

## Sensor/Actuator cable - SAC-4P-MR/5,0-647 SCO BK - 1410236

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)



Sensor/Actuator cable, 4-position, TPE, Plug angled M12 SPEEDCON, A-coded, on free cable end, Cable length: 5 m



### Key Commercial Data

Packing unit	1 pc
Weight per Piece (excluding packing)	1.0 g
Country of origin	United States

### Technical data

#### Dimensions

Length of cable	5 m
-----------------	-----

#### 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	250 V
Number of positions	4
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)

## Sensor/Actuator cable - SAC-4P-MR/5,0-647 SCO BK - 1410236

### 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

#### 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	4 wires, twisted
External sheath, color	yellow
Outer sheath thickness	0.89 mm
External cable diameter D	6 mm ±0.25 mm
Cable weight	31 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	27061801
eCl@ss 6.0	27061801

## Sensor/Actuator cable - SAC-4P-MR/5,0-647 SCO BK - 1410236

### Classifications

eCl@ss

eCl@ss 8.0	27279218
eCl@ss 9.0	27060311

### Accessories

#### Accessories

#### Conductor marking

Insert label - PABA WH/15 - 1013151



Insert label, Strip, white, unlabeled, can be labeled with: Plotter, Mounting type: Thread on, Cable diameter: 0.6-50 mm, Lettering field: 15 x 4 mm

Insert label - PABA YE/15 - 1013698



Insert label, Strip, yellow, unlabeled, can be labeled with: Plotter, Mounting type: Thread on, Cable diameter: 0.6-50 mm, Lettering field: 15 x 4 mm

Insert label - PABA RD/15 - 1013944



Insert label, Strip, red, unlabeled, can be labeled with: Plotter, Mounting type: Thread on, Cable diameter: 0.6-50 mm, Lettering field: 15 x 4 mm

#### Corrugated pipe

Protective hose - WP-PA HF 13,0 BK - 3240681



Polyamide protective hose, inflammability class V0, UV resistant

## Sensor/Actuator cable - SAC-4P-MR/5,0-647 SCO BK - 1410236

### Accessories

Protective hose - WP-PA HF-HB 13,0 BK - 3240839



Polyamide protective hose, inflammability class HB, UV resistant

---

### Cutting tools

Diagonal cutter - CUTFOX-S VDE - 1212207



Diagonal cutter for copper and aluminum conductors, VDE 1000 V AC/ 1500 V DC-tested

---

### Marker carrier cable

Conductor marker carrier - PATG 2/15 - 1013038



Conductor marker carrier, transparent, unlabeled, Mounting type: slide on, Cable diameter: 2-4 mm, Lettering field: 4 x 15 mm

---

Conductor marker carrier - PATG 3/15 - 1013041



Conductor marker carrier, transparent, unlabeled, Mounting type: slide on, Cable diameter: 4-7 mm, Lettering field: 4 x 15 mm

---

Conductor marker carrier - PATG 4/15 - 1013054



Conductor marker carrier, transparent, unlabeled, Mounting type: slide on, Cable diameter: 6-10 mm, Lettering field: 4 x 15 mm

## Sensor/Actuator cable - SAC-4P-MR/5,0-647 SCO BK - 1410236

### Accessories

---

#### Marker pen

Marker pen - B-STIFT - 1051993



Marker pen, for manual labeling of unprinted Zack strips, smear-proof and waterproof, line thickness 0.5 mm

---

#### 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

---

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

---

#### Stripping tool

Stripping tool - WIREFOX SAC-1 - 1212757



Stripping pliers, for halogen-free sensor/actuator cables (SAC cables), with PUR and PVC insulation, from Ø of 3.2 to 4.4 mm, any stripping length

---

## Sensor/Actuator cable - SAC-4P-MR/5,0-647 SCO BK - 1410236

### Accessories

Stripping tool - WIREFOX SAC - 1212623



Stripping pliers, for halogen-free sensor/actuator cables (SAC cables), with PUR and PVC insulation, from  $\varnothing$  of 4.4 to 7 mm, any stripping length

---

Stripping tool - WIREFOX 10 - 1212150



Stripping tool, for cables and conductors from 0.02 - 10 mm<sup>2</sup>, self-adjusting, stripping length of up to 18 mm, cutting capacity of up to 10 mm<sup>2</sup> stranded/1.5 mm<sup>2</sup> solid, replaceable stripping blade

---

### 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

---

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



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

---

WP-CTA POM 13,0 BK - 1422884



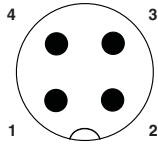
Protective hose adapter, for corrugated hoses with a nominal size of 13 (10 x 13), corrugated in parallel

---

# Sensor/Actuator cable - SAC-4P-MR/5,0-647 SCO BK - 1410236

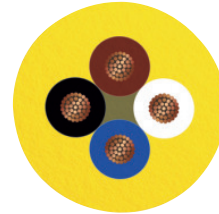
## Drawings

Schematic diagram



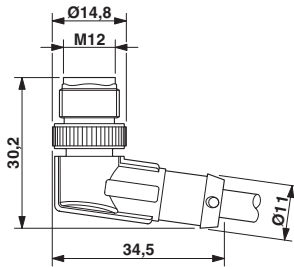
Pin assignment M12 plug, 4-pos., A-coded, view plug side

Cable cross section



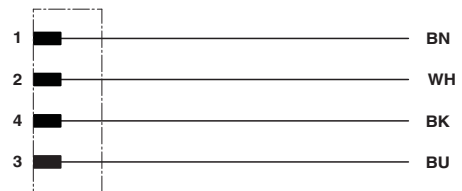
TPE yellow 105 °C [647]

Dimensional drawing



M12 x 1 male plug, angled

Circuit diagram



Contact assignment of the M12 plugs