


## Sensor/actuator cable - SAC-12P-MS/ 1,0-35T/FS SH SCO - 1404941

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Sensor/actuator cable, 12-pos., PUR/PVC, RAL 9005 (black), shielded, straight M12 SPEEDCON plug (A-coded) to straight M12 SPEEDCON socket (A-coded), cable length: 1 m



### Key Commercial Data

Packing unit	1 pc
Minimum order quantity	25 pc
GTIN	 4 046356 728461
GTIN	4046356728461
Weight per Piece (excluding packing)	140.000 g
Custom tariff number	85444290
Country of origin	Germany

### Technical data

#### Dimensions

Length of cable	1 m
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#### Ambient conditions

Degree of protection	IP65
	IP67

#### General

Rated current at 40°C	1.5 A
Rated voltage	30 V AC
	30 V DC
Number of positions	12
Insulation resistance	≥ 100 MΩ
Coding	A - standard
Standards/regulations	M12 connector IEC 61076-2-101
Status display	No
Overvoltage category	II

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## Technical data

### General

Degree of pollution	3
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### Material

Flammability rating according to UL 94	V0
Contact material	CuZn
Contact surface material	Ni/Au
Contact carrier material	PA 6.6
Material of grip body	TPU, hardly inflammable, self-extinguishing
Material, knurls	Zinc die-cast, nickel-plated
Sealing material	NBR

### Standards and Regulations

Standards/specifications	M12 connector IEC 61076-2-101
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
Flammability rating according to UL 94	V0

### Cable

Cable type	Black PUR/PVC twisted pair
Cable type (abbreviation)	35T
Cable abbreviation	LSPYwC11Y
UL AWM style	20233 / 1061 (80°C/300 V)
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
Twisted pairs	2 cores to the pair
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 ±0.2 mm
Minimum bending radius, fixed installation	5 x D
Minimum bending radius, flexible installation	10 x D
Number of bending cycles	2000000
Bending radius	85 mm

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### Technical data

#### Cable

Traversing path	10 m
Traversing rate	3 m/s
Acceleration	10 m/s <sup>2</sup>
Cable weight	87 kg/km
Outer sheath, material	PUR
Material, inner sheath	PVC
Material conductor insulation	PVC
Conductor material	Tin-plated Cu litz wires
Insulation resistance	≥ 10 MΩ*km (at 20 °C)
Conductor resistance	≤ 142 Ω/km (at 20 °C)
Nominal voltage, cable	42 V AC
Test voltage, cable	1500 V AC
Special properties	Flexible cable conduit capable
Flame resistance	According to DIN EN 60332-1-2
	According to VW-1
Resistance to oil	in accordance with DIN EN 60811-2-1
Other resistance	hydrolysis and microbe resistant according to EN 50396
Ambient temperature (operation)	-30 °C ... 80 °C (cable, fixed installation)
	-5 °C ... 80 °C (cable, flexible installation)

