

SAC-4P-M12MS/ 0,5-652/M12FS - Sensor/actuator cable



1432047

<https://www.phoenixcontact.com/us/products/1432047>

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.



Commercial data

Item number	1432047
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Sales key	BF03
Product key	AF1ICB
GTIN	4055626432281
Weight per piece (including packing)	22.22 g
Weight per piece (excluding packing)	22.22 g
Country of origin	US

SAC-4P-M12MS/ 0,5-652/M12FS - Sensor/actuator cable



1432047

<https://www.phoenixcontact.com/us/products/1432047>

Technical data

Product properties

Product type	Sensor/actuator cable
Application	Standard, U.S. cables
Number of positions	4
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	250 V AC
	250 V DC
Nominal current I_N	4 A

Mechanical properties

Mechanical data

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

Signaling

Status display	no
Status display present	no

Connection data

Conductor connection

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

Connector

SAC-4P-M12MS/ 0,5-652/M12FS - Sensor/actuator cable



1432047

<https://www.phoenixcontact.com/us/products/1432047>

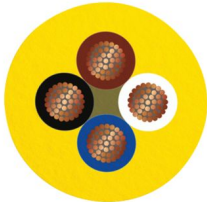
Connection 1

Type	Plug straight M12
Number of positions	4
Coding type	A

Connection 2

Type	Socket straight M12
Number of positions	4
Coding type	A

Cable/line

Cable length	0.5 m
Dimensional drawing	
UL AWM Style	20327 (105 °C / 300 V)
Number of positions	4
Shielded	no
Conductor structure signal line	19x 0.03 in.
AWG signal line	22
Conductor cross section	4x 0.34 mm ² (Signal line)
Wire diameter incl. insulation	0.05 in. ±0.02 mm
External cable diameter	5.33 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
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	43 mm
Dynamic load capacity (bending)	Max. bending cycles: 10000000, Bending radius: 8 x D
Dynamic load capacity (torsion)	Torsion: ±360 °/m, Torsion cycles: 10000000
Halogen-free	yes
Flame resistance	in acc. with UL FT4 oil resistant (to UL 2256)

SAC-4P-M12MS/ 0,5-652/M12FS - Sensor/actuator cable



1432047

<https://www.phoenixcontact.com/us/products/1432047>

Other resistance	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

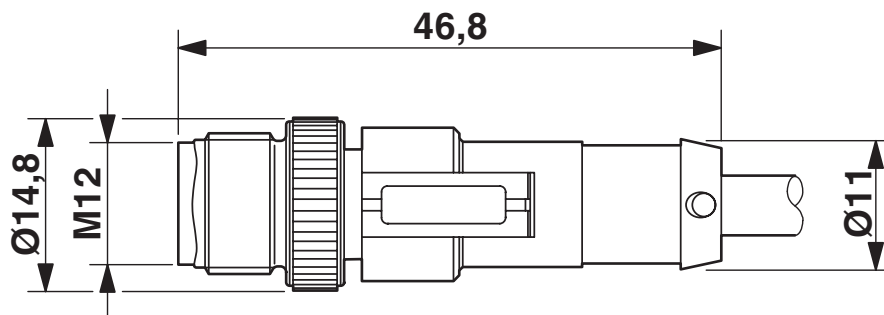
SAC-4P-M12MS/ 0,5-652/M12FS - Sensor/actuator cable

