

# SAC-12P-MS/ 7,0-35T/FS SH SCO - Sensor/actuator cable



1423635

<https://www.phoenixcontact.com/us/products/1423635>

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Sensor/actuator cable, 12-position, shielded, Plug straight M12, coding: A SPEEDCON, on Socket straight M12, coding: A SPEEDCON, cable length: 7 m

## Commercial data

Item number	1423635
Packing unit	1 pc
Minimum order quantity	25 pc
Note	Made to order (non-returnable)
Sales key	BF03
Product key	BF1CNA
GTIN	4055626351230
Weight per piece (including packing)	686.1 g
Weight per piece (excluding packing)	686.1 g
Customs tariff number	85444290
Country of origin	DE

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## Technical data

### Product properties

Product type	Sensor/actuator cable
Number of positions	12
No. of cable outlets	1
Shielded	yes
Coding	A

### Insulation characteristics

Overvoltage category	II
Degree of pollution	3

### Material specifications

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

### Electrical properties

Contact resistance	$\leq 5 \text{ m}\Omega$
Insulation resistance	$\geq 100 \text{ M}\Omega$
Nominal voltage $U_N$	30 V AC
	30 V DC
Nominal current $I_N$	1.5 A

### Signaling

Status display	No
Status display present	No

### Connector

#### Connection 1

Type	Plug straight M12 SPEEDCON
Number of positions	12
Coding type	A
Number of positions	12
Locking type	SPEEDCON

#### Connection 2

Type	Socket straight M12 SPEEDCON
Number of positions	12

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Coding type	A
Number of positions	12
Locking type	SPEEDCON

## Cable/line

Cable length	7 m
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Black PUR/PVC twisted pair [35T]

Dimensional drawing	
Cable weight	87 kg/km
UL AWM Style	20233 / 1061 (80°C/300 V)
Number of positions	12
Shielded	yes
Cable type	Black PUR/PVC twisted pair [35T]
Conductor structure signal line	18x 0.10 mm
AWG signal line	26
Conductor cross section	12x 0.14 mm <sup>2</sup> (Signal line)
Wire diameter incl. insulation	1 mm ±0.05 mm (Signal line)
External cable diameter	8.5 mm ±0.2 mm
Outer sheath, material	PUR
External sheath, color	black RAL 9005
Conductor material	Tin-plated Cu litz wires
Material wire insulation	PVC
Single wire, color	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
Optical shield covering	85 %
Max. conductor resistance	≤ 142 Ω/km (at 20 °C)
Insulation resistance	≥ 10 MΩ*km (at 20 °C)
Nominal voltage, cable	42 V AC
Test voltage	1500 V AC
Minimum bending radius, fixed installation	5 x D
Minimum bending radius, flexible installation	10 x D
Max. bending cycles	2000000
Flame resistance	According to DIN EN 60332-1-2 According to VW-1

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Resistance to oil	in accordance with DIN EN 60811-2-1
Other resistance	hydrolysis and microbe resistant in accordance with EN 50396
Special properties	Flexible cable conduit capable
Ambient temperature (operation)	-30 °C ... 80 °C (cable, fixed installation)
	-5 °C ... 80 °C (Cable, flexible installation)

## Environmental and real-life conditions

### Ambient conditions

Degree of protection	IP65
	IP68
Ambient temperature (operation)	-25 °C ... 90 °C (Plug / socket)
	-40 °C ... 80 °C (cable, fixed installation)

## Standards and regulations

Standard designation	M12 connector
Standards/specifications	IEC 61076-2-101

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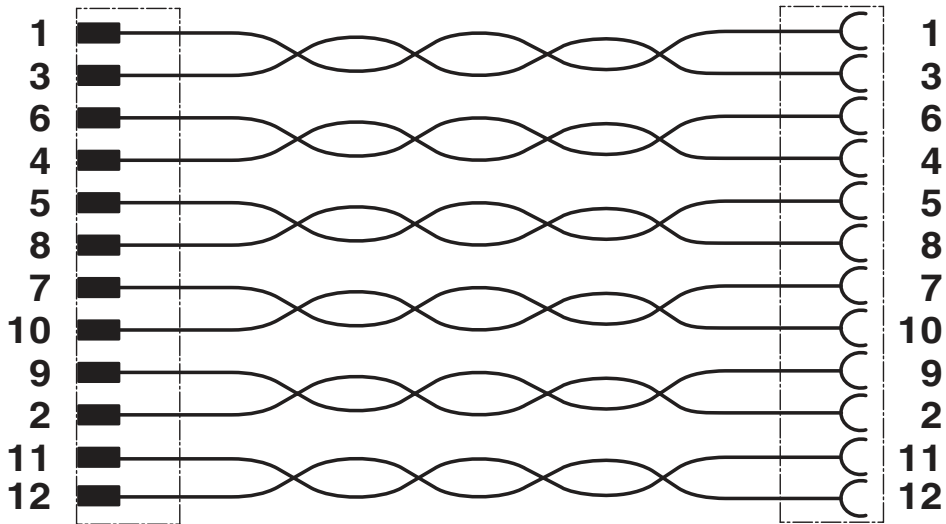


