

RC-09S1N12Z500 - Cable connector



1596271

<https://www.phoenixcontact.com/us/products/1596271>

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M23, Cable connector, series: RC, angled, shielded: no, Screw locking mechanism, No. of pos.: 8+1, Direction of rotation: Standard, contact connection type: Socket, Solder cup, coding: N, this item is expected to be lead-free from Q1 2026 in accordance with RoHS II without exception 6c (Pb < 0.1%), a lead-free alternative is possible on request in advance

Commercial data

Item number	1596271
Packing unit	8 pc
Minimum order quantity	8 pc
Note	Made to order (non-returnable)
Sales key	AB31
Product key	ABRAFC
GTIN	4046356210447
Weight per piece (including packing)	150.19 g
Weight per piece (excluding packing)	144.708 g
Customs tariff number	85366990
Country of origin	DE

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Technical data

Product properties

Product type	Circular connector (cable-side)
Thread type	M23

Material specifications

Flammability rating according to UL 94	V0
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Connector

Insulating body

Coding	N
Material (Insulating body)	PBT
Material (Contact)	CuZn
Material (Contact surface)	Ni/Au
Insertion/withdrawal cycles	50
Connection method	Solder cup
Contact switching type	Socket
Application	Signal
Number of positions	9
Direction of rotation	Standard
Connection profile	8+1
Number Contact (Contact group 1)	1
Diameter Contact (Contact group 1)	2 mm
Litz wire cross-section min. Contact (Contact group 1)	0.08 mm ²
Litz wire cross-section max. Contact (Contact group 1)	2.5 mm ²
Rated current Contact (Contact group 1)	20 A (for max. connection cross section)
Rated voltage Contact (Contact group 1)	48 V AC 74 V DC
Rated surge voltage	1.5 kV
Overvoltage category	III
Degree of pollution	3
Number Contact (Contact group 2)	8
Diameter Contact (Contact group 2)	1 mm
Litz wire cross-section min. Contact (Contact group 2)	0.08 mm ²
Litz wire cross-section max. Contact (Contact group 2)	1 mm ²
Rated current Contact (Contact group 2)	8 A (for max. connection cross section)
Rated voltage Contact (Contact group 2)	48 V AC 48 V AC

Housing

Type	Cable connector housing
Thread type	M23

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Design	angled
Type of locking	Screw locking mechanism
Pg screw connection	Pg9
Material (Housing)	GD-Zn
Material (Housing surface)	Ni
Material (Rotating parts)	CuZn
Degree of protection (plugged in)	IP65
	IP67

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP67
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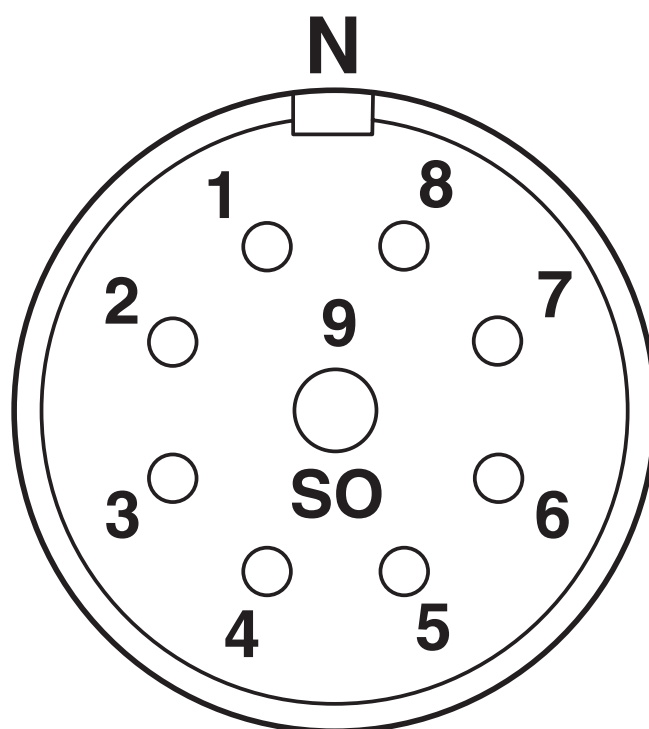
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Drawings

