

# Sensor/actuator cable - SAC-5P-MR/ 3,0-547/FR SCO BK - 1424980


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



## Key Commercial Data

Packing unit	1 pc
GTIN	 4 0 5 5 6 2 6 4 0 2 2 7 7
GTIN	4055626402277

## Technical data

### Dimensions

Length of cable	3 m
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### Ambient conditions

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

### General

Rated current at 40°C	4 A
Rated voltage	48 V AC
	60 V DC
Number of positions	5
Insulation resistance	≥ 10 MΩ
Coding	A - standard
Standards/regulations	M12 connector IEC 61076-2-101
Status display	No
Protective circuit/component	unwired
Overvoltage category	II

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## Technical data

### General

Degree of pollution	3
Torque	0.4 Nm (M12 connector)

### Material

Flammability rating according to UL 94	HB
Contact material	CuSn
Contact surface material	Ni/Au
Contact carrier material	TPU GF
Material of grip body	TPU, hardly inflammable, self-extinguishing
Material, knurls	Zinc die-cast, nickel-plated
Sealing material	NBR

### Standards and Regulations

Standards/specifications	M12 connector IEC 61076-2-101
Flammability rating according to UL 94	HB

### Cable

Cable type	PVC yellow 105 °C
Cable type (abbreviation)	547
UL AWM style	2517 (105 °C / 300 V)
AWG signal line	18
Conductor structure signal line	41x 0.16 mm
Core diameter including insulation	1.7 mm ±0.03 mm
Wire colors	Brown, white, blue, black, gray
Overall twist	5 wires around filler to the core
External sheath, color	yellow
External cable diameter D	6.6 mm ±0.2 mm
Minimum bending radius, fixed installation	8 x D
Outer sheath, material	PVC
Material, filler	PP
Material conductor insulation	PVC
Conductor material	Tin-plated Cu litz wires
Nominal voltage, cable	300 V
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
Flame resistance	FT4
Ambient temperature (operation)	-30 °C ... 105 °C (cable, fixed installation)

