

# SAC-5P-M12MS/ 5,0-547/M12FS BK - Sensor/actuator cable



1424987

<https://www.phoenixcontact.com/us/products/1424987>

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Sensor/actuator cable, 5-position, PVC, yellow, Plug straight M12, coding: A, on Socket straight M12, coding: A, cable length: 5 m

## Commercial data

Item number	1424987
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF13
Product key	BF11FC
GTIN	4055626402345
Weight per piece (including packing)	410.3 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	5
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	PVC

### Electrical properties

Insulation resistance	$\geq 10 \text{ M}\Omega$
Nominal voltage $U_N$	48 V AC
	60 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
Number of positions	5
Coding type	A

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## Connection 2

Type	Socket straight M12
Number of positions	5
Coding type	A

## Cable/line

Cable length	5 m
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PVC AWG 18 yellow 105°C [547]

Dimensional drawing	
UL AWM Style	2517 (105 °C / 300 V)
Number of positions	5
Shielded	no
Cable type	PVC AWG 18 yellow 105°C [547]
Conductor structure signal line	41x 0.16 mm
AWG signal line	18
Wire diameter incl. insulation	1.7 mm ±0.03 mm
External cable diameter	6.60 mm ±0.2 mm
Outer sheath, material	PVC
External sheath, color	yellow
Conductor material	Tin-plated Cu litz wires
Material, filler	PP
Material wire insulation	PVC
Single wire, color	brown, white, blue, black, gray
Overall twist	5 wires around filler to the core
Nominal voltage, cable	300 V
Minimum bending radius, fixed installation	8 x D
Smallest bending radius, fixed installation	53 mm
Flame resistance	FT4
Special properties	C(UL) CMX OUTDOOR-CMG 105 °C UL ITC/PLTC 105 °C CSA AWM I/II A/B FT4 105 °C / 300 V
Ambient temperature (operation)	-30 °C ... 105 °C (cable, fixed installation)

## Environmental and real-life conditions

Ambient conditions

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

## Standards and regulations

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

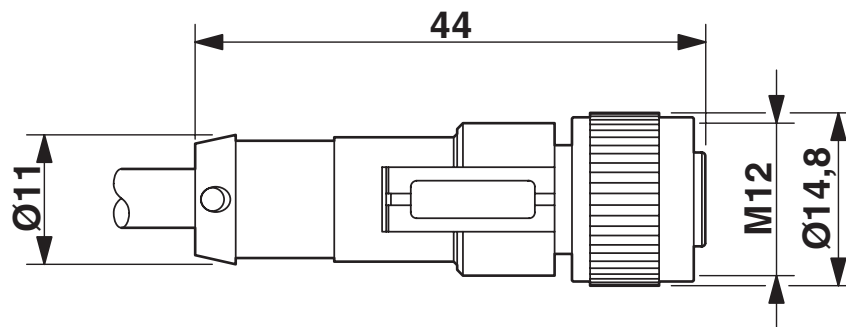
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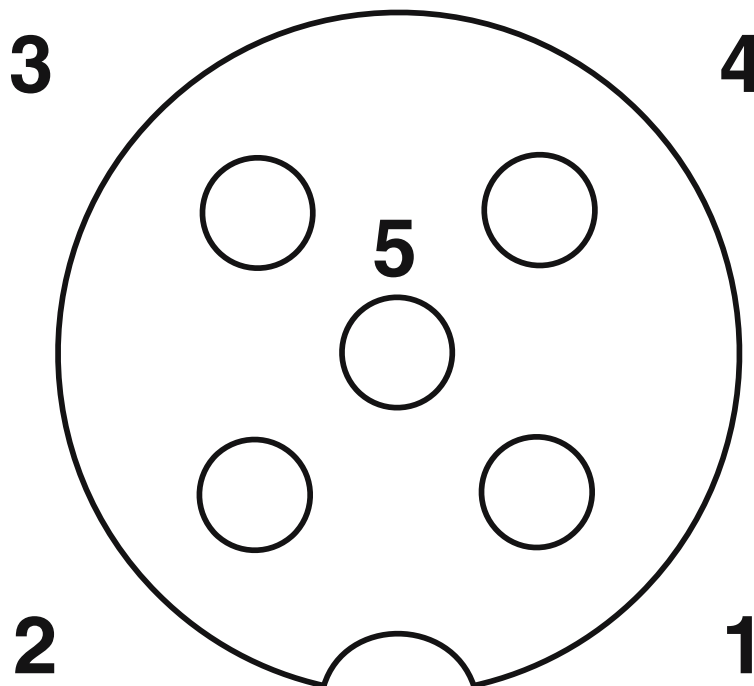
## Drawings

