

1436165

<https://www.phoenixcontact.com/us/products/1436165>

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, free cable end, on Socket straight M12 SPEEDCON, coding: A and Socket straight M12 SPEEDCON, coding: A, cable length: 1.5 m

Commercial data

Item number	1436165
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF10
Product key	BF1GAD
Catalog page	Page 249 (C-2-2019)
GTIN	4046356432412
Weight per piece (including packing)	78 g
Weight per piece (excluding packing)	65.84 g
Customs tariff number	85444290
Country of origin	PL

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



1436165

<https://www.phoenixcontact.com/us/products/1436165>

Technical data

Product properties

Product type	Distributor with cable
Application	Standard
Number of positions	4
No. of cable outlets	1
Shielded	no
Coding	A
Thread type	M12 x 1

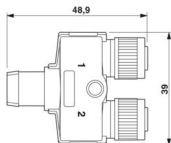
Insulation characteristics

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 Ω/m

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



1436165

<https://www.phoenixcontact.com/us/products/1436165>

Mechanical properties

Mechanical data

Insertion/withdrawal cycles	≥ 100
Max. bending cycles	4000000

Signaling

Status display	no
Status display present	No

Connector

Connection 1

Type	free cable end
------	----------------

Connection 2

Type	Socket straight M12 SPEEDCON
Locking type	SPEEDCON
Coding type	A

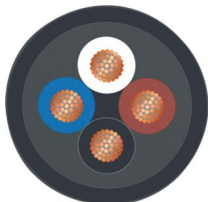
Connection 3

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 ² (Signal line)
Wire diameter incl. insulation	1.27 mm ±0.02 mm

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



1436165

<https://www.phoenixcontact.com/us/products/1436165>

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: 10 x D, Traversing path: 10 m, Traversing rate: 3 m/s, Acceleration: 10 m/s²
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
Ambient temperature (operation)	-25 °C ... 90 °C (Plug / socket) -40 °C ... 80 °C (cable, fixed installation)

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



1436165

<https://www.phoenixcontact.com/us/products/1436165>

	-5 °C ... 80 °C (Cable, flexible installation)
--	--

Standards and regulations

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

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

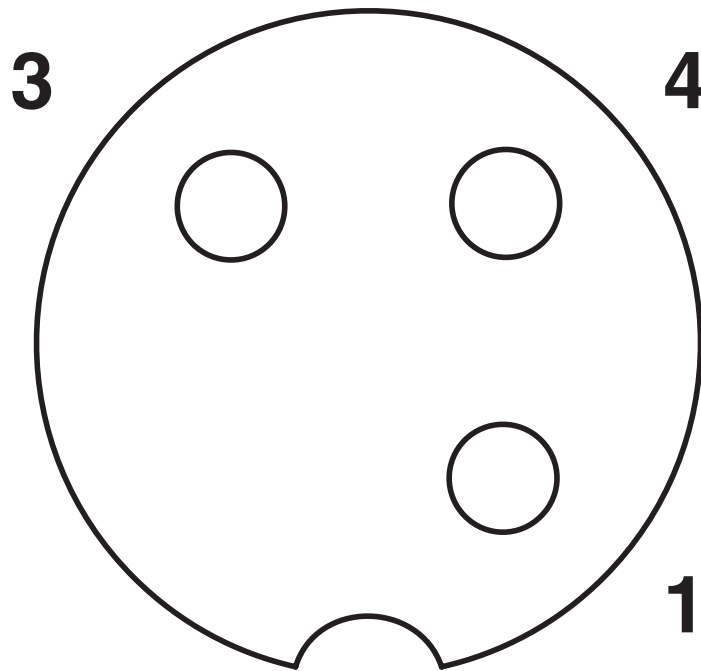
1436165

<https://www.phoenixcontact.com/us/products/1436165>



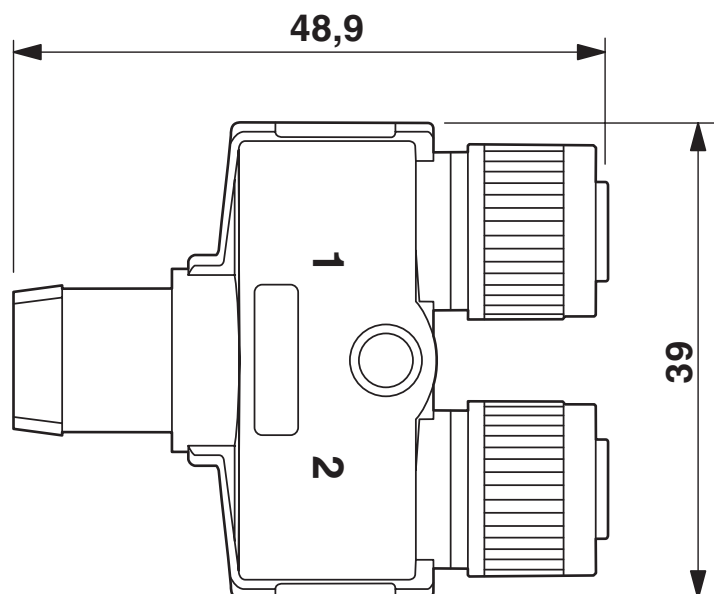
Drawings

Schematic diagram



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

Dimensional drawing



Y distributor, 2 x socket M12 x 1

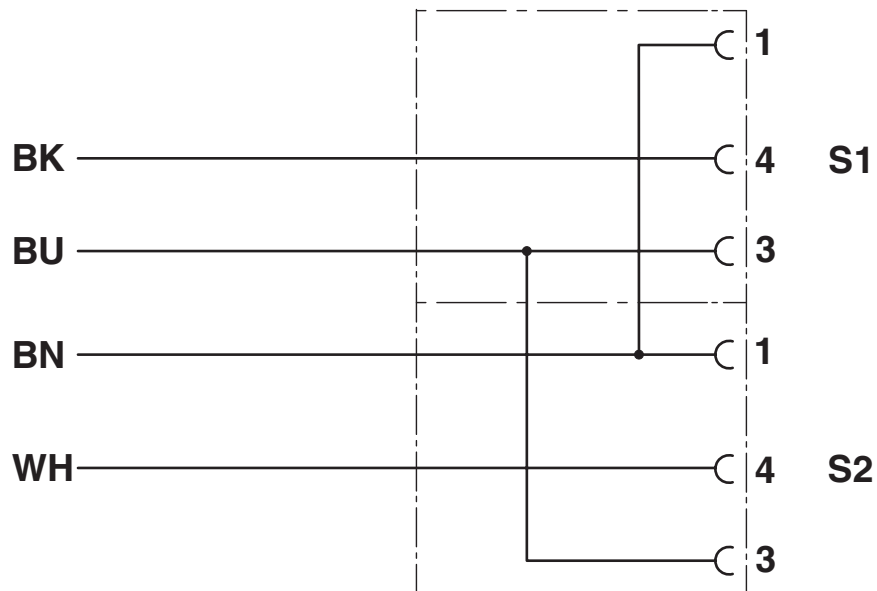
SAC-4PY- 1,5-PUR/2XF - Sensor/actuator cable

1436165

<https://www.phoenixcontact.com/us/products/1436165>



Circuit diagram



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



1436165

<https://www.phoenixcontact.com/us/products/1436165>

Classifications

ECLASS

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

ETIM

ETIM 9.0	EC001855
----------	----------

UNSPSC

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

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



1436165

<https://www.phoenixcontact.com/us/products/1436165>

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%
EF3.0 Climate Change	
CO2e kg	1.489 kg CO2e

Phoenix Contact 2024 © - 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