

1662528

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Connector, Universal, 4-position, Plug straight M12, coding: A, Screw connection, knurl material: Zinc die-cast, nickel-plated, cable gland Pg7, external cable diameter 4 mm ... 6 mm

### Your advantages

- · Safe use in the field, thanks to a high degree of protection
- · Screw connection: proven connection technology for a large selection of different conductors

#### Commercial data

Item number	1662528
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	AF2CAA
Product key	AF2CAA
Catalog page	Page 22 (C-2-2019)
GTIN	4017918137526
Weight per piece (including packing)	22.75 g
Weight per piece (excluding packing)	22.34 g
Customs tariff number	85366990
Country of origin	DE



1662528

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### Technical data

#### Notes

Assembly note	NOTE: Observe the permissible bending radii when routing cables, since the degree of protection may be at risk if the bending forces are too high. Reduce mechanical loads upstream of the connector, e.g., by using cable ties.
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#### Product properties

Product type	Circular connector (cable-side)	
Sensor type	Universal	
Number of positions	4	
No. of cable outlets	1	
Shielded	no	
Coding	A	
Cable outlet	straight	
Pg screw connection	Pg7	
Insulation characteristics		
Overvoltage category	II	

3

### Dimensions

Degree of pollution

Dimensional drawing	60
Width	20 mm
Height	20 mm
Length	60 mm
External dimensions	
Outside diameter	4 mm 6 mm
Housing	
Diameter housing	20 mm

#### Material specifications

Flammability rating according to UL 94	НВ
Seal material	NBR
Material of grip body	PA
Contact material	CuZn
Contact surface material	CuSnZn
Contact carrier material	PA



1662528

Ambient conditions

Degree of protection

connector)