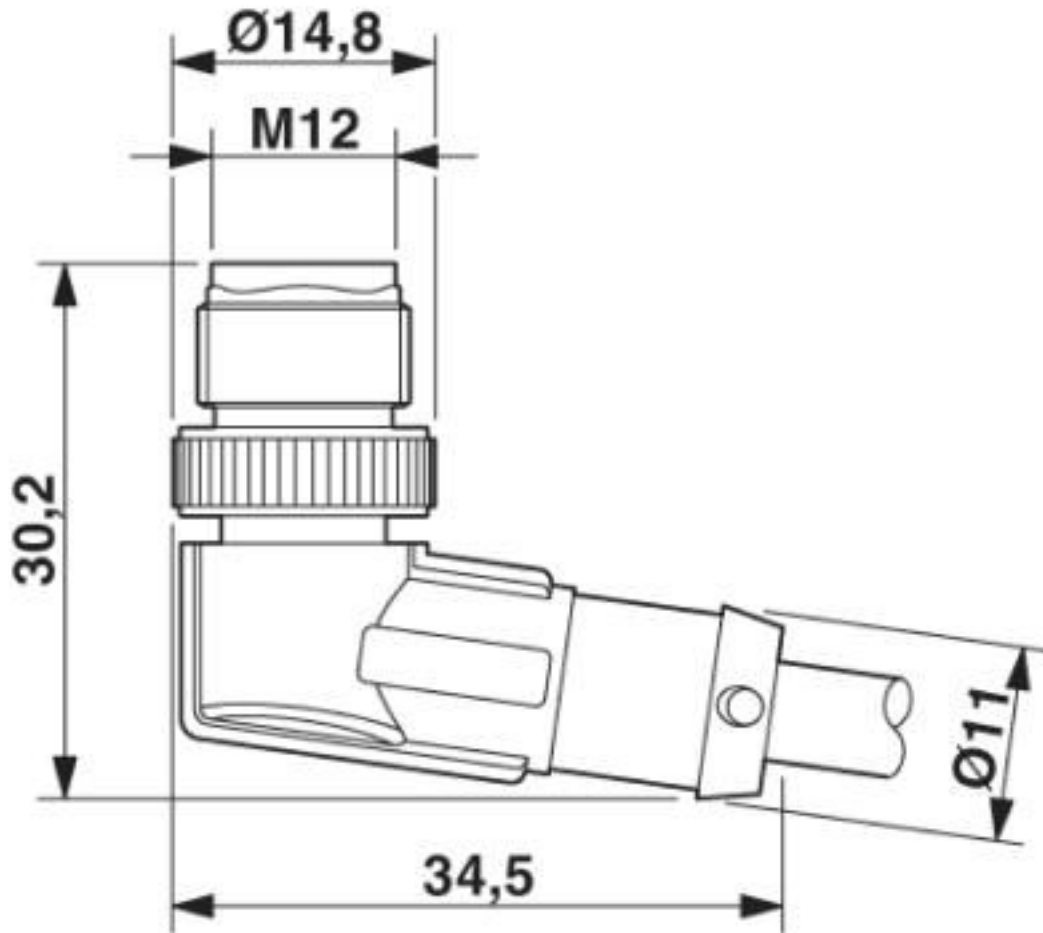
### Environmental Product Compliance

China RoHS	Environmentally Friendly Use Period = 50 years
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

