## Section 6  Suction Filters Selection Guide

<table>
<thead>
<tr>
<th>Suction Filters</th>
<th>Pressure psi (bar)</th>
<th>Flow gpm (L/min)</th>
<th>Element Length/Size</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tank-Mounted Suction Filter</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>ST</strong></td>
<td>NA</td>
<td>20 (75)</td>
<td>K, KT</td>
<td>333</td>
</tr>
<tr>
<td>Top-Ported Suction Filter</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>SKF3</strong></td>
<td>300 (20)</td>
<td>25 (95)</td>
<td>KT</td>
<td>337</td>
</tr>
<tr>
<td>In-Line Magnetic Suction Separators</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TF-SKB</strong></td>
<td>NA</td>
<td>12.5 (47)</td>
<td>SKB</td>
<td>341</td>
</tr>
<tr>
<td><strong>KF3-SKB</strong></td>
<td>NA</td>
<td>35 (130)</td>
<td>SKB</td>
<td>342</td>
</tr>
<tr>
<td>Tank-Mounted Magnetic Suction Separator</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>BFT-SKB</strong></td>
<td>NA</td>
<td>75 (285)</td>
<td>SKB</td>
<td>343</td>
</tr>
</tbody>
</table>
Tank-Mounted Suction Filter

Features and Benefits
- Tank-mounted suction filter for hydrostatic suction service
- Optional check valve prevents reservoir siphoning
- Easy Element changeout
- Inlet filter protects pump, reduces start-up failures

Model No. of filter in photograph is ST1K10SY.

Flow Rating: Up to 20 gpm (75 L/min) for 150 SUS (32 cSt) fluids
Max. Operating Pressure: Suction Filter
Min. Yield Pressure: Not Applicable
Rated Fatigue Pressure: Not Applicable
Temp. Range: -20°F to 225°F (-29°C to 107°C)
Bypass Setting: Non-bypassing
Porting Head: Die Cast Aluminum
Cap: Steel
Element Case: Steel
Weight of ST-1K: 11.1 lbs. (5.0 kg)
Weight of ST-2K: 14.7 lbs. (6.7 kg)
Element Change Clearance: 7.25" (185 mm) for 1K; 17.50" (445 mm) for KK

Type Fluid | Appropriate Schroeder Media
---|---
Petroleum Based Fluids | All E media (cellulose) and Z-Media® (synthetic)
High Water Content | 10 µ Z-Media® (synthetic)
Invert Emulsions | 10 µ Z-Media® (synthetic)
Water Glycols | 10 µ Z-Media® (synthetic)
Phosphate Esters | 10 µ Z-Media® (synthetic) with H (EPR) seal designation and 10 µ E media (cellulose) with H (EPR) seal designation
Skydroil® | 10 µ Z-Media (synthetic) with H.5 seal designation (EPR seals and stainless steel wire mesh in element, and light oil coating on housing exterior)
### Element Performance Information & Dirt Holding Capacity

#### Filtration Ratio Per ISO 4572/NFPA T3.10.8.8

Using automated particle counter (APC) calibrated per ISO 4402

<table>
<thead>
<tr>
<th>Element</th>
<th>$\beta_x \geq 75$</th>
<th>$\beta_x \geq 100$</th>
<th>$\beta_x \geq 200$</th>
<th>$\beta_x(c) \geq 200$</th>
<th>$\beta_x(c) \geq 1000$</th>
</tr>
</thead>
<tbody>
<tr>
<td>KTZ10</td>
<td>7.4</td>
<td>8.0</td>
<td>10.0</td>
<td>8.0</td>
<td>10.0</td>
</tr>
</tbody>
</table>

#### Filtration Ratio per ISO 16889

Using APC calibrated per ISO 11171

<table>
<thead>
<tr>
<th>Element</th>
<th>DHC (gm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>KTZ10</td>
<td>56</td>
</tr>
</tbody>
</table>

**Element Collapse Rating:** 150 psid (10 bar)

**Flow Direction:** Inside Out

**Element Nominal Dimensions:** 3.9" (99 mm) O.D. x 9.0" (230 mm) long

Metric dimensions in ( ).
**Exercise:**

Determine $\Delta P_{filter}$ at 15 gpm (57 L/min) for ST1KTZ10PY using 160 SUS (34 cSt) fluid.

