



elster
American Meter

Model 1800 PFM Series Regulator

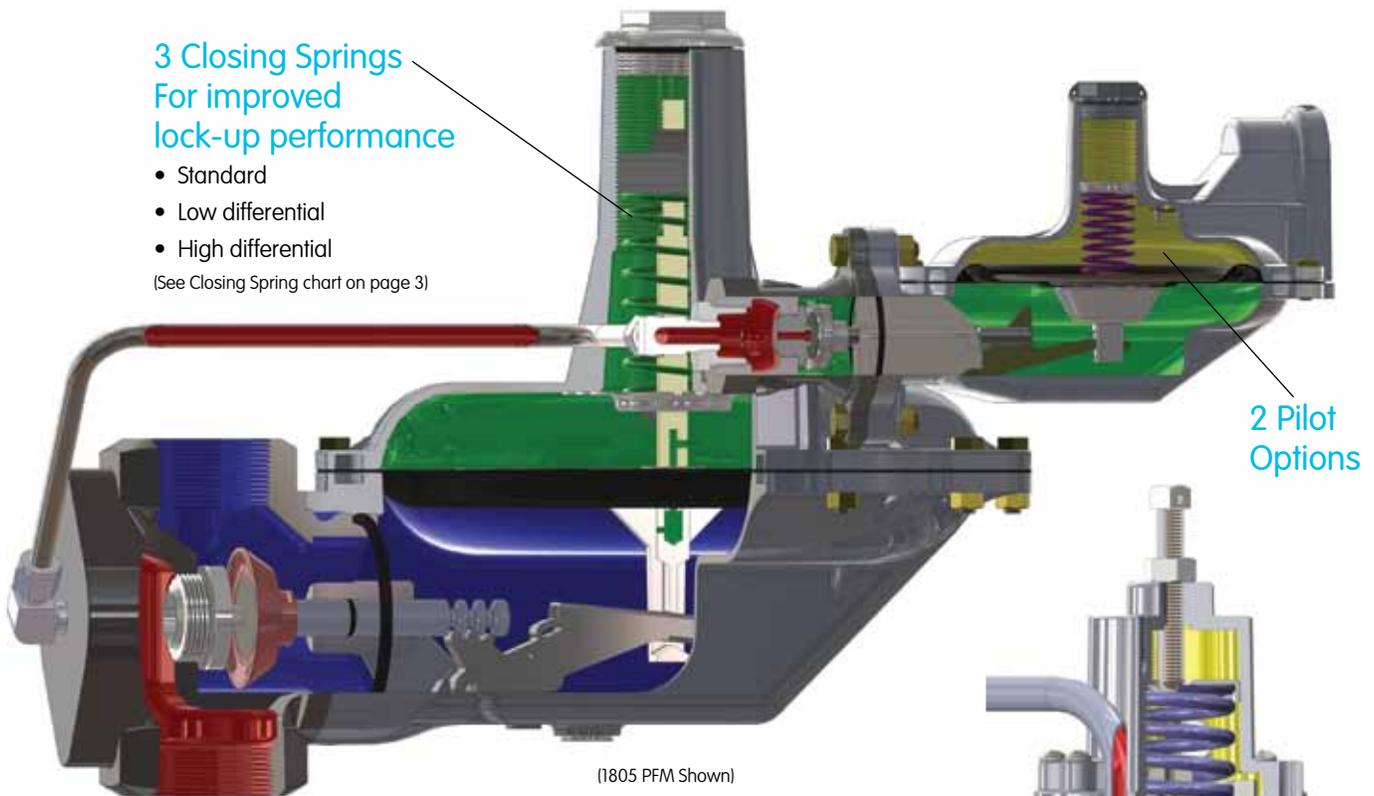


1800 PFM Series Regulator

3 Closing Springs For improved lock-up performance

- Standard
- Low differential
- High differential

(See Closing Spring chart on page 3)



(1805 PFM Shown)

- Inlet pressure
- Loading pressure
- Outlet pressure

(Pilot for 1804 PFM)

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 $\pm 1\%$ 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)