Dimensional drawing



M12 x 1 socket, straight

Schematic diagram



Pin assignment M12 socket, 5-pos., A-coded, female side

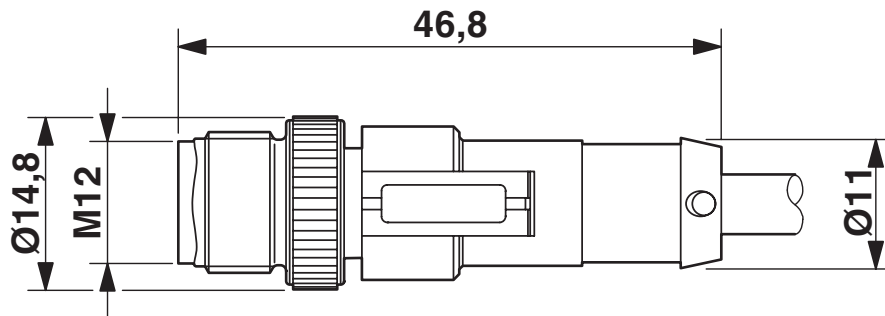
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Dimensional drawing



Plug, M12 x 1, straight, shielded

Circuit diagram



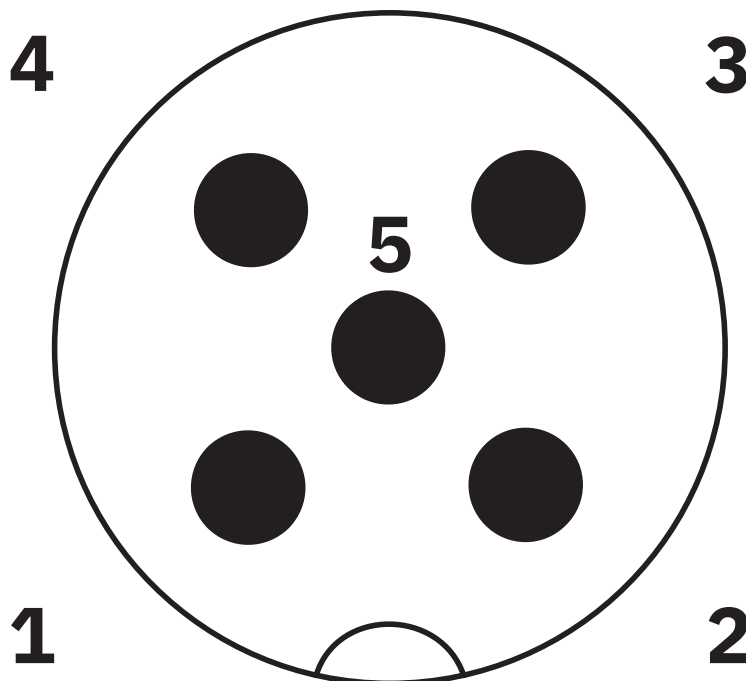
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Schematic diagram



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

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## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1424987>

 <b>UL Listed</b> Approval ID: FILE E 221474				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
	125 V	4 A	-	-

 <b>cUL Listed</b> Approval ID: FILE E 221474				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
	125 V	4 A	-	-

<b>cULus Listed</b>				
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## Classifications

### ECLASS

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

### ETIM

ETIM 8.0	EC001855
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### UNSPSC

UNSPSC 21.0	26121600
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## Environmental product compliance

### EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
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### 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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Phoenix Contact USA  
586 Fulling Mill Road  
Middletown, PA 17057, United States  
(+717) 944-1300  
[info@phoenixcon.com](mailto:info@phoenixcon.com)