The MD Pro is a miniature solenoid-operated valve that controls gas flow proportionally to input current. This non-thermally compensated VSO® valve is the economical solution for precise flow control.

**Features**
- Provides repeatability across its operating range.
- Offers a superior combination of value and performance.
- Rated for 10 million life cycles.
- ROHS compliant.

**Physical Properties**
- **Valve Type:** 2-Way Normally Closed
- **Media:** Air, argon, helium, hydrogen, methane, nitrogen, oxygen, & others
- **Operating Environment:** 32 to 140°F (0 to 60°C)
- **Storage Temperature:** -40 to 158°F (-40 to 70°C)
- **Length:** 1.785 in (45.34 mm)
- **Width:** 0.625 in (16.51 mm)
- **Height:** 0.67 in (17.02 mm)
- **Porting:** 1/8” barbs; manifold mount
- **Weight:** 2.2 oz (62.86 grams)
- **Internal Volume:** 0.031 in³ (.508 cm³)
- **Filtration (Suggested and Available):** 43 micron
- **Oxygen Clean:** Available

**Electrical**
- **Power:** 2.0 Watts maximum
- **Voltage:** See ordering information
- **Electrical Termination:** 18” Wire Leads

**Wetted Materials**
- **Body:** 360 HO2 Brass
- **Stem Base:** 430 FR Stainless Steel and Brass 360 HT
- **All Others:** Fluorocarbon; 430 FR Stainless Steel; 300 Series Stainless Steel

**Performance Characteristics**
- **Leak Rate:** <0.2 sccm of air
- **Pressure:**
  - 0 to 50 psi (0.34 MPa)
  - 0 to 75 psi (0.52 MPa)
  - 0 to 100 psi (0.69 MPa)
- **Vacuum:** 0-27 in Hg (0.09 MPa)
- **Orifice Sizes:**
  - 0.040” (1.02 mm)
  - 0.050” (1.27 mm)
  - 0.065” (1.65 mm)

**Typical Air Flow with 20VDC coil (25 psig)**

VSO is a registered trademark of Parker Hannifin Corporation.
**MD PRO**  Non-Thermally Compensated Proportional Valve

### Dimensions

**Basic Valve Dimensions**

- .056 [1.40]
- .305 [7.75]
- .125 [3.18]
- .02 [0.51]
- .500 [12.7]
- .281 [7.14]
- .156 [3.97]
- .312 [7.92]

**Pneumatic Interface Options**

- 625 MAX [15.88]
- 2X .125 [3.18]
- 2X .123 [3.12] (I.D.)
- 1.785 [45.34]
- .305 [7.75]

### Ordering Information

<table>
<thead>
<tr>
<th>Sample Part ID</th>
<th>MDPRO 4 VA F S</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
<td>Series</td>
</tr>
<tr>
<td></td>
<td>#: Max. Operating Pressure/Orifice Size</td>
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<tr>
<td></td>
<td>4: 75 psig/0.040&quot;</td>
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<tr>
<td></td>
<td>5: 100 psig/0.050&quot;</td>
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<td></td>
<td>6: 50 psig/0.065&quot;</td>
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<tr>
<td></td>
<td>V: FKM</td>
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<tr>
<td></td>
<td>X: Max Voltage*</td>
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<tr>
<td></td>
<td>A: 5.5 VDC</td>
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<td></td>
<td>B: 8 VDC</td>
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<td></td>
<td>C: 11.5 VDC</td>
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<tr>
<td></td>
<td>D: 13.5 VDC</td>
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<td></td>
<td>E: 20 VDC</td>
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<td>F: 27 VDC</td>
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<tr>
<td></td>
<td>Q: 50 psig/0.065&quot;</td>
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<tr>
<td></td>
<td>R: 50 psig/0.065&quot;</td>
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<tr>
<td></td>
<td>S: Standard Cleaning</td>
</tr>
</tbody>
</table>

**Options**

- *. Max Voltage for continuous full flow, ambient temperature 55°C
- *43 Micron Screen (Port 2)

**Electrical Interface Options**

- Wire Leads, 18" (P): 5.5 VDC
- Quick Connect Spade (Q)
- PC Mount 4 PC Pins (R)

**NOTES:**

1. DIMENSIONS IN [ ] ARE IN MM.

**NOTE:** Please consult Parker Precision Fluidics Division for other considerations. For more detailed info, visit us on the Web, or call and refer to Performance Spec. #790-002206-001 and Drawing #890-003022-001.