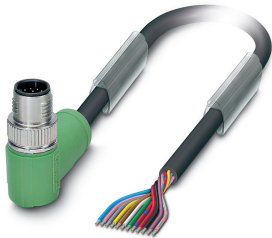


## Sensor/actuator cable - SAC-12P-MR/ 1,5-PVC SCO - 1554814

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Sensor/actuator cable, 12-position, PVC, black RAL 9005, Plug angled M12 SPEEDCON, coding: A, on free cable end, cable length: 1.5 m

### Your advantages

- ✓ Easy and safe: 100% electrically tested plug-in components
- ✓ Save time, thanks to installation with SPEEDCON fast locking system
- ✓ Save space – with high-pos. connectors



### Key Commercial Data

Packing unit	1 pc
GTIN	 4 046356 176231
GTIN	4046356176231
Weight per Piece (excluding packing)	94.200 g
Custom tariff number	85444290
Country of origin	Germany

### Technical data

#### Dimensions

Length of cable	1.5 m
Cable diameter	5.9 mm
Stripping length of the free conductor end	50 mm (Partial stripping)

#### Ambient conditions

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

## Sensor/actuator cable - SAC-12P-MR/ 1,5-PVC SCO - 1554814

### Technical data

#### Ambient conditions

Degree of protection	IP65
	IP67
	IP68

#### General

Rated current at 40°C	1.5 A
Rated voltage	30 V AC
	30 V DC
Number of positions	12
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
Degree of pollution	3
Torque	0.4 Nm (M12 connector)

#### Material

Flammability rating according to UL 94	HB
Contact material	CuZn
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

#### Cable

Cable type	PVC black
Conductor cross section	0.14 mm <sup>2</sup>
AWG signal line	26
Conductor structure signal line	18x 0.10 mm
Wire colors	Color-coded DIN 47100
Overall twist	Wires twisted in layers
External sheath, color	black RAL 9005
External cable diameter	5.90 mm
Smallest bending radius, movable installation	88.5 mm
Outer sheath, material	PVC
Material conductor insulation	PVC
Conductor material	Bare Cu litz wires

# Sensor/actuator cable - SAC-12P-MR/ 1,5-PVC SCO - 1554814

## Technical data

### Cable

Standards/specifications	M12 connector IEC 61076-2-101
Conductor resistance	142 Ω/m
Ambient temperature (operation)	-25 °C ... 80 °C (cable, fixed installation)
	-5 °C ... 80 °C (cable, flexible installation)

### Standards and Regulations

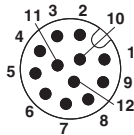
Standards/specifications	M12 connector IEC 61076-2-101
Flammability rating according to UL 94	HB

### Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

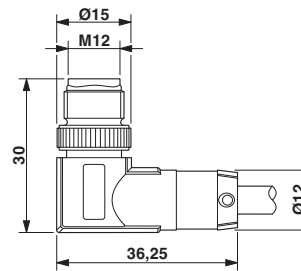
## Drawings

Schematic diagram



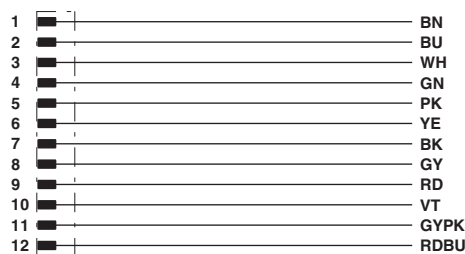
Pin assignment M12 male connector, 12-pos., male side view

Dimensional drawing



M12 SPEEDCON plug, angled

Circuit diagram



Contact assignment of the M12 plug

# Sensor/actuator cable - SAC-12P-MR/ 1,5-PVC SCO - 1554814

Cable cross section



PVC black [PVC]

## Classifications

eCl@ss

eCl@ss 10.0.1	27060311
eCl@ss 11.0	27060311
eCl@ss 4.0	27060300
eCl@ss 4.1	27060300
eCl@ss 5.0	27061800
eCl@ss 5.1	27061800
eCl@ss 6.0	27279200
eCl@ss 7.0	27279218
eCl@ss 9.0	27060311

# Sensor/actuator cable - SAC-12P-MR/ 1,5-PVC SCO - 1554814

## Classifications

### ETIM

ETIM 3.0	EC001855
ETIM 4.0	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 / EAC-RoHS / EAC

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	30 V		
Nominal current IN	1 A		

EAC-RoHS		RU D- DE.HB35.B.00387
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## Sensor/actuator cable - SAC-12P-MR/ 1,5-PVC SCO - 1554814

### Approvals

EAC		EAC-Zulassung
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### Accessories

#### Accessories

#### Conductor marking

Insert label - PABA WH/23 - 1013779



Insert label, Strip, white, unlabeled, can be labeled with: CMS-P1-PLOTTER, mounting type: thread on, cable diameter range: 1.5 ... 35 mm, lettering field size: 23 x 4 mm, Number of individual labels: 20

Insert label - PABA YE/23 - 1013782



Insert label, Strip, yellow, unlabeled, can be labeled with: CMS-P1-PLOTTER, mounting type: thread on, cable diameter range: 1.5 ... 35 mm, lettering field size: 23 x 4 mm, Number of individual labels: 20

#### Corrugated pipe

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



Polyamide protective hose, inflammability class V0, UV resistant

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



Polyamide protective hose, inflammability class HB, UV resistant

## Sensor/actuator cable - SAC-12P-MR/ 1,5-PVC SCO - 1554814

### Accessories

#### Cutting tools

Diagonal cutter - CUTFOX-S VDE - 1212207



Diagonal cutter for hard (piano wire) and soft wires, VDE 1000 V AC/1500 V DC tested

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#### 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

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#### 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

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#### 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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#### Screwdriver tools

## Sensor/actuator cable - SAC-12P-MR/ 1,5-PVC SCO - 1554814

### 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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### Stripping tool

Stripping tool - WIREFOX SAC-1 - 1212757



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

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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

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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

## Sensor/actuator cable - SAC-12P-MR/ 1,5-PVC SCO - 1554814

### Accessories

#### 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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Protective hose adapter - 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

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