

## Sensor/Actuator cable - SAC-12P-MS/ 5,0-35T SH SCO - 1430064

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://download.phoenixcontact.com>)




Sensor/Actuator cable, 12-position, PUR/PVC, Black RAL 9005, shielded, Plug straight M12-SPEEDCON, A-coded, on Free cable end, Cable length: 5 m

### Product Features

- ✓ Easy and safe: 100% electrically tested plug-in components
- ✓ Save time, thanks to installation with SPEEDCON rapid interlock system
- ✓ Save space – with high-pos. plug-in connectors
- ✓ Reliable signal transmission – 360° shielding in environments with electromagnetic interference



### Key commercial data

Packing unit	1 PCE
Catalog page	Page 150 (PC-2011)
GTIN	 4 046356 323154
Custom tariff number	85444290
Country of origin	GERMANY

### Technical data

#### General data

Rated current at 40°C	1.5 A
Rated voltage	30 V
Number of positions	12
Volume resistance	≤ 5 mΩ
Insulation resistance	≥ 100 MΩ
Length of cable	5 m
Stripping length of the free conductor end	35 mm
Ambient temperature (operation)	-25 °C ... 90 °C (Plug / socket)

## Sensor/Actuator cable - SAC-12P-MS/ 5,0-35T SH SCO - 1430064

### Technical data

#### General characteristics

Standards/regulations	M12 plug-in connector IEC 61076-2-101
Coding	A - standard
Surge voltage category	II
Pollution degree	3
Degree of protection	IP65/IP68/IP69K
Torque	0.4 Nm (M12 plug-in connector)
Contact material	CuZn
Contact surface material	Ni/Au
Contact carrier material	PA 66
Material of grip body	TPU, hardly inflammable, self-extinguishing
Material, knurls	Zinc die-cast, nickel-plated
Status display	No

#### Conductor data

Cable type	Black PUR/PVC twisted pair
Cable type (abbreviation)	35T
Conductor cross section	12x 0.14 mm <sup>2</sup> (signal line)
AWG signal line	26
Conductor structure signal line	18x 0.10 mm
Core diameter including insulation	1 mm ±0.05 mm (signal line)
Wire colors	White-brown, green-yellow, gray-pink, blue-red, black-violet, gray/pink-red/ blue
Overall twist	Six pairs around the filler to the core
Shielding	Tinned copper braided shield
Optical shield covering	85 %
External sheath, color	Black RAL 9005
External cable diameter D	8.5 mm
Number of bending cycles	2000000
Bending radius	85 mm
Traversing path	10 m
Traversing rate	3 m/s
Acceleration	10 m/s <sup>2</sup>
Outer sheath, material	PUR
Material, inner sheath	PVC
Material conductor insulation	PVC
Conductor material	Tin-plated Cu litz wires
Conductor resistance	142 Ω/km
Flame resistance	DIN VDE 0472 part 804, test type B

# Sensor/Actuator cable - SAC-12P-MS/ 5,0-35T SH SCO - 1430064

## Technical data

### Conductor data

Resistance to oil	DIN VDE 0472 Part 803, test type B
Other resistance	Hydrolysis and microbe resistant as per VDE 0282 section 10
Ambient temperature (operation)	-40 °C ... 80 °C (cable, fixed installation)
Ambient temperature (operation)	-5 °C ... 80 °C (cable, flexible installation)

## Classifications

### ETIM

ETIM 3.0	EC001855
ETIM 4.0	EC001855
ETIM 5.0	EC001855

### UNSPSC

UNSPSC 11	31251501
UNSPSC 12.01	31251501
UNSPSC 13.2	31251501
UNSPSC 6.01	31251501
UNSPSC 7.0901	31251501

### eCl@ss

eCl@ss 4.0	27060306
eCl@ss 4.1	27060306
eCl@ss 5.0	27061801
eCl@ss 5.1	27061801
eCl@ss 6.0	27061801
eCl@ss 7.0	27061801

## Accessories

### Accessories

#### Fuse

Fuse clip - SAC-M12-EXCLIP-M - 1558988



Fuse clip for the pin side of various M12 sensor/actuator connectors prevents plug-in connections being interrupted without using a tool

## Sensor/Actuator cable - SAC-12P-MS/ 5,0-35T SH SCO - 1430064

### Accessories

#### 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

---

##### Conductor marker carrier - PATG 2/23 - 1013850



Conductor marker carrier, transparent, Unlabeled, Mounting type: Slide on, Cable diameter: 2-4 mm, Lettering field: 4 x 23 mm

---

##### Conductor marker carrier - PATG 3/23 - 1013863



Conductor marker carrier, transparent, Unlabeled, Mounting type: Slide on, Cable diameter: 4-7 mm, Lettering field: 4 x 23 mm

---

## Sensor/Actuator cable - SAC-12P-MS/ 5,0-35T SH SCO - 1430064

### Accessories

Conductor marker carrier - PATG 4/23 - 0808011



Conductor marker carrier, transparent, Unlabeled, Mounting type: Slide on, Cable diameter: 6-10 mm, Lettering field: 4 x 23 mm

Marker pen - B-STIFT - 1051993



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

### Protection and sealing elements

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



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

### Tools

Cable-cutting tool - CUTFOX-S VDE - 1212207



Diagonal cutter for copper and aluminum conductors, VDE-tested

Stripping tool - WIREFOX SAC - 1212623



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

## Sensor/Actuator cable - SAC-12P-MS/ 5,0-35T SH SCO - 1430064

### Accessories

---

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 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

---

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



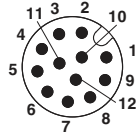
Nut for assembling sensor/actuator cables with M12 connector and for M12 connectors with QUICKON fast connection technology, for 4 mm hexagonal drive

---

# Sensor/Actuator cable - SAC-12P-MS/ 5,0-35T SH SCO - 1430064

## Drawings

Schematic diagram



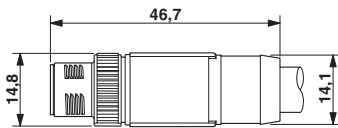
Pin assignment M12 male connector, 12-pos., male side view

Cable cross section



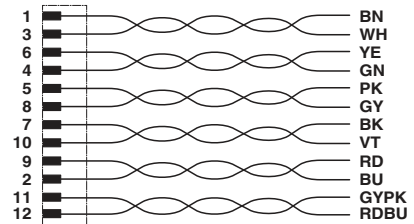
Black PUR/PVC twisted pair [35T]

Dimensioned drawing



M12 SPEEDCON plug, straight, shielded

Circuit diagram



Contact assignment of the M12 plug