

1027477

https://www.phoenixcontact.com/us/products/1027477

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Power connector, Power, 5-position, shielded, Plug straight M12, L, Crimp connection, knurl material: Zinc die-cast, tin-plated, external cable diameter 8 mm ... 13 mm, without crimp contacts

#### Your advantages

- · Extremely compact, thanks to the small wiring space and high contact density
- · Safely shielded: reliable shield connection even under extreme mechanical strain
- · Robust connection: suitable for railway applications with high shock and vibration loads
- High-performance: DC connectors for up to 16 A and 63 V DC
- · Protection against mismatching, thanks to special L-coding

#### Commercial data

Item number	1027477
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF34
Product key	BF2CJB
Catalog page	Page 278 (C-2-2019)
GTIN	4055626521138
Weight per piece (including packing)	41.3 g
Weight per piece (excluding packing)	22.22 g
Customs tariff number	85366990
Country of origin	DE



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### Technical data

#### Notes

NOTE: Observe the permissible bending radii when laying conductors, since the degree of protection may be put in jeopardy if the bending forces are too high. Alleviate mechanical loads upstream of the connector, e.g. by using cable ties.

#### Mounting

Composition modified	Crimon and action
Connection method	Crimp connection

#### Product properties

Product type	Circular connector (cable-side)
Sensor type	Power
Number of positions	5
Application	Power supply
No. of cable outlets	1
Shielded	yes
Coding	L
Cable outlet	straight
Insulation characteristics	
insulation characteristics	
Overvoltage category	III

Overvoltage category	III
Degree of pollution	3

#### **Dimensions**

Dimensional drawing	15 A
Length	58 mm
External dimensions	
Outside diameter	8 mm 13 mm
Housing	
Diameter housing	21.5 mm

#### Material specifications

Flammability rating according to UL 94	V0
Material of grip body	Zinc die-cast, nickel-plated
Contact carrier material	PA
Material for screw connection	Zinc die-cast, tin-plated

#### Connection data



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#### Conductor connection

Connection method	Crimp connection
Connection cross section	1.5 mm² 2.5 mm² (flexible)
Connection cross section AWG	14 (flexible)
Tightening torque	M12 knurl
	Pressure nut with coupling sleeve
Pin assignment	

Pin assignment	
Contact   Color (signal designation)   Contact (optional)	1 = BN
	2 = WH
	3 = BU
	4 = BK
	FE = GYPK

#### Electrical properties

Rated surge voltage	1.5 kV
Insulation resistance	≥ 100 MΩ
Nominal voltage U <sub>N</sub>	63 V DC
Nominal current I <sub>N</sub>	16 A (when using 2.5 mm² conductors)
	16 A (at 40 °C)

#### Mechanical properties

#### Mechanical data

Insertion/withdrawal cycles ≥ 1	100
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#### Connector

#### Connection 1

Head design	Plug
Head cable outlet	straight
Head thread type	M12
Coding	L

#### Cable/line

Signal type/category	Power
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#### Environmental and real-life conditions

#### Ambient conditions

Degree of protection	IP65
Ambient temperature (operation)	-40 °C 85 °C (Plug / socket)

#### Standards and regulations

Standard designation	M12 connector
Standards/specifications	based on IEC 61076-2-111

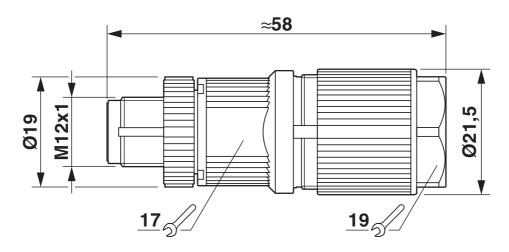


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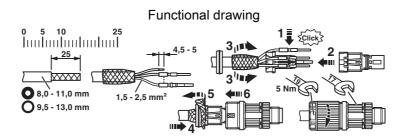
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### Drawings

#### Dimensional drawing



Plug, M12 x 1, straight, shielded

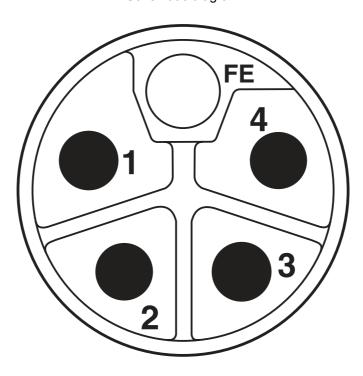




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### Schematic diagram



Pin assignment of M12 connector, 5-pos., L-coded, pin side view



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### **Approvals**

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1027477

c <b>FX</b> 2 us	cULus Recognized Approval ID: E468743				
		Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
		600 V	13 A	- 14	-



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### Classifications

UNSPSC 21.0

#### **ECLASS**

27440102		
27440116		
27440116		
ETIM		
EC002635		
UNSPSC		

39121400



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# Environmental product compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values



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### Mandatory accessories

CC1,5-TS-2,10M AU - Crimp contact

1029394

https://www.phoenixcontact.com/us/products/1029394



Crimp contact, contact diameter: 1.5 mm, turned, Pin, contact material: CuZn, contact surface: Ni/Au, connection cross section: 1.5 mm $^2$  ... 1.5 mm $^2$ , AWG 14 ... 14

#### CC1,5-TS-2,50M AU - Crimp contact

1029388

https://www.phoenixcontact.com/us/products/1029388



Crimp contact, contact diameter: 1.5 mm, turned, Pin, contact material: CuZn, contact surface: Ni/Au, connection cross section: 2.5 mm $^2$  ... 2.5 mm $^2$ , AWG 14



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#### CC1,5-TS-2,10FPE K/L AU - Crimp contact

1029401

https://www.phoenixcontact.com/us/products/1029401



Crimp contact, contact diameter: 1.5 mm, turned, Socket, contact material: CuZn, contact surface: Ni/Au, connection cross section: 1.5 mm $^2$  ... 1. 5 mm $^2$ , AWG 14, for the PE or functional ground connection

#### CC1,5-TS-2,50FPE K/L AU - Crimp contact

1029393

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Crimp contact, contact diameter: 1.5 mm, turned, Socket, contact material: CuZn, contact surface: Ni/Au, connection cross section: 2.5 mm $^2$ ... 2. 5 mm $^2$ , AWG 14, for the PE or functional ground connection



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#### CRIMPFOX-TC MP-6 - Crimping pliers with digital display

1202888

https://www.phoenixcontact.com/us/products/1202888



Crimping tool, for turned contacts, universal cross-section setting, up to a maximum of 6.0 mm<sup>2</sup>, digital display with 0.01 mm increments, pressure lock can be unlocked, positioning tool necessary as an accessory for contact positioning

#### Accessories

#### CRIMPFOX-TC MP/LOC-1 - Spare locator

1142829

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Locator for CRIMPFOX-TC MP6



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#### WIREFOX 2,5 - Stripping tool

1212368

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Stripping tool, for conductors and cables with a conductor cross section from 0. 08 to 2.5 mm, self-adjusting, stripping length adjustable up to 15 mm, cutting capacity up to 6  $\text{mm}^2$  stranded/1.5  $\text{mm}^2$  solid

#### WIREFOX-D 40 - Stripping tool

1212161

https://www.phoenixcontact.com/us/products/1212161



Stripping tool, for stripping cables of 4.5 mm - 40 mm-Ø, insulation thickness of up to 4.5 mm, pivoting blade for round, lengthwise, and spiral cuts

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