F-Series Air Cylinders

Your Exact Interchange for Stainless Steel Body, Non-repairable Cylinders

Catalog # SSB-03
Prices effective
March 8, 2010
Some product prices updated
April 20, 2016 or before
**F-Series Direct Interchange Air Cylinders**

All the Models Bore-for-Bore!

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### F-Series Max Operating Pressure Ratings

<table>
<thead>
<tr>
<th>Cylinder Type</th>
<th>Max Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>F-Series Basic Cylinders</td>
<td>250 psi</td>
</tr>
<tr>
<td>Adjustable Cushion Cylinders</td>
<td>250 psi</td>
</tr>
<tr>
<td>Custom Cylinders 1&quot; Diameter Rod, 2&quot; Bore</td>
<td>250 psi</td>
</tr>
<tr>
<td>Volume Chambers</td>
<td>250 psi</td>
</tr>
<tr>
<td>Delrin® Series</td>
<td>100 psi</td>
</tr>
<tr>
<td>Magnetic Interchange Cylinders</td>
<td>250 psi</td>
</tr>
<tr>
<td>Hole Punch Cylinders</td>
<td>250 psi</td>
</tr>
<tr>
<td>3-Position Cylinders</td>
<td>250 psi</td>
</tr>
<tr>
<td>Position Feedback Cylinders</td>
<td>150 psi</td>
</tr>
</tbody>
</table>

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### Magnetic Interchange Cylinders

- Double Nose or Rear Pivot Mount
- Front Block Mount
- Trunnion Mount

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### Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>F-Series Ordering Information</td>
<td>2-5</td>
</tr>
<tr>
<td>F-Series Cylinders and Mounting Accessories</td>
<td>6, 7</td>
</tr>
<tr>
<td>5/16&quot; Bore</td>
<td>8-10</td>
</tr>
<tr>
<td>7/16&quot; Bore</td>
<td>11-13</td>
</tr>
<tr>
<td>9/16&quot; Bore</td>
<td>14-17</td>
</tr>
<tr>
<td>3/4&quot; Bore</td>
<td>16-20</td>
</tr>
<tr>
<td>1-1/16&quot; Bore</td>
<td>21-24</td>
</tr>
<tr>
<td>1-1/4&quot; Bore</td>
<td>25-27</td>
</tr>
<tr>
<td>1-1/2&quot; Bore</td>
<td>28-31</td>
</tr>
<tr>
<td>1-3/4&quot; Bore</td>
<td>32-33</td>
</tr>
<tr>
<td>2&quot; Bore</td>
<td>34-37</td>
</tr>
<tr>
<td>2-1/2&quot; Bore</td>
<td>38</td>
</tr>
<tr>
<td>3&quot; Bore</td>
<td>39</td>
</tr>
<tr>
<td>Adjustable Cushion Cylinders</td>
<td>36</td>
</tr>
<tr>
<td>1&quot; Diameter Rod, 2&quot; Bore</td>
<td>30, 31</td>
</tr>
<tr>
<td>Custom Cylinders</td>
<td>36</td>
</tr>
<tr>
<td>Volume Chambers</td>
<td>40</td>
</tr>
<tr>
<td>Volume chambers, ordering information</td>
<td></td>
</tr>
<tr>
<td>Delrin® Series – Corrosion Resistant Cylinders</td>
<td>41</td>
</tr>
<tr>
<td>3/4&quot; Bore</td>
<td>42</td>
</tr>
<tr>
<td>1-1/16&quot; Bore</td>
<td>42</td>
</tr>
<tr>
<td>1-1/2&quot; Bore</td>
<td>43</td>
</tr>
<tr>
<td>9/16&quot; Bore</td>
<td>44</td>
</tr>
<tr>
<td>3/4&quot; Bore</td>
<td>45</td>
</tr>
<tr>
<td>1-1/16&quot; Bore</td>
<td>46</td>
</tr>
<tr>
<td>1-1/4&quot; Bore</td>
<td>47</td>
</tr>
<tr>
<td>1-1/2&quot; Bore</td>
<td>48</td>
</tr>
<tr>
<td>1-3/4&quot; Bore</td>
<td>49</td>
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<tr>
<td>2&quot; Bore</td>
<td>50</td>
</tr>
<tr>
<td>2-1/2&quot; Bore</td>
<td>51</td>
</tr>
<tr>
<td>Magnetic Interchange Cylinders</td>
<td>52</td>
</tr>
<tr>
<td>3/4&quot; Bore</td>
<td>45</td>
</tr>
<tr>
<td>1-1/16&quot; Bore</td>
<td>46</td>
</tr>
<tr>
<td>1-1/4&quot; Bore</td>
<td>47</td>
</tr>
<tr>
<td>1-1/2&quot; Bore</td>
<td>48</td>
</tr>
<tr>
<td>1-3/4&quot; Bore</td>
<td>49</td>
</tr>
<tr>
<td>2&quot; Bore</td>
<td>50</td>
</tr>
<tr>
<td>2-1/2&quot; Bore</td>
<td>51</td>
</tr>
<tr>
<td>Hole Punch Cylinders</td>
<td>54</td>
</tr>
<tr>
<td>3-Position Cylinders</td>
<td>55</td>
</tr>
<tr>
<td>3-Position Cylinders</td>
<td>52</td>
</tr>
<tr>
<td>Port Mounted Flow Controls</td>
<td>53</td>
</tr>
<tr>
<td>Molded body</td>
<td>58</td>
</tr>
<tr>
<td>Brass body</td>
<td>59</td>
</tr>
<tr>
<td>Magnetic Position Sensing Sensors</td>
<td>60</td>
</tr>
<tr>
<td>Mounting Accessories – Summary</td>
<td>61</td>
</tr>
</tbody>
</table>

Specifications and prices subject to change without notice or incurring obligation

4-20-16
Pre-Lubrication
Factory lube is a special petroleum based oil formulated for long maintenance-free performance.

Piston Rod
303 stainless steel, ground, polished, and roller burnished for corrosion-free long life.

Temperature Ranges
Standard Seals........ –10° to +165°F  (–23° to + 74°C)
Low Temperature Seals ... –40° to +225°F  (–40° to + 107°C)
Viton® Seals............  –15° to +350°F  (–26° to + 177°C)

Stroke Tolerance = +/- .032

Overall Length Calculations for F Series Cylinders

Single Acting Spring Return Cylinders
Calculate the length of next whole standard increment of stroke. Then subtract the difference between desired stroke and next longer standard increment of stroke.

\[
\text{OAL} = B + (\text{STA} \times S1) - (S1 - S)
\]

Example: F-1062S01-02M  (2-3/4" stroke)
F-1062S01 base length = 1.938
Plus 1.562 per inch of stroke = +4.686
F-1062S01-01E length = 6.624
Standard stroke increment = 3.000
Minus desired stroke = -2.750
Stroke difference = .250
F-1062S01-02M length = 6.374

Double Acting Cylinders
Add desired stroke length to base length of cylinder.

\[
\text{OAL} = B + S
\]

Example: F-0750D01-01E  (1-1/4" stroke)
F-0750D01 base length = 2.969
Plus 1.250 stroke = +1.250
F-0750D01-01E length = 4.219

Single Acting Spring Extend Cylinders
Calculate the length of next whole standard increment of stroke. Then subtract twice the difference between desired stroke and next longer standard increment of stroke.

\[
\text{OAL} = B + (\text{STA} \times S1) - 2(S1 - S)
\]

Example: F-0438R02-01K  (1-5/8" stroke)
F-0438R02 base length = 2.375
Plus 1.438 per each 0.5" stroke = +6.752
1.438 x 4.0 (number of standard increments required for the next longer increment) = 5.752
Standard stroke increment = 2.000
Minus desired stroke = -1.625
Stroke difference = .375
Twice stroke difference = .750
F-0438R02-01K length = 7.377

Specifications and prices subject to change without notice or incurring obligation.
### How to Order

#### Bore Size (4 digits)

<table>
<thead>
<tr>
<th>Bore Size</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>0313 = 5/16&quot;</td>
<td></td>
</tr>
<tr>
<td>0438 = 7/16&quot;</td>
<td></td>
</tr>
<tr>
<td>0563 = 9/16&quot;</td>
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</tr>
<tr>
<td>0750 = 3/4&quot;</td>
<td></td>
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<tr>
<td>0875 = 7/8&quot;</td>
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<tr>
<td>1062 = 1-1/16&quot;</td>
<td></td>
</tr>
<tr>
<td>1250 = 1-1/4&quot;</td>
<td></td>
</tr>
<tr>
<td>1500 = 1-1/2&quot;</td>
<td></td>
</tr>
<tr>
<td>1750 = 1-3/4&quot;</td>
<td></td>
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<tr>
<td>2000 = 2&quot;</td>
<td></td>
</tr>
<tr>
<td>2500 = 2-1/2&quot;</td>
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<td>3000 = 3&quot;</td>
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#### Mounting Style (3 digits)

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<tr>
<th>Mounting Style</th>
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<tbody>
<tr>
<td>S01 = S01A</td>
<td>Single Acting Spring Return Nose Mount</td>
</tr>
<tr>
<td>S02 = S02R</td>
<td>Single Acting Spring Return Rear Pivot</td>
</tr>
<tr>
<td>R01 = R01N</td>
<td>Single Acting Spring Extend Nose Mount</td>
</tr>
<tr>
<td>R02 = R02R</td>
<td>Single Acting Spring Extend Rear Pivot</td>
</tr>
<tr>
<td>N01 = N01N</td>
<td>Single Acting Spring Return Non-Rotating Nose Mount</td>
</tr>
<tr>
<td>N02 = N02R</td>
<td>Single Acting Spring Return Non-Rotating Rear Pivot</td>
</tr>
<tr>
<td>D01 = D01N</td>
<td>Double Acting Nose Mount</td>
</tr>
<tr>
<td>D02 = D02R</td>
<td>Double Acting Rear Pivot</td>
</tr>
<tr>
<td>D03 = D03D</td>
<td>Double Acting Double Rod</td>
</tr>
<tr>
<td>D04 = D04D</td>
<td>Double Acting Double Nose</td>
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<tr>
<td>D05 = D05F</td>
<td>Double Acting Front Block</td>
</tr>
<tr>
<td>D13 = 1-1/16&quot;</td>
<td>Interchange Option for 1-1/16&quot; Bore Hollow Rod</td>
</tr>
<tr>
<td>DH3 = D06H</td>
<td>Double Acting Double Rod Hollow Rod</td>
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<tr>
<td>D06 = D06T</td>
<td>Double Acting Trunnion Mount</td>
</tr>
<tr>
<td>DG1 = D06C</td>
<td>Double Acting Adjustable Cushion Nose Mount</td>
</tr>
<tr>
<td>DG2 = D06C</td>
<td>Double Acting Adjustable Cushion Rear Pivot</td>
</tr>
<tr>
<td>DG4 = D06C</td>
<td>Double Acting Adjustable Cushion Double Nose</td>
</tr>
<tr>
<td>DL1 = D06N</td>
<td>Double Acting Nose Mount 2&quot; Bore 1&quot; Rod</td>
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<tr>
<td>DL2 = D06R</td>
<td>Double Acting Rear Pivot 2&quot; Bore 1&quot; Rod</td>
</tr>
<tr>
<td>DC1 = D06D</td>
<td>Double Acting Delrin® Nose Mount</td>
</tr>
<tr>
<td>DC2 = D06D</td>
<td>Double Acting Delrin® Rear Pivot</td>
</tr>
<tr>
<td>DC3 = D06D</td>
<td>Double Acting Delrin® Double Rod</td>
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<tr>
<td>DM1 = D06M</td>
<td>Magnetic Interchange, Nose Mount</td>
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<tr>
<td>DM2 = D06M</td>
<td>Magnetic Interchange, Nose/Rear Pivot Mt.</td>
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<tr>
<td>DM3 = D06M</td>
<td>Magnetic Interchange, Double Rod</td>
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#### Stroke (1 or 2 digits)

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<tr>
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</tr>
<tr>
<td>C = 1/8&quot;</td>
<td></td>
</tr>
<tr>
<td>D = 3/16&quot;</td>
<td></td>
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<td>E = 1/4&quot;</td>
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<tr>
<td>F = 5/16&quot;</td>
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</tr>
<tr>
<td>G = 3/8&quot;</td>
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</tr>
<tr>
<td>H = 7/16&quot;</td>
<td></td>
</tr>
<tr>
<td>I = 1/2&quot;</td>
<td></td>
</tr>
<tr>
<td>J = 9/16&quot;</td>
<td></td>
</tr>
<tr>
<td>K = 5/8&quot;</td>
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<tr>
<td>L = 11/16&quot;</td>
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<tr>
<td>M = 3/4&quot;</td>
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<tr>
<td>N = 13/16&quot;</td>
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<tr>
<td>O = 7/8&quot;</td>
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<tr>
<td>P = 15/16&quot;</td>
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#### Fractional Inch Stroke (1 digit)

<table>
<thead>
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<th>Description</th>
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</thead>
<tbody>
<tr>
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<tr>
<td>O = 7/8&quot;</td>
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<tr>
<td>P = 15/16&quot;</td>
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#### Full Inch Stroke (2 digits)

<table>
<thead>
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<th>Description</th>
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<tr>
<td>01 = 1&quot;</td>
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</tr>
<tr>
<td>02 = 2&quot;</td>
<td></td>
</tr>
<tr>
<td>03 = 3&quot;</td>
<td></td>
</tr>
<tr>
<td>32 = 32&quot;</td>
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#### Rod and/or Thread Extension

<table>
<thead>
<tr>
<th>Extension Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>1A = 1A00M</td>
<td>Rod Extension (Additional length)</td>
</tr>
<tr>
<td>2A = 2A01M</td>
<td>Thread Extension (Additional length)</td>
</tr>
<tr>
<td>RT = RT02A01M</td>
<td>Rod and Thread Extension (Additional length)</td>
</tr>
</tbody>
</table>

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Call DuPont for general information (800) 441-0575 for information regarding properties of these materials.

