SF-7ES1N8A80A3 - Cable connector

1605597

https://www.phoenixcontact.com/us/products/1605597

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CRIMP



The figure shows the product with assembled crimp contacts. Please order crimp contacts separately.

Cable connector, application: Power, straight short, Screw locking mechanism, M23, number of positions: 4+3+PE, contact connection type: Socket, shielded: yes, degree of protection: IP67, cable diameter range: 11 mm ... 14 mm, number of positions: 8, connection method: Crimp connection, series: SF, this item is expected to be lead-free from Q4 2026 in accordance with RoHS II without exception 6c (Pb < 0.1%), a lead-free alternative is possible on request in advance, 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. Alternative products: 1628820

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 preassembled cables on one or both sides

Commercial data

Item number	1605597
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	AB32
Product key	ABRBFA
GTIN	4046356253901
Weight per piece (including packing)	129.7 g
Weight per piece (excluding packing)	116.75 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
Note on application	Series SF connectors are not compatible with series M23 PRO and must not be combined.

Product properties

Product type	Circular connector (cable-side)
Series	SF
Application	Power
Number of positions	8
Connection profile	4+3+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	1 mm
Nominal current I_N	9 A
Nominal voltage U_N	250 V
Overvoltage category	III
Degree of pollution	3

Rated surge voltage	4 kV

Connector

Type	straight short

Connection 1

Head design	Socket
Head cable outlet	straight, short
Head thread type	M23

Cable/line

External cable diameter	11 mm ... 14 mm

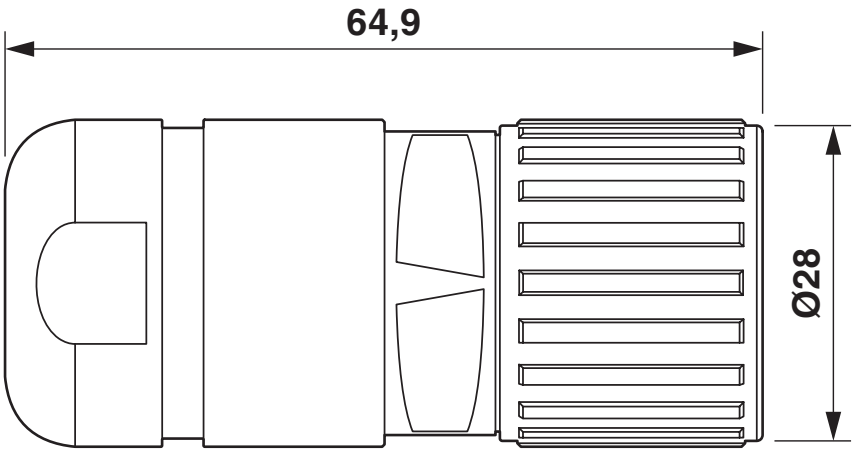
Environmental and real-life conditions

Ambient conditions

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

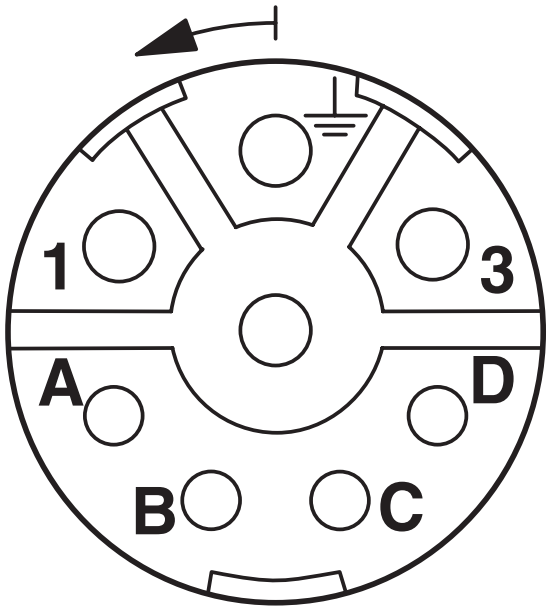
Drawings

Dimensional drawing



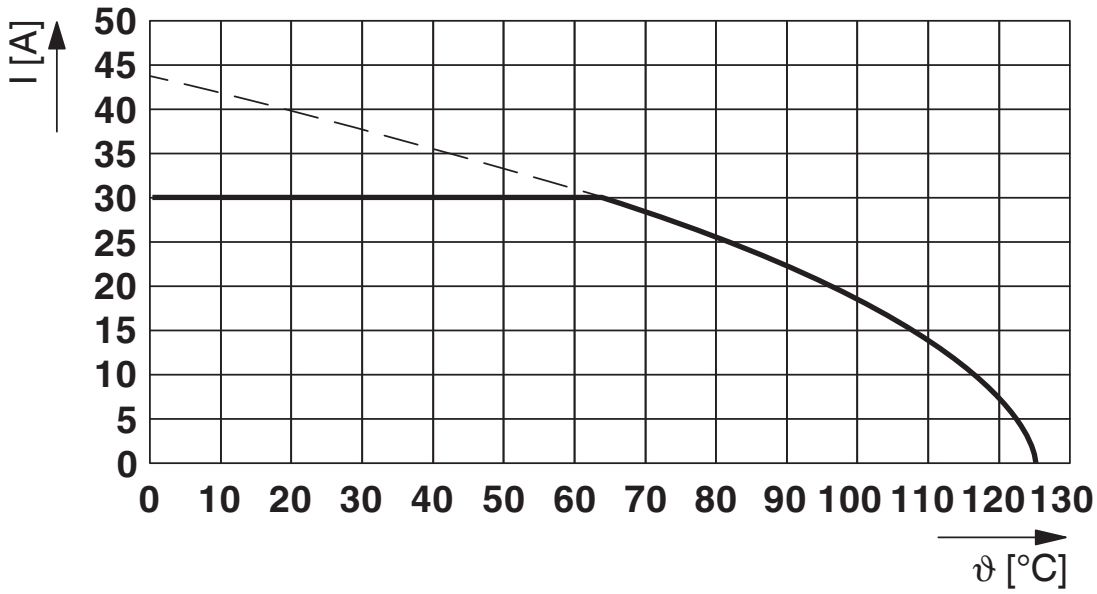
Dimensional drawing

Schematic diagram



Connector pin assignment

Diagram



I = current strength, T = ambient temperature

Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1605597

cUL Recognized
Approval ID: E153698-20041116

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine				
	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
keine				
	600 V	27 A	12	-

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	1da2ff8d-2868-44a8-8ea6-513734f507af

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