

# SAC-8P-M12MS/ 3,0-853/M12FS HN - Sensor/actuator cable



1404947

<https://www.phoenixcontact.com/us/products/1404947>

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-pos., PUR, black, shielded, straight M12 male plug, A-coded, to straight M12 female plug, A-coded, cable length: 3 m

## Commercial data

Item number	1404947
Packing unit	1 pc
Minimum order quantity	10 pc
Product key	AF1CMA
GTIN	4046356729550
Weight per piece (including packing)	105 g
Weight per piece (excluding packing)	105 g
Country of origin	PL

# SAC-8P-M12MS/ 3,0-853/M12FS HN - Sensor/actuator cable



1404947

<https://www.phoenixcontact.com/us/products/1404947>

## Technical data

### Product properties

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

### Material specifications

Seal material	NBR
Material of grip body	TPU, hardly inflammable, self-extinguishing
Contact material	CuZn
Contact surface material	Ni/Au
Contact carrier material	TPU GF
Material for screw connection	Zinc die-cast, nickel-plated

### Electrical properties

Insulation resistance	≥ 100 MΩ
Nominal voltage U <sub>N</sub>	30 V AC
	30 V DC

### Mechanical properties

#### Mechanical data

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

### Signaling

Status display	no
Status display present	no

### Connector

#### Connection 1

Type	Plug straight M12
Number of positions	8
Coding type	A

#### Connection 2

Type	Socket straight M12
Number of positions	8
Coding type	A

### Cable/line

Cable length	3 m
Cable weight	22 kg/km

# SAC-8P-M12MS/ 3,0-853/M12FS HN - Sensor/actuator cable



1404947

<https://www.phoenixcontact.com/us/products/1404947>

Copper weight	13.5 kg/km
UL AWM Style	20963 (80°C/30 V)
Number of positions	8
Shielded	yes
Conductor structure	4x2xAWG28/19; S/UTP
Conductor structure signal line	19x 0.08 mm
AWG signal line	28
Conductor cross-section	4x 2x 0.09 mm <sup>2</sup>
Wire diameter incl. insulation	0.6 mm
External cable diameter	3.70 mm ±0.1 mm
Outer sheath, material	PUR
External sheath, color	black
Conductor material	Tin-plated Cu litz wires
Material, filler	Yarn
Material wire insulation	TPE
Thickness, outer sheath	nom. 0.45 mm
Twisted pairs	2 cores to the pair
Overall twist	Four pairs and four fillers to the core
Optical shield covering	85 %
Shield resistance	approx. 36.00 Ω/km
Max. conductor resistance	≤ 222 Ω/km
Insulation resistance	≥ 200 MΩ*km
Cable capacity	nom. 110 pF/m (Within a pair of wires)
Nominal voltage, cable	30 V
Test voltage Core/Core	0.5 kV (50 Hz, 1 min.)
Test voltage Core/Shield	0.50 kV (50 Hz, 1 min.)
Smallest bending radius, fixed installation	10 mm
Smallest bending radius, movable installation	50 mm
Dynamic load capacity (bending)	Max. bending cycles: 3000000
Flame resistance	in accordance with EN 50265-2-1 in acc. to UL VW1
Other resistance	Hydrolysis-resistant (In accordance with D 253 377-02-A-01 F83558) Media resistance (In accordance with D 253 377-02-A-01 F83558)
Special properties	Silicone-free PVC-free
Ambient temperature (operation)	-40 °C ... 80 °C (cable, fixed installation) -10 °C ... 80 °C (Cable, flexible installation) 100 °C (with limited hydrolysis/media resistance)

## Environmental and real-life conditions

### Ambient conditions

IP65

# SAC-8P-M12MS/ 3,0-853/M12FS HN - Sensor/actuator cable



1404947

<https://www.phoenixcontact.com/us/products/1404947>

Degree of protection	IP67
	IP68

## Standards and regulations

Standard designation	M12 connector
----------------------	---------------

# SAC-8P-M12MS/ 3,0-853/M12FS HN - Sensor/actuator cable

1404947

<https://www.phoenixcontact.com/us/products/1404947>

## Drawings

Dimensional drawing



Plug, M12 x 1, straight, shielded

Dimensional drawing



M12 x 1 socket, straight, shielded

1404947

<https://www.phoenixcontact.com/us/products/1404947>

Schematic diagram



Pin assignment M12 plug, 8-pos., view plug side

Schematic diagram



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

# SAC-8P-M12MS/ 3,0-853/M12FS HN - Sensor/actuator cable



1404947

<https://www.phoenixcontact.com/us/products/1404947>

Circuit diagram



Contact assignment of the M12 plug and the M12 socket

# SAC-8P-M12MS/ 3,0-853/M12FS HN - Sensor/actuator cable



1404947

<https://www.phoenixcontact.com/us/products/1404947>

## Classifications

### ECLASS

ECLASS-13.0	27060311
ECLASS-15.0	27060311

### UNSPSC

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

# SAC-8P-M12MS/ 3,0-853/M12FS HN - Sensor/actuator cable



1404947

<https://www.phoenixcontact.com/us/products/1404947>

## Environmental product compliance

### EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
---	--------------------

### China RoHS

Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.

### EU REACH SVHC

REACH candidate substance (CAS No.)	1,6,7,8,9,14,15,16,17,17,18,18-Dodecachloropentacyclo[12.2.1.16.9.02,13.05,10]octadeca-7,15-diene ("Dechlorane Plus" <sup>TM</sup> )(CAS: n/a)
-------------------------------------	--

Phoenix Contact 2026 © - 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](mailto:info@phoenixcon.com)