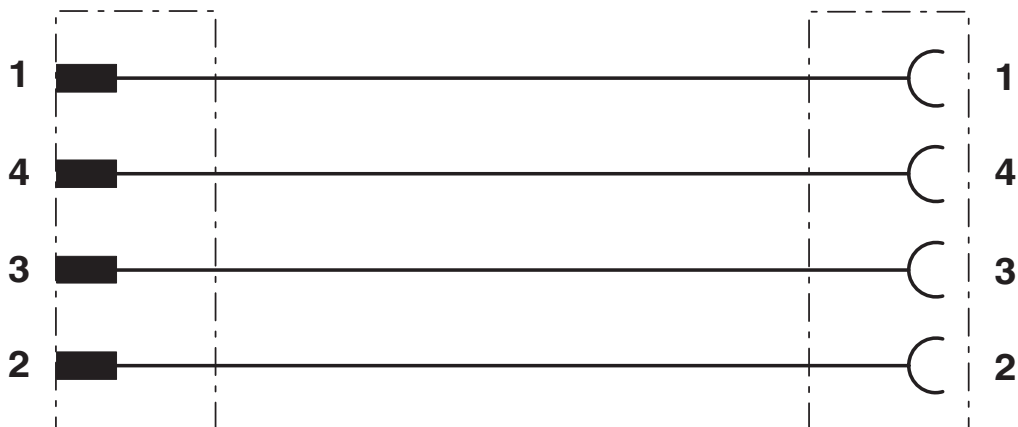
Drawings

Schematic diagram



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

Circuit diagram



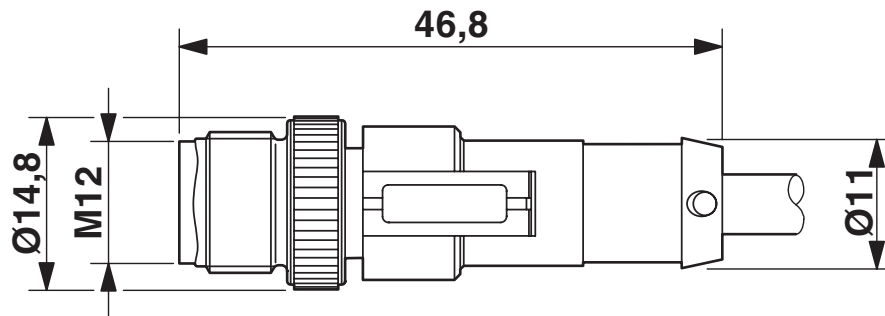
SAC-4P-MS/5,0-647/FS SCO BK - Sensor/actuator cable



1415145

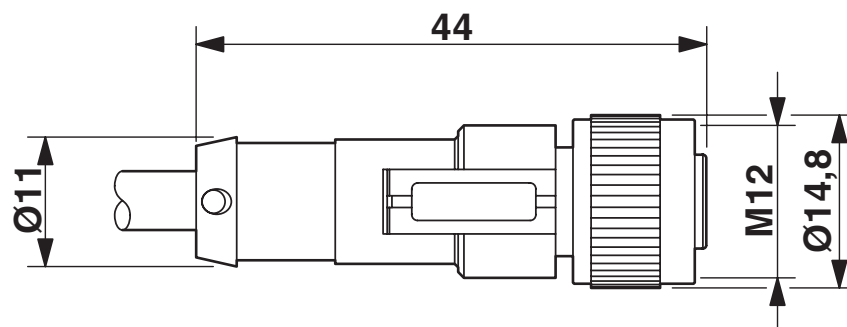
<https://www.phoenixcontact.com/us/products/1415145>

