

1617909

https://www.phoenixcontact.com/us/products/1617909

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.



Device connector front mounting, straight, SPEEDCON, M23, number of positions: 5+PE, contact connection type: Pin, Axial O-ring, 4x Ø 3.2, shielded: yes, flange dimensions: 26 mm x 26 mm, degree of protection: IP67, number of positions: 6, connection method: Crimp connection, series: SF

#### Commercial data

Item number	1617909
Packing unit	20 pc
Minimum order quantity	20 pc
Note	Made to order (non-returnable)
Sales key	AB32
Product key	ABRBFL
GTIN	4046356581035
Weight per piece (including packing)	37.915 g
Weight per piece (excluding packing)	35.63 g
Customs tariff number	85366990
Country of origin	DE



1617909

https://www.phoenixcontact.com/us/products/1617909

### Technical data

#### Notes

Order information:	Order crimp contacts 6 x Ø 2 mm separately
Safety 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>
	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.
	<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>
	Ensure that the protective or functional ground has been properly connected.
	<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>
	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>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 standards.</li> </ul>
	Observe the minimum bending radius of the cable. Lay the cable without twisting it.
	<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</li> </ul>



1617909

Connection data

Conductor connection

https://www.phoenixcontact.com/us/products/1617909

	warnings (e.g. DIN EN ISO 13732-1:2008-12).
ounting	
Mounting type	Front mounting
Mounting	4x Ø 3.2
oduct properties	
Product type	Circular connectors (device side)
Series	SF
Application	Power
Number of positions	6
Connection profile	5+PE
Shielded	yes
Coding	N
Thread type	M23
Housing	00
Flange dimensions	26 mm x 26 mm
aterial specifications	
Flammability rating according to UL 94	V0
Seal material	FPM
Housing material	GD-Zn
	GD-Zn
ectrical properties	GD-Zn
ectrical properties Contact	
ectrical properties  Contact  Contact diameter	2 mm
ectrical properties  Contact  Contact diameter  Max. current	2 mm 30 A
ectrical properties  Contact  Contact diameter  Max. current  Nominal voltage U <sub>N</sub>	2 mm 30 A 630 V
ectrical properties  Contact  Contact diameter  Max. current  Nominal voltage U <sub>N</sub> Overvoltage category	2 mm 30 A 630 V
ectrical properties  Contact  Contact diameter  Max. current  Nominal voltage U <sub>N</sub> Overvoltage category  Degree of pollution	2 mm 30 A 630 V III 3
ectrical properties  Contact  Contact diameter  Max. current  Nominal voltage U <sub>N</sub> Overvoltage category  Degree of pollution  Rated surge voltage	2 mm 30 A 630 V
ectrical properties  Contact  Contact diameter  Max. current  Nominal voltage U <sub>N</sub> Overvoltage category  Degree of pollution  Rated surge voltage  Contact	2 mm 30 A 630 V III 3 6 kV
ectrical properties  Contact  Contact diameter  Max. current  Nominal voltage U <sub>N</sub> Overvoltage category  Degree of pollution  Rated surge voltage  Contact  Contact diameter	2 mm 30 A 630 V III 3 6 kV
ectrical properties  Contact  Contact diameter  Max. current  Nominal voltage U <sub>N</sub> Overvoltage category  Degree of pollution  Rated surge voltage  Contact  Contact diameter  Max. current	2 mm 30 A 630 V III 3 6 kV
ectrical properties  Contact  Contact diameter  Max. current  Nominal voltage U <sub>N</sub> Overvoltage category  Degree of pollution  Rated surge voltage  Contact  Contact diameter  Max. current  Nominal voltage U <sub>N</sub>	2 mm 30 A 630 V III 3 6 kV
ectrical properties  Contact  Contact diameter  Max. current  Nominal voltage U <sub>N</sub> Overvoltage category  Degree of pollution  Rated surge voltage  Contact  Contact diameter  Max. current	2 mm 30 A 630 V III 3 6 kV



1617909

https://www.phoenixcontact.com/us/products/1617909

Connection method	Crimp connection
Contact connection type	Pin
Connector	
Туре	straight

