

M23 Signal Connectors • Series RF

Technical Data

Mechanical data:

Housing material:	Machined component: copper-zinc alloy (CuZn), die-cast part: zinc (GD-Zn)
Housing surface:	Nickel-plated; panel mounting connectors / receptacles: nickel-plated/thick-film passivated (can be overpainted)
Stainless steel:	Housing material: stainless steel 1.4305
Insulating body:	Polyamide (PA 66)
Contact material:	Copper-zinc alloy (CuZn)
Contact surface:	Nickel-plated (Ni) with gold layer (Au)
Contact connection type:	Crimp version
Gasket and O-ring:	Fluorine rubber (FPM)
Ambient temperature:	-20°C up to +125°C
Conductor entry:	Cable connectors and cable connecting receptacles for external cable diameters of 3 – 13.2 mm, shielded
Locking method:	M23 screw locking
Mechanical insertion/ with drawal cycles:	Standard: 50, stamped-rolled C-HC crimp contacts: up to 10,000
Degree of protection:	IP67 in locked state

Electrical data:

Number of positions		12	16	17
Contacts		12	16	17
Contact Ø	[mm]	1	1	
Conductor cross section				
machined crimp contacts	[mm ²]	0.08 - 1.0	0.08 - 1.0	0.08 - 1.0
stamped-rolled C-HC crimp contacts	[mm ²]	0.08 - 0.56	0.08 - 0.56	0.08 - 0.56
Nominal current per contact at 25 °C ¹⁾	[A]	8	8	8

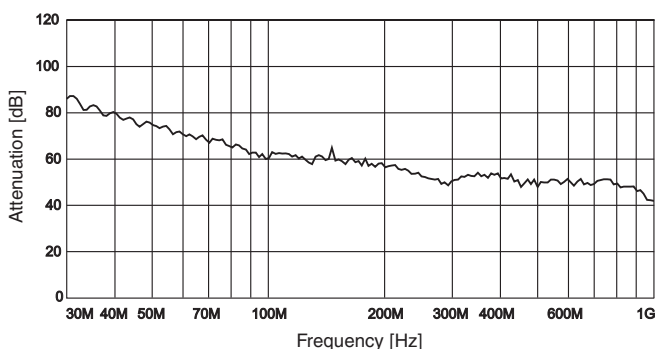
Data according to DIN EN 61984:2001


Nominal/operating voltage	[V AC / DC]	150	100	100
Test/surge voltage	[kV]	2.5	1.5	1.5
Surge voltage category		III	III	III
Contamination class ²⁾		3	3	3
Installation altitude	[m]	up to 2000	up to 2000	up to 2000

1) The effective current carrying capacity is to be determined via a derating curve depending on the application, if necessary.

2) The specified values assume that the connector pair is correctly locked and is only disconnected for testing and maintenance purposes. If the connector is unlocked and exposed to ambient conditions and if there is a danger of contamination, the connector must be sealed using a protective cap \geq IP54.

Shield attenuation curve based on DIN EN 50289-1-6 (cable connector and panel mounting connector angled on base plate)



 Unlike plugs, connectors must not be plugged in or unplugged under load.

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Pin assignments and coding

Number of positions	Contact chamber numbering (view of plug-in side)			
	Clockwise (standard)	Counter-clockwise (standard)	Counter-clockwise (opposite direction)	Clockwise (opposite direction)
	Male	Female	Male	Female
12-position N coding Crimp				
12-position S/N coding Crimp				
16-position N coding Crimp				
17-position N coding Crimp				
17-position S/N coding (On request)				

Other coding versions and pin assignments can be created on request.

The M23 signal connectors of the RF series can be provided for assembly with male or female contacts depending on the application.

For safety reasons, only female contacts may be used in the live part of the connector.

Direction of contact chamber numbering (view of plug-in side)



Female, counter-clockwise
(standard, L marked)



Female, clockwise
(opposite direction, R marked)



Male, clockwise
(standard, R marked)



Male, counter-clockwise
(opposite direction, L marked)