

# SAC-8P-M12MS/ 1,5-PVC/M12FS - Sensor/actuator cable



1415739

<https://www.phoenixcontact.com/us/products/1415739>

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, PVC, black RAL 9005, Plug straight M12, coding: A, on Socket straight M12, coding: A, cable length: 1.5 m

## Your advantages

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

## Commercial data

Item number	1415739
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF03
Product key	AF1CFA
GTIN	4055626052564
Weight per piece (including packing)	95.6 g
Weight per piece (excluding packing)	95.6 g
Customs tariff number	85444290
Country of origin	PL

# SAC-8P-M12MS/ 1,5-PVC/M12FS - Sensor/actuator cable



1415739

<https://www.phoenixcontact.com/us/products/1415739>

## Technical data

### Product properties

Product type	Sensor/actuator cable
Application	Standard
Number of positions	8
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	CuZn
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 $I_N$	2 A

### Mechanical properties

#### Mechanical data

Insertion/withdrawal cycles	$\geq 100$
-----------------------------	------------

### Signaling

Status display	no
Status display present	no

### Connector

#### Connection 1

Type	Plug straight M12
Number of positions	8
Coding type	A

#### Connection 2

# SAC-8P-M12MS/ 1,5-PVC/M12FS - Sensor/actuator cable

1415739

<https://www.phoenixcontact.com/us/products/1415739>

Type	Socket straight M12
Number of positions	8
Coding type	A

## Cable/line

Cable length	1.5 m
--------------	-------

### PVC black [PVC]

Dimensional drawing	
Cable weight	54 kg/km
UL AWM Style	2464 / 1729 (80°C/300 V)
Number of positions	8
Shielded	no
Cable type	PVC black [PVC]
Conductor structure signal line	14x 0.15 mm
AWG signal line	24
Conductor cross section	8x 0.25 mm <sup>2</sup> (Signal line)
Wire diameter incl. insulation	1.17 mm ±0.05 mm
External cable diameter	5.90 mm ±0.2 mm
Outer sheath, material	PVC
External sheath, color	black RAL 9005
Conductor material	Bare Cu litz wires
Material wire insulation	PVC
Single wire, color	white, brown, green, yellow, gray, pink, blue, red
Thickness, insulation	≥ 0.23 mm
Thickness, outer sheath	≥ 0.76 mm
Overall twist	8 wires around filler to the core
Max. conductor resistance	79 Ω/km (at 20 °C)
Insulation resistance	≥ 200 MΩ*km (at 20 °C)
Nominal voltage, cable	≤ 300 V AC
Test voltage	≥ 3000 V AC
Minimum bending radius, fixed installation	5 x D
Minimum bending radius, flexible installation	10 x D
Smallest bending radius, fixed installation	30 mm
Smallest bending radius, movable installation	59 mm
Flame resistance	as per VW-1 in accordance with UL 758
Resistance to oil	in accordance with DIN EN 60811-2-1

# SAC-8P-M12MS/ 1,5-PVC/M12FS - Sensor/actuator cable



1415739

<https://www.phoenixcontact.com/us/products/1415739>

Ambient temperature (operation)	-25 °C ... 80 °C (cable, fixed installation)
	-10 °C ... 80 °C (Cable, flexible installation)

## Environmental and real-life conditions

### Ambient conditions

Degree of protection	IP65
	IP67
	IP68
Ambient temperature (operation) (male connector/female connector)	-25 °C ... 90 °C (Plug / socket)

## Standards and regulations

Standard designation	M12 connector
Standards/specifications	IEC 61076-2-101

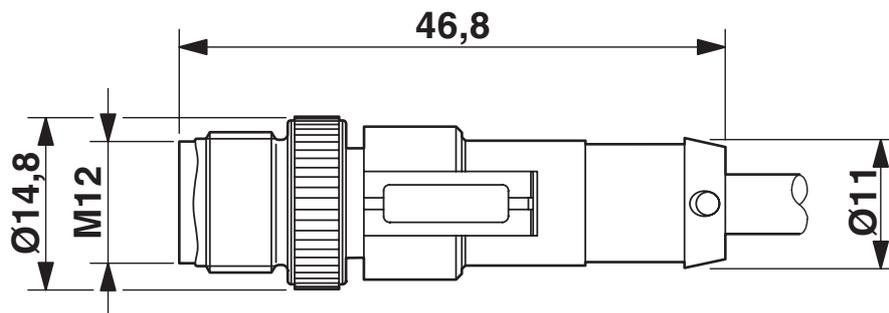
# SAC-8P-M12MS/ 1,5-PVC/M12FS - Sensor/actuator cable