Use the element pressure curve to determine $\Delta P_{housing}$ at 15 gpm. In this case, $\Delta P_{housing}$ is 1.5 psi (.10 bar) according to the graph for the ST element.

Use the element pressure curve to determine $\Delta P_{element}$ at 15 gpm. In this case, $\Delta P_{element}$ is .75 psi (.05 bar) according to the graph for the KTZ10 element.

Because the viscosity in this sample is 160 SUS (34 cSt), we determine the Viscosity Factor ($\nu_f$) by dividing the Operating Fluid Viscosity with the Standard Viscosity of 150 SUS (32 cSt). To best determine your Operating Fluid Viscosity, please reference the chart in Appendix D.

Finally, the overall filter pressure differential, $\Delta P_{filter}$, is calculated by adding $\Delta P_{housing}$ with the true element pressure differential, ($\Delta P_{element} \times \nu_f$). The $\Delta P_{element}$ from the graph has to be multiplied by the viscosity factor to get the true pressure differential across the element.

**Solution:**

$\Delta P_{housing} = 1.5$ psi [.75 bar] | $\Delta P_{element} = .75$ psi [.05 bar]

$\nu_f = 160$ SUS (34 cSt) / 150 SUS (32 cSt) = 1.07

$\Delta P_{filter} = 1.5$ psi + (.75 psi * 1.07) = 2.3 psi

OR

$\Delta P_{filter} = .10$ bar + (.05 bar * 1.07) = 0.15 bar
# Tank-Mounted Suction Filter

## How to Build a Valid Model Number for a Schroeder ST:

<table>
<thead>
<tr>
<th>BOX 1</th>
<th>BOX 2</th>
<th>BOX 3</th>
<th>BOX 4</th>
<th>BOX 5</th>
<th>BOX 6</th>
<th>BOX 7</th>
<th>BOX 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Filter Series</td>
<td>Number of Elements</td>
<td>Element Part Number</td>
<td>Seal Material</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ST</td>
<td>1</td>
<td>K10 = K size 10 µ E media (cellulose)</td>
<td>Omit = Buna N</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>K25 = K size 25 µ E media (cellulose)</td>
<td>H = EPR</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>KTZ3 = K size 3 µ Excellement® Z-Media® (synthetic) inside-out flow</td>
<td>W = Buna N</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>KTZ5 = K size 5 µ Excellement® Z-Media® (synthetic) inside-out flow</td>
<td>H.5 = Skydrol® compatibility</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>KTZ10 = K size 10 µ Excellement® Z-Media® (synthetic) inside-out flow</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>KTZ25 = K size 25 µ Excellement® Z-Media® (synthetic) inside-out flow</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Example: NOTE: Only box 8 may contain more than one option

<table>
<thead>
<tr>
<th>BOX 1</th>
<th>BOX 2</th>
<th>BOX 3</th>
<th>BOX 4</th>
<th>BOX 5</th>
<th>BOX 6</th>
<th>BOX 7</th>
<th>BOX 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>ST</td>
<td>1</td>
<td>K25</td>
<td>P</td>
<td>Y</td>
<td>= ST1K25PY</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## OUTLET PORTS

- P = 1½” NPTF
- PP = Dual 1½” NPTF
- S = SAE 24
- SS = Dual SAE 24
- B = ISO 228 G-1½"
- BB = ISO 228 G-1½"

## Optional Check Valve

- Omit = None
- C = Check Valve

## Dirt Alarm® Options

- Omit = None
- Visual
- Y = Vacuum gauge
- YR = Vacuum gauge mounted on opposite side of standard location
- Electrical
- VS = Electrical Vacuum Switch
- VSR = Electrical Vacuum Switch mounted on opposite side of standard location
- VSR1 = Heavy-Duty Vacuum Switch

