#### 1414587

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**PHŒNIX** CONTACT

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Data connector, PROFINET CAT6<sub>A</sub> (10 Gbps), 8-position, halogen-free, shielded, Socket straight M12, 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

### Commercial data

Item number	1414587
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF31
Product key	BF2CDN
Catalog page	Page 344 (C-2-2017)
GTIN	4055626029245
Weight per piece (including packing)	47 g
Weight per piece (excluding packing)	47.4 g
Customs tariff number	85366990
Country of origin	DE

1414587

https://www.phoenixcontact.com/us/products/1414587

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### Technical data

#### Notes

General	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.

#### Product properties

Product type	Circular connector (cable-side)
Sensor type	PROFINET
Number of positions	8
Application	Data
No. of cable outlets	1
Shielded	yes
Coding	X
Cable outlet	straight
Insulation characteristics	
Overvoltage category	Ш
Degree of pollution	3

#### Dimensions

Dimensional drawing	
Length	57 mm
Wrench size, union nut	15 mm
External dimensions	
Outside diameter	5 mm 9.7 mm
Housing	
Diameter housing	19 mm
laterial specifications	
Flammability rating according to UL 94	V0
Seal material	NBR
Material of grip body	Zinc die-cast, nickel-plated
Contact material	CuSn
Contact surface material	Ni/Au
Contact carrier material	PA 6.6
Material for screw connection	Zinc die-cast, nickel-plated

#### 1414587

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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)
Wire insulation material	PVC / PE / PP / rubber

#### Connection data

Connection method	Insulation displacement connection
Connection cross section	0.25 mm² 0.5 mm² (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	M12 knurl
	5 Nm (Pressure nut)
Pin assignment	
Contact   Color (signal designation)   Contact (optional)	1 = YE

	1-12
	2 = OG
	3 = WH
	4 = BU

#### **Electrical properties**

Rated surge voltage	0.8 kV
Insulation resistance	≥ 100 MΩ
Nominal voltage U <sub>N</sub>	48 V AC
	60 V DC
Nominal current I <sub>N</sub>	0.5 A

#### Mechanical properties

Mechanical data	
Insertion/withdrawal cycles	≥ 100

#### Connector

Connection 1	
Head design	Socket
Head cable outlet	straight
Head thread type	M12
Coding	Х

#### Cable/line

#### Environmental and real-life conditions

Ambient conditions



#### 1414587

https://www.phoenixcontact.com/us/products/1414587

Degree of protection	IP65
	IP67
Ambient temperature (operation)	-40 °C 85 °C (Plug / socket)
Ambient temperature (assembly)	-5 °C 50 °C

#### Standards and regulations

Testing		
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)	
Standard designation	M12 connector	
Standards/specifications	based on IEC 61076-2-109	
Standard designation	Shock, vibration	
Standards/specifications	EN 50155:2001	

1414587

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### Classifications

#### ECLASS

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

#### ETIM

	ETIM 9.0	EC002635	
UNSPSC			
	UNSPSC 21.0	39121400	

1414587

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### Environmental product compliance

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

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