

1414412

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Cable connector, Ethernet CAT6 $_{\rm A}$  (10 Gbps), 8-pos., halogen-free, shielded, insulation displacement connection, housing material: zinc die-cast, nickel-plated, outer cable diameter of 5 mm ... 9.7 mm

### Your advantages

- · Innovative and time saving QUICKON fast connection for time saving of up to 80 % for on-site connection
- · Safe use in the field, thanks to a high degree of protection
- Reliable signal transmission 360° shielding in environments with electromagnetic interference
- · Insulation displacement connection: innovative and time-saving assembly without stripping the single wire

#### Commercial data

Item number	1414412
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF31
Product key	BF6EFI
Catalog page	Page 342 (C-2-2019)
GTIN	4055626025490
Weight per piece (including packing)	62.8 g
Weight per piece (excluding packing)	62 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	Cable connector	
Sensor type	Ethernet	
Number of positions	8	
No. of cable outlets	2	
Shielded	yes	
Data management status		
Article revision	04	

## Insulation characteristics

Overvoltage category	III
Degree of pollution	3

#### **Dimensions**

Dimensional drawing	15 / 15 / 15	
Length	83 mm	
Wrench size, union nut	15 mm	
Wrench size, counter nut	17 mm	
External dimensions		
Outside diameter	5 mm 9.7 mm	

### Connection data

#### Connection technology

Connection method	Insulation displacement connection
Frequency of connections between conductors of the same cross section	10
Outlief to the constitution	



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Structure of individual litz in acc. with VDE 0295 / smallest wire diameter	Class 2-6
Tightening torque	5 Nm (Pressure nut)
Wrench size, union nut	15 mm
Wrench size, contact carrier	17 mm
Wire diameter including insulation	0.75 mm 2 mm
Tightening torque	5 Nm (Pressure nut)
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+)
ectrical 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 (30 W)
Transmission characteristics (category)	CAT6 <sub>A</sub>
terial 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
Standards/regulations	PA 6.6: Fire protection in rail vehicles - requirement sets R22, R23, and R24 acc. to DIN EN 45545-2 (Risk level HL1 - HL3)
Wire insulation material	PVC / PE / PP / rubber
nnector	
Connection 1	Cable connectors
Head design	Cable connectors
ble/line	
Signal type/category	Ethernet CAT6 <sub>A</sub> (IEC 11801), 10 Gbps



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### Environmental and real-life conditions

#### Ambient conditions

Degree of protection	IP65
	IP67
Ambient temperature (operation)	-40 °C 85 °C
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, and R24 acc. to DIN EN 45545-2 (Risk level HL1 - HL3)
Standards/specifications	based on IEC 61076-2-109
Standard designation	Shock, vibration
Standards/specifications	EN 50155:2001

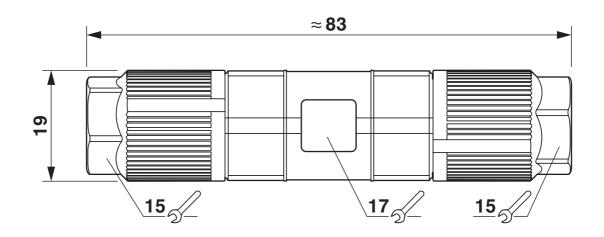


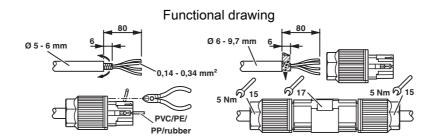
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## Drawings

### Dimensional drawing







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## **Approvals**

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1414412



EAC

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



**EAC-RoHS** 

Approval ID: RU D-DE.HB35.B.00387



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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

#### 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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