

# SAC-4PY-MS- 1,5-PUR/2XF - Sensor/actuator cable



1436220

<https://www.phoenixcontact.com/us/products/1436220>

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



Sensor/actuator cable, 4-position, PUR halogen-free, black-gray RAL 7021, Plug straight M12 SPEEDCON, coding: A, on Socket straight M12 SPEEDCON, coding: A and Socket straight M12 SPEEDCON, coding: A, cable length: 1.5 m

## Commercial data

Item number	1436220
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF10
Product key	AF1GAD
GTIN	4046356432474
Weight per piece (including packing)	83.5 g
Weight per piece (excluding packing)	83.5 g
Customs tariff number	85444290
Country of origin	PL

# SAC-4PY-MS- 1,5-PUR/2XF - Sensor/actuator cable



1436220

<https://www.phoenixcontact.com/us/products/1436220>

## Technical data

### Product properties

Product type	Distributor with cable
Application	Standard
Number of positions	4
No. of cable outlets	1
Shielded	no
Coding	A

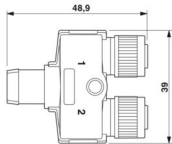
### Insulation characteristics

Overvoltage category	II
Degree of pollution	3

### Connection data

Tightening torque	0.4 Nm (M12 connector)
-------------------	------------------------

### Dimensions

Dimensional drawing	
Center distance	21 mm

### 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
Outer sheath, material	PUR
Conductor material	Bare Cu litz wires

### Electrical properties

Insulation resistance	$\geq 100 \text{ M}\Omega$
Nominal voltage $U_N$	48 V AC
	60 V DC
Nominal current $I_N$	4 A
Max. conductor resistance	58 $\Omega$ /m

### Mechanical properties

# SAC-4PY-MS- 1,5-PUR/2XF - Sensor/actuator cable



1436220

<https://www.phoenixcontact.com/us/products/1436220>

## Mechanical data

Insertion/withdrawal cycles	≥ 100
Max. bending cycles	4000000

## Signaling

Status display	no
Status display present	no

## Connector

### Connection 1

Type	Plug straight M12 SPEEDCON
Locking type	SPEEDCON
Coding type	A

### Connection 2

Type	Socket straight M12 SPEEDCON
Locking type	SPEEDCON
Coding type	A

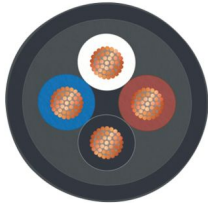
### Connection 3

Type	Socket straight M12 SPEEDCON
Locking type	SPEEDCON
Coding type	A

## Cable/line

Cable length	1.5 m
--------------	-------

### PUR halogen-free black [PUR]

Dimensional drawing	
Cable weight	30 kg/km
UL AWM Style	20549 / 10493 (80°C/300 V)
Number of positions	4
Shielded	no
Cable type	PUR halogen-free black [PUR]
Conductor structure signal line	42x 0.10 mm
AWG signal line	22
Conductor cross-section	4x 0.34 mm <sup>2</sup> (Signal line)

# SAC-4PY-MS- 1,5-PUR/2XF - Sensor/actuator cable



1436220

<https://www.phoenixcontact.com/us/products/1436220>

Wire diameter incl. insulation	1.27 mm ±0.02 mm
External cable diameter	4.20 mm ±0.15 mm
Outer sheath, material	PUR
External sheath, color	black-gray RAL 7021
Conductor material	Bare Cu litz wires
Material wire insulation	PP
Single wire, color	brown, white, blue, black
Thickness, insulation	≥ 0.21 mm
Thickness, outer sheath	approx. 0.50 mm
Overall twist	4 wires, twisted
Max. conductor resistance	≤ 58 Ω/km
Insulation resistance	≥ 1 GΩ*km
Nominal voltage, cable	≤ 300 V
Test voltage	≥ 3000 V
Minimum bending radius, fixed installation	5 x D
Minimum bending radius, flexible installation	10 x D
Smallest bending radius, fixed installation	21 mm
Smallest bending radius, movable installation	42 mm
Dynamic load capacity (bending)	Max. bending cycles: 10000000, Bending radius: 42 mm, Bending radius: 10 x D, Traversing path: 10 m, Traversing rate: 3 m/s, Acceleration: 10 m/s <sup>2</sup>
Dynamic load capacity (torsion)	Torsion: ±180 °/m, Torsion cycles: ≥5000000, Torsional frequency: 35 cycles/min.
Halogen-free	in accordance with DIN VDE 0472 part 815 in accordance with DIN EN 50267-2-1
Flame resistance	in accordance with UL 758/1581 FT2 DIN EN 60332-2-2 (20 s)
Resistance to oil	in accordance with DIN EN 60811-2-1
Other resistance	Highly resistant to acids, alkaline solutions and solvents hydrolysis and microbe resistant partly UV-resistant (in accordance with DIN EN ISO 4892-2-A) Low adhesion abrasion-resistant
Special properties	Flexible cable conduit capable Silicone-free Free of substances which would hinder coating with paint or varnish flexible
Ambient temperature (operation)	-40 °C ... 80 °C (cable, fixed installation) -25 °C ... 80 °C (Cable, flexible installation)

