

Device connector, front mounting - SF-7EP1N8AA500



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, 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: 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

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Commercial Data

Item number	1620660
Packing unit	1 pc
Minimum order quantity	1 pc
Sales Key	A12
Product Key	ABRCBL
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

Order information:	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"> • 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. • When operating the connectors in outdoor applications, they must be separately protected against environmental influences. • Assembled products may not be manipulated or improperly opened. • 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). • When using the product in direct connection with third-party manufacturers, the user is responsible. • For operating voltages > 50 V AC, conductive connector housings must be grounded • Ensure that the protective or functional ground has been properly connected. • 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 • Only use tools recommended by Phoenix Contact • The installation notes/Design In documents online on the download page at phoenixcontact.com/products must be observed for this product. • Operate the connector only when it is fully plugged in and interlocked. • Ensure that when laying the cable, the tensile load on the connectors does not exceed the upper limit specified in the standards. • Observe the minimum bending radius of the cable. Lay the cable without twisting it. • 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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warnings (e.g. DIN EN ISO 13732-1:2008-12).

Product properties

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

Ambient conditions

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

Dimensions

Housing

Flange dimensions	26 mm x 26 mm
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Connector

Type	angled rotatable
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Electrical properties

Contact

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

Contact

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

Material specifications

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

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Connection data

Conductor connection

Connection method	Crimp connection
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Mounting

Mounting	4x Ø 3.2
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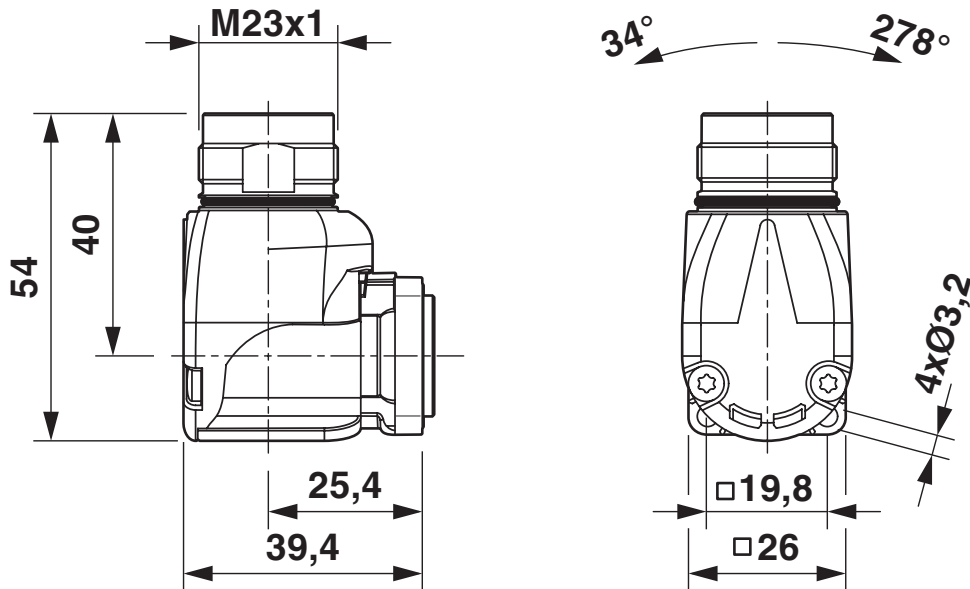


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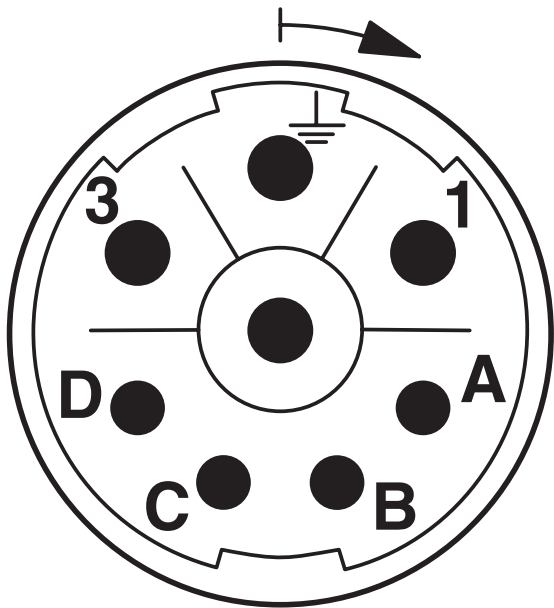
Drawings

