

SAC-8P-M 8MS/ 3,0-PUR SH - Sensor/actuator cable

1404140

<https://www.phoenixcontact.com/us/products/1404140>



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, 8-position, PUR halogen-free, black-gray RAL 7021, shielded, Plug straight M8, coding: A, on free cable end, cable length: 3 m

Your advantages

- Easy and safe: 100 % electrically tested plug-in components
- Save space – with high-pos. connectors
- Reliable signal transmission – 360° shielding in environments with electromagnetic interference

Commercial data

Item number	1404140
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Sales key	BF01
Product key	AF1BNA
GTIN	4046356680592
Weight per piece (including packing)	148.5 g
Weight per piece (excluding packing)	142 g
Customs tariff number	85444290
Country of origin	PL

Technical data

Product properties

Product type	Sensor/actuator cable
Application	Standard
Number of positions	8
No. of cable outlets	1
Shielded	yes
Coding	A

Insulation characteristics

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	$\geq 100 \text{ M}\Omega$
Nominal voltage U_N	30 V AC
	30 V DC
Nominal current I_N	1.5 A

Mechanical properties

Mechanical data	
Insertion/withdrawal cycles	≥ 100

Signaling

Status display	no
Status display present	no

Connection data

Conductor connection	
Tightening torque	0.2 Nm (M8 connectors)

Connector

Connection 1	
Type	Plug straight M8

SAC-8P-M 8MS/ 3,0-PUR SH - Sensor/actuator cable

1404140

<https://www.phoenixcontact.com/us/products/1404140>



Number of positions	8
Coding type	A
Connection 2	
Type	free cable end
Cable/line	
Cable length	3 m
PUR halogen-free black [PUR]	
Dimensional drawing	
Cable weight	45 kg/km
UL AWM Style	20549
Number of positions	8
Shielded	yes
Cable type	PUR halogen-free black [PUR]
Conductor structure signal line	18x 0.10 mm
AWG signal line	26
Conductor cross section	8x 0.14 mm ² (Signal line)
Wire diameter incl. insulation	1 mm ±0.02 mm (Signal line)
External cable diameter	5.90 mm ±0.2 mm
Outer sheath, material	PUR
External sheath, color	black-gray RAL 7021
Conductor material	Bare Cu litz wires
Material, filler	PE
Material wire insulation	PP
Single wire, color	white, brown, green, yellow, gray, pink, blue, red
Thickness, insulation	≥ 0.21 mm (Signal line) ≥ 0.38 mm (Outer cable sheath)
Overall twist	8 wires around filler to the core
Length of twist, overall twist	58 mm
Optical shield covering	85 %
Max. conductor resistance	139 Ω/km (at 20 °C)
Insulation resistance	1 GΩ*km (at 20 °C)
Nominal voltage, cable	≤ 300 V AC
Test voltage	≥ 3000 V AC (Spark test)
Test voltage Core/Shield	≥ 2000.00 V AC (for 60 s)
Smallest bending radius, fixed installation	29.5 mm

SAC-8P-M 8MS/ 3,0-PUR SH - Sensor/actuator cable

1404140

<https://www.phoenixcontact.com/us/products/1404140>



Smallest bending radius, movable installation	59 mm
Dynamic load capacity (bending)	Max. bending cycles: 2000000, Bending radius: 59 mm, Traversing path: 10 m, Traversing rate: 3 m/s, Acceleration: 10 m/s ²
Dynamic load capacity (torsion)	Torsion: ±180 °/m, Torsion cycles: ≥1000000, 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	according to UL 758/1581 (horizontal) in accordance with UL 758/1581 FT2
Resistance to oil	in accordance with DIN EN 60811-2-1
Other resistance	hydrolysis and microbe resistant Resistant to salt water Low adhesion abrasion-resistant partly UV-resistant (in accordance with DIN EN ISO 4892-2-A)
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) (male connector/female connector)	-25 °C ... 85 °C (Plug / socket)