## Additional Options

- Omit = None
- G2293 = Cork Gasket
- G547 = Two ¼” gauge ports

### NOTES:

- Box 3. Replacement element part numbers are identical to contents of Boxes 3 and 4.
- Box 4. For options H and W, all aluminum parts are anodized.
  - H.5 seal designation includes the following: EPR seals, stainless steel wire mesh on elements, and light oil coating on housing exterior.
- Skydrol® is a registered trademark of Solutia Inc.
- Box 6. See also “Accessories for Tank-Mounted Filters,” page 299.
**Top-Ported Suction Filter**

**Features and Benefits**
- Top-ported suction filter for hydrostatic suction service
- Easy element changeout
- Inlet filter protects pump, reduces start-up failures
- 2.5 psi suction bypass available

**Flow Rating:** Up to 25 gpm (95 L/min) for 150 SUS (32 cSt) fluids

**Max. Operating Pressure:** 300 psi (20 bar)

**Min. Yield Pressure:** 1000 psi (70 bar), per NFPA T2.6.1

**Rated Fatigue Pressure:** 290 psi (20 bar), per NFPA T2.6.1-2005

**Temp. Range:** -20°F to 225°F (-29°C to 107°C)

**Bypass Setting:**
- Cracking: 2.5 psi (0.2 bar)
- Full Flow: Contact Factory

**Porting Base:** Die Cast Aluminum

**Element Case:** Steel

**Weight of SKF3:** 10.5 lbs. (4.8 kg)

**Element Change Clearance:** 1.50" (40 mm) for all lengths

---

**Type Fluid** | **Appropriate Schroeder Media**
---|---
Petroleum Based Fluids | All E-Media (cellulose), Z-Media®
High Water Content | All Z-Media®
Invert Emulsions | 10 and 25 µ Z-Media® (synthetic)
Water Glycols | 3, 5, 10 and 25 µ Z-Media® (synthetic)
Phosphate Esters | All Z-Media® (synthetic) with H (EPR) seal designation and 3 and 10 µ E-Media (cellulose) with H (EPR) seal designation
Skydrol® | 3, 5, 10 and 25 µ Z-Media® (synthetic) with H.5 seal designation

---

SCHROEDER INDUSTRIES 337
**Filtration Ratio Per ISO 4572/NFPA T3.10.8.8**

Using automated particle counter (APC) calibrated per ISO 4402

<table>
<thead>
<tr>
<th>Element</th>
<th>( \beta_x \geq 75 )</th>
<th>( \beta_x \geq 100 )</th>
<th>( \beta_x \geq 200 )</th>
<th>( \beta_x(c) \geq 200 )</th>
<th>( \beta_x(c) \geq 1000 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>KTZ1/GKTZ1</td>
<td>&lt;1.0</td>
<td>&lt;1.0</td>
<td>&lt;1.0</td>
<td>&lt;4.0</td>
<td>4.2</td>
</tr>
<tr>
<td>KTZ3/GKTZ3</td>
<td>&lt;1.0</td>
<td>&lt;1.0</td>
<td>&lt;2.0</td>
<td>&lt;4.0</td>
<td>4.8</td>
</tr>
<tr>
<td>KTZ5/GKTZ5</td>
<td>2.5</td>
<td>3.0</td>
<td>4.0</td>
<td>4.8</td>
<td>6.3</td>
</tr>
<tr>
<td>KTZ10/GKTZ10</td>
<td>7.4</td>
<td>8.2</td>
<td>10.0</td>
<td>8.0</td>
<td>10.0</td>
</tr>
<tr>
<td>KTZ25/GKTZ25</td>
<td>18.0</td>
<td>20.0</td>
<td>22.5</td>
<td>19.0</td>
<td>24.0</td>
</tr>
</tbody>
</table>

