

1002791

https://www.phoenixcontact.com/us/products/1002791

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.



Connector, Universal, 8-position, shielded, Socket straight M12, coding: A, Screw connection, knurl material: Brass, nickel-plated, 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
- Reliable signal transmission 360° shielding in environments with electromagnetic interference

Commercial data

Item number	1002791	
Packing unit	1 pc	
Minimum order quantity	100 pc	
Sales key	BF30	
Product key	BF2CBA	
GTIN	4055626465388	
Weight per piece (including packing)	61.2 g	
Weight per piece (excluding packing)	22.22 g	
Customs tariff number	85366990	
Country of origin	CN	



NOTE: Observe the permissible bending radii when routing

1002791

https://www.phoenixcontact.com/us/products/1002791

Technical data

Assembly note

Notes

	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.
ounting	
Thread type	0
roduct properties	
Product type	Circular connector (cable-side)
Sensor type	Universal
Number of positions	8
No. of cable outlets	1
Shielded	yes
Coding	A

01

Ш

3

Dimensions

Article revision

Insulation characteristics

Degree of pollution

Overvoltage category

Dimensional drawing	18 A 17 A 18 A 19
Width	20 mm
Height	20 mm
Length	57 mm
Wrench size, union nut	18 mm
Wrench size, counter nut	17 mm
External dimensions	
Outside diameter	4 mm 6 mm
Housing	
Diameter housing	20 mm

Material specifications



1002791

https://www.phoenixcontact.com/us/products/1002791

Flammability rating according to UL 94	НВ	
Seal material	Silicon	
Material of grip body	Brass, nickel-plated	
Contact material	CuZn	
Contact surface material	Au	
Contact carrier material	PA	
Material for screw connection	Brass, nickel-plated	

Connection data

Conductor connection

Connection method	Screw connection
Connection cross section	0.25 mm² 0.5 mm² (without ferrule)
	0.14 mm ² 0.34 mm ² (with ferrule)
	0.25 mm² 0.5 mm² (solid)
Connection cross section AWG	24 20 (without ferrule)
	26 22 (with ferrule)
Stripping length of the individual wire	5 mm
Tightening torque	0.4 Nm (M12 knurl)
	0.2 Nm (Screw terminal blocks)
	1 Nm (Pressure nut with coupling sleeve)

Electrical properties

Rated surge voltage	0.8 kV
Contact resistance	≤ 8 mΩ
Insulation resistance	≥ 100 MΩ
Nominal voltage U _N	30 V AC
	30 V DC
Nominal current I _N	2 A

Mechanical properties

Mechanical data

Insertion/withdrawal cycles	≥ 100

Connector

Connection 1

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

Cable/line

Signal type/category	Universal
Stripping length of the individual wire	5 mm



1002791

https://www.phoenixcontact.com/us/products/1002791

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP67	
Ambient temperature (operation)	-40 °C 85 °C (Plug / socket)	

Standards and regulations

M12

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

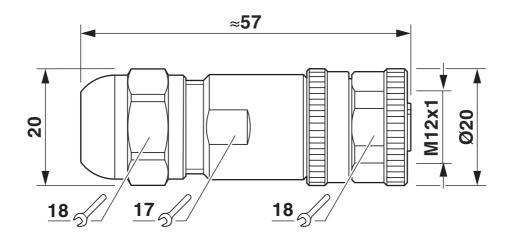


1002791

https://www.phoenixcontact.com/us/products/1002791

Drawings

Dimensional drawing



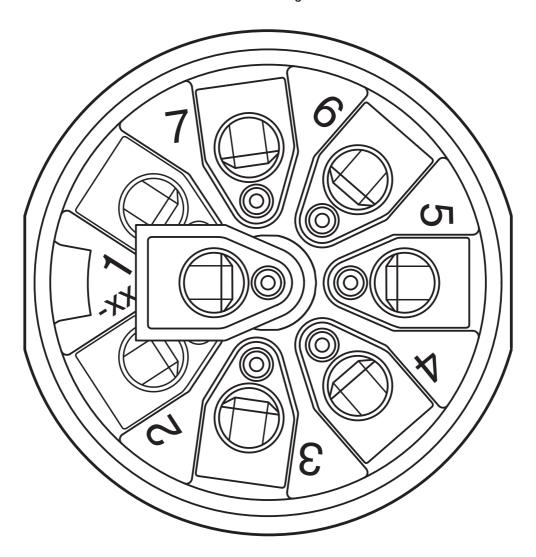
M12 x 1 socket, straight, shielded



1002791

https://www.phoenixcontact.com/us/products/1002791

Schematic diagram



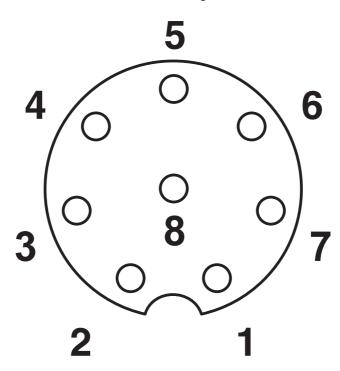
Cable connection side M12 (screw connection)



1002791

https://www.phoenixcontact.com/us/products/1002791





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



1002791

https://www.phoenixcontact.com/us/products/1002791

Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1002791

CUL Recognized Approval ID: FILE E 221474					
		Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
		30 V	2 A	-	-

71	UL Recognized Approval ID: FILE E 221474					
		Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²	
		30 V	2 A	-	-	

cULus Recognized



1002791

https://www.phoenixcontact.com/us/products/1002791

Classifications

ECLASS

	ECLASS-11.0	27440102		
	ECLASS-12.0	27440116		
	ECLASS-13.0	27440116		
ETIM				
	ETIM 9.0	EC002635		
UNSPSC				
	UNSPSC 21.0	39121400		



1002791

https://www.phoenixcontact.com/us/products/1002791

Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements Exemption	Yes 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)

Phoenix Contact 2024 © - 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