

SAC-4P-M 8MS/2,0-PUR/M 8FS - Sensor/actuator cable



1420545

<https://www.phoenixcontact.com/us/products/1420545>

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 M8, coding: A, connected with unwired, on Socket straight M8, cable length: 2 m

Your advantages

- Easy and safe: 100% electrically tested plug-in components

Commercial data

Item number	1420545
Packing unit	1 pc
Minimum order quantity	50 pc
Note	Made to order (non-returnable)
Sales key	BF01
Product key	BF1BCA
GTIN	4055626462264
Weight per piece (including packing)	52.6 g
Weight per piece (excluding packing)	51.1 g
Customs tariff number	85444290
Country of origin	DE

SAC-4P-M 8MS/2,0-PUR/M 8FS - Sensor/actuator cable



1420545

<https://www.phoenixcontact.com/us/products/1420545>

Technical data

Product properties

Product type	Sensor/actuator cable
Number of positions	4
Application	Standard
No. of cable outlets	1
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
Outer sheath, material	PUR
Conductor material	Bare Cu litz wires

Electrical properties

Contact resistance	$\leq 5 \text{ m}\Omega$
Insulation resistance	$\geq 100 \text{ M}\Omega$
Nominal voltage U_N	48 V AC
	60 V DC
Nominal current I_N	4 A
Protective circuit	unwired
Max. conductor resistance	78 Ω/km

Mechanical properties

Mechanical data

Insertion/withdrawal cycles	≥ 100
Max. bending cycles	4000000

Signaling

Status display	No
Status display present	No

Connector

SAC-4P-M 8MS/2,0-PUR/M 8FS - Sensor/actuator cable



1420545

<https://www.phoenixcontact.com/us/products/1420545>

Connection 1

Type	Plug straight M8
Number of positions	4
Coding type	A
Number of positions	4

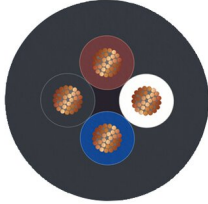
Connection 2

Type	Socket straight M8
Number of positions	4
	4

Cable/line

Cable length	2 m
--------------	-----

PUR halogen-free black [PUR]

Dimensional drawing	
Cable weight	25 kg/km
UL AWM Style	20549
Number of positions	4
Shielded	no
Cable type	PUR halogen-free black [PUR]
Conductor structure signal line	32x 0.10 mm
AWG signal line	24
Conductor cross section	4x 0.25 mm ² (Signal line)
Wire diameter incl. insulation	1.17 mm ±0.02 mm (Signal line)
External cable diameter	4.4 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 (Core insulation)
Thickness, outer sheath	approx. 0.7 mm
Overall twist	4 wires, twisted
Max. conductor resistance	max. 78 Ω/km (at 20 °C)
Insulation resistance	≥ 100 GΩ*km (at 20 °C)
Nominal voltage, cable	≤ 300 V

SAC-4P-M 8MS/2,0-PUR/M 8FS - Sensor/actuator cable



1420545

<https://www.phoenixcontact.com/us/products/1420545>

Test voltage	≥ 3000 V
Smallest bending radius, fixed installation	22 mm
Smallest bending radius, movable installation	44 mm
Max. bending cycles	4000000
Halogen-free	in accordance with DIN VDE 0472 part 815
Flame resistance	in accordance with DIN UL-Style 20549
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
Special properties	Flexible cable conduit capable
	Silicone-free
	Free of substances which would hinder coating with paint or varnish
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)
	-5 °C ... 80 °C (Cable, flexible installation)

