

SF-5ES1N8A80A1 - Cable connector



1605524

<https://www.phoenixcontact.com/in/products/1605524>

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Cable connector, straight short, Screw locking, M23, number of positions: 5+PE, type of contact: Socket, shielded: yes, degree of protection: IP67, cable diameter range: 7.5 mm ... 9 mm, number of positions: 6, connection method: Crimp connection, series: SF, Alternative product in accordance with RoHS II without Exemption 6c (Pb <0.1%) item no.: 1241907

Your advantages

- Consistent EMC protection for reliable connection solutions in the industrial environment
- Crimping connection: vibration- and temperature-resistant assembly
- Flexible use: reliably connect various cable diameters
- Molded designs with pre-assembled cables on one or both sides

Commercial Data

Item number	1605524
Packing unit	1 pc
Minimum order quantity	1 pc
Sales Key	ABR
Product Key	ABRCBA
Catalog Page	Page 154 (C-2-2019)
GTIN	4046356253406
Weight per Piece (including packing)	135.1 g
Weight per Piece (excluding packing)	120.87 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
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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.
	• 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.

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

Product properties

Product type	Circular connector (cable-side)
Number of positions	6
Connection profile	5+PE
Application	Power
Locking type	Screw locking
Series	SF
Shielded	yes
Coding	N
Thread type	M23

Material specifications

Seal material	FPM
Housing material	Turned parts: copper zinc alloy (CuZn), die-cast parts: zinc (GD-Zn)
Insulator material	PA 6.6
Gasket and O-ring material	FPM
Housing material	Metal

Connection data

Conductor connection

Connection method	Crimp connection
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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

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Rated surge voltage	6 kV

Connector

Type	straight short
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Connection 1

Head design	Socket
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Cable/line

External cable diameter	7.5 mm ... 9 mm
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Environmental and real-life conditions

Ambient conditions

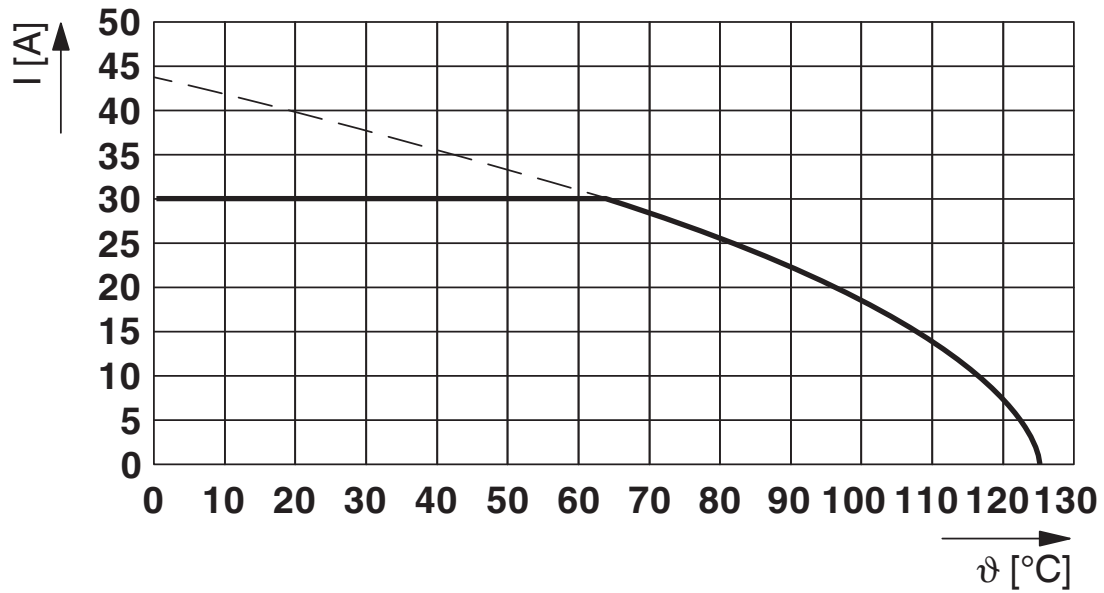
Degree of protection	IP67
Ambient temperature (operation)	-40 °C ... 125 °C
Altitude	3000 m

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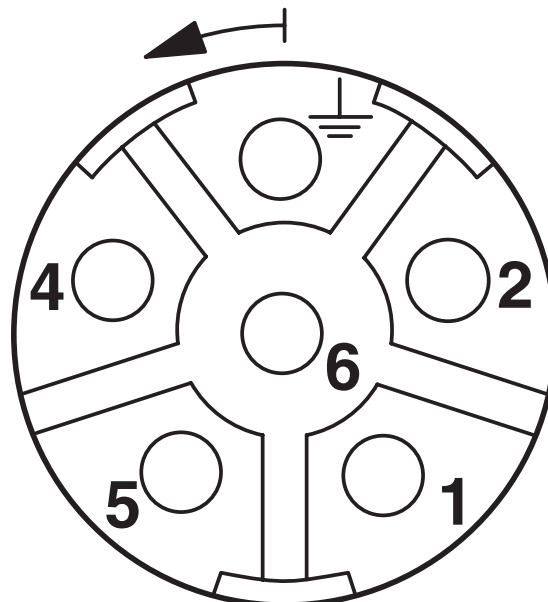
<https://www.phoenixcontact.com/in/products/1605524>

