

# Sensor/Actuator cable - SAC-12P-MS/5,0-35T/M23FS SHSCO - 1437355

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Sensor/Actuator cable, 12-position, PUR/PVC, Black RAL 9005, shielded, Plug straight M12 SPEEDCON, A-coded, on Socket straight M23, Cable length: 5 m

## Why buy this product

- ✓ 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
- ✓ Reliable signal transmission – 360° shielding in environments with electromagnetic interference



## Key commercial data

Packing unit	1 pc
GTIN	 4 046356 456265
Weight per Piece (excluding packing)	546.7 g
Custom tariff number	85444290
Country of origin	Germany
Note	Made to Order (non-returnable)

## Technical data

### Dimensions

Length of cable	5 m
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### Ambient conditions

Ambient temperature (operation)	-25 °C ... 90 °C (Plug / socket)
	-40 °C ... 125 °C (Plug / socket)
Degree of protection	IP65
	IP67

### General

Rated current at 40°C	1.5 A
Rated voltage	30 V

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## Technical data

### General

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

Contact material	CuZn
Contact surface material	Ni/Au
Contact carrier material	PBT / PA 66
Material of grip body	PUR
Material, knurls	Nickel-plated brass
Sealing material	FKM

### 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

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## Technical data

### Cable

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)

## Classifications

### 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
eCl@ss 8.0	27279218

### ETIM

ETIM 3.0	EC001855
ETIM 4.0	EC001855
ETIM 5.0	EC001855

### UNSPSC

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

## Approvals

### Approvals

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#### Approvals

EAC

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#### Ex Approvals

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## Sensor/Actuator cable - SAC-12P-MS/5,0-35T/M23FS SHSCO - 1437355

### Approvals

Approvals submitted

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### Approval details

EAC
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### 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

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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

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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

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### Marker carrier cable

Conductor marker carrier - PATO 2/15 - 1013122



Conductor marker carrier, transparent, unlabeled, Mounting type: clip on, Cable diameter: 2.8-4.4 mm, Lettering field: 4 x 15 mm

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## Sensor/Actuator cable - SAC-12P-MS/5,0-35T/M23FS SHSCO - 1437355

### Accessories

Conductor marker carrier - PATO 3/15 - 1013135



Conductor marker carrier, transparent, unlabeled, Mounting type: clip on, Cable diameter: 4.4-6.7 mm, Lettering field: 4 x 15 mm

Conductor marker carrier - PATO 4/15 - 1013148



Conductor marker carrier, transparent, unlabeled, Mounting type: clip on, Cable diameter: 6.7-10 mm, Lettering field: 4 x 15 mm

### 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

### 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



### Safety locking

Locking clip - SAC-M12-EXCLIP-M - 1558988



### Screwdriver tools

# Sensor/Actuator cable - SAC-12P-MS/5,0-35T/M23FS SHSCO - 1437355

## 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

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

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

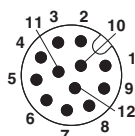
Torque screwdriver - TSD-M 1,2NM - 1212224



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

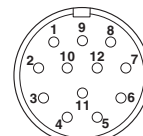
## Drawings

Schematic diagram



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

Schematic diagram



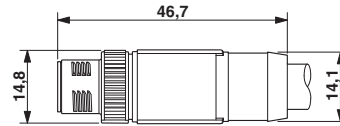
Pin assignment M23 socket, 12-pos., female side view

# Sensor/Actuator cable - SAC-12P-MS/5,0-35T/M23FS SHSCO - 1437355

Cable cross section



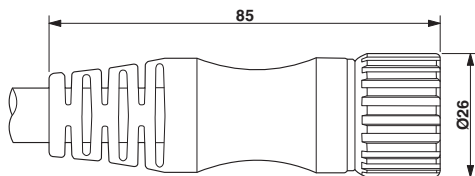
Dimensioned drawing



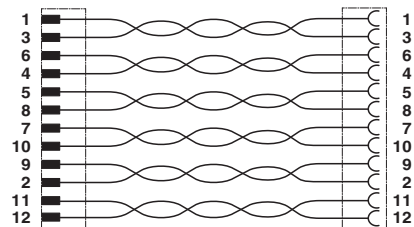
Black PUR/PVC twisted pair [35T]

M12 SPEEDCON plug, straight, shielded

Dimensioned drawing



Circuit diagram



M23 socket, straight, shielded

Contact assignment of the M12 plug and the M23 socket