Specifications and prices subject to change without notice or incurring obligation.
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How to Order

Standard F-Series Options

01 = Bumpers
02 = Viton Seals
03 = Magnet
04 = Bumpers, and Magnet
05 = Pivot bushing
06 = Bumpers, and Pivot Bushing
07 = Viton Seals, and Pivot Bushing
08 = Magnet, and Pivot Bushing
09 = Bumpers, Magnet, and Pivot Bushing
20 = Port Rotated w/ No Options
30 = Rod Wiper w/ No Options
31 = Rod Wiper w/ Bumpers
32 = Rod Wiper w/ Viton Seals
33 = Rod Wiper w/ Magnet
34 = Rod Wiper w/ Bumpers, and Magnet
35 = Rod Wiper w/ Pivot bushing
36 = Rod Wiper w/ Bumpers, and Pivot Bushing
37 = Rod Wiper w/ Viton Seals, and Pivot Bushing
38 = Rod Wiper w/ Magnet, and Pivot Bushing
39 = Rod Wiper w/ Bumpers, Magnet, and Pivot Bushing
50 = Side Port w/ No Options
100 = Low Temp Seals
101 = Low Temp Seals and Bumpers
103 = Low Temp Seals and Magnet
104 = Low Temp Seals, Bumpers and Magnet
105 = Low Temp Seals and Pivot Bushing
106 = Low Temp Seals, Bumpers and Pivot Bushing
108 = Low Temp Seals, Magnet and Pivot Bushing
109 = Low Temp Seals, Bumpers, Magnet and Pivot Bushing
200 = Polypak rod seal
300 = Polypak piston seal
400 = Both Polypak rod and piston seal

Cylinder Pricing Notes

Standard Strokes
• Standard Strokes are those shown for each bore and mounting style.
• Cylinder prices shown are for standard listed strokes.
• Models that include a 1/2” stroke increment or less, add 50% of the per inch price (round up to the next $0.01) for the fractional stroke.

Non-Standard Strokes
• Consult factory for price and delivery based on net stroke and quantity.

Rod and/or Thread Extension Pricing Notes
• Consult factory for rod or thread extension on Double Rod styles (D03, D13, DH3, DC3, DM3).
• For rod and/or thread extension increments of 1/2” or less, add 50% of the per inch price (round up to the next $0.01) for the increment of extension.
• For rod and/or thread extension increments of more than 1/2”, use next full inch pricing.

HOW TO ORDER – EXAMPLES

F-0438S01-01A
0438 = 7/16” Bore
S01 = Single Acting, Spring Return, Nose Mount
01 = 1” Stroke
A = .00” Fractional Stroke

F-1500D04-10I-01-1A02A
1500 = 1-1/2” Bore
D04 = Double Acting, Double Nose
10 = 10” Stroke
I = .50” Fractional Stroke
01 = Bumpers
1A02A = Additional 2” Rod Extension

F-1062D02-03E-04
1062 = 1-1/16” Bore
D02 = Double Acting, Rear Pivot Mount
03 = 3” Stroke
E = .25” Fractional Stroke
04 = Bumpers and Magnet

F-2000DG2-20H-03-RT02A01I
2000 = 2” Bore
DG2 = Double Acting, Adjustable Cushion, Rear Pivot Mount
20 = 20” Stroke
H = .4375 Fractional Stroke
03 = Magnet
RT02A01I = Additional 2” Rod Extension and Additional 1-1/2” Thread Extension

Specifications and prices subject to change without notice or incurring obligation
**F-Series**  
**5/16" Bore Cylinders**

### Single Acting  
**Spring Return**

- **Front Nose Mount**
  - Standard Stroke Lengths: 1/2", 1", 1-1/2", 2", 2-1/2", 3", 4"
  - Maximum Stroke: 4"
  - Optional Accessories:
    - F-M117001 Mounting Bracket
    - F-M127001 Rod Clevis
  - Base Weight: .03 lbs.
  - Plus .02 lbs. per inch of stroke

- **Double Nose or Rear Pivot Mount**
  - Standard Stroke Lengths: 1/2", 1", 1-1/2", 2", 2-1/2", 3", 4"
  - Maximum Stroke: 4"
  - Optional Accessories:
    - F-M117001 Mounting Bracket (with front nose mount)
    - F-M117002 Mounting Bracket (with rear nose mount)
    - F-M129001 Pivot Bracket
    - F-M127001 Rod Clevis
  - Base Weight: .04 lbs.
  - Plus .02 lbs. per inch of stroke

### Single Acting  
**Spring Extend**

- **Front Nose Mount**
  - Standard Stroke Lengths: 1/2", 1", 1-1/2", 2", 2-1/2", 3", 4"
  - Maximum Stroke: 4"
  - Optional Accessories:
    - F-M117002 Mounting Bracket
    - F-M127001 Rod Clevis
  - Base Weight: .05 lbs.
  - Plus .03 lbs. per inch of stroke

- **Double Nose or Rear Pivot Mount**
  - Standard Stroke Lengths: 1/2", 1", 1-1/2", 2", 2-1/2", 3", 4"
  - Maximum Stroke: 4"
  - Optional Accessories:
    - F-M117002 Mounting Bracket
    - F-M129001 Pivot Bracket
    - F-M127001 Rod Clevis
  - Base Weight: .05 lbs.
  - Plus .03 lbs. per inch of stroke

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**F-0313S01-00A**  
**MOUNTING NUT INCLUDED**

- **1.125 + (.750 PER .500 STROKE)**
- **.375 Ø ROD**
- **1/4-28 UNF-2A THREAD**
- **#10-32 UNF-2B THREAD**

- **$11.41 Base Price**  
  Add $1.97 per inch of stroke

**F-0313S02-00A**  
**MOUNTING NUT NOT INCLUDED**

- **1.516 + (.750 PER .500 STROKE)**
- **.125 Ø ROD**
- **1/4-28 UNF-2B THREAD**
- **#10-32 UNF-2B THREAD**
- **3/8-24 UNF-2A THREAD**
- **.125 Ø I.D. BUSHING**

- **$14.91 Base Price**  
  Add $1.97 per inch of stroke

**F-0313R01-00A**  
**MOUNTING NUT INCLUDED**

- **1.484 + (1.250 PER .500 STROKE)**
- **.375 Ø ROD**
- **.125 Ø ROD**
- **3/8-24 UNF-2A THREAD**
- **#5-40 UNC-2A THREAD**

- **$17.39 Base Price**  
  Add $1.97 per inch of stroke

**F-0313R02-00A**  
**MOUNTING NUT NOT INCLUDED**

- **1.875 + (1.250 PER .500 STROKE)**
- **.125 Ø ROD**
- **.375 Ø ROD**
- **3/8-24 UNF-2A THREAD (TYP)**
- **#5-40 UNC-2A THREAD**

- **$22.05 Base Price**  
  Add $1.97 per inch of stroke

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Specifications and prices subject to change without notice or incurring obligation  
See pricing notes on Page 5
5/16" Bore Cylinder Features – Options & Accessories

-10° to +165°F
- Piston Rod: Ground and Polished 303 Stainless Steel
- Mounting nuts are standard on all nose mount cylinders
- Approximate Force Exerted: (0.07) x (Air Line Pressure)
- Spring Force: 0.5 lb. Relaxed – 1 lb. Compressed

**OPTION**

<table>
<thead>
<tr>
<th>OPTION</th>
<th>PRICE ADDER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Viton® Seals –</td>
<td>Spring Return (-15°F to 300°F) ............................. $4.01</td>
</tr>
<tr>
<td>Double Acting (-15°F to 350°F) ........................... $10.74</td>
<td></td>
</tr>
<tr>
<td>Spring Extend (-15°F to 300°F) ............................. $7.53</td>
<td></td>
</tr>
<tr>
<td>Ports Rotated – 90° on S02, R02, or D02 (both) ........... No charge</td>
<td></td>
</tr>
<tr>
<td>Rod Wipers ........................................................... NA</td>
<td></td>
</tr>
<tr>
<td>Side Port ..................................................................... No charge</td>
<td></td>
</tr>
<tr>
<td>Low Temperature Seals – Not available ..................... NA</td>
<td></td>
</tr>
<tr>
<td>Rod Extension ........................................................... $0.63/inch</td>
<td></td>
</tr>
<tr>
<td>Rod Thread Extension ............................................... $1.69</td>
<td></td>
</tr>
</tbody>
</table>

**Mounting Bracket**
- F-M117001
  - Price: $1.89

**Pivot Bracket**
- F-M129001
  - Price: $3.19

**Rod Clevis**
- F-M127001
  - Price: $3.19

**Mounting Nut**
- F-M190001
  - Price: $0.28
- F-M190002
  - Price: $0.28
F-0438S01-00A
$11.90 Base Price
Add $2.23 per inch of stroke

F-0438S02-00A
$15.77 Base Price
Add $2.23 per inch of stroke

F-0438R01-00A
$18.18 Base Price
Add $2.23 per inch of stroke

F-0438R02-00A
$22.74 Base Price
Add $2.23 per inch of stroke

Specifications and prices subject to change without notice or incurring obligation.
FABCO-AIR

7/16" Bore Cylinders

F-0438N01-00A
Single Acting Spring Return
Front Nose Mount
Non-Rotating
Maximum Stroke: 6"
Optional Accessories:
- F-M117004 Mounting Bracket
- F-M127002 Rod Clevis
Base Weight: .04 lbs.
Plus .04 lbs. per inch of stroke

$14.98 Base Price
Add $2.23 per inch of stroke

F-0438N02-00A
Single Acting Spring Return
Rear Pivot Mount
Non-Rotating
Maximum Stroke: 6"
Optional Accessories:
- F-M117004 Front Mounting Bracket
- F-M117003 Rear Mounting Bracket
- F-M029002 Pivot Bracket
- F-M127002 Rod Clevis
Base Weight: .04 lbs.
Plus .04 lbs. per inch of stroke

$18.67 Base Price
Add $2.23 per inch of stroke

F-0438D01-00A
Double Acting
Front Nose Mount
Maximum Stroke: 12"
Optional Accessories:
- F-M117003 Mounting Bracket
- F-M127002 Rod Clevis
Base Weight: .07 lbs.
Plus .04 lbs. per inch of stroke

$16.64 Base Price
Add $1.60 per inch of stroke

F-0438D02-00A
Double Acting
Rear Pivot Mount
Maximum Stroke: 12"
Optional Accessories:
- F-M117003 Mounting Bracket
- F-M029002 Pivot Bracket
- F-M127002 Rod Clevis
Base Weight: .08 lbs.
Plus .02 lbs. per inch of stroke

$20.22 Base Price
Add $1.60 per inch of stroke

Specifications and prices subject to change without notice or incurring obligation
See pricing notes on Page 5
F-Series
7/16" Bore Cylinders

Cylinder Features – Options & Accessories

• –10° to +165°F
• Piston Rod:
  Round – Ground and Polished 303 Stainless Steel
  Hex – Ground 303 Stainless Steel
• Mounting nuts standard on all nose mount cylinders
• Approximate Force Exerted:
  (0.15) x (Air Line PSI)
• Spring Force:
  1 lb. Relaxed – 2 lb. Compressed

OPTION

PRICE ADDER

• Viton® Seals –
  Spring Return (-15° F to 300° F).................................$4.20
  D01 – Double Acting (-15° F to 350° F)......................$10.96
  D02 – Double Acting (-15° F to 350° F)......................$10.84
  Spring Extend (-15° F to 300° F)..............................$7.71
• Ports Rotated – 90° on S02, R02, N02, or D02 (both).......No charge
• Rod Wiper.................................................................NA
• Side Port.................................................................No charge
• Low Temperature Seals – Applications to -40° F.................$7.18
• Rod Extension.........................................................$0.74/inch
• Rod Thread Extension..............................................$1.79/inch

Mounting Bracket
F-M117003
Price: $2.04

Mounting Bracket
F-M117004
Price: $2.04

Mounting Nut
F-M190002
Price: $0.28

Mounting Nut
F-M190003
Price: $0.28

Rod Clevis
F-M127002
Price: $3.24

Pivot Bracket
F-M029002
Price: $3.24
Specifications and prices subject to change without notice or incurring obligation

See pricing notes on Page 5
### Specifications and Prices

Specifications and prices subject to change without notice or incurring obligation.

---

#### F-Series

**9/16" Bore Cylinders**

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Threads</th>
<th>Bore Size</th>
<th>Stroke Lengths</th>
<th>Weight</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>F-0563N01-00A</td>
<td>Single Acting - Spring Return</td>
<td>#10-32 UNF-2B, 7/16-20 UNF-2A</td>
<td>.188 Ø</td>
<td>1.781 + (1.625 per 1.00 stroke)</td>
<td>.9 lbs</td>
<td>$15.77 Base Price + $2.23 per inch of stroke</td>
</tr>
<tr>
<td>F-0563N02-00A</td>
<td>Single Acting - Spring Return</td>
<td>#10-32 UNF-2B, 7/16-20 UNF-2A</td>
<td>.188 Ø</td>
<td>2.063 + (1.625 per 1.00 stroke)</td>
<td>.9 lbs</td>
<td>$19.79 Base Price + $2.23 per inch of stroke</td>
</tr>
<tr>
<td>F-0563D01-00A</td>
<td>Double Acting</td>
<td>#10-32 UNF-2B</td>
<td>.188 Ø</td>
<td>2.281 + STROKE</td>
<td>.9 lbs</td>
<td>$17.02 Base Price + $1.60 per inch of stroke</td>
</tr>
<tr>
<td>F-0563D02-00A</td>
<td>Double Acting</td>
<td>#10-32 UNF-2B</td>
<td>.188 Ø</td>
<td>2.563 + STROKE</td>
<td>.9 lbs</td>
<td>$20.77 Base Price - D02 + $1.60 per inch of stroke</td>
</tr>
</tbody>
</table>

---

**Optional Accessories**

- **Bumper Option** (Available Cap End Only): Add .062 to OAL + $2.84
- **Magnetic Piston**: Add .531 to OAL + $23.66
- **Both Bumper & Magnetic Piston**: Add .713 to OAL + $24.04

---

**Base Price**

- $15.77 for F-0563N01-00A
- $19.79 for F-0563N02-00A
- $17.02 for F-0563D01-00A
- $20.77 for F-0563D02-00A

**Includes mounting nuts**

- $2.84 for Bumper Option (F-0563N01-00A)
- $23.66 for Magnetic Piston (F-0563N02-00A)
- $24.04 for Both Bumper & Magnetic Piston (F-0563N02-00A)

---

**See pricing notes on Page 5**
9/16" Bore Cylinder Specifications – Options & Accessories

-10° to +165°F
- Piston Rod: Hex - Ground 303 Stainless Steel
  Round - Ground and Polished 303 Stainless Steel
- Mounting nuts are standard on all nose mount cylinders
- Bumpers are OPTIONAL on all 9/16" bore cylinders (except in combination with Viton® option)
- Approximate Force Exerted: (0.25) x (Air Line Pressure)
- Spring Force: 2 lb. Relaxed – 4 lb. Compressed
- Magnetic piston optional on all 9/16" bore cylinders (except in combination with Viton® option).