Dimensional drawing

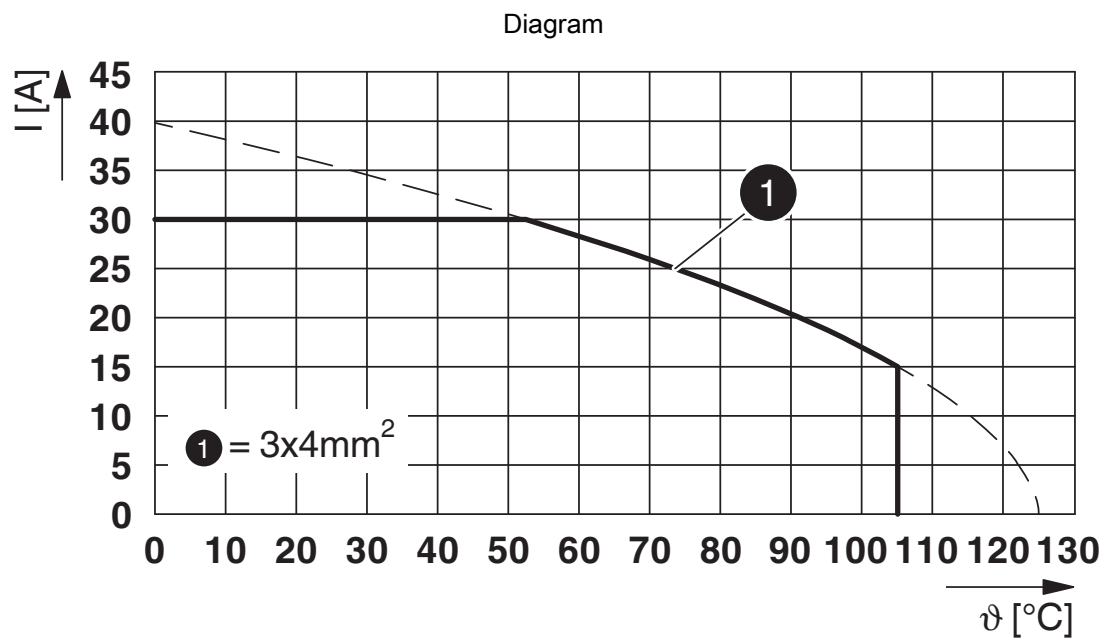


Dimensional drawing

Schematic diagram

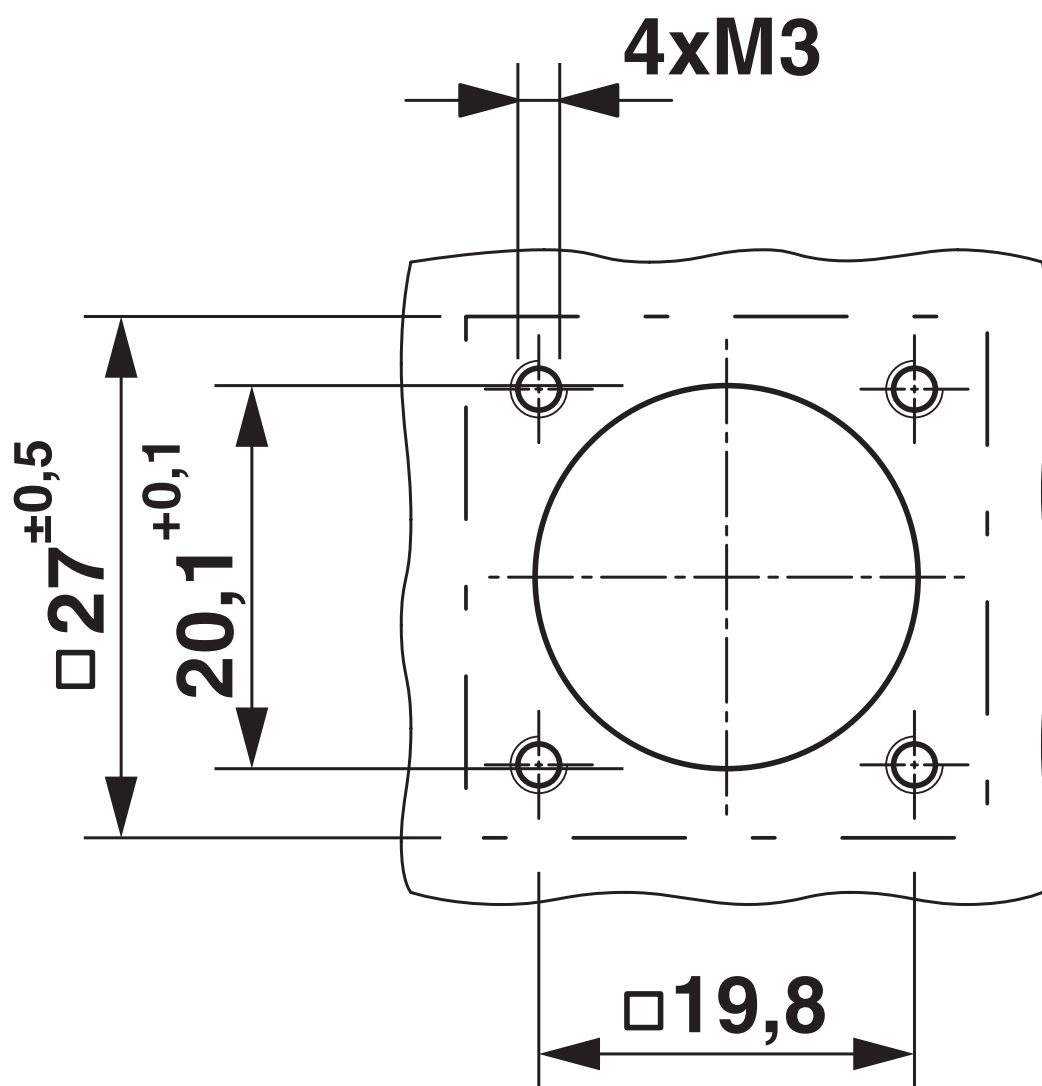


Connector pin assignment



I = current strength, T = ambient temperature

Dimensional drawing



Installation dimensions

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Approvals



EAC

Approval ID: B.01687

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Classifications

ECLASS

ECLASS-9.0	27440103
ECLASS-10.0.1	27440109
ECLASS-11.0	27440109

ETIM

ETIM 8.0	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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Accessories

Crimp contact

Crimp contact - SF-7RP2000 - 1605646

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



Crimp contact, turned, Single contact, contact diameter: 2 mm, crimp range: 0.14 mm² ... 0.25 mm²

Crimp contact

Crimp contact - SF-7PP2000 - 1605634

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



Crimp contact, turned, Single contact, contact diameter: 2 mm, crimp range: 0.25 mm² ... 1 mm²

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Crimp contact

Crimp contact - SF-20KP004 - 1607376

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



Crimp contact, turned, contact diameter: 2 mm, crimp range: 0.75 mm² ... 1.5 mm²

Crimp contact

Crimp contact - SF-7QP2000 - 1605639

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



Crimp contact, turned, Single contact, contact diameter: 2 mm, crimp range: 1 mm² ... 2.5 mm²

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Crimp contact

Crimp contact - SF-7MP2000 - 1605626

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



Crimp contact, turned, Single contact, contact diameter: 2 mm, crimp range: 4 mm² ... 4 mm²

Crimp contact

Crimp contact - SF-6CP2000 - 1605559

<https://www.phoenixcontact.com/us/products/1605559>



Crimp contact, turned, Single contact, contact diameter: 1 mm, crimp range: 0.06 mm² ... 0.25 mm²

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Crimp contact

