

Sensor/actuator cable - SAC-8P- 5,0-28X/M12FS OD



1407275

<https://www.phoenixcontact.com/de/produkte/1407275>

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, PE-X halogen-free, black-gray RAL 7021, free cable end, on Socket straight M12, coding: A, cable length: 5 m, for outdoor applications, with high-grade steel knurl

Your advantages

- Easy and safe: 100% electrically tested plug-in components
- Robust throughout: resistant to oil, UV, and ozone, withstands temperatures from -40°C ... +105°C

Sensor/actuator cable - SAC-8P- 5,0-28X/M12FS OD



1407275

<https://www.phoenixcontact.com/de/produkte/1407275>

Commercial Data

Item number	1407275
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to Order (non-returnable)
Sales Key	C1 - Sensor-Aktor-Kabel
Product Key	BF1CFA
Catalog Page	Page 157 (C-4-2013)
GTIN	4046356773935
Weight per Piece (including packing)	319,8 g
Weight per Piece (excluding packing)	319,8 g
Customs tariff number	85444290
Country of origin	PL

Technical Data

Product properties

Product type	Sensor/actuator cable
Number of positions	8
Application	External areas
No. of cable outlets	1
Shielded	no
Coding	A - standard

Insulation characteristics

Degree of pollution	3
---------------------	---

Material specifications

Color	black
Flammability rating according to UL 94	V0
Sealing material	FPM
Material of grip body	PP
Contact material	CuSn
Contact surface material	Ni/Au
Contact carrier material	PP
Cable gland material	Stainless steel

Electrical properties

Contact resistance	$\leq 5 \text{ m}\Omega$
Insulation resistance	$\geq 100 \text{ M}\Omega$
Nominal voltage U_N	30 V AC
	30 V DC
Nominal current I_N	2 A
Protective circuit	unwired

Connection data

Conductor connection

Tightening torque	0.4 NmM12 connector
-------------------	---------------------

Connector

Insertion/withdrawal cycles	≥ 100
-----------------------------	------------

Header 1

Head design	free cable end
-------------	----------------

Header 2

Head design	Socket
Head cable outlet	straight
Head thread type	M12

Sensor/actuator cable - SAC-8P- 5,0-28X/M12FS OD



1407275

<https://www.phoenixcontact.com/de/produkte/1407275>

Coding	A
--------	---

LED signaling

Status display	No
Status display present	No

Cable / line

Cable length	5 m
Cable weight	65 kg/km
Number of positions	8
Shielded	no
Cable type	PE-X black [28X]
Conductor structure signal line	32x 0.10 mm
AWG signal line	24
Conductor cross section	8x 0.25 mm ²
Wire diameter incl. insulation	1.17 mm ±0.02 mm
External cable diameter	6.8 mm ±0.2 mm
Outer sheath, material	PE-X
External sheath, color	black-gray RAL 7021
Conductor material	Bare Cu litz wires
Material wire insulation	PE-X
Single wire, color	white, brown, green, yellow, gray, pink, blue, red
Thickness, insulation	approx. 0.25 mm (Core insulation)
Thickness, outer sheath	approx. 1.3 mm
Overall twist	8 wires around filler to the core
Length of twist, overall twist	67 mm
Max. conductor resistance	≤ 78 Ω/km (at 20 °C)
Insulation resistance	≥ 100 MΩ*km (at 20 °C)
Nominal voltage, cable	≤ 300 V AC
Test voltage	≥ 3000 V AC (Spark test)
Minimum bending radius, fixed installation	5 x D
Minimum bending radius, flexible installation	10 x D
Max. bending cycles	2000000
Halogen-free	in accordance with DIN VDE 0472 part 815 in accordance with DIN EN 50267-2-1
Flame resistance	According to DIN EN 60332-1-2 according to DIN EN 50266-2-5
Resistance to oil	According to DIN EN 60811-2-1, 168 h at 100°C According to DIN EN 50306
Other resistance	Resistance to fuels according to IEC 60811, 168 h at 70°C UV resistant according to DIN VDE 0276-605
Special properties	Irradiated
Ambient temperature (operation)	-40 °C ... 105 °C (cable, fixed installation) -15 °C ... 105 °C (Cable, flexible installation)

Sensor/actuator cable - SAC-8P- 5,0-28X/M12FS OD



1407275

<https://www.phoenixcontact.com/de/produkte/1407275>

	20 °C ±5 °C (cable, drag chain applications)
--	--

Cable structure

Cable type	PE-X black
Outer sheath, material	PE-X
External sheath, color	black-gray RAL 7021

Ambient conditions

Degree of protection	IP65
	IP67
	IP68
	IP69K
Ambient temperature (operation)	-40 °C ... 105 °C (Plug / socket)
	-40 °C ... 85 °C (On sudden changes in temperature (according to IEC 60512-11-4))

Standards and regulations

M12

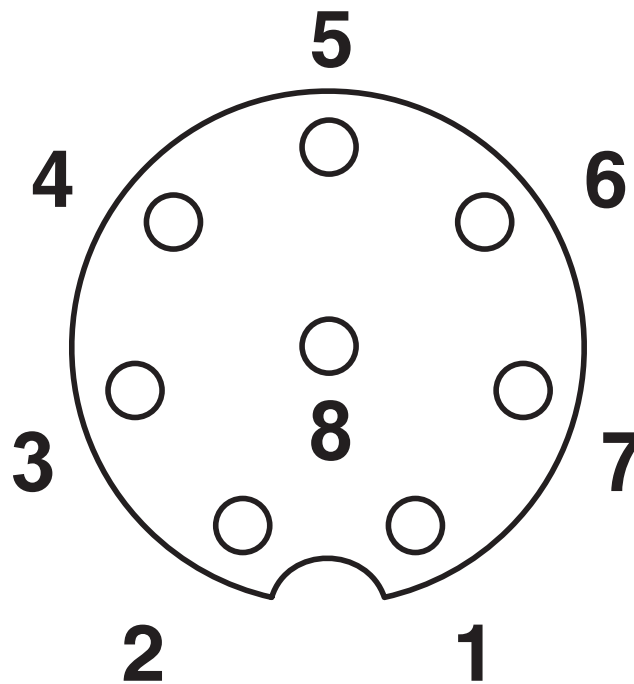
Standards/specifications	IEC 61076-2-101
--------------------------	-----------------