**OPTION**

<table>
<thead>
<tr>
<th>PRICE ADDER</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Viton® Seals – Not available with bumpers or magnetic piston</td>
</tr>
<tr>
<td>Spring Return (-15° F to 300° F) .............................................. $4.20</td>
</tr>
<tr>
<td>N01 &amp; N02 Spring Return (-15° F to 300° F).......................... $10.96</td>
</tr>
<tr>
<td>Double Acting (-15° F to 350° F)............................................. $10.96</td>
</tr>
<tr>
<td>Spring Extend (-15° F to 300° F)........................................... $7.71</td>
</tr>
<tr>
<td>Double Rod (-15° F to 350° F)................................................ $15.47</td>
</tr>
<tr>
<td>- Ports Rotated – 90° on S02, R02, N02, or D02 (both)........... NA</td>
</tr>
<tr>
<td>- Side Port – Cap end port on S01, N01, or D01........................ NA</td>
</tr>
<tr>
<td>Add .03 to OAL</td>
</tr>
<tr>
<td>- Low Temperature Seals – Applications to -40° F................ $10.88</td>
</tr>
<tr>
<td>- Rod Extension............................................................................ $0.74/inch</td>
</tr>
<tr>
<td>- Rod Thread Extension............................................................ $1.79/inch</td>
</tr>
</tbody>
</table>

**DOUBLE ACTING**

- Maximum Stroke: 12"

**DOUBLE ROD**

- Maximum Stroke: 12"
F-Series
3/4" Bore Cylinders

Single Acting Spring Return
Front Nose Mount
Maximum Stroke: 6"
Optional Accessories:
• F-M117006 Mounting Bracket
• F-M127003 Rod Clevis
Base Weight:.10 lbs.
Plus .08 lbs. per inch of stroke

Specifications and prices subject to change without notice or incurring obligation

See pricing notes on Page 5
Specifications and prices subject to change without notice or incurring obligation

See pricing notes on Page 5

1/8" NPTF

.969

.500

.094 (TYP)

.500 (TYP)

.469 (TYP)

.250 Ø ROD

1/4-28 UNF-2A THREAD

5/8-18 UNF-2A THREAD

.875 Ø

.624 Ø

.281

.375

.813 Ø

.188

.500

1/16" NPT

.094

.500

.469

.250 Ø ROD (TYP)

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5/8-18 UNF-2A THREAD

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.094 (TYP)

.500 (TYP)

.469 (TYP)

.250 Ø ROD

1/4-28 UNF-2A THREAD

5/8-18 UNF-2A THREAD

.875 Ø

.624 Ø

.281

.375

.813 Ø

.188

.500
F-Series
3/4" Bore Cylinders

Double Acting
Front Block Mount
Standard Stroke Lengths:
1/2", 1", 1-1/2", 2", 2-1/2", 3", 4", 5", 6"
Maximum Stroke: 12"
Optional Accessories:
• F-M127003 Rod Clevis
Base Weight: .22 lbs.
Plus .03 lbs. per inch of stroke

F-0750D05-00A
$27.55 Base Price
Add $1.60 per inch of stroke

Double Acting
Trunnion Mount
Standard Stroke Lengths:
1/2", 1", 1-1/2", 2", 2-1/2", 3", 4", 5", 6"
Maximum Stroke: 12"
Optional Accessories:
• F-M029006 Trunnion Bracket
• F-M127003 Rod Clevis
Base Weight: .29 lbs.
Plus .03 lbs. per inch of stroke

F-0750D06-00A
$35.74 Base Price
Add $1.60 per inch of stroke

Double Acting
Front Nose Mount
with Adjustable Cushions
Standard Stroke Lengths:
1/2", 1", 1-1/2", 2", 2-1/2", 3", 4", 5", 6"
Maximum Stroke: 12"
Optional Accessories:
• F-M117005 Mounting Bracket
• F-M127003 Rod Clevis
Base Weight: .24 lbs.
Plus .03 lbs. per inch of stroke

F-0750DG1-00A
$35.07 Base Price
Add $1.60 per inch of stroke
Viton® seals - Consult Factory

Double Acting
Rear Pivot Mount
with Adjustable Cushions
Standard Stroke Lengths:
1/2", 1", 1-1/2", 2", 2-1/2", 3", 4", 5", 6"
Maximum Stroke: 12"
Optional Accessories:
• F-M117005 Mounting Bracket
• F-M029003 Pivot Bracket
• F-M127003 Rod Clevis
Base Weight: .29 lbs.
Plus .03 lbs. per inch of stroke

F-0750DG2-00A or F-0750DG4-00A
$41.97 Base Price – DG2
$41.97 Base Price – DG4 includes mounting nuts, no pin
Add $1.69 per inch of stroke
Viton® seals - Consult Factory

Specifications and prices subject to change without notice or incurring obligation
See pricing notes on Page 5
1-11-10
Cylinder Specifications – Options & Accessories

-10° to +165°F
- Piston Rod:
  Round - Ground, Polished, 303 Stainless Steel
  Hex - Ground 303 Stainless Steel
- Mounting nuts are standard on all nose mount cylinders
- Bronze Rod Guide Bushing is Standard
- Approximate Force Exerted: (0.4) x (Air Line Pressure)
- Spring Force: 3 lb. Relaxed – 6 lb. Compressed
- Magnetic piston optional on all 3/4" bore cylinders (except in combination with Viton® option).

F-Series

### 3/4" Bore Cylinders

#### OPTION
- Viton® Seals – Not available with bumpers or magnetic piston
  Spring Return (–15° F to 300° F) ..................................... $4.20
  Double Acting (–15° F to 350° F) .................................. $10.96
  Spring Extend (–15° F to 300° F) .................................. $7.71
  Double Rod (–15° F to 350° F) ..................................... $15.41
- Ports Rotated – 90° on S02, R02, N02, D02 (both), or D04 (both) ....... No charge
- Rod Wiper – Not available in spring return models .................. $7.10
- Side Port – Cap end port on S01, N01, D01, D05, or D06 (Add .44 to OAL) ...... No Charge
- Low Temperature Seals – Applications to –40° F ..................... $4.83
- Rod Extension ....................................................... $0.74/inch
- Rod Thread Extension ............................................. $1.79/inch

#### PRICE ADDER

- JAM NUT
  Price: $0.41

- Pivot Bracket
  Price: $3.73

- Trunnion Bracket
  Price: $14.18

- Mounting Bracket
  Price: $2.70

- Pivot Bracket
  Price: $5.89

- Rod Clevis
  Price: $3.73

- Mounting Nut
  Price: $0.41

- Mounting Nut
  Price: $0.41

Specifications and prices subject to change without notice or incurring obligation

See pricing notes on Page 5
**F-Series**

**7/8" Bore Cylinders**

### Single Acting Spring Return

**Front Nose Mount**
- Standard Stroke Lengths: 1/2", 1", 1-1/2", 2", 2-1/2", 3", 4"
- Maximum Stroke: 6"

**Optional Accessories:**
- F-M117005 Mounting Bracket
- F-M127003 Rod Clevis
- Base Weight: 17 lbs.
- Plus .09 lbs. per inch of stroke

**F-0875S01-00A**
- MOUNTING NUT INCLUDED
- 1.844 + (1.562 PER 1.00 STROKE)
- 0.94
- .188
- 624 Ø ROD
- 5/8-18 UNF-2A THREAD
- 1/4-28 UNF-2A THREAD
- 1/8" NPTF

**Base Price:** $13.74

**Add $2.46 per inch of stroke**

**Options:**
- BUMPER OPTION (AVAILABLE CAP END ONLY) - NO CHANGE IN OAL...
  - $2.72
- MAGNETIC PISTON OPTION - ADD .531 TO OAL...
  - $23.48
- BOTH BUMPER & MAGNETIC PISTON OPTIONS - ADD .733 TO OAL...
  - $23.48

### Single Acting Spring Return

**Rear Pivot Mount**
- Standard Stroke Lengths: 1/2", 1", 1-1/2", 2", 2-1/2", 3", 4"
- Maximum Stroke: 6"

**Optional Accessories:**
- F-M117005 Mounting Bracket
- F-M127003 Rod Clevis
- Base Weight: 17 lbs.
- Plus .09 lbs. per inch of stroke

**F-0875S02-00A**
- MOUNTING NUT NOT INCLUDED
- 2.469 + (1.562 PER 1.00 STROKE)
- 0.94
- 1/8" NPTF
- 1/8" NPTF
- .624 Ø (TYP)
- 5/8-18 UNF-2A THREAD
- 1/4-28 UNF-2A THREAD
- .250 Ø ROD

**Base Price:** $17.49

**Add $2.46 per inch of stroke**

**Options:**
- BUMPER OPTION (AVAILABLE CAP END ONLY) - NO CHANGE IN OAL...
  - $2.72
- MAGNETIC PISTON OPTION - ADD .531 TO OAL...
  - $23.85
- BOTH BUMPER & MAGNETIC PISTON OPTIONS - ADD .733 TO OAL...
  - $23.85

### Single Acting Spring Extend

**Front Nose Mount**
- Standard Stroke Lengths: 1/2", 1", 1-1/2", 2", 2-1/2", 3", 4"
- Maximum Stroke: 6"

**Optional Accessories:**
- F-M117005 Mounting Bracket
- F-M127003 Rod Clevis
- Base Weight: 20 lbs.
- Plus .09 lbs. per inch of stroke

**F-0875R01-00A**
- MOUNTING NUT INCLUDED
- 2.313 + (2.562 PER 1.00 STROKE)
- 0.94
- 1/8" NPTF
- 1/8" NPTF
- .624 Ø (TYP)
- 5/8-18 UNF-2A THREAD
- 1/4-28 UNF-2A THREAD
- .250 Ø ROD

**Base Price:** $20.22

**Add $2.46 per inch of stroke**

**Options:**
- BUMPER OPTION (AVAILABLE ROD END ONLY) - NO CHANGE IN OAL...
  - $2.72
- MAGNETIC PISTON OPTION - ADD .531 TO OAL...
  - $24.09
- BOTH BUMPER & MAGNETIC PISTON OPTIONS - ADD .733 TO OAL...
  - $24.09

### Single Acting Spring Extend

**Rear Pivot Mount**
- Standard Stroke Lengths: 1/2", 1", 1-1/2", 2", 2-1/2", 3", 4"
- Maximum Stroke: 6"

**Optional Accessories:**
- F-M117005 Mounting Bracket
- F-M029003 Pivot Bracket
- F-M127003 Rod Clevis
- Base Weight: 20 lbs.
- Plus .09 lbs. per inch of stroke

**F-0875R02-00A**
- MOUNTING NUT NOT INCLUDED
- 2.625 + (2.562 PER 1.00 STROKE)
- 0.94
- 1/8" NPTF
- 1/8" NPTF
- .624 Ø (TYP)
- 5/8-18 UNF-2A THREAD
- 1/4-28 UNF-2A THREAD
- .250 Ø ROD

**Base Price:** $23.97

**Add $2.46 per inch of stroke**

**Options:**
- BUMPER OPTION (AVAILABLE ROD END ONLY) - NO CHANGE IN OAL...
  - $2.72
- MAGNETIC PISTON OPTION - ADD .531 TO OAL...
  - $24.46
- BOTH BUMPER & MAGNETIC PISTON OPTIONS - ADD .733 TO OAL...
  - $24.46

Specifications and prices subject to change without notice or incurring obligation.
Specifications and prices subject to change without notice or incurring obligation

See pricing notes on Page 5
F-Series

7/8" Bore Cylinders

Double Acting
Double Nose or Rear Pivot Mount

Standard Stroke Lengths:
1/2", 1", 1-1/2", 2", 2-1/2", 3", 4", 5", 6"

Maximum Stroke: 32°

Optional Accessories:
• F-M117005 Mounting Bracket
• F-M129003 Pivot Bracket
• F-M127003 Rod Clevis

Base Weight: .32 lbs.
Plus .03 lbs. per inch of stroke

7/8" Bore Cylinder Specifications – Options & Accessories

• –10° to +165°F
• Piston Rod:
  Round - Ground and Polished, 303 Stainless Steel
 Hex - Ground 303 Stainless Steel
• Mounting nuts are standard on all nose mount cylinders
• Bronze Rod Guide Bushing is Standard
• Approximate Force Exerted: (0.6) x (Air Line Pressure)
• Spring Force:
  3 lb. Relaxed – 6 lb. Compressed
• Magnetic piston optional on all 7/8" bore cylinders
  (except in combination with Viton® option).

Nose Mounting Bracket
F-M117005
Price: $2.70

Pivot Mounting Bracket
F-M029003
Price: $3.24

Pivot Bracket
F-M129003
Price: $5.89

Mounting Nut
F-M190005
Price: $0.41

MOUNTING NUTS INCLUDED

MOUNTING NUTS INCLUDED

Base Weight: .32 lbs.
Plus .03 lbs. per inch of stroke

Add $1.60 per inch of stroke

$25.37 Base Price

OPTIONS

<table>
<thead>
<tr>
<th>OPTION</th>
<th>PRICE ADDER</th>
</tr>
</thead>
<tbody>
<tr>
<td>S01 – Spring Return (–15° F to 300° F)</td>
<td>$4.75</td>
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<tr>
<td>S02 – Spring Return (–15° F to 300° F)</td>
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<tr>
<td>R01 – Spring Extend (–15° F to 300° F)</td>
<td>$8.14</td>
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<tr>
<td>R02 – Spring Extend (–15° F to 300° F)</td>
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<tr>
<td>N01 – Spring Return (–15° F to 300° F)</td>
<td>$11.16</td>
</tr>
<tr>
<td>N02 – Spring Return (–15° F to 300° F)</td>
<td>$12.14</td>
</tr>
<tr>
<td>D01 – Double Acting (–15° F to 350° F)</td>
<td>$11.16</td>
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<tr>
<td>D02 – Double Acting (–15° F to 350° F)</td>
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<tr>
<td>D04 – Double Acting (–15° F to 350° F)</td>
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<tr>
<td>Spring Extend (–15° F to 300° F)</td>
<td>$8.14</td>
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</tbody>
</table>

Viton® Seals – Not available with bumpers or magnetic piston

BUMPERS

Bumper Option - No change in OAL
.................................................................$4.01

Magnetic Piston Option - No change in OAL
.................................................................$6.09

Both Bumper & Magnetic Piston Options - Add .125 to OAL

PORTS

Ports Rotated – 90°
on S02, R02, N02, D02 (both), or D04 (both) ..........No charge

Rod Wiper – Not available in spring return models.............$7.10

Side Port – Cap end port on S01, N01, or D01 .................No charge
Add .28 to OAL

Low Temperature Seals – Applications to –40° F ..............$4.83

Rod Extension.................................................$0.74/inch

Rod Thread Extension........................................$1.79/inch

Specifications and prices subject to change without notice or incurring obligation

See pricing notes on Page 5

4-20-16
Specifications and prices subject to change without notice or incurring obligation

See pricing notes on Page 5
F-Series
1-1/16" Bore Cylinders

Single Acting  Spring Return
Front Nose Mount Non-Rotating
Standard Stroke Lengths:
1/2", 1", 1-1/2", 2", 2-1/2", 3", 4"
Maximum Stroke: 6"
Optional Accessories:
• F-M117005 Mounting Bracket
• F-M127004 Rod Clevis
Base Weight: .25 lbs.
Plus .12 lbs. per inch of stroke