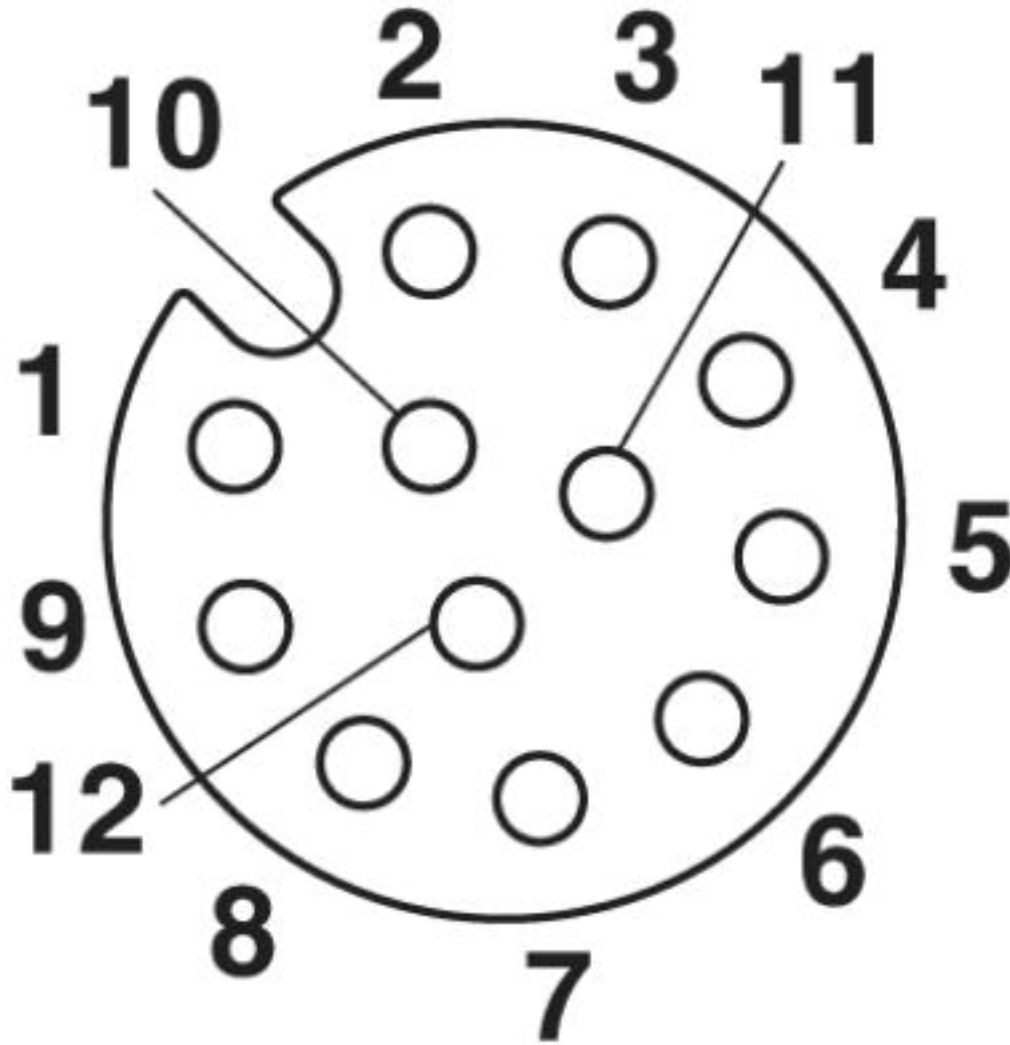
#### Environmental Product Compliance

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

# Sensor/actuator cable - SAC-12P-MS/ 1,0-35T/FS SH SCO - 1404941

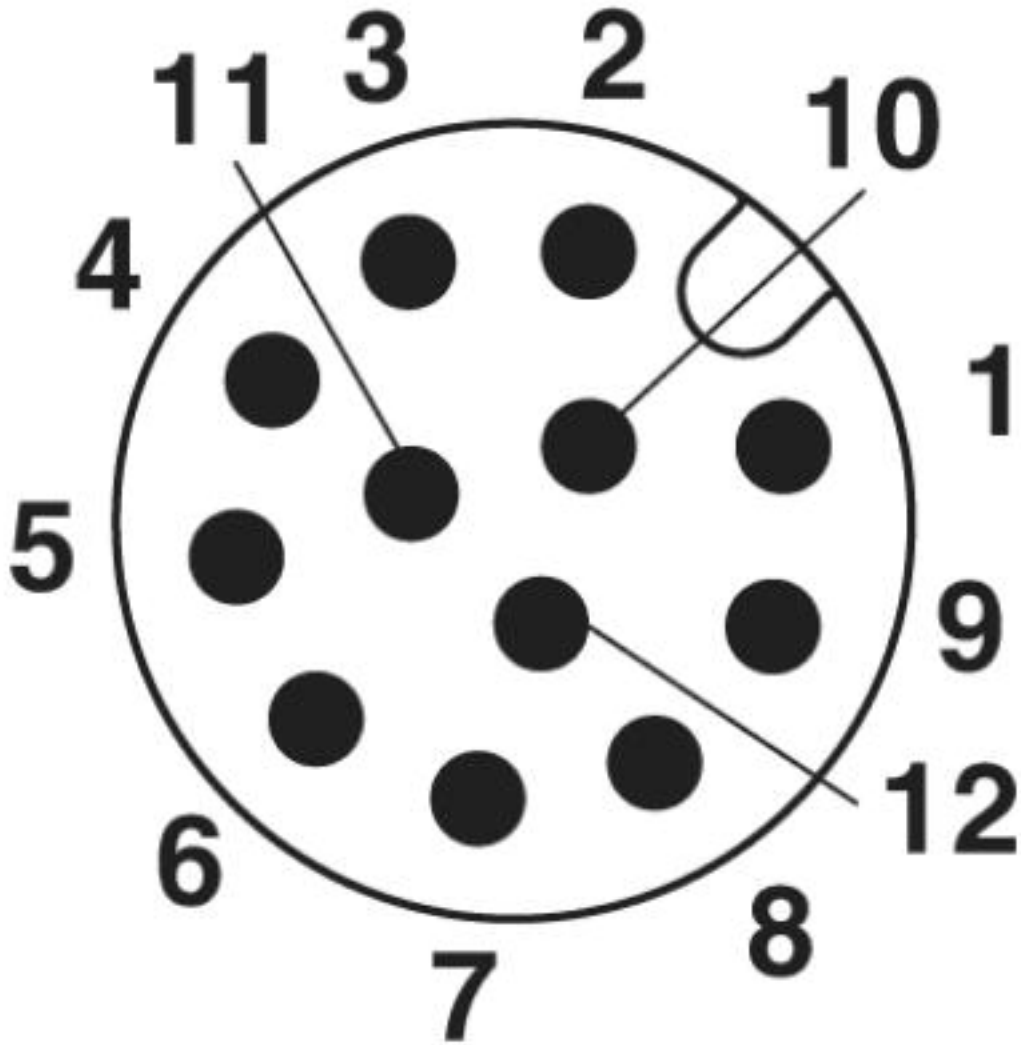
Schematic diagram



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

# Sensor/actuator cable - SAC-12P-MS/ 1,0-35T/FS SH SCO - 1404941

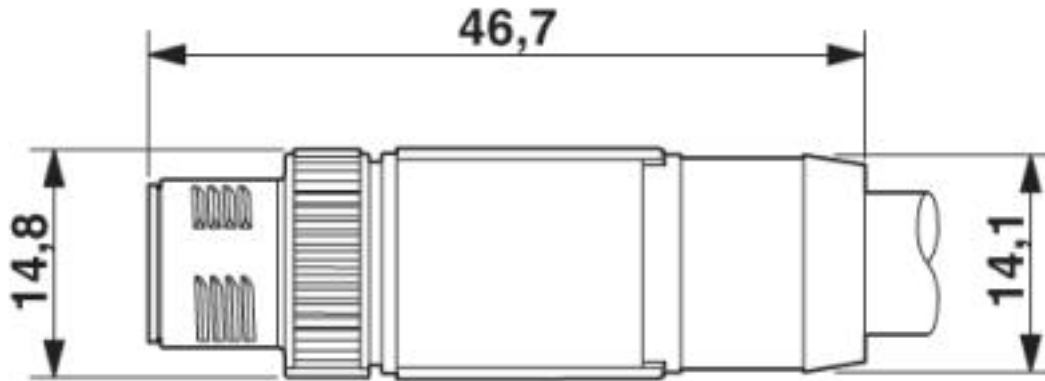
Schematic diagram



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

