

1424177

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Device connector rear mounting, Ethernet CAT6 $_{\rm A}$ (10 Gbps), 8-position, Socket, straight, M12-SPEEDCON, X-coding, Wave soldering, this item is expected to be lead-free from Q1 2026 in accordance with RoHS II without exception 6c (Pb < 0.1%), a lead-free alternative is possible on request in advance

Your advantages

- Easy PCB assembly: one-piece connectors for wave soldering
- · All standard pin assignments and codings for signal, data, and power transmission with a uniform design-in design
- · For high transmission reliability: optional shield connection to the housing by means of shield contact

Commercial data

Item number	1424177
Packing unit	20 pc
Minimum order quantity	20 pc
Sales key	AB26
Product key	ABQEHB
GTIN	4046356692656
Weight per piece (including packing)	16.65 g
Weight per piece (excluding packing)	15.779 g
Customs tariff number	85366990
Country of origin	DE



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Technical data

Notes

Notes on operation	The electrical and mechanical data specified assumes that the connector pair is correctly locked and mounted. If the connector is unlocked and if there is a danger of pollution, the connector must be sealed using a protective cap >IP54. Influences arising from litz wires, cables, or PCB mounting must also be taken into consideration. Additional mechanical fixing of the PCB is required.
Order information:	Lock nut is included in the scope of delivery

Mounting

Mounting type	Rear mounting (M16 x 1,5)
Tightening torque	2 Nm 3 Nm (Installation-side)

Product properties

Product type	Circular connectors (device side)
Application	Data
Sensor type	Ethernet
Number of positions	8
Shielded	yes
Coding	X
Thread type	M12

Insulation characteristics

Overvoltage category	III
Degree of pollution	3

Dimensions

Length of the solder pin	6 mm
	6 mm

Material specifications

Material Housing	GD-Zn
Material Housing surface	Ni
Material Insulating body	PPA
Material Contact	CuZn
Material Contact surface	Au
Material Seal	FKM
Flammability rating according to UL 94	V0

Electrical properties

Rated surge voltage	0.8 kV
Contact resistance	≤ 3 mΩ



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Insulation resistance	> 100 MΩ
Nominal voltage U _N	48 V AC
	60 V DC
Nominal current I _N	0.5 A (Data)
Transmission speed	10 Gbps
Transmission characteristics (category)	CAT6 _A

Connection data

Conductor connection

Connection method	Wave soldering
Contact connection type	Socket
Tightening torque	2 Nm 3 Nm (Installation-side)

Mechanical properties

Mechanical data

	Insertion/withdrawal cycles	≥ 100

Connector

Connection 1

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

Cable/line

Signal type/category	Ethernet CAT6 _A , 10 Gbps
0 11 0 1	A' '

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP67 (When plugged in)	
Ambient temperature (operation) (male connector/female connector)	-25 °C 85 °C (Plug / socket)	
	-40 °C 85 °C (without mechanical actuation)	
UL Type Rating	Type 4 (indoor use only)	

Standards and regulations

Standard designation	M12 circular connector
Standards/specifications	according to IEC 61076-2-109
Standard designation	Shock, vibration
Standards/specifications	according to EN 50155
Standard designation	Shock, vibration



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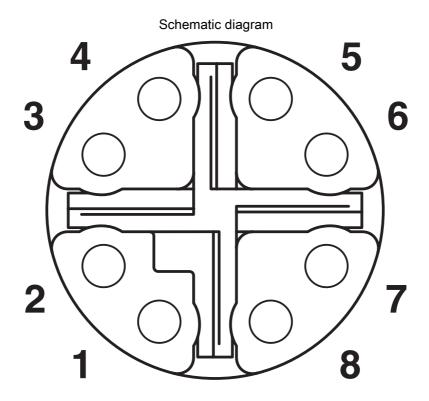
Standards/specifications according to EN 61373:2011



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Drawings



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/us/products/1424177

. F. L	cUL Recognized Approval ID: E335024-20120308				
		Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
keine					
		60 V	0.5 A	-	-

7/	UL Recognized Approval ID: E335024-20120308				
		Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
keine					
		60 V	0.5 A	-	-



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Classifications

UNSPSC 21.0

ECLASS

	ECLASS-13.0	27440110		
	ECLASS-15.0	27440110		
ETIM				
	ETIM 9.0	EC003568		
UN	ISPSC			

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Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	6(c)
China RoHS	
Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.
EU REACH SVHC	
REACH candidate substance (CAS No.)	Lead(CAS: n/a)
SCIP	635c5b25-2d21-45ea-8e5e-ac02b3954907

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