

## High Efficiency, Long Life Cartridges for Industrial Fluids



FO-424PLxx



FO-718PLxx



FO-614PLFxx



FO-512PLxx



FO-644PLFxxTB

- **Large Surface Area** – Allows high flow rate with low initial pressure drop and maximum contaminant holding capacity.
- **Resin Impregnated Media** – Maintains strength, resists effects of water and heat.
- **75 psi Collapse Strength** – Heavy gauge carbon steel endcaps and center tube give safety margin against pressure surges.
- **Coated Steel Components** – Resist corrosion from most industrial fluids.
- **Corrugated Media** – Prevents pleat pinch-off, assuring all filtration media is utilized.
- **Buna-N Gaskets** – The best general gasket material available assures positive seal in most fluids.
- **Thermoset Bonding Material** – Durable endcap-to-media bond prevents internal bypassing.
- **Threaded base filter cartridges** – Available for easier installation.

### APPLICATIONS

Velcon Pleated Media Cartridges are suitable for a broad range of polar and non-polar fluids. Recommended for applications where the contaminant is granular (non-colloidal), allowing maximum utilization of the high surface area.

### Suitable for:

All Hydrocarbon Fuels	Cutting Oils	Insulating Oils	Glycols	Toluol	Naphtha
Diesel Fuel	Lube Oils	Hydraulic Oils	Water Emulsion	Coolants	
Biodiesel Fuel	Synthetic Oils	Ethyl Alcohol	Degreasing Fluids		

### SPECIFICATIONS

75 psi Collapse strength	250°F Maximum operating temperature
5 - 9 Operating pH range	Recommended changeout differential pressure - 25 psid
Micron ratings from 1/4 to 75	Multi-pass (Beta Ratio) data available on request

98%+ Nominal filtration efficiency

For information about Flow Ratings with various viscosity fluids, refer to Form #1532


**Photos - please note:** The outer wrap of a cartridge can be either nylon jacket, beaming paper, or PVC-coated screen wrap. Actual cartridges may not look exactly like those shown in photo. In the part numbers above, "xx" represents micron rating of the cartridge.

## CARTRIDGE INFORMATION

The following table lists a few of the broad range of available Velcon cartridges. Your local Velcon Representative can provide more complete information.

Dimensions	Model	Nominal Micron Rating	Protective Outer Wrap
4" x 12¼" x 1¾" ID	FO-412PL2	2	No
	FO-412PL5	5	No
4" x 18" x 1¾" ID	FO-418PL5	5	No
	FO-418PL15	15	No
For VF-61 Housing	FO-512PL1/2	½	No
	FO-512PL05	5	No
	FO-512PL25	25	No
6" x 14½" x 3½" ID	FO-614PLF½	½	No
	FO-614PLF1	1	No
	FO-614PLF2	2	No
	FO-614PLF5	5	No
	FO-614PLF5M	5	Yes
	FO-614PLF10	10	No
	FO-614PLF15	15	No
	FO-614PLF15M	15	Yes
	FO-614PLF25	25	No
	FO-614PLF25M	25	Yes
	FO-614PLF75	75	No
6" x 29" x 3½" ID	FO-629PLF1/4	¼	Yes
	FO-629PLF1/2	½	Yes
	FO-629PLF1	1	Yes
	FO-629PLF2	2	Yes
	FO-629PLF5	5	Yes
	FO-629PLF10	10	Yes
	FO-629PLF20	20	Yes
	FO-629PLF25	25	Yes
6" x 29" Threaded Base	FO-629PLF1/2TB	½	Yes
	FO-629PLF1TB	1	Yes
	FO-629PLF2TB	2	Yes
	FO-629PLF5TB	5	Yes
	FO-629PLF25TB	25	Yes

