

# SAC-3P-MS/5,0-647/FR SCO BK - Sensor/actuator cable



1415135  
<https://www.phoenixcontact.com/us/products/1415135>

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Sensor/actuator cable, 3-position, TPE, yellow, Plug straight M12 SPEEDCON, coding: A, on Socket angled M12 SPEEDCON, coding: A, cable length: 5 m

## Commercial data

Item number	1415135
Packing unit	1 pc
Note	Made to order (non-returnable)
Sales key	BF13
Product key	BF1IFA
GTIN	4055626048680
Weight per piece (including packing)	22.22 g
Weight per piece (excluding packing)	22.22 g
Customs tariff number	85444290
Country of origin	US

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## Technical data

### Product properties

Product type	Sensor/actuator cable
Application	Standard, U.S. cables
Number of positions	3
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)
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### Connector

#### Connection 1

Type	Plug straight M12 SPEEDCON
Number of positions	3
Locking type	SPEEDCON
Coding type	A

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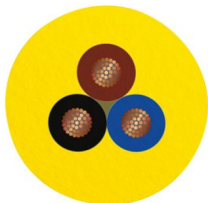
## Connection 2

Type	Socket angled M12 SPEEDCON
Number of positions	3
Locking type	SPEEDCON
Coding type	A

## Cable/line

Cable length	5 m
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## TPE yellow 105 °C [647]

Dimensional drawing	
Cable weight	23 kg/km
UL AWM Style	20327 (105 °C / 300 V)
Number of positions	3
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	5.70 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	3 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

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

## Standards and regulations

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

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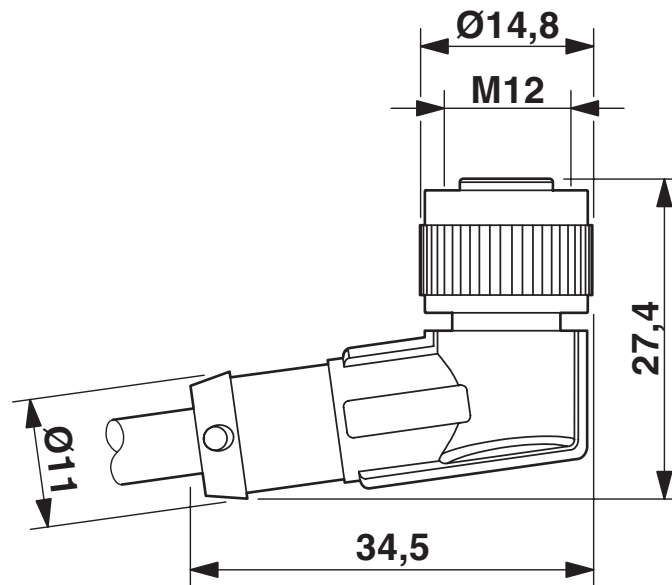


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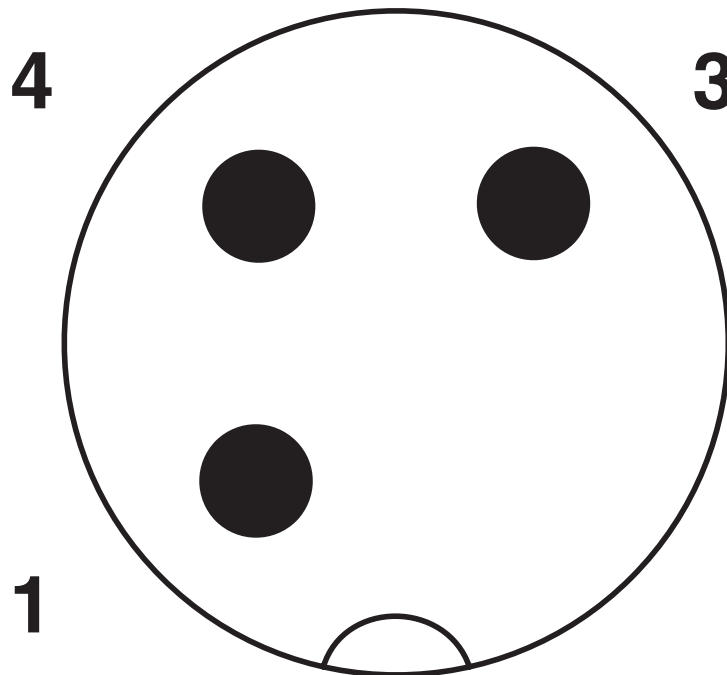
## Drawings

