

## Device connector, front mounting - SF-5EP1N8AA500 - 1620657

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Device connector, front mounting, angled rotatable, for standard and SPEEDCON interlock, M23, number of positions: 5+PE, type of contact: Pin, Axial O-ring, 4x Ø 3.2, shielded: yes, flange dimensions: 26 mm x 26 mm, degree of protection: IP67, Compatible with mating connectors with SPEEDCON or M23 standard knurled nuts, number of positions: 6, connection method: Crimp connection


The figure shows the 8-pos.  
(4+3+PE) product version

### Your advantages

- ✓ Easy connection, thanks to infinitely adjustable cable outlet direction up to 310°
- ✓ Consistent EMC protection for reliable connection solutions in the industrial environment
- ✓ Crimping connection: vibration- and temperature-resistant assembly



### Key Commercial Data

Packing unit	1 pc
GTIN	 4 046356 839969
GTIN	4046356839969
Weight per Piece (excluding packing)	140.000 g
Custom tariff number	85366990
Country of origin	Germany

### Technical data

#### General

Note	Order information: Order crimp contacts 6 x Ø 2 mm separately
Type of locking	for standard and SPEEDCON interlock
Coding	N
Contact connection method	Crimp connection
Type of contacts	Pin

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### Technical data

#### General

Number of positions	6
Contact diameter of power contacts	2 mm
Rated current for power contacts	30 A
Contact diameter of signal contacts	2 mm
Nominal current per signal contact	30 A
Pg housing screw connection	none
Mounting type	4x Ø 3.2

#### Ambient conditions

Ambient temperature	-40 °C ... 125 °C
Degree of protection	IP67

#### Specifications according to DIN EN 61984:2001

Installation height max.	3000 m
Nominal / operating voltage of power contacts	630 V
Rated surge voltage of power contacts	6 kV
Overvoltage category of power contacts	III
Degree of pollution of power contacts	3
Nominal / operating voltage of signal contacts	630 V
Rated surge voltage of signal contacts	6 kV
Overvoltage category of signal contacts	III
Degree of pollution of signal contacts	3

#### Standards and Regulations

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 style="list-style-type: none"> <li>• 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.</li> </ul>
	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>• The products are suitable for applications in plant, controller, and electrical device engineering.</li> </ul>
	<ul style="list-style-type: none"> <li>• When operating the connectors in outdoor applications, they must be separately protected against environmental influences.</li> </ul>
	<ul style="list-style-type: none"> <li>• Assembled products may not be manipulated or improperly opened.</li> </ul>

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### Technical data

#### Standards and Regulations

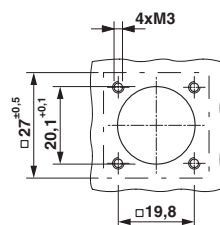
	<ul style="list-style-type: none"> <li>Only use mating connectors that are specified in the technical data of the standards listed (e.g. the ones listed in the product accessories online at <a href="https://www.phoenixcontact.com/products">phoenixcontact.com/products</a>).</li> </ul>
	<ul style="list-style-type: none"> <li>When using the product in direct connection with third-party manufacturers, the user is responsible.</li> </ul>
	<ul style="list-style-type: none"> <li>For operating voltages &gt; 50 V AC, conductive connector housings must be grounded</li> </ul>
	<ul style="list-style-type: none"> <li>Ensure that the protective or functional ground has been properly connected.</li> </ul>
	<ul style="list-style-type: none"> <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>
	<ul style="list-style-type: none"> <li>Only use tools recommended by Phoenix Contact</li> </ul>
	<ul style="list-style-type: none"> <li>The installation notes/Design In documents online on the download page at <a href="https://www.phoenixcontact.com/products">phoenixcontact.com/products</a> must be observed for this product.</li> </ul>
	<ul style="list-style-type: none"> <li>Operate the connector only when it is fully plugged in and interlocked.</li> </ul>
	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>Observe the minimum bending radius of the cable. Lay the cable without twisting it.</li> </ul>
	<ul style="list-style-type: none"> <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>

#### Environmental Product Compliance

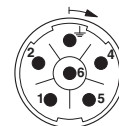
REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