Crimp contact - SF-10KP004 - 1607355

<https://www.phoenixcontact.com/us/products/1607355>



Crimp contact, turned, Single contact, contact diameter: 1 mm, crimp range: 0.14 mm² ... 0.5 mm²

Crimp contact

Crimp contact - SF-6AP2000 - 1605554

<https://www.phoenixcontact.com/us/products/1605554>



Crimp contact, turned, Single contact, contact diameter: 1 mm, crimp range: 0.25 mm² ... 1 mm²

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Protective cap

Protective cap - SF-Z0019 - 1607449

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



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

Protective cap

Protective cap - RC-Z2059 - 1604225

<https://www.phoenixcontact.com/us/products/1604225>



Plastic protection cap for connectors with M23 external thread

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Plastic anti-static dust protection cap

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

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



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

Metal protective cap

Metal protective cap - SC-Z2319 - 1605456

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



Metal protection cap for power connectors with M23 external thread

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Metal protective cap

Metal protective cap - SC-Z2320 - 1605457

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

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

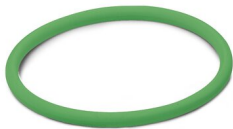


Color-coding

Color-coding - RF-Z0017 - 1620624

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

Color-coding, color: green



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Color-coding

Color-coding - RF-Z0018 - 1620625

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

Color-coding, color: orange



Color-coding

Color-coding - RF-Z0019 - 1620626

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

Color-coding, color: anthracite



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