The 3L Filters™ F & FD Series oil cartridge filters provide continuous particulate filtration for critical and non-critical lube, seal and control oil applications. Many standard systems conform to API 614 requirements for system components, including filters and transfer valves as well as the required controls and instrumentation.

Applications

Turbine manufacturers, machine tool manufacturers, lube oil console manufacturers, mining-gear lube oil filters, transformer oil filtration-distribution terminals, oil recycling plants, hydraulic systems, heat transfer oil filtration and any other rotating equipment such as compressors and motors.

Standard Features

- 150 psig at 150°F (66°C) standard design pressure
- -20°F to 200°F (-29°C to 93°C ) standard design temperature
- 150 lb ANSI RF50 flanged inlet/outlet nozzles
- 3000 lb NPT couplings for vent, drain and pressure gauge connections
- vertical housing of carbon steel material
- stainless steel cartridge hardware
- housing dimensions under 12” (305 mm) utilize handles, not headlifts
- 3L Pogo (spring-assisted) headlift on housing diameters 8” to 18” (203 mm to 457 mm); hydraulic Jack headlift on housing diameters over 18” (457 mm)
- quick access to replace cartridges
- standard Swing Bolt closures
- O-ring closure seal
- Standard cartridge lengths 18” (457 mm) and 36” (914 mm)
- external primer finish for carbon steel housings

Options & Accessories

- custom design pressures to 3000 psig
- higher design temperatures
- custom flange rating
- custom housing materials
- optional headlifts: handwheel or 3L Cantilever
- optional closures: Thru-Bolt or patented Easy Access Closure
- O-ring closure seal in Buna, Viton®, Teflon® or EPDM
- custom cartridge configurations and sizes
- custom filter media
- paint or coating to customer specification
- additional nozzles as needed
- three way valves
- safety relief valves
- pressure gauges
- steam jackets
- working platform

