

1620619

https://www.phoenixcontact.com/us/products/1620619

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Device connector front mounting, straight, for standard and SPEEDCON interlock, M23, number of positions: 5+PE, contact connection type: Pin, Axial O-ring, 4x Ø 3.2, shielded: yes, degree of protection: IP67, cable diameter range: 0 mm ... 0 mm, Compatible with mating connectors with SPEEDCON or M23 standard knurled nuts, number of positions: 6, connection method: Crimp connection, series: SF

## Your advantages

- Consistent EMC protection for reliable connection solutions in the industrial environment
- · Crimping connection: vibration- and temperature-resistant assembly

#### Commercial data

Item number	1620619
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	AB32
Product key	ABRBFL
Catalog page	Page 156 (C-2-2019)
GTIN	4046356845939
Weight per piece (including packing)	36 g
Weight per piece (excluding packing)	35.9 g
Customs tariff number	85366990
Country of origin	DE



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## 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.
	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 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.
	The products are suitable for applications in plant, controller, and electrical device engineering.
	<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>Ensure that the protective or functional ground has been properly connected.</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>
	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>
	<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



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Туре

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	warnings (e.g. DIN EN ISO 13732-1:2008-12).
nting	
Mounting type	Front mounting
Mounting	4x Ø 3.2
duct 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
Data management status	
Article revision	07
terial specifications	
Flammability rating according to UL 94	V0
Flammability rating according to UL 94 Seal material	V0 FPM
Flammability rating according to UL 94  Seal material ectrical properties	
Flammability rating according to UL 94  Seal material  ctrical properties	
Flammability rating according to UL 94  Seal material  ctrical properties  contact	FPM
Flammability rating according to UL 94  Seal material  ctrical properties  ontact  Contact diameter	FPM 2 mm
Flammability rating according to UL 94  Seal material  ectrical properties  Contact  Contact diameter  Max. current	PPM 2 mm 30 A
Flammability rating according to UL 94  Seal material  ectrical properties  Contact  Contact diameter  Max. current  Nominal voltage U <sub>N</sub>	2 mm 30 A 630 V
Flammability rating according to UL 94  Seal material  Extrical properties  Contact  Contact diameter  Max. current  Nominal voltage U <sub>N</sub> Overvoltage category	2 mm 30 A 630 V
Flammability rating according to UL 94  Seal material  ctrical 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 III 3
Flammability rating according to UL 94  Seal material  ctrical 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 III 3
Flammability rating according to UL 94  Seal material  ctrical 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 III 3 6 kV
Flammability rating according to UL 94  Seal material  Cortical 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
Flammability rating according to UL 94  Seal material  Actrical properties  Contact  Contact diameter  Max. current  Nominal voltage U <sub>N</sub> Overvoltage category  Degree of pollution  Rated surge voltage  Contact  Contact diameter  Overvoltage category	2 mm 30 A 630 V III 3 6 kV
Flammability rating according to UL 94  Seal material  Actrical properties  Contact  Contact diameter  Max. current  Nominal voltage U <sub>N</sub> Overvoltage category  Degree of pollution  Rated surge voltage  Contact  Contact diameter  Overvoltage category  Degree of pollution	2 mm 30 A 630 V III 3 6 kV
Flammability rating according to UL 94  Seal material  Actrical properties  Contact  Contact diameter  Max. current  Nominal voltage U <sub>N</sub> Overvoltage category  Degree of pollution  Rated surge voltage  Contact  Contact diameter  Overvoltage category  Degree of pollution  Rated surge voltage  Contact  Contact diameter  Overvoltage category  Degree of pollution  Rated surge voltage	2 mm 30 A 630 V III 3 6 kV
Flammability rating according to UL 94  Seal material  Actrical properties  Contact  Contact diameter  Max. current  Nominal voltage U <sub>N</sub> Overvoltage category  Degree of pollution  Rated surge voltage  Contact  Contact diameter  Overvoltage category  Degree of pollution  Rated surge voltage	2 mm 30 A 630 V III 3 6 kV

straight



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Connection 1			
Head design	Pin		
Cable/line			
External cable diameter	0 mm 0 mm		
Environmental and real-life conditions  Ambient conditions			
Degree of protection	IP67		
Ambient temperature (operation)	-40 °C 125 °C		
Ambient temperature (storage/transport)	45 %0 05 %0		
	15 °C 25 °C		