**Filtration Ratio per ISO 16889**

Using APC calibrated per ISO 11171

<table>
<thead>
<tr>
<th>Element</th>
<th>( \beta_x \geq 75 )</th>
<th>( \beta_x \geq 100 )</th>
<th>( \beta_x \geq 200 )</th>
<th>( \beta_x(c) \geq 200 )</th>
<th>( \beta_x(c) \geq 1000 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>KTZ1/GKTZ1</td>
<td>&lt;1.0</td>
<td>&lt;1.0</td>
<td>&lt;1.0</td>
<td>&lt;4.0</td>
<td>4.2</td>
</tr>
<tr>
<td>KTZ3/GKTZ3</td>
<td>&lt;1.0</td>
<td>&lt;1.0</td>
<td>&lt;2.0</td>
<td>&lt;4.0</td>
<td>4.8</td>
</tr>
<tr>
<td>KTZ5/GKTZ5</td>
<td>2.5</td>
<td>3.0</td>
<td>4.0</td>
<td>4.8</td>
<td>6.3</td>
</tr>
<tr>
<td>KTZ10/GKTZ10</td>
<td>7.4</td>
<td>8.2</td>
<td>10.0</td>
<td>8.0</td>
<td>10.0</td>
</tr>
<tr>
<td>KTZ25/GKTZ25</td>
<td>18.0</td>
<td>20.0</td>
<td>22.5</td>
<td>19.0</td>
<td>24.0</td>
</tr>
</tbody>
</table>

**Dirt Holding Capacity**

<table>
<thead>
<tr>
<th>Element</th>
<th>DHC (gm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>KTZ1/GKTZ1</td>
<td>112</td>
</tr>
<tr>
<td>KTZ3/GKTZ3</td>
<td>115</td>
</tr>
<tr>
<td>KTZ5/GKTZ5</td>
<td>119</td>
</tr>
<tr>
<td>KTZ10/GKTZ10</td>
<td>108</td>
</tr>
<tr>
<td>KTZ25/GKTZ25</td>
<td>93</td>
</tr>
</tbody>
</table>

**Element Collapse Rating:** 150 psid (10 bar) for standard elements

**Flow Direction:** Inside Out

**Element Nominal Dimensions:** K: 3.9” (99 mm) O.D. x 9.0” (230 mm) long
Exercise:
Determine $\Delta P_{\text{filter}}$ at 20 gpm (76 L/min) for SKF31KTZ25S2.5Y using 200 SUS (44 cSt) fluid.

Use the housing pressure curve to determine $\Delta P_{\text{housing}}$ at 20 gpm. In this case, $\Delta P_{\text{housing}}$ is 0.7 psi (.05 bar) on the graph for the SKF3 housing.

Use the element pressure curve to determine $\Delta P_{\text{element}}$ at 20 gpm. In this case, $\Delta P_{\text{element}}$ is 0.8 psi (.06 bar) according to the graph for the 1KTZ25 element.

Because the viscosity in this sample is 200 SUS (44 cSt), we determine the Viscosity Factor ($\nu_f$) by dividing the Operating Fluid Viscosity with the Standard Viscosity of 150 SUS (32 cSt). To best determine your Operating Fluid Viscosity, please reference the chart in Appendix D.

Finally, the overall filter pressure differential, $\Delta P_{\text{filter}}$, is calculated by adding $\Delta P_{\text{housing}}$ with the true element pressure differential, $(\Delta P_{\text{element}} * \nu_f)$. The $\Delta P_{\text{element}}$ from the graph has to be multiplied by the viscosity factor to get the true pressure differential across the element.

Solution:

$\Delta P_{\text{housing}} = 0.7 \text{ psi} [0.21 \text{ bar}]$ | $\Delta P_{\text{element}} = 0.8 \text{ psi} [0.415 \text{ bar}]$

$\nu_f = 200 \text{ SUS} / 150 \text{ SUS} = 1.333$

$\Delta P_{\text{filter}} = 0.7 \text{ psi} + (0.8 \text{ psi} * 1.333) = 1.8 \text{ psi}$

OR

$\Delta P_{\text{filter}} = 0.05 \text{ bar} + (0.06 \text{ bar} * 1.333) = 0.13 \text{ bar}$
### How to Build a Valid Model Number for a Schroeder SKF3:

