

https://www.phoenixcontact.com/au/products/1646350

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.



Power connector, Power, 5-position, unshielded, Socket straight M12, coding: L, Push-lock spring connection, knurl material: Zinc die-cast, nickel-plated, external cable diameter 8 mm ... 13 mm, Contact 5 leading

## Your advantages

- Time-saving Push-Lock connection: Tool-free connection and disconnection of conductors by opening the contact levers
- · Intuitive connection: Easy assignment of individual litz wires with color-coded and numerical identification of the contact levers
- · Integrated Push-in Technology: Wire rigid and pretreated conductors easily by means of simple, direct insertion
- · Shock- and vibration-resistant connection: Proven spring-cage technology guarantees secure and reliable contacting
- · Protected seal in the M12 socket

## Commercial data

Item number	1646350
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	AF2CEP
Product key	AF2CEP
GTIN	4067923233287
Weight per piece (including packing)	51.2 g
Weight per piece (excluding packing)	51.2 g
Customs tariff number	85366990
Country of origin	DE

PHŒN

1646350

https://www.phoenixcontact.com/au/products/1646350

# 

## Technical data

#### Notes

Assembly note	<b>NOTE:</b> 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.
Mounting	
Assembly note	The wires can be connected both with ferrules and without ferrules
Product properties	
Product type	Circular connector (cable-side)
Application	Power supply
Sensor type	Power
Number of positions	5
No. of cable outlets	1
Shielded	no
Coding	L
Cable outlet	straight

Insulation characteristics

Overvoltage category	111
Degree of pollution	3

#### Dimensions

Dimensional drawing	
Width	23 mm
Height	23 mm
Length	67 mm

External dimensions

Outside diameter	8 mm 13 mm
Housing	
Diameter housing	23 mm
Material specifications	

Material	PA 6 (Actuation lever)
Flammability rating according to UL 94	V0
Seal material	NBR



https://www.phoenixcontact.com/au/products/1646350

Material of grip body	PA 6.6
Contact material	CuSn
Contact surface material	Ni/Au
Contact carrier material	PA 6.6
Material for screw connection	Zinc die-cast, nickel-plated

#### Connection data

Conductor connection	
Connection method	Push-lock spring connection
Connection cross section	1.5 mm <sup>2</sup> 2.5 mm <sup>2</sup>
	1.5 mm <sup>2</sup> 2.5 mm <sup>2</sup> (with ferrule)
	1.5 mm² 2.5 mm² (solid)
Connection cross section AWG	16 14 (without ferrule)
	16 14 (with ferrule)
Stripping length of the individual wire	10 mm
Tightening torque	0.6 Nm (M12 knurl)
	3 Nm (Pressure nut with connector housing)
Pin assignment	
Contact   Color (signal designation)   Contact (optional)	1 = BN
	2 - 10/14

nal designation)   Contact (optional)	1 = BN
	2 = WH
	3 = BU
	4 = BK
	FE = GYPK

#### **Electrical properties**

Rated surge voltage	1.5 kV
Nominal voltage U <sub>N</sub>	63 V DC
Nominal current I <sub>N</sub>	16 A (when using 2.5 mm <sup>2</sup> conductors)
	16 A (at 40 °C)

#### Mechanical properties

Mechanical data	
Insertion/withdrawal cycles	≥ 100

#### Connector

Connection 1	
Head design	Socket
Head cable outlet	straight
Head thread type	M12
Coding	L

#### Cable/line

Cianal trino/actorian	Dewer
Signal type/category	Power



#### 1646350

https://www.phoenixcontact.com/au/products/1646350

	Stripping length of the individual wire	10 mm		
Environmental and real-life conditions				
A	Ambient conditions			
	Degree of protection	IP67		
	Ambient temperature (operation) (male connector/female connector)	-40 °C 85 °C (Plug / socket)		
Standards and regulations				
	Standard designation	M12 connector		
	Standards/specifications	according to IEC 61076-2-111		

1646350

https://www.phoenixcontact.com/au/products/1646350



## Drawings

Dimensional drawing







https://www.phoenixcontact.com/au/products/1646350

Schematic diagram



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

https://www.phoenixcontact.com/au/products/1646350



# Classifications

#### ECLASS

	ECLASS-13.0	27440116		
E٦	ETIM			
	ETIM 9.0	EC002635		

https://www.phoenixcontact.com/au/products/1646350

## Environmental product compliance

#### EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions		
China RoHS			
Environment friendly use period (EFUP)	EFUP-E		
	No hazardous substances above the limits		
EU REACH SVHC			
REACH candidate substance (CAS No.)	No substance above 0.1 wt%		

Phoenix Contact 2025 © - all rights reserved https://www.phoenixcontact.com

PHOENIX CONTACT PTY Ltd Unit 7, 2-8 South Street Rydalmere NSW 2116 1300 786 411 customerservice@phoenixcontact.com.au