### Drawings

Dimensional drawing



Schematic diagram

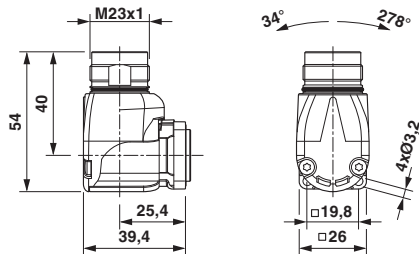


Connector pin assignment

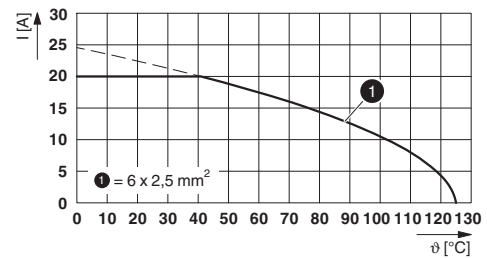
#### Installation dimensions

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Dimensional drawing



Diagram



Dimensional drawing

I = current strength, θ = ambient temperature, 6x 20 A

### Classifications

eCl@ss

eCl@ss 10.0.1	27440109
eCl@ss 11.0	27440109
eCl@ss 4.0	27260700
eCl@ss 4.1	27260700
eCl@ss 5.0	27260700
eCl@ss 5.1	27260700
eCl@ss 6.0	27260700
eCl@ss 7.0	27440102
eCl@ss 9.0	27440103

ETIM

ETIM 3.0	EC001121
ETIM 4.0	EC001121
ETIM 6.0	EC002061

UNSPSC

UNSPSC 6.01	43172015
UNSPSC 7.0901	43201404
UNSPSC 11	43172015
UNSPSC 12.01	43201404
UNSPSC 13.2	39121413
UNSPSC 18.0	39121413
UNSPSC 19.0	39121413
UNSPSC 20.0	39121413
UNSPSC 21.0	39121413

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### Approvals


#### Approvals


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UL Recognized / cUL Recognized / EAC / cULus Recognized


#### Ex Approvals

### Approval details

UL Recognized			<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	E153698-20041116
Nominal voltage UN		600 V		
Nominal current IN		27 A		
mm²/AWG/kcmil		12		

cUL Recognized			<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	E153698-20041116
Nominal voltage UN		600 V		
Nominal current IN		18 A		
mm²/AWG/kcmil		12		

EAC		B.01687
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cULus Recognized	
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### Accessories

#### Accessories

#### Crimp contact

## Device connector, front mounting - SF-5EP1N8AA500 - 1620657

### Accessories

Crimp contact - SF-7RP2000 - 1605646



Crimp contact, turned, Single contact, contact diameter: 2 mm, crimp range: 0.14 mm<sup>2</sup> ... 0.25 mm<sup>2</sup>

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Crimp contact - SF-7PP2000 - 1605634



Crimp contact, turned, Single contact, contact diameter: 2 mm, crimp range: 0.25 mm<sup>2</sup> ... 1 mm<sup>2</sup>

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Crimp contact - SF-20KP004 - 1607376



Crimp contact, turned, contact diameter: 2 mm, crimp range: 0.75 mm<sup>2</sup> ... 1.5 mm<sup>2</sup>

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Crimp contact - SF-7QP2000 - 1605639



Crimp contact, turned, Single contact, contact diameter: 2 mm, crimp range: 1 mm<sup>2</sup> ... 2.5 mm<sup>2</sup>

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Crimp contact - SF-7MP2000 - 1605626



Crimp contact, turned, Single contact, contact diameter: 2 mm, crimp range: 4 mm<sup>2</sup> ... 4 mm<sup>2</sup>

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### Mounting material

## Device connector, front mounting - SF-5EP1N8AA500 - 1620657

### Accessories

Color-coding - RF-Z0017 - 1620624



Color-coding, color: green

Color-coding - RF-Z0018 - 1620625



Color-coding, color: orange

Color-coding - RF-Z0019 - 1620626



Color-coding, color: anthracite

### Protective cover

Protective cap - SF-Z0019 - 1607449



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

Protective cap - RC-Z2059 - 1604225



Plastic protection cap for connectors with M23 external thread

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### Accessories

Plastic anti-static dust protection cap - RC-Z2469 - 1611797



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

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Metal protective cap - SC-Z2319 - 1605456



Metal protection cap for power connectors with M23 external thread

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Metal protective cap - SC-Z2320 - 1605457



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

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