

# SAC-3P-M12Y/2X1,0-140/M12FS - Sensor/actuator cable



1502303

<https://www.phoenixcontact.com/us/products/1502303>

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Sensor/actuator cable, 3-position, PUR/PVC, yellow, Plug straight M12, coding: A, on Socket straight M12, coding: A and Socket straight M12, coding: A, cable length: 1 m

As shown in the illustration but with a yellow conductor

## Commercial data

Item number	1502303
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF03
Product key	AF1COA
GTIN	4017918815158
Weight per piece (including packing)	105.6 g
Weight per piece (excluding packing)	102.6 g
Customs tariff number	85444290
Country of origin	PL

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## Technical data

### Product properties

Product type	Distributor with cable
Number of positions	3
No. of cable outlets	2
Shielded	no
Coding	A

### Insulation characteristics

Overvoltage category	II
Degree of pollution	3

### Material specifications

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

### Electrical properties

Insulation resistance	$\geq 10 \text{ G}\Omega$
Nominal voltage $U_N$	48 V AC
	60 V DC
Nominal current $I_N$	4 A

### Mechanical properties

#### Mechanical data

Insertion/withdrawal cycles	$\geq 100$
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### Signaling

Status display	no
Status display present	no

### Connector

#### Connection 1

Type	Plug straight M12
Coding type	A

#### Connection 2

Type	Socket straight M12
Coding type	A

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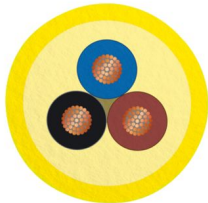
## Connection 3

Type	Socket straight M12
Coding type	A

## Cable/line

Cable length	1 m
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## PUR/PVC yellow [140]

Dimensional drawing	
Cable weight	37 kg/km
Number of positions	3
Shielded	no
Cable type	PUR/PVC yellow [140]
Conductor structure signal line	42x 0.10 mm
AWG signal line	22
Conductor cross-section	0.34 mm <sup>2</sup>
Wire diameter incl. insulation	1.52 mm ±0.02 mm
External cable diameter	5.20 mm ±0.2 mm
Outer sheath, material	PUR
External sheath, color	yellow
Conductor material	Bare Cu litz wires
Material wire insulation	PVC
Single wire, color	brown, blue, black
Thickness, insulation	≥ 0.23 mm (Core insulation) ≥ 0.38 mm (Outer cable sheath) approx. 0.45 mm (Inner sheath)
Overall twist	3 wires, twisted
Max. conductor resistance	max. 57.3 Ω/km (at 20 °C)
Insulation resistance	≥ 100 MΩ*km (at 20 °C)
Nominal voltage, cable	300 V
Test voltage	2500 V
Smallest bending radius, fixed installation	52 mm
Smallest bending radius, movable installation	52 mm
Dynamic load capacity (bending)	Max. bending cycles: 2000000, Bending radius: 52 mm, Traversing path: 5 m, Traversing rate: 3 m/s
Ambient temperature (operation)	-25 °C ... 80 °C (cable, fixed installation) -5 °C ... 80 °C (Cable, flexible installation)

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## Environmental and real-life conditions

### Ambient conditions

Degree of protection	IP65
	IP67
	IP68
Ambient temperature (operation)	-25 °C ... 90 °C (Plug / socket)
	-25 °C ... 80 °C (cable, fixed installation)
	-5 °C ... 80 °C (Cable, flexible installation)