Ambient temperature (operation) (male connector/female

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Connection method   Screw connection	Material for screw connection	Zinc die-cast, nickel-plated
Connection cross section         0.25 mm² 0.75 mm² (without ferrule)           0.14 mm² 0.75 mm² (with ferrule)         0.25 mm² 0.75 mm² (with ferrule)           0.25 mm² 0.75 mm² (solid)         24 18 (without ferrule)           25 20 (with ferrule)         25 20 (with ferrule)           Stripping length of the individual wire         5 mm           Tightening torque         0.4 Nm (M12 knurl)           0.2 Nm (Screw terminal blocks)         0.8 Nm 1 Nm (Pressure screw with sleeve housing the surge voltage           Corrical properties         ≤ 8 mΩ           Insulation resistance         ≥ 100 MΩ           Nominal voltage U <sub>N</sub> 250 ∨ DC           Nominal current I <sub>N</sub> 4 A           chanical properties         250 ∨ DC           lechanical data         1 msertion/withdrawal cycles         ≥ 50           Insection 1         1 Head design         Plug           Head able outlet         straight           Head thread type         M12           Coding         A	nection data	
Connection cross section       0.25 mm² 0.75 mm² (without ferrule)         0.14 mm² 0.75 mm² (with ferrule)       0.25 mm² 0.75 mm² (solid)         Connection cross section AWG       24 18 (without ferrule)         26 20 (with ferrule)       25 20 (with ferrule)         Stripping length of the individual wire       5 mm         Tightening torque       0.4 Nm (M12 knurl)         0.2 Nm (Screw terminal blocks)       0.8 Nm 1 Nm (Pressure screw with sleeve housing the surface of the surfac	onductor connection	
0.14 mm² 0.75 mm² (with ferrule)   0.25 mm² 0.75 mm² (solid)   24 18 (without ferrule)   26 20 (with ferrule)   26 20 (with ferrule)   26 20 (with ferrule)   26 20 (with ferrule)   28 20 (with ferrule)   29 20 (with ferrule)   29 20 (with ferrule)   20 20 (with ferrule)	Connection method	Screw connection
0.25 mm² 0.75 mm² (solid)   Connection cross section AWG   24 18 (without ferrule)     26 20 (with ferrule)     27  mm (M12 knurl)     2.2  mm (Screw terminal blocks)     2.3  mm 1  mm (Pressure screw with sleeve housing the surge voltage   2.5  kV     Contact resistance   ≤ 8  mΩ     Insulation resistance   ≤ 100  MΩ     Nominal voltage U <sub>N</sub>   250  ∨ AC     250  ∨ DC     Nominal current I <sub>N</sub>   4  A     Chanical properties     Achanical data     Insertion/withdrawal cycles   ≥ 50     Thead design   Plug     Head design   Plug     Head design   A     Head thread type   M12     Coding   A	Connection cross section	0.25 mm <sup>2</sup> 0.75 mm <sup>2</sup> (without ferrule)
Connection cross section AWG       24 18 (without ferrule)         26 20 (with ferrule)         Stripping length of the individual wire       5 mm         Tightening torque       0.4 Nm (M12 knurl)         0.2 Nm (Screw terminal blocks)       0.8 Nm 1 Nm (Pressure screw with sleeve housing screw housing screw with sleeve hous		0.14 mm <sup>2</sup> 0.75 mm <sup>2</sup> (with ferrule)
26 20 (with ferrule)  Stripping length of the individual wire 5 mm  Tightening torque 0.4 Nm (M12 knurt) 0.2 Nm (Screw terminal blocks) 0.8 Nm 1 Nm (Pressure screw with sleeve housing screw and surge voltage 2.5 kV  Contact resistance ≤ 8 mΩ Insulation resistance ≥ 100 MΩ  Nominal voltage U <sub>N</sub> 250 ∨ AC 250 ∨ DC  Nominal current I <sub>N</sub> 4 A  Chanical properties  Mechanical properties  Mechanical data Insertion/withdrawal cycles ≥ 50  Insulation resistance		0.25 mm <sup>2</sup> 0.75 mm <sup>2</sup> (solid)
Stripping length of the individual wire  Tightening torque  Tightening torque  0.4 Nm (M12 knurl) 0.2 Nm (Screw terminal blocks) 0.8 Nm 1 Nm (Pressure screw with sleeve housing screws and surge voltage  2.5 kV  Contact resistance  1 sulation resistance  2 100 MΩ  Nominal voltage U <sub>N</sub> 250 ∨ AC  250 ∨ DC  Nominal current I <sub>N</sub> 4 A  Chanical properties  Insertion/withdrawal cycles  ≥ 50  Insertion/withdrawal cycles  ≥ 50  Insertion/withdrawal cycles  ≥ 50  Insertion 1  Head design  Plug  Head cable outlet  Head thread type  M12  Coding  A	Connection cross section AWG	24 18 (without ferrule)
Tightening torque  0.4 Nm (M12 knurl) 0.2 Nm (Screw terminal blocks) 0.8 Nm 1 Nm (Pressure screw with sleeve housing stream of the properties  Rated surge voltage 2.5 kV  Contact resistance ≤ 8 mΩ Insulation resistance ≥ 100 MΩ  Nominal voltage U <sub>N</sub> 250 V AC 250 V DC  Nominal current I <sub>N</sub> 4 A  Chanical properties  Rechanical data Insertion/withdrawal cycles  Insertion/withdrawal cycles  Plug Head design Plug Head cable outlet Head thread type M12  Coding A		26 20 (with ferrule)
