AIRTAK
Compressed Air System Products
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STANDARD FILTER HOUSING ASSEMBLY: F03 - F04

A. INSTALLATION

Filters should be installed in a level pipeline, mounted vertically, with the bowl downward with one bowl length clearance for element removal. The filter should be installed at the highest pressure point practicable, as near to the equipment to be protected as possible and have a drip leg immediately upstream. They should be visible and easily accessible for periodic draining and maintenance.

The filters should be plumbed in accordance with the flow arrows on the Differential Pressure Indicator (DPI-10). The various filter positions relative to the other equipment in the compressed air system should be as follows unless specific instructions are given to the contrary: (1) The COALESCER (C) and GENERAL PURPOSE (GP) filters generally go ahead of the dryer, no matter what type of dryer is used. (2) The PREFILTER (PF) goes ahead of the COALESCER (C) when pre-filtration is required. (3) The PARTICULATE INTERCEPTOR (P) is installed downstream of desiccant dryers to prevent desiccant migration. (4) The ABSORBER (A) should be preceded by a COALESCER (C).

B. OPERATION

Filtration is a continuous, balanced, steady-state process occurring at or below a housing's rated flow that depends on 2 factors for high performance: (1) The bowl must be kept free of waste liquid build-up and (2) the element must be replaced when its induced pressure drop reaches 5-8 psid, 10 psid maximum. Differential pressure can be sensed at the inlet and outlet ports by 2 gauges, by a DPI-10 Differential Pressure Indicator, or by observing system characteristics. The bowl is drained by the ADV-10 Automatic Drain Valve, which should be kept clear of emulsions and other heavy liquids. A Solenoid Drain Valve (optional) can be used to drain the bowl at preset intervals.

Filters, under normal system conditions, will operate for 3 to 6 months before reaching their maximum differential pressure. Should one clog sooner it is very likely that a prefilter should be employed ahead of the coalescer or general purpose filter to increase its life by 2 to 3 times. The particulate interceptor should be replaced when its differential pressure reaches 8-10 psid.

Coalescers are designed for normal operation with 10-20 wt. oil. Any viscosity increase over that of 20 wt. oil must be offset by a proportionate over sizing of the filter element. Consult the factory.

C. MAINTENANCE

ELEMENT REPLACEMENT PROCEDURE

1. Depressurize system and drain bowl.

2. Unscrew bowl from head and set aside.

3. Remove and discard clogged filter element from rod.

4. Inspect head and rod seals for cracks or cuts.

5. Place new filter element on the rod.

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