Pneumatic Valves for Fuel Gas Shutoff

Models M2582-P and M5180-P

- Pneumatically Open and Shut Off Fuel Gas Automatically or Semi-automatically
- Pneumatic Control Pressure Can Be Air, Gas or Oil
- Models for 2 in. or 1 in. (51 mm or 25 mm) Fuel Gas Lines

Description
The M2582-P and M5180-P are pneumatically controlled fuel shut-off valves that open and close automatically or semi-automatically. The pneumatic control pressure can be air, oil or gas. A manual lever aids in opening the valve when control pressure is insufficient. A gas escape vent, when properly vented and maintained, releases trapped gas from the valve after shutoff.

Basic Operation
Automatic: As the control pressure/vacuum increases the valve will open. When the control pressure/vacuum decreases, the valve will close.
Semi-Automatic: If the control pressure/vacuum is too low and the valve does not open automatically, it can be opened manually by lifting the built-in lever arm and setting the latch. The latch resets automatically when control pressure rises enough to release it.

M2582-P is for 1 in. (25 mm) gas lines. It automatically opens at 2 psi (14 kPa) [.14 bar] and fully opens the seat at 3 psi (21 kPa) [.21 bar]. The valve can be manually opened with lever and latched against inlet pressure of 100 psi (689 kPa) [6.89 bar]. The latch will release after pilot pressure reaches 2.5 psi (17 kPa) [.17 bar].

M5180-P is for 2 in. (52 mm) gas lines. It automatically opens at 2 psi (14 kPa) [.14 bar] and fully opens the seat at 3 psi (21 kPa) [.21 bar]. The valve can be manually opened with lever and latched against inlet pressure of 100 psi (689 kPa) [6.89 bar]. The latch will release after pilot pressure reaches 2.5 psi (17 kPa) [.17 bar].

Specifications
Valve Body: Sandcast aluminum (alodined for corrosion resistance).
Optional steel body available on M5180-P models only (see How to Order).
Valve Seat: Buna-N
Valve Inlet Pressure (Maximum):
M2582-P: 80 psi (552 kPa) [5.52 bar]
M5180-P: 100 psi (689 kPa) [6.89 bar]
Parts Exposed to Gas Line Flow:
M2582-P:
- Aluminum
- Buna-N
- 302, 303, and 17-7 PH stainless steel
M5180-P:
- Aluminum (Steel optional)
- Buna-N
- 302, 303, 304, and 416 stainless steel
Control Diaphragm: Flexweave polyester fabric and Buna-N elastomer.

Control Pressure (Maximum):
M2582-P: 75 psi (517 kPa) [5.17 bar]
M5180-P: 80 psig (552 kPa) [5.52 bar]

How to Order
To order, use the diagram below.

Model
M2582-P
M5180-P
Body
Blank = Aluminum
2 = Steel (applies to M5180-P)

Warranty
A limited warranty on materials and workmanship is given with this FW Murphy product. A copy of the warranty may be viewed or printed by going to www.fwmurphy.com/support/warranty.htm
**M2582-P Dimensions**

- 1/4 in. (6 mm) tube connection; control pressure 3 psi (21 kPa) [.21 bar] minimum, 75 psi (517 kPa) [.517 bar] maximum.
- Breather/Vent 1/16 in. (2 mm)
- 1 NPT (2 places)
- 1/4 NPT, Vent and Plug
- 3-3/32 in. (79 mm)
- 5-1/2 in. (140 mm)

**M5180-P Dimensions**

- Latch Arm (see NOTE 2)
- Breather Vent (see NOTE 1)
- 2 NPT (2 places)
- Vent and Plug 1/2 NPT
- 4-3/8 in. (111 mm)
- 4-1/4 in. (108 mm)

**NOTE:** Thumb operated opening latch (2.5 psi [17 kPa] [.17 bar] required to release cocking latch)

**NOTE 1:** Control pressure connection fitting and breather vent fitting can be swapped to convert to vacuum control.

**NOTE 2:** Thumb operated opening latch (2.5 psi [17 kPa] [.17 bar] required to release cocking latch)

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**M2582-P Flow Characteristics Laboratory Test**

- Standard cubic feet per hour
- Cubic meters per hour in brackets [

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**Shipping Weights**

- M2582-P: 5 lbs 10 oz (2.55 kg).
- M5180-P: 14 lbs 9 oz (6.61 kg).

With steel body option “2”; 25 lbs (11.34 kg).

**Shipping Dimensions**

- M2582-P: 8-1/4 x 8-1/4 x 7-1/2 in. (210 x 210 x 191 mm).
- M5180-P: 12-1/4 x 12-1/4 x 9-3/4 in. (311 x 311 x 248 mm).

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**Service Parts**

Specify part number when ordering. M2582P M5180P

- Handle and Latch Kit 55000148 55000154
- Stem and Seat Kit 55000147 55000155
- Top Works Complete Valve Less Body & Vent 55000135 55000153 55005420
- Diaphragm Assembly 55000184 55000155 00007908
- Pilot Diaphragm 55000079 55000420

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