

# SAC-8P-M12MS/ 2,0-542 SH BK - Sensor/actuator cable



1406073

<https://www.phoenixcontact.com/us/products/1406073>

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, yellow, shielded, Plug straight M12, coding: A, on free cable end, cable length: 2 m

## Commercial data

Item number	1406073
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Sales key	BF13
Product key	BF1IDD
GTIN	4046356799744
Weight per piece (including packing)	143.3 g
Weight per piece (excluding packing)	136 g
Customs tariff number	85444290
Country of origin	US

# SAC-8P-M12MS/ 2,0-542 SH BK - Sensor/actuator cable



1406073

<https://www.phoenixcontact.com/us/products/1406073>

## Technical data

### Product properties

Product type	Sensor/actuator cable
Application	Standard, U.S. cables
Number of positions	8
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	CuZn
Contact surface material	Ni/Au
Contact carrier material	TPU GF
Material for screw connection	Zinc die-cast, nickel-plated
Outer sheath, material	PVC

### 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

### Connection data

#### Conductor connection

Tightening torque	0.4 Nm (M12 connector)
-------------------	------------------------

### Connector

#### Connection 1

# SAC-8P-M12MS/ 2,0-542 SH BK - Sensor/actuator cable



1406073

<https://www.phoenixcontact.com/us/products/1406073>

Type	Plug straight M12
Coding type	A

## Connection 2

Type	free cable end
------	----------------

## Cable/line

Cable length	2 m
--------------	-----

PVC yellow 105 °C [542]

Dimensional drawing	
Cable weight	58 kg/km
UL AWM Style	2517 (105 °C / 300 V)
Number of positions	8
Shielded	yes
Cable type	PVC yellow 105 °C [542]
Conductor structure signal line	32x 1.10 mm
AWG signal line	24
Wire diameter incl. insulation	1.12 mm ±0.03 mm
External cable diameter	6.30 mm ±0.2 mm
Outer sheath, material	PVC
External sheath, color	yellow
Conductor material	Tin-plated Cu litz wires
Material, filler	PP
Material wire insulation	PVC
Single wire, color	white, brown, green, yellow, gray, pink, blue, red
Overall twist	8 wires around filler to the core
Optical shield covering	85 %
Max. conductor resistance	max. 79.7 Ω/km (20 °C)
Insulation resistance	≥ (550 M Ohms/m @ 500V)
Nominal voltage, cable	300 V
Minimum bending radius, flexible installation	12 x D
Smallest bending radius, movable installation	76 mm
Flame resistance	FT1, VW-1
Other resistance	UV resistant
Ambient temperature (operation)	-30 °C ... 105 °C (cable, fixed installation) -5 °C ... 105 °C (Cable, flexible installation)

# SAC-8P-M12MS/ 2,0-542 SH BK - Sensor/actuator cable



1406073

<https://www.phoenixcontact.com/us/products/1406073>

## Environmental and real-life conditions

### Ambient conditions

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

## Standards and regulations

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

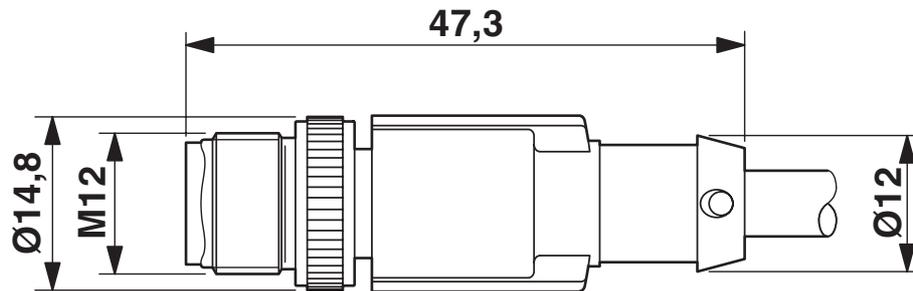
# SAC-8P-M12MS/ 2,0-542 SH BK - Sensor/actuator cable