Standards and regulations

Standard designation	M8 connector
Standards/specifications	IEC 61076-2-104

SAC-4P-M 8MS/2,0-PUR/M 8FS - Sensor/actuator cable



1420545

<https://www.phoenixcontact.com/us/products/1420545>

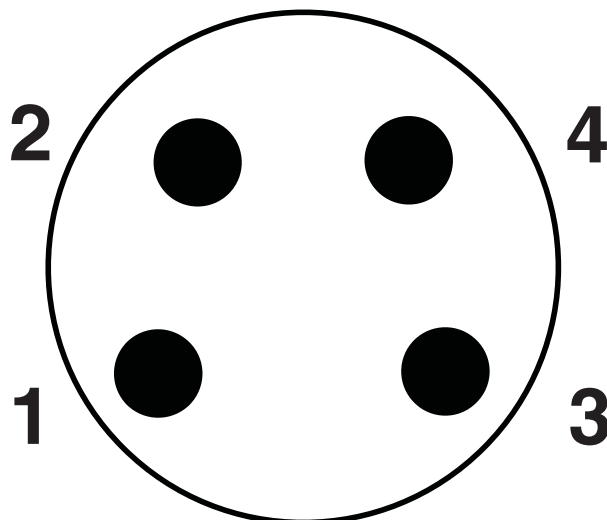
Drawings

Dimensional drawing



M8 x 1 male plug, straight version

Schematic diagram



Pin assignment M8 plug, 4-pos., view male side

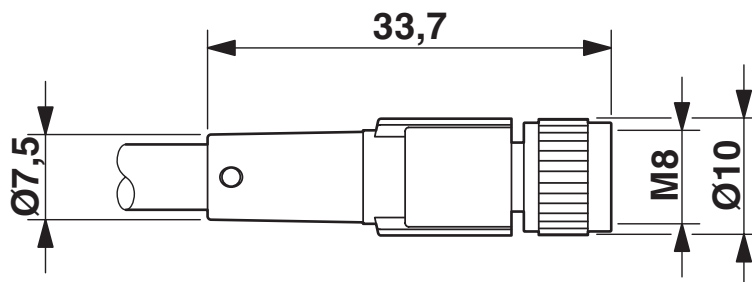
SAC-4P-M 8MS/2,0-PUR/M 8FS - Sensor/actuator cable



1420545

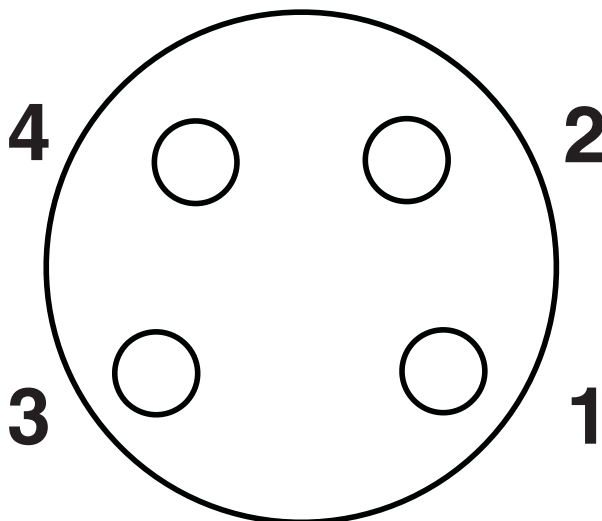
<https://www.phoenixcontact.com/us/products/1420545>

Dimensional drawing



Socket M8 x 1, straight

Schematic diagram



Pin assignment M8 socket, 4-pos., view female side

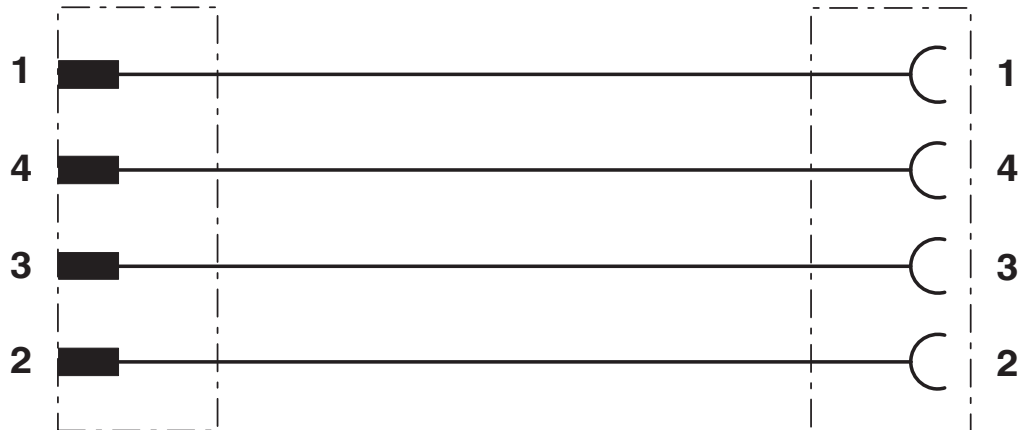
SAC-4P-M 8MS/2,0-PUR/M 8FS - Sensor/actuator cable



1420545

<https://www.phoenixcontact.com/us/products/1420545>

Circuit diagram



SAC-4P-M 8MS/2,0-PUR/M 8FS - Sensor/actuator cable



1420545

<https://www.phoenixcontact.com/us/products/1420545>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1420545>