Single Acting  Spring Return
Rear Pivot Mount Non-Rotating
Standard Stroke Lengths:
1/2", 1", 1-1/2", 2", 2-1/2", 3", 4"
Maximum Stroke: 6"
Optional Accessories:
• F-M117005 Mounting Bracket
• F-M029003 Pivot Bracket
• F-M127004 Rod Clevis
Base Weight: .25 lbs.
Plus .12 lbs. per inch of stroke

Double Acting
Front Nose Mount
Standard Stroke Lengths:
1/2", 1", 1-1/2", 2", 2-1/2", 3", 4", 5", 6"
Maximum Stroke: 12"
Optional Accessories:
• F-M117005 Mounting Bracket
• F-M127004 Rod Clevis
Base Weight: .33 lbs.
Plus .05 lbs. per inch of stroke

Double Acting
Rear Pivot Mount
Standard Stroke Lengths:
Maximum Stroke: 32"
Optional Accessories:
• F-M117005 Mounting Bracket
• F-M029003 Pivot Bracket
• F-M127004 Rod Clevis
Base Weight: .33 lbs.
Plus .05 lbs. per inch of stroke

Double Acting
Double Nose or Rear Pivot Mount
Standard Stroke Lengths:
Maximum Stroke: 32"
Optional Accessories:
• F-M117005 Mounting Bracket
• F-M127004 Rod Clevis
Base Weight: .33 lbs.
Plus .05 lbs. per inch of stroke

Specifications and prices subject to change without notice or incurring obligation
See pricing notes on Page 5

F-1062N01-00A

| $17.76 Base Price |
| Add $2.78 per inch of stroke |

F-1062N02-00A

| $21.82 Base Price |
| Add $2.78 per inch of stroke |

F-1062D01-00A

| $19.90 Base Price |
| Add $1.60 per inch of stroke |

F-1062D02-00A

| $23.90 Base Price |
| Add $1.60 per inch of stroke |

F-1062D04-00A

| $26.18 Base Price |
| Add $1.60 per inch of stroke |
Specifications and prices subject to change without notice or incurring obligation.

See pricing notes on Page 5
### 1-1/16" Bore Cylinders

#### Double Acting

**Front Nose Mount with Adjustable Cushions**

- Maximum Stroke: 12"
- Optional Accessories:
  - F-M117005 Mounting Bracket
  - F-M127004 Rod Clevis

**Specifications:**
- Mounting nuts are standard on all nose mount cylinders.
- Spring force: 3 lbs. relaxed, 6 lbs. compressed.
- Approximate force exerted = (0.9) x (air line pressure).
- Bumpers are optional on all 1-1/16" bore cylinders (except in combination with Viton® option).
- Magnetic piston option on all 1-1/16" bore cylinders (except in combination with Viton® option).

#### Double Acting

**Rear Pivot Mount with Adjustable Cushions**

- Maximum Stroke: 32"
- Optional Accessories:
  - F-M117005 Mounting Bracket
  - F-M127004 Rod Clevis

**Specifications:**
- Mounting nuts are standard on all nose mount cylinders.
- Bumpers are optional on all 1-1/16" bore cylinders.
- Magnetic piston option on all 1-1/16" bore cylinders.
- Low Temperature Seals (Applications to –40° F) Add .25 to OAL.
- Rod Wiper – Not available in spring return.
- Ports Rotated – 90° on S02, R02, N02, D02 (both), or D04 (both)..............No charge
- Rod Extension......................$0.74/inch
- Rod Thread Extension......................$1.79/inch

---

### 1-1/16" Bore Cylinder Specifications – Options & Accessories

<table>
<thead>
<tr>
<th>Option</th>
<th>Price Adder</th>
</tr>
</thead>
<tbody>
<tr>
<td>Viton® Seals: Not available with bumpers or magnetic piston</td>
<td>$5.36</td>
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<tr>
<td>Spring Return (–15° F to 300° F)</td>
<td>$5.36</td>
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<tr>
<td>N01 &amp; N02 Spring Return (–15° F to 300° F)</td>
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<tr>
<td>Double Acting (–15°F to 350°F)</td>
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<tr>
<td>D05 – Double Acting (–15°F to 350°F)</td>
<td>$12.81</td>
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<tr>
<td>Spring Extend (–15° F to 300° F)</td>
<td>$8.63</td>
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<tr>
<td>Double Rod (–15°F to 350°F)</td>
<td>$17.76</td>
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<tr>
<td>Ports Rotated – 90°</td>
<td>$7.10</td>
</tr>
<tr>
<td>Rod Wiper – Not available in spring return</td>
<td>$7.10</td>
</tr>
<tr>
<td>Rod Extension</td>
<td>$0.74/inch</td>
</tr>
<tr>
<td>Rod Thread Extension</td>
<td>$1.79/inch</td>
</tr>
</tbody>
</table>

---

**Pivot Bracket**

- F-M117005 - Price: $2.70
- F-M127004 - Price: $3.73
- F-M129003 - Price: $5.89
- F-M029006 - Price: $3.24
- F-M127004 Rod Clevis - Price: $2.70

---

**Mounting Bracket**

- F-M117005 - Price: $2.70
- F-M117005 - Price: $2.70
- F-M127004 Rod Clevis - Price: $2.70
- F-M129003 - Price: $5.89

---

**See pricing notes on Page 5**
Specifications and prices subject to change without notice or incurring obligation

**F-Series**

**1-1/4" Bore Cylinders**

**Single Acting Spring Return**

**Front Nose Mount**

- Standard Stroke Lengths: 1/2", 1", 1-1/2", 2", 2-1/2", 3", 4"
- Maximum Stroke: 6"

Optional Accessories:
- F-M117007 Mounting Bracket
- F-M127005 Rod Clevis

Base Weight: .39 lbs.
Plus .21 lbs. per inch of stroke

**Single Acting Spring Return**

**Double Nose or Rear Pivot Mount**

- Standard Stroke Lengths: 1/2", 1", 1-1/2", 2", 2-1/2", 3", 4"
- Maximum Stroke: 6"

Optional Accessories:
- F-M117007 Mounting Bracket
- F-M229003 Pivot Bracket
- F-M127005 Rod Clevis

Base Weight: .53 lbs.
Plus .21 lbs. per inch of stroke

**Single Acting Spring Extend**

**Front Nose Mount Non-Rotating**

- Standard Stroke Lengths: 1/2", 1", 1-1/2", 2", 2-1/2", 3", 4"
- Maximum Stroke: 6"

Optional Accessories:
- F-M117007 Mounting Bracket
- F-M127005 Rod Clevis

Base Weight: .57 lbs.
Plus .21 lbs. per inch of stroke

**Single Acting Spring Extend**

**Double Nose or Rear Pivot Mount**

- Standard Stroke Lengths: 1/2", 1", 1-1/2", 2", 2-1/2", 3", 4"
- Maximum Stroke: 6"

Optional Accessories:
- F-M117007 Mounting Bracket
- F-M229003 Pivot Bracket
- F-M127005 Rod Clevis

Base Weight: .57 lbs.
Plus .21 lbs. per inch of stroke
F-1250N02-00A

- **Specifications and prices subject to change without notice or incurring obligation**
- **See pricing notes on Page 5**

**Single Acting** Spring Return Rear Pivot Mount
**Non-Rotating**
Maximum Stroke: 6"
Optional Accessories:
- F-M117007 Mounting Bracket
- F-M229003 Pivot Bracket
- F-M127005 Rod Clevis

Base Weight: .41 lbs.
Plus .20 lbs. per inch of stroke

$32.17 Base Price
Add $3.64 per inch of stroke

**Double Acting**
Front Nose Mount
Maximum Stroke: 12"
Optional Accessories:
- F-M117007 Mounting Bracket
- F-M127005 Rod Clevis

Base Weight: .58 lbs.
Plus .08 lbs. per inch of stroke

$30.68 Base Price
Add $2.11 per inch of stroke

**Double Acting**
Double Nose or Rear Pivot Mount
Maximum Stroke: 32"
Optional Accessories:
- F-M117007 Mounting Bracket
- F-M229003 Pivot Bracket
- F-M127005 Rod Clevis

Base Weight: .71 lbs.
Plus .08 lbs. per inch of stroke

$36.60 Base Price – D02
$36.10 Base Price – D04 includes mounting nuts
Add $2.11 per inch of stroke

**Double Acting**
Double Rod
Maximum Stroke: 12"
Optional Accessories:
- F-M117007 Mounting Bracket
- F-M127005 Rod Clevis

Base Weight: .98 lbs.
Plus .12 lbs. per inch of stroke

$52.80 Base Price
Add $3.14 per inch of stroke

Specifications and prices subject to change without notice or incurring obligation

See pricing notes on Page 5
1-1/4" Bore Cylinder Specifications – Options & Accessories

-10° to +165°F
- Piston Rod:
  Round – Ground and Polished, 303 Stainless Steel.
  Hex – Ground 303 Stainless Steel.
- Bronze rod guide bushing is standard.
- Approximate force exerted = (1.2) x (air line pressure).
- Spring force: 7.5 lbs. relaxed, 15 lbs. compressed.
- Mounting nuts are standard on all nose mount cylinders.
- Bumpers are optional on all 1-1/4" bore cylinders (except in combination with Viton® option).
- Magnetic piston optional on all 1-1/4" bore cylinders (except in combination with Viton® option).

**F-1250DH3-00A**

**Option** | **Price Adder**
---|---
- Viton® Seals – Not available with Bumpers or Magnetic Piston
  S01 – Spring Return (–15°F to 300°F) .............................................. $5.49
  S02 – Spring Return (–15°F to 300°F) .............................................. $5.44
  N01 & N02 – Spring Return (–15°F to 300°F) ................................ $13.37
  Double Acting (–15°F to 350°F) ......................................................... $13.37
  R01 – Spring Extend (–15°F to 300°F) ................................................... $8.70
  R02 – Spring Extend (–15°F to 300°F) ................................................... $8.63
  Double Rod (–15°F to 350°F) ................................................................. $19.84
- Ports Rotated – 90° on S02, R02, N02, or D02 (both) ......................... No charge
- Rod Wiper – Not available in spring return models ............................. $7.10
- Side Port - Cap end port on S01, N01, or D01 Add .31 to OAL ............... No charge
- Low Temperature Seals – Applications to –40° F ................................ $7.18
- Rod Extension - ................................................................. $0.99/inch
- Rod Thread Extension ............................................................... $2.03/inch
**F-Series**

**1-1/2” Bore Cylinders**

---

**Single Acting Spring Return**

**Front Nose Mount**


Maximum Stroke: 6”

Optional Accessories:
- F-M117007 Mounting Bracket
- F-M029904 Pivot Bracket
- F-M127005 Rod Clevis

Base Weight: .44 lbs.

Plus .22 lbs. per inch of stroke

---

**Single Acting Spring Return**

**Rear Pivot Mount**


Maximum Stroke: 6”

Optional Accessories:
- F-M117007 Mounting Bracket
- F-M029904 Pivot Bracket
- F-M127005 Rod Clevis

Base Weight: .45 lbs.

Plus .22 lbs. per inch of stroke

---

**Single Acting Spring Extend**

**Front Nose Mount**


Maximum Stroke: 6”

Optional Accessories:
- F-M117007 Mounting Bracket
- F-M029904 Pivot Bracket
- F-M127005 Rod Clevis

Base Weight: .44 lbs.

Plus .22 lbs. per inch of stroke

---

**Single Acting Spring Extend**

**Rear Pivot Mount**


Maximum Stroke: 6”

Optional Accessories:
- F-M117007 Mounting Bracket
- F-M029904 Pivot Bracket
- F-M127005 Rod Clevis

Base Weight: .45 lbs.

Plus .22 lbs. per inch of stroke

---

**Single Acting Spring Return**

**Non-Rotating**

**Front Nose Mount**


Maximum Stroke: 6”

Optional Accessories:
- F-M117007 Mounting Bracket
- F-M127005 Rod Clevis

Base Weight: .45 lbs.

Plus .22 lbs. per inch of stroke

---

Specifications and prices subject to change without notice or incurring obligation

See pricing notes on Page 5
### F-Series

#### 1-1/2" Bore Cylinders

**Specifications and Prices Subject to Change Without Notice or Incurring Obligation**

**See Pricing Notes on Page 5**

---

**Single Acting**

**Spring Return**

Rear Pivot Mount Non-Rotating

Standard Stroke Lengths:

- 1/2", 1", 1-1/2", 2", 2-1/2", 3", 4"

Maximum Stroke: 6"

Optional Accessories:

- F-M117007 Mounting Bracket
- F-M029004 Pivot Bracket
- F-M127005 Rod Clevis

Base Weight: .46 lbs.

Plus .22 lbs. per inch of stroke

---

**Double Acting**

Front Nose Mount

Standard Stroke Lengths:


Maximum Stroke: 12"

Optional Accessories:

- F-M117007 Mounting Bracket
- F-M127005 Rod Clevis

Base Weight: .69 lbs.

Plus .08 lbs. per inch of stroke

---

**Double Acting**

Rear Pivot Mount Non-Rotating

Standard Stroke Lengths:


Maximum Stroke: 32"

Optional Accessories:

- F-M117007 Mounting Bracket
- F-M127005 Rod Clevis

Base Weight: .73 lbs.

Plus .08 lbs. per inch of stroke

---

**Double Acting**

Double Nose Mount

Standard Stroke Lengths:


Maximum Stroke: 32"

Optional Accessories:

- F-M117007 Mounting Bracket
- F-M127005 Rod Clevis

Base Weight: .82 lbs.

Plus .08 lbs. per inch of stroke

---

**Double Acting**

Double Rod

Standard Stroke Lengths:

- 1/2", 1", 1-1/2", 2", 2-1/2", 3", 4", 5", 6"

Maximum Stroke: 12"

Optional Accessories:

- F-M117007 Mounting Bracket
- F-M127005 Rod Clevis

Base Weight: 1.17 lbs.

