SF-5ES1N8AR4DU - Cable connector

1605553

https://www.phoenixcontact.com/nl/products/1605553

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

Cable connector, straight, Screw locking mechanism, M23, number of positions: 5+PE, contact connection type: Socket, shielded: yes, degree of protection: IP67, cable diameter range: 7.5 mm ... 14 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.

Commercial data

Item number	1605553
Packing unit	20 pc
Minimum order quantity	20 pc
Sales key	ABRBFA
Product key	ABRBFA
GTIN	4046356253598
Weight per piece (including packing)	163,02 g
Weight per piece (excluding packing)	155,91 g
Customs tariff number	85366990
Country of origin	DE

Technical data

Notes

Order information:	Order crimp contacts 6 x Ø 2 mm separately
Note on application	Series SF connectors are not compatible with series M23 PRO and must not be combined.

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

Product properties

Series	SF
Application	Power
Number of positions	6
Connection profile	5+PE
Shielded	yes
Coding	N
Thread type	M23

Material specifications

Material Housing	GD-Zn
Material Rotating parts	CuZn
Material Housing surface	Ni
Material Insulating body	PA 6.6
Material Seal	FPM (O-ring)

Connection data

Conductor connection

Connection method	Crimp connection

Electrical properties

Contact: Contact group 1

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

Contact: Contact group 2

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

Connector

Type	straight

Connection 1

Head design	Socket
Head cable outlet	straight
Head thread type	M23

Cable/line

External cable diameter	7.5 mm ... 14 mm

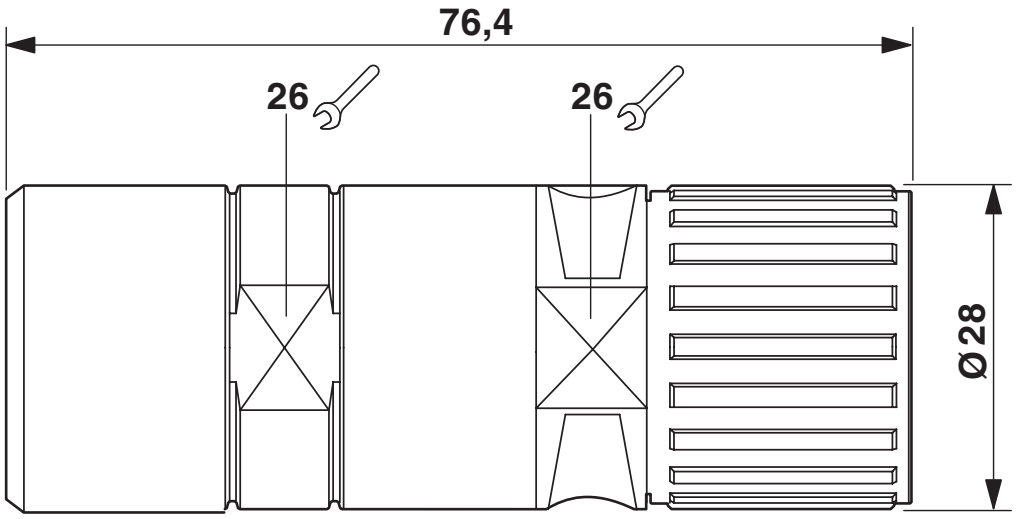
Environmental and real-life conditions

Ambient conditions

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

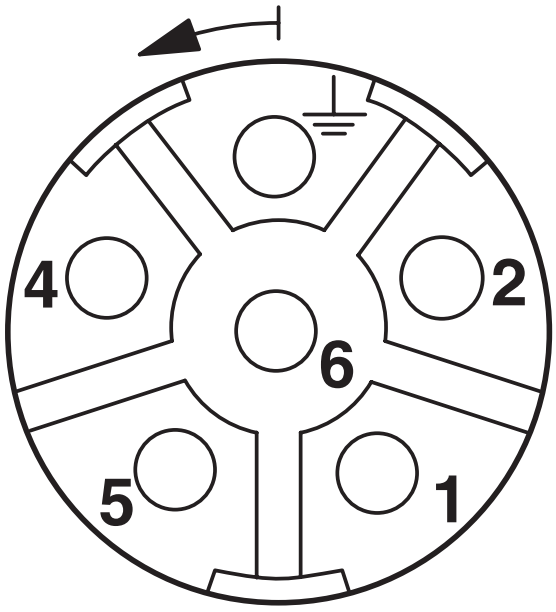
Drawings

Dimensional drawing



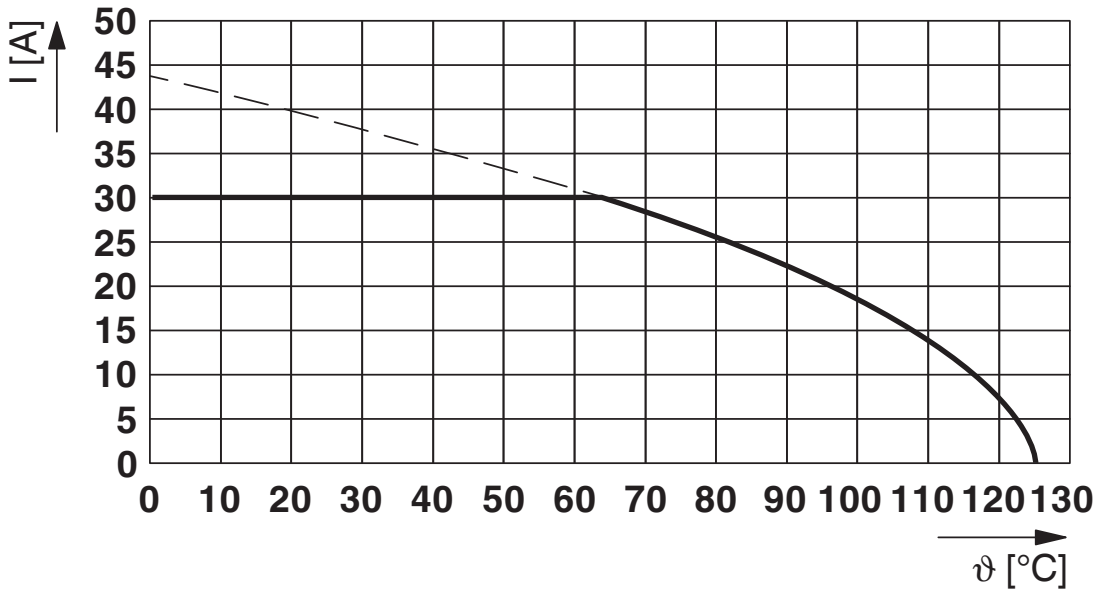
Dimensional drawing

Schematic diagram



Connector pin assignment

Diagram


I [A]
50
45
40
35
30
25
20
15
10
5
0
0 10 20 30 40 50 60 70 80 90 100 110 120 130
ϑ [°C]

Classifications

ECLASS

ECLASS-13.0	27440116
ECLASS-15.0	27440116

ETIM

ETIM 10.0	EC002635

UNSPSC

UNSPSC 21.0	39121400

Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	6(c)

China RoHS

Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.

EU REACH SVHC

REACH candidate substance (CAS No.)	Lead(CAS: 7439-92-1)
SCIP	9e4b6d66-39ef-4136-8ad3-2b91bab82f47

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