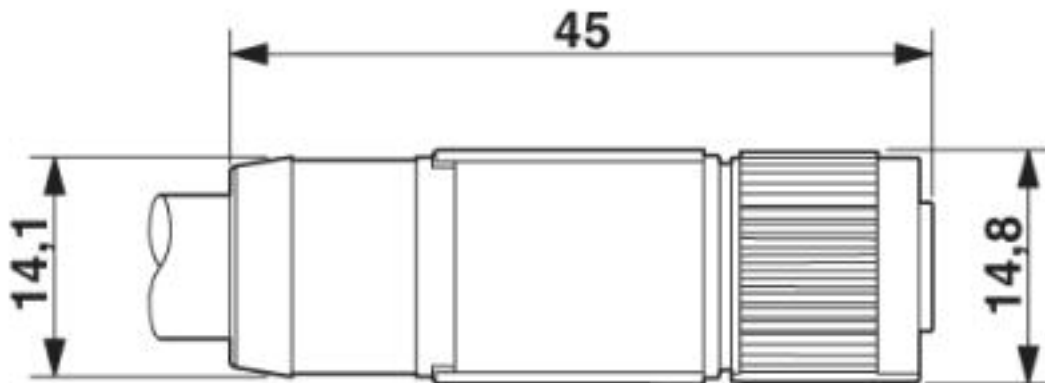
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Dimensional drawing



M12 SPEEDCON plug, straight, shielded

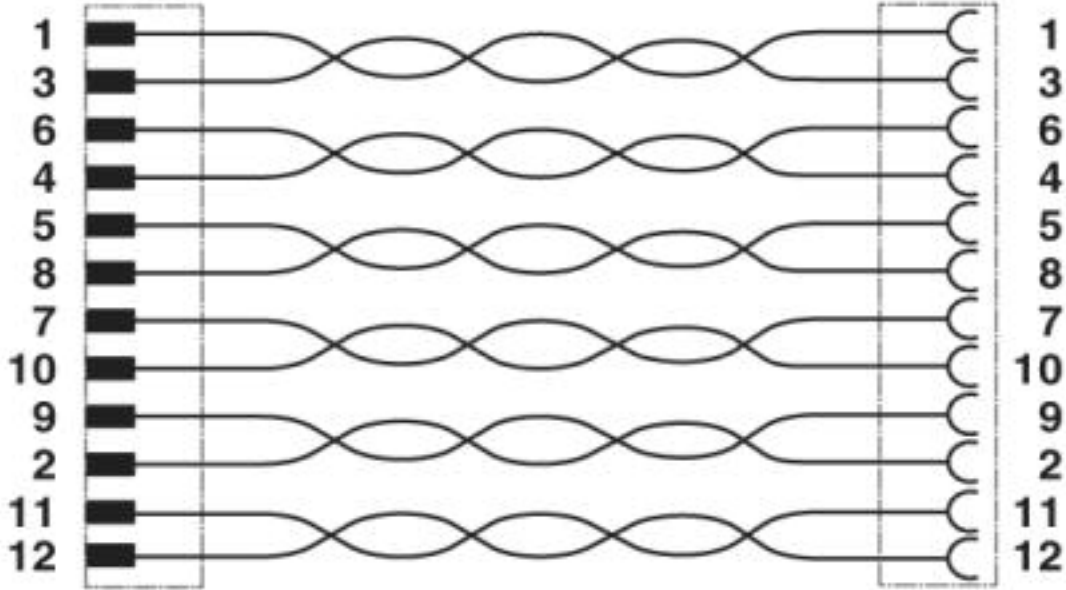
Dimensional drawing



Socket M12-SPEEDCON, straight, shielded

# Sensor/actuator cable - SAC-12P-MS/ 1,0-35T/FS SH SCO - 1404941

Circuit diagram



Contact assignment of the M12 plug and the M23 socket

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Cable cross section



Black PUR/PVC twisted pair [35T]

## Classifications

eCl@ss

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 8.0	27279218

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## Classifications

eCl@ss

eCl@ss 9.0	27060311
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### ETIM

ETIM 3.0	EC001855
ETIM 4.0	EC001855
ETIM 5.0	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

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		