#### Environmental and real-life conditions

#### Ambient conditions

Degree of protection	IP67
Ambient temperature (operation)	-40 °C 125 °C
Ambient temperature (storage/transport)	15 °C 25 °C
Altitude	3000 m
Permissible humidity (storage/transport)	50 % 65 %

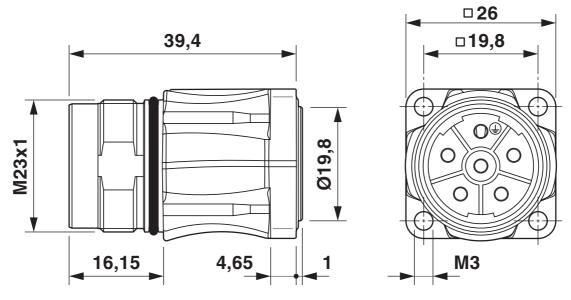


1617909

https://www.phoenixcontact.com/us/products/1617909

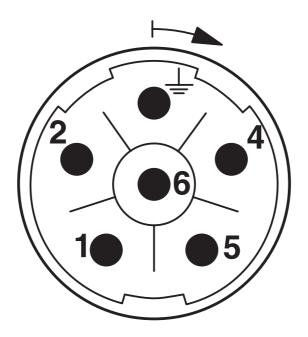
### Drawings

#### Dimensional drawing



Dimensional drawing

Schematic diagram

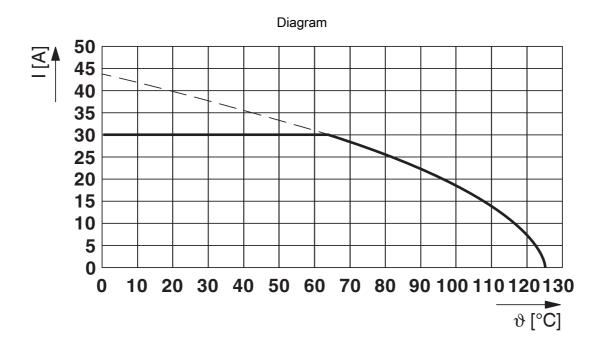


Connector pin assignment



1617909

https://www.phoenixcontact.com/us/products/1617909

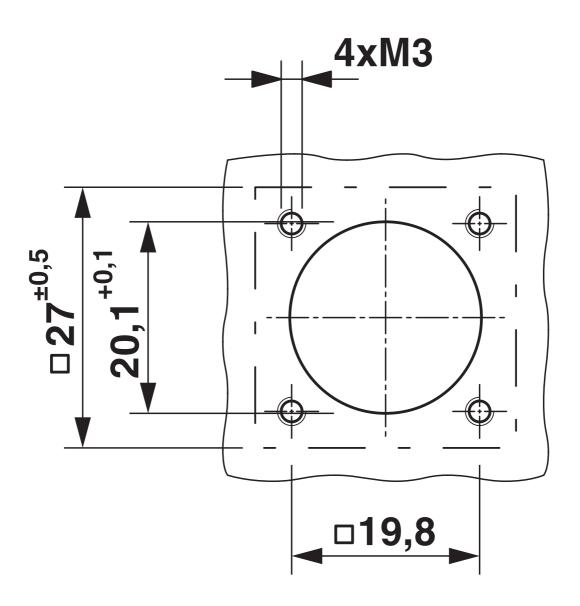




1617909

https://www.phoenixcontact.com/us/products/1617909

### Dimensional drawing



Installation dimensions



1617909

https://www.phoenixcontact.com/us/products/1617909

### **Approvals**

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1617909

. <b>51</b> 1	<b>cUL Recognized</b> Approval ID: E153698-20041116			
	Nominal volta	ge U <sub>N</sub> Nominal current	I <sub>N</sub> Cross section AWC	G Cross section mm <sup>2</sup>
	600 V	18 A	12 - 12	-

