

SAC-4P-M 8MR/ 0,5-PUR/M 8FR SH - Sensor/actuator cable



1147958

<https://www.phoenixcontact.com/us/products/1147958>

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, shielded, Plug angled M8, coding: A, on Socket angled M8, cable length: 0.5 m

Commercial data

Item number	1147958
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Sales key	BF01
Product key	AF1BJA
GTIN	4063151140342
Weight per piece (including packing)	37.28 g
Weight per piece (excluding packing)	37.28 g
Customs tariff number	85444290
Country of origin	PL

SAC-4P-M 8MR/ 0,5-PUR/M 8FR SH - Sensor/actuator cable



1147958

<https://www.phoenixcontact.com/us/products/1147958>

Technical data

Product properties

Product type	Sensor/actuator cable
Number of positions	4
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	HB
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	$\geq 100 \text{ M}\Omega$
Nominal voltage U_N	48 V AC
	60 V DC
Nominal current I_N	4 A

Signaling

Status display	no
Status display present	no

Connector

Connection 1

Type	Plug angled M8
Number of positions	4
Coding type	A

Connection 2

Type	Socket angled M8
Number of positions	4

Cable/line

Cable length	0.5 m
--------------	-------

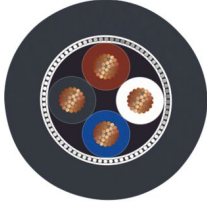
PUR halogen-free black [PUR]

SAC-4P-M 8MR/ 0,5-PUR/M 8FR SH - Sensor/actuator cable



1147958

<https://www.phoenixcontact.com/us/products/1147958>

Dimensional drawing	
Cable weight	31 kg/km
UL AWM Style	20549
Number of positions	4
Shielded	yes
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	4.70 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) approx. 0.50 mm (Outer cable sheath)
Overall twist	4 wires, twisted
Optical shield covering	80 %
Max. conductor resistance	max. 78 Ω/km (at 20 °C)
Insulation resistance	≥ 100 GΩ*km (at 20 °C)
Nominal voltage, cable	≤ 300 V
Test voltage	≥ 3000 V
Smallest bending radius, fixed installation	24 mm
Smallest bending radius, movable installation	48 mm
Dynamic load capacity (bending)	Max. bending cycles: 10000000, Bending radius: 48 mm, Traversing path: 10 m, Traversing rate: 3 m/s, Acceleration: 10 m/s ²
Dynamic load capacity (torsion)	Torsion: ±180 °/m, Torsion cycles: ≥2000000, Torsional frequency: 35 cycles/min.
Halogen-free	in accordance with DIN VDE 0472 part 815
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

SAC-4P-M 8MR/ 0,5-PUR/M 8FR SH - Sensor/actuator cable



1147958

<https://www.phoenixcontact.com/us/products/1147958>

Special properties	partly UV-resistant (in accordance with DIN EN ISO 4892-2-A)
	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)
	-25 °C ... 80 °C (cable, fixed installation)
	-5 °C ... 80 °C (Cable, flexible installation)

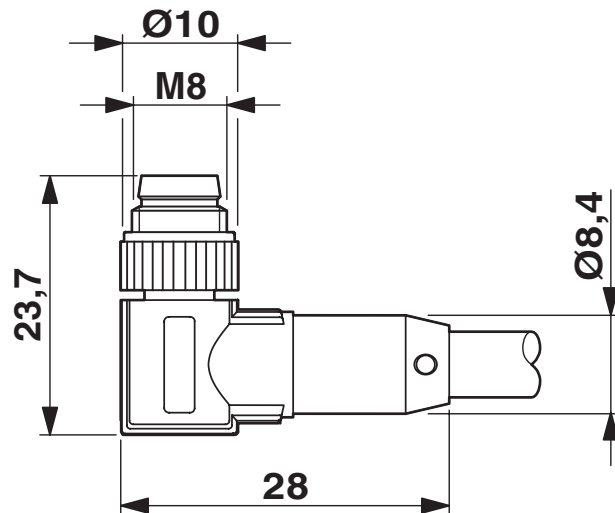
SAC-4P-M 8MR/ 0,5-PUR/M 8FR SH - Sensor/actuator cable