## Environmental and real-life conditions

### Ambient conditions

Degree of protection	IP65
	IP67

# SAC-4PY-MS- 1,5-PUR/2XF - Sensor/actuator cable



1436220

<https://www.phoenixcontact.com/us/products/1436220>

Ambient temperature (operation) (male connector/female connector)	-25 °C ... 90 °C (Plug / socket)
Ambient temperature (operation) (fixed installation)	-40 °C ... 80 °C (cable, fixed installation)
Ambient temperature (operation) (flexible installation)	-5 °C ... 80 °C (Cable, flexible installation)

## Standards and regulations

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

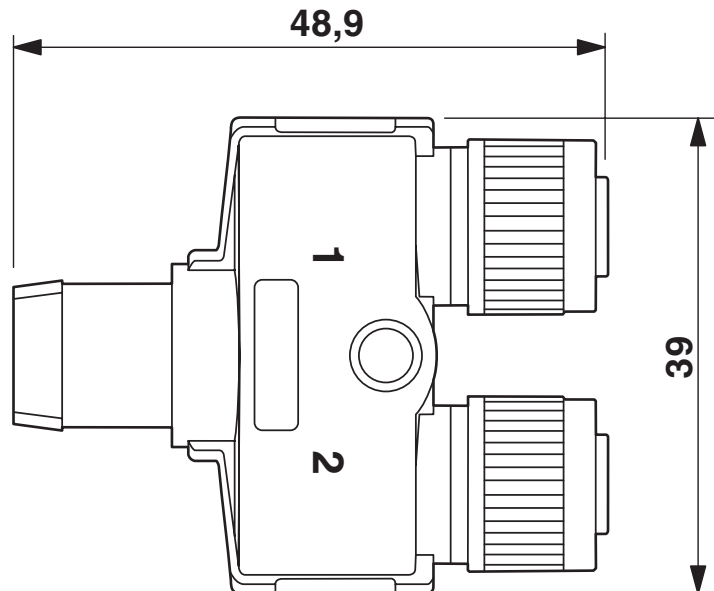
# SAC-4PY-MS- 1,5-PUR/2XF - Sensor/actuator cable

