


# SAC-12P- 0,5-35T/FS SH SCO

Order No.: 1437083

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Sensor/Actuator cable, 12-position, PUR/PVC, Black RAL 9005, shielded, free cable end, on Socket straight M12 SPEEDCON, A-coded, Cable length: 0.5 m



Commercial data	
EAN	 4 046356 456685
sales group	D117
Pack	1 Pcs.
Customs tariff	85444290
Gross weight in pieces	0.0741 KG
Net weight per piece	0.0741 KG
Catalog page information	Page 66 (C-4-2013)

**Product notes**

WEEE/RoHS-compliant since:  
09/29/2008



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**Technical data****Dimensions**

Length of cable	0.5 m
Stripping length of the free conductor end	35 mm

**Ambient conditions**

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

**General**

Rated current at 40°C	1.5 A
Rated voltage	30 V
Number of positions	12
Contact resistance	≤ 5 mΩ
Insulation resistance	≥ 100 MΩ
Coding	A - standard
Standards/regulations	M12 connector IEC 61076-2-101
Status display	No
Protective circuit/component	Unwired
Surge voltage category	II
Pollution degree	3
Torque	0.4 Nm (M12 connector)

**Material**

Inflammability class according to UL 94	V0
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
Sealing material	NBR

**Cable**

Cable type	Black PUR/PVC twisted pair
Cable type (abbreviation)	35T
Conductor cross section	0.14 mm <sup>2</sup>
AWG signal line	26
Conductor structure signal line	18x 0.10 mm
Core diameter including insulation	1 mm ±0.05 mm
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	8.50 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
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) -5 °C ... 80 °C (cable, flexible installation)

### Certificates / Approvals



Certification GOST

Certifications applied for:

Certification Ex:

### Accessories

Item	Designation	Description
<b>Fuse</b>		
1558991	SAC-M12-EXCLIP-F	Fuse clip for the socket side of sensor/actuator cables with M12 connector and M12 connectors which can be assembled with QUICKON fast connection technology, prevents the disconnection of plug-in connections without tools

### Marking

1051993	B-STIFT	Marker pen, for manual labeling of unprinted Zack strips, smear-proof and waterproof, line thickness 0.5 mm
1013944	PABA RD/15	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
1013151	PABA WH/15	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
1013698	PABA YE/15	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
1013038	PATG 2/15	Conductor marker carrier, transparent, unlabeled, Mounting type: Slide on, Cable diameter: 2-4 mm, Lettering field: 4 x 15 mm
1013041	PATG 3/15	Conductor marker carrier, transparent, unlabeled, Mounting type: Slide on, Cable diameter: 4-7 mm, Lettering field: 4 x 15 mm
1013054	PATG 4/15	Conductor marker carrier, transparent, unlabeled, Mounting type: Slide on, Cable diameter: 6-10 mm, Lettering field: 4 x 15 mm

### Protection and sealing elements

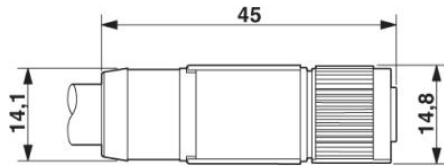
1430899	PROT-M12 MS-PA-CHAIN	M12 sealing cap with fixing band, for sensor cables, for free M12 sockets
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### Tools

1212207	CUTFOX-S VDE	Diagonal cutter for copper and aluminum conductors, VDE-tested
1208432	SAC BIT M12-D15	Nut for assembling sensor/actuator cables with M12 connector and for M12 connectors with QUICKON fast connection technology, for 4 mm hexagonal drive
1208429	TSD 04 SAC	Torque screwdriver, with preset torque of 0.4 Nm and 4 mm hexagonal drive for M12 connectors
1212224	TSD-M 1,2NM	Torque screw driver, accuracy as per EN ISO 6789 standard, adjustable from 0.3 - 1.2 Nm
1212600	TSD-M SAC-BIT ADAPTER	Adapter bit for TSD-M...torque tools, E6.3-1/4" drive with 4 mm hexagon to accommodate SAC bits
1212150	WIREFOX 10	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
1212623	WIREFOX SAC	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
1212757	WIREFOX SAC-1	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

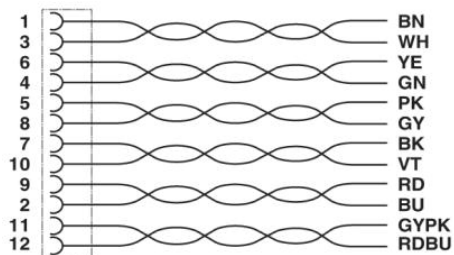
## Drawings

### Dimensioned drawing



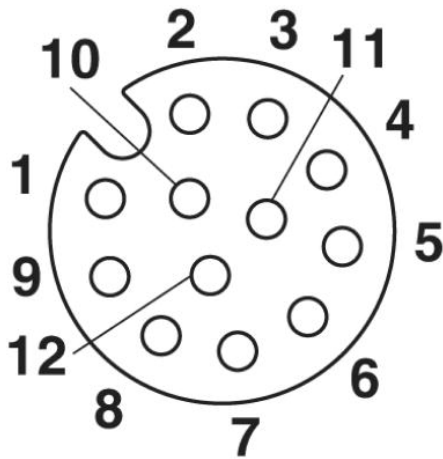
Socket M12-SPEEDCON, straight, shielded

### Circuit diagram



Contact assignment of the M12 socket

### Schematic diagram



Pin assignment M12, 12-pos., female side view



Black PUR/PVC twisted pair [35T]

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