

1401425

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Device connector rear mounting, 5-position, PUR, green RAL 6018, Socket, M12, B-coding, on free cable end, Bus line, cable length: 2 m, 0.25 mm<sup>2</sup>, PROFIBUS, this item is expected to be lead-free from Q2 2026 in accordance with RoHS II without exception 6c (Pb < 0.1%), a lead-free alternative is possible on request in advance

#### Commercial data

Item number	1401425
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	AB25
Product key	ABQDGG
GTIN	4046356555234
Weight per piece (including packing)	172.3 g
Weight per piece (excluding packing)	167.084 g
Customs tariff number	85444290
Country of origin	DE



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#### Technical data

#### Notes

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.
	<ul> <li>The products are suitable for applications in plant, controller, and electrical device engineering.</li> </ul>
	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 suitable accessories are available online in the accessory section of the product at phoenixcontact.com/products
	<ul> <li>Ensure that the protective or functional ground has been properly connected.</li> </ul>
	<ul> <li>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</li> </ul>



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	<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>
ounting	
Mounting type	Rear mounting (M16 x 1,5)
roduct properties	
Product type	Circular connectors (device side)
Number of positions	5
No. of cable outlets	1
Shielded	yes
Coding	В
Thread type	M12
Insulation characteristics	
Overvoltage category	III
Degree of pollution	3
aterial 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
ectrical properties	
Rated surge voltage	1.5 kV AC
Contact resistance	≤ 3 mΩ
Insulation resistance	≥ 10 GΩ
Nominal voltage U <sub>N</sub>	48 V AC
	60 V DC
Nominal current I <sub>N</sub>	4 A (Plug/socket in accordance with IEC 61076-2-101, cable technical data is to be observed)
onnection data	
Conductor connection	
Connection method	Bus line
Contact connection type	Socket



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Conductor cross-section	0.25 mm²
Apphanical proportion	
lechanical properties	
Mechanical data	
Max. bending cycles	3000000
connector	
Connection 1	
Head design	Socket
Head thread type	M12
Coding	В
Connection 2	
	free cable end
Head design	free cable end
cable/line	
Cable length	2 m
PROFIBUS [915]	
Number of positions	2
Shielded	yes
Cable type	PROFIBUS [915]
Conductor structure	1x2xAWG24/19
AWG signal line	24
Conductor cross section	2x 0.3 mm² (Signal line)
Wire diameter incl. insulation	2.55 mm ±0.05 mm
External cable diameter	7.80 mm ±0.02 mm
Outer sheath, material	PUR
External sheath, color	blue
Conductor material	Bare Cu litz wires
Material wire insulation	Foamed PE
Single wire, color	red, green
Overall twist	2 wires, twisted
Optical shield covering	70 %
Insulation resistance	≥ 5 GΩ*km
Wave impedance	150 Ω ±10 % (3 MHz 20 MHz)
Nominal voltage, cable	≤ 125 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
Dynamic load capacity (bending)	Max. bending cycles: 3000000, Bending radius: 15 x D, Traversing path: 4.5 m, Traversing rate: 3 m/s, Acceleration: 3



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m/s²
≤ 4.9 dB (at 16 MHz)
≤ 4.9 dB (at 4 MHz)
≤ 0.5 dB (at 38.4 kHz)
≤ 0.3 dB (at 9.6 kHz)
IEC 60332-1-2
UL VW-1
in accordance with UL 2556, Section 9.4 and UL 1581, Section 1060
in accordance with DIN EN 60811-404
-40 °C 80 °C (cable, fixed installation)
-30 °C 70 °C (Cable, flexible installation)
-20 °C 60 °C (for installation)
-20 °C 60 °C (cable, drag chain applications)

#### Environmental and real-life conditions

#### Ambient conditions

Degree of protection	IP67 (When plugged in)
	IP65 (When plugged in)
	IP65/IP67
Ambient temperature (operation)	-25 °C 85 °C (Plug / socket)
	-40 °C 80 °C (cable, fixed installation)
	-20 °C 80 °C (Cable, flexible installation)
UL Type Rating	Type 4 (indoor use only)

#### Standards and regulations

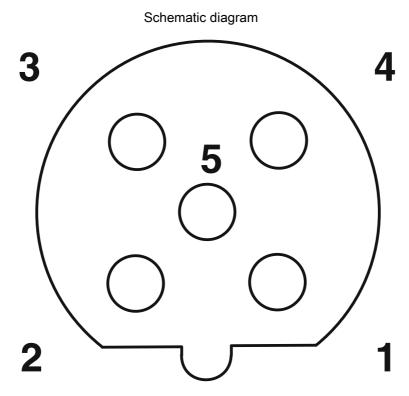
Standard designation	M12 circular connector	
Standards/specifications	according to IEC 61076-2-101	



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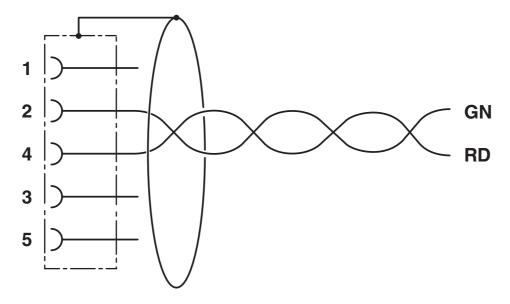
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### Drawings



Pin assignment M12 socket, 5-pos., B-coded, female side

Circuit diagram



Contact assignment of the M12 socket



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### Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1401425

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					
		60 V	1.5 A	-	-

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				
	60 V	1.5 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	6ffe6f23-77ab-4158-9f82-e97966c7a752	

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