Dimensions	Model	Nominal Micron Rating	Protective Outer Wrap
6" x 44" x 3½" ID	FO-644PLF1/2	½	No
	FO-644PLF1M	1	Yes
	FO-644PLF2M	2	Yes
	FO-644PLF5M	5	Yes
	FO-644PLF10M	10	Yes
	FO-644PLF15M	15	Yes
	FO-644PLF25M	25	Yes
6" x 44" Threaded Base	FO-644PLF1/4TB	¼	Yes
	FO-644PLF1/2TB	½	Yes
	FO-644PLF1TB	1	Yes
	FO-644PLF2TB	2	Yes
	FO-644PLF5TB	5	Yes
	FO-644PLF10TB	10	Yes
	FO-644PLF25TB	25	Yes
6" x 56" x 3½" ID	FO-656PLF1M	1	Yes
6" x 56" Threaded Base	FO-656PLF1/2TB	½	Yes
	FO-656PLF1TB	1	Yes
	FO-656PLF2TB	2	Yes
	FO-656PLF5TB	5	Yes
	FO-656PLF25TB	25	Yes
6¼" x 18" x 2 <sup>9</sup> / <sub>16</sub> " ID	FO-718PLP3	0.3	No
	FO-718PL1/2	½	No
	FO-718PL01	1	Yes
	FO-718PL02	2	Yes
	FO-718PL05	5	Yes
	FO-718PL10	10	Yes
	FO-718PL15	15	Yes
	FO-718PL25	25	Yes
	FO-718PL50	50	Yes
	6¼" x 36" x 2 <sup>9</sup> / <sub>16</sub> " ID	FO-736PLP3	0.3
FO-736PL1/2		½	No
FO-736PL05		5	Yes
FO-736PL15		15	Yes
8" x 22 <sup>1</sup> / <sub>8</sub> " x 2" ID	FO-822PLP3	0.3	No
	FO-822PL1/2	½	No
	FO-822PL05	5	No
8" x 29½" x 2" ID	FO-829PL05	5	No



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# Filter Sizing Information

## FO Series Filter Cartridges

### CARTRIDGE FLOW RATE (USGPM) VS. VISCOSITY DATA FOR 2 PSI AND 5 PSI INITIAL PRESSURE DROPS

CARTRIDGE	33 SUS 2 CS		39 SUS 4 CS		46 SUS 6 CS		59 SUS 10 CS		98 SUS 20 CS		142 SUS 30 CS		187 SUS 40 CS	
	2 PSI	5 PSI	2 PSI	5 PSI	2 PSI	5 PSI	2 PSI	5 PSI	2 PSI	5 PSI	2 PSI	5 PSI	2 PSI	5 PSI
FO-614PLF1/2	68	68	50	66	33	65	20	50	10	25	7	17	5	12
FO-614PLF1	68	68	50	66	33	65	20	50	10	25	7	17	5	12
FO-614PLF2	68	68	66	66	65	65	52	64	26	63	18	44	13	33
FO-614PLF5	68	68	66	66	65	65	64	64	63	63	53	62	40	61
FO-614PLF25	68	68	66	66	65	65	64	64	63	63	62	62	61	61
FO-614PLF75	68	68	66	66	65	65	64	64	63	63	62	62	61	61
FO-718PL1/2	50	50	50	50	38	50	23	50	12	29	8	19	6	15
FO-718PL01	50	50	50	50	38	50	23	50	12	29	8	19	6	15
FO-718PL02	50	50	50	50	50	50	50	50	31	50	21	50	16	39
FO-718PL05	50	50	50	50	50	50	50	50	50	50	50	50	50	50
FO-718PL15	50	50	50	50	50	50	50	50	50	50	50	50	50	50
FO-718PL50	50	50	50	50	50	50	50	50	50	50	50	50	50	50
FO-618FGA5	68	68	66	66	42	65	25	60	13	31	8	21	6	16
FO-618FGA10	68	68	66	66	50	65	30	64	15	38	10	25	8	19
FO-618FGA25	68	68	66	66	50	65	30	64	15	38	10	25	8	19