Dimensional drawing



M12 x 1 socket, angled

Schematic diagram



Pin assignment M12 plug, 3-pos., A-coded, view male side

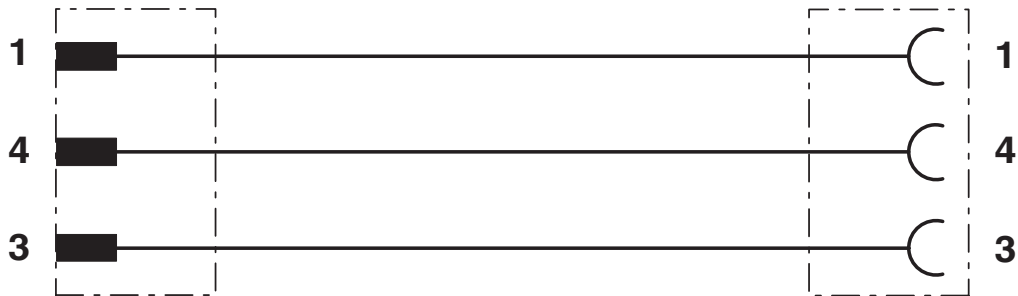
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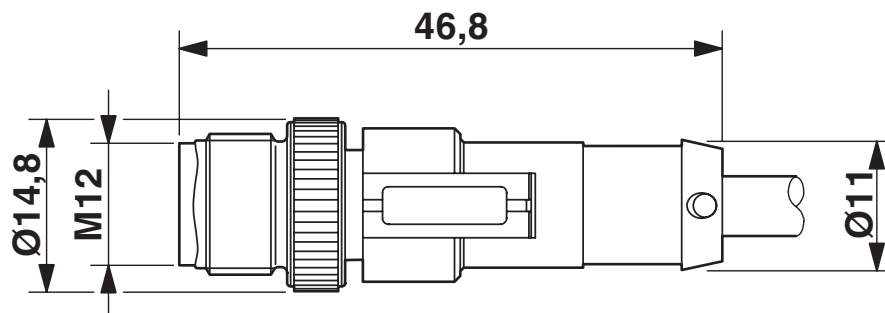
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Circuit diagram



Dimensional drawing



Plug, M12 x 1, straight, shielded

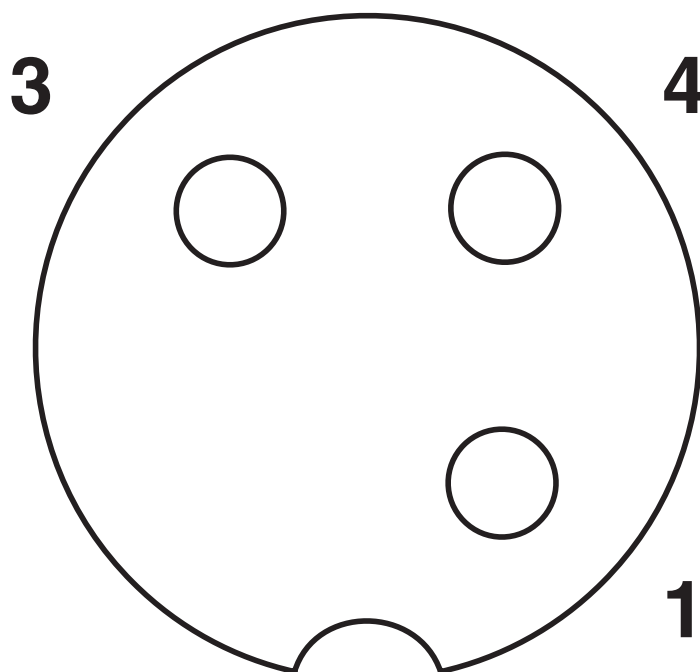
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Schematic diagram



Pin assignment M12 socket, 3-pos., A-coded, view female side

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## Classifications

### ECLASS

ECLASS-11.0	27060311
ECLASS-13.0	27060311

### UNSPSC

UNSPSC 21.0	31251501
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## 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%

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## 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



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### 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



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## 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



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## 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



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## 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

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## 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

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## 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

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## 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

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