1406073

<https://www.phoenixcontact.com/us/products/1406073>

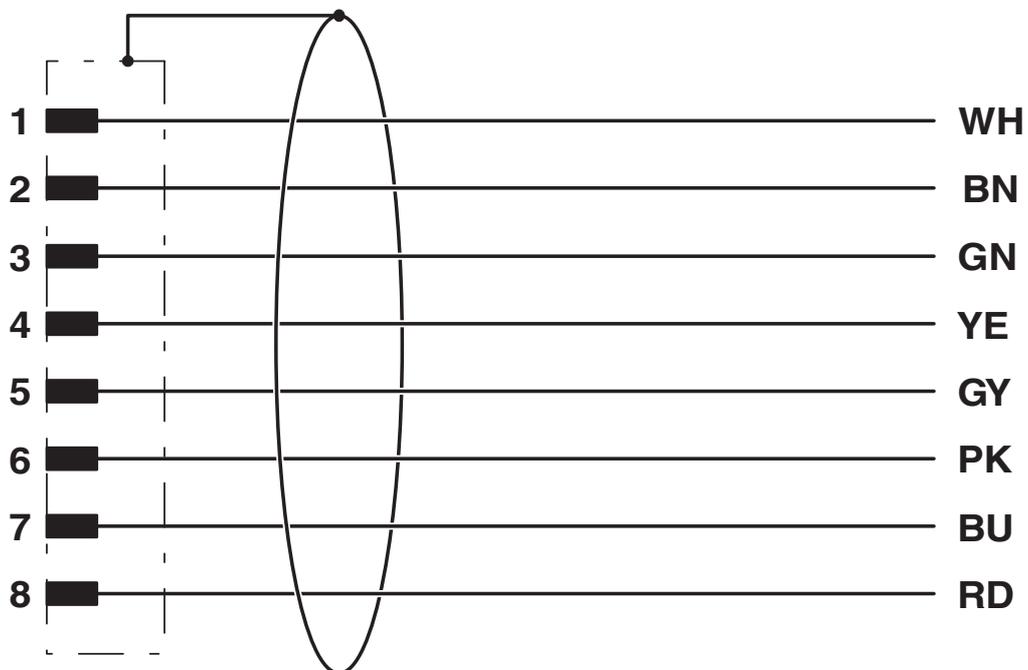
## Drawings

Dimensional drawing



Plug, M12 x 1, straight, shielded

Circuit diagram

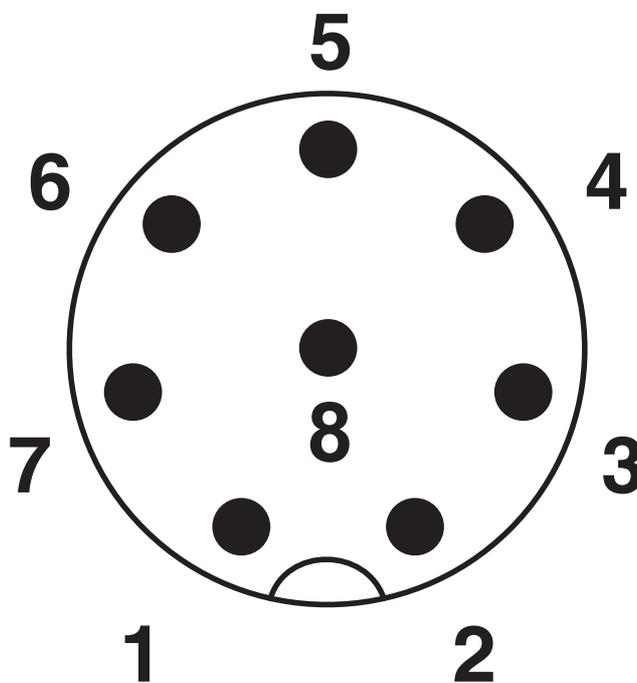


# SAC-8P-M12MS/ 2,0-542 SH BK - Sensor/actuator cable

1406073

<https://www.phoenixcontact.com/us/products/1406073>

Schematic diagram



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

# SAC-8P-M12MS/ 2,0-542 SH BK - Sensor/actuator cable



1406073

<https://www.phoenixcontact.com/us/products/1406073>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1406073>

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

<b>cULus Listed</b>				
---------------------	--	--	--	--

# SAC-8P-M12MS/ 2,0-542 SH BK - Sensor/actuator cable



1406073

<https://www.phoenixcontact.com/us/products/1406073>

## Classifications

### ECLASS

ECLASS-11.0	27060311
ECLASS-12.0	27060311
ECLASS-13.0	27060311

### ETIM

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

### UNSPSC

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

# SAC-8P-M12MS/ 2,0-542 SH BK - Sensor/actuator cable



1406073

<https://www.phoenixcontact.com/us/products/1406073>

## 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 2024 © - 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)