

# SACC-M12MS-8QO-0,25-CM M - Connector



1424433

<https://www.phoenixcontact.com/us/products/1424433>

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.



Connector, Universal, 8-position, Plug straight M12, A, Insulation displacement connection, knurl material: Zinc die-cast, nickel-plated, external cable diameter 3 mm ... 7 mm

## Your advantages

- Safe use in the field, thanks to a high degree of protection
- Insulation displacement connection: innovative and time-saving assembly without stripping the single wire

## Commercial data

Item number	1424433
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF31
Product key	BF2CCA
Catalog page	Page 17 (C-2-2017)
GTIN	4055626375625
Weight per piece (including packing)	20.9 g
Weight per piece (excluding packing)	20 g
Customs tariff number	85444290
Country of origin	DE

# SACC-M12MS-8QO-0,25-CM M - Connector



1424433

<https://www.phoenixcontact.com/us/products/1424433>

## 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.
---------	--

### Mounting

Connection method	Insulation displacement connection
-------------------	------------------------------------

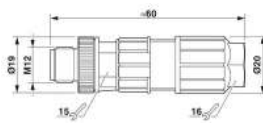
### Product properties

Product type	Circular connector (cable-side)
Sensor type	Universal
Number of positions	8
No. of cable outlets	1
Shielded	no
Coding	A
Cable outlet	straight

### Insulation characteristics

Overvoltage category	III
Degree of pollution	3

### Dimensions

Dimensional drawing	
Length	60 mm
Wrench size, union nut	16 mm
Wrench size, counter nut	15 mm

### External dimensions

Outside diameter	3 mm ... 7 mm
------------------	---------------

### Housing

Diameter housing	20 mm
------------------	-------

### Material specifications

Flammability rating according to UL 94	V0
Seal material	FKM
Material of grip body	PA-GF
Contact material	CuSn
Contact surface material	Ni/Au

# SACC-M12MS-8QO-0,25-CM M - Connector



1424433

<https://www.phoenixcontact.com/us/products/1424433>

Contact carrier material	PA 6.6
Material for screw connection	Zinc die-cast, nickel-plated
Wire insulation material	PVC / PE / PP / rubber

## Connection data

### Conductor connection

Connection method	Insulation displacement connection
Connection cross section	0.14 mm <sup>2</sup> ... 0.25 mm <sup>2</sup> (flexible)
Connection cross section AWG	26 ... 24 (flexible)
Tightening torque	0.4 Nm (M12 knurl)
	4 Nm (Pressure nut)

### Pin assignment

Contact   Color (signal designation)   Contact (optional)	1 = WH
	2 = BN
	3 = GN
	4 = YE
	5 = GY
	6 = PK
	7 = BU
	8 = RD

## Electrical properties

Rated surge voltage	0.8 kV
Insulation resistance	≥ 100 MΩ
Nominal voltage U <sub>N</sub>	30 V AC
	30 V DC
Nominal current I <sub>N</sub>	2 A

## Mechanical properties

### Mechanical data

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

## Connector

### Connection 1

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

## Cable/line

Signal type/category	Universal
----------------------	-----------

## Environmental and real-life conditions

# SACC-M12MS-8QO-0,25-CM M - Connector



1424433

<https://www.phoenixcontact.com/us/products/1424433>

## Ambient conditions

Degree of protection	IP65
Ambient temperature (operation)	-40 °C ... 85 °C (Plug / socket)
Ambient temperature (assembly)	-5 °C ... 50 °C

## Standards and regulations

### M12

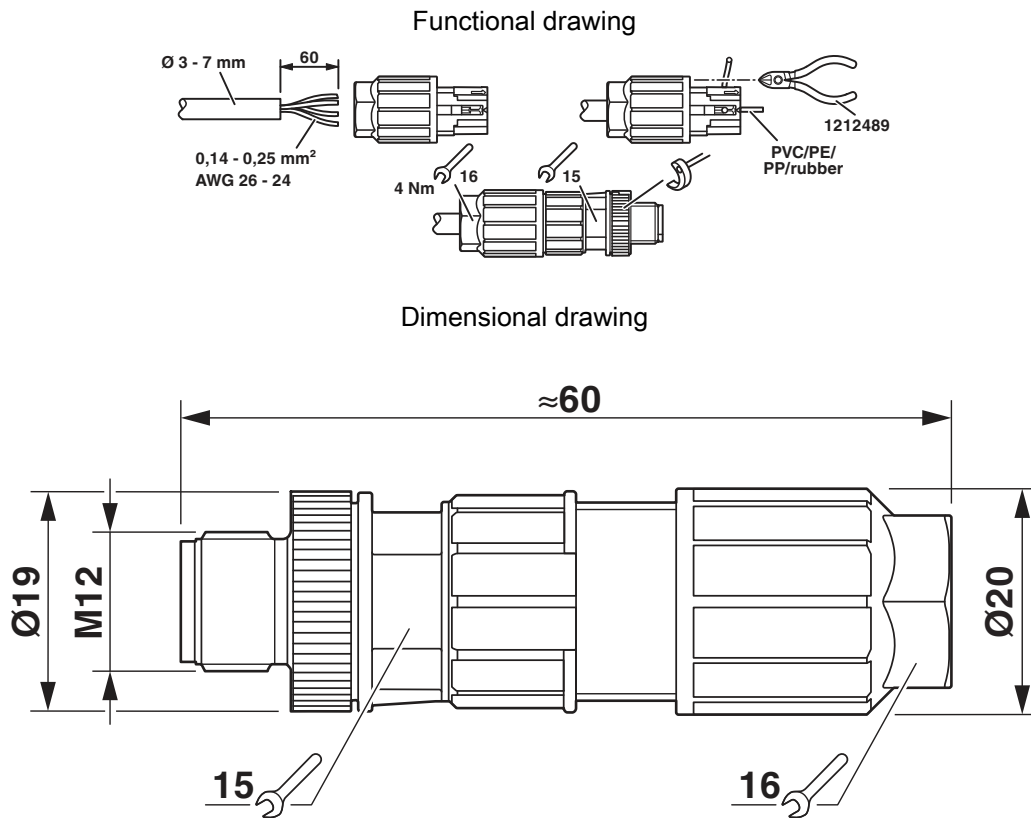
Standard designation	M12 connector
Standards/specifications	according to IEC 61076-2-101