1432047

<https://www.phoenixcontact.com/us/products/1432047>

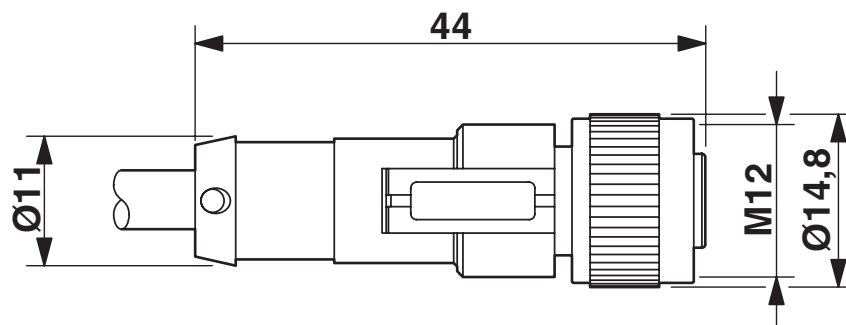
Drawings

Dimensional drawing



Plug, M12 x 1, straight

Dimensional drawing



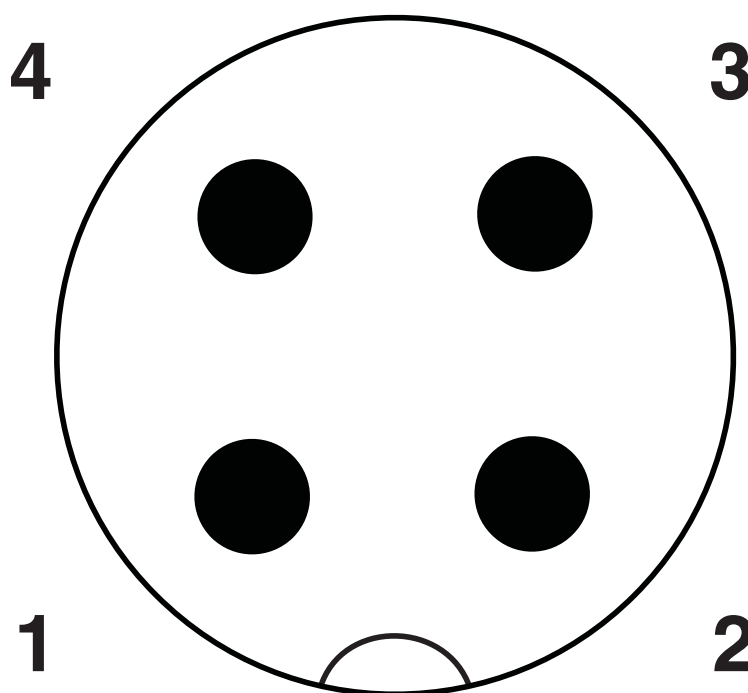
M12 x 1 socket, straight

SAC-4P-M12MS/ 0,5-652/M12FS - Sensor/actuator cable

1432047

<https://www.phoenixcontact.com/us/products/1432047>

Schematic diagram



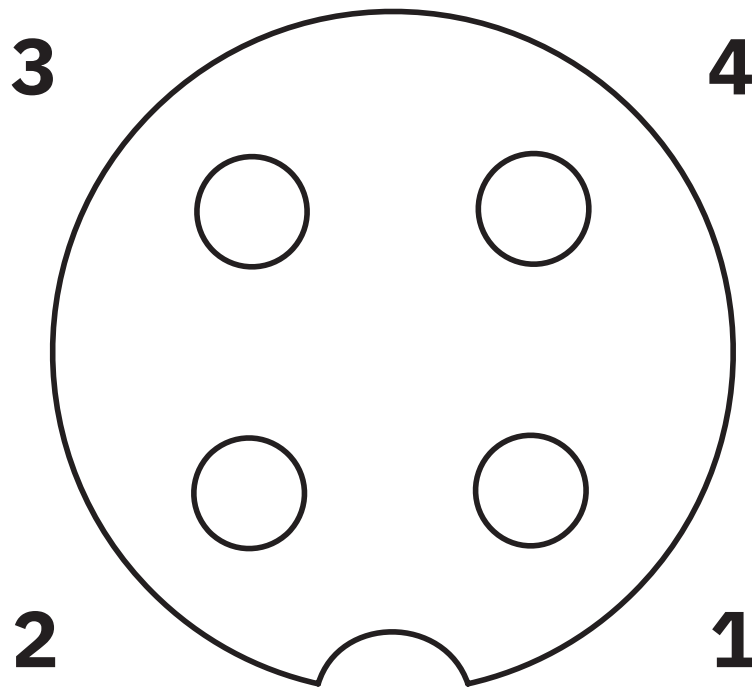
Pin assignment M12 plug, 4-pos., A-coded, view plug side

SAC-4P-M12MS/ 0,5-652/M12FS - Sensor/actuator cable

1432047

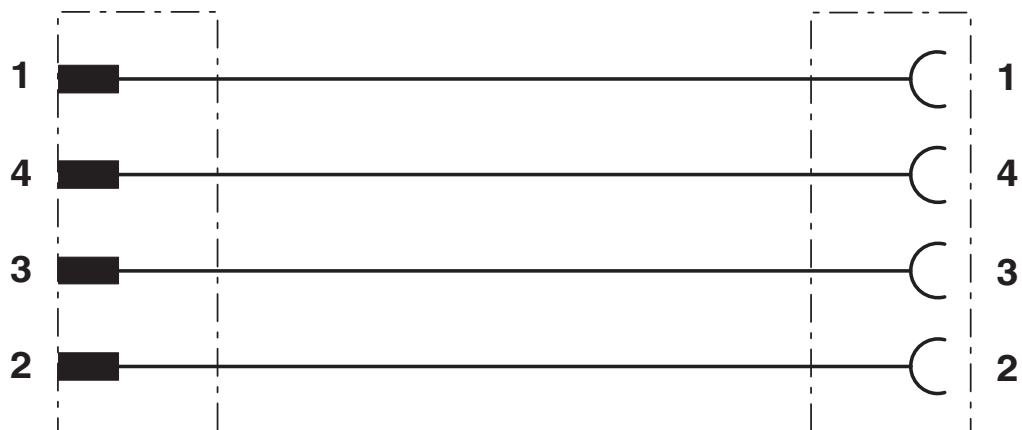
<https://www.phoenixcontact.com/us/products/1432047>

Schematic diagram



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

Circuit diagram



Contact assignment of the M12 plug and the M12 socket

SAC-4P-M12MS/ 0,5-652/M12FS - Sensor/actuator cable



1432047

<https://www.phoenixcontact.com/us/products/1432047>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1432047>

 UL Listed Approval ID: FILE E 221474				
	Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
keine				
	300 V	4 A	-	-

 cUL Listed Approval ID: FILE E 221474				
	Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
keine				
	300 V	4 A	-	-

SAC-4P-M12MS/ 0,5-652/M12FS - Sensor/actuator cable



1432047

<https://www.phoenixcontact.com/us/products/1432047>

Classifications

ECLASS

ECLASS-13.0	27060311
ECLASS-15.0	27060311

ETIM

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

SAC-4P-M12MS/ 0,5-652/M12FS - Sensor/actuator cable



1432047
<https://www.phoenixcontact.com/us/products/1432047>

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 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