

https://www.phoenixcontact.com/gb/products/1623711



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M40, Coupler connector, series: SB, straight long, shielded: yes, for standard and SPEEDCON interlock, No. of pos.: 4+4+4+PE / 3+N+PE, Direction of rotation: Standard, contact connection type: Pin, Crimp connection, cable diameter range: 14 mm ... 20.5 mm, coding: CAT5, coding 2, Alternative product in accordance with RoHS II without Exemption 6c (Pb < 0.1 %) item no.: 1244956

#### Your advantages

- · Transmission of signals, data, and power in just a single connector
- · CAT5 data interface for up to 100 Mbps
- · Mechanical coding reliably prevents incorrect connections
- · Safe use in the field, thanks to high degree of protection
- Consistent EMC protection for reliable connection solutions in the industrial environment

#### Commercial data

Item number	1623711
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	ABRCEG
Product key	ABRCEG
Catalog page	Page 127 (C-2-2019)
GTIN	4055626194714
Weight per piece (including packing)	491.6 g
Weight per piece (excluding packing)	491.6 g
Customs tariff number	85366990
Country of origin	DE



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### Technical data

#### Notes

Order information:	Crimp contacts, 4 x Ø 0.8 mm, 4 x Ø 1 mm, 5 x Ø 3.6 mm, order separately
afety 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>
	<ul> <li>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.</li> </ul>
	<ul> <li>The products are suitable for applications in plant, controller, and electrical device engineering.</li> </ul>
	<ul> <li>When operating the connectors in outdoor applications, they must be separately protected against environmental influences.</li> </ul>
	<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>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>
	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
	<ul> <li>Only use tools recommended by Phoenix Contact</li> </ul>
	<ul> <li>The installation notes/Design In documents online on the download page at phoenixcontact.com/products must be observed for this product.</li> </ul>
	<ul> <li>Use a protective cap to protect connectors that are not in use.</li> <li>The suitable accessories are available online in the accessory section of the product at phoenixcontact.com/products</li> </ul>
	<ul> <li>Operate the connector only when it is fully plugged in and interlocked.</li> </ul>

• Ensure that when laying the cable, the tensile load on the



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Rated voltage (III/3) power contact

Nominal current per signal contact

Rated voltage (III/3) signal contact

Note

Rated surge voltage

Contact diameter Signal contacts

Litz wire cross-section Signal contacts min.

Litz wire cross-section Signal contacts max.

	connectors does not exceed the upper limit specified in the standards.
	<ul> <li>Observe the minimum bending radius of the cable. Lay the cable without twisting it.</li> </ul>
	<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>
Product properties	
Product type	Circular connector (cable-side)
Data management status	
Article revision	10
Connector Insulating body	
Data rate	100 Mbps
Coding	CAT5, coding 2
Connection method	Crimp connection
Contact switching type	Pin
Application	Hybrid
Number of positions	13
Direction of rotation	Standard
Connection profile	4+4+4+PE / 3+N+PE
Contact diameter Power contacts	3.6 mm
Litz wire cross-section Power contacts min.	2.5 mm²
Litz wire cross-section Power contacts max.	16 mm²
Rated current Power contacts	70 A
Note	for max. connection cross section
Rated voltage	630 V AC
Rated surge voltage	6 kV
Overvoltage category	III
Degree of pollution	3
Rated voltage (II/3) power contact	850 V DC

