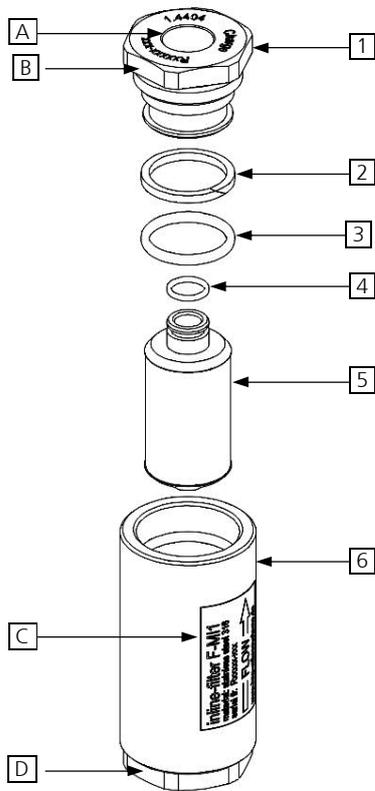


# Quick Guide Inline Filter F-MI1



## Technical Data

| Dimensions                             | Value                                 | Pressures             | max. Value          |
|--|---------------------------------------|-----------------------|---------------------|
| Filter area (depends on filter tissue) | 9.5 cm <sup>2</sup><br>(1.47 sq.in.)  | Operating pressure    | 50 bar<br>(725 psi) |
| Dimensions (Ø x H)                     | Ø 25 x 53 mm<br>(Ø 0.984 x 2.087 in.) | Differential pressure | 5 bar (72.5 psi)    |
| Empty volume                           | 7.5 ml (0.46 cu.in.)                  |                       |                     |

## Items and descriptions

| Item no. | Description   | Material                                    |
|----------|---|---|
| 1        | Filter cover  | 1.4404                                      |
| 2        | Support ring for O-ring Ø 14 x 1.78 mm                        | PTFE  |
| 3        | O-ring Ø 14 x 1.78 mm   | refer to table "Sealing materials..." below |
| 4        | O-ring Ø 6 x 1 mm   | refer to table "Sealing materials..." below |
| 5        | Filter element (mesh sizes)                                   | 1.4404<br>(10 µm)                           |
| 6        | Filter housing  | 1.4404                                      |
| A        | Fluidic connection 1/8" NPT (2 times, only outlet port shown) |   |
| B, D     | Hexagon bolt AF 22  |   |
| C        | Label with specifications and flow direction                  |   |

## Sealing materials and Operating temperature ranges

| Sealing material                       | Temperature range             |
|--|-------------------------------|
| -v FPM                                 | -15...+200 °C (+5...+392 °F)  |
| -e1 EPDM (FDA compliant)               | -50...+140 °C (-58...+284 °F) |
| -f8 FFPM (FDA compliant, USP Class VI) | -10...+230 °C (+14...+446 °F) |

## ⚠ Safety instructions

All of the following tasks must be carried out only by professional and qualified personnel.

The filter must be operated within its specifications. Manipulation, misuse and damaging of the filter are forbidden.

It is only allowed to use original-spare parts. The internal safety instructions for the used medium must be observed.

## Installation/Assembly

- The filter should be placed upstream of the component to be protected (i.e. pump)
- Fasten the filter in the system using a Ø 25 mm pipe clamp (not included in the scope of delivery) - the outlet port **A** should point upwards
  - ⓘ The filter may only be fastened via fluidic connections **A** as long as pipes are connected which are themselves fastened directly in front of or behind the filter in the system.
- Ensure a tension free connection of the system tubing to the fluidic connections **A**
  - ⚠ **Attention!** Basically, for fluidic connectors with NPT-threads use an appropriate thread sealant (i.e. PTFE-tape)!

## Commissioning

- Ensure media supply
- Switch on the system

## Decommissioning

- Ensure system is shut down, depressurized and eventually cooled down
- Interrupt media supply

## Exchange of filter element

- Required tools / assistive equipment: thread lubricant, wrench width across flats (AF) 22, bench vice (alternatively a second wrench AF 22)
- Decommissioning (see above)
- Empty the filter in the system
- Remove the filter from the system
- Clamp the filter cover **1** on the wrench flat AF 22 **B** in the bench vice
- Screw the filter housing **6** from the filter cover **1** using a wrench AF 22 **D**
- Remove filter element **5** from filter cover **1** by pulling and simultaneous slight turning and shaking
- Clean all parts and inspect for damage (especially seals **3**, **4** and threads) - replace components if necessary
- If a new support ring **2** is required, place him in front of the O-ring **3**, with the

concave side facing the O-ring and filter housing **6**

- Eventually attach O-ring **4** on the new or cleaned filter element **5**
- Moisten O-ring **4** with volatile medium such as demineralized water or isopropanol (alternatively with the conveying medium) and carefully insert by hand the filter element **5** by wiggling it into the filter cover **1** until it stops
- Lubricate the thread on the filter cover **1** with thread lubricant
- Moisten the O-ring **3** with volatile medium such as demineralized water or isopropanol (alternatively with the conveying medium or thread lubricant)
  - ⚠ **Attention!** An assembly without lubricant can lead to damage to threads and O-rings!
- Carefully put the filter housing **6** over the filter element **5** and screw it onto the filter cover **1**
- Screw the filter housing **6** tight until limit stop using the AF 22 wrench flats **D**
- Install the filter into the system according to the installation/assembly instructions
- Perform a pressure test and make a visually inspect of all sealing points
- Commissioning (see above)

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