

# SACC-M12FRD-4Q SH PN - Data connector



1554542

<https://www.phoenixcontact.com/us/products/1554542>

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Data connector, PROFINET CAT5 (100 Mbps), 4-position, shielded, Socket angled M12, coding: D, 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	1554542
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF31
Product key	AF2CDN
GTIN	4046356166232
Weight per piece (including packing)	50 g
Weight per piece (excluding packing)	49.7 g
Customs tariff number	85366990
Country of origin	DE

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## Technical data

### Mounting

Assembly note	The connector pin assignment can be rotated 45° to the cable outlet
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### Product properties

Product type	Circular connector (cable-side)
Application	Data
Number of positions	4
No. of cable outlets	1
Shielded	yes
Coding	D
Cable outlet	angled

### Insulation characteristics

Overvoltage category	II
Degree of pollution	3

### Dimensions

#### External dimensions

Outside diameter	4 mm ... 8 mm
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### Material specifications

Flammability rating according to UL 94	V0
Seal material	Neoprene
Material of grip body	Zinc die-cast, nickel-plated
Contact material	CuSn
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	0.25 mm <sup>2</sup> ... 0.5 mm <sup>2</sup> (flexible)
	0.25 mm <sup>2</sup> ... 0.5 mm <sup>2</sup> (solid)
Connection cross section AWG	24 ... 20 (flexible)
	24 ... 20 (solid)
Tightening torque	0.4 Nm (M12 knurl)
	0.8 Nm (Connector with coupling sleeve)
	3 Nm (Pressure nut with coupling sleeve)

### Electrical properties

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Contact resistance	≤ 5 mΩ
Insulation resistance	≥ 100 MΩ
Nominal voltage U <sub>N</sub>	48 V AC
	60 V DC
Nominal current I <sub>N</sub>	1.75 A
Transmission speed	100 Mbps

## Mechanical properties

### Mechanical data

Insertion/withdrawal cycles	≥ 100
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## Connector

### Connection 1

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

## Cable/line

Signal type/category	PROFINET CAT5 (based on IEC 11801), 100 Mbps
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## Environmental and real-life conditions

### Ambient conditions

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

## Standards and regulations

### M12

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

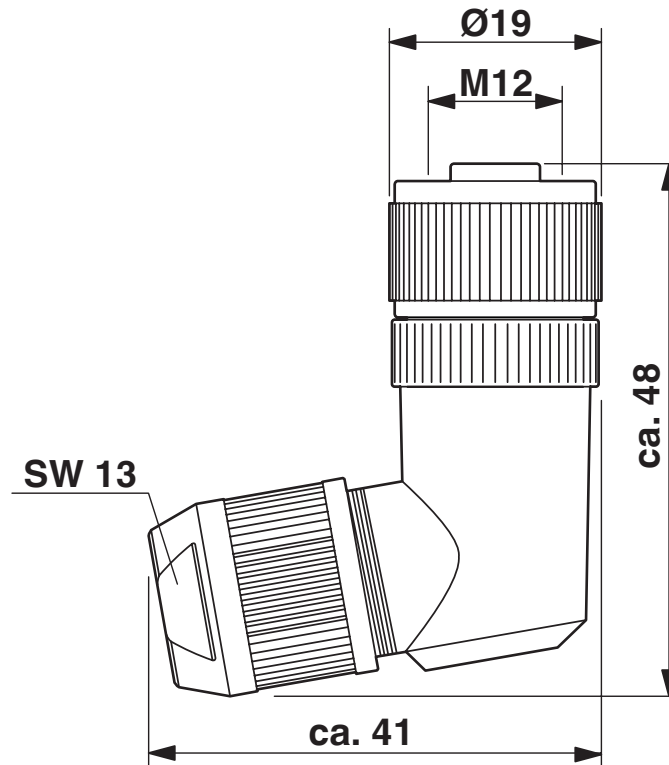
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## Drawings

Dimensional drawing



M12 x 1 socket, angled, shielded

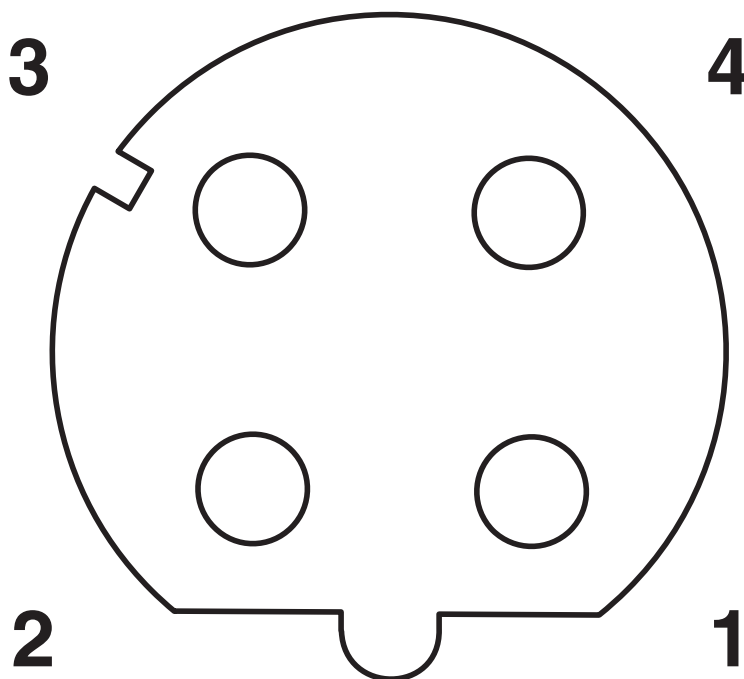
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Schematic diagram



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

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## Classifications

### ECLASS

ECLASS-13.0	27440116
ECLASS-15.0	27440116

### ETIM

ETIM 10.0	EC002635
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### UNSPSC

UNSPSC 21.0	39121400
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## Environmental product compliance

### EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
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### 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	50dcce9b-5f2e-4094-a162-a9035571984c

### EF3.1 Climate Change

CO2e kg	0.338 kg CO2e
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