0.2 Nm (Screw terminal blocks) 0.8 Nm 1 Nm (Pressure screw with sleeve housing control of the properties  Rated surge voltage 2.5 kV  Contact resistance ≤ 8 mΩ  Insulation resistance ≥ 100 MΩ  Nominal voltage U <sub>N</sub> 250 V AC 250 V DC  Nominal current I <sub>N</sub> 4 A  chanical properties  Rechanical data Insertion/withdrawal cycles ≥ 50  nnector  connection 1  Head design Plug  Head cable outlet straight  Head thread type M12  Coding A	Stripping length of the individual wire	5 mm
0.8 Nm 1 Nm (Pressure screw with sleeve housing sectrical properties	Tightening torque	0.4 Nm (M12 knurl)
Rated surge voltage 2.5 kV  Contact resistance ≤ 8 mΩ Insulation resistance ≥ 100 MΩ  Nominal voltage U <sub>N</sub> 250 ∨ AC  250 ∨ DC  Nominal current I <sub>N</sub> 4 A  Achanical properties  Mechanical data Insertion/withdrawal cycles ≥ 50  nnector  Connection 1  Head design Plug Head cable outlet straight Head thread type M12  Coding A		0.2 Nm (Screw terminal blocks)
Rated surge voltage       2.5 kV         Contact resistance       ≤ 8 mΩ         Insulation resistance       ≥ 100 MΩ         Nominal voltage $U_N$ 250 V AC         250 V DC         Nominal current $I_N$ 4 A         chanical properties         Mechanical data         Insertion/withdrawal cycles       ≥ 50         nnector         Connection 1         Head design       Plug         Head thread type       M12         Coding       A		0.8 Nm 1 Nm (Pressure screw with sleeve housing)
Rated surge voltage       2.5 kV         Contact resistance       ≤ 8 mΩ         Insulation resistance       ≥ 100 MΩ         Nominal voltage $U_N$ 250 V AC         250 V DC         Nominal current $I_N$ 4 A         chanical properties         Mechanical data         Insertion/withdrawal cycles       ≥ 50         nnector         Connection 1         Head design       Plug         Head thread type       M12         Coding       A	etrical properties	
Contact resistance ≤ 8 mΩ   Insulation resistance ≥ 100 MΩ   Nominal voltage U <sub>N</sub> 250 V AC   250 V DC   Nominal current I <sub>N</sub> 4 A    The chanical properties  The chanical data  Insertion/withdrawal cycles  The connector  The connection 1  The design  Head design  Plug  Head cable outlet  Head thread type  M12  Coding  A  The connection is the connection of t		2.5 kV
Insulation resistance  Nominal voltage U <sub>N</sub> 250 ∨ AC  250 ∨ DC  Nominal current I <sub>N</sub> 4 A  Chanical properties  Mechanical data Insertion/withdrawal cycles  ≥ 50  nnector  Connection 1  Head design  Head cable outlet  Head thread type  Coding  A  ble/line		
Nominal voltage UN 250 ∨ AC   250 ∨ DC   Nominal current IN 4 A    The chanical properties  The chanical data  Insertion/withdrawal cycles  The connection 1  Head design  Head design  Head cable outlet  Head thread type  Coding  A  Plug  M12  Coding  A  Ble/line  Plug  M12  Coding  A  Plug  M12  Coding  M12  Coding  M12  Coding		
Nominal current I <sub>N</sub> 4 A  schanical properties  Mechanical data Insertion/withdrawal cycles ≥ 50  nnector  Connection 1  Head design Plug Head cable outlet straight Head thread type M12  Coding A		
Nominal current I <sub>N</sub> 4 A  chanical properties  Mechanical data Insertion/withdrawal cycles ≥ 50  nnector  Connection 1  Head design Plug Head cable outlet straight Head thread type M12  Coding A	Trommar voltage on	
Mechanical data Insertion/withdrawal cycles ≥ 50  Innector  Connection 1  Head design Plug  Head cable outlet straight  Head thread type M12  Coding A	Nominal current I <sub>N</sub>	4 A
lechanical data Insertion/withdrawal cycles ≥ 50 Innector Innection 1 Head design Plug Head cable outlet straight Head thread type M12 Coding A		
Insertion/withdrawal cycles  ≥ 50  Innector  Connection 1  Head design  Head cable outlet  Head thread type  Coding  Die/line	chanical properties	
nnector  Connection 1  Head design Plug  Head cable outlet straight  Head thread type M12  Coding A	echanical data	
Connection 1  Head design Plug Head cable outlet straight Head thread type M12  Coding A	Insertion/withdrawal cycles	≥ 50
Head design Plug Head cable outlet straight Head thread type M12 Coding A		
Head design Plug Head cable outlet straight Head thread type M12 Coding A	nector	
Head cable outlet straight  Head thread type M12  Coding A  ble/line	onnection 1	
Head cable outlet straight  Head thread type M12  Coding A  ble/line	Head design	Plug
Head thread type M12 Coding A ble/line		
Coding A ble/line	Head thread type	
		A
	lo/line	
Cinnal type loote name		Hairarad
Signal type/category Universal  Stripping length of the individual wire 5 mm	Signal type/category	