Plus .13 lbs. per inch of stroke

---

**Bumper Available Cap End Only - No Change in OAL**

- Bumper Option: Add .125 to OAL
- Magnetic Piston Option: No Change in OAL
- Both Bumper & Magnetic Piston Options: Add .250 to OAL

**Magnetic Piston Option - Add .438 to OAL**

- Add $2.46 per inch of stroke

**Both Bumper & Magnetic Piston Options - Add .765 to OAL**

- Add $4.07 per inch of stroke
**F-Serie**

*1-1/2" Bore Cylinders*

**Double Acting**

Hollow Double Rod

Standard Stroke Lengths: 
1/2", 1", 1-1/2", 2", 2-1/2", 3", 4", 5", 6"

Maximum Stroke: 12"

Optional Accessories:
- F-M117007 Mounting Bracket
- Base Weight: 1.16 lbs.
- Plus .13 lbs. per inch of stroke

---

**Double Acting**

Front Block Mount

Standard Stroke Lengths: 
1/2", 1", 1-1/2", 2", 2-1/2", 3", 4", 5", 6"

Maximum Stroke: 12"

Optional Accessories:
- F-M127005 Rod Clevis
- Base Weight: .99 lbs.
- Plus .08 lbs. per inch of stroke

---

**Double Acting**

Trunnion Mount

Standard Stroke Lengths: 
1/2", 1", 1-1/2", 2", 2-1/2", 3", 4", 5", 6"

Maximum Stroke: 12"

Optional Accessories:
- F-M029006 Trunnion Bracket
- F-M127005 Rod Clevis
- Base Weight: 1.06 lbs.
- Plus .08 lbs. per inch of stroke

---

**Double Acting Front Nose Mount**

with Adjustable Cushions

Standard Stroke Lengths: 

Maximum Stroke: 12"

Optional Accessories:
- F-M117007 Mounting Bracket
- F-M127005 Rod Clevis
- Base Weight: .76 lbs.
- Plus .09 lbs. per inch of stroke

---

Specifications and prices subject to change without notice or incurring obligation

See pricing notes on Page 5

2-23-10
# 1-1/2" Bore Cylinder Specifications – Options & Accessories

- **-10° to +165°F**
- **Piston Rod: Hex – Ground 303 Stainless Steel. Round – Ground and Polished, 303 Stainless Steel.**
- **Bronze rod guide bushing is standard.**
- **Approximate force exerted = (1.7) x (air line pressure).**
- **Spring force: 7 lbs. relaxed, 14 lbs. compressed.**
- **Mounting nuts are standard on all nose mount cylinders.**
- **Bumpers are optional on all 1-1/2" bore cylinders (except in combination with Viton® option).**
- **Magnetic piston optional on all 1-1/2" bore cylinders (except in combination with Viton® option).**

## 1-1/2" Bore Cylinder Specifications

<table>
<thead>
<tr>
<th>OPTION</th>
<th>PRICE ADDER</th>
</tr>
</thead>
</table>
| **MAGNETIC PISTON** | **OPTION PRICE ADDER**

<table>
<thead>
<tr>
<th>OPTION</th>
<th>PRICE ADDER</th>
</tr>
</thead>
</table>
| **Viton® Seals** | **– Not available with bumpers or magnetic piston**
| S01 & N01 – Spring Return (–15° F to 300° F) | $7.27 |
| S02 – Spring Return (–15° F to 300° F) | $7.32 |
| N02 – Spring Return (–15° F to 300° F) | $18.11 |
| **Double Acting** | **–15° F to 350° F** | $18.11 |
| D06 – Double Acting (–15° F to 350° F) | $13.49 |
| R01 – Spring Extend (–15° F to 300° F) | $13.56 |
| R02 – Spring Extend (–15° F to 300° F) | $13.63 |
| **Double Rod** | **–15° F to 350° F** | $19.22 |
| D06 – Double Rod (–15° F to 350° F) | $13.49 |
| **Ports Rotated – 90° on S02, R02, N02, or D02 (both)** | No charge |
| **Rod Wiper** | **– Not available in spring return models.** | $7.10 |
| **Side Port** | **– Cap end port on S01, N01, D01, D05, or D06 (Add .19 to OAL)** | No charge |
| **Low Temperature Seals** | **– Applications to –40° F** | $8.07 |
| **Rod Extension** | **Applications to –40° F** | $1.17/inch |
| **Rod Thread Extension** | **Applications to –40° F** | $2.23/inch |

---

## Optional Accessories

- **F-M117007 Mounting Bracket**
- **F-M029004 Pivot Bracket**
- **F-M127005 Rod Clevis**
- **Base Weight: .77 lbs.**
- **Plus .09 lbs. per inch of stroke**

---

## Prices

- **Mounting Bracket**
  - **F-M117007**
  - **Price: $3.79**

- **Rod Clevis**
  - **F-M127005**
  - **Price: $6.16**

- **Pivot Bracket**
  - **F-M029004**
  - **Price: $5.56**

- **Trunnion Bracket**
  - **F-M029006**
  - **Price: $14.18**

- **Mounting Nut**
  - **F-M190006**
  - **Price: $0.54**

---

## Standards

- **Standard Stroke Lengths:**
- **Maximum Stroke:** 32"

---

## Specifications

- **Specifications and prices subject to change without notice or incurring obligation**
- **See pricing notes on Page 5**
**F-Series**

**1-3/4" Bore Cylinders**

**Single Acting** Spring Return
Front Nose Mount
Standard Stroke Lengths:
- 1/2", 1", 1-1/2", 2", 2-1/2", 3", 4"
Maximum Stroke: 6"
Optional Accessories:
- F-M117008 Mounting Bracket
- F-M127006 Rod Clevis
Base Weight: .85 lbs.
Plus .36 lbs. per inch of stroke

**Single Acting** Spring Return
Double Nose or Rear Pivot Mount
Standard Stroke Lengths:
- 1/2", 1", 1-1/2", 2", 2-1/2", 3", 4"
Maximum Stroke: 6"
Optional Accessories:
- F-M117008 Mounting Bracket
- F-M129005 Pivot Bracket
- F-M127006 Rod Clevis
Base Weight: .86 lbs.
Plus .36 lbs. per inch of stroke

**Single Acting** Spring Extend
Front Nose Mount
Standard Stroke Lengths:
- 1/2", 1", 1-1/2", 2", 2-1/2", 3", 4"
Maximum Stroke: 6"
Optional Accessories:
- F-M117008 Mounting Bracket
- F-M127006 Rod Clevis
Base Weight: 1.17 lbs.
Plus .31 lbs. per inch of stroke

**Double Acting**
Front Nose Mount
Standard Stroke Lengths:
Maximum Stroke: 12"
Optional Accessories:
- F-M117008 Mounting Bracket
- F-M127006 Rod Clevis
Base Weight: 1.29 lbs.
Plus .11 lbs. per inch of stroke

---

Specifications and prices subject to change without notice or incurring obligation

See pricing notes on Page 5

$41.97 Base Price
Add $5.49 per inch of stroke

$43.92 Base Price
Add $5.49 per inch of stroke

$50.71 Base Price
Add $5.49 per inch of stroke

$51.02 Base Price
Add $2.46 per inch of stroke
1-3/4" Bore Cylinder Specifications – Options & Accessories

-10° to +165°F
- Piston Rod: Ground and Polished, 303 Stainless Steel.
- Bronze rod guide bushing is standard.
- Approximate force exerted = (2.4) x (air line pressure).
- Spring force: 11 lbs. relaxed, 24 lbs. compressed.
- Mounting nuts are standard on all nose mount cylinders.
- Bumpers are optional on all 1-3/4" bore cylinders (except in combination with Viton® option).
- Magnetic piston optional on all 1-3/4" bore cylinders (except in combination with Viton® option).

### OPTION PRICE ADDER

- Viton® Seals – Not available with bumpers or magnetic piston
  - Spring Return (–15° F to 300° F) ........................................... $7.64
  - Double Acting (–15° F to 350° F) ......................................... $18.86
  - Spring Extend (–15° F to 300° F) ......................................... $14.05
- Ports Rotated – 90° on S02 or D02 models (both)............. No charge
- Rod Wiper – Not available in spring return models............ $7.10
- Side Port - Cap end ports on S01 or D01 models
  Add .56 to OAL................................................................. No charge
- Low Temperature Seals – Applications to –40° F............... $4.83
- Rod Extension .............................................................. $1.17/inch
- Rod Thread Extension .................................................... $2.23/inch
F-Series

2" Bore Cylinders

**Single Acting Spring Return**

Front Nose Mount

Standard Stroke Lengths:
1/2", 1", 1-1/2", 2", 2-1/2", 3", 4"

Maximum Stroke: 4"

Optional Accessories:
- F-M117009 Mounting Bracket
- F-M229005 Pivot Bracket
- F-M127006 Rod Clevis

Base Weight: 1.04 lbs.
Plus .43 lbs. per inch of stroke

---

**Single Acting Spring Return**

Double Nose or Rear Pivot Mount

Standard Stroke Lengths:
1/2", 1", 1-1/2", 2", 2-1/2", 3", 4"

Maximum Stroke: 4"

Optional Accessories:
- F-M117009 Mounting Bracket
- F-M229005 Pivot Bracket
- F-M127006 Rod Clevis

Base Weight: 1.26 lbs.
Plus .43 lbs. per inch of stroke

---

**Single Acting Spring Extend**

Front Nose Mount

Standard Stroke Lengths:
1/2", 1", 1-1/2", 2", 2-1/2", 3", 4"

Maximum Stroke: 4"

Optional Accessories:
- F-M117009 Mounting Bracket
- F-M229005 Pivot Bracket
- F-M127006 Rod Clevis

Base Weight: 1.46 lbs.
Plus .43 lbs. per inch of stroke

---

**Single Acting Spring Extend**

Double Nose or Rear Pivot Mount

Standard Stroke Lengths:
1/2", 1", 1-1/2", 2", 2-1/2", 3", 4"

Maximum Stroke: 4"

Optional Accessories:
- F-M117009 Mounting Bracket
- F-M229005 Pivot Bracket
- F-M127006 Rod Clevis

Base Weight: 1.64 lbs.
Plus .43 lbs. per inch of stroke

---

Specifications and prices subject to change without notice or incurring obligation

See pricing notes on Page 5
F-2000D01-00A

Double Acting
Front Nose Mount
Standard Stroke Lengths:
1/2", 1", 1-1/2", 2", 2-1/2", 3", 4", 5", 6", 7", 8"
Maximum Stroke: 12"
Optional Accessories:
• F-M117009 Mounting Bracket
• F-M127006 Rod Clevis
Base Weight: 1.40 lbs.
Plus .15 lbs. per inch of stroke

$53.43 Base Price
Add $2.78 per inch of stroke

MOUNTING NUT INCLUDED

MOUNTING NUT NOT INCLUDED

F-2000D02-00A

Double Acting
Double Nose or Rear Pivot Mount
Standard Stroke Lengths:
Maximum Stroke: 32"
Optional Accessories:
• F-M117009 Mounting Bracket
• F-M229005 Pivot Bracket
• F-M127006 Rod Clevis
Base Weight: 1.62 lbs.
Plus .15 lbs. per inch of stroke

$64.26 Base Price
Add $2.91 per inch of stroke

MOUNTING NUT INCLUDED

MOUNTING NUT NOT INCLUDED

F-2000D03-00A

Double Acting
Double Rod
Standard Stroke Lengths:
1/2", 1", 1-1/2", 2", 2-1/2", 3", 4", 5", 6"
Maximum Stroke: 12"
Optional Accessories:
• F-M117009 Mounting Bracket
• F-M127006 Rod Clevis
Base Weight: 1.97 lbs.
Plus .24 lbs. per inch of stroke

$79.53 Base Price
Add $4.20 per inch of stroke
F-Series

2" Bore Cylinders

Double Acting
Front Nose Mount
with Adjustable Cushions
Standard Stroke Lengths:
1/2", 1", 1-1/2", 2", 2-1/2", 3", 4", 5", 6"
Maximum Stroke: 12"
Optional Accessories:
• F-M117009 Mounting Bracket
• F-M229005 Pivot Bracket
• F-M127006 Rod Clevis
Base Weight: 1.64 lbs.
Plus .15 lbs. per inch of stroke

$82.79 Base Price
Add $2.78 per inch of stroke
Viton® Seals – Consult Factory

MAGNETIC PISTON OPTION – NO CHANGE IN OAL ......................................... $11.79

BUMPERS NOT AVAILABLE

$117.90 Base Price
Add $5.18 per inch of stroke
MAGNETIC PISTON OPTION – ADD .299 TO OAL .................................... $11.79

Viton® Seals – Consult Factory

Double Acting
Rear Pivot Mount
with Adjustable Cushions
Standard Stroke Lengths:
1/2", 1", 1-1/2", 2", 2-1/2", 3", 4", 5", 6"
Maximum Stroke: 32"
Optional Accessories:
• F-M117009 Mounting Bracket
• F-M229005 Pivot Bracket
• F-M127006 Rod Clevis
Base Weight: 1.68 lbs.
Plus .15 lbs. per inch of stroke

$99.55 Base Price
Add $2.91 per inch of stroke
MAGNETIC PISTON OPTION – NO CHANGE IN OAL ......................................... $11.79

BUMPERS NOT AVAILABLE

$99.55 Base Price
Add $2.91 per inch of stroke
MAGNETIC PISTON OPTION – NO CHANGE IN OAL ......................................... $11.79

BUMPERS NOT AVAILABLE

$122.46 Base Price
Add $2.91 per inch of stroke
MAGNETIC PISTON OPTION – NO CHANGE IN OAL ......................................... $11.79

BUMPERS NOT AVAILABLE

$122.46 Base Price
Add $2.91 per inch of stroke
MAGNETIC PISTON OPTION – NO CHANGE IN OAL ......................................... $11.79

BUMPERS NOT AVAILABLE

$174.90 Base Price
Add $2.78 per inch of stroke
MAGNETIC PISTON OPTION – ADD .299 TO OAL .................................... $11.79

BUMPERS NOT AVAILABLE

$185.37 Base Price
Add $2.78 per inch of stroke
MAGNETIC PISTON OPTION – ADD .299 TO OAL .................................... $11.79

BUMPERS NOT AVAILABLE

Specifications and prices subject to change without notice or incurring obligation

See pricing notes on Page 5
Standard Cylinder Specifications – Options & Accessories

• –10° to +165°F
• Piston Rod: Ground and Polished, 303 Stainless Steel (Except for 1" Rod Models. See below).
• Bronze rod guide bushing is standard.
• Approximate force exerted = (3.1) x (air line pressure).
• Spring force: 15 lbs. relaxed, 30 lbs. compressed.
• Mounting nuts are standard on all nose mount cylinders except 1" rod models.
• Bumpers are optional on all 2" bore cylinders (except in combination with Viton® option).
• Magnetic piston optional on all 2" bore cylinders (except in combination with Viton® option).

1" Rod Cylinder Specifications

• 1" chrome rod is standard.
• Magnetic piston optional.
• Viton® seals optional.

