Filter Module FIL-M12-PI-1NF

Description

The feedthrough Filter Module M12-PI-1NF (circular connector) with integrated EMI filter is designed to be built in at MTS Shielding Boxes series MSB. Twelve independent filtered lines enable the connection of devices with low data rates, ideal for current loop, serial data, audio and auto-motive bus systems (CAN etc.).

Passive filter elements are included which can be modified according to requirements (see spec number 1.3 and 1.4).

The connectors are M12-Standard coding A plug and jack.

Technical data:

1   M12 specifications:

1.1	Voltage	30 V AC / DC max.
1.2	Current capacity	1 A max.
1.3	EMI filter	Pi filter (1 nF)

1.4 Insertion loss (Pi)
@ No load

@ 1 MHz	0 dB typ.	
@ 10 MHz	5 dB typ.	
@ 100 MHz	35 dB typ.	
@ 1000 MHz	60 dB typ.	

1.5	RF shielding	80 dB typ.

1.6 Pinning UNIV interface

@ Pin 1	1 : 1	Pi filter
@ Pin 2	1 : 1	Pi filter
@ Pin 3	1 : 1	Pi filter
@ Pin 4	1 : 1	Pi filter
@ Pin 5	1 : 1	Pi filter
@ Pin 6	1 : 1	Pi filter
@ Pin 7	1 : 1	Pi filter
@ Pin 8	1 : 1	Pi filter
@ Pin 9	1 : 1	Pi filter
@ Pin 10	1 : 1	Pi filter
@ Pin 11	1 : 1	Pi filter
@ Pin 12	1 : 1	Pi filter
@ Shell	Shield	Housing + GND

2   Connections (outside / inside):

2.1	M12 interface outside	M12-Standard coding A plug
2.2	M12 interface inside	M12-Standard coding A jack

2.3 Durability

@ each connector	>100 cycles

3   General specifications:

3.1	Operating temperature	-30 °C - +70 °C
3.2	Storage temperature	-40 °C - +80 °C
3.3	Reference temperature for specifications	+25 °C
3.4	Dimensions (without connections)	71 mm x 31 mm x 31 mm (LxWxH)
3.5	Case style	Milled aluminium enclosure
3.6	Colour	SurTec650 (chromit Al)
3.7	Weight	145 grams

4   Delivered parts:

Filter Module FIL-M12-PI-1NF

Datasheet

5   Comments:

Warranty	12 months
RoHS-compliant	Yes

6   Recommended accessories:

SAC-12P / Shielded sensor/actuator cable, jack straight M12 SPEEDCON, coding A, one free cable end, 0.5 m - 2 m

SAC-12P-MS / Shielded sensor/actuator cable, plug straight M12 SPEEDCON, coding A, one free cable end, 0.5 m - 2 m
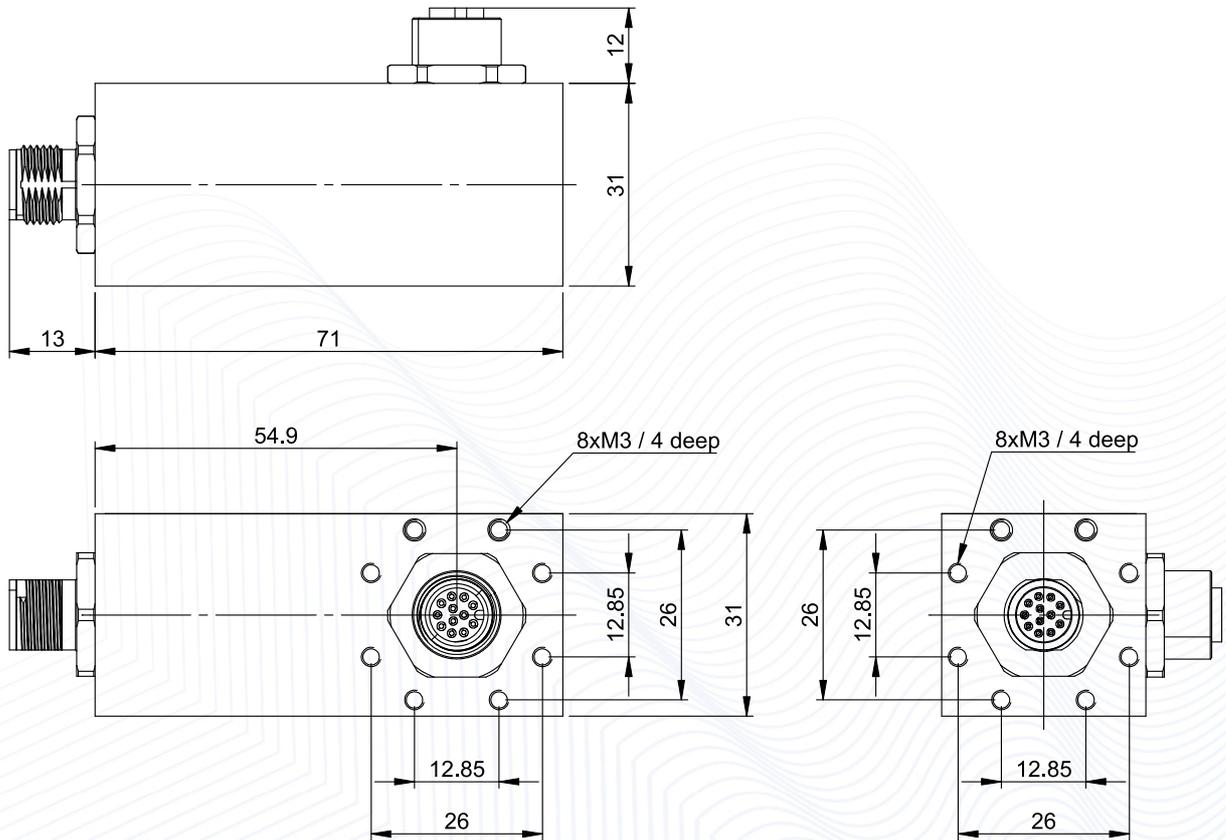
PROT-M12 / Sealing cap, M12 metal sealing cap for unoccupied M12 plugs

Views:

8xM3 / 4 deep

8xM3 / 4 deep

Typical RF shielding:

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Technical subject to change

MTS Systemtechnik GmbH
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