

1414586

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Data connector, Ethernet $CAT6_A$ (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	1414586
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF31
Product key	BF2CDI
Catalog page	Page 342 (C-2-2019)
GTIN	4055626029238
Weight per piece (including packing)	46.934 g
Weight per piece (excluding packing)	47.28 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

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

Insulation characteristics

Overvoltage category	II
Degree of pollution	3

Dimensions

Dimensional drawing	57 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	VO
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

Connection method	Insulation displacement connection
Connection cross section	0.14 mm² 0.34 mm² (flexible)
	0.14 mm ² 0.34 mm ² (solid)
Connection cross section AWG	26 22 (flexible)
	26 22 (solid)
Tightening torque	M12 knurl
	5 Nm (Pressure nut)

Pin assignment

Pin assignment	
Contact Color (signal designation) Contact (optional)	1 = WHOG (D1+)
	2 = OG (D1-)
	3 = WHGN (D2+)
	4 = GN (D2-)
	5 = WHBN (D4+)
	6 = BN (D4-)
	7 = WHBU (D3-)
	8 = BU (D3+)

Electrical properties

Rated surge voltage	0.8 kV
Insulation resistance	≥ 100 MΩ
Nominal voltage U _N	48 V AC
	60 V DC
Nominal current I _N	0.5 A

Mechanical properties

Mechanical data

insertion/withdrawar cycles = 100

Connector

Connection 1

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

Cable/line



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	Signal type/category	Ethernet CAT6 _A (IEC 11801), 10 Gbps		
Environmental and real-life conditions				
P	Ambient conditions			
	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

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



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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			



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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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