Schematic diagram



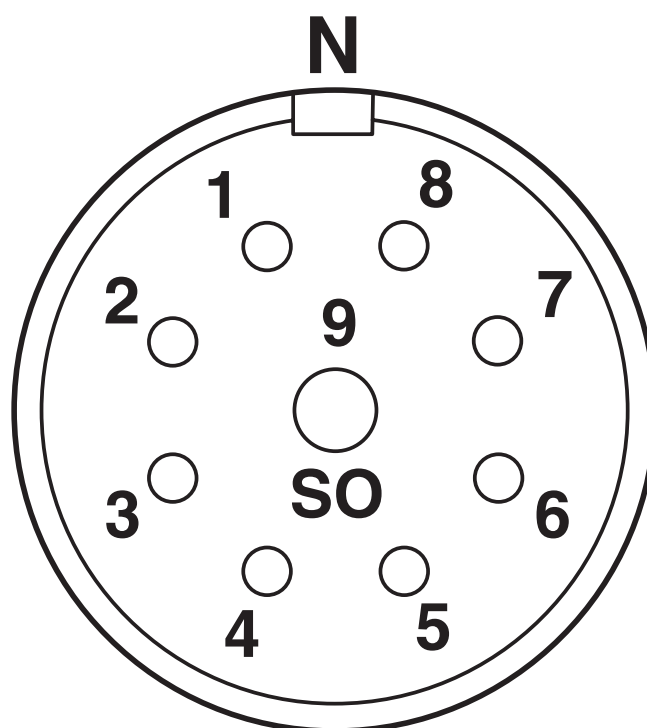
Connector pin assignment

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Schematic diagram



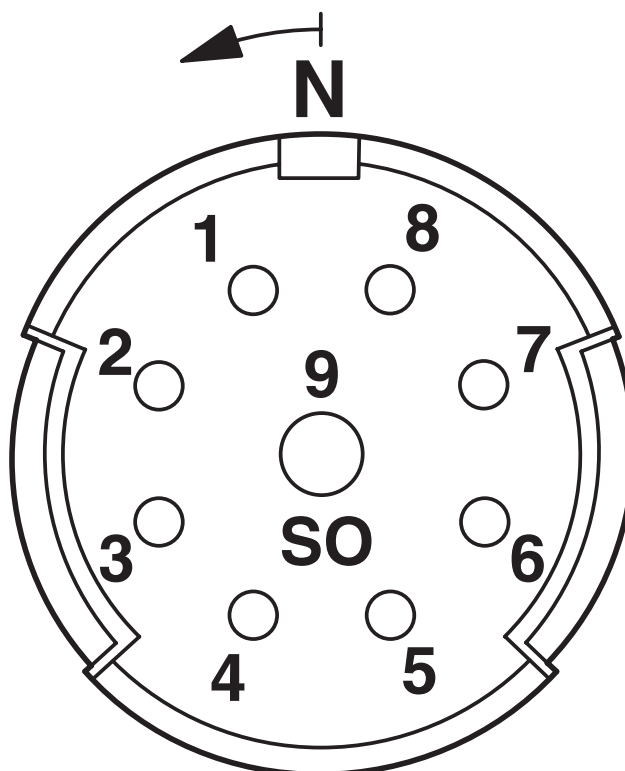
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Schematic diagram



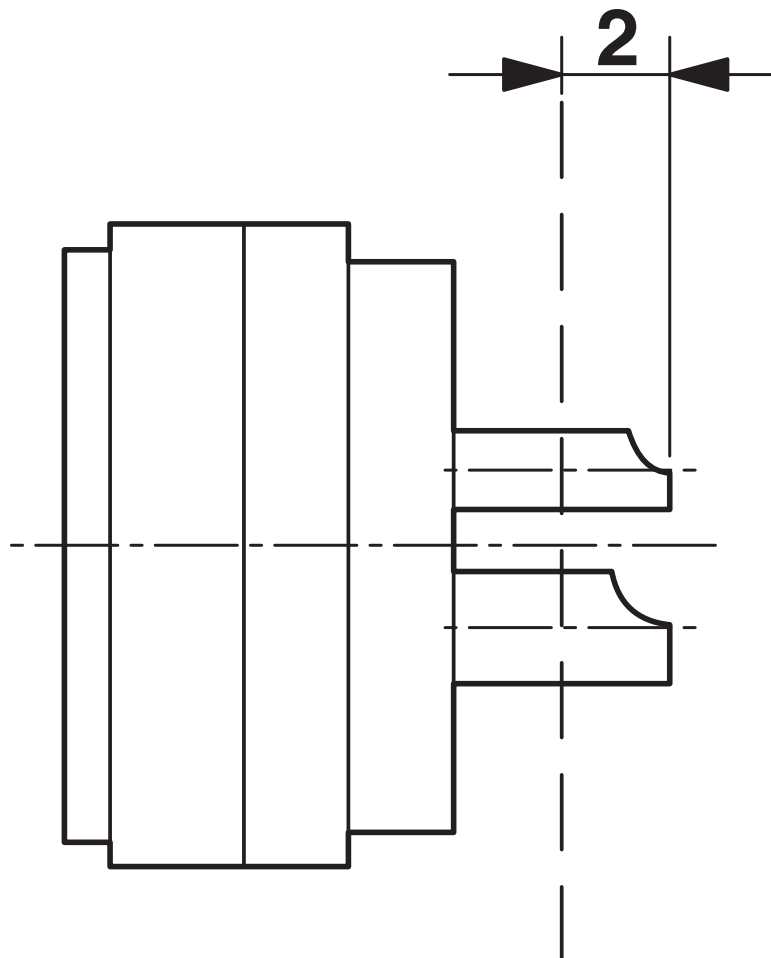
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Schematic diagram



Dimensional drawing

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Classifications

ECLASS

ECLASS-13.0	27440116
ECLASS-15.0	27440116

ETIM

ETIM 9.0	EC002635
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UNSPSC

UNSPSC 21.0	39121400
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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	edf4b920-1ae4-467b-b1eb-6f5f3704bde6

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