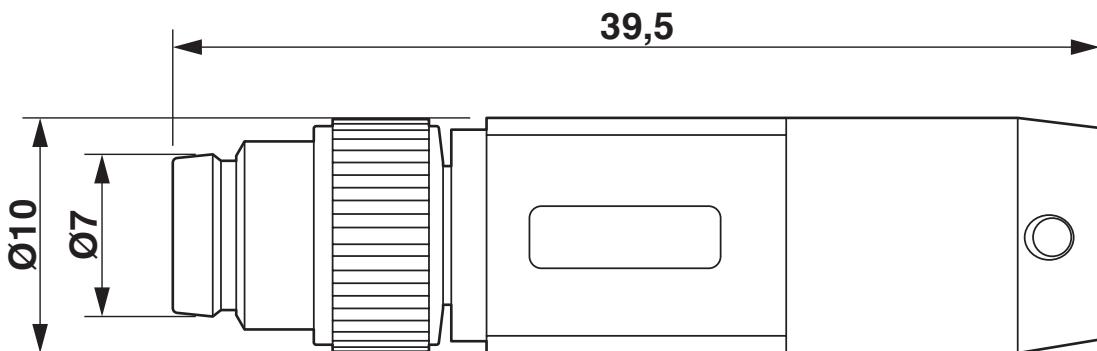
Standards and regulations

M8

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

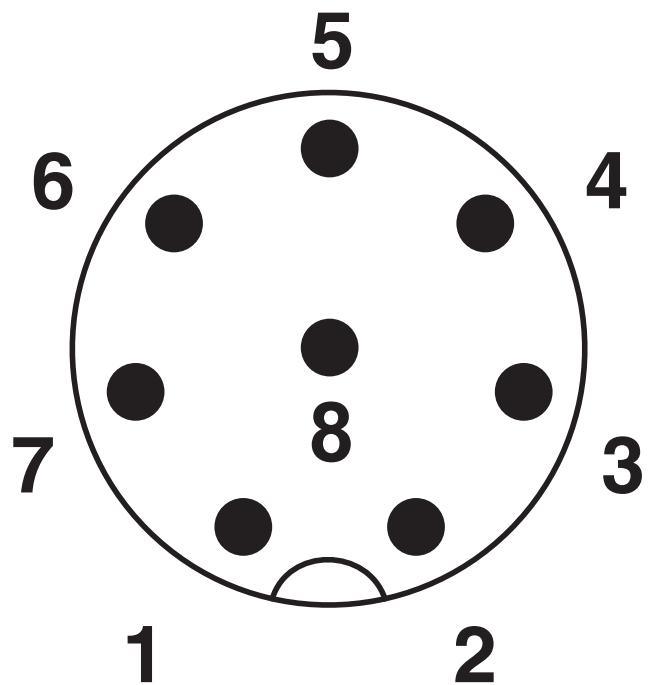
Drawings

Dimensional drawing



M8 x 1 male plug, straight version

Schematic diagram



M8 plug pin assignment, 8-pos., view of pin side

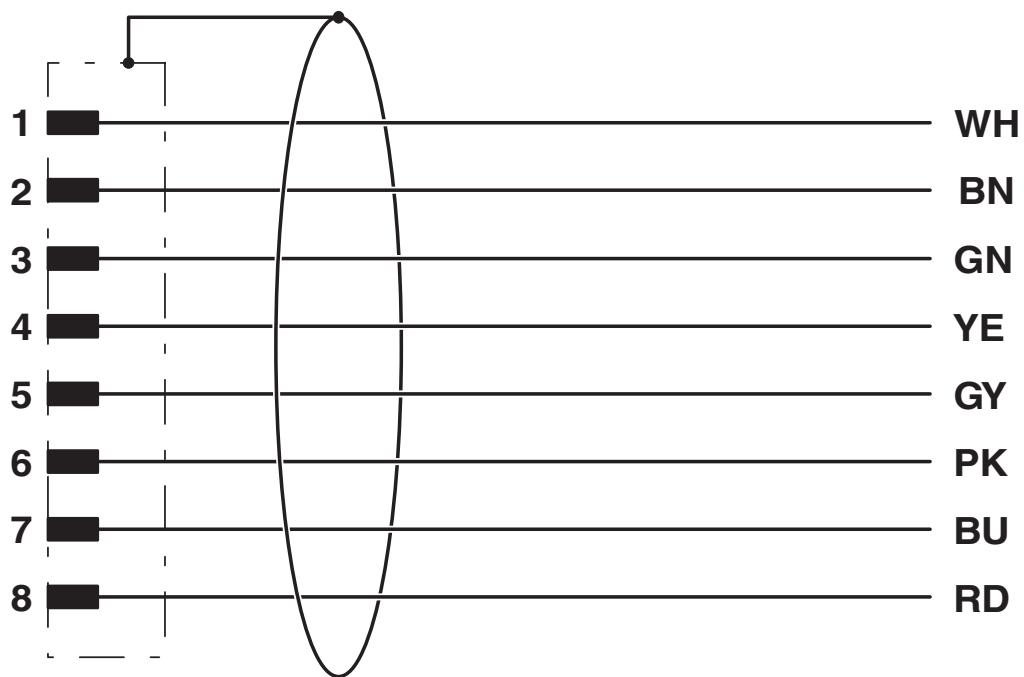
SAC-8P-M 8MS/ 3,0-PUR SH - Sensor/actuator cable

1404140

<https://www.phoenixcontact.com/us/products/1404140>



Circuit diagram



Contact assignment of the M8 plug

Approvals

ⓘ To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1404140>

UL Listed		Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine					
		30 V	1.5 A	-	-

cUL Listed		Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine					
		30 V	1.5 A	-	-

EAC-RoHS		Approval ID: RU D-DE.HB35.B.00387			

Classifications

ECLASS

ECLASS-13.0	27060311
ECLASS-15.0	27060311

ETIM

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

UNSPSC

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

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	2.594 kg CO2e
---------	---------------

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