

## Sensor/actuator cable - SAC-5P-M12MS/40,0-680/M12FS FD - 1095849


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Sensor/actuator cable, 5-position, PVC, gray, shielded, Plug straight M12, coding: A, on Socket straight M12, coding: A, cable length: 40 m, Foil shielding plus drain wire



### Key Commercial Data

Packing unit	1 pc
GTIN	 4 055626 928005
GTIN	4055626928005
Weight per Piece (excluding packing)	1,680.000 g
Country of origin	United States

### Technical data

#### Dimensions

Length of cable	40 m
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#### Ambient conditions

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

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## Technical data

### General

Number of positions	5
Insulation resistance	≥ 100 MΩ
Coding	A - standard
Standards/regulations	M12 connector IEC 61076-2-101
Status display	No
Protective circuit/component	unwired
Overvoltage category	II
Degree of pollution	3
Insertion/withdrawal cycles	≥ 100
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
Standards/specifications	M12 connector IEC 61076-2-101

### Cable

Cable type	PVC, gray, 105°C
Cable type (abbreviation)	680
UL AWM style	2517 (105 °C / 300 V)
AWG signal line	22
Core diameter including insulation	1.27 mm ±0.03 mm
Wire colors	brown, white, blue, black
Type of pair shielding	Plastic-coated aluminum foil, aluminum side inside
Overall twist	Conductors, fillers, and drain wire are twisted with left-hand lay
Shielding	Plastic-coated aluminum foil connection with a drain wire
External cable diameter D	5.08 mm ±0.2 mm
Minimum bending radius, flexible installation	8 x D
Cable weight	45.42 kg/km
External sheath, color	gray

# Sensor/actuator cable - SAC-5P-M12MS/40,0-680/M12FS FD - 1095849

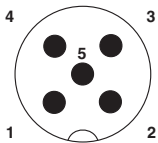
## Technical data

### Cable

Outer sheath, material	PVC
Material conductor insulation	PVC (Signal line)
Conductor material	Tin-plated Cu litz wires
Insulation resistance	$\geq$ (550 M Ohms/m @ 500V)
Conductor resistance	max. 51.1 $\Omega$ /km (20 °C)
Nominal voltage, cable	300 V
Special properties	UL standards PLTC and ITC
Other resistance	UV resistant
Flame resistance	FT4
Ambient temperature (operation)	-30 °C ... 105 °C (cable, fixed installation)

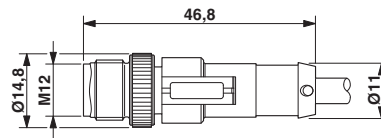
## Drawings

Schematic diagram



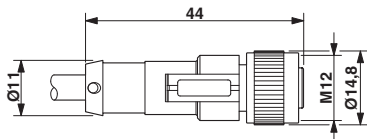
Pin assignment M12 male connector, 5-pos., A-coded, male side