<table>
<thead>
<tr>
<th>OPTION</th>
<th>PRICE ADDER</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Viton® Seals – Not available with bumpers or magnetic piston</td>
<td></td>
</tr>
<tr>
<td>Spring Return (–15°F to 300°F) ..........</td>
<td>$7.64</td>
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<tr>
<td>Double Acting (–15°F to 350°F) ..........</td>
<td>$18.62</td>
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<td>D02 – Double Acting (–15°F to 350°F) ....</td>
<td>$18.56</td>
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<tr>
<td>R01 – Spring Extend (–15°F to 300°F) ..</td>
<td>$14.00</td>
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<tr>
<td>R02 – Spring Extend (–15°F to 300°F) ..</td>
<td>$14.05</td>
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<tr>
<td>Double Rod (–15°F to 350°F) ............</td>
<td>$26.18</td>
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<tr>
<td>• Ports Rotated – 90° on S02, R02, or D02 models (both) .........</td>
<td>No charge</td>
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<tr>
<td>• Rod Wiper – Not available in spring return models .........</td>
<td>$7.10</td>
</tr>
<tr>
<td>• Side Port – Cap end port on S01 or D01 models</td>
<td>Add .38 to OAL ........ No charge</td>
</tr>
<tr>
<td>• Low Temperature Seals – Applications to –40°F ..........</td>
<td>10.88</td>
</tr>
<tr>
<td>• Rod Extension - Single, reverse and double acting .......</td>
<td>$1.54/inch</td>
</tr>
<tr>
<td>• Rod Thread Extension .......................</td>
<td>$2.60/inch</td>
</tr>
</tbody>
</table>

Mounting Bracket
F-M117009
Price: $8.11

Pivot Bracket
F-M2290005
Price: $11.35

Rod Clevis
F-M1270006
Price: $6.16

Mounting Nut
F-M1900009
Price: $3.86
F-Series
2-1/2" Bore Cylinders

Double Acting
Front Nose Mount
Standard Stroke Lengths:
Maximum Stroke: 12"
Optional Accessories:
• F-M117010 Mounting Bracket
• F-M229005 Pivot Bracket
• F-M127006 Rod Clevis
• F-M190012 Mounting Nut
Base Weight 1.98 lbs.
Plus .17 lbs. per inch of stroke

Double Acting
Rear Pivot Mount
Standard Stroke Lengths:
Maximum Stroke: 32"
Optional Accessories:
• F-M117010 Mounting Bracket
• F-M229005 Pivot Bracket
• F-M127006 Rod Clevis
• F-M190012 Mounting Nut
Base Weight: 2.27 lbs.
Plus .17 lbs. per inch of stroke

2-1/2" Bore Cylinder Specifications – Options & Accessories

• –10° to +165°F
• Piston Rod: Ground and Polished, 303 Stainless Steel.
• Bronze rod guide bushing is standard.
• Approximate force exerted = (5.0) x (air line pressure).
• Magnetic piston optional on all 2-1/2" bore cylinders (except in combination with Viton option).

2-1/2" Bore Cylinder Specifications – Options & Accessories

Option | Price Adder
--- | ---
Viton® Seals – Not available with bumpers or magnetic piston | D01 – Double Acting (–15° F to 350° F) $22.68
D02 – Double Acting (–15° F to 350° F) $22.63
Ports Rotated – 90° on D02 (both) No charge
Rod Wiper No charge | $7.10
Side Port – Cap end on D01. Add .38 to overall length No charge
Low Temperature Seals – Applications to –40° F $8.07
Rod Extension $1.54/inch
Rod Thread Extension $2.60/inch

Mounting Bracket
F-M117010
Price: $21.70

Pivot Bracket
F-M229005
Price: $11.35

Rod Clevis
F-M127006
Price: $6.16

Mounting Nut
F-M190012
Price: $6.09

Specifications and prices subject to change without notice or incurring obligation
See pricing notes on Page 5

2-2-12
Double Acting
Front Nose Mount
Standard Stroke Lengths:
1/2", 1", 1-1/2", 2", 2-1/2", 3", 4", 5", 6"
Maximum Stroke: 12"
*Optional Accessories:
• F-M117011 Mounting Bracket
• F-M127007 Rod Clevis
• F-M190013 Mounting Nut
Base Weight: 3.34 lbs.
Plus .26 lbs. per inch of stroke

Double Acting
Double Nose or Rear Pivot Mount
Standard Stroke Lengths:
1/2", 1", 1-1/2", 2", 2-1/2", 3", 4", 5", 6"
Maximum Stroke: 32"
*Optional Accessories:
• F-M117011 Mounting Bracket
• F-M229006 Pivot Bracket
• F-M127007 Rod Clevis
• F-M190013 Mounting Nut
Base Weight: 3.87 lbs.
Plus .26 lbs. per inch of stroke

3" Bore Cylinder Specifications – Options & Accessories

-10° to +165°F
Piston Rod
Ground and Polished, 303 Stainless Steel is standard.
Bronze rod guide bushing is standard.
Approximate force exerted = (7.0) x (air line pressure).
Magnetic piston optional on all 3" bore cylinders (except in combination with Viton option).

<table>
<thead>
<tr>
<th>OPTION</th>
<th>PRICE ADDER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Viton® Seals – Not available with bumpers or magnetic piston Double Acting (-15° F to 350° F)</td>
<td>$24.59</td>
</tr>
<tr>
<td>Ports Rotated – 90° on D02 model (both)</td>
<td>No charge</td>
</tr>
<tr>
<td>Rod Wiper</td>
<td></td>
</tr>
<tr>
<td>Side Port – Cap end on D01. Add .44 to OAL</td>
<td>No charge</td>
</tr>
<tr>
<td>Low Temperature Seals – Applications to -40° F</td>
<td>$10.88</td>
</tr>
<tr>
<td>Rod Extension</td>
<td></td>
</tr>
<tr>
<td>Rod Thread Extension</td>
<td></td>
</tr>
</tbody>
</table>

Mounting Bracket
F-M117011
Price: $14.12

Pivot Bracket
F-M229006
Price: $15.57

Rod Clevis
F-M127007
Price: $16.45

Mounting Nut
F-M190013
Price: $6.09

Specifications and prices subject to change without notice or incurring obligation
See pricing notes on Page 5
F-Series
Volume Chambers

How to Order

F-1500 V 01 - 01 A

Series

Bore Size (4 digits)
0750 = 3/4"
1062 = 1-1/16"
1500 = 1-1/2"
2000 = 2"
2500 = 2-1/2"
3000 = 3"

Style
V = Volume chamber

Version
01 = In-line mount

Fractional Inch Length
(1 digit)
A = 0"

Full Inch Length (2 digits)
00 = 0"
01 = 1"
02 = 2"
03 = 3"
32 = 32"

Volume Chamber Specifications

-40° to +350°F
303 stainless steel body.
Aluminum alloy end caps.
Pressure rating: 250 psi.

Specifications and prices subject to change without notice or incurring obligation
See pricing notes on Page 5
### Delrin® Corrosion Resistant Cylinders

#### Features

- Delrin® head, Delrin® cap and aluminum piston provide excellent corrosion resistance in wash down environments where cylinders are exposed to moisture and certain solvents.*
- Stainless steel rod and tube complete the corrosion resistance package and provide long life.
- Corrosion resistant cylinders are offered in three standard bore sizes: 3/4", 1-1/16" and 1-1/2" with both nose and rear pivot mounts.
- Stroke tolerance +/- .032

Delrin® is a registered trademark of DuPont. ★ Call DuPont (800) 441-0575 for information regarding properties of this material.

---

**3/4" Bore Delrin® Series**

**F-0750DC1-00A**

Double Acting Front Nose Mount

- Maximum Stroke: 12"*
- Optional Accessories:
  - F-M19S005 Stainless Steel Mounting Nut
  - Base Weight: .13 lbs. Plus .03 lbs. per inch of stroke

**F-0750DC2-00A**

Double Acting Rear Pivot Mount

- Maximum Stroke: 32"*
- Optional Accessories:
  - F-M19S005 Stainless Steel Mounting Nut
  - Base Weight: .15 lbs. Plus .03 lbs. per inch of stroke

**F-0750DC3-00A**

Double Acting Double Rod

- Maximum Stroke: 12"*
- Optional Accessories:
  - F-M19S005 Stainless Steel Mounting Nut
  - Base Weight: .18 lbs. Plus .05 lbs. per inch of stroke

---

* Specifications and prices subject to change without notice or incurring obligation.

See pricing notes on Page 5
F-Series
Delrin® Corrosion Resistant Cylinders

1-1/16" Bore Delrin® Series
Double Acting Front Nose Mount
Maximum Stroke: 12"
Optional Accessories:
• F-M19S005 Stainless Steel Mounting Nut
Base Weight: .21 lbs.
Plus .05 lbs. per inch of stroke

1-1/16" Bore Delrin® Series
Double Acting Rear Pivot Mount
Optional Accessories:
• F-M19S005 Stainless Steel Mounting Nut
Base Weight: .25 lbs.
Plus .05 lbs. per inch of stroke

1-1/2" Bore Delrin® Series
Double Acting
Front Nose Mount
Maximum Stroke: 12"
Optional Accessories:
• F-M19S006 Stainless Steel Mounting Nut
Base Weight: .46 lbs.
Plus .08 lbs. per inch of stroke

1-1/2" Bore Delrin® Series
Double Acting Rear Pivot Mount
Maximum Stroke: 12"
Optional Accessories:
• F-M19S006 Stainless Steel Mounting Nut
Base Weight: .48 lbs.
Plus .08 lbs. per inch of stroke

Specifications and prices subject to change without notice or incurring obligation

See pricing notes on Page 5
Delrin® Cylinder Specifications – Options & Accessories

- Maximum operating pressure 100psi Air.
- Temperature range +32° to +160°F.
- Piston Rod
  Ground and polished, 303 stainless steel is standard.
- Magnetic Piston optional on all bore cylinders (except in combination with Viton option).

**F-1500DC3-00A**

- **1-1/2" Bore Delrin® Series**
- Double Acting Double Rod
- Maximum Stroke: 12"
- Optional Accessories:
  - F-M19S006 Stainless Steel Mounting Nut
  - Base Weight: .60 lbs.
  - Plus .13 lbs. per inch of stroke

### Delrin® Corrosion Resistant Cylinders

- **1-1/2" Bore Delrin® Series**
- Double Acting Double Rod
- Maximum Stroke: 12"
- Optional Accessories:
  - F-M19S006 Stainless Steel Mounting Nut
  - Base Weight: .60 lbs.
  - Plus .13 lbs. per inch of stroke

![Diagram of Delrin® Cylinder Specifications](image-url)

**OPTION** | **PRICE adder**
--- | ---
- Viton® Seals – Not available with bumpers or magnetic piston (for media or environment compatibility only)
  DC1 – 3/4 Bore | $11.10
  DC2 – 3/4 Bore | $11.04
  DC3 – 3/4 Bore | $15.41
  DC1 – 1-1/16 Bore | $13.37
  DC2 – 1-1/16 Bore | $13.37
  DC3 – 1-1/16 Bore | $17.76
  DC1 – 1-1/2 Bore | $19.22
  DC2 – 1-1/2 Bore | $14.23
  DC3 – 1-1/2 Bore | $14.23
- Pivot Bushing – Not Available
- Ports Rotated – Not Available
- Rod Wiper – Not Available
- Side Port – Not Available
- Low Temp. Seals – Not Available
- Rod Extension –
  3/4 Bore | $.74/inch
  1-1/16 Bore | $.74/inch
  1-1/2 Bore | $1.17/inch
- Rod Thread Extension –
  3/4 Bore | $1.79/inch
  1-1/16 Bore | $1.79/inch
  1-1/2 Bore | $2.23/inch
**F-Series Magnetic Interchange**

### 9/16" Bore Cylinders

#### Double Acting

**Front Nose Mount**
- Maximum Stroke: 12"  
- Optional Accessories:  
  - F-M117003 Mounting Bracket  
  - F-M129002 Rod Clevis  
- Base Weight: .10 lbs.  
- Plus .01 lbs. per inch of stroke

**Double Acting**
- Double Nose or Rear Pivot Mount  
- Maximum Stroke: 12"  
- Optional Accessories:  
  - F-M117003 Mounting Bracket  
  - F-M129002 Pivot Bracket  
  - F-M127002 Rod Clevis  
- Base Weight: .10 lbs.  
- Plus .01 lbs. per inch of stroke

**Double Acting**
- Double Rod  
- Maximum Stroke: 12"  
- Optional Accessories:  
  - F-M117003 Mounting Bracket  
  - F-M127002 Rod Clevis  
- Base Weight: .14 lbs.  
- Plus .02 lbs. per inch of stroke

### 9/16" Bore Cylinder Specifications – Options & Accessories

- –10° to +165°F  
- Piston Rod: Ground/Polished 303 Stainless Steel  
- **Mounting nuts are not included**  
- Bumpers are optional on all 9/16" bore cylinders  
- Approximate Force Exerted: (0.25) x (Supply psi)  
- Stroke tolerance ±.032

**OPTION**

<table>
<thead>
<tr>
<th>OPTION</th>
<th>PRICE ADDER</th>
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<tbody>
<tr>
<td>Ports Rotated – 90° on DM2 (both)</td>
<td>No charge</td>
</tr>
<tr>
<td>Viton® Seals – (for media or environment compatibility only) DM1 &amp; DM2</td>
<td>$10.96</td>
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<tr>
<td>DM3</td>
<td>$15.47</td>
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<tr>
<td>Rod Wiper</td>
<td>NA</td>
</tr>
<tr>
<td>Side Port – DM1 (Add .03 to OAL)</td>
<td>No charge</td>
</tr>
<tr>
<td>Rod Extension DM1, DM2</td>
<td>$0.74/inch</td>
</tr>
<tr>
<td>Rod Thread Extension</td>
<td>$1.79/inch</td>
</tr>
</tbody>
</table>

**Mounting Bracket**  
F-M117003  
Price: $2.04

**Pivot Bracket**  
F-M129002  
Price: $6.12

**Rod Clevis**  
F-M127002  
Price: $3.24

**Mounting Nut**  
F-M190003  
Price: $0.28

Specifications and prices subject to change without notice or incurring obligation

See pricing notes on Page 5

2-2-12
3/4" Bore Cylinder Specifications – Options & Accessories

-10° to +165°F
- Piston Rod: Ground/Polished 303 Stainless Steel
- Mounting nuts are not included
- Bumpers are optional on all 3/4" bore cylinders
- Approximate Force Exerted: (0.4) x (Supply psi)
- Stroke tolerance ±.032

**OPTION**  | **PRICE ADDER**
---|---
- Ports Rotated – 90° on DM2 (both) | No charge
- Viton® Seals – (for media or environment compatibility only)
  - DM1 & DM2 | $10.96
  - DM3 | $15.41
- Rod Wiper | $7.10
- Side Port – DM1 (Add .44 to OAL) | No charge
- Rod Extension DM1, DM2 | $0.74/Inch
- Rod Thread Extension | $1.79/Inch

Specifications and prices subject to change without notice or incurring obligation