<table>
<thead>
<tr>
<th>Box 1</th>
<th>Box 2</th>
<th>Box 3</th>
<th>Box 4</th>
<th>Box 5</th>
<th>Box 6</th>
<th>Box 7</th>
<th>Box 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>SKF3</td>
<td>1K</td>
<td>Z</td>
<td>25</td>
<td>S</td>
<td>2.5</td>
<td>Y</td>
<td></td>
</tr>
</tbody>
</table>

**Example:** SKF31KTZ25S2.5Y

---

**Box 1**
- **Filter Series**
  - SKF3
  - GSKF3 (GeoSeal®)

**Box 2**
- **Number & Size of Elements**
  - 1KT
  - GeoSeal®
  - 1KTG

**Box 3**
- **Media Type**
  - Omit = E media (cellulose)
  - Z = Excellement® Z-Media® (synthetic)
  - M = M Media (reusable metal)

**Box 4**
- **Micron Rating**
  - 1 = 1μ (Z-Media)
  - 3 = 3μ (E, Z-Media)
  - 5 = 5μ (Z-Media)
  - 10 = 10μ (E, Z and M-Media)
  - 25 = 25μ (E, Z and M-Media)
  - 60 = 60μ (M-Media)
  - 150 = 150μ (M-Media)

**Box 5**
- **Seal Material**
  - Omit = Buna N
  - H = EPR
  - V = Viton®
  - H.5 = Skydrol® Compatibility
  - W = Buna N with anodized parts

**Box 6**
- **Magnetic Core**
  - Omit = No Magnetic Core
  - M = Magnetic Core

**Box 7**
- **Porting**
  - P = 1 1/2” NPTF
  - S = SAE 24
  - F = 1 1/4” SAE-4-bolt flange Code 61
  - B = ISO 228 G-1½"

**Box 8**
- **Bypass**
  - Omit = No Bypass
  - 2.5 = 2.5 psi Suction Bypass

**Box 9**
- **Dirt Alarm® Options**
  - Omit = None
  - Visual Y = Vacuum gauge
  - Electrical VS = Electrical Vacuum Switch
  - VS1 = Heavy-Duty Vacuum Switch

---

**NOTES:**

- **Box 2:** Replacement element part numbers are a combination of Boxes 2, 3, and 4. Example: KT225
- **Box 5:** For options H, W, V, and H.5, all aluminum parts are anodized. H.5 seal designation includes the following: EPR seals, stainless steel wire mesh on elements, and light oil coating on housing exterior. Viton® is a registered trademark of DuPont Dow Elastomers. Skydrol® is a registered trademark of Solutia Inc.
- **Box 7:** For option F, bolt thread depth .63” (16 mm). B porting option supplied with metric mounting holes.
In-Line Magnetic Suction Separators

Features and Benefits
- Protects components downstream by capturing potentially harmful ferrous particles

Specifications

<table>
<thead>
<tr>
<th>Feature</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flow Rating</td>
<td>12.5 gpm (47 L/min)</td>
</tr>
<tr>
<td>Element Replacement Part Number</td>
<td>SKB-1</td>
</tr>
<tr>
<td>Element Change Clearance</td>
<td>2.5” (65 mm)</td>
</tr>
<tr>
<td>Weight of TF-SKB</td>
<td>5.8 lbs (2.6 kg)</td>
</tr>
</tbody>
</table>

How to Build a Valid Model Number for a Schroeder TF-SKB:

Example: NOTE: One option per box

BOX 1  BOX 2  BOX 3  BOX 4
TF-SKB - - -

BOX 1  BOX 2  BOX 3  BOX 4
P  Y  - -

TF-SKBPY

Filter Model Number Selection

<table>
<thead>
<tr>
<th>BOX 1</th>
<th>BOX 2</th>
<th>BOX 3</th>
<th>BOX 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Filter Series</td>
<td>Seal Material</td>
<td>Porting</td>
<td>Dirt Alarm Options</td>
</tr>
<tr>
<td>TF-SKB</td>
<td>Omit = Buna N</td>
<td>P = 1” NPTF</td>
<td>Omit = None</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Visual  Y = Vacuum gauge</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Electrical  V5 = Electrical Vacuum Switch</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>V51 = Heavy-Duty Vacuum Switch</td>
</tr>
</tbody>
</table>