Dimensional drawing



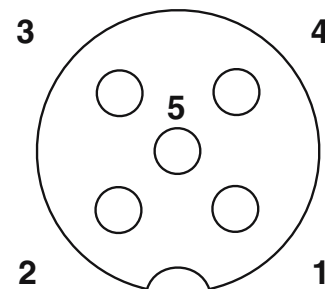
Plug, M12 x 1, straight, shielded

Dimensional drawing



M12 x 1 socket, straight

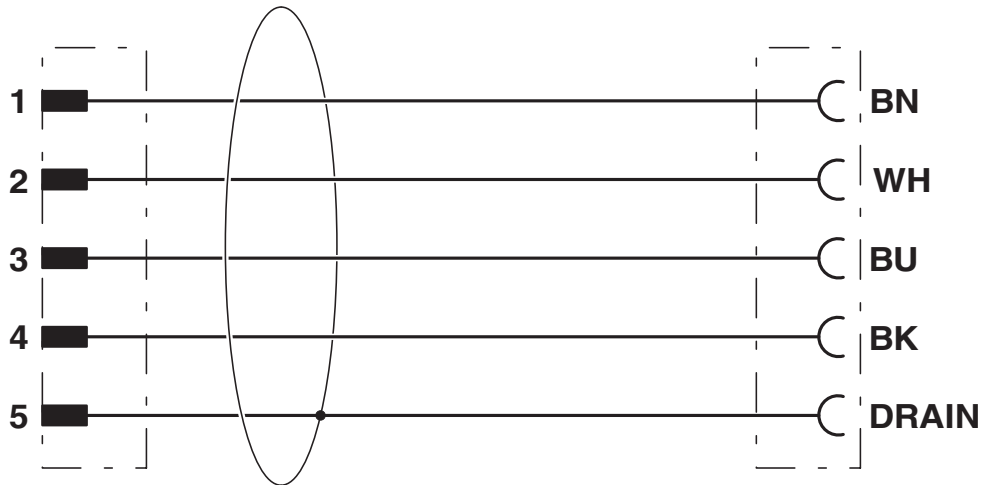
Schematic diagram



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

# Sensor/actuator cable - SAC-5P-M12MS/40,0-680/M12FS FD - 1095849

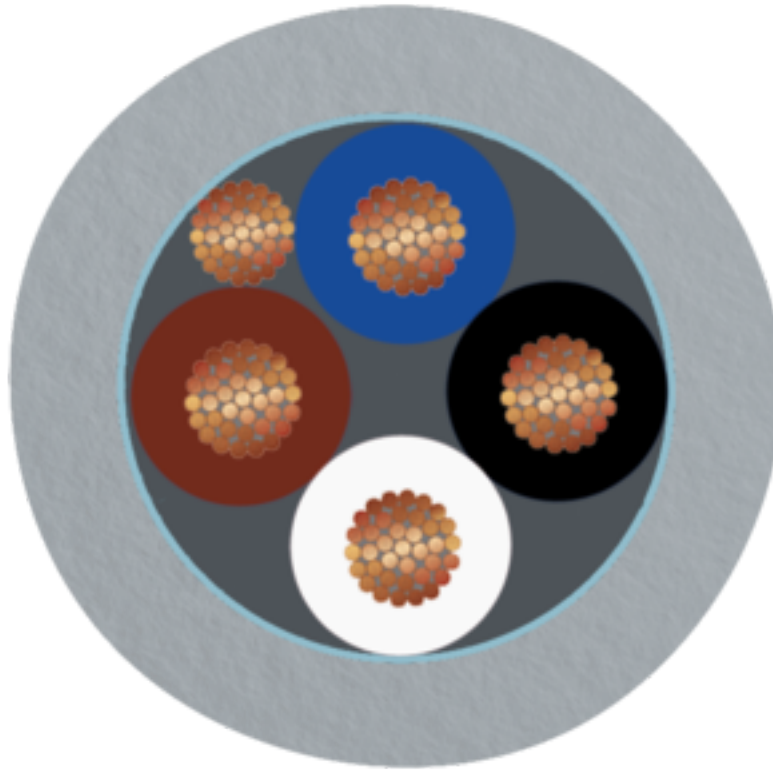
Circuit diagram



Contact assignment of the M12 plug and the M12 socket

# Sensor/actuator cable - SAC-5P-M12MS/40,0-680/M12FS FD - 1095849

Cable cross section



PVC, gray, 105°C [680]

## Classifications

eCl@ss

eCl@ss 10.0.1	27060311
eCl@ss 11.0	27060311
eCl@ss 9.0	27060311

UNSPSC

UNSPSC 19.0	31251501
UNSPSC 20.0	31251501

# Sensor/actuator cable - SAC-5P-M12MS/40,0-680/M12FS FD - 1095849

## Classifications

### UNSPSC

UNSPSC 21.0	31251501
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## Approvals

### Approvals

#### Approvals

UL Listed / cUL Listed / cULus Listed

#### Ex Approvals

## Approval details

UL Listed		<a href="http://database.ul.com/cgi-bin/XYVV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYVV/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/XYVV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYVV/template/LISEXT/1FRAME/index.htm</a>	FILE E 221474
Nominal voltage UN		125 V	
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cULus Listed			
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## Accessories

### Accessories

Plug for cable screw gland

## Sensor/actuator cable - SAC-5P-M12MS/40,0-680/M12FS FD - 1095849

### Accessories

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

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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

## Sensor/actuator cable - SAC-5P-M12MS/40,0-680/M12FS FD - 1095849

### Accessories

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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