Dimensional drawing



Plug, M12 x 1, straight, shielded

Dimensional drawing



M12 x 1 socket, straight

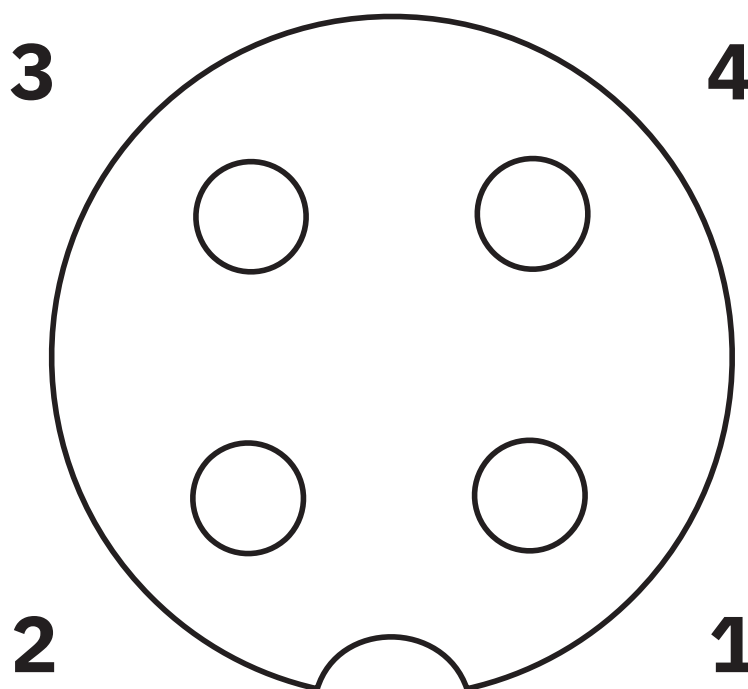
SAC-4P-MS/5,0-647/FS SCO BK - Sensor/actuator cable



1415145

<https://www.phoenixcontact.com/us/products/1415145>

Schematic diagram



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

SAC-4P-MS/5,0-647/FS SCO BK - Sensor/actuator cable



1415145
<https://www.phoenixcontact.com/us/products/1415145>

Classifications

ECLASS

ECLASS-11.0	27060311
ECLASS-13.0	27060311

UNSPSC

UNSPSC 21.0	31251501
-------------	----------

SAC-4P-MS/5,0-647/FS SCO BK - Sensor/actuator cable



1415145
<https://www.phoenixcontact.com/us/products/1415145>

Environmental product compliance

China RoHS	
Environment friendly use period (EFUP)	EFUP-50 An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.
EU REACH SVHC	
REACH candidate substance (CAS No.)	No substance above 0.1 wt%

SAC-4P-MS/5,0-647/FS SCO BK - Sensor/actuator cable



1415145

<https://www.phoenixcontact.com/us/products/1415145>

Accessories

PROT-M12 FS-PA-CHAIN - Sealing cap

1430873

<https://www.phoenixcontact.com/us/products/1430873>

M12 sealing cap made of plastic with fixing band, for sensor cables, for free M12 plugs



SAC-M12-EXCLIP-M - Locking clip

1558988

<https://www.phoenixcontact.com/us/products/1558988>

Locking clip for the pin side of sensor/actuator cables with M12 connector and M12 connectors for assembly, for knurl diameter: 15 mm or for Allen key with a wrench size of 14 mm, prevents the disconnection of plug-in connections without tools



SAC-4P-MS/5,0-647/FS SCO BK - Sensor/actuator cable



1415145

<https://www.phoenixcontact.com/us/products/1415145>

PROT-M12 MS-PA-CHAIN - Screw plug

1430899

<https://www.phoenixcontact.com/us/products/1430899>

M12 sealing cap with fixing band, for sensor cables, for free M12 sockets



SAC-M12-EXCLIP-F - Locking clip

1558991

<https://www.phoenixcontact.com/us/products/1558991>

Locking clip for the socket side of sensor/actuator cables with M12 connector and M12 connectors for assembly, for knurl diameter: 15 mm or for Allen key with a wrench size of 14 mm, prevents the disconnection of plug-in connections without tools



SAC-4P-MS/5,0-647/FS SCO BK - Sensor/actuator cable



1415145

<https://www.phoenixcontact.com/us/products/1415145>

TSD 04 SAC - Torque screwdriver

1208429

<https://www.phoenixcontact.com/us/products/1208429>



Torque screwdriver, with preset torque of 0.4 Nm and 4 mm hexagonal drive for M12 connectors

TSD-M 1,2NM - Torque screwdriver

1212224

<https://www.phoenixcontact.com/us/products/1212224>



Torque screw driver, accuracy as per EN ISO 6789 standard, adjustable from 0.3 - 1.2 Nm

SAC-4P-MS/5,0-647/FS SCO BK - Sensor/actuator cable



1415145

<https://www.phoenixcontact.com/us/products/1415145>

TSD-M SAC-BIT ADAPTER - Adapter insert

1212600

<https://www.phoenixcontact.com/us/products/1212600>



Adapter bit for TSD-M...torque tools, E6.3-1/4" drive with 4 mm hexagon to accommodate SAC bits

SAC BIT M12-D15 - Tool

1208432

<https://www.phoenixcontact.com/us/products/1208432>



Nut for assembling sensor/actuator cables with M12 connector and M12 connectors for assembly, with a knurl diameter of 15 mm, for 4 mm hexagonal drive

Phoenix Contact 2024 © - 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