

1424180

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Contact carrier, Ethernet CAT6 $_{\rm A}$  (10 Gbps), 8-position, Socket, angled, M12, X-coding, Wave soldering, this item is expected to be lead-free from Q4 2025 in accordance with RoHS II without exception 6c (Pb < 0.1%), a lead-free alternative is possible on request in advance

## Your advantages

- · Reduced mounting costs thanks to two-piece device connector
- · All common pin assignments and codings available
- Easy device integration thanks to mechanical port screw connections with threaded attachment, press-in contour or direct integration in the front plate

#### Commercial data

Item number	1424180
Packing unit	20 pc
Minimum order quantity	20 pc
Sales key	AB23
Product key	ABQAHS
GTIN	4046356692663
Weight per piece (including packing)	6.87 g
Weight per piece (excluding packing)	6.87 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 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.
	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

### Product properties

Product type	Contact insert
Application	Data
Sensor type	Ethernet
Number of positions	8
Seal present	no
Shielded	yes
Coding	X
Thread type	M12

#### Insulation characteristics

Overvoltage category	III
Degree of pollution	3

### Electrical properties

Rated surge voltage	0.8 kV
Contact resistance	< 3 mΩ
Insulation resistance	> 100 MΩ
Nominal voltage U <sub>N</sub>	50 V AC (Data)
	60 V DC
Nominal current I <sub>N</sub>	0.5 A (Data)
Transmission speed	10 Gbps
Transmission characteristics (category)	CAT6 <sub>A</sub>

#### Connection data

Connection method	Wave soldering
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## Interfaces

Signal type/category	Ethernet CAT6 <sub>A</sub> , 10 Gbps
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### Material specifications

Material Contact carrier	PA 6T/66
Material Contact	Copper alloy
Material Contact surface	Au
Flammability rating according to UL 94	V0



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#### Connector

#### Connection 1

Head design	Socket
Head cable outlet	angled
Head thread type	M12
Coding	X

#### Cable/line

Signal type/category	Ethernet CAT6 <sub>A</sub> , 10 Gbps

### Mechanical properties

#### Mechanical data

Insertion/withdrawal cycles	≥ 100

#### Environmental and real-life conditions

#### Ambient conditions

Degree of protection	IP67 (When plugged in)
Ambient temperature (operation) (male connector/female connector)	-40 °C 105 °C (Plug / socket)
Ambient temperature (operation)	-40 °C 105 °C (without mechanical actuation)
	-25 °C 105 °C (Cable, flexible installation)
	-40 °C 105 °C (cable, fixed installation)
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
Standards/specifications	according to EN 61373:2011

### Mounting

#### Processing notes

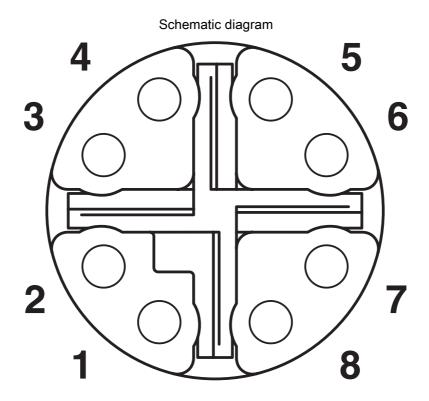
•	
Process	Wave soldering



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# Drawings



Pin assignment M12 connector, 8-pos., view socket side



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## **Approvals**

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.51	cUL Recognized Approval ID: E335024-20120	308			
	ı	Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
keine					
	(	60 V	0.5 A	-	-

<b>7.1</b>	UL Recognized Approval ID: E335024-2	0120308	08		
		Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
keine					
		60 V	0.5 A	-	-



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# Classifications

### **ECLASS**

	ECLASS-13.0	27440223	
	ECLASS-15.0	27440223	
	-1A 4		
ETIM			
	ETIM 9.0	EC003557	
UI	NSPSC		
	UNSPSC 21.0	39121400	



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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: 7439-92-1)
SCIP	fa4a0fc9-4b6e-4255-89bb-4c0db9e5f819

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