1147958

<https://www.phoenixcontact.com/us/products/1147958>

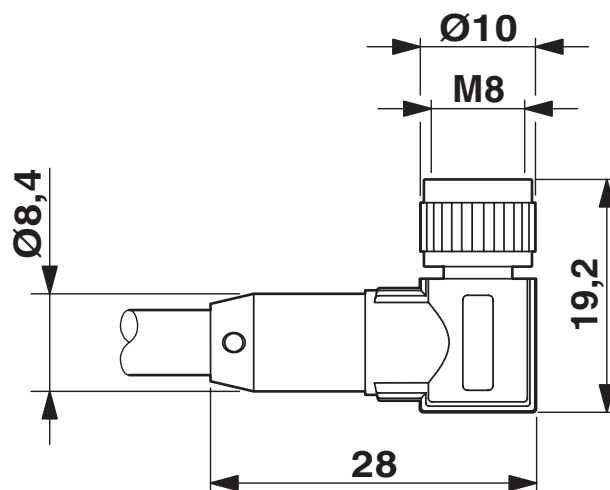
Drawings

Dimensional drawing



Plug M8 x 1, angled, shielded

Dimensional drawing

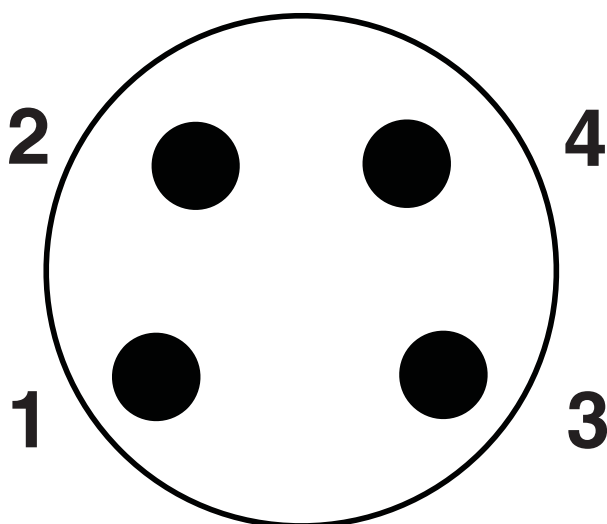


Socket M8 x 1, angled, shielded

1147958

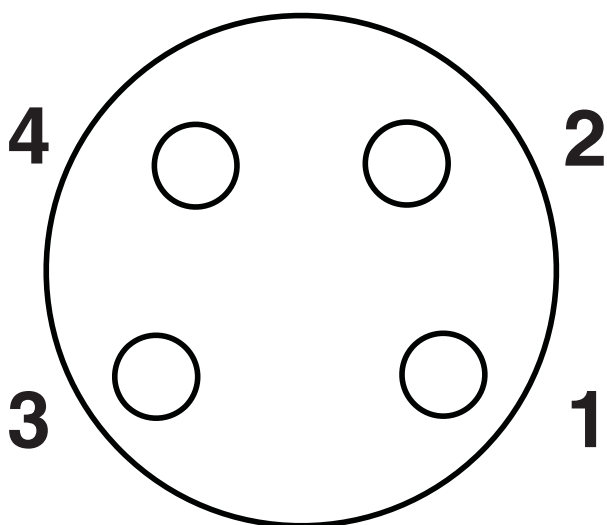
<https://www.phoenixcontact.com/us/products/1147958>

Schematic diagram



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

Schematic diagram



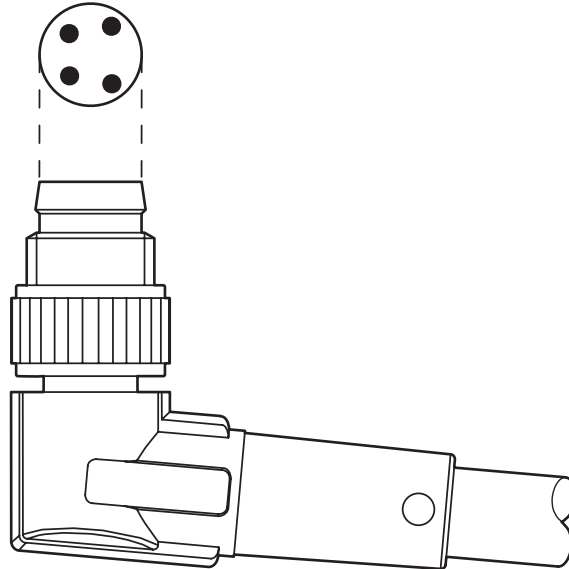
Pin assignment M8 socket, 4-pos.

SAC-4P-M 8MR/ 0,5-PUR/M 8FR SH - Sensor/actuator cable

1147958

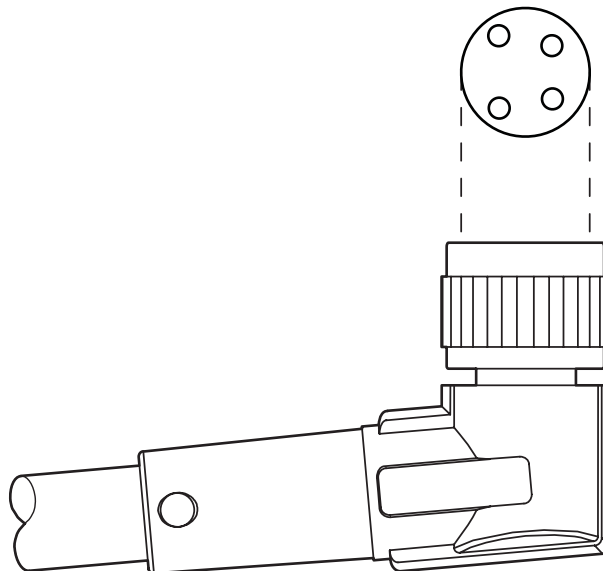
<https://www.phoenixcontact.com/us/products/1147958>

Schematic diagram



Layout of connector pin assignments

Schematic diagram



Layout of connector pin assignments

SAC-4P-M 8MR/ 0,5-PUR/M 8FR SH - Sensor/actuator cable



1147958

<https://www.phoenixcontact.com/us/products/1147958>

Circuit diagram



Contact assignment of M8 plugs/sockets

SAC-4P-M 8MR/ 0,5-PUR/M 8FR SH - Sensor/actuator cable



1147958

<https://www.phoenixcontact.com/us/products/1147958>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1147958>

 UL Listed Approval ID: FILE E 221474				
	Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
keine				
	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
keine				
	30 V	4 A	-	-

SAC-4P-M 8MR/ 0,5-PUR/M 8FR SH - Sensor/actuator cable



1147958

<https://www.phoenixcontact.com/us/products/1147958>

Classifications

ECLASS

ECLASS-13.0	27060311
ECLASS-15.0	27060311

ETIM

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

UNSPSC

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

1147958
<https://www.phoenixcontact.com/us/products/1147958>

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%

Phoenix Contact 2025 © - 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