Drawings

Diagram



Schematic diagram



Connector pin assignment

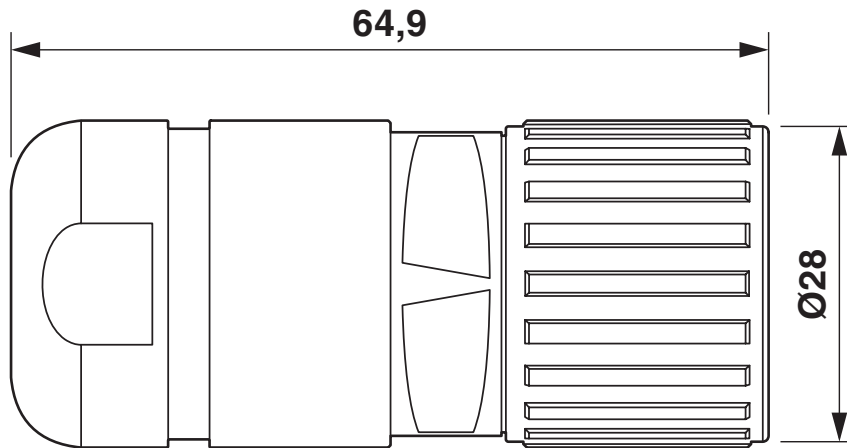
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Dimensional drawing



Dimensional drawing

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Approvals

 cUL Recognized Approval ID: E153698-20041116	Nominal Voltage U_N	Nominal Current I_N	Cross Section AWG	Cross Section mm^2
	600 V	18 A	- 12	-

 UL Recognized Approval ID: E153698-20041116	Nominal Voltage U_N	Nominal Current I_N	Cross Section AWG	Cross Section mm^2
	600 V	27 A	- 12	-

 EAC Approval ID: B.01687
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Classifications

ECLASS

ECLASS-11.0	27440102
ECLASS-12.0	27440116
ECLASS-13.0	27440116

ETIM

ETIM 8.0	EC002635
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UNSPSC

UNSPSC 21.0	39121400
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Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"

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Accessories

SF-7PS2000 - Crimp contact

1605636

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Crimp contact, Socket, turned, Single contact, contact diameter: 2 mm, crimp range: 0.25 mm² ... 1 mm², Alternative product in accordance with RoHS II without Exemption 6c (Pb <0.1%) item no.: 1241952

SF-7NS2000 - Crimp contact

1605631

<https://www.phoenixcontact.com/in/products/1605631>



Crimp contact, Socket, turned, Single contact, contact diameter: 2 mm, crimp range: 0.75 mm² ... 1.5 mm², Alternative product in accordance with RoHS II without Exemption 6c (Pb <0.1%) item no.: 1237431

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SF-7QS2000 - Crimp contact

1605643

<https://www.phoenixcontact.com/in/products/1605643>



Crimp contact, Socket, turned, Single contact, contact diameter: 2 mm, crimp range: 1 mm² ... 2.5 mm², Alternative product in accordance with RoHS II without Exemption 6c (Pb <0.1%) item no.: 1237431

RC-Z2058 - Protective cap

1604223

<https://www.phoenixcontact.com/in/products/1604223>



Plastic protection cap for connectors with M23 knurled nut

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RC-Z2468 - Protective cap

1611796

<https://www.phoenixcontact.com/in/products/1611796>

Plastic protection cap, antistatic, for connectors with M23 knurled nut



SC-Z2322 - Metal protective cap

1605459

<https://www.phoenixcontact.com/in/products/1605459>

Metal dust protection cap with steel wire for power plugs with M23 knurled nuts



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SF-Z0064 - Color-coding

1620585

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Color-coding, color: green



SF-Z0065 - Color-coding

1620586

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Color-coding, color: orange



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SF-Z0066 - Color-coding

1620587

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Color-coding, color: black



SF-Z0028 - Torque screwdriver

1607456

<https://www.phoenixcontact.com/in/products/1607456>

Torque screwdriver, series: RC



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SF-Z0027 - Hook wrench

1607455

<https://www.phoenixcontact.com/in/products/1607455>



Hook wrench, series: RC

SF-Z0068 - Square mounting flange

1620927

<https://www.phoenixcontact.com/in/products/1620927>



Square mounting flange, 4xM3, flange dimensions: 38 mm x 38 mm, series: SF, Alternative product in accordance with RoHS II without Exemption 6c (Pb <0.1%) item no.: 1244326

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