

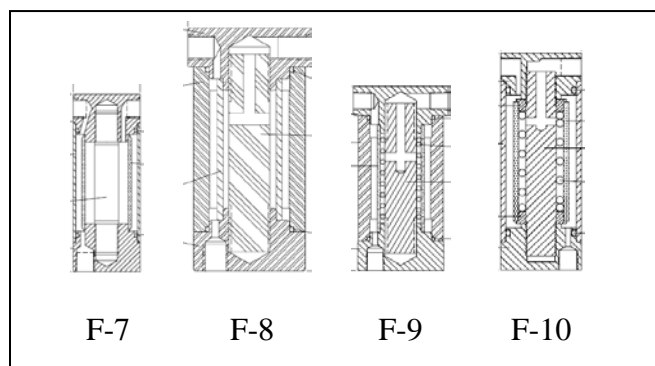
Welker[®] Filters

Models F-7, F-8, F-9, F-10

1.1 Product description

The Welker Filters are designed for filtering and drying natural gas in order to prepare it for use as an instrument supply. As product enters the filter, it is dried and removed of unwanted elements.

Specifications	
Products	Gases
Materials of Construction	F7 & F8: Carbon Steel, and Viton [®] F9 & F10: 316 Stainless Steel
Sample Outlet Connection	1/4" NPT (others available)
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Maximum Allowable Operating Pressure*	F-7: 1,500 psi @ -20° F to 100 ° F (103 bar @ -29° C to 37° C) F-8: 3000 psi @ -20° F to 100 ° F (207 bar @ -29° C to 37° C) F-9: 4000 psi @ -20° F to 100 ° F (276 bar @ -29° C to 37° C) F-10: 2000 psi @ -20° F to 100 ° F (138 bar @ -29° C to 37° C) (Higher operating pressures available)
Filter media	35 micron polyethylene (standard, others available)



* Figures are not shown to scale

Figure 1



Installation, Operation, and Maintenance Manual

1.2 Installation

- 1.2.1 Plug or install a drain valve in the drain port on the bottom of the device (see Figure 1).
- 1.2.2 Connect the supply source to the inlet port on the filter.
- 1.2.3 Connect the outlet port on the filter to the inlet of the instrument that will receive the filtered product.
- 1.2.4 Slowly open the supply source valve. Check the connections for leaks.

N NOTE

When sealing fittings with PTFE tape, refer to the proper sealing instructions for the tape used.

1.3 Maintenance

N NOTE

We recommend that the unit have annual maintenance. In some cases, a more frequent schedule may be appropriate. All maintenance should be done on a clean surface. Filters can be taken apart and re-assembled by hand; no tools are required for tightening.

- 1.3.1 Close the supply source valve and shut down instrumentation connected to the unit.
- 1.3.2 Open the drain port to depressurize the unit.
- 1.3.3 Unscrew the top and bottom caps from the body.
- 1.3.4 Discard old O-rings and filter elements.
- 1.3.5 **(F9 & F10 Only)** Remove the spring but **do not discard it**. Wipe the spring clean.
- 1.3.6 Wipe the remaining internal parts clean.
- 1.3.7 Replace the O-rings in the top and bottom caps.
- 1.3.8 **(F9 & F10 Only)** Place the cleaned spring back into the filter.

N NOTE

Use Dow Corning 111 (DC 111) grease or equivalent lubricant to lightly grease the O-ring.

- 1.3.9 Replace the filter element.
- 1.3.10 Screw the top and bottom caps back onto the body.
- 1.3.11 Maintenance is now complete.