

1605520

https://www.phoenixcontact.com/us/products/1605520

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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, shielded: yes, flange dimensions: 26 mm x 26 mm, number of positions: 6, connection method: Crimp connection, series: SF, This product is in the process of being discontinued. This product must no longer be considered for new projects. Please contact your sales representative for alternatives.

### Your advantages

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

#### Commercial data

Item number	1605520
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	AB32
Product key	ABRBFL
GTIN	4046356182164
Weight per piece (including packing)	47.9 g
Weight per piece (excluding packing)	33.726 g
Customs tariff number	85366990
Country of origin	DE



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### Technical data

#### Notes

Order information:  Note on application  General	Order crimp contacts 6 x Ø 2 mm separately  Series SF connectors are not compatible with series M23 PRO and must not be combined.
General	
	Compatible with mating connectors with SPEEDCON or M23 standard knurled nuts
ety 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 an operate the product. They must observe the following safety notes. The qualified personnel must be familiar with the basics electrical engineering. They must be able to recognize and prevent danger. The relevant symbol on the packaging indicate that only personnel familiar with electrical engineering are allowed to install and operate the product.</li> </ul>
	• 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/o 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



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	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 warnings (e.g. DIN EN ISO 13732-1:2008-12).</li> </ul>
ounting	
Mounting type	Front mounting/square flange (4x Ø 3.2 mm)
roduct 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
imensions	
monoidie	
Housing	
Flange dimensions	26 mm x 26 mm
aterial specifications	
Material Housing	GD-Zn
Material Rotating parts	CuZn
Material Housing surface	Ni
Material Insulating body	PA 6.6
Material Seal	FPM (O-ring)
Flammability rating according to UL 94	VO
ectrical properties  Contact: Contact group 1	
Contact diameter	2 mm
Nominal current I <sub>N</sub>	30 A
Nominal voltage U <sub>N</sub>	
	630 V
Overvoltage category	III
Degree of pollution	III 3
· · · · · ·	III
Degree of pollution	III 3
Degree of pollution  Rated surge voltage	III 3
Degree of pollution Rated surge voltage  Contact: Contact group 2	III 3 6 kV
Degree of pollution Rated surge voltage  Contact: Contact group 2  Contact diameter	III 3 6 kV



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### Connection data

Connection method	Crimp connection
Contact connection type	Pin

#### Connector

Туре	straight	
Connection 1		
Head design	Pin	

### Environmental and real-life conditions

#### Ambient conditions

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

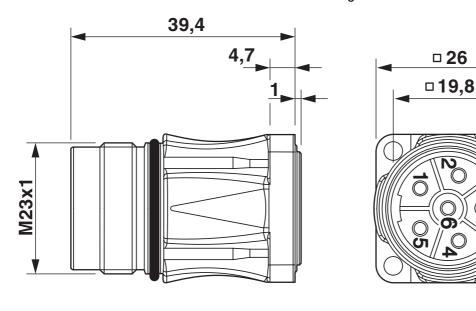


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### Drawings

### Dimensional drawing



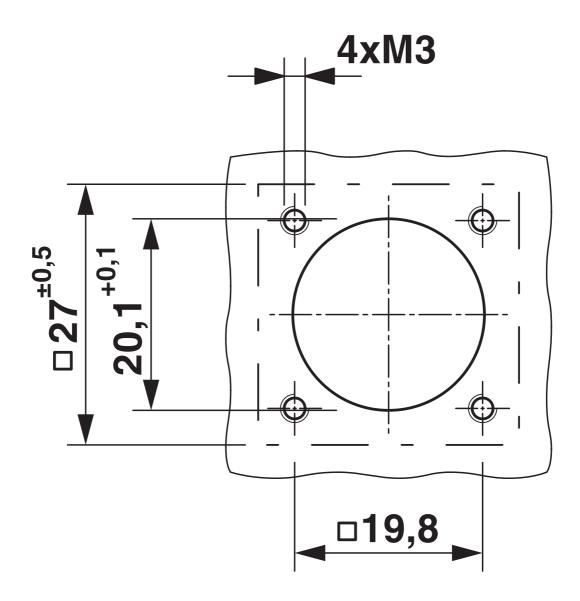
Dimensional drawing



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### Dimensional drawing



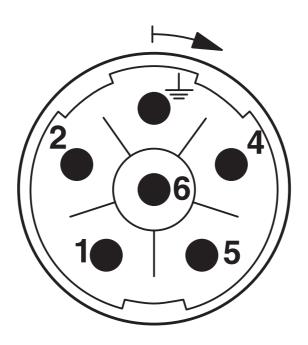
Installation dimensions



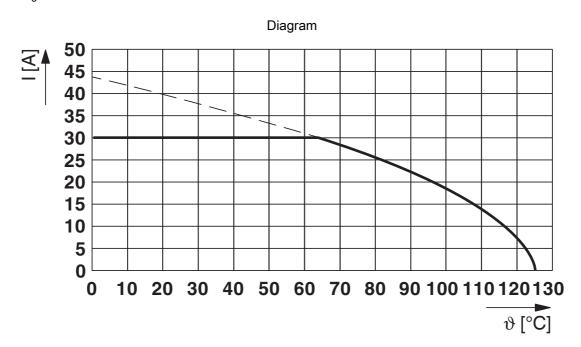
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### Schematic diagram



#### Connector pin assignment



I = current strength, T = ambient temperature



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### **Approvals**

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1605520

. <b>9</b> 1	CUL 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>
keine					
		600 V	18 A	12	-

<b>7.1</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>
keine					
		600 V	27 A	12	-



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### Classifications

#### **ECLASS**

	ECLASS-13.0	27440109
	ECLASS-15.0	27440109
ΕΊ	ГІМ	
	ETIM 9.0	EC003569
U	NSPSC	
	UNSPSC 21.0	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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