

SAC-4P-M12MS/20,0-652/M12FS - Sensor/actuator cable



1432058

<https://www.phoenixcontact.com/us/products/1432058>

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, 4-position, TPE, yellow, Plug straight M12, coding: A, on Socket straight M12, coding: A, cable length: 20 m

Commercial data

Item number	1432058
Packing unit	1 pc
Note	Made to order (non-returnable)
Sales key	BF03
Product key	BF1ICB
GTIN	4055626432397
Weight per piece (including packing)	22.22 g
Weight per piece (excluding packing)	22.22 g
Country of origin	US

SAC-4P-M12MS/20,0-652/M12FS - Sensor/actuator cable



1432058

<https://www.phoenixcontact.com/us/products/1432058>

Technical data

Product properties

Product type	Sensor/actuator cable
Number of positions	4
Application	Standard, U.S. cables
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

Contact resistance	$\leq 5 \text{ m}\Omega$
Insulation resistance	$\geq 10 \text{ M}\Omega$
Nominal voltage U_N	250 V AC
	250 V DC
Nominal current I_N	4 A
Protective circuit	unwired

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)
-------------------	------------------------

SAC-4P-M12MS/20,0-652/M12FS - Sensor/actuator cable



1432058

<https://www.phoenixcontact.com/us/products/1432058>

Connector


Connection 1

Type	Plug straight M12
Number of positions	4
Coding type	A
Number of positions	4

Connection 2

Type	Socket straight M12
Number of positions	4
Coding type	A
Number of positions	4

Cable/line

Cable length	20 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
Max. bending cycles	10000000
Torsion force	± 360 °/m

SAC-4P-M12MS/20,0-652/M12FS - Sensor/actuator cable



1432058

<https://www.phoenixcontact.com/us/products/1432058>

Torsion cycles	10000000
Halogen-free	yes
Flame resistance	in acc. with UL FT4
Other resistance	to UL 2256
	welding sputter-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)	-25 °C ... 90 °C (Plug / socket)
	-30 °C ... 105 °C (cable, fixed installation)
	-5 °C ... 105 °C (Cable, flexible installation)

Standards and regulations

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

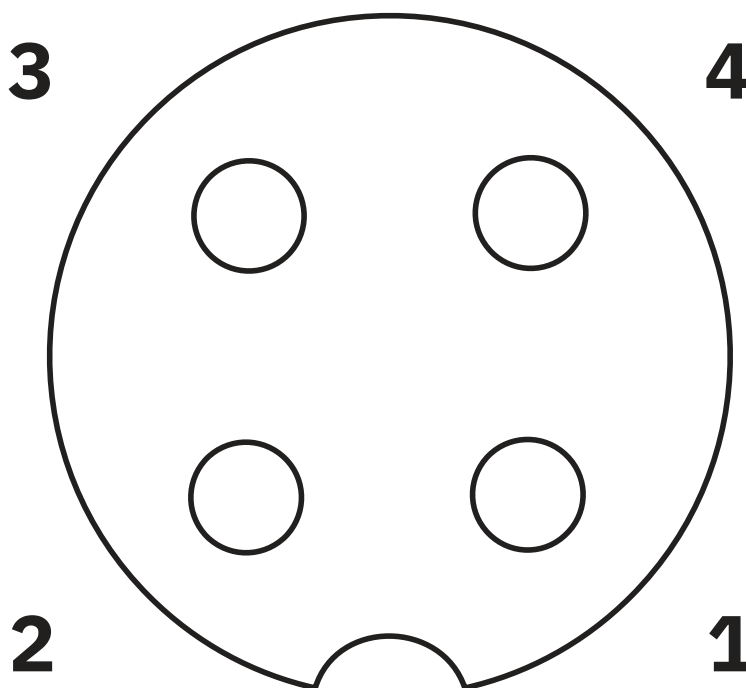
SAC-4P-M12MS/20,0-652/M12FS - Sensor/actuator cable