1436220

<https://www.phoenixcontact.com/us/products/1436220>

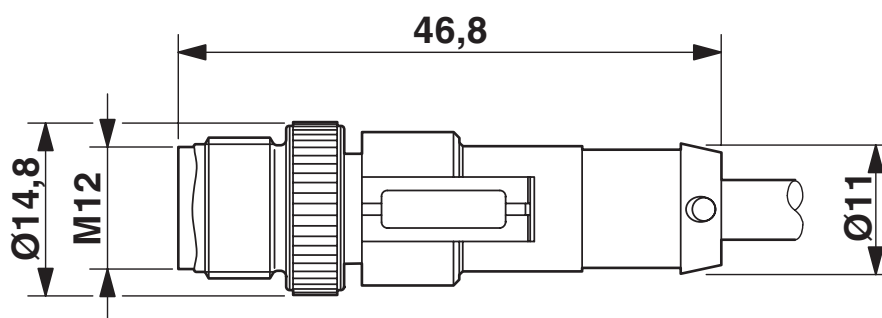
## Drawings

Dimensional drawing



Y distributor, 2 x socket M12 x 1

Dimensional drawing



Plug, M12 x 1, straight, shielded

# SAC-4PY-MS- 1,5-PUR/2XF - Sensor/actuator cable



1436220

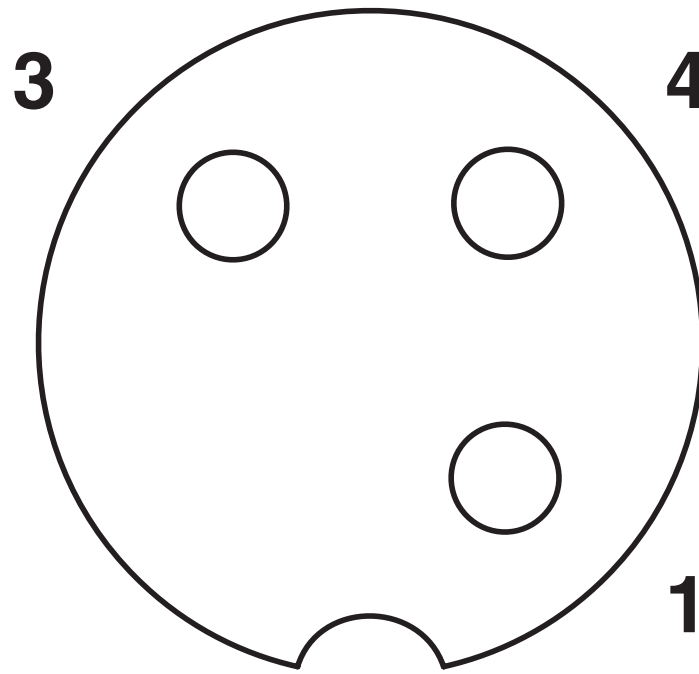
<https://www.phoenixcontact.com/us/products/1436220>

Schematic diagram



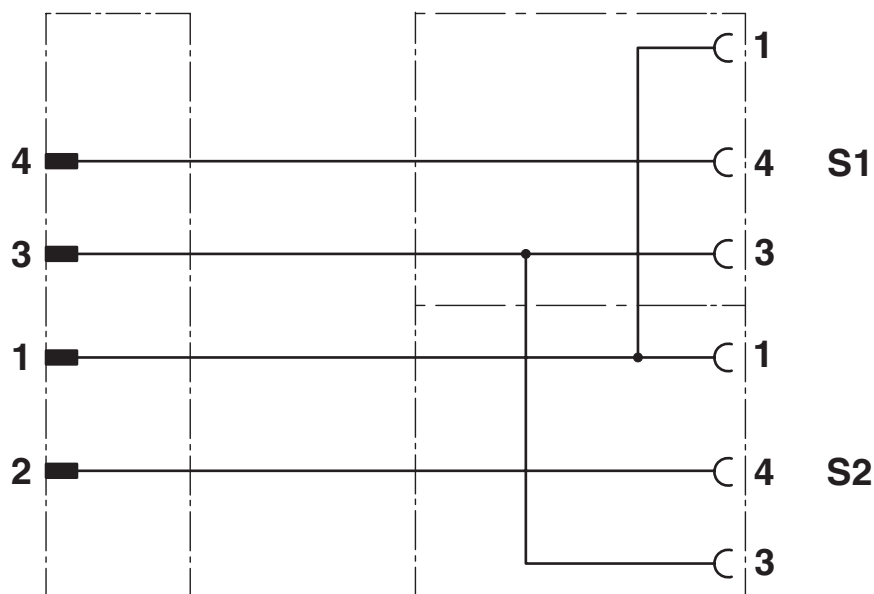
Pin assignment M12 plug, 4-pos., A-coded, view plug side

Schematic diagram



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

Circuit diagram



Contact assignment of the M12 Y distributor

# SAC-4PY-MS- 1,5-PUR/2XF - Sensor/actuator cable



1436220

<https://www.phoenixcontact.com/us/products/1436220>

## Classifications

### ECLASS

ECLASS-13.0	27060311
ECLASS-15.0	27060311

### ETIM

ETIM 10.0	EC001855
-----------	----------

### UNSPSC

UNSPSC 21.0	26121600
-------------	----------

# SAC-4PY-MS- 1,5-PUR/2XF - Sensor/actuator cable



1436220

<https://www.phoenixcontact.com/us/products/1436220>

## Environmental product compliance

### EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
---	--------------------

### 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%
-------------------------------------	----------------------------

### EF3.1 Climate Change

CO2e kg	1.546 kg CO2e
---------	---------------

Phoenix Contact 2026 © - all rights reserved  
<https://www.phoenixcontact.com>

Phoenix Contact USA  
586 Fulling Mill Road  
Middletown, PA 17057, United States  
(+717) 944-1300  
[info@phoenixcon.com](mailto:info@phoenixcon.com)