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## Drawings

Dimensional drawing



Plug M12 x 1, Y distributor

Dimensional drawing



M12 x 1 socket, straight

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Dimensional drawing



M12 x 1 socket, straight

Schematic diagram



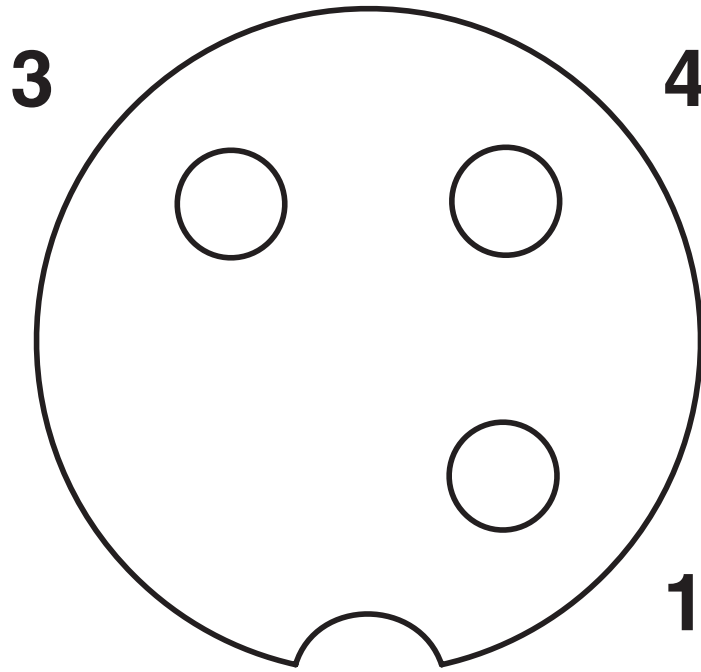
Pin assignment M12 plug, 4-pos., A-coded, view plug side

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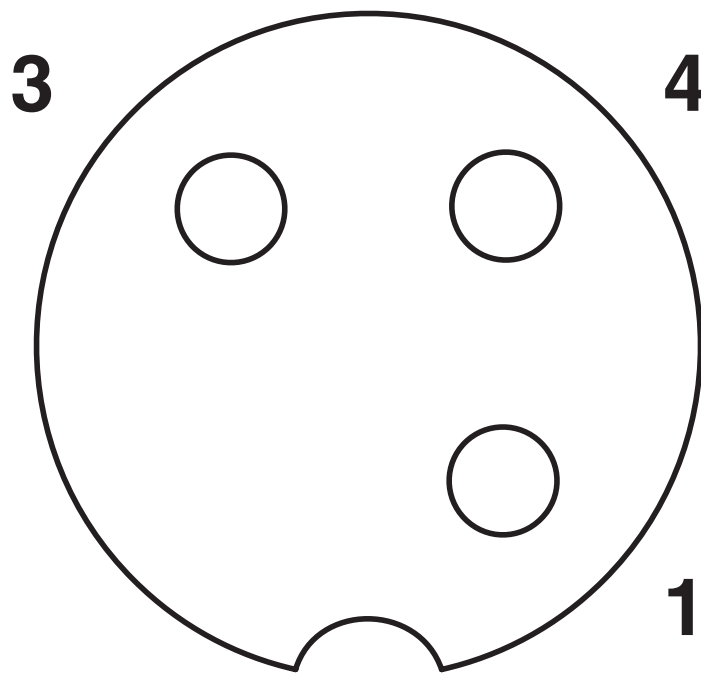
<https://www.phoenixcontact.com/us/products/1502303>

Schematic diagram



Pin assignment M12 socket, 3-pos., A-coded, view female side

Schematic diagram



Pin assignment M12 socket, 3-pos., A-coded, view female side

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## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1502303>

 <b>UL Listed</b> Approval ID: FILE E 221474				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
keine				
	300 V	4 A	-	-

 <b>cUL Listed</b> Approval ID: FILE E 221474				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
keine				
	300 V	4 A	-	-

 <b>EAC-RoHS</b> Approval ID: RU D-DE.HB35.B.00387	
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## Classifications

### ECLASS

ECLASS-13.0	27060313
ECLASS-15.0	27060313

### ETIM

ETIM 10.0	EC001855
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### UNSPSC

UNSPSC 21.0	26121600
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## Environmental product compliance

### EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
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### China RoHS

Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits

### EU REACH SVHC

REACH candidate substance (CAS No.)	No substance above 0.1 wt%
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