Model Number	Description
1804 PFM	Standard regulator
1804M PFM	Standard regulator with external sense
1884 PFM	Standard regulator with overpressure shut-off
1884M PFM	Standard regulator with external sense and overpressure shut-off
1884 PFM w/USSA	Standard regulator with overpressure and under pressure shut-off
1884M PFM w/ USSA	Standard regulator with external sense, overpressure and under pressure shut-off

1805 PFM Series (7" WC-2 PSIG Outlet Pressure)

Model Number	Description
1805 PFM	Standard regulator
1805M PFM	Standard regulator with external sense
1885 PFM	Standard regulator with overpressure shut-off
1885M PFM	Standard regulator with external sense and overpressure shut-off
1885 PFM w/USSA	Standard regulator with overpressure and under pressure shut-off
1885M PFM w/ USSA	Standard regulator with external sense, overpressure and under pressure shut-off

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
5. Main Orifice Diameter: 1/4", 3/8", 1/2", 5/8", 3/4", 7/8", 1", 1-1/4"
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

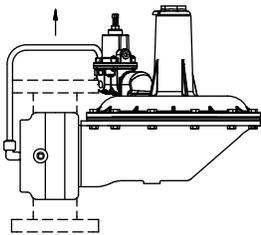
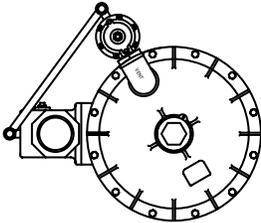
Closing Spring Part Number	Spring color	Description	1/4"	3/8"	1/2"	5/8"	3/4"	7/8"	1"	1-1/4"
71424P028	Black/Red	Low Differential	25	15	5	5	3	NR	NR	NR
71424P025	Black	Standard	125	125	125	125	80	55	40	35
71424P036	Solid Silver	High Differential	NR	NR	NR	NR	125	125	100	80

NR = Not recommended for optimum lock-up performance

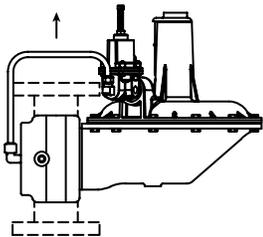
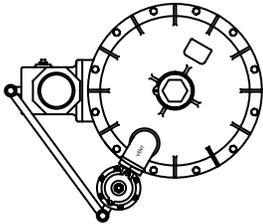
1804/1884 PFM Series Assembly Positions

1804 PFM Series

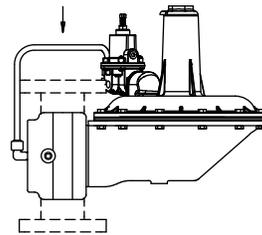
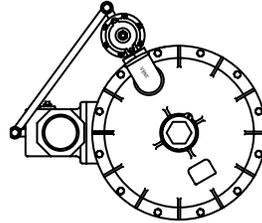
Assembly Position "A1.5"



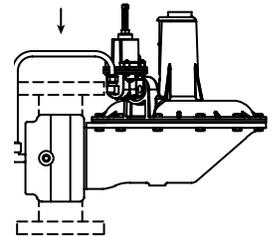
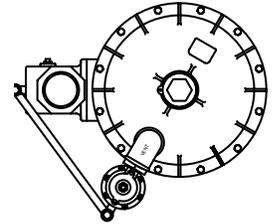
Assembly Position "A4.5"



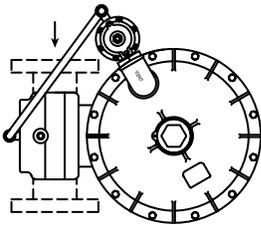
Assembly Position "B1.5"



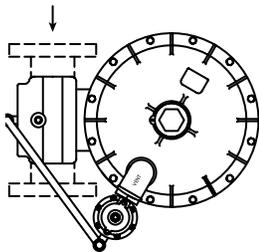
Assembly Position "B4.5"



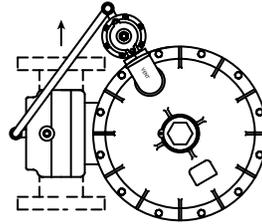
Assembly Position "C1.5"



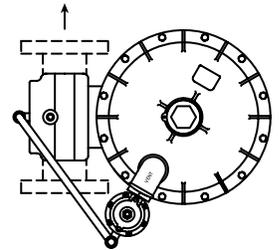
Assembly Position "C4.5"