Certifications

- designed to ASME Section VIII Div.1 & 2

Model Coding

```
<table>
<thead>
<tr>
<th>F &amp; FD</th>
<th>8</th>
<th>18</th>
<th>C</th>
<th>150</th>
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</thead>
<tbody>
<tr>
<td>LUBE OIL, SEAL OIL, CONTROL OIL FILTERS</td>
<td>VESSEL DIAMETER</td>
<td>CARTRIDGE LENGTH</td>
<td>MATERIAL</td>
<td>DESIGN PRESSURE (psig)</td>
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<tr>
<td>F - SINGLE</td>
<td>F - DUPLEX</td>
<td>A - ALUMINUM</td>
<td>E - SS304</td>
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<tr>
<td>FD</td>
<td>C</td>
<td>C</td>
<td>S - SS316</td>
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</tbody>
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Particulate Filters
## Cartridge Filters (Lube Oil, Seal Oil & Control Oil)

| Fig. | Model No. | Qty | Filter Elements | A Vessel OD in (mm) | B1 in (mm) | B2 in (mm) | C in (mm) | D in (mm) | E in (mm) | F in (mm) | G in (mm) | H in (mm) | Inlet/Outlet (RF) | Vent Safety Drains (NPT) | Press. Gauge (NPT) | GPM (US) | Weight lbs (kg) |
|------|-----------|-----|-----------------|-------------------|-----------|-----------|---------|--------|---------|--------|--------|--------|---------|----------------|----------------|----------------|--------|-------------|
| 1    | FD818C150| 1   | 18              | 8.625 (219)       | 8.75 (222) | 6 (152)   | 32.50 (826) | 36 (914) | 50.50 (1283) | 21 (533) | –       | 8.500 (216) | 1 1/2” | 3/4” | 1/2” | 50 215 (98) |
| 1    | FD836C150| 1   | 36              | 8.625 (219)       | 10.00 (254) | 6 (152)   | 51.00 (1295) | 56 (1397) | 87.00 (2210) | 21 (533) | –       | 8.500 (216) | 2”     | 3/4” | 1/2” | 100 260 (118) |
| 1    | FD1436C150| 2  | 36              | 14.000 (356)      | 11.50 (292) | 6 (152)   | 51.75 (1314) | 56 (1422) | 87.75 (2229) | 33 (836) | –       | 12.375 (314) | 3”     | 3/4” | 1/2” | 200 365 (168) |
| 1    | FD1636C150| 3  | 36              | 16.000 (406)      | 11.50 (292) | 6 (152)   | 51.75 (1314) | 56 (1422) | 87.75 (2229) | 39 (991) | –       | 13.750 (349) | 3”     | 3/4” | 1/2” | 300 440 (200) |
| 1    | FD1836C150| 4  | 36              | 19.000 (457)      | 13.00 (330) | 6 (152)   | 52.50 (1334) | 57 (1448) | 88.50 (2248) | 45 (1143) | –       | 15.250 (387) | 4”     | 3/4” | 1/2” | 400 470 (213) |
| 2    | F818C150  | 1   | 18              | 8.625 (219)       | 14.75 (375) | 6 (152)   | 32.50 (826) | 36 (914) | 50.50 (1283) | –       | 20.625 (524) | 8.500 (216) | 1 1/2” | 3/4” | 1/2” | 50 215 (98) |
| 2    | F836C150  | 1   | 36              | 8.625 (219)       | 16.00 (406) | 6 (152)   | 51.00 (1295) | 55 (1397) | 87.00 (2210) | –       | 20.625 (524) | 8.500 (216) | 2”     | 3/4” | 1/2” | 100 260 (118) |
| 2    | F1436C150 | 2   | 36              | 14.000 (356)      | 17.50 (445) | 6 (152)   | 51.75 (1314) | 56 (1422) | 87.75 (2229) | –       | 26.000 (660) | 12.375 (314) | 3”     | 3/4” | 1/2” | 200 365 (168) |
| 2    | F1636C150 | 3   | 36              | 16.000 (406)      | 17.50 (445) | 6 (152)   | 51.75 (1314) | 56 (1422) | 87.75 (2229) | –       | 28.000 (711) | 13.750 (349) | 3”     | 3/4” | 1/2” | 300 440 (200) |
| 2    | F1836C150 | 4   | 36              | 18.000 (457)      | 19.00 (483) | 6 (152)   | 52.50 (1334) | 57 (1448) | 88.50 (2248) | –       | 30.000 (762) | 15.250 (387) | 4”     | 3/4” | 1/2” | 400 470 (213) |

**Note:**
- Dimension ‘E’ is the minimum clearance required for cartridge removal.
- Flow rates are based on a liquid viscosity of 200 SSU.
- Drawings for reference only. Certified drawings will be supplied after receipt of order.
- 1.5” (38 mm) and 2” (51 mm) Inlet/Outlet nozzles are 3000# NPT.
- 3” (76 mm) and 4” (102 mm) Inlet/Outlet nozzles are 150# RFSo.
Oil Cartridge Filter RFQ Form

**Client Information:**
- Company Name: ________________________________
- Address: ________________________________________
- City, State (Prov): ________________________________
- Country, Zip (Postal Code): ________________________
- Contact Name: _________________________________
- Contact Title: _________________________________
- Phone / Fax: _________________________________
- E-mail: ________________________________________
- Project Name: ________________________________
- Project Location: ______________________________
- Item: _________________________________________
- Tag No: _______________________________________
- Date: _________________________________________

**Proposal Type Required:**
- Budgetary
- Bid
- Buy

**Additional Data:**
- Solid Contaminants: % wt / % vol / Other
- Type of Solid Contaminant: _______________________
- Allowable Clean Pressure Drop: __________________
- Max. Allowable Pressure Drop: __________________
- Nozzle Inlet/Outlet Size: ________________________

**Required Data:**
- Liquid To Be Filtered:
  - Hydraulic Oil
  - Lube Oil
  - Seal Oil
  - Other
- Type of Oil: _______________________
- Maximum/Design Flow Rate: gpm / ft³/hr / m³/hr / Other
- Operating Pressure: psig / barg / kg/cm² g / Other
- Operating Temperature: ___________ °F/°C
- Particle Removal Size: ___________ Microns:
- Density of Liquid at Op. Condition: lb/ft³ / Liquid sp. gr. / Other
- Viscosity of Liquid at Op. Condition: cp / SSU / Other

**Filter Style:** _____________________________ Single/Duplex

**Material of Construction:**
- Vessel: ________ Internals: ________ Support: ___________
- Design & Code:
  - ASME
  - Other
  - CRN: ____________________________
  - Yes
  - No
  - Province ________

**API 614 Compliance:** Yes / No

**Design Pressure:** psig / barg / kg/cm² g / Other

**Design Temperature:** Min. ___________ Max. ___________ °F/°C

**Corrosion Allowance:** ___________ in/mm

**Radiography:**
- None
- Spot
- Full
- 100% All Butt Wells

**Vessel Internal Finish:**
- Clean & Dry
- Other
- Specify: ___________

**Vessel External Finish:**
- Primer
- Other
- Specify: ___________

**Gasket:**
- Buna-N
- Viton® A
- EPDM
- Other

**Closure:**
- Standard
- Quick Opening

**Notes:** ____________________________

To receive your enclosure quote, fax these pages to:
(905) 829-4430 Attention: Projects

ASME Section VII, Div. 1