

# SACC-M12FS-12SOL-PG 9-M - Connector



1404420

<https://www.phoenixcontact.com/us/products/1404420>

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Connector, Universal, 12-position, Socket straight M12, coding: A, Solder connection, knurl material: Zinc die-cast, nickel-plated, cable gland Pg9, external cable diameter 6 mm ... 8 mm

## Your advantages

- Safe use in the field, thanks to a high degree of protection
- Save space – with high-pos. connectors

## Commercial data

Item number	1404420
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF32
Product key	BF2CGA
Catalog page	Page 26 (C-2-2019)
GTIN	4046356694520
Weight per piece (including packing)	24.3 g
Weight per piece (excluding packing)	24.3 g
Customs tariff number	85366990
Country of origin	DE

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## Technical data

### Notes

General	<b>NOTE:</b> Observe the permissible bending radii when laying conductors, since the degree of protection may be put in jeopardy if the bending forces are too high. Alleviate mechanical loads upstream of the connector, e.g. by using cable ties.
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### Mounting

Connection method	Solder connection
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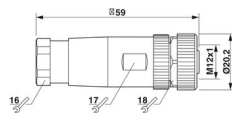
### Product properties

Product type	Circular connector (cable-side)
Sensor type	Universal
Number of positions	12
No. of cable outlets	1
Shielded	no
Coding	A
Cable outlet	straight
Pg screw connection	Pg9

### Insulation characteristics

Overvoltage category	II
Degree of pollution	3

### Dimensions

Dimensional drawing	
Width	20.2 mm
Height	20.2 mm
Length	59 mm

### External dimensions

Outside diameter	6 mm ... 8 mm
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### Housing

Diameter housing	20.2 mm
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### Material specifications

Flammability rating according to UL 94	HB
Seal material	NBR
Material of grip body	PA
Contact material	CuZn

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Contact surface material	Au
Contact carrier material	PA
Material for screw connection	Zinc die-cast, nickel-plated

## Connection data

### Conductor connection

Connection method	Solder connection
Connection cross section	0.08 mm <sup>2</sup> ... 0.25 mm <sup>2</sup> (without ferrule)
	0.08 mm <sup>2</sup> ... 0.25 mm <sup>2</sup> (solid)
Connection cross section AWG	28 ... 24 (without ferrule)
Stripping length of the individual wire	4 mm
Tightening torque	0.4 Nm (M12 knurl)
	0.8 Nm ... 1 Nm (Pressure nut with coupling sleeve)

## Electrical properties

Rated surge voltage	0.5 kV
Contact resistance	≤ 3 mΩ
Insulation resistance	> 10 GΩ
Nominal voltage U <sub>N</sub>	30 V AC
	30 V DC
Nominal current I <sub>N</sub>	1.5 A (up to 40 °C)

## Mechanical properties

### Mechanical data

Insertion/withdrawal cycles	≥ 100
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## Connector

### Connection 1

Head design	Socket
Head cable outlet	straight
Head thread type	M12
Coding	A

## Cable/line

Signal type/category	Universal
Stripping length of the individual wire	4 mm

## Environmental and real-life conditions

### Ambient conditions

Degree of protection	IP67
Ambient temperature (operation)	-40 °C ... 85 °C (Plug / socket)

## Standards and regulations

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## M12

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

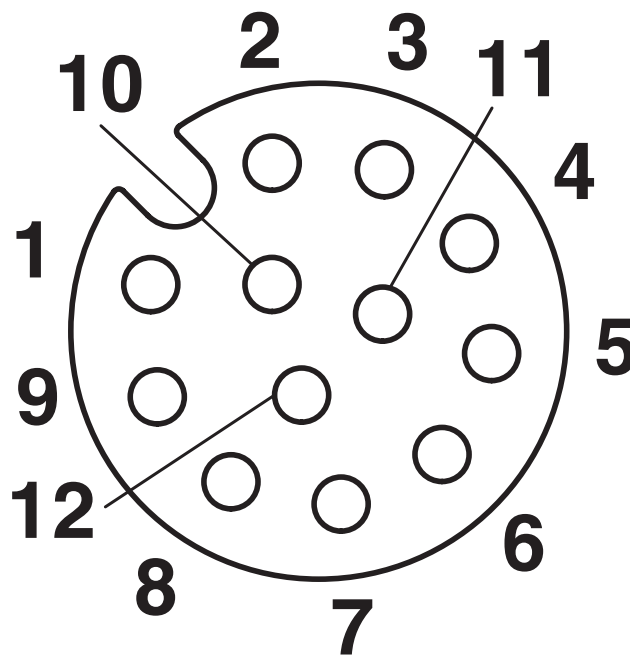
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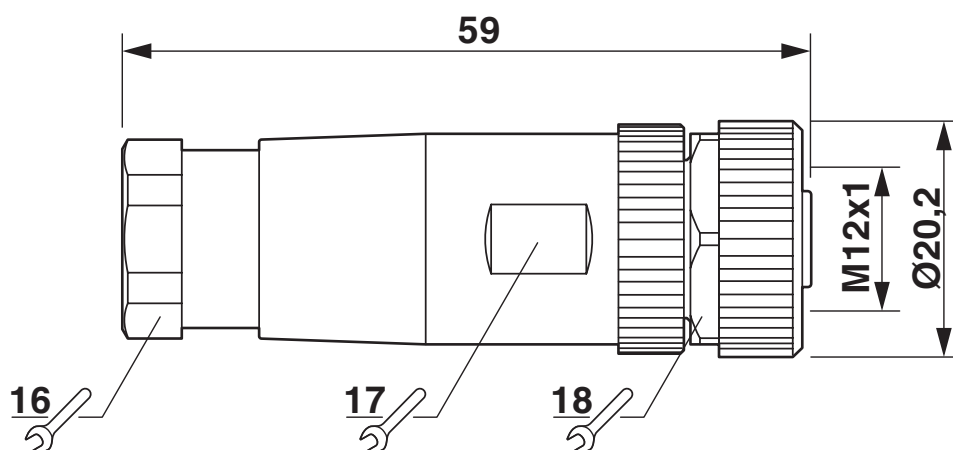
## Drawings

Schematic diagram



Pin assignment M12 socket, 12-pos., A-coded, view female side

Dimensional drawing



M12 x 1 socket, straight

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## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1404420>

 <b>cUL Recognized</b> Approval ID: FILE E 221474				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
	30 V	1 A	-	-

 <b>UL Recognized</b> Approval ID: FILE E 221474				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
	30 V	1 A	-	-

<b>cULus Recognized</b>				
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## Classifications

### ECLASS

ECLASS-11.0	27440102
ECLASS-12.0	27440116
ECLASS-13.0	27440116

### ETIM

ETIM 9.0	EC002635
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### UNSPSC

UNSPSC 21.0	39121400
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## Environmental product compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"



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## Accessories

### 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



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### 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



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## SACC BIT M12-D20 - Tool

1208445

<https://www.phoenixcontact.com/us/products/1208445>

Nut for assembling M12 connectors for assembly with a knurl diameter of 20 mm, for 4 mm hexagonal drive



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## 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



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## 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

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## WIREFOX SAC - Stripping tool

1212623

<https://www.phoenixcontact.com/us/products/1212623>



Stripping pliers, for halogen-free sensor/actuator cables (SAC cables), with PUR and PVC insulation, from Ø of 4.4 to 7 mm, any stripping length

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