Assembly Position "D1.5"

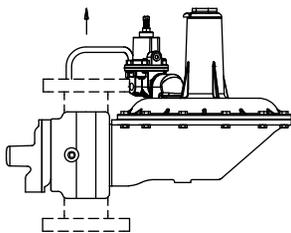
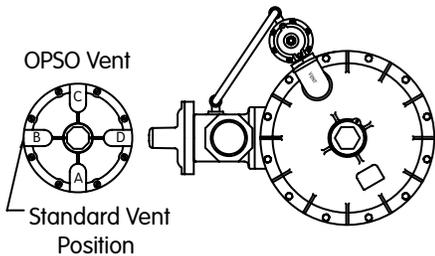


Assembly Position "D4.5"

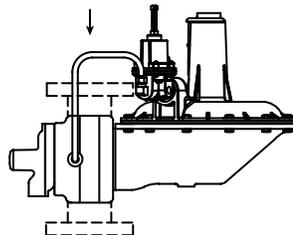
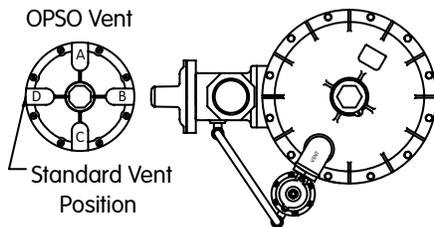


1884 PFM Series

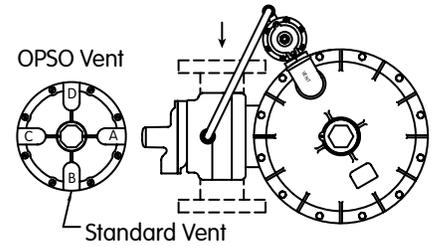
Assembly Position "A1.5"



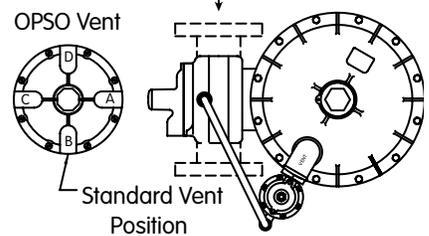
Assembly Position "B4.5"



Assembly Position "C1.5"



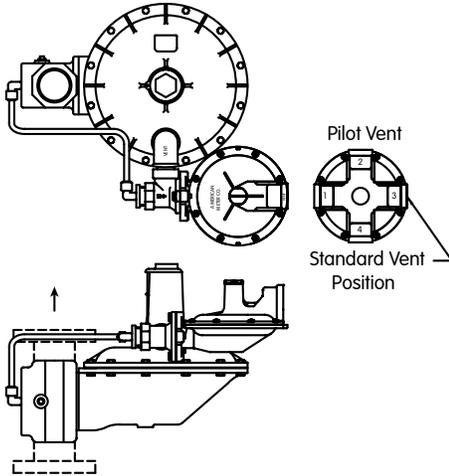
Assembly Position "C4.5"



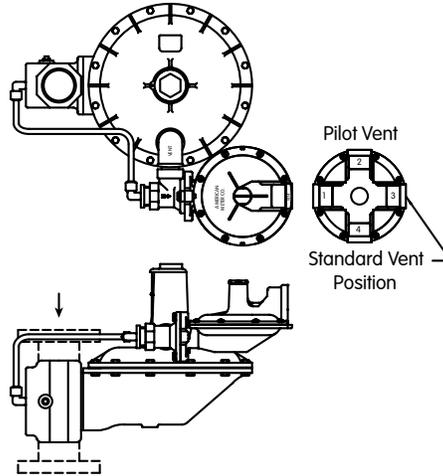
1805/1885 PFM Series Assembly Positions

1805 PFM Series

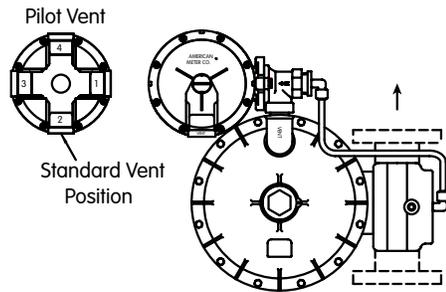
Valve Head Position "A"



