

# SAC-5P-M12MS/ 5,0-652/M12FS - Sensor/actuator cable



1420498

<https://www.phoenixcontact.com/us/products/1420498>

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, 5-position, TPE halogen-free, welding sputter-resistant, highly flexible, yellow, Plug straight M12, coding: A, on Socket straight M12, coding: A, cable length: 5 m

## Commercial data

Item number	1420498
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Sales key	BF13
Product key	AF1ICC
GTIN	4055626432229
Weight per piece (including packing)	22.22 g
Weight per piece (excluding packing)	22.22 g
Country of origin	US

# SAC-5P-M12MS/ 5,0-652/M12FS - Sensor/actuator cable



1420498

<https://www.phoenixcontact.com/us/products/1420498>

## Technical data

### Product properties

Product type	Sensor/actuator cable
Application	Standard, U.S. cables
Number of positions	5
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	CuSn
Contact surface material	Ni/Au
Contact carrier material	TPU GF
Material for screw connection	Zinc die-cast, weld slag-resistant coating
Outer sheath, material	TPE

### Electrical properties

Insulation resistance	$\geq 10 \text{ M}\Omega$
Nominal voltage $U_N$	125 V AC
	125 V DC
Nominal current $I_N$	4 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

# SAC-5P-M12MS/ 5,0-652/M12FS - Sensor/actuator cable

1420498

<https://www.phoenixcontact.com/us/products/1420498>

## Connection 1

Type	Plug straight M12
Number of positions	5
Coding type	A

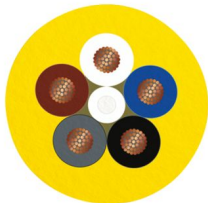
## Connection 2

Type	Socket straight M12
Number of positions	5
Coding type	A

## Cable/line

Cable length	5 m
--------------	-----

TPE, highly flexible, yellow [652]

Dimensional drawing	
UL AWM Style	20626 (90 °C / 300 V)
Number of positions	5
Shielded	no
Cable type	TPE, highly flexible, yellow [652]
Conductor structure signal line	19x 0.03 in.
AWG signal line	22
Conductor cross-section	5x 0.34 mm <sup>2</sup> (Signal line)
Wire diameter incl. insulation	0.05 in. ±0.02 mm
External cable diameter	5.59 mm ±0.13 mm
Outer sheath, material	TPE
External sheath, color	yellow
Conductor material	Bare Cu litz wires
Material wire insulation	SRPVC
Single wire, color	brown, white, blue, black, gray
Overall twist	4 wires, twisted
Nominal voltage, cable	300 V
Test voltage	Spark test
Minimum bending radius, flexible installation	8 x D
Smallest bending radius, fixed installation	10 x D
Smallest bending radius, movable installation	45 mm
Dynamic load capacity (bending)	Max. bending cycles: 10000000, Bending radius: 8 x D
Dynamic load capacity (torsion)	Torsion: ±360 °/m, Torsion cycles: 10000000

# SAC-5P-M12MS/ 5,0-652/M12FS - Sensor/actuator cable



1420498

<https://www.phoenixcontact.com/us/products/1420498>

Halogen-free	yes
Flame resistance	in acc. with UL FT4
Other resistance	oil resistant (to UL 2256)
	welding sputter-resistant
	sunlight resistant (720 h test per UL 2256)
Ambient temperature (operation)	-5 °C ... 105 °C (Cable, flexible installation)
	-30 °C ... 105 °C (cable, fixed 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)
Ambient temperature (operation) (Cable, fixed installation)	-30 °C ... 105 °C (cable, fixed installation)
Ambient temperature (operation) (Cable, flexible installation)	-5 °C ... 105 °C (Cable, flexible installation)

## Standards and regulations

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

# SAC-5P-M12MS/ 5,0-652/M12FS - Sensor/actuator cable



1420498

<https://www.phoenixcontact.com/us/products/1420498>

## Drawings

Dimensional drawing



Plug, M12 x 1, straight

Dimensional drawing



M12 x 1 socket, straight

# SAC-5P-M12MS/ 5,0-652/M12FS - Sensor/actuator cable

1420498

<https://www.phoenixcontact.com/us/products/1420498>

Schematic diagram



Pin assignment M12 plug, 4-pos., A-coded, view plug side

Schematic diagram



Pin assignment M12 socket, 4-pos., A-coded, view female side

# SAC-5P-M12MS/ 5,0-652/M12FS - Sensor/actuator cable

1420498

<https://www.phoenixcontact.com/us/products/1420498>

Circuit diagram



Contact assignment of the M12 plug and the M12 socket

# SAC-5P-M12MS/ 5,0-652/M12FS - Sensor/actuator cable



1420498

<https://www.phoenixcontact.com/us/products/1420498>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1420498>

 <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				
	125 V	4 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				
	125 V	4 A	-	-

# SAC-5P-M12MS/ 5,0-652/M12FS - Sensor/actuator cable



1420498

<https://www.phoenixcontact.com/us/products/1420498>

## Classifications

### ECLASS

ECLASS-13.0	27060311
ECLASS-15.0	27060311

### ETIM

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

# SAC-5P-M12MS/ 5,0-652/M12FS - Sensor/actuator cable



1420498

<https://www.phoenixcontact.com/us/products/1420498>

## 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 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)