

## Sensor/Actuator cable - SAC-5P-MR/1,5-647/FR SCO BK - 1410212

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Sensor/Actuator cable, 5-position, TPE, Plug angled M12 SPEEDCON, A-coded, on Socket angled M12 SPEEDCON, A-coded, Cable length: 1.5 m



### Key Commercial Data

Packing unit	1 pc
Weight per Piece (excluding packing)	400.0 g
Country of origin	United States

### Technical data

#### Dimensions

Length of cable	1.5 m
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#### Ambient conditions

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

#### General

Rated current at 40°C	4 A
Rated voltage	60 V
Number of positions	5
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
Torque	0.4 Nm (M12 connector)

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### Technical data

#### 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

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

#### Cable

Cable type	TPE yellow 105 °C
Cable type (abbreviation)	647
UL AWM style	20327 (105°C/300 V)
AWG signal line	18
Conductor structure signal line	41x 0.16 mm
Core diameter including insulation	1.8 mm
Thickness, insulation	0.23 mm
Overall twist	5 wires around filler to the core
External sheath, color	yellow
Outer sheath thickness	0.89 mm
External cable diameter D	6.6 mm ±0.25 mm
Cable weight	39 kg/km
Outer sheath, material	TPE
Material conductor insulation	PVC
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)

### Classifications

eCl@ss

eCl@ss 5.1	27061804
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### Classifications

eCl@ss

eCl@ss 6.0	27061801
eCl@ss 8.0	27279218
eCl@ss 9.0	27060311

### Accessories

#### Accessories

#### 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 sockets



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

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



#### 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

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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### Accessories

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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



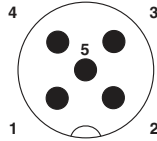
Torque screw driver, accuracy as per EN ISO 6789 standard, adjustable from 0.3 - 1.2 Nm

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### Drawings

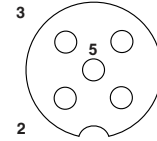
# Sensor/Actuator cable - SAC-5P-MR/1,5-647/FR SCO BK - 1410212

Schematic diagram



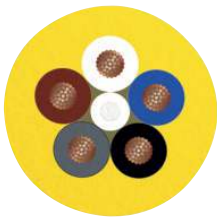
Pin assignment M12 male connector, 5-pos., A-coded, male side

Schematic diagram



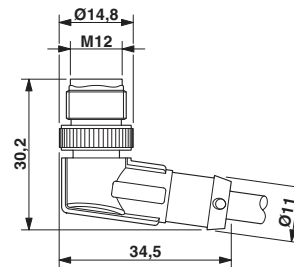
Pin assignment M12 socket, 5-pos., A-coded, socket side view

Cable cross section



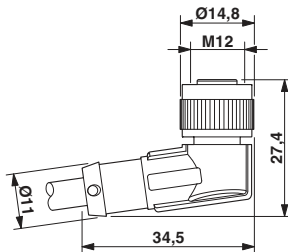
TPE yellow 105 °C [647]

Dimensional drawing



M12 x 1 male plug, angled

Dimensional drawing



M12 x 1 socket, angled

Circuit diagram



Contact assignment of the M12 plug and the M12 socket