#### 1623697

https://www.phoenixcontact.com/be/products/1623697

**PHŒNIX** CONTACT

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.



M40, Cable connector, series: SB, straight long, shielded: yes, SPEEDCON, No. of pos.: 8+4+PE, Direction of rotation: Standard, contact connection type: Pin, Crimp connection, cable diameter range: 20.5 mm ... 26.5 mm, coding: Signal, coding 2, Alternative product in accordance with RoHS II without Exemption 6c (Pb < 0.1 %) item no.: 1244948

### Your advantages

- · All housing can be fitted with pin or socket contacts
- · A total of eight contacts are available for signal transmission
- · Reduced connection time with SPEEDCON fast locking system
- · 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	1623697
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Sales key	ABRCEB
Product key	ABRCEB
Catalog page	Page 126 (C-2-2019)
GTIN	4055626194387
Weight per piece (including packing)	440,9 g
Weight per piece (excluding packing)	440,9 g
Customs tariff number	85366990
Country of origin	DE

1623697

https://www.phoenixcontact.com/be/products/1623697



### Technical data

Order information:	Crimp contacts, 8 x Ø 1 mm, 5 x Ø 3.6 mm, order separately
ifety note	
Safety note	WARNING: The connectors may not be plugged in or disconnected under load. Ignoring the warning or improper us may damage persons and/or property.
	WARNING: Commission properly functioning products only The products must be regularly inspected for damage. Decommission defective products immediately. Replace damaged products. Repairs are not possible.
	WARNING: Only electrically qualified personnel may install operate the product. They must observe the following safety notes. The qualified personnel must be familiar with the basic electrical engineering. They must be able to recognize and prevent danger. The relevant symbol on the packaging indica that only personnel familiar with electrical engineering are allowed to install and operate the product.
	<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, the must be separately protected against environmental influence</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 technic data of the standards listed (e.g. the ones listed in the produc 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>
	VDE 0100/1.97 § 411.1.3.2 and DIN EN 60 204/11.98 § 14. are applicable when combining several circuits in a cable and connector
	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
	Only use tools recommended by Phoenix Contact
	<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 us The suitable accessories are available online in the accessor 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>
	<ul> <li>Ensure that when laying the cable, the tensile load on the connectors does not exceed the upper limit specified in the</li> </ul>



https://www.phoenixcontact.com/be/products/1623697

	standards.
	<ul> <li>Observe the minimum bending radius of the cable. Lay the cable without twisting it.</li> </ul>
	• 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).
Product properties	
Product type	Circular connector (cable-side)

Data management status	
Article revision	11

#### Connector

nsulating body			
Coding	Signal, coding 2		
Connection method	Crimp connection		
Contact switching type	Pin		
Application	Hybrid		
Number of positions	13		
Direction of rotation	Standard		
Connection profile	8+4+PE		
Contact diameter Power contacts	3.6 mm		
Litz wire cross-section Power contacts min.	2.5 mm <sup>2</sup>		
Litz wire cross-section Power contacts max.	16 mm <sup>2</sup>		
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		
Rated voltage (III/3) power contact	630 V AC		
Contact diameter Signal contacts	1 mm		
Litz wire cross-section Signal contacts min.	0.06 mm <sup>2</sup>		
Litz wire cross-section Signal contacts max.	1.5 mm <sup>2</sup>		
Nominal current per signal contact	8 A		
Note	for max. connection cross section		
Rated surge voltage	6 kV		
Rated voltage (III/3) signal contact	500 V		
Contact diameter Data contacts	1 mm		
Litz wire cross-section Data contacts min.	0.06 mm <sup>2</sup>		



#### 1623697

https://www.phoenixcontact.com/be/products/1623697

Litz wire cross-section Data contacts max.	1.5 mm <sup>2</sup>
Rated current per data contact at 25°C	8 A
Note	for max. connection cross section
Rated voltage Data contacts	50 V
Rated surge voltage	1.5 kV
Installation height	2000 m
lousing	
Housing material	Turned parts: copper zinc alloy (CuZn), die-cast parts: zinc (GD Zn)
Type of locking	SPEEDCON
Pg screw connection	none
Degree of protection (plugged in)	IP68/IP69K
Thread type	M40
eal	
External cable diameter	20.5 mm 26.5 mm
Seal material	FKM

