

1437818

https://www.phoenixcontact.com/us/products/1437818

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, PROFINET CAT5 (IEC 11801:2002) (100 Mbps), EtherCAT® CAT5 (100 Mbps), 4-position, PVC, green RAL 6018, shielded, Pin, straight, M12-SPEEDCON, D-coding, on free cable end, Cable connection, cable length: 1 m, PROFINET PVC stranded CAT5, 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	1437818
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	AB25
Product key	ABQDGD
GTIN	4046356458559
Weight per piece (including packing)	97.8 g
Weight per piece (excluding packing)	80.083 g
Customs tariff number	85444290
Country of origin	DE



1437818

https://www.phoenixcontact.com/us/products/1437818

#### Technical data

#### Notes

otes	
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
Safety note	
Safety note	WARNING: The connectors may not be plugged in or disconnected under load. Ignoring the warning or improper use may damage persons and/or property.
	<ul> <li>WARNING: Commission properly functioning products only.</li> <li>The products must be regularly inspected for damage.</li> <li>Decommission defective products immediately. Replace damaged products. Repairs are not possible.</li> </ul>
	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.
	<ul> <li>Assembled products may not be manipulated or improperly opened.</li> </ul>
	<ul> <li>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).</li> </ul>
	<ul> <li>When using the product in direct connection with third-party manufacturers, the user is responsible.</li> </ul>
	<ul> <li>For operating voltages &gt; 50 V AC, conductive connector housings must be grounded</li> </ul>
	<ul> <li>Ensure that when laying the cable, the tensile load on the connectors does not exceed the upper limit specified in the standards.</li> </ul>
	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.  The principal connectors that are not in use.

The suitable accessories are available online in the accessory



1437818

https://www.phoenixcontact.com/us/products/1437818

	section of the product at phoenixcontact.com/products
	<ul> <li>Ensure that the protective or functional ground has been properly connected.</li> </ul>
	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
	<ul> <li>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).</li> </ul>
lounting	
Mounting type	Rear mounting (Pg9)
Tightening torque	2 Nm 3 Nm (Installation-side)
roduct properties	
Product type	Circular connectors (device side)
Application	Data
Sensor type	PROFINET
Number of positions	4
No. of cable outlets	1
Shielded	yes
Coding	D
Thread type	M12
Insulation characteristics	
Overvoltage category	II
Degree of pollution	3
	3
aterial specifications	
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	PVC
lectrical properties	
Rated surge voltage	2.5 kV
Contact resistance	≤ 3 mΩ
Insulation resistance	≥ 100 MΩ
Nominal voltage U <sub>N</sub>	250 V AC
Nominal current I <sub>N</sub>	4 A (Plug/socket in accordance with IEC 61076-2-101, cable technical data is to be observed)
Transmission medium	Copper
Transmission speed	100 Mbps



1437818

https://www.phoenixcontact.com/us/products/1437818

Transmission characteristics (category)	CAT5 (IEC 11801:2002)
Connection data	
Conductor connection	
Connection method	Cable connection
Contact connection type	Pin
Tightening torque	2 Nm 3 Nm (Installation-side)
Mechanical properties	
Mechanical data	
Insertion/withdrawal cycles	≥ 100
Connector	
Connection 1	
Head design	Pin
Head cable outlet	straight
Head thread type	M12
Head locking type	SPEEDCON
Coding	D
Connection 2	
Head design	free cable end
Cable/line	
Cable length	1 m
PROFINET PVC stranded CAT5 [93B]	
Dimensional drawing	
UL AWM Style	21695 (80 °C / 600 V)
Number of positions	4
Shielded	yes
Cable type	PROFINET PVC stranded CAT5 [93B]
Conductor structure	1x4xAWG22/7, SF/TQ
AWG signal line	22
Conductor cross section	4x 0.34 mm²



1437818

https://www.phoenixcontact.com/us/products/1437818

Wire diameter incl. insulation	1.5 mm ±0.1 mm	
External cable diameter	6.50 mm ±0.2 mm	
Outer sheath, material	PVC	
External sheath, color	green RAL 6018	
Conductor material	Tin-plated Cu litz wires	
Material wire insulation	PE	
Single wire, color	white, yellow, blue, orange	
Overall twist	Star quad	
Optical shield covering	85 %	
Insulation resistance	≥ 5 GΩ*km	
Loop resistance	≤ 120.00 Ω/km	
Wave impedance	100 Ω ±5 Ω (at 100 MHz)	
Nominal voltage, cable	≤ 600 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	
Flame resistance	UL 1581, Section 1060 and UL 2556, Section 9.3 (FT1)	
	UL 1685 (CSA FT 4)	
	UL 1581, Section 1100 and UL 2556, Section 9.1 (HFT/FT2)	
Resistance to oil	OIL RES I according to UL 2256	
Other resistance	UV resistant (according to UL 1581, Section 1200)	
Ambient temperature (operation)	-40 °C 80 °C (cable, fixed installation)	
	-10 °C 70 °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	-25 °C 85 °C (Plug / socket)
connector)	-40 °C 85 °C (without mechanical actuation)

### Standards and regulations

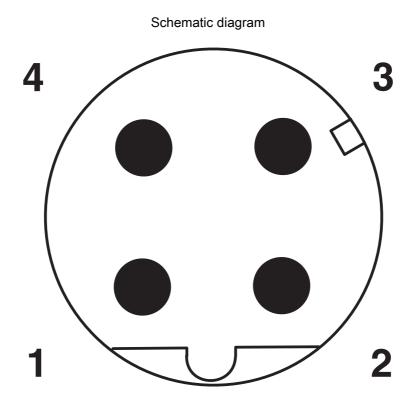
Standard designation	M12 circular connector	
Standards/specifications	according to IEC 61076-2-101	



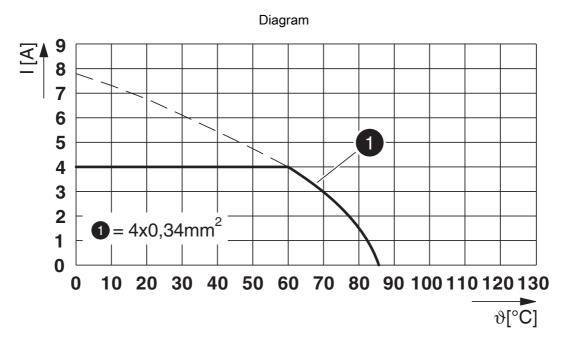
1437818

https://www.phoenixcontact.com/us/products/1437818

### Drawings



Pin assignment M12 male connector, 4-pos., D-coded, male side



I = current strength, T = ambient temperature



1437818

https://www.phoenixcontact.com/us/products/1437818

### Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1437818

UL Recognized Approval 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					
		250 V	4 A	- 22	-

. <b>71</b> 2	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					
		250 V	1.5 A	-	-

<i>5</i> 11	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					
		250 V	4 A	-	-



1437818

https://www.phoenixcontact.com/us/products/1437818

### Classifications

#### **ECLASS**

	ECLASS-13.0	27440103
	ECLASS-15.0	27440103
ΕΊ	ТІМ	
	ETIM 9.0	EC003570
U	NSPSC	
	UNSPSC 21.0	39121400

Sep 19, 2025, 2:36□PM Page 8 (9)



1437818

https://www.phoenixcontact.com/us/products/1437818

### 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	2f6062e4-4705-4c02-98ce-1f3c6a5dcda1	

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