1432058

<https://www.phoenixcontact.com/us/products/1432058>

Drawings

Schematic diagram



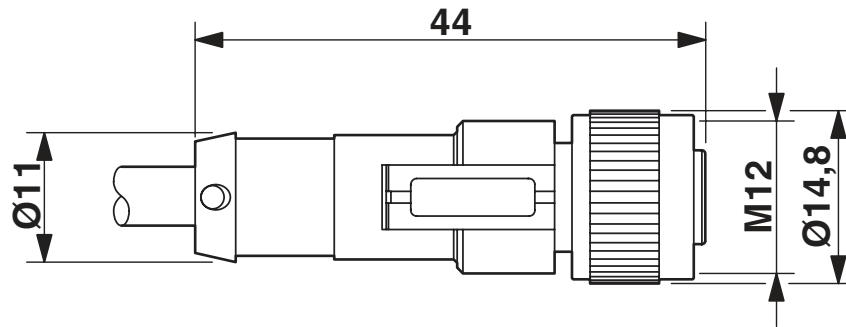
Pin assignment M12 socket, 4-pos., A-coded, view female side

SAC-4P-M12MS/20,0-652/M12FS - Sensor/actuator cable

1432058

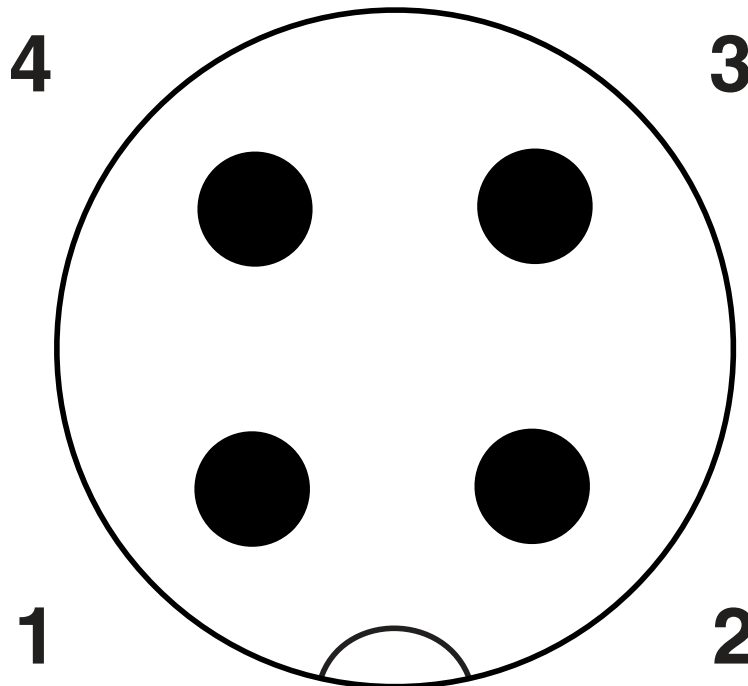
<https://www.phoenixcontact.com/us/products/1432058>

Dimensional drawing



M12 x 1 socket, straight

Schematic diagram



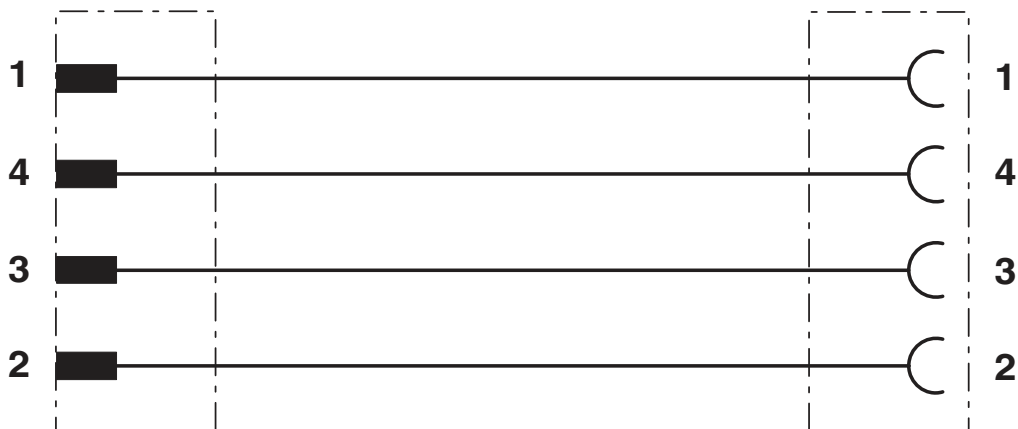
Pin assignment M12 plug, 4-pos., A-coded, view plug side