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## Drawings

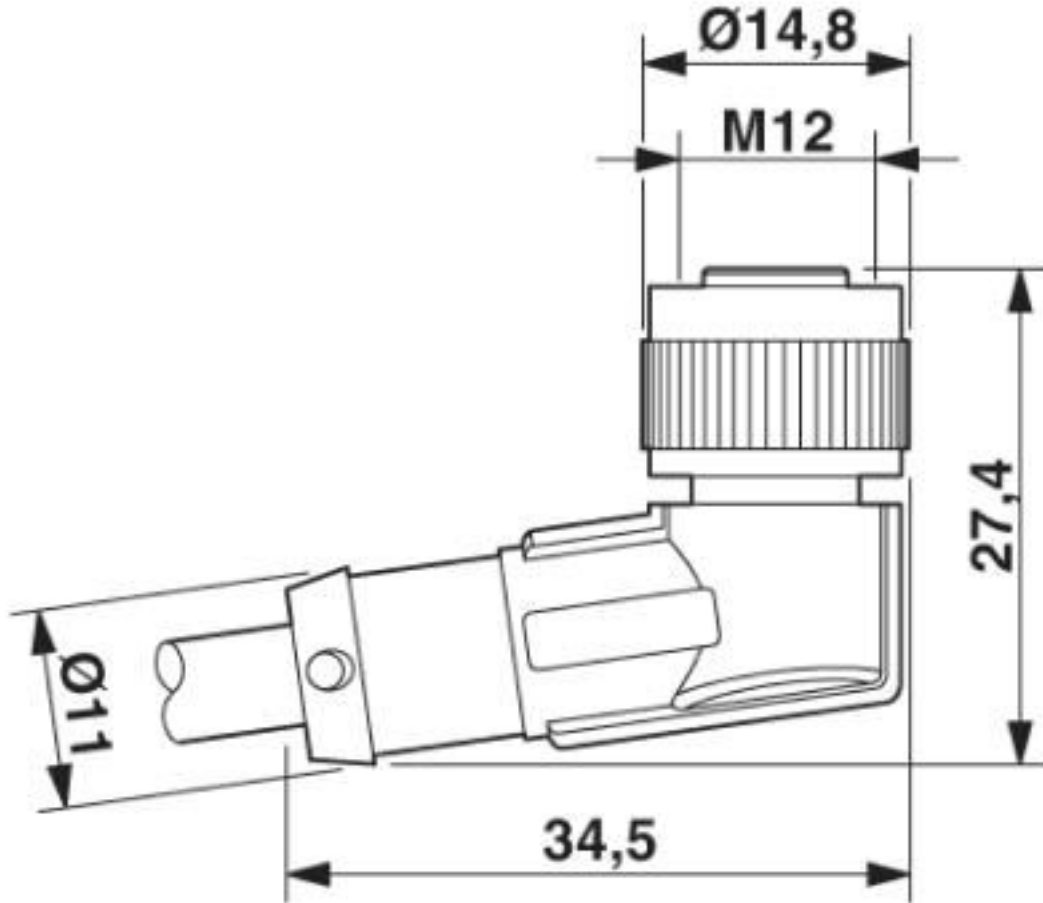
Dimensional drawing



M12 x 1 male plug, angled

# Sensor/actuator cable - SAC-5P-MR/ 3,0-547/FR SCO BK - 1424980

Dimensional drawing



M12 x 1 socket, angled

## Sensor/actuator cable - SAC-5P-MR/ 3,0-547/FR SCO BK - 1424980

Circuit diagram



Contact assignment of the M12 plug and the M12 socket

# Sensor/actuator cable - SAC-5P-MR/ 3,0-547/FR SCO BK - 1424980

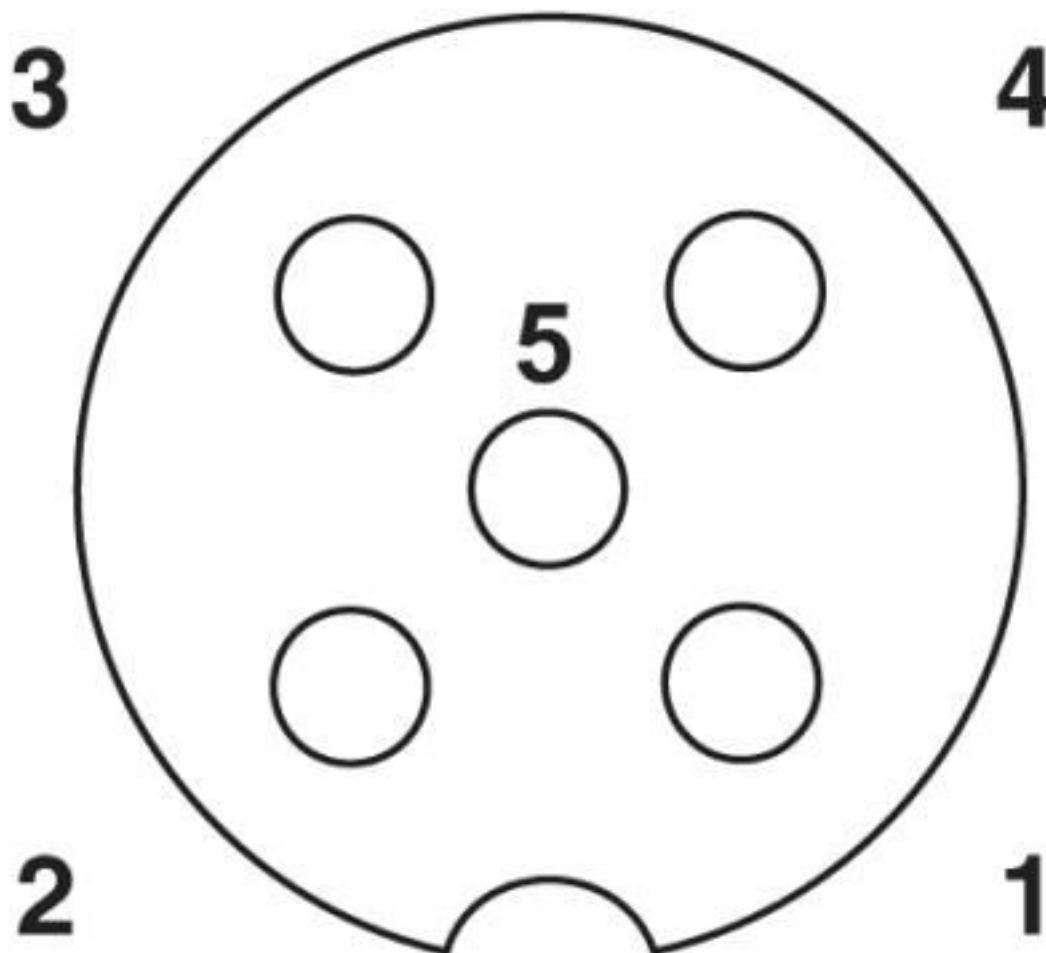
Schematic diagram



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

# Sensor/actuator cable - SAC-5P-MR/ 3,0-547/FR SCO BK - 1424980

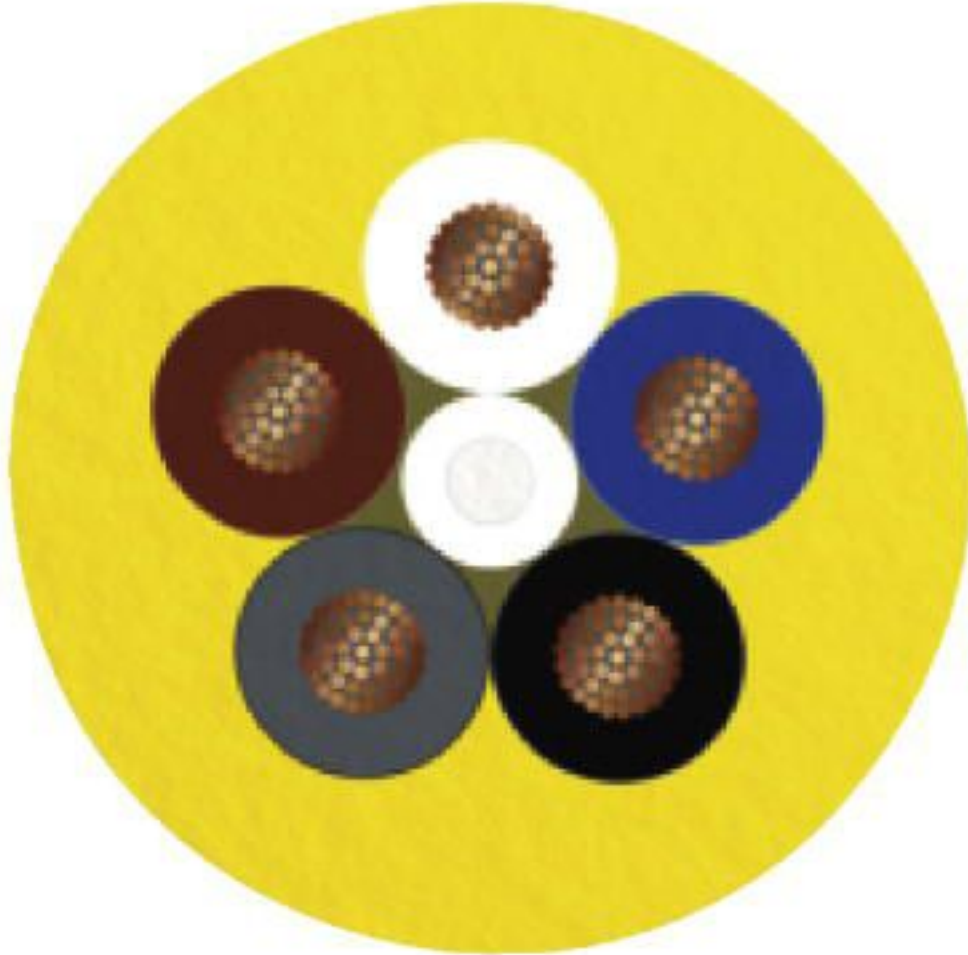
Schematic diagram



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

# Sensor/actuator cable - SAC-5P-MR/ 3,0-547/FR SCO BK - 1424980

Cable cross section



PVC yellow 105 °C [547]

## Classifications

eCl@ss

eCl@ss 10.0.1	27060311
eCl@ss 4.0	27060306
eCl@ss 4.1	27060306
eCl@ss 5.0	27061801
eCl@ss 5.1	27061801
eCl@ss 6.0	27279200
eCl@ss 7.0	27279218
eCl@ss 8.0	27279218
eCl@ss 9.0	27060311



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## Classifications

### ETIM

ETIM 2.0	EC000830
ETIM 3.0	EC001855
ETIM 4.0	EC001855
ETIM 5.0	EC001855
ETIM 6.0	EC001855
ETIM 7.0	EC001855

### UNSPSC

UNSPSC 6.01	31251501
UNSPSC 7.0901	31251501
UNSPSC 11	31251501
UNSPSC 12.01	31251501
UNSPSC 13.2	31251501
UNSPSC 19.0	31251501
UNSPSC 20.0	31251501
UNSPSC 21.0	31251501

## Approvals

### Approvals

#### Approvals

UL Listed / cUL Listed / EAC-RoHS / cULus Listed

#### Ex Approvals

### Approval details

UL Listed		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 221474
Nominal voltage UN	125 V		
Nominal current IN	4 A		

cUL Listed		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 221474
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# Sensor/actuator cable - SAC-5P-MR/ 3,0-547/FR SCO BK - 1424980

## Approvals

Nominal current I <sub>N</sub>	4 A
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EAC-RoHS		RU D- DE.HB35.B.00387
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cULus Listed	
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## Accessories

### Accessories

#### Plug for cable screw gland

Screw plug - PROT-M12 MS-PA-CHAIN - 1430899

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



#### Protective cap

Sealing cap - PROT-M12 FS-PA-CHAIN - 1430873

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



#### Safety locking

Locking clip - SAC-M12-EXCLIP-M - 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



## Sensor/actuator cable - SAC-5P-MR/ 3,0-547/FR SCO BK - 1424980

### Accessories

Locking clip - SAC-M12-EXCLIP-F - 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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### Screwdriver tools

Adapter insert - TSD-M SAC-BIT ADAPTER - 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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Tool - SAC BIT M12-D15 - 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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### Torque tool

Torque screwdriver - TSD 04 SAC - 1208429



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

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Torque screwdriver - TSD-M 1,2NM - 1212224



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

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