CARTRIDGE	233 SUS 50 CS		348 SUS 75 CS		463 SUS 100 CS		927 SUS 200 CS		1390 SUS 300 CS		1853 SUS 400 CS		2316 SUS 500 CS	
	2 PSI	5 PSI	2 PSI	5 PSI	2 PSI	5 PSI	2 PSI	5 PSI	2 PSI	5 PSI	2 PSI	5 PSI	2 PSI	5 PSI
FO-614PLF1/2	4	10	3	7	2	5	1	3	1	2	-	1	-	1
FO-614PLF1	4	10	3	7	2	5	1	3	1	2	-	1	-	1
FO-614PLF2	10	26	7	18	5	13	3	7	2	4	1	3	1	3
FO-614PLF5	32	60	22	55	16	40	8	20	5	13	4	10	3	8
FO-614PLF25	60	60	59	59	45	58	22	55	15	50	11	28	9	23
FO-614PLF75	60	60	59	59	58	58	45	57	30	56	22	55	18	45
FO-718PL1/2	5	12	3	8	2	6	1	3	1	2	1	2	-	1
FO-718PL01	5	12	3	8	2	6	1	3	1	2	1	2	-	1
FO-718PL02	12	31	8	21	6	16	3	8	2	5	2	4	1	3
FO-718PL05	41	50	27	50	20	50	10	25	7	17	5	13	4	10
FO-718PL15	50	50	50	50	42	50	21	50	14	35	10	26	8	21
FO-718PL50	50	50	50	50	50	50	30	50	20	50	15	38	12	30
FO-618FGA5	5	13	3	8	2	6	1	3	1	2	1	2	1	1
FO-618FGA10	6	15	4	10	3	8	1	4	1	3	1	2	1	2
FO-618FGA25	6	15	4	10	3	8	1	4	1	3	1	2	1	2

**NOTE:** Figures in table are flow rates (US GPM) that will cause a pressure drop of 2 or 5 psi across the cartridge.



# Filter Housings

## VF166C

## VF2012C

### Six and Twelve Cartridge Housings

#### STANDARD FEATURES

- ASME Code Design
- Carbon Steel Construction
- 150 psi operating pressure, 225 psi test
- O-Ring closure
- Primed exterior, oil coated interior
- Positive seal tie-rod cartridge mounting
- Swing bolt lid closure
- Six types of cartridge media available
- Lid lifting mechanism
- 200°F Design temperature

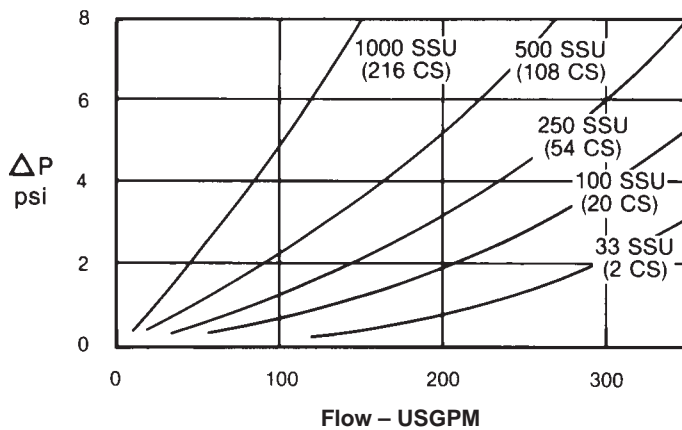
#### APPLICATIONS

- |                |                |
|----------------|----------------|
| Gasoline       | Lube Oils      |
| Cooling Water  | Cutting Oils   |
| Coolants       | Gear Oil       |
| Solvents       | Hydraulic Oil  |
| Kerosene       | Quench Oil     |
| Diesel Fuel    | Insulating Oil |
| Biodiesel Fuel |                |

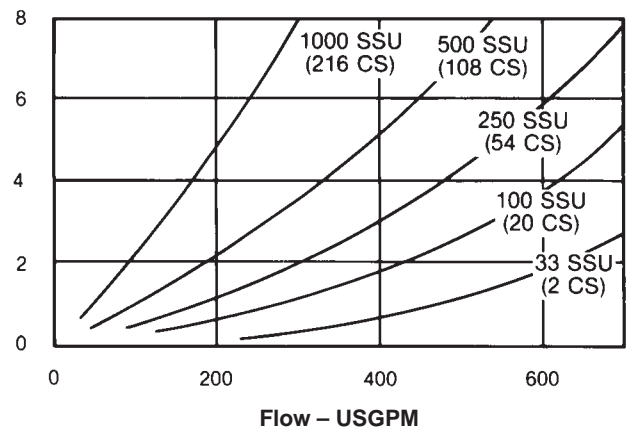


VF2012C-150

#### PRESSURE DROP CHARACTERISTICS



VF166C Housing with six FO-718PL05 Cartridges



VF2012C Housing with twelve FO-718PL05 Cartridges