SAC-4P-M12MS/20,0-652/M12FS - Sensor/actuator cable

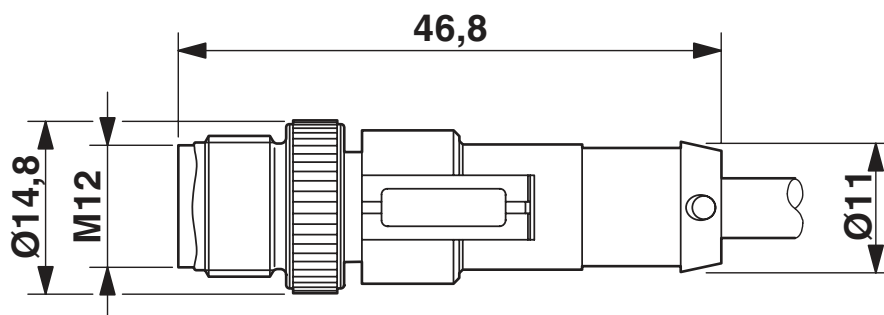
1432058

<https://www.phoenixcontact.com/us/products/1432058>

Circuit diagram



Dimensional drawing



Plug, M12 x 1, straight

SAC-4P-M12MS/20,0-652/M12FS - Sensor/actuator cable



1432058

<https://www.phoenixcontact.com/us/products/1432058>

Classifications

ECLASS

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

ETIM

ETIM 7.0	EC001855
----------	----------

SAC-4P-M12MS/20,0-652/M12FS - Sensor/actuator cable



1432058

<https://www.phoenixcontact.com/us/products/1432058>

Environmental product compliance

China RoHS	Environmentally Friendly Use Period = 50 years
	For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"

SAC-4P-M12MS/20,0-652/M12FS - Sensor/actuator cable



1432058

<https://www.phoenixcontact.com/us/products/1432058>

Accessories

PROT-M12 FS-PA-CHAIN - Sealing cap

1430873

<https://www.phoenixcontact.com/us/products/1430873>

M12 sealing cap made of plastic with fixing band, for sensor cables, for free M12 plugs



SAC-M12-EXCLIP-M - Locking clip

1558988

<https://www.phoenixcontact.com/us/products/1558988>

Locking clip for the pin side of sensor/actuator cables with M12 connector and M12 connectors for assembly, for knurl diameter: 15 mm or for Allen key with a wrench size of 14 mm, prevents the disconnection of plug-in connections without tools



SAC-4P-M12MS/20,0-652/M12FS - Sensor/actuator cable



1432058

<https://www.phoenixcontact.com/us/products/1432058>

PROT-M12 MS-PA-CHAIN - Screw plug

1430899

<https://www.phoenixcontact.com/us/products/1430899>

M12 sealing cap with fixing band, for sensor cables, for free M12 sockets



SAC-M12-EXCLIP-F - Locking clip

1558991

<https://www.phoenixcontact.com/us/products/1558991>

Locking clip for the socket side of sensor/actuator cables with M12 connector and M12 connectors for assembly, for knurl diameter: 15 mm or for Allen key with a wrench size of 14 mm, prevents the disconnection of plug-in connections without tools



SAC-4P-M12MS/20,0-652/M12FS - Sensor/actuator cable

1432058

<https://www.phoenixcontact.com/us/products/1432058>

TSD 04 SAC - Torque screwdriver

1208429

<https://www.phoenixcontact.com/us/products/1208429>



Torque screwdriver, with preset torque of 0.4 Nm and 4 mm hexagonal drive for M12 connectors

TSD-M 1,2NM - Torque screwdriver

1212224

<https://www.phoenixcontact.com/us/products/1212224>



Torque screw driver, accuracy as per EN ISO 6789 standard, adjustable from 0.3 - 1.2 Nm

SAC-4P-M12MS/20,0-652/M12FS - Sensor/actuator cable



1432058

<https://www.phoenixcontact.com/us/products/1432058>

TSD-M SAC-BIT ADAPTER - Adapter insert

1212600

<https://www.phoenixcontact.com/us/products/1212600>



Adapter bit for TSD-M...torque tools, E6.3-1/4" drive with 4 mm hexagon to accommodate SAC bits

SAC BIT M12-D15 - Tool

1208432

<https://www.phoenixcontact.com/us/products/1208432>



Nut for assembling sensor/actuator cables with M12 connector and M12 connectors for assembly, with a knurl diameter of 15 mm, for 4 mm hexagonal drive

Phoenix Contact 2023 © - 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