

1409739

https://www.phoenixcontact.com/us/products/1409739

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



Device connector rear mounting, 8-position, PUR, water blue RAL 5021, Socket, straight, M12, A-coding, on free cable end, Cable connection, cable length: 0.41 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	1409739
Packing unit	1 pc
Minimum order quantity	50 pc
Product key	ABQDGG
GTIN	4046356880961
Weight per piece (including packing)	39.1 g
Weight per piece (excluding packing)	39.1 g
Country of origin	DE



1409739

https://www.phoenixcontact.com/us/products/1409739

### 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)
---------------	--

### Product properties

Product type	Circular connectors (device side)
Application	Data
	On the device side
Number of positions	8
No. of cable outlets	1
Shielded	yes
Coding	A
Thread type	M12

3

## Degree of pollution Material specifications

Material Housing	GD-Zn
Material Housing surface	Ni
Material Insulating body	PA 6.6
Material Contact	CuZn
Material Contact surface	Ni/Au
Material Seal	NBR
Flammability rating according to UL 94	V0
Material for screw connection	CuZn alloy, nickel-plated
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



1409739

https://www.phoenixcontact.com/us/products/1409739

	60 V DC
Nominal current I <sub>N</sub>	2 A
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

Cable length 0.4	41 m
------------------	------

#### 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



1409739

https://www.phoenixcontact.com/us/products/1409739

Outer sheath, material	PUR
External sheath, color	water blue RAL 5021
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

Degree 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)
UL Type Rating	Type 4 (indoor use only)

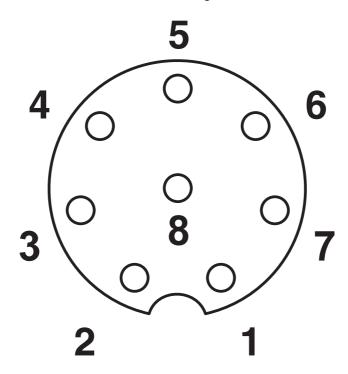


1409739

https://www.phoenixcontact.com/us/products/1409739

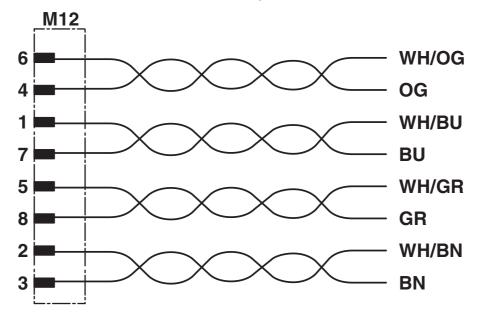
### Drawings

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



1409739

https://www.phoenixcontact.com/us/products/1409739

### Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1409739

. <b>91</b>	<b>cUL Recognized</b> Approval ID: E221474-202209	Recognized al ID: E221474-20220907			
	No	ominal 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>7/1</b>	UL Recognized Approval ID: E221474-2	'4-20220907				
		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	-	-	



1409739

https://www.phoenixcontact.com/us/products/1409739

### Classifications

#### **ECLASS**

	ECLASS-13.0	27440103		
	ECLASS-15.0	27440103		
ETIM				
	ETIM 9.0	EC003570		
UNSPSC				
	UNSPSC 21.0	39121400		



1409739

https://www.phoenixcontact.com/us/products/1409739

### 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	e995b3e4-b283-48dc-b69d-26cdbca19643

Phoenix Contact 2025 @ - all rights reserved https://www.phoenixcontact.com

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