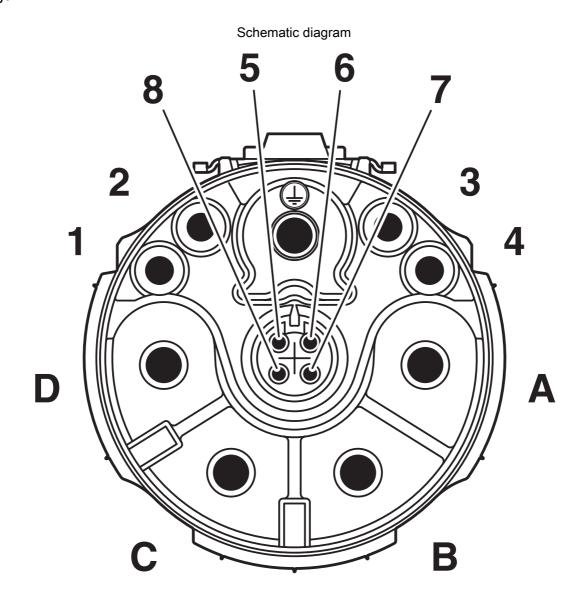
Ambient conditions	
Ambient temperature (operation)	-40 °C 115 °C (see derating curve)

1623697

https://www.phoenixcontact.com/be/products/1623697



Drawings

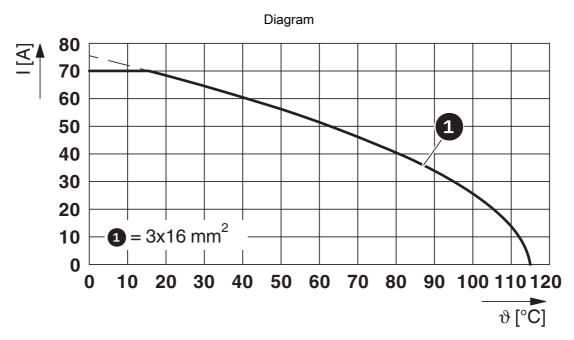


Pin assignment of pin signal, coding 2



1623697

https://www.phoenixcontact.com/be/products/1623697



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



1623697

https://www.phoenixcontact.com/be/products/1623697

### Approvals

🌣 To download certificates, visit the product detail page: https://www.phoenixcontact.com/be/products/1623697

Approval ID: E153698-20190718				
	Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
Power	600 V	24 A	6 - 16	-
Signal	500 V	4 A	1,5 - 1,5	-
Data	50 V	1 A	0,34 - 0,34	-

<b>UL Recognized</b> Approval ID: E153698-2	AD UL Recognized Approval ID: E153698-20190718				
	Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>	
Power	600 V	32 A	6 - 16	-	
Signal	500 V	4 A	1,5 - 1,5	-	
Data	50 V	1 A	0,34 - 0,34	-	

cULus Recognized

1623697

https://www.phoenixcontact.com/be/products/1623697



### Classifications

#### ECLASS

ECLASS-11.0	27440102
ECLASS-12.0	27440116
ECLASS-13.0	27440116

#### ETIM

	ETIM 9.0	EC002635
UN	NSPSC	
	UNSPSC 21.0	39121400

1623697

https://www.phoenixcontact.com/be/products/1623697



### 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)		
78e0da84-7fe1-4b72-970e-e1ba4a902da6		

1623697

https://www.phoenixcontact.com/be/products/1623697



Accessories

ST-10KP010 - Crimp contact

1618255 https://www.phoenixcontact.com/be/products/1618255



Crimp contact, Pin, turned, Single contact, contact diameter: 1 mm, crimp range:  $0.06 \text{ mm}^2 \dots 0.25 \text{ mm}^2$ , Alternative product in accordance with RoHS II without Exemption 6c (Pb < 0.1 %) item no.: 1243215