<b>71</b>	UL Recognized Approval ID: E153698-20041116				
		Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
		600 V	27 A	12 - 12	-

cULus Recognized



1617909

https://www.phoenixcontact.com/us/products/1617909

### Classifications

#### **ECLASS**

UNSPSC 21.0

	ECLASS-11.0	27440102
	ECLASS-12.0	27440116
	ECLASS-13.0	27440116
ET	IM	
	ETIM 9.0	EC002635
UN	SPSC	

39121400



1617909

https://www.phoenixcontact.com/us/products/1617909

### 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%			



1617909

https://www.phoenixcontact.com/us/products/1617909

#### Accessories

SF-7RP2000 - Crimp contact

1605646

https://www.phoenixcontact.com/us/products/1605646



Crimp contact, Pin, turned, Single contact, contact diameter: 2 mm, crimp range:  $0.14~\text{mm}^2$  ...  $0.25~\text{mm}^2$ , Alternative product in accordance with RoHS II without Exemption 6c (Pb < 0.1~%) item no.: 1241951

#### SF-7PP2000 - Crimp contact

1605634

https://www.phoenixcontact.com/us/products/1605634



Crimp contact, Pin, turned, Single contact, contact diameter: 2 mm, crimp range:  $0.25~\text{mm}^2$  ... 1 mm², Alternative product in accordance with RoHS II without Exemption 6c (Pb < 0.1 %) item no.: 1241951



1617909

https://www.phoenixcontact.com/us/products/1617909

#### SF-20KP004 - Crimp contact

1607376

https://www.phoenixcontact.com/us/products/1607376



Crimp contact, Pin, turned, contact diameter: 2 mm, crimp range:  $0.75 \text{ mm}^2 \dots 1$ .  $5 \text{ mm}^2$ , Alternative product in accordance with RoHS II without Exemption 6c (Pb < 0.1 %) item no.: 1241953

#### SF-7QP2000 - Crimp contact

1605639

https://www.phoenixcontact.com/us/products/1605639



Crimp contact, Pin, turned, Single contact, contact diameter: 2 mm, crimp range: 1  $\text{mm}^2$  ... 2.5  $\text{mm}^2$ , Alternative product in accordance with RoHS II without Exemption 6c (Pb < 0.1 %) item no.: 1241953



1617909

https://www.phoenixcontact.com/us/products/1617909

#### SF-7MP2000 - Crimp contact

1605626

https://www.phoenixcontact.com/us/products/1605626



Crimp contact, Pin, turned, Single contact, contact diameter: 2 mm, crimp range:  $4~\text{mm}^2$  ...  $4~\text{mm}^2$ , Alternative product in accordance with RoHS II without Exemption 6c (Pb < 0.1 %) item no.: 1241948

#### SF-Z0019 - Protective cap

1607449

https://www.phoenixcontact.com/us/products/1607449



Plastic protection cap, with eye, IP40 for connectors with M23 external thread, RF, SF series



1617909

https://www.phoenixcontact.com/us/products/1617909

#### RC-Z2469 - Protective cap

1611797

https://www.phoenixcontact.com/us/products/1611797



Plastic protection cap, antistatic, for RF, SF, CA, RC series connectors, with M23 external thread

#### SC-Z2319 - Metal protective cap

1605456

https://www.phoenixcontact.com/us/products/1605456



Metal protection cap for power connectors with M23 external thread



1617909

https://www.phoenixcontact.com/us/products/1617909

SC-Z2320 - Metal protective cap

1605457

https://www.phoenixcontact.com/us/products/1605457

Metal protection cap with steel wire for power connectors with M23 external thread



RF-Z0017 - Color coding

1620624

https://www.phoenixcontact.com/us/products/1620624

Color coding, color: green





1617909

https://www.phoenixcontact.com/us/products/1617909

RF-Z0018 - Color coding

1620625

https://www.phoenixcontact.com/us/products/1620625

Color coding, color: orange



RF-Z0019 - Color coding

1620626

https://www.phoenixcontact.com/us/products/1620626

Color coding, color: anthracite





1617909

https://www.phoenixcontact.com/us/products/1617909

#### PROT-M23PRO-OT-IP20 - Plastic protective cap

1055753

https://www.phoenixcontact.com/us/products/1055753



Plastic protective cap, M23, degree of protection: IP20, series: M23 PRO

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