

1407618

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Device connector rear mounting, Ethernet CAT5 (IEC 11801:2002) (100 Mbps), 8-position, Socket, straight, M12-SPEEDCON, coding: Y, on free cable end, Rear mounting, M16 x 1.5, Individual wires, cable length: 0.5 m, 0.14 mm^2 , TPE litz wire, Alternative product in accordance with RoHS II without Exemption 6c (Pb < 0.1 %) item no.: 1238753

Your advantages

- · Preassembled with litz wires for immediate use
- · Customer-specific assemblies and litz wire lengths available
- · All standard pin assignments and codings for signal, data, and power transmission with a uniform design-in design
- For high transmission safety: shield connection to the housing with optional EMC nut

Commercial data

Item number	1407618
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	AB24
Product key	ABQCGG
GTIN	4046356807913
Weight per piece (including packing)	39 g
Weight per piece (excluding packing)	37 g
Customs tariff number	85444290
Country of origin	DE



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Technical data

Notes

General	The electrical and mechanical data specified assume that the connector pair is correctly locked and mounted. If the connector is unlocked and if there is a danger of contamination, the connector must be sealed using a protective cap > IP54. Influences arising from litz wires, cables or PCB assembly must also be taken into consideration.
General	Lock nut is included in the scope of delivery
General	Contact connection method: Crimp connection

Safety note

Sa	tety	no	te

WARNING: The connectors may not be plugged in or disconnected under load. Ignoring the warning or improper use may damage persons and/or property.

- WARNING: Commission properly functioning products only.
 The products must be regularly inspected for damage.
 Decommission defective products immediately. Replace damaged products. Repairs are not possible.
- WARNING: Only electrically qualified personnel may install and operate the product. They must observe the following safety notes. The qualified personnel must be familiar with the basics of electrical engineering. They must be able to recognize and prevent danger. The relevant symbol on the packaging indicates that only personnel familiar with electrical engineering are allowed to install and operate the product.
- The products are suitable for applications in plant, controller, and electrical device engineering.
- When operating the connectors in outdoor applications, they must be separately protected against environmental influences.
- Assembled products may not be manipulated or improperly opened.
- Only use mating connectors that are specified in the technical data of the standards listed (e.g. the ones listed in the product accessories online at phoenixcontact.com/products).
- When using the product in direct connection with third-party manufacturers, the user is responsible.
- For operating voltages > 50 V AC, conductive connector housings must be grounded
- Ensure that when laying the cable, the tensile load on the connectors does not exceed the upper limit specified in the standards.
- Observe the corresponding technical data. You will find information:
- o On the product
- o On the packing label
- o In the supplied documentation
- o Online at phoenixcontact.com/products under the product
- Only use tools recommended by Phoenix Contact
- Use a protective cap to protect connectors that are not in use.



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	The suitable accessories are available online in the accessory section of the product at phoenixcontact.com/products
	 Ensure that the protective or functional ground has been properly connected.
	 VDE 0100/1.97 § 411.1.3.2 and DIN EN 60 204/11.98 § 14.1.3 are applicable when combining several circuits in a cable and/or connector
	 The connector warms up in normal operation. Depending on the ambient conditions, the surface of the connector can continue to warm up. In this case, the user is responsible for posting warnings (e.g. DIN EN ISO 13732-1:2008-12).
lounting	
Mounting type	Rear mounting M16 x 1.5
roduct properties	
Product type	Circular connectors (device side)
Sensor type	Ethernet
Number of positions	8
Shielded	no
Coding	Y
Thread type	M12
Les lefters the control of the	
Insulation characteristics	III
Overvoltage category Degree of pollution	3
Degree of political	3
aterial specifications	
Flammability rating according to UL 94	V0
Seal material	FKM
Contact material	CuZn
Contact surface material	Ni/Au
Control comics scaterial	147.6
Contact carrier material	PPA
Material for screw connection	
	PPA
Material for screw connection Conductor material	PPA Zinc die-cast, nickel-plated
Material for screw connection Conductor material	PPA Zinc die-cast, nickel-plated
Material for screw connection Conductor material lectrical properties	PPA Zinc die-cast, nickel-plated Tin-plated Cu litz wires
Material for screw connection Conductor material lectrical properties Rated surge voltage	PPA Zinc die-cast, nickel-plated Tin-plated Cu litz wires 0.8 kV
Material for screw connection Conductor material lectrical properties Rated surge voltage Contact resistance Insulation resistance	PPA Zinc die-cast, nickel-plated Tin-plated Cu litz wires 0.8 kV ≤ 3 mΩ
Material for screw connection Conductor material lectrical properties Rated surge voltage Contact resistance	PPA Zinc die-cast, nickel-plated Tin-plated Cu litz wires 0.8 kV \leq 3 mΩ \Rightarrow 100 MΩ
Material for screw connection Conductor material lectrical properties Rated surge voltage Contact resistance Insulation resistance	PPA Zinc die-cast, nickel-plated Tin-plated Cu litz wires 0.8 kV $\leq 3 \text{ m}\Omega$ $> 100 \text{ M}\Omega$ $48 \text{ V AC (Power and data)}$
Material for screw connection Conductor material lectrical properties Rated surge voltage Contact resistance Insulation resistance Nominal voltage U _N	PPA Zinc die-cast, nickel-plated Tin-plated Cu litz wires 0.8 kV ≤ 3 mΩ > 100 MΩ 48 V AC (Power and data) 50 V DC (Power and data)
Material for screw connection Conductor material lectrical properties Rated surge voltage Contact resistance Insulation resistance Nominal voltage U _N	PPA Zinc die-cast, nickel-plated Tin-plated Cu litz wires 0.8 kV $\leq 3 \text{ m}\Omega$ $> 100 \text{ M}\Omega$ $48 \text{ V AC (Power and data)}$ $50 \text{ V DC (Power and data)}$ 0.5 A (Data)



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Max. conductor resistance	142 mΩ/m
connection data	
Conductor connection	
Connection method	Individual wires
Contact connection type	Socket
Conductor cross section	0.14 mm²
Tightening torque	3 Nm 4 Nm (Installation-side)
lechanical properties	
Mechanical data	
Insertion/withdrawal cycles	> 100
onnector	
Connection 1	
Head design	Socket
Head cable outlet	straight
Head thread type	M12
Head locking type	SPEEDCON
Coding	Y
Connection 2	
Head design	free cable end
ricad design	nec capic crid
able/line	
Cable length	0.5 m
Cable type	TPE litz wire
Signal type/category	Ethernet CAT5 (IEC 11801:2002), 100 Mbps
Single wire, color	Signal: orange/white, orange, green/white, green Power: blue, white, brown, black
Cable cross section	0.14 mm²
Conductor material	Tin-plated Cu litz wires
Conductor structure signal line	1.10 mm
AWG signal line	26
Conductor structure, voltage supply	1.50 mm
AWG power supply	20
Material wire insulation	TPE
Thickness, insulation	0.25 mm
Nominal voltage, cable	300 V
Test voltage, cable	3000 V AC
Cable resistance	≤ 142 mΩ/m



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Cable insulation resistance	≥ 20 MΩ*km
Ambient temperature (operation)	-40 °C 105 °C (cable, fixed installation)
	-30 °C 90 °C (Cable, flexible installation)

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP67
	IP67
Ambient temperature (operation)	-25 °C 85 °C
	-40 °C 85 °C (without mechanical actuation)
	-30 °C 90 °C (Cable, flexible installation)
	-40 °C 105 °C (cable, fixed installation)

Standards and regulations

M12

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

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