

# RC-09S1N12K0M6 - Cable connector



1596116

<https://www.phoenixcontact.com/us/products/1596116>

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M23, Cable connector, application: Signal, series: RC, straight plastic-sheathed, shielded: yes, Screw locking mechanism, No. of pos.: 8+1, Direction of rotation: Standard, contact connection type: Socket, Solder cup, cable diameter range: 9.5 mm ... 10.5 mm, coding: N

The figure shows the 12-pos.  
product version

## Commercial data

Item number	1596116
Packing unit	20 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Product key	ABRAFA
GTIN	4046356209861
Weight per piece (including packing)	41.63 g
Weight per piece (excluding packing)	41.63 g
Country of origin	DE

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## Technical data

### Product properties

Product type	Circular connector (cable-side)
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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 group 1)	1
Contact diameter (Contact group 1)	2 mm
Litz wires Min. cross section (Contact group 1)	0.08 mm <sup>2</sup>
Litz wires Max. cross section (Contact group 1)	2.5 mm <sup>2</sup>
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 group 2)	8
Contact diameter (Contact group 2)	1 mm
Litz wires Max. cross section (Contact group 2)	1 mm <sup>2</sup>
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
Design	straight plastic-sheathed
Type of locking	Screw locking mechanism
Pg screw connection	none
Material (Housing)	GD-Zn
Material (Rotating parts)	CuZn

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Degree of protection (plugged in)	IP67
Seal	
External cable diameter	9.5 mm ... 10.5 mm

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## Drawings

Schematic diagram



Connector pin assignment

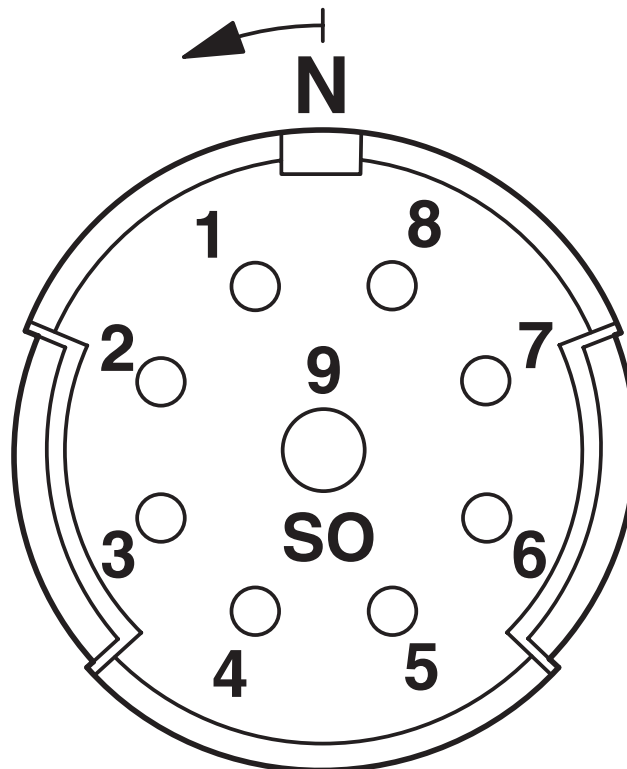
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Schematic diagram



Connector pin assignment

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Schematic diagram



Dimensional drawing

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## Classifications

### UNSPSC

UNSPSC 21.0	39121413
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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.)	No substance above 0.1 wt%
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