See pricing notes on Page 5
1-1/16" Bore Cylinders Specifications – Options & Accessories

-10° to +165°F
- Piston Rod: Ground/Polished 303 Stainless Steel
- **Mounting nuts are not included**
- Bumpers are optional on all 1-1/16" bore cylinders
- Approximate Force Exerted: (0.9) x (Supply psi)
- Stroke tolerance ±.032

<table>
<thead>
<tr>
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<tr>
<td>• Ports Rotated – 90° on DM2 (both)</td>
<td>No charge</td>
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<tr>
<td>• Viton® Seals – (for media or environment compatibility only)</td>
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<tr>
<td>DM1 &amp; DM2</td>
<td>$13.26</td>
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<tr>
<td>DM3</td>
<td>$17.76</td>
</tr>
<tr>
<td>• Rod Wiper</td>
<td>$7.10</td>
</tr>
<tr>
<td>• Side Port – DM1 (Add .25 to OAL)</td>
<td>No charge</td>
</tr>
<tr>
<td>• Rod Extension DM1, DM2</td>
<td>$0.74/inch</td>
</tr>
<tr>
<td>• Rod Thread Extension</td>
<td>$1.79/inch/end</td>
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</tbody>
</table>

**Mounting Nut**
- F-M190006
- Price: $0.54

**Rod Clevis**
- F-M127004
- Price: $3.73
F-Series Magnetic Interchange
1-1/4" Bore Cylinders

---

### Double Acting

**Front Nose Mount**

- Maximum Stroke: 12"
- Optional Accessories:
  - F-M117013 Mounting Bracket
  - Base Weight: .51 lbs.
  - Plus .07 lbs. per inch of stroke

---

### Double Acting

**Double Nose or Rear Pivot Mount**

- Maximum Stroke: 32"
- Optional Accessories:
  - F-M117013 Mounting Bracket
  - Base Weight: .61 lbs.
  - Plus .07 lbs. per inch of stroke

---

### Double Acting

**Double Rod**

- Maximum Stroke: 12"
- Optional Accessories:
  - F-M117013 Mounting Bracket
  - Base Weight: .70 lbs.
  - Plus .14 lbs. per inch of stroke

---

### 1-1/4" Bore Cylinder Specifications – Options & Accessories

<table>
<thead>
<tr>
<th>OPTION</th>
<th>PRICE ADDER</th>
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<tbody>
<tr>
<td>Ports Rotated – 90° on DM2 (both)</td>
<td>No charge</td>
</tr>
<tr>
<td>Viton® Seals – (for media or environment compatibility only)</td>
<td>DM1 &amp; DM2</td>
</tr>
<tr>
<td></td>
<td>DM3</td>
</tr>
<tr>
<td>Rod Wiper</td>
<td>$7.10</td>
</tr>
<tr>
<td>Side Port – DM1 (Add .25 to OAL)</td>
<td>No charge</td>
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<tr>
<td>Rod Extension DM1, DM2</td>
<td>$0.99/inch</td>
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<tr>
<td>Rod Thread Extension</td>
<td>$2.03/inch/end</td>
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- -10° to +165°F
- Piston Rod: Ground/Polished 303 Stainless Steel
- Bumpers are optional on all 1-1/4" bore cylinders
- Mounting nuts are not included
- Approximate Force Exerted: (1.2) x (Supply psi)
- Stroke tolerance ±.032
F-1500DM1-00A

-10° to +165°F
Piston Rod: Ground/Polished 303 Stainless Steel
Mounting nuts are not included
Bumpers are optional on all 1-1/2" bore cylinders
Approximate Force Exerted: (1.7) x (Supply psi)
Stroke tolerance ±.032

Double Acting
Front Nose Mount
Standard Stroke Lengths:
1/2", 1", 1-1/2", 2", 2-1/2", 3", 4", 5", 6"
Maximum Stroke: 12"
Optional Accessories:
• F-M127005 Rod Clevis
Base Weight: .74 lbs.
Plus .10 lbs. per inch of stroke

F-1500DM2-00A

-10° to +165°F
Piston Rod: Ground/Polished 303 Stainless Steel
Mounting nuts are not included
Bumpers are optional on all 1-1/2" bore cylinders
Approximate Force Exerted: (1.7) x (Supply psi)
Stroke tolerance ±.032

Double Acting
Double Nose or Rear Pivot Mount
Standard Stroke Lengths:
1/2", 1", 1-1/2", 2", 2-1/2", 3", 4", 5", 6"
Maximum Stroke: 32"
Optional Accessories:
• F-M127005 Rod Clevis
Base Weight: .87 lbs.
Plus .10 lbs. per inch of stroke

Double Acting Double Rod
Standard Stroke Lengths:
1/2", 1", 1-1/2", 2", 2-1/2", 3", 4", 5", 6"
Maximum Stroke: 12"
Optional Accessories:
• F-M127005 Rod Clevis
Base Weight: .94 lbs.
Plus .20 lbs. per inch of stroke

1-1/2" Bore Cylinder Specifications – Options & Accessories

-10° to +165°F
Piston Rod: Ground/Polished 303 Stainless Steel
Mounting nuts are not included
Bumpers are optional on all 1-1/2" bore cylinders
Approximate Force Exerted: (1.7) x (Supply psi)
Stroke tolerance ±.032

Specifications and prices subject to change without notice or incurring obligation
See pricing notes on Page 5
Specifications and prices subject to change without notice or incurring obligation

See pricing notes on Page 5
F-Series Magnetic Interchange

2" Bore Cylinders

Double Acting
Front Nose Mount
Standard Stroke Lengths:
1/2", 1", 1-1/2", 2", 2-1/2", 3", 4", 5", 6"
Maximum Stroke: 12"
Optional Accessories:
• F-M127006 Rod Clevis
Base Weight: 1.55 lbs.
Plus .15 lbs. per inch of stroke

Double Acting
Double Nose or Rear Pivot Mount
Standard Stroke Lengths:
1/2", 1", 1-1/2", 2", 2-1/2", 3", 4", 5", 6"
Maximum Stroke: 32"
Optional Accessories:
• F-M127006 Rod Clevis
Base Weight: 1.80 lbs.
Plus .15 lbs. per inch of stroke

Double Acting
Double Rod
Standard Stroke Lengths:
1/2", 1", 1-1/2", 2", 2-1/2", 3", 4", 5", 6"
Maximum Stroke: 12"
Optional Accessories:
• F-M127006 Rod Clevis
Base Weight: 1.90 lbs.
Plus .30 lbs. per inch of stroke

2" Bore Cylinder Specifications – Options & Accessories

• -10° to +165°F
• Piston Rod: Ground/Polished 303 Stainless Steel
• Mounting nuts are not included
• Bumpers are optional on all 2" bore cylinders
• Approximate Force Exerted: (3.1) x (Supply psi)
• Stroke tolerance ±.032

Option

**PORTS ROTATED – 90° ON DM2 (both)**
No charge

**Viton® Seals**
(for media or environment compatibility only)
DM1 & DM2
$18.62
DM3
$26.18

**Rod Wiper**
No charge

**Side Port – DM1**
(Add .56 to OAL)
No charge

**Rod Extension DM1, DM2**
$1.54/inch

**Rod Thread Extension**
$2.60/inch/end

F-2000DM1-00A

$64.64 Base Price
Add $2.84 per inch of stroke

F-2000DM2-00A

$71.04 Base Price
Add $2.84 per inch of stroke

F-2000DM3-00A

$84.57 Base Price
Add $4.13 per inch of stroke

**Specifications and prices subject to change without notice or incurring obligation**

See pricing notes on Page 5
F-Series Magnetic Interchange
2-1/2" Bore Cylinders

F-2500DM1-00A

Double Acting
Front Nose Mount
Standard Stroke Lengths:
1/2", 1", 1-1/2", 2", 2-1/2", 3", 4", 5", 6"
Maximum Stroke: 12"
Optional Accessories:
• F-M127007 Rod Clevis
Base Weight: 2.48 lbs.
Plus .20 lbs. per inch of stroke

$82.12 Base Price
Add $3.09 per inch of stroke

F-2500DM2-00A

Double Acting
Double Nose or Rear Pivot Mount
Standard Stroke Lengths:
Maximum Stroke: 32"
Optional Accessories:
• F-M127007 Rod Clevis
Base Weight: 2.90 lbs.
Plus .20 lbs. per inch of stroke

$91.48 Base Price
Add $3.09 per inch of stroke

F-2500DM3-00A

Double Acting
Double Rod
Standard Stroke Lengths:
1/2", 1", 1-1/2", 2", 2-1/2", 3", 4", 5", 6"
Maximum Stroke: 12"
Optional Accessories:
• F-M127007 Rod Clevis
Base Weight: 3.15 lbs.
Plus .40 lbs. per inch of stroke

$107.50 Base Price
Add $4.86 per inch of stroke

2-1/2" Bore Cylinder Specifications – Options & Accessories

• -10° to +165°F
• Piston Rod: Ground/Polished 303 Stainless Steel

Mounting nuts are not included

• Bumpers are optional on all 2-1/2" bore cylinders
• Approximate Force Exerted: (5.0) x (Supply psi)
• Stroke tolerance ±0.032

<table>
<thead>
<tr>
<th>OPTION</th>
<th>PRICE ADDER</th>
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<tbody>
<tr>
<td>• Ports Rotated – 90° on DM2 (both)</td>
<td>No charge</td>
</tr>
<tr>
<td>• Viton® Seals – (for media or environment compatibility only)</td>
<td></td>
</tr>
<tr>
<td>DM1</td>
<td>$22.68</td>
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<tr>
<td>DM2</td>
<td>$22.63</td>
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<tr>
<td>DM3</td>
<td>$33.95</td>
</tr>
<tr>
<td>• Rod Wiper</td>
<td>$7.10</td>
</tr>
<tr>
<td>• Side Port - DM1. (Add .38 to OAL)</td>
<td>No charge</td>
</tr>
<tr>
<td>• Rod Extension DM1, DM2</td>
<td>$1.54/inch</td>
</tr>
<tr>
<td>• Rod Thread Extension</td>
<td>$2.60/inch/end</td>
</tr>
</tbody>
</table>

Mounting Nut
F-M190012
Price: $6.09

Rod Clevis
F-M127007
Price: $16.45

See pricing notes on Page 5
Tandem cylinders are generally used when three distinct rod positions are required from a single cylinder body. Two cylinders are assembled tip-to-tail with a common center head. Using cylinders with two different lengths (the shorter located on the rear cylinder), enables the front rod to be extended from “home” to a positive mid-position or to full extension.

### How they work

**Exposed rod is in retracted "home" position when port 1 is pressurized and ports 2 & 4 are open to atmosphere.**

**Rod is extended to mid position when port 4 is pressurized and ports 1 & 2 are open to atmosphere.**

**Rod is fully extended when port 2 is pressurized and ports 1 & 4 are open to atmosphere.**

### How to Order

<table>
<thead>
<tr>
<th>Series</th>
<th>Bore Size (4 digits)</th>
<th>Mounting Style (2 digits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>F-1500</td>
<td>0750 = 3/4&quot;</td>
<td>D1 = Double Acting Nose Mount</td>
</tr>
<tr>
<td></td>
<td>1062 = 1-1/16&quot;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1500 = 1-1/2&quot;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2000 = 2&quot;</td>
<td></td>
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</tbody>
</table>

**Bore Size**
- 0750 = 3/4" (4 digits)
- 1062 = 1-1/16"
- 1500 = 1-1/2"
- 2000 = 2"

**Mounting Style**
- D1 = Double Acting Nose Mount

**Stroke Tolerance**

<table>
<thead>
<tr>
<th>Stroke Tolerance</th>
<th>3/4&quot; thru 1-1/2&quot; bore</th>
<th>2&quot; bore</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>+.075 / -.040</td>
<td>+.095 / -.060</td>
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**Full Inch Stroke**

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<tr>
<th>00</th>
<th>0&quot;</th>
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<tbody>
<tr>
<td>01</td>
<td>1&quot;</td>
</tr>
<tr>
<td>02</td>
<td>2&quot;</td>
</tr>
<tr>
<td>03</td>
<td>3&quot;</td>
</tr>
<tr>
<td>08</td>
<td>8&quot; (max. cyl. 2 stroke)</td>
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</table>

**Fractional Inch Stroke**

<table>
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<tr>
<th>A</th>
<th>= 0&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>= 1/2&quot;</td>
</tr>
</tbody>
</table>

In the order example above, when port 4 is pressurized, the cylinder will stroke 4". When port 2 is pressurized, the cylinder will stroke an additional 2" for a total of 6".

For cylinder 2 strokes over 8" and/or combined strokes over 24", consult factory.

Specifications and prices subject to change without notice or incurring obligation

See pricing notes on Page 5
Specifications and prices subject to change without notice or incurring obligation

See pricing notes on Page 5
**F-Series**

**Hole Punch Cylinders**

Fabco-Air's rugged Hole Punch Cylinder enables trouble-free punching of millions of holes in plastic film; ideally suited for LLDPE (linear low density polyethylene). A major feature allows punch replacement without having to replace the cylinder. Available in eight different hole punch sizes from 1/8” to 3/4,” razor sharp plastic punches are self-sharpening and significantly outlast conventional steel punches in most applications.

An air ejector, foam ejector, and auto ejector are offered as options. These ejectors discharge material slugs from the center of the punch and prevent debris build-up.

Punches may be used with any F-Series cylinder that has 1/4-28 UNF-2A male threads. For your convenience, Fabco-Air has configured three standard cylinders designed specifically for hole punch applications. A thread extension of 1/2” aids punch position adjustment. Elastomer bumpers are included to ensure quiet operation. The cylinders are rated for 250 psi. A mounting nut is included.

**3/4” Bore Single Acting Spring Return**

**1/2” Stroke**
- Bumpers
- 1/2” Thread Extension
- Mounting Nut Included

**3/4” Bore Single Acting Spring Return**

**1” Stroke**
- Bumpers
- 1/2” Thread Extension
- Mounting Nut Included

**3/4” Bore Single Acting Spring Return**

**1/2” Stroke – Non-Rotating Rod**
- Bumpers
- 1/2” Thread Extension
- Mounting Nut Included

**3/4” Bore Single Acting Spring Return**

**1” Stroke – Non-Rotating Rod**
- Bumpers
- 1/2” Thread Extension
- Mounting Nut Included

**3/4” Bore Single Acting Spring Return**

**1/2” Stroke – Hollow Rod**
- Bumpers
- 1/2” Thread Extension
- Mounting Nut Included

**3/4” Bore Single Acting Spring Return**

**1” Stroke – Hollow Rod**
- Bumpers
- 1/2” Thread Extension
- Mounting Nut Included

Specifications and prices subject to change without notice or incurring obligation 1-25-10
F-Series
Replaceable Hole Punches

Benefits

- Punches are replaceable without replacing cylinder.
- Punches are self-sharpening, lightweight plastic.
  Made from specially formulated material, these punches regularly outlast steel punches in most applications.
- Auto-Ejector is standard on 1/8" and 1/4" diameters.
- Foam ejector is standard on 3/8" to 3/4" diameters.
- Punch locations are adjustable along cylinder rod.
- Excellent for use in:
  - Linear Low Density Polyethylene Film (LLDPE)
  - Polyethylene film up to 3 mil thickness
  - Polypropylene film up to 1 mil thickness

Note:
1. Punch standard package quantity is 5 pieces.
2. Adapters are available individually, and are not supplied with the punch.
3. For air ejection applications, use hollow rod cylinders type FM12265.
4. Jam nuts are included with all "Hole Punch" cylinders.