1415739

<https://www.phoenixcontact.com/us/products/1415739>

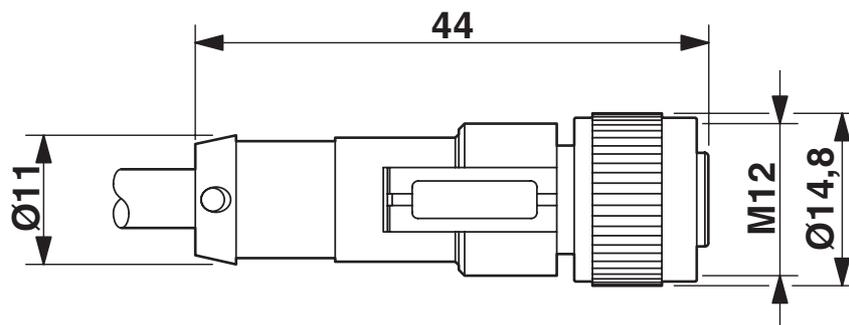
## Drawings

Dimensional drawing



Plug, M12 x 1, straight, shielded

Dimensional drawing



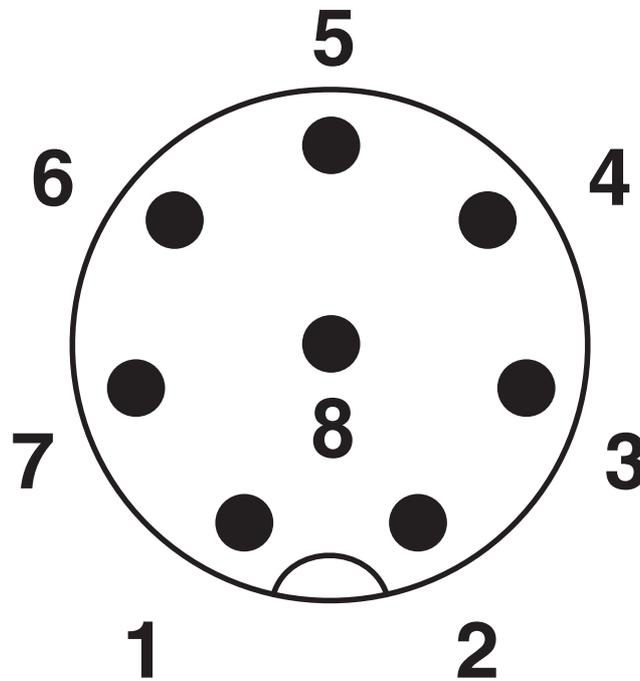
M12 x 1 socket, straight

# SAC-8P-M12MS/ 1,5-PVC/M12FS - Sensor/actuator cable

1415739

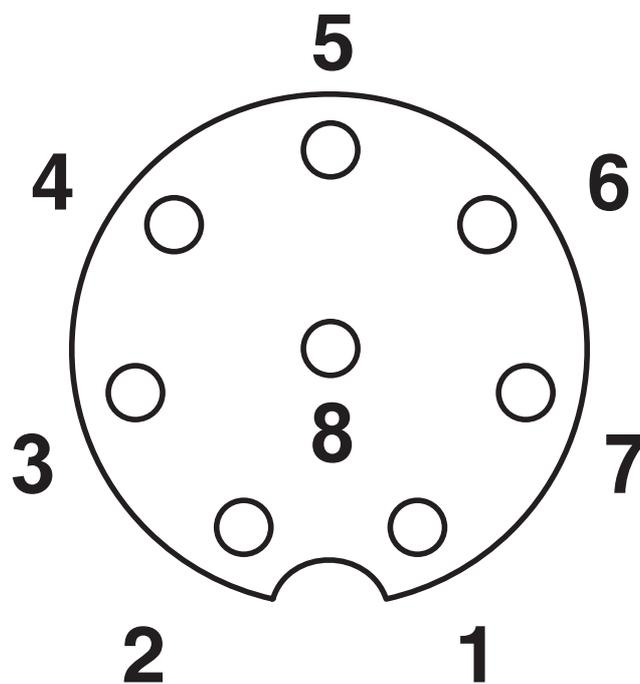
<https://www.phoenixcontact.com/us/products/1415739>

Schematic diagram



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

Schematic diagram



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

# SAC-8P-M12MS/ 1,5-PVC/M12FS - Sensor/actuator cable



1415739

<https://www.phoenixcontact.com/us/products/1415739>

Circuit diagram



Contact assignment of the M12 plug and the M12 socket

# SAC-8P-M12MS/ 1,5-PVC/M12FS - Sensor/actuator cable



1415739

<https://www.phoenixcontact.com/us/products/1415739>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1415739>

 <b>UL Listed</b> Approval ID: FILE E 221474				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
keine				
	30 V	2 A	-	-

 <b>cUL Listed</b> Approval ID: FILE E 221474				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
keine				
	30 V	2 A	-	-

 <b>EAC-RoHS</b> Approval ID: RU D-DE.HB35.B.00387	
--	--

# SAC-8P-M12MS/ 1,5-PVC/M12FS - Sensor/actuator cable



1415739

<https://www.phoenixcontact.com/us/products/1415739>

## Classifications

### ECLASS

ECLASS-13.0	27060311
ECLASS-15.0	27060311

### ETIM

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

### UNSPSC

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

# SAC-8P-M12MS/ 1,5-PVC/M12FS - Sensor/actuator cable



1415739

<https://www.phoenixcontact.com/us/products/1415739>

## 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	1.663 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](mailto:info@phoenixcon.com)