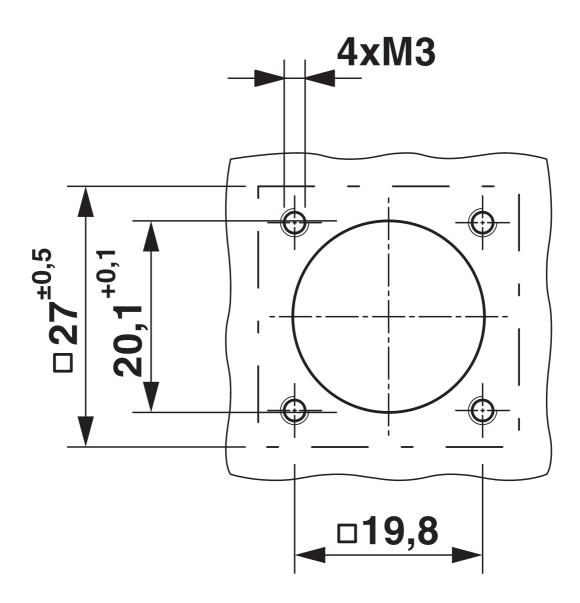


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## **Drawings**

## Dimensional drawing



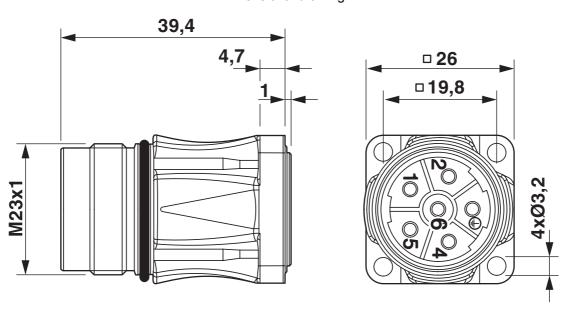
Installation dimensions



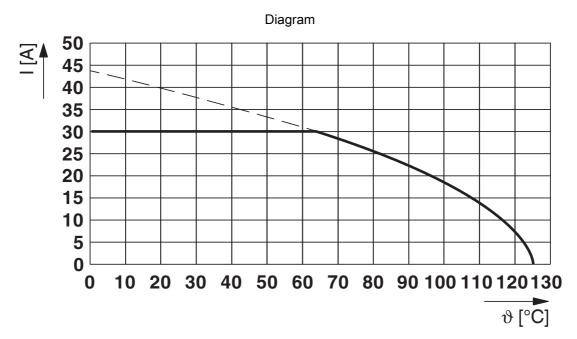
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## Dimensional drawing



Dimensional drawing



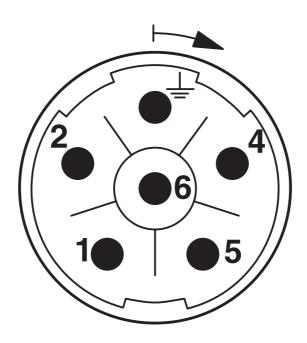
I = current strength, T = ambient temperature



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## Schematic diagram



Connector pin assignment



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## **Approvals**

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1620619

.71	<b>cUL Recognized</b> Approval ID: E153698-20041116			
	Nominal voltage $U_N$	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
	600 V	18 A	12 - 12	-

<i>7</i> 1	UL Recognized Approval ID: E153698-20	0041116			
		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



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## Classifications

UNSPSC 21.0

## **ECLASS**

27440109		
27440109		
27440109		
ETIM		
EC003569		

39121400



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## 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%



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### 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:  $0.14~\text{mm}^2~\dots~0.25~\text{mm}^2$ , 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



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### 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



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### 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

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



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### 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



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## 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

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Color coding, color: green





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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





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## 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

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