NOTE: Box 1. Element replacement part number: SKB-1.
In-Line Magnetic Suction Separators

Features and Benefits
- Protects components downstream by capturing potentially harmful ferrous particles

Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flow Rating</td>
<td>35 gpm (130 L/min)</td>
</tr>
<tr>
<td>Element Replacement Part Number</td>
<td>A-LF-1789</td>
</tr>
<tr>
<td>Element Change Clearance</td>
<td>1.5&quot; (40 mm)</td>
</tr>
<tr>
<td>Weight of KF3-SKB</td>
<td>11.5 lbs (5.2 kg)</td>
</tr>
</tbody>
</table>

Metric dimensions in ( ).

How to Build a Valid Model Number for a Schroeder KF3-SKB:

<table>
<thead>
<tr>
<th>BOX 1</th>
<th>BOX 2</th>
<th>BOX 3</th>
<th>BOX 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>KF3-SKB</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Example: NOTE: One option per box

<table>
<thead>
<tr>
<th>BOX 1</th>
<th>BOX 2</th>
<th>BOX 3</th>
<th>BOX 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>KF3-SKB</td>
<td>P</td>
<td>Y</td>
<td></td>
</tr>
</tbody>
</table>

= KF3-SKBPY

Filter Series | Seal Material | Porting | Dirt Alarm® Options
---------------|---------------|---------|---------------------|
KF3-SKB       | Omit = Buna N | P = 1½" NPTF | Omit = None       |
              |               |         | Visual Y = Vacuum gauge |
              |               |         | Electrical VS = Electrical Vacuum Switch |
              |               |         | VS1 = Heavy-Duty Vacuum Switch |

Tank-Mounted Magnetic Suction Separators

Features and Benefits

- Protects components downstream by capturing potentially harmful ferrous particles

Flow Rating: 75 gpm (285 L/min)

Element Replacement
- with check valve: A-SKB-3-76
- without check valve: SKB-3

Element Change Clearance: 13.5" (345 mm)

Weight of BFT-SKB: 32.0 lbs (14.5 kg)

How to Build a Valid Model Number for a Schroeder BFT-SKB:

Example: NOTE: One option per box

BFT-SKB

BOX 1

BOX 2

BOX 3

BOX 4

BOX 5

BFT-SKB

P

Y

= BFT-SKBPY

Filter Model Number Selection

BOX 1

Filter Series

Omit = Buna N

BFT-SKB

BOX 2

Seal Material

Omit = None

P = 2½" NPTF

PP = Dual 2½" NPTF

F = 2½" SAE 4-bolt flange Code 61

FF = Dual 2½" SAE 4-bolt flange Code 61

BOX 3

Porting

Other Options

Omit = None

C = Check Valve

BOX 5

Dirt Alarm® Options

Omit = None

Visual

Y = Vacuum gauge

YR = Vacuum gauge mounted on opposite side of standard location

Electrical

VS = Electrical Vacuum Switch

VSR = Electrical Vacuum Switch on opposite side of standard location

VS1 = Heavy-Duty Vacuum Switch

NOTE: Box 1. See specifications on previous page for element replacement part numbers.
Magnet Inserts for Filters

KF30, KF50, KC50, KC65 and TF50 are available with magnet inserts to trap ferrous material that passes through the filter element.

These inserts are removed with the element each time service is performed and cleaned before being reinserted with new elements.

Replacements are available by ordering parts:

<table>
<thead>
<tr>
<th></th>
<th>Single Element</th>
<th>Double Element</th>
<th>Triple Element</th>
</tr>
</thead>
<tbody>
<tr>
<td>KF30, KF50, KC50, KC65, KF3, LF1, MLF1</td>
<td>A-LF-1592</td>
<td>A-LF-1593</td>
<td>A-LF-1594</td>
</tr>
<tr>
<td>TF50</td>
<td>A-TF-301-1</td>
<td>A-TF-302-1</td>
<td></td>
</tr>
</tbody>
</table>