#### ST-10KP035 - Crimp contact

1618458 https://www.phoenixcontact.com/be/products/1618458



Crimp contact, Pin, turned, contact diameter: 1 mm, crimp range:  $0.25 \text{ mm}^2 \dots 1 \text{ mm}^2$ , Alternative product in accordance with RoHS II without Exemption 6c (Pb < 0.1 %) item no.: 1243215



https://www.phoenixcontact.com/be/products/1623697

**PHŒNIX** CONTACT

SM-Z0003 - Square mounting flange with O-ring

1607935

https://www.phoenixcontact.com/be/products/1607935



Square mounting flange with O-ring, Axial O-ring, 4x Ø4,2, series: SM

#### SM-Z0004 - Square mounting flange

1607937 https://www.phoenixcontact.com/be/products/1607937



Square mounting flange, 4x Ø4,2, series: SM

#### 1623697

https://www.phoenixcontact.com/be/products/1623697

# 

#### PROT-M40-PW-IT-IP20 - Plastic protective cap

#### 1577213

https://www.phoenixcontact.com/be/products/1577213



Plastic protective cap, M40, degree of protection: IP20, series: SM, SB

#### SB-10KP001 - Crimp contact

1623607 https://www.phoenixcontact.com/be/products/1623607



Crimp contact, Pin, turned, contact diameter: 1 mm, crimp range: 0.06  $\text{mm}^2 \dots 0.25 \text{ mm}^2$ 

1623697

https://www.phoenixcontact.com/be/products/1623697



SB-10KP002 - Crimp contact

#### 1623611

https://www.phoenixcontact.com/be/products/1623611



Crimp contact, Pin, turned, contact diameter: 1 mm, crimp range: 0.34  $\text{mm}^2$  ... 0. 5  $\text{mm}^2$ 

#### SB-10KP003 - Crimp contact

1623612 https://www.phoenixcontact.com/be/products/1623612



Crimp contact, Pin, turned, Single contact, contact diameter: 1 mm, crimp range: 0.5  $\text{mm}^2$  ... 1  $\text{mm}^2$ 

1623697

https://www.phoenixcontact.com/be/products/1623697



SB-10KP004 - Crimp contact

1623613

https://www.phoenixcontact.com/be/products/1623613



Crimp contact, Pin, turned, Single contact, contact diameter: 1 mm, crimp range: 1 mm<sup>2</sup> ... 1.5 mm<sup>2</sup>, Alternative product in accordance with RoHS II without Exemption 6c (Pb < 0.1 %) item no.: 1244925

#### SB-36KP002 - Crimp contact

1623383 https://www.phoenixcontact.com/be/products/1623383



Crimp contact, Pin, turned, contact diameter: 3.6 mm, crimp range:  $2.5 \text{ mm}^2 \dots 4 \text{ mm}^2$ , Alternative product in accordance with RoHS II without Exemption 6c (Pb < 0.1 %) item no.: 1244894

1623697

https://www.phoenixcontact.com/be/products/1623697



SB-36KP003 - Crimp contact

1623384

https://www.phoenixcontact.com/be/products/1623384



Crimp contact, Pin, turned, Single contact, contact diameter: 3.6 mm, crimp range:  $4 \text{ mm}^2 \dots 6 \text{ mm}^2$ , Alternative product in accordance with RoHS II without Exemption 6c (Pb < 0.1 %) item no.: 1244894

#### SB-36KP004 - Crimp contact

1623385 https://www.phoenixcontact.com/be/products/1623385



Crimp contact, Pin, turned, Single contact, contact diameter: 3.6 mm, crimp range: 10 mm<sup>2</sup> ... 10 mm<sup>2</sup>, Alternative product in accordance with RoHS II without Exemption 6c (Pb < 0.1 %) item no.: 1244895

1623697

https://www.phoenixcontact.com/be/products/1623697



SB-36KP005 - Crimp contact

1623386

https://www.phoenixcontact.com/be/products/1623386



Crimp contact, Pin, turned, Single contact, contact diameter: 3.6 mm, crimp range: 16 mm<sup>2</sup> ... 16 mm<sup>2</sup>, Alternative product in accordance with RoHS II without Exemption 6c (Pb < 0.1 %) item no.: 1244896

#### SM-Z0025 - Color coding

1620558 https://www.phoenixcontact.com/be/products/1620558

Color coding, color: green



1623697

https://www.phoenixcontact.com/be/products/1623697



SM-Z0026 - Color coding

1620559 https://www.phoenixcontact.com/be/products/1620559

Color coding, color: orange



#### SM-Z0027 - Color coding

1620560 https://www.phoenixcontact.com/be/products/1620560

Color coding, color: black



Phoenix Contact 2024 © - all rights reserved https://www.phoenixcontact.com

PHOENIX CONTACT nv/sa Minervastraat 10-12 1930 Zaventem-Keiberg II +32 (0)2/723 98 11 info@phoenixcontact.be