UL Listed

Approval ID: FILE E 221474

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
	30 V	4 A	-	-



cUL Listed

Approval ID: FILE E 221474

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
	30 V	4 A	-	-

cULus Listed

SAC-4P-M 8MS/2,0-PUR/M 8FS - Sensor/actuator cable



1420545

<https://www.phoenixcontact.com/us/products/1420545>

Classifications

ECLASS

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

ETIM

ETIM 8.0	EC001855
----------	----------

UNSPSC

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

SAC-4P-M 8MS/2,0-PUR/M 8FS - Sensor/actuator cable



1420545
<https://www.phoenixcontact.com/us/products/1420545>

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"

SAC-4P-M 8MS/2,0-PUR/M 8FS - Sensor/actuator cable



1420545

<https://www.phoenixcontact.com/us/products/1420545>

Accessories

PROT-M 8 FS-PA-CHAIN - Sealing cap

1430857

<https://www.phoenixcontact.com/us/products/1430857>

M8 sealing cap made of plastic with fixing band for sensor cables, for M8 plugs



UCT-WMT (23X4) - Conductor marker

0801453

<https://www.phoenixcontact.com/us/products/0801453>

Conductor marker, Sheet, white, unlabeled, can be labeled with: TOPMARK NEO, TOPMARK LASER, BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, THERMOMARK PRIME, THERMOMARK CARD 2.0, THERMOMARK CARD, mounting type: insert, cable diameter range: 1.5 ... 35 mm, lettering field size: 23 x 4 mm, Number of individual labels: 30



SAC-4P-M 8MS/2,0-PUR/M 8FS - Sensor/actuator cable



1420545

<https://www.phoenixcontact.com/us/products/1420545>

UC-WMT (23X4) - Conductor marker

0819411

<https://www.phoenixcontact.com/us/products/0819411>



Conductor marker, Sheet, white, unlabeled, can be labeled with: BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, PLOTMARK, CMS-P1-PLOTTER, mounting type: insert, cable diameter range: 1.5 ... 35 mm, lettering field size: 23 x 4 mm, Number of individual labels: 24

US-WMT (23X4) - Cable marker

0828769

<https://www.phoenixcontact.com/us/products/0828769>



Cable marker, Card, white, unlabeled, can be labeled with: BLUEMARK ID COLOR, BLUEMARK ID, THERMOMARK PRIME, THERMOMARK CARD 2.0, THERMOMARK CARD, mounting type: slide-on, cable diameter range: 1.5 ... 35 mm, lettering field size: 23 x 4 mm, Number of individual labels: 56

SAC-4P-M 8MS/2,0-PUR/M 8FS - Sensor/actuator cable



1420545

<https://www.phoenixcontact.com/us/products/1420545>

WMTW (23X4)R - Cable marker

0831004

<https://www.phoenixcontact.com/us/products/0831004>



Cable marker, Roll, white, unlabeled, can be labeled with: THERMOMARK E.300 (D)/600 (D), THERMOMARK ROLL 2.0, THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK ROLLMASTER 300/600, THERMOMARK X1.2, mounting type: insert, cable diameter range: 1.5 ... 35 mm, lettering field size: 23 x 4 mm, Number of individual labels: 3000

B-STIFT - Marker pen

1051993

<https://www.phoenixcontact.com/us/products/1051993>



Marker pen, for manual labeling of unprinted Zack strips, smear-proof and waterproof, line thickness 0.5 mm

SAC-4P-M 8MS/2,0-PUR/M 8FS - Sensor/actuator cable



1420545

<https://www.phoenixcontact.com/us/products/1420545>

PROT-M 8 MS-PA-CHAIN - Screw plug

1430860

<https://www.phoenixcontact.com/us/products/1430860>

M8 sealing cap made of plastic with fixing band for sensor cables, for M8 sockets



TSD 02 SAC - Torque screwdriver

1208487

<https://www.phoenixcontact.com/us/products/1208487>

Torque screwdriver, with preset torque of 0.2 Nm and 4 mm hexagonal drive for M8 connectors



SAC-4P-M 8MS/2,0-PUR/M 8FS - Sensor/actuator cable



1420545

<https://www.phoenixcontact.com/us/products/1420545>

SAC BIT M8-D10 - Tool

1208461

<https://www.phoenixcontact.com/us/products/1208461>



Nut for assembling M8 connectors with longitudinal knurl and a knurl diameter of 10 mm, for 4 mm hexagonal drive

Phoenix Contact 2023 © - 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