Product data sheet

Automation technology - sensors and actuators



Product description

M12-A Male panel mount connector, Contacts: 4, unshielded, screw clamp, IP67, UL, M20x1.5, for the power supply

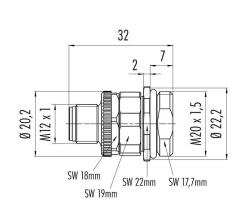
Area Part no. M12-A series 713 99 0431 500 04

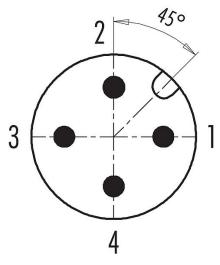
Illustration

Scale drawing

Contact arrangement (Plug-in side)







You can find the assembly instructions on the next page.

Technical data

General features

Part no.	99 0431 500 04
Connector design	Male panel mount connector
Connector locking system	screw
Termination	screw clamp
Degree of protection	IP67
Cross-sectional area	max. 1.50 mm² / AWG 16
Mechanical operation	> 100 Mating cycles
Weight (g)	24.60
Customs tariff number	85369010

Electrical parameters

Rated voltage	250 V
Rated impulse voltage	2500 V
Rated current (40 °C)	8.0 A
Insulation resistance	> 10M Ω
Pollution degree	3
Overvoltage category	
Insulating material group	
EMC compliance	unshielded

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Material

Housing material	Zinc die-cast nickel-plated
Contact body material	PA
Contact material	CuZn (brass)
Contact plating	Au (gold)
Locking material	Zinc die-cast nickel-plated
REACH SVHC	CAS 7439-92-1 (Lead)
SCIP number	1b26d419-9f03-4719-8d69-19a264f3a9c3

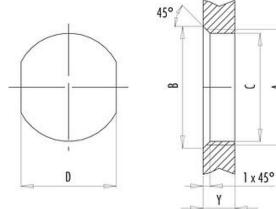
Authorization/approvals

Approvals UL

With bore hole

Assembly instructions / Panel cut-out

With flats as anti-rotation device



Installation direction: o-ring sits on chamfer.

Thread Measures		7,	Tightening torque		
Α	B (mm)	C (mm)	D (mm)	Metal	Plastic
PG 9	16,0	15,3	13,5	1,25 Nm	1,25 Nm
PG 11	20,2	18,7	17,0	2 Nm	1,25 Nm
PG 13,5	22,0	20,5	18,8	2 Nm	1,25 Nm
M12 x 0,5	-	12,1	-	-	0,4 Nm
M12 x 1	-	12,1	-	1 Nm	-
M14 x 1	14,4	14,1	2	1 Nm	_
M16 x 1,5	17,0	16,1	13,5	1,25 Nm	1,25 Nm
M20 x 1,5	21,6	20,1	17,8	2 Nm	1,25 Nm

Version	min (mm)	max (mm)
Fastened from rear	2	3,5
Front fastened	2	4,5
Positioning possible 1)	2	3,5
Screw clamp	2	3,5
Thread M12 x 1	2	3,0
Thread M14 x 1 2)	3)1,5/4)2	6,5

Notes

- 1) Do not attach a chamfer
- 2) Wall thickness: use nut 38 5385 100 001 up to 1,5 mm, >1,5 mm cut thread
- 3) Nut
- 4) Thread in wall of housing

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General Disclaim Notice

The connector must not be plugged or unplugged under load. Non-observance and improper use can result in personal injury.

The connectors have been developed for applications in plant engineering, control and electrical equipment construction. The user is responsible for checking whether the connectors can also be used in other areas of application.

To protect against unintentional opening of the connector, the thread between the housing and the connector head must be secured with a suitable cyanoacrylate adhesive when used in circuits with voltages dangerous to the touch. This does not apply to connectors used in SELV and PELV circuits according to IEC 61140 (EN 61140, VDE 0140-1).

Connectors which are used in circuits with voltages dangerous to the touch may only be installed and used by, or under the supervision of, persons with electrical engineering training, taking into account the applicable regulations and standards.

The user must take suitable safety precautions to ensure that the connector cannot be accidentally disconnected.

Plug connectors with enclosure protection IP67 and IP68 are not suitable for use under water. When used outdoors, the plug connectors must be protected separately against corrosion. For further information on the IP protection classes, please refer to the "Technical Information" download centre.

The plug connector is not suitable for mains voltages Please observe the pollution degree and the overvoltage category. For further information, please refer to the download center "Technical Information".

To lock the cable connector with the device connector, the threaded ring is tightened "hand-tight" (approx. 50 cNm).

The user must take appropriate safety precautions to ensure that the connector cannot be accidentally disconnected. In addition, the user must ensure that the cable is suitably secured.