

1620660  
<https://www.phoenixcontact.com/us/products/1620660>

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Device connector front mounting, angled rotatable, for standard and SPEEDCON interlock, M23, number of positions: 4+3+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, Compatible with mating connectors with SPEEDCON or M23 standard knurled nuts, number of positions: 8, connection method: Crimp connection, series: SF

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

Commercial data

Item number	1620660
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	AB32
Product key	ABRBFM
Catalog page	Page 156 (C-2-2019)
GTIN	4046356840989
Weight per piece (including packing)	133.7 g
Weight per piece (excluding packing)	123.6 g
Customs tariff number	85366990
Country of origin	DE

## Technical data

### Notes

General	Order crimp contacts 4 x Ø 1 mm, 4 x Ø 2 mm separately
Safety note	
Safety note	<p>WARNING: The connectors may not be plugged in or disconnected under load. Ignoring the warning or improper use may damage persons and/or property.</p> <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> <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> <li>• The products are suitable for applications in plant, controller, and electrical device engineering.</li> <li>• When operating the connectors in outdoor applications, they must be separately protected against environmental influences.</li> <li>• Assembled products may not be manipulated or improperly opened.</li> <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> <li>• When using the product in direct connection with third-party manufacturers, the user is responsible.</li> <li>• For operating voltages &gt; 50 V AC, conductive connector housings must be grounded</li> <li>• Ensure that the protective or functional ground has been properly connected.</li> <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> <li>• Only use tools recommended by Phoenix Contact</li> <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> <li>• Operate the connector only when it is fully plugged in and interlocked.</li> <li>• Ensure that when laying the cable, the tensile load on the connectors does not exceed the upper limit specified in the standards.</li> <li>• Observe the minimum bending radius of the cable. Lay the cable without twisting it.</li> <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>

# SF-7EP1N8AA500 - Device connector front mounting



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warnings (e.g. DIN EN ISO 13732-1:2008-12).

## Mounting

Mounting	4x Ø 3.2
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## Product properties

Product type	Circular connectors (device side)
Number of positions	8
Connection profile	4+3+PE
Application	Power
Series	SF
Shielded	yes
Coding	N
Thread type	M23

## Dimensions

### Housing

Flange dimensions	26 mm x 26 mm
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## Material specifications

Flammability rating according to UL 94	V0
Seal material	FPM
Housing material	Metal

## Electrical properties

### Contact

Contact diameter	2 mm
Max. current	30 A
Nominal voltage $U_N$	630 V
Overvoltage category	III
Degree of pollution	3
Rated surge voltage	6 kV

### Contact

Contact diameter	1 mm
Max. current	9 A
Nominal voltage $U_N$	250 V
Overvoltage category	III
Degree of pollution	3
Rated surge voltage	4 kV

## Connection data

### Conductor connection

Connection method	Crimp connection
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Contact connection type	Pin
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Connector

Type	angled rotatable
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Connection 1

Head design	Pin
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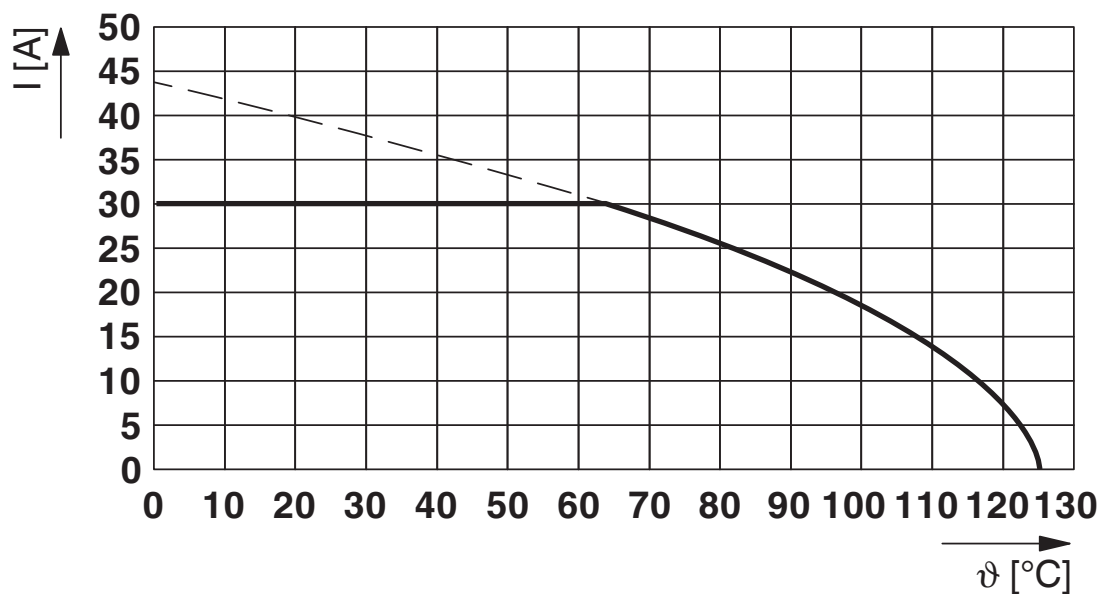
Environmental and real-life conditions

