

OPERATION

Type C Element

Contaminated air enters the inside of the filter element and flows through an inner perforated stainless steel support core where it is diffused over the entire element. It then passes through a finely woven nylon fabric pre-filter that also protects the filter medium. After flowing through layers of randomly packed, inert borosilicate glass microfibrils where ultra-fine filtration takes place, the air then passes through a layer of nylon fabric and the perforated stainless steel outer support. Coalesced liquids (with entrained solids) contained in the compressed airflow enter the specially treated porous polyurethane outer foam cover that surrounds the filter element. This foam cover is bonded to the end caps to prevent air from by-passing. The coalesced liquids gravitate to the bottom section of the foam cover and drip off the end cap into the sump, where they are discharged automatically or drained manually.

Type D Element

Air that has passed through the Type C Element may still contain oil vapors, oil-vapor-associated odors, and some solid particles smaller than 0.01-microns. The Type D will remove virtually all of these contaminants. The Type D Element, is composed of activated carbon granules. Oil vapors, oil-vapor-associated odors, and solid particles are removed by the carbon as the air passes through the filter medium. The air leaving the filter is approximately 400,000 times cleaner than the air normally drawn into the compressor.

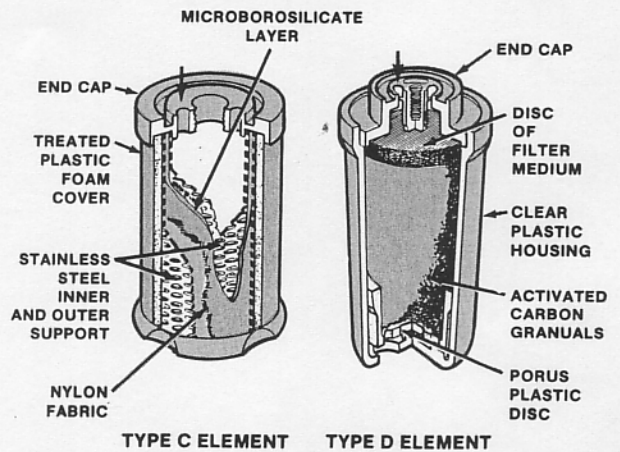
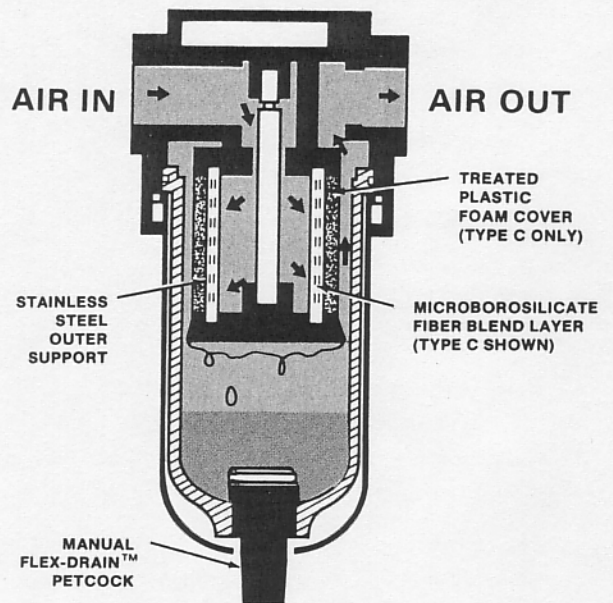
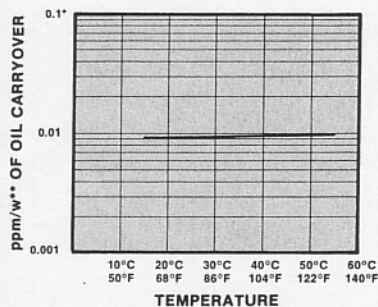


CHART A

* Instrument air quality parameters established by the Instrument Society of America.

** Refers to liquid oil content at a filtration temperature up to 122°F (50°C) at 100 psig (7 bar) operating pressure with compressed air and a typical compressor lubricating oil.



Effect of compressed air temperature on liquid oil carryover using Wilkerson Type C Coalescing Filter.

PERFORMANCE CHARACTERISTICS

