

1413934

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Data connector, PROFIBUS (31.25 kbps), 2-position, halogen-free, shielded, Socket straight M12, coding: A, 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	1413934
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Sales key	BF31
Product key	BF2CDC
Catalog page	Page 423 (C-2-2019)
GTIN	4055626013169
Weight per piece (including packing)	49.4 g
Weight per piece (excluding packing)	50.4 g
Customs tariff number	85366990
Country of origin	DE



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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.
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### Product properties

PROFIBUS
2
Data
1
yes
A
straight

#### Insulation characteristics

Overvoltage category	II
Degree of pollution	3

#### **Dimensions**

Dimensional drawing	57 15 / 15 / 15 /
Length	57 mm
Wrench size, union nut	15 mm
External dimensions	
Outside diameter	5 mm 9.7 mm
Housing	
Diameter housing	19 mm

#### Material 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



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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  Conductor connection	
	Insulation displacement connection

0.14 mm<sup>2</sup> ... 0.5 mm<sup>2</sup> (solid)

24 ... 18 (flexible) 26 ... 20 (solid)

5 Nm (Pressure nut)

#### Pin assignment

Tightening torque

Connection cross section AWG

· ··· assig·····s···	
Contact   Color (signal designation)   Contact (optional)	PROFIBUS PA: 1 = OG (DATA+)
	PROFIBUS PA: 3 = BU (DATA-)
	PROFIBUS PA: 4 = WH (shield)
	FOUNDATION Fieldbus: 1 = BU (DATA-)
	FOUNDATION Fieldbus: 2 = OG (DATA+)
	FOUNDATION Fieldbus: 3 (shield)

### Electrical properties

Rated surge voltage	0.8 kV
Insulation resistance	≥ 100 MΩ
Nominal voltage U <sub>N</sub>	30 V DC
Nominal current I <sub>N</sub>	4 A

### Mechanical properties

1400	h-n		4040
wec	nan	ICai	data

Insertion/withdrawal cycles	≥ 100

#### Connector

#### Connection 1

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

#### Cable/line

Signal type/category	PROFIBUS, 31.25 kbps

### Environmental and real-life conditions

#### Ambient conditions



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

## Standards and regulations

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



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# Classifications

UNSPSC 21.0

#### **ECLASS**

ECLASS-11.0	27440102	
ECLASS-12.0	27440116	
ECLASS-13.0	27440116	
ETIM		
ETIM 9.0	EC002635	
UNSPSC		

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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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