Cylinder and Punch Assemblies
The PFA Series is an economical pneumatic linear actuator that contains an internal Linear Resistive Transducer (LRT). It is ideal for applications where traditional magnetic position sensing is not acceptable. Additionally, the PFA Series is conducive where variations in cylinder stroke and speed are required or where an application calls for continuous position monitoring.

- Operating pressure: 150 psi max.
- Recommended Media: Filtered, clean, dry "non-condensing" compressed air. Do not apply any fluids that may be electrically conductive. Water-based fluids should not be used.

### General Technical Data

- **Cylinder Bore**
  - 10 = 1-1/16"
  - 15 = 1-1/2"
  - 20 = 2"
  - 25 = 2-1/2"
  - 30 = 3"

- **Cylinder Mounting**
  - 1 = Front Nose
  - 2 = Rear Pivot

- **"Standard" Full Inches of Stroke**
  - 01 = 1" Stroke
  - 02 = 2" Stroke
  - 03 = 3" Stroke
  - 04 = 4" Stroke
  - 06 = 6" Stroke
  - 08 = 8" Stroke
  - 12 = 12" Stroke
  - 18 = 18" Stroke (Max. Available)

- **Options**
  - 00 = No Options (or leave blank)
  - 01 = Bumpers

### How to Order Cylinder

- **Basic Series**
  - F - 10 AM

- **Cylinder Type**
  - AM = PFA Series

- **Connector Pin Assignments**

### Connector Pin Assignments

- **Electrical Specifications**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
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<tbody>
<tr>
<td>Electrical Resistance</td>
<td>1000 ohms (± 20%) per inch of stroke</td>
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<tr>
<td>Resolution</td>
<td>Infinite (limited by interfacing electronics)</td>
</tr>
<tr>
<td>Temperature Range</td>
<td>0° F to 160° F</td>
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<tr>
<td>Life Rating</td>
<td>500 million inches of travel on transducer</td>
</tr>
<tr>
<td>Linearity</td>
<td>±1% of stroke (or better)</td>
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<tr>
<td>Interface</td>
<td>6&quot; cable with M6x1 Quick Connect</td>
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<tr>
<td>Signal Input</td>
<td>Typically 10 VDC</td>
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<tr>
<td>Maximum Speed</td>
<td>50 in/sec</td>
</tr>
<tr>
<td>Maximum Standard Stroke</td>
<td>18 inches (longer strokes available upon request)</td>
</tr>
<tr>
<td>Maximum Current</td>
<td>1 microamp required from the transducer</td>
</tr>
</tbody>
</table>

Note that the PFA Series can integrate with some Fabco-Air slide products. Contact your local distributor or Fabco-Air engineering for details.
Position Feedback Cylinders

Front Nose Mount - 150 psi Max.
Cylinder Type AM1
Rod wiper is standard.
Mounting nut is not included.

Rear Pivot Mount - 150 psi Max.
Cylinder Type AM2
Rod wiper is standard.
Mounting nut is not included.
Pivot bushing NOT available.

Note:
Remove pivot mount attachment and rotate 90° to align pivot eye to ports.

See page 61 for accessory details.

### PFA Cylinder Dimensions

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<tr>
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<th></th>
<th></th>
<th></th>
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<td>4.88</td>
<td>5.46</td>
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<td>6.78</td>
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<td>B</td>
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<td>0.500</td>
<td>0.625</td>
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<td>C</td>
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<td>F</td>
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<td>1.13</td>
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<td>G</td>
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<td>0.31</td>
<td>0.38</td>
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<td>H</td>
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<td>0.09</td>
<td>0.13</td>
<td>0.13</td>
<td>0.19</td>
</tr>
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<td>I</td>
<td>5/16-24 UNF</td>
<td>7/16-20 UNF</td>
<td>1/2-20 UNF</td>
<td>5/8-18 UNF</td>
<td>5/8-18 UNF</td>
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<td>J</td>
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<td>0.50</td>
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<td>0.63</td>
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<td>K</td>
<td>7/8-14 UNF</td>
<td>1 1/8-12 UNF</td>
<td>1 1/4-12 UNF</td>
<td>1 3/8-12 UNF</td>
<td>1 1/2-12 UNF</td>
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<tr>
<td>L</td>
<td>0.875</td>
<td>1.125</td>
<td>1.375</td>
<td>1.500</td>
<td>1.625</td>
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<td>O</td>
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<td>0.50</td>
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<td>0.83</td>
<td>0.93</td>
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<td>0.63</td>
<td>0.75</td>
<td>0.88</td>
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<td>R</td>
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<td>1.125</td>
<td>1.375</td>
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<td>1.625</td>
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<td>0.56</td>
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<td>0.81</td>
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<td>5.44</td>
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<td>7.16</td>
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<td>0.500</td>
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<td>1/4 NPTF</td>
<td>1/4 NPTF</td>
<td>3/8 NPTF</td>
<td>3/8 NPTF</td>
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### PFA Cylinder Pricing

<table>
<thead>
<tr>
<th>Bore Code</th>
<th>Bore Size</th>
<th>Base Price AM1</th>
<th>Stroke Adder per Inch AM1</th>
<th>Rod Extension per Inch AM1</th>
<th>Thread Extension per Inch AM1</th>
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<tbody>
<tr>
<td>10</td>
<td>1.062</td>
<td>$354.63</td>
<td>$16.49</td>
<td>$4.76</td>
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<td>9.51</td>
<td>18.98</td>
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<tr>
<td>30</td>
<td>3.0</td>
<td>449.60</td>
<td>29.53</td>
<td>14.24</td>
<td>28.48</td>
</tr>
</tbody>
</table>

Specifications and prices subject to change without notice or incurring obligation.
Port Mounted Flow Controls

Swivel, Brass Body Flow Controls
• Full 360° Swivel • Compact Size • Pre-applied thread sealant

SPECIFICATIONS
• Male sizes:
  #10-32, 1/8 NPT, 1/4 NPT
• Female NPT or instant tube connections:
  10-32, 1/8 NPT, 1/4 NPT,
  5/32" T, 1/4" T, 3/8" T
• Choice of controlled flow direction
  • Valve mount – Meter in
  • Cylinder mount – Meter out
• Operating pressure to 150 PSI (10 bar)
• Operating temperature: -25° to 250°F

Swivel, Molded Body Flow Controls
• Full 360° Swivel • Compact Size • Pre-applied thread sealant

SPECIFICATIONS
• Male sizes:
  #10-32, 1/8 NPT, 1/4 NPT, 3/8 NPT
• Female instant tube connections:
  5/32" T, 1/4" T, 3/8" T
• Operating pressure to 150 PSI (10 bar)
• Operating temperature:
  0 to 160°F (-18˚C to 70˚C)
• High flow rates (see chart at right)
• Use with air or other inert gas only
• Not recommended for use with liquids
• Meter out only

How to Order

<table>
<thead>
<tr>
<th>MODEL NUMBER</th>
<th>DESCRIPTION</th>
<th>PRICE</th>
<th>A</th>
<th>B max</th>
<th>C</th>
<th>FLOW (Cv)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PK-82010</td>
<td>5/32 tubing x 10-32</td>
<td>$10.95</td>
<td>0.68</td>
<td>0.45</td>
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<td>5/32 tubing x 1/8 NPT</td>
<td>$8.20</td>
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<td>PK-82014</td>
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<td>1/4 tubing x 10-32</td>
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<td>0.27</td>
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<td>1.70</td>
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<td>PK-82066</td>
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<td>0.92</td>
<td>1.75</td>
<td>0.27</td>
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# F-Series Port Mounted Flow Controls

## Specifications and Prices

### Size 1
10-32 Male Thread

**Knob Adjustment**

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<th>Dim.</th>
<th>Lock Nut</th>
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<td>.18</td>
<td>.38</td>
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**Screwdriver Adjustment**

<table>
<thead>
<tr>
<th>Dim.</th>
<th>Lock Nut</th>
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<tbody>
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### Size 2
1/8 NPT Male Thread

**Knob Adjustment**

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**Screwdriver Adjustment**

<table>
<thead>
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<th>Lock Nut</th>
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### Size 4
1/4 NPT Male Thread

**Knob Adjustment**

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<tbody>
<tr>
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**Screwdriver Adjustment**

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<tr>
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### Flow Characteristics

**Typical Free Flow Maximum**

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<th>Supply Pressure</th>
<th>Flow Rate</th>
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<td>1.1 SCFM</td>
</tr>
<tr>
<td>100 psi</td>
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<td>60 psi</td>
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<tr>
<td>100 psi</td>
<td>24.8 SCFM</td>
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### Model Number / Price

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<th>Male Thread</th>
<th>Adjustment</th>
<th>Connection</th>
<th>Model In</th>
<th>Model Out</th>
<th>Price In</th>
<th>Price Out</th>
<th>Dim.</th>
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<tbody>
<tr>
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<td>10-32 Tap</td>
<td>PV1-A</td>
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<td>PC1-K</td>
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<td>PC1-M</td>
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<td>1/8 NPT Tap</td>
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<td>PC2-A</td>
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<td>PC2-C</td>
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<td></td>
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<td>1/8 NPT Tap</td>
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<td>PC2-K</td>
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<td>PC2-M</td>
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<td>PC2-N</td>
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<td>1.65</td>
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<td>PC4-A</td>
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<td>PC4-C</td>
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<td>3/8&quot; Tube</td>
<td>PV4-M</td>
<td>PC4-M</td>
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<td>21.20</td>
<td>2.00</td>
</tr>
</tbody>
</table>

Pricing effective September 1, 2011

Specifications and prices subject to change without notice or incurring obligation.
Magnetically operated reed switches and electronic sensors can be mounted anywhere along the length and circumference of the cylinder. A magnetic piston is required and is standard on Magnetic Interchange cylinders. Specify Magnetic Piston Option "–03" for other F-Series models or "–12" for 3-position models.

**Dovetail Style Sensors**

<table>
<thead>
<tr>
<th>Sensor Type</th>
<th>Electrical Characteristics</th>
<th>Prewired 9 ft. Leadwire Part No.</th>
<th>Price</th>
<th>Quick Disconnect* Part No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reed (No LED)</td>
<td>0-120 VDC/VAC, 0.5 Amp Max current, 5 Watt Max, 0 Voltage Drop</td>
<td>949-000-001 ...</td>
<td>$18.95</td>
<td>949-000-301 ...</td>
<td>$26.95</td>
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<tr>
<td>Reed (LED)</td>
<td>5-120 VDC/VAC, 0.03 Amp Max current, 4 Watt Max, 2.0 Voltage Drop</td>
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<td>$19.80</td>
<td>949-000-302 ...</td>
<td>$27.60</td>
</tr>
<tr>
<td>Electronic (LED)</td>
<td>Sourcing PNP 5-28 VDC, 0.20 Amp Max current, 1.0 Voltage Drop</td>
<td>949-000-031 ...</td>
<td>$25.00</td>
<td>949-000-331 ...</td>
<td>$32.85</td>
</tr>
<tr>
<td>Electronic (LED)</td>
<td>Sinking NPN 5-28 VDC, 0.20 Amp Max current, 1.0 Voltage Drop</td>
<td>949-000-032 ...</td>
<td>$25.00</td>
<td>949-000-332 ...</td>
<td>$32.85</td>
</tr>
</tbody>
</table>

*Note: Quick disconnect styles are supplied with 6 inch pigtail with male connector. Order female cordsets separately from chart below.

**Mounting Options**

- Encased in a plastic housing, dovetail style sensors are corrosion resistant. 60° wire outlet allows close mounting.
- Two methods of mounting are available: one is fastened to the cylinder barrel with a band clamp (not included with sensor – must be ordered separately); the second is an adhesive-backed mounting rail with twin dovetail slots.

**Clamp on Style Sensors**

<table>
<thead>
<tr>
<th>Sensor Type</th>
<th>Electrical Characteristics</th>
<th>Prewired 9 ft. Leadwire Part No.</th>
<th>Price</th>
<th>Quick Disconnect* Part No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reed (LED)</td>
<td>5-120 VAC/VDC, 0.5 Amp Max, 10 Watt Max, SPST N.O. 3.5 voltage drop</td>
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<td>9-2A197-1303 ...</td>
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</tr>
<tr>
<td>Electronic (LED)</td>
<td>Sourcing PNP, 6-24 VDC, 0.5 Amp Max, 1.0 voltage drop</td>
<td>9-2A197-1031 ...</td>
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<td>9-2A197-1331 ...</td>
<td>$43.15</td>
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<tr>
<td>Electronic (LED)</td>
<td>Sinking NPN, 6-24 VDC, 0.5 Amp Max, 1.0 voltage drop</td>
<td>9-2A197-1032 ...</td>
<td>$33.65</td>
<td>9-2A197-1332 ...</td>
<td>$43.15</td>
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</tbody>
</table>

**Band Clamp Adapter for Dovetail Sensors**

Part No. 900-300-000
Price: $8.55

**Band Clamp for Clamp On Sensors**

Part No. 800-A00-000
Price: $8.10

**Female Cordsets for Quick Disconnect Sensors**

<table>
<thead>
<tr>
<th>Cordset Length</th>
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<tr>
<td>2 Meters</td>
<td>CFC-2M</td>
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<tr>
<td>5 Meters</td>
<td>CFC-5M</td>
<td>$21.30</td>
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Specifications and prices subject to change without notice or incurring obligation
### Nose Mounting Brackets

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>J</th>
<th>K</th>
<th>Part #</th>
<th>Price</th>
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<tbody>
<tr>
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<td>.063</td>
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<td>.38</td>
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<td>.251</td>
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<td>.13</td>
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<td>.251</td>
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### Pivot Mounting Brackets

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<th>F</th>
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<th>Part #</th>
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### Rod Clevises

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### Mounting Nuts & Rod Thread Nuts

<table>
<thead>
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<th>A</th>
<th>B</th>
<th>C</th>
<th>Price</th>
</tr>
</thead>
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Specifications and prices subject to change without notice or incurring obligation.

Pricing effective February 2, 2012.