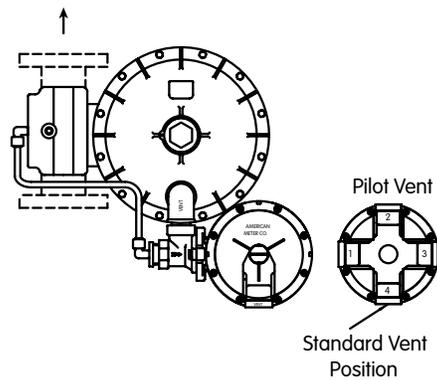
Valve Head Position "B"



Valve Head Position "C"

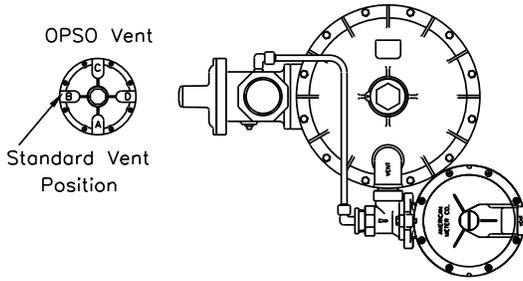


Valve Head Position "D"

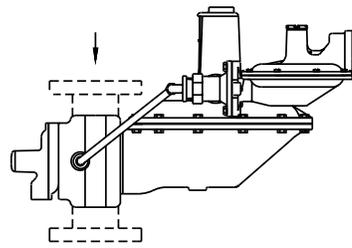
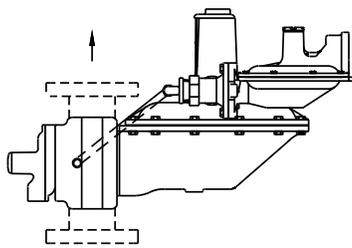
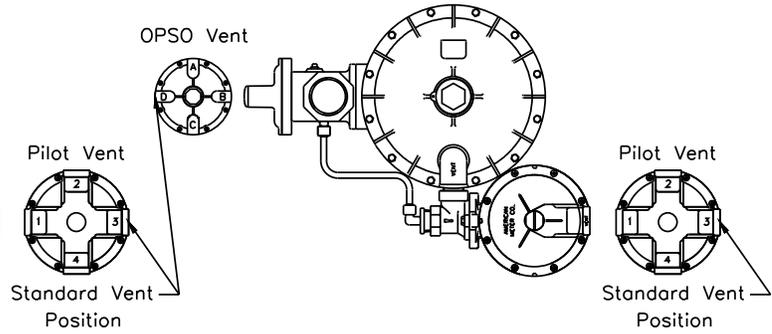


1885 PFM Series

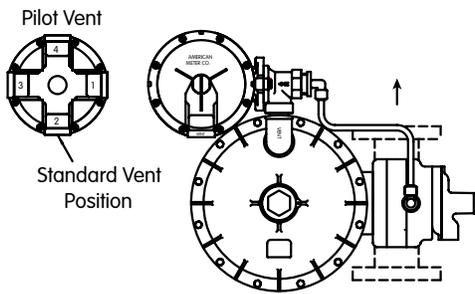
Valve Head Position "A"



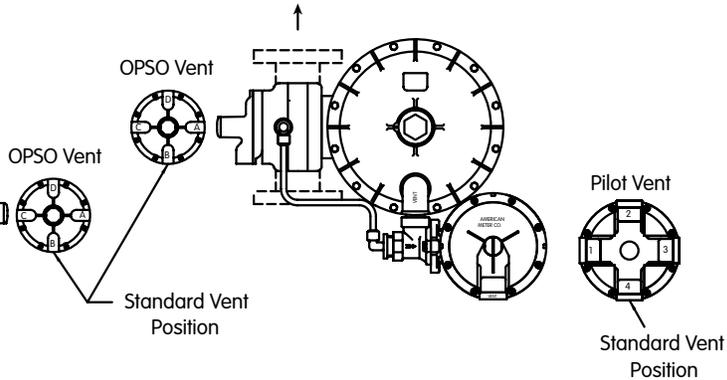
Valve Head Position "B"



Valve Head Position "C"



Valve Head Position "D"



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