

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	AF2CDI
Product key	AF2CDI
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

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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Product properties

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

Insulation characteristics

Overvoltage category	II
Degree of pollution	3

Dimensions

Dimensional drawing	9 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
Standards/regulations	PA 6.6



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Wire insulation material	PVC / PE / PP / rubber
Connection data	
Conductor connection	
Connection method	Insulation displacement connection
Connection cross section	0.14 mm ² 0.34 mm ² (flexible)
	0.14 mm² 0.34 mm² (solid)
Connection cross section AWG	26 22 (flexible)
	26 22 (solid)
Tightening torque	M12 knurl
	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+)
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/withdrawal cycles	≥ 100
Connector	
Connection 1	
Head design	Socket
Head cable outlet	straight
Head thread type	M12
Coding	X
Cable/line	

Environmental and real-life conditions

Signal type/category

Ethernet CAT6_A (IEC 11801), 10 Gbps



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Ambient conditions

Degree of protection	IP65
	IP67
Ambient temperature (operation) (male connector/female connector)	-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	according to IEC 61076-2-109
Standard designation	Shock, vibration
Standards/specifications	EN 50155:2001

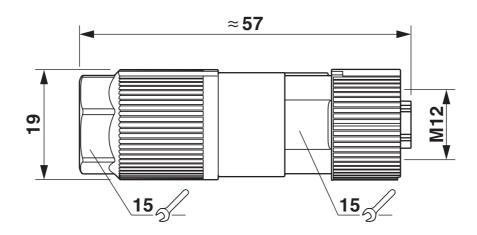


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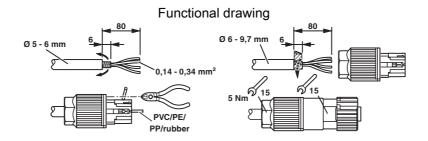
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Drawings

Dimensional drawing



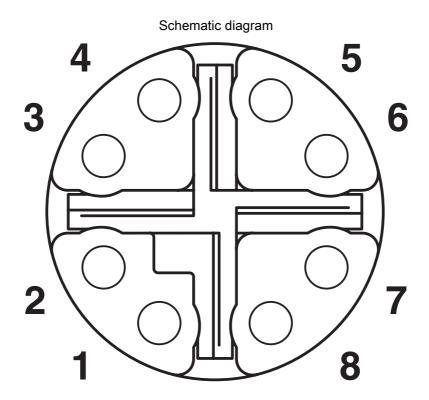
M12 x 1 socket, straight, shielded





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M12 socket pin assignment, 8-pos, view of socket side



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Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/au/products/1414586



UL Listed

Approval ID: E335024-20120831



cUL Listed

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Classifications

	ECLASS-13.0	27440116		
ΕΊ	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%
EF3.0 Climate Change	
CO2e kg	9.544 kg CO2e

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