

The Unique Problem of High Pressure Applications

Compressed air and gases at pressures higher than normal pressures (above 100 to 125 psi) pose a more serious environmental threat because the contaminant concentration is many times higher than in a normal system.

Example: The existing contaminant at 100 psi (7 Bar) is increased 8 times that of atmospheric pressure.

At 4500 psi (300 Bar) the contaminant is increased 301 times that of atmospheric pressure.



High Pressure Applications with Low Pressure Efficiencies

Microdyne's modular range of high efficiency filters is available in carbon steel or stainless steel housings capable of accepting the full range of interchangeable filter elements, including those available in our offering of coalescing, sterile, steam, prefilters, and activated carbon series with pressures to 6000 psi. Additional higher pressure filter housings are available to 10,000 psi operating pressure.

With the modular construction of the low pressure housing filter elements and the accommodating features of the high pressure housings, utilization of the same high quality elements of the low pressure series for the high pressure series is made possible. By using the same elements, availability of the elements is insured and performance is identical to the standard pressure ratings.

Standard inlet connections are from 1/4" to 2" NPT. Optional Graylock connections or flanged connections are available on a custom designed basis to meet the specialized needs of our customers.

Application

In every S.I.C. coded industry requiring high pressure air/gas high efficiency purification to 10,000 psi High Pressure Filter operating pressure.

Housings — Constructed of carbon steel or stainless steel rated to 10,000 psi operating pressure.

- Single element housing from 1/4" to 3" NPTF, all inlet/discharge, as well as flanged connections.

Elements — Double O-ring plug-in type bayonet connection. Self-locking type of stainless steel, nickel 200, nickel 400 layered stainless steel 5-ply construction. Pleated as well as Microdyne's full-range of high efficiency, modular interchangeable range of elements.

- **PF-Prefilter** — Designed for maximum pre-filtration of larger particulates rated at 100% efficiency @ 1 micron with minimum differential pressures and to extend the service life of microfilters installed thereafter.
- **CFA-Coalescing Filter/Alpha Series®** — The most effective coalescing filter in this series to remove oil, water, and dirt from compressed air systems. The Alpha Series is capable of removing contaminants .01 micron with 99.99998% efficiency. The special foam socks on the coalescers are resistant to mineral, synthetic, and decomposed oils.

Microdyne Products Corp.
12735 Carrollton Industrial Dr.
Bridgeton, MO 63044
phone: 314.291.5600
fax: 314.344.4422
email: sales@microdyneproducts.com
www.microdyneproducts.com

Elements — Continued

- **CFB-Coalescing Filter/Beta Series®** — For more effective micron retention of oil, water, and dirt from compressed air. The Beta Series filter is designed to trap particulates, .01 micron and larger at an efficiency of 99.9999%.
- **CFC-Coalescing Filter/Gamma Series®** — For the removal of oil, water, and dirt from compressed air systems. Capable of performing with 99.99% efficiency at the .01 micron level of filtration. In applications where compressed air is severely contaminated, it is recommended that CFC filters be installed upstream of the CFA filters, in order to achieve economical operation.
- **ACF-Activated Carbon Filter** — For the elimination of odors from compressed air. The ACF filter is capable of producing compressed air which is 400,000 times more pure than the ambient air in which we breathe and is thus available for such applications.
- **DF-Dustfilter** — Specialized in the removal of rust and dust particulates from compressed air systems.

Technical Data — Housing Specifications

High pressure single-element housings are fabricated in carbon or stainless steel and have NPT connections.

Size	Nominal flow (SCFM) of all carbon steel high pressure filter housings						NPT Size Connect	Elements Per Filter	Dimensions in Inches		
	375 PSI	600 PSI	940 PSI	1500 PSI	3000 PSI	6000 PSI			Length of Filter	Width of Head (Inlet to Outlet)	Height to Connect
3	90	150	240	360	360	360	1/4"	1	8.50"	3.15"	7.52"
5	144	240	314	576	576	576	3/8"	1	8.50"	3.15"	7.52"
7	195	325	520	780	780	780	1/2"	1	11.06"	3.15"	10.08"
9	330	550	880	1320	1320	1320	3/4"	1	12.80"	4.57"	11.81"
10	450	750	1200	1800	1800	1800	1"	1	16.14"	4.57"	15.16"
11	600	1000	1600	2400	2400	2400	1"	1	16.14"	4.57"	15.16"
13	1350	2250	3600	5400	5400	5400	1 1/2"	1	30.75"	4.92"	29.45"
14	1800	3000	4800	7200	7200	7200	2"	1	31.50"	5.71"	29.82"

Microdyne Products Corp.
 12735 Carrollton Industrial Dr.
 Bridgeton, MO 63044
 phone: 314.291.5600
 fax: 314.344.4422
 email: sales@microdyneproducts.com
 www.microdyneproducts.com