Ambient conditions

Degree of protection	IP67
Ambient temperature (operation)	-40 °C ... 125 °C
Altitude	3000 m

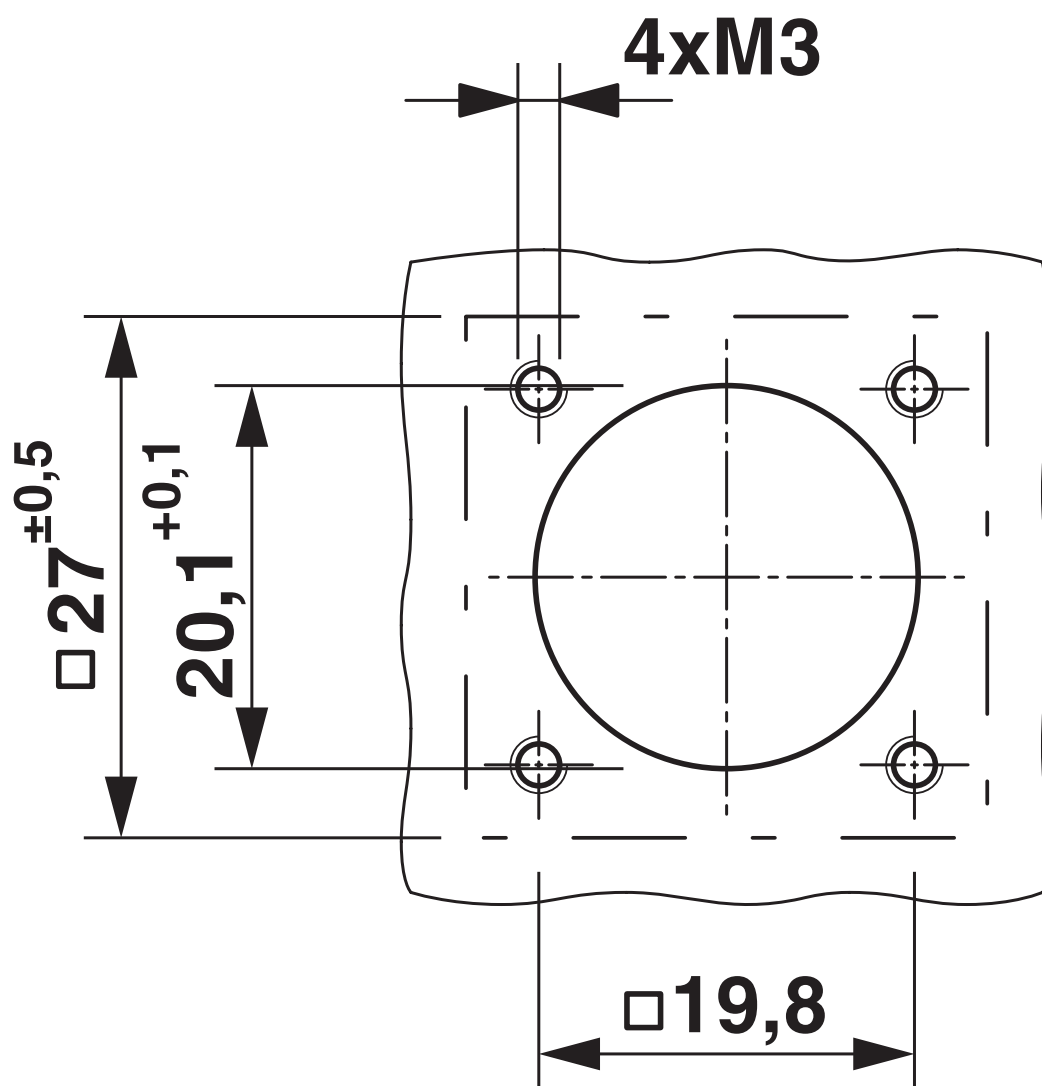
## Drawings

Diagram



$I$  = current strength,  $T$  = ambient temperature

Dimensional drawing



Installation dimensions

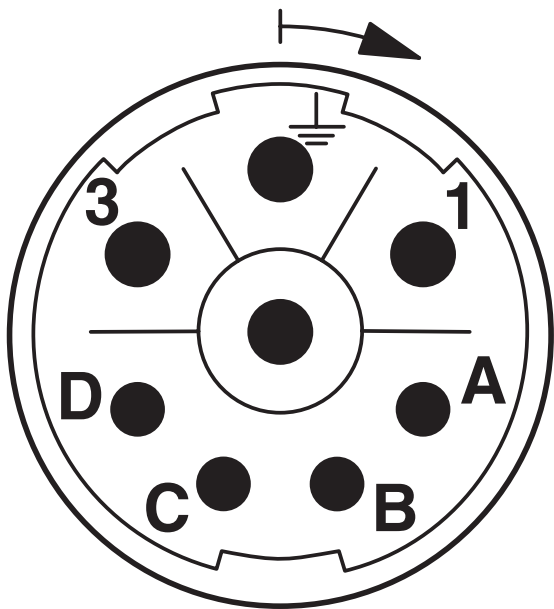
SF-7EP1N8AA500 - Device connector front mounting



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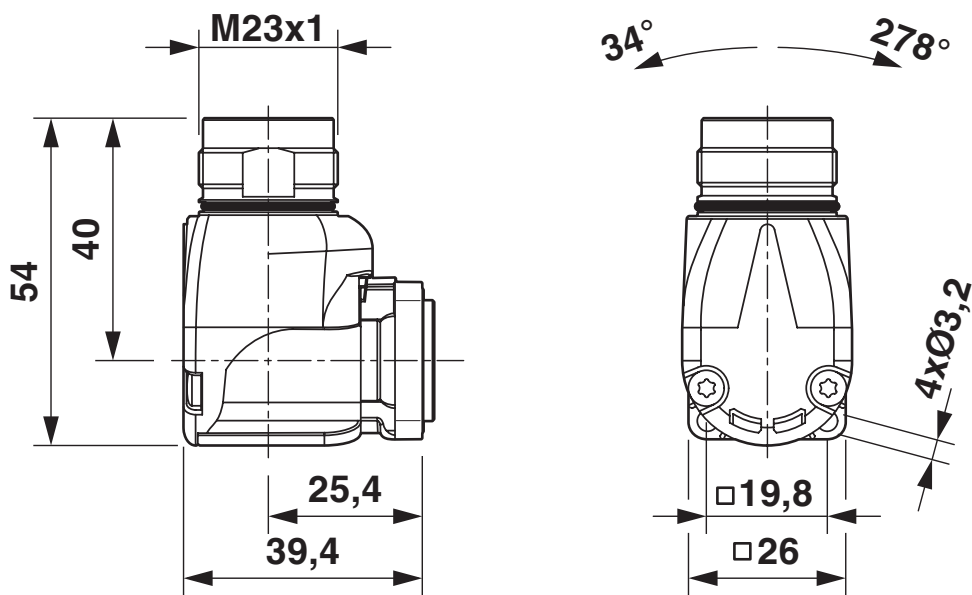
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Schematic diagram



Connector pin assignment

Dimensional drawing



Dimensional drawing

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## Classifications

### ECLASS

ECLASS-11.0	27440109
ECLASS-12.0	27440109
ECLASS-13.0	27440109

### ETIM

ETIM 9.0	EC003569
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### UNSPSC

UNSPSC 21.0	39121400
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Environmental product compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

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