

1553381

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Device connector rear mounting, 8-position, PUR, water blue RAL 5021, Socket, straight, M12, A-coding, on free cable end, Cable connection, cable length: 2 m, 0.14 mm<sup>2</sup>, Ethernet, this item is expected to be lead-free from Q1 2027 in accordance with RoHS II without exception 6c (Pb < 0.1%), a lead-free alternative is possible on request in advance

#### Your advantages

- · Preassembled with cables in various standard lengths for immediate use
- · Customer-specific assemblies and cable lengths can be supplied
- · Sealed on the cable side for optimum tightness of seal
- · Cable designs for all common networks and fieldbuses
- · For high transmission safety: shield connection to the housing with optional EMC nut

#### Commercial data

Item number	1553381
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	AB25
Product key	ABQDGG
GTIN	4046356162364
Weight per piece (including packing)	117.966 g
Weight per piece (excluding packing)	115.806 g
Customs tariff number	85444290
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.
Order information:	Lock nut is included in the scope of delivery

#### Mounting

Mounting type	Rear mounting (M16 x 1.5, with flat nut)
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#### Product properties

Circular connectors (device side)
Data
8
1
yes
A
M12

#### Insulation characteristics

Overvoltage category	II
Degree of pollution	3

#### Material specifications

Material Housing	GD-Zn
Material Housing surface	Ni
Flammability rating according to UL 94	V0
Seal material	FKM
Contact material	CuZn
Contact surface material	Ni/Au
Contact carrier material	PA 6.6
Outer sheath, material	PUR
Conductor material	Bare Cu litz wires

#### Electrical properties

Contact resistance	≤ 3 mΩ
Insulation resistance	≥ 100 MΩ
Nominal voltage U <sub>N</sub>	48 V AC
	60 V DC
Nominal current I <sub>N</sub>	2 A



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Transmission characteristics (category)	CAT5 (IEC 11801:2002)
Wave impedance	100 Ω
Max. conductor resistance	150 mΩ/m

#### Connection data

#### Conductor connection

Connection method	Cable connection
Contact connection type	Socket
Conductor cross-section	0.14 mm²

#### Connector

#### Connection 1

Head design	Socket
Head cable outlet	straight
Head thread type	M12
Coding	A

#### Connection 2

Head design	free cable end

#### Cable/line

|--|

#### Ethernet flexible CAT5, 4-pair [94B]

Dimensional drawing



UL AWM Style	21238 (80 °C / 600 V)
Number of positions	8
Shielded	yes
Cable type	Ethernet flexible CAT5, 4-pair [94B]
Conductor structure	4x2xAWG26/7, SF/UTP
AWG signal line	26
Conductor cross section	4x 2x 0.14 mm²
Wire diameter incl. insulation	0.96 mm ±0.05 mm
External cable diameter	6.40 mm ±0.2 mm
Outer sheath, material	PUR
External sheath, color	water blue RAL 5021



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Conductor material	Bare Cu litz wires		
Material wire insulation	Foamed PE		
Single wire, color	white/blue-blue, white/orange-orange, white/green-green, white/brown-brown		
Twisted pairs	2 cores to the pair		
Overall twist	4 pairs for core		
Optical shield covering	70 %		
Insulation resistance	≥ 500 MΩ*km		
Loop resistance	≤ 290.00 Ω/km		
Wave impedance	100 $\Omega$ ±5 $\Omega$ (at 100 MHz)		
Nominal voltage, cable	≤ 100 V		
Test voltage Core/Core	2000 V (50 Hz, 1 min.)		
Test voltage Core/Shield	2000.00 V (50 Hz, 1 min.)		
Minimum bending radius, fixed installation	4 x D		
Minimum bending radius, flexible installation	8 x D		
Smallest bending radius, fixed installation	26 mm		
Smallest bending radius, movable installation	51 mm		
Halogen-free	according to IEC 60754-1		
Flame resistance	according to IEC 60332-1-2		
	according to CSA C 22.2 No. 210-FT1		
Resistance to oil	in accordance with EN 60811-2-1		
Ambient temperature (operation)	-40 °C 80 °C (cable, fixed installation)		
	-20 °C 80 °C (Cable, flexible installation)		

#### Environmental and real-life conditions

#### Ambient conditions

egree of protection	IP67 (When plugged in)
	IP65 (When plugged in)
	IP65/IP67
Ambient temperature (operation) (male connector/female connector)	-25 °C 90 °C (Plug / socket)
Ambient temperature (operation) (Cable, fixed installation)	-40 °C 70 °C (cable, fixed installation)
Ambient temperature (operation) (Cable, flexible installation)	-10 °C 50 °C (Cable, flexible installation)

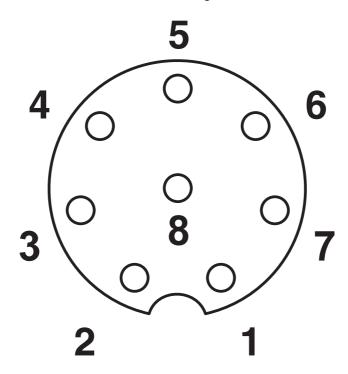


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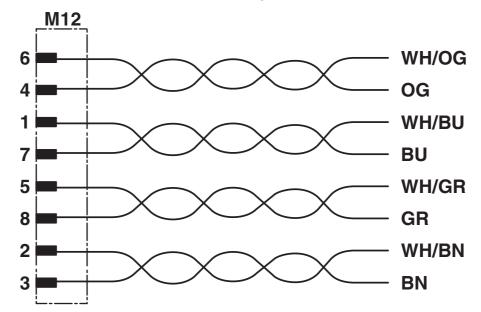
### Drawings

Schematic diagram



Pin assignment M12 socket, 8-pos., A-coded, view female side

Circuit diagram



Contact assignment of the M12 plug and the M12 socket



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### Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1553381

UL Recognized Approval ID: E221474-20220907					
		Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
keine					
		30 V	2 A	- 26	-

. <b>71</b>	CUL Recognized Approval ID: E221474-20220907				
		Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
keine					
		30 V	1.5 A	-	-

<b>71</b>	<b>UL Recognized</b> Approval ID: E118976-20	Recognized  vval ID: E118976-20100522			
		Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
keine					
		30 V	2 A	-	-



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#### Classifications

#### **ECLASS**

	ECLASS-13.0	27440103	
	ECLASS-15.0	27440103	
ETIM			
	ETIM 9.0	EC003570	
U	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	7421a347-ce07-404b-af6f-234c4f8de251	

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Phoenix Contact USA 586 Fulling Mill Road Middletown, PA 17057, United States (+717) 944-1300 info@phoenixcon.com