

1413994

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Connector, Universal, 4-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	1413994
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF31
Product key	BF2CDA
Catalog page	Page 21 (C-2-2019)
GTIN	4055626013206
Weight per piece (including packing)	45 g
Weight per piece (excluding packing)	45 g
Customs tariff number	85366990
Country of origin	DE



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Technical data

Notes

Assembly note	NOTE: Observe the permissible bending radii when routing cables, since the degree of protection may be at risk if the bending forces are too high. Reduce mechanical loads upstream of the connector, e.g., by using cable ties.
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Mounting

Assembly note	If the conductor is to be reconnected, it must be cut off above the
	last contact point.

Product properties

Product type	Circular connector (cable-side)
Sensor type	Universal
Number of positions	4
No. of cable outlets	1
Shielded	yes
Coding	A
Cable outlet	straight

Data management status

Article revision	06

Insulation characteristics

Overvoltage category	II
Degree of pollution	3

Dimensions

Dimensional drawing	9 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



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Contact material	CuSn
Contact surface material	Ni/Au
Contact carrier material	PA 6.6
Material for screw connection	Zinc die-cast, nickel-plated
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 mm ² 0.75 mm ² (flexible)
	0.14 mm ² 0.5 mm ² (solid)
Connection cross section AWG	26 18 (flexible)
	26 20 (solid)
Tightening torque	5 Nm (Pressure nut)

Pin assignment

Contact Color (signal designation) Contact (optional)	1 = BN
	2 = WH
	3 = BU
	4 = BK

Electrical properties

Rated surge voltage	2.5 kV
Insulation resistance	≥ 100 MΩ
Nominal voltage U _N	250 V AC
	250 V DC
Nominal current I _N	4 A

Mechanical properties

Mecha	ınıcal	data

Insertion/withdrawal cycles	≥ 100
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Connector

Connection 1

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

Cable/line

Signal type/category	Universal



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Environmental and real-life conditions

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

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
Standard designation	Shock, vibration
Standards/specifications	EN 50155:2001

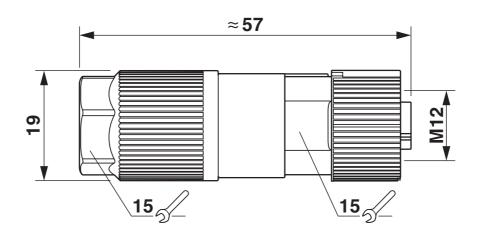


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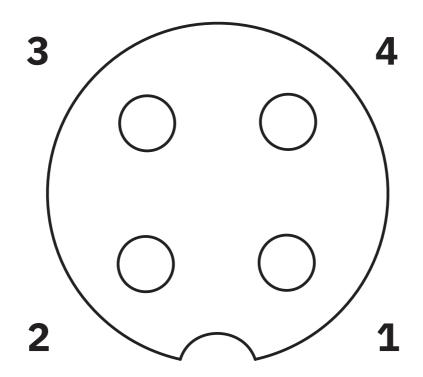
Drawings

Dimensional drawing



M12 x 1 socket, straight, shielded

Schematic diagram

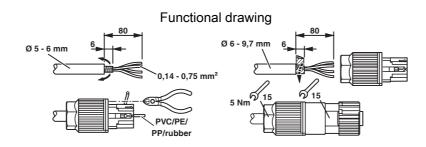


Pin assignment M12 socket, 4-pos., A-coded, view female side



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Approvals

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EAC

Approval ID: RU C-DE.BL08.B.00511



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Classifications

UNSPSC 21.0

ECLASS

ECLASS-1	1.0	27440102
ECLASS-1	2.0	27440116
ECLASS-1	3.0	27440116
ETIM		
ETIM 9.0		EC002635
UNSPSC		

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Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
China RoHS	
Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits
EU REACH SVHC	
REACH candidate substance (CAS No.)	No substance above 0.1 wt%

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