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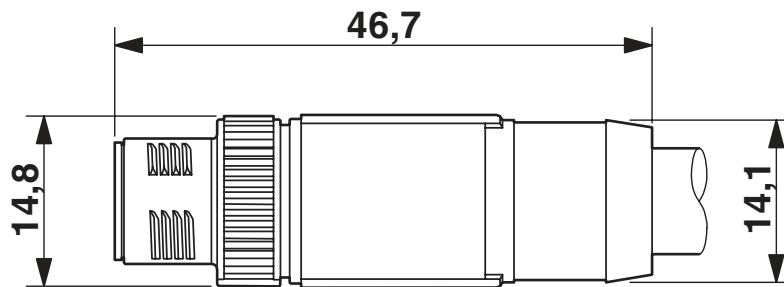
<https://www.phoenixcontact.com/us/products/1423635>

## Drawings

Circuit diagram



Dimensional drawing



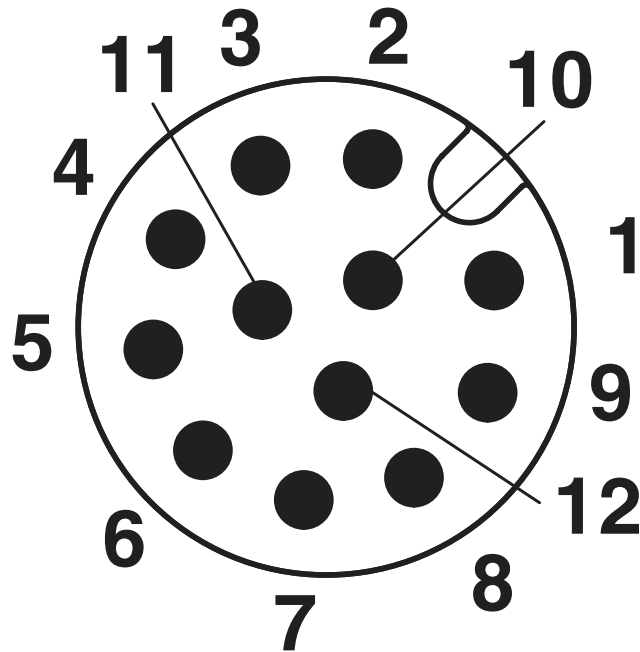
M12 SPEEDCON plug, straight, shielded

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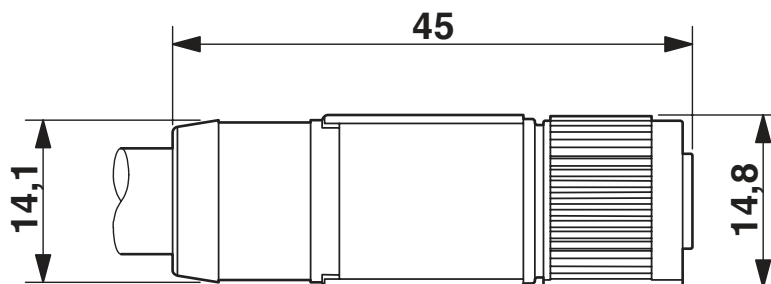
<https://www.phoenixcontact.com/us/products/1423635>

Schematic diagram



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

Dimensional drawing



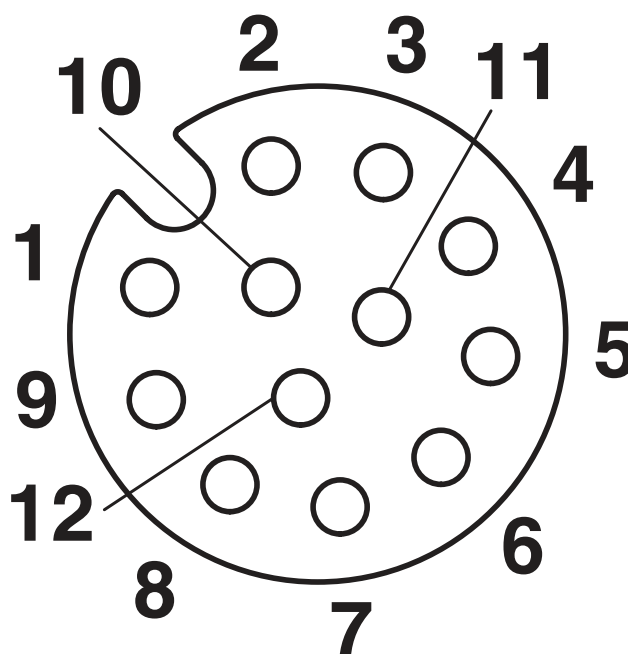
Socket M12-SPEEDCON, straight, shielded

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Schematic diagram



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

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## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1423635>

 <b>UL Listed</b> Approval ID: FILE E 221474	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
	30 V	1 A	-	-



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## Classifications

### ECLASS

ECLASS-11.0	27060311
ECLASS-12.0	27060311
ECLASS-13.0	27060311

### ETIM

ETIM 8.0	EC001855
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### UNSPSC

UNSPSC 21.0	26121600
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## Environmental product compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"

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