630 V AC 1 mm

0.06 mm<sup>2</sup>

1.5 mm<sup>2</sup>

for max. connection cross section

8 A

6 kV

500 V



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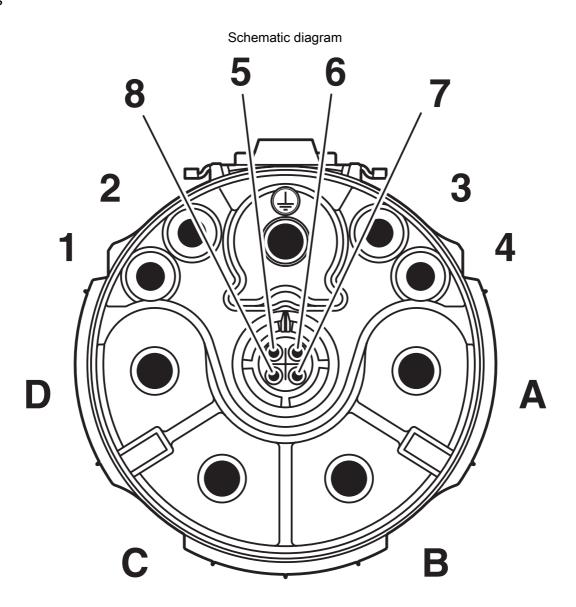
Contact diameter Data contacts	0.8 mm
Litz wire cross-section Data contacts min.	0.08 mm <sup>2</sup>
Litz wire cross-section Data contacts max.	0.5 mm²
Rated current per data contact at 25°C	3.6 A
Note	for max. connection cross section
Rated surge voltage	1.5 kV
Installation height	2000 m
Housing	
Housing material	Turned parts: copper zinc alloy (CuZn), die-cast parts: zinc (GD-Zn)
Type of locking	for standard and SPEEDCON interlock
Pg screw connection	none
Degree of protection (plugged in)	IP68/IP69K
Thread type	M40
Seal	
External cable diameter	14 mm 20.5 mm
Seal material	FKM
nvironmental and real-life conditions	
Ambient conditions	
Ambient temperature (operation)	-40 °C 115 °C (see derating curve)

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### Drawings

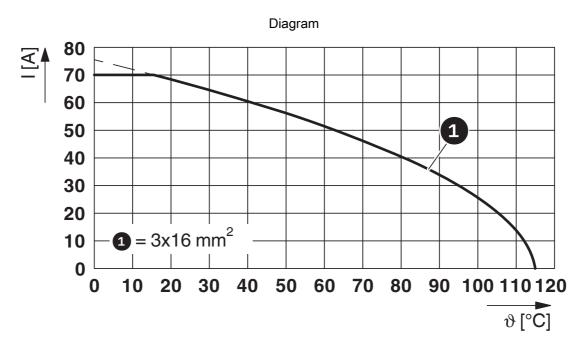


Pin assignment of pin CAT5, coding 2



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I = current strength,  $\vartheta$  = ambient temperature, power contacts A–C: 3x up to 70 A, signal contacts: 4x 2 A constant, data contacts: no load



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### **Approvals**

To download certificates, visit the product detail page: https://www.phoenixcontact.com/gb/products/1623711

cUL Recogn Approval ID: E4	<b>nized</b> 68743-20170914			
	Nominal voltage $U_N$	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
Power	600 V	42 A	- 6	-
Signal	500 V	4 A	- 16	-
Data	30 V	1 A	- 22	-

UL Recognized Approval ID: E468743-2	0170914			
	Nominal voltage $U_N$	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
Power	600 V	50 A	- 6	-
Signal	500 V	4 A	- 16	-
Data	30 V	1 A	- 22	-

UL Recognized Approval ID: E153698-2	0190718			
	Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
Power	600 V	70 A	-	-
Signal	500 V	4 A	-	-
Data	50 V	1 A	-	-

cUL Recognized Approval ID: E153698-2	20190718			
	Nominal voltage $U_N$	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
Power	600 V	28 A	-	-
Signal	500 V	4 A	-	-
Data	50 V	1 A	-	-



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### Classifications

UNSPSC 21.0

#### **ECLASS**

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

39121400



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### Environmental product compliance

#### EU RoHS

Yes
6(b), 6(b)-II
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.
Lead(CAS: 7439-92-1)
3d339521-e5a7-4bc8-914b-5129e9409376

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