

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's documentation. Our General Terms of Use for Downloads are valid (http://phoenixcontact.com/download)



Connector, PROFINET CAT6 $_{\rm A}$  (10 Gbps), 8-position, halogen-free, shielded, Socket straight M12 SPEEDCON, Coding: X, Insulation displacement connection, knurl material: Zinc die-cast, nickel-plated, external cable diameter 5 mm ... 9.7 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
- ☑ Reliable signal transmission 360° shielding in environments with electromagnetic interference



## **Key Commercial Data**

Packing unit	1 pc
GTIN	4 055626 029245
GTIN	4055626029245
Weight per Piece (excluding packing)	40.000 g
Custom tariff number	85366990
Country of origin	Germany

### Technical data

#### **Dimensions**

Wrench size, union nut	15 mm
Diameter housing	19 mm
Length	57 mm
External cable diameter	5 mm 9.7 mm
Stripping length of the sheath	≥ 80 mm



# Technical data

#### Ambient conditions

Ambient temperature (assembly)	-5 °C 50 °C
Degree of protection	IP65
	IP67

#### General

Note	NOTE: 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.
Rated current at 40°C	0.5 A
Rated voltage	48 V AC
	60 V DC
Number of positions	8
Insulation resistance	≥ 100 MΩ
Coding	X - data
Standards/regulations	M12 connector Based on IEC 61076-2-109
	Shock, vibration EN 50155:2001
Signal type/category	PROFINET CAT6 <sub>A</sub> (IEC 11801), 10 Gbps
Status display	No
Overvoltage category	II
Degree of pollution	3
Connection method	Insulation displacement connection
Conductor cross section	0.25 mm² 0.5 mm² (flexible)
	0.25 mm² 0.5 mm² (solid)
Conductor cross section AWG	24 20 (flexible)
	24 20 (solid)
Wire diameter including insulation	0.75 mm 2 mm
Frequency of connections between conductors of the same cross section	10
Wire insulation material	PVC / PE / PP / rubber
Structure of individual litz in acc. with VDE 0295 / smallest wire diameter	Class 2-6
Insertion/withdrawal cycles	≥ 100
Torque	M12 knurl
	5 Nm (Pressure nut)
Transmission characteristics (category)	CAT6 <sub>A</sub>

### Material

Flammability rating according to UL 94	V0
Contact material	CuSn
Contact surface material	Ni/Au



## Technical data

#### Material

Contact carrier material	PA 6.6
Material of grip body	Zinc die-cast, nickel-plated
Material, knurls	Zinc die-cast, nickel-plated
Sealing material	NBR
Standards/regulations	PA 6.6: Fire protection in rail vehicles - requirement sets R22, R23, R24, and R26 acc. to DIN EN 45545-2 (Risk level HL1 - HL3)

# Standards and Regulations

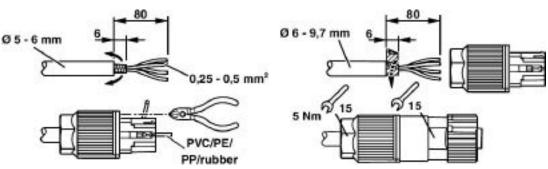
Standards/specifications	M12 connector Based on IEC 61076-2-109
	Shock, vibration EN 50155:2001
Flammability rating according to UL 94	V0

# **Environmental Product Compliance**

REACh SVHC	Lead 7439-92-1

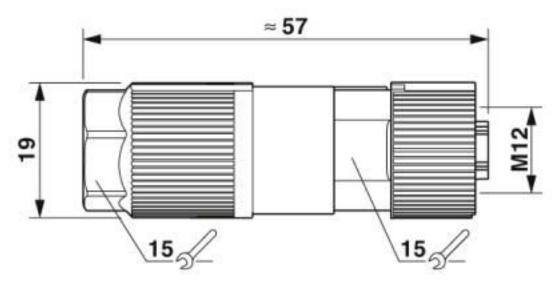
# Drawings

## Functional drawing





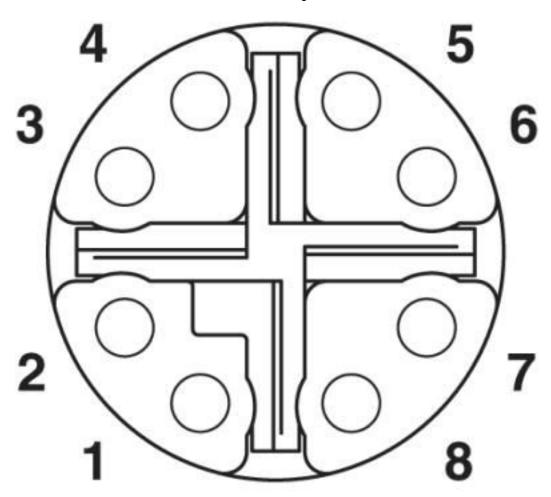
## Dimensional drawing



M12 x 1 socket, straight, shielded







M12 socket pin assignment, 8-pos, view of socket side

# Classifications

# eCl@ss

eCl@ss 10.0.1	27440102
eCl@ss 4.0	27140800
eCl@ss 4.1	27140800
eCl@ss 5.0	27143400
eCl@ss 5.1	27143400
eCl@ss 6.0	27279200
eCl@ss 7.0	27440104
eCl@ss 8.0	27440104



# Classifications

eCl@ss 9.0	27440102	
ETIM		
ETIM 5.0	EC002062	
ETIM 6.0	EC002062	
UNSPSC		
UNSPSC 13.2	39121413	
UNSPSC 18.0	39121413	
UNSPSC 19.0	39121413	
UNSPSC 20.0	39121413	
UNSPSC 21.0	39121413	
Approvals		
Approvals	Approvals	
Approvals		
EAC / EAC		
Ex Approvals		
Approval details		

EAC EAC-Zulassung

EAC RU C-DE.BL08.B.00511

## Accessories

Accessories

Electronics pliers



### Accessories

Diagonal cutter - MICROFOX-SB - 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

Plug for cable screw gland

Screw plug - PROT-M12 MS-PA-CHAIN - 1430899

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



#### Screwdriver tools

Tool - SACC BIT M12-D20 - 1208445



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

Adapter insert - TSD-M SAC-BIT ADAPTER - 1212600



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

Stripping tool



#### Accessories

Stripping tool - WIREFOX-D 40 - 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

## Torque tool

Torque screwdriver - TSD 04 SAC - 1208429



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

Torque screwdriver - TSD-M 1,2NM - 1212224



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

Shielding foil - VS-08-RJ45-FOLIEN-SET - 1417184

Shielding foil set, 25 pieces, replacement for RJ45 and M12 Quickon connector



Stripping tool - VS-CABLE-STRIP-VARIO - 1657407



Stripping tool, for the multi-level stripping of shielded cables



Phoenix Contact 2020 © - all rights reserved http://www.phoenixcontact.com