Model 1800 PFM Series Regulator
1800 PFM Series Regulator

3 Closing Springs
For improved lock-up performance
- Standard
- Low differential
- High differential
(See Closing Spring chart on page 3)

Inlet pressure
Loading pressure
Outlet pressure

General Information
- Maximum 125 PSIG inlet pressure
- Operating temperature range of -20°F to 150°F (-30°C to 65°C)
- Maximum flow rates of up to 80,000 SCFH
- 1-1/2" or 2" NPT connection or 2" ANSI Class 125 lb. Flat Faced flanged connection

Enhancements
- Extended outlet pressure range to cover 7" WC to 30 PSIG
- Improved ease of pilot maintenance
- 1804 pilot covers wide range of 2-30 PSIG outlet
- 1805 pilot optimizes performance between 7" WC and 2 PSIG outlet range
- 3 closing spring options provide for improved lock-up performance

Features
- Same great PFM rugged design and proven reliability
- Expanded orifice offerings with the addition of 1/2" and 3/4" sizes
- Maintains constant outlet pressure within ±1% absolute set pressure over a wide range of flow rates
- Ideal for fixed factor measurement
- Available with optional OPSO (over pressure shut off), USSA (universal safety shut off assembly), and ISO™ (internal safety orifice)

Pilot Options
1804 PFM Series
(2-30 PSIG Outlet Range)
- 2 pilot spring range options
  - 2-30 PSIG
  - 2-10 PSIG

1805 PFM Series
(7" WC to 2 PSIG Outlet Range)
- 2 pilot spring range options
  - 7"-30" WC
  - 1.0-2.4 PSIG
Applications

1804 PFM Series (2-30 PSIG Outlet Pressure)

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1804 PFM</td>
<td>Standard regulator</td>
</tr>
<tr>
<td>1804M PFM</td>
<td>Standard regulator with external sense</td>
</tr>
<tr>
<td>1884 PFM</td>
<td>Standard regulator with overpressure shut-off</td>
</tr>
<tr>
<td>1884M PFM</td>
<td>Standard regulator with external sense and overpressure shut-off</td>
</tr>
<tr>
<td>1884 PFM w/USSA</td>
<td>Standard regulator with overpressure and under pressure shut-off</td>
</tr>
<tr>
<td>1884M PFM w/USSA</td>
<td>Standard regulator with external sense, overpressure and under pressure shut-off</td>
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1805 PFM Series (7" WC-2 PSIG Outlet Pressure)

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Description</th>
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<tbody>
<tr>
<td>1805 PFM</td>
<td>Standard regulator</td>
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<tr>
<td>1805M PFM</td>
<td>Standard regulator with external sense</td>
</tr>
<tr>
<td>1885 PFM</td>
<td>Standard regulator with overpressure shut-off</td>
</tr>
<tr>
<td>1885M PFM</td>
<td>Standard regulator with external sense and overpressure shut-off</td>
</tr>
<tr>
<td>1885 PFM w/USSA</td>
<td>Standard regulator with overpressure and under pressure shut-off</td>
</tr>
<tr>
<td>1885M PFM w/USSA</td>
<td>Standard regulator with external sense, overpressure and under pressure shut-off</td>
</tr>
</tbody>
</table>

Ordering Information
1. Model Number
2. Connection Size: 1-1/2" Threaded, 2" Threaded, 2" Flanged
3. Inlet Pressure Range: up to 125 PSIG
4. Outlet Set Pressure: 7" WC to 30 PSIG
6. Gas Specific Gravity
7. Regulator Assembly Position: See below
8. Pilot Filter Option: Yes/No
9. OPSO Spring Range
10. Under pressure spring range (USSA only)

Maximum Differential Pressure Across Orifice (PSID) 1804 & 1805 PFM Series

<table>
<thead>
<tr>
<th>Closing Spring Part Number</th>
<th>Spring color</th>
<th>Description</th>
<th>1/4&quot;</th>
<th>3/8&quot;</th>
<th>1/2&quot;</th>
<th>5/8&quot;</th>
<th>3/4&quot;</th>
<th>7/8&quot;</th>
<th>1&quot;</th>
<th>1-1/4&quot;</th>
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<tbody>
<tr>
<td>71424P028</td>
<td>Black/Red</td>
<td>Low Differential</td>
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<td>15</td>
<td>5</td>
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<td>71424P025</td>
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<td>Standard</td>
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<tr>
<td>71424P036</td>
<td>Solid Silver</td>
<td>High Differential</td>
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<td>125</td>
<td>100</td>
<td>80</td>
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</tbody>
</table>

NR = Not recommended for optimum lock-up performance
1804/1884 PFM Series Assembly Positions

1804 PFM Series

Assembly Position “A1.5”

Assembly Position “A4.5”

Assembly Position “B1.5”

Assembly Position “B4.5”

Assembly Position “C1.5”

Assembly Position “C4.5”

Assembly Position “D1.5”

Assembly Position “D4.5”

1884 PFM Series

Assembly Position “A1.5”

Assembly Position “B4.5”

Assembly Position “C1.5”

OPSO Vent

Standard Vent Position

OPSO Vent

Standard Vent Position

OPSO Vent

Standard Vent Position

Assembly Position “C4.5”

OPSO Vent

Standard Vent Position
1805/1885 PFM Series Assembly Positions

1805 PFM Series

Valve Head Position “A”

Valve Head Position “B”

Valve Head Position “C”

Valve Head Position “D”
1885 PFM Series

Valve Head Position “A”

Valve Head Position “B”

Valve Head Position “C”

Valve Head Position “D”