

# SACC-M12FR-8Q SH - Data connector



1553666

<https://www.phoenixcontact.com/us/products/1553666>

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.



Data connector, Ethernet CAT5 (1 Gbps), 8-position, shielded, Socket angled M12, coding: A, Insulation displacement connection, knurl material: Brass, nickel-plated, external cable diameter 4 mm ... 8 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
- Reliable signal transmission – 360° shielding in environments with electromagnetic interference

## Commercial data

Item number	1553666
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF31
Product key	AF2CDI
GTIN	4046356158831
Weight per piece (including packing)	45.92 g
Weight per piece (excluding packing)	45.92 g
Customs tariff number	85366990
Country of origin	DE

# SACC-M12FR-8Q SH - Data connector



1553666

<https://www.phoenixcontact.com/us/products/1553666>

## Technical data

### Notes

Assembly note	<b>NOTE:</b> Observe the permissible bending radii when routing cables, since the degree of protection may be at risk if the bending forces are too high. Reduce mechanical loads upstream of the connector, e.g., by using cable ties.
---------------	---

### Mounting

Assembly note	The connector pin assignment can be rotated 45° to the cable outlet
---------------	---

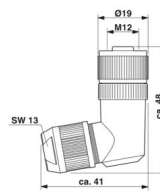
### Product properties

Product type	Circular connector (cable-side)
Application	Data
Sensor type	Ethernet
Number of positions	8
No. of cable outlets	1
Shielded	yes
Coding	A
Cable outlet	angled

### Insulation characteristics

Overvoltage category	II
Degree of pollution	3

### Dimensions

Dimensional drawing	
Length	48 mm

### External dimensions

Outside diameter	4 mm ... 8 mm
------------------	---------------

### Housing

Diameter housing	19 mm
------------------	-------

### Material specifications

Flammability rating according to UL 94	V0
Seal material	Neoprene
Material of grip body	Zinc die-cast, nickel-plated
Contact material	CuSn

# SACC-M12FR-8Q SH - Data connector



1553666

<https://www.phoenixcontact.com/us/products/1553666>

Contact surface material	Ni/Au
Contact carrier material	PA 6
Material for screw connection	Brass, nickel-plated

## Connection data

### Conductor connection

Connection method	Insulation displacement connection
Connection cross section	0.14 mm <sup>2</sup> ... 0.34 mm <sup>2</sup>
Connection cross section AWG	26 ... 22
Tightening torque	0.4 Nm (M12 knurl)
	0.8 Nm (Connector with coupling sleeve)
	3 Nm (Pressure nut with coupling sleeve)

## Electrical properties

Rated surge voltage	0.8 kV
Contact resistance	≤ 5 mΩ
Insulation resistance	≥ 100 MΩ
Nominal voltage U <sub>N</sub>	30 V AC
	30 V DC
Nominal current I <sub>N</sub>	2 A
Transmission speed	1 Gbps

## Mechanical properties

### Mechanical data

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

## Connector

### Connection 1

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

## Cable/line

Signal type/category	Ethernet CAT5 (based on IEC 11801), 1 Gbps
----------------------	--

## Environmental and real-life conditions

### Ambient conditions

Degree of protection	IP67
Ambient temperature (operation) (male connector/female connector)	-40 °C ... 85 °C (Plug / socket)
Ambient temperature (assembly)	-5 °C ... 50 °C

# SACC-M12FR-8Q SH - Data connector



1553666

<https://www.phoenixcontact.com/us/products/1553666>

## Standards and regulations

### M12

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

# SACC-M12FR-8Q SH - Data connector

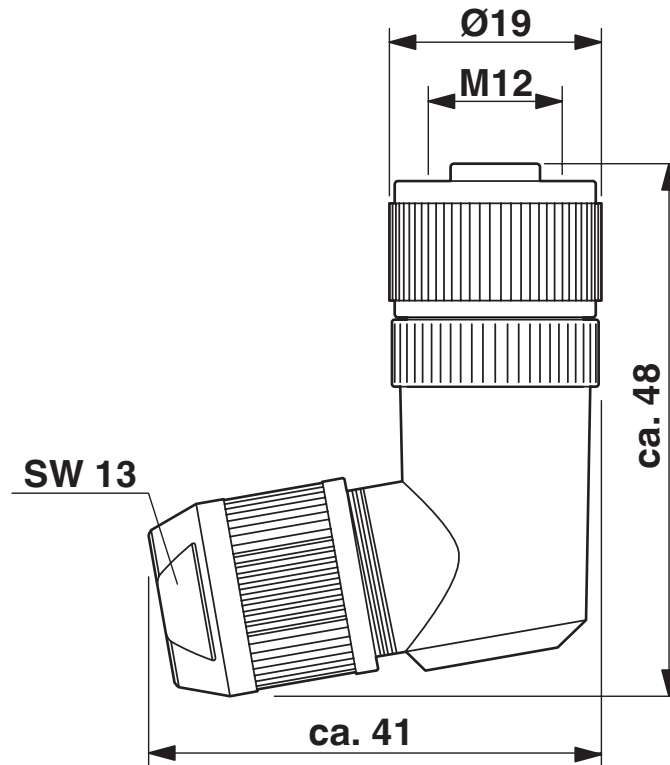
1553666

<https://www.phoenixcontact.com/us/products/1553666>



## Drawings

Dimensional drawing



M12 x 1 socket, angled, shielded

# SACC-M12FR-8Q SH - Data connector

1553666

<https://www.phoenixcontact.com/us/products/1553666>



Schematic diagram



Pin assignment M12 socket, 8-pos., A-coded, view female side

# SACC-M12FR-8Q SH - Data connector



1553666

<https://www.phoenixcontact.com/us/products/1553666>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1553666>



**EAC**

Approval ID: RU C-DE.AI30.B.01102

# SACC-M12FR-8Q SH - Data connector



1553666

<https://www.phoenixcontact.com/us/products/1553666>

## Classifications

### ECLASS

ECLASS-13.0	27440116
ECLASS-15.0	27440116

### ETIM

ETIM 10.0	EC002635
-----------	----------

### UNSPSC

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

# SACC-M12FR-8Q SH - Data connector



1553666

<https://www.phoenixcontact.com/us/products/1553666>

## 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.)	2-(2H-benzotriazol-2-yl)-4-(1,1,3,3-tetramethylbutyl)phenol (UV-329)(CAS: 3147-75-9)
SCIP	5deb6e66-fc6c-4d0d-a34a-6bae969a910b

### EF3.1 Climate Change

CO2e kg	0.971 kg CO2e
---------	---------------

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)