IP67

-40 °C ... 85 °C (Plug / socket)



1662528

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### Standards and regulations

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

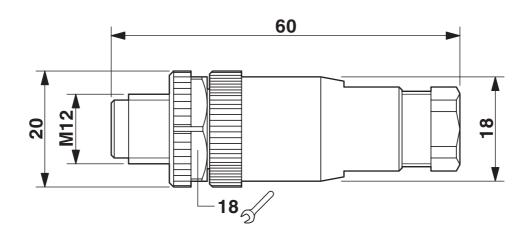


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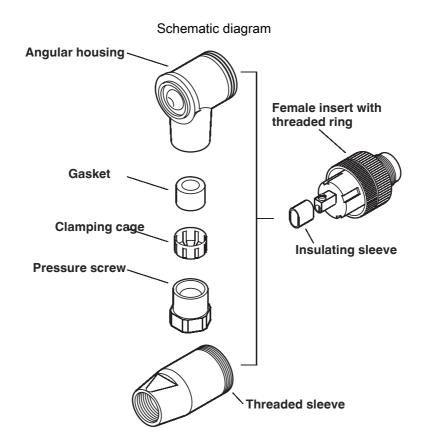


### **Drawings**

### Dimensional drawing



Plug, M12 x 1, straight

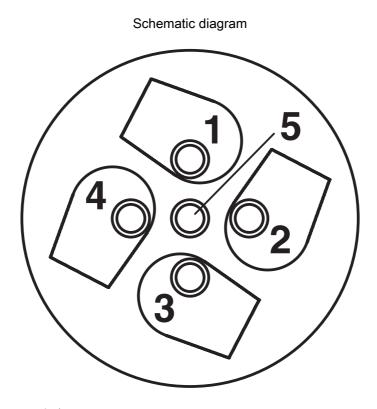


Male/Female M12



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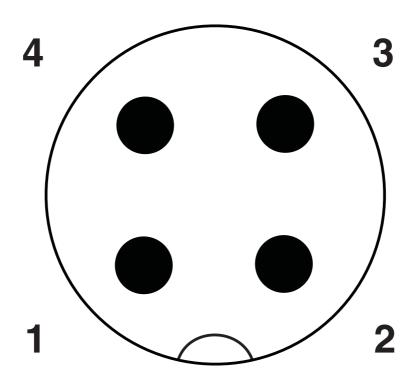
Cable connection side M12 (screw connection)



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### Schematic diagram



Pin assignment M12 plug, 4-pos., A-coded, view plug side



1662528

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### **Approvals**

To download certificates, visit the product detail page: https://www.phoenixcontact.com/au/products/1662528

cUL Recognized Approval ID: FILE E 221474					
		Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
		250 V	4 A	-	-

71	UL Recognized Approval ID: FILE E 221474					
		Nominal voltage $U_N$	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>	
		250 V	4 A	-	-	



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### Classifications

	ECLASS-13.0	27440116
E <sup>-</sup>	ГІМ	
	ETIM 9.0	EC002635
UI	NSPSC	
	UNSPSC 21.0	39121400



1662528

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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	2537eb2f-935f-4bc6-8077-93057f7f9fde

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