1407275

<https://www.phoenixcontact.com/de/produkte/1407275>

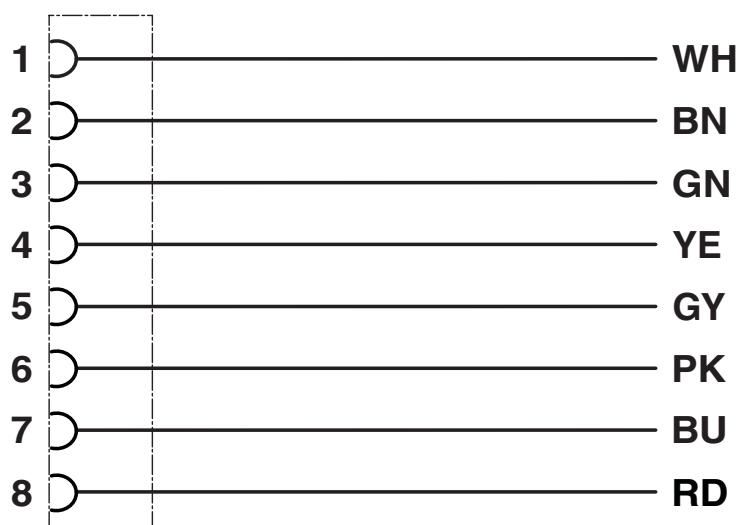
Drawings

Schematic diagram



Pin assignment M12 socket, 8-pos., A-coded, view female side

Circuit diagram



Contact assignment of the M12 socket

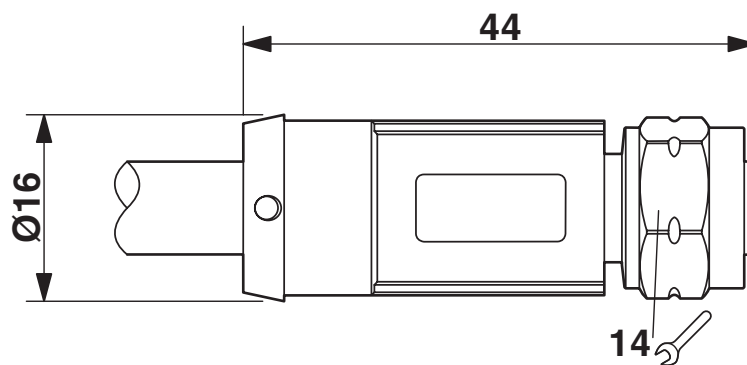
Sensor/actuator cable - SAC-8P- 5,0-28X/M12FS OD

1407275

<https://www.phoenixcontact.com/de/produkte/1407275>



Dimensional drawing



M12 x 1 socket, straight

Sensor/actuator cable - SAC-8P- 5,0-28X/M12FS OD



1407275

<https://www.phoenixcontact.com/de/produkte/1407275>

Approvals

DNV

Approval ID: TAE00002K4



EAC

Approval ID: RU C-DE.BL08.B.00286



EAC

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

Sensor/actuator cable - SAC-8P- 5,0-28X/M12FS OD



1407275

<https://www.phoenixcontact.com/de/produkte/1407275>

Classifications

ECLASS

ECLASS-9.0	27060311
ECLASS-10.0.1	27060311
ECLASS-11.0	27060311

ETIM

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

UNSPSC

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

Sensor/actuator cable - SAC-8P- 5,0-28X/M12FS OD



1407275

<https://www.phoenixcontact.com/de/produkte/1407275>

Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

1407275

<https://www.phoenixcontact.com/de/produkte/1407275>

Accessories

Torque screwdriver

Torque screwdriver - TSD 04 SAC - 1208429

<https://www.phoenixcontact.com/de/produkte/1208429>



Torque screwdriver, with preset torque of 0.4 Nm and 4 mm hexagonal drive for M12 connectors

Torque screwdriver

Torque screwdriver - TSD-M 1,2NM - 1212224

<https://www.phoenixcontact.com/de/produkte/1212224>



Torque screw driver, accuracy as per EN ISO 6789 standard, adjustable from 0.3 - 1.2 Nm

Sensor/actuator cable - SAC-8P- 5,0-28X/M12FS OD



1407275

<https://www.phoenixcontact.com/de/produkte/1407275>

Adapter insert

Adapter insert - TSD-M SAC-BIT ADAPTER - 1212600

<https://www.phoenixcontact.com/de/produkte/1212600>



Adapter bit for TSD-M...torque tools, E6.3-1/4" drive with 4 mm hexagon to accommodate SAC bits

Tool

Tool - SAC BIT M12-W14 - 1212513

<https://www.phoenixcontact.com/de/produkte/1212513>



Nut for assembling sensor/actuator cables with M12 connector and M12 connectors for assembly, with a hexagonal knurl wrench size of 14 mm, with 4 mm hexagonal drive

Phoenix Contact 2022 © - all rights reserved
<https://www.phoenixcontact.com>

PHOENIX CONTACT Deutschland GmbH
Flachsmarktstraße 8
D-32825 Blomberg
+49 52 35/3-1 20 00
info@phoenixcontact.de