# SACC-M12MS-8QO-0,25-CM M - Connector

1424433

<https://www.phoenixcontact.com/us/products/1424433>

## Drawings



Plug, M12 x 1, straight

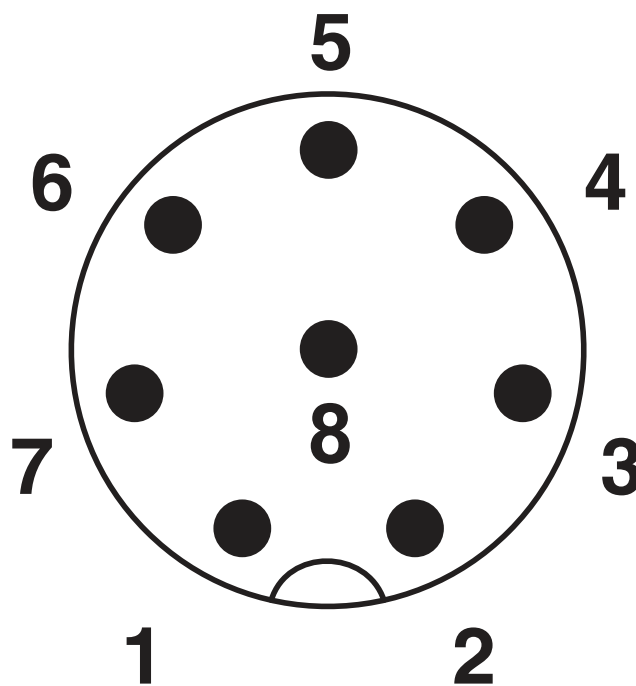
# SACC-M12MS-8QO-0,25-CM M - Connector

1424433

<https://www.phoenixcontact.com/us/products/1424433>



Schematic diagram



Pin assignment of M12 plug, 8-pos., A-coded, view of plug side

# SACC-M12MS-8QO-0,25-CM M - Connector



1424433

<https://www.phoenixcontact.com/us/products/1424433>

## Classifications

### ECLASS

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

### ETIM

ETIM 8.0	EC002635
----------	----------

### UNSPSC

UNSPSC 21.0	39121400
-------------	----------

# SACC-M12MS-8QO-0,25-CM M - Connector



1424433

<https://www.phoenixcontact.com/us/products/1424433>

## Environmental product compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values



# SACC-M12MS-8QO-0,25-CM M - Connector



1424433

<https://www.phoenixcontact.com/us/products/1424433>

## 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



---

### 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



# SACC-M12MS-8QO-0,25-CM M - Connector

1424433

<https://www.phoenixcontact.com/us/products/1424433>



## 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



---

## 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



# SACC-M12MS-8QO-0,25-CM M - Connector



1424433

<https://www.phoenixcontact.com/us/products/1424433>

## 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

---

## WIREFOX-D 40 - Stripping tool

1212161

<https://www.phoenixcontact.com/us/products/1212161>



Stripping tool, for stripping cables of 4.5 mm - 40 mm-Ø, insulation thickness of up to 4.5 mm, pivoting blade for round, lengthwise, and spiral cuts

# SACC-M12MS-8QO-0,25-CM M - Connector



1424433

<https://www.phoenixcontact.com/us/products/1424433>

## 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

---

## MICROFOX-SB - Diagonal cutter

1212489

<https://www.phoenixcontact.com/us/products/1212489>



Electronic diagonal cutter, round head, without chamfer, with opening spring, mirror-polished and oiled, 2-component grip, cutting capacity: soft 0.2 - 2.0 mm; medium hard 1.2 mm; hard 0.5 mm diameter

---

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](mailto:info@phoenixcon.com)