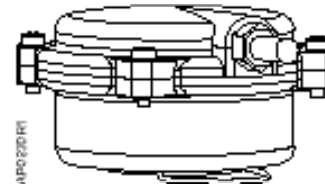


## Powermite 599 Series

### MT Series 2-inch Pneumatic Valve Actuator



<b>Description</b>	The Powermite 599 Series MT Series 2-inch pneumatic valve actuator is designed for use with the Powermite 599 Series MT Series terminal unit valves with a 7/32-inch (5.5 mm) stroke.							
<b>Features</b>	<ul style="list-style-type: none"> <li>• Low profile</li> <li>• Freely rotates to aid tubing installation</li> <li>• Easy installation and removal</li> <li>• All metal housing</li> </ul>							
<b>Application</b>	These 2-inch pneumatic actuators are designed to be used on Powermite MT Series terminal unit valves requiring a minimum of 67 pounds force (300N). They can be used in liquid and steam service applications.							
<b>Product Number</b>	<b>599 -01088</b>	Actuator Prefix code when combining with a <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="border-right: 1px solid black; padding-right: 5px;">10 to 15 psi spring range valve</td> <td style="padding-left: 5px;">256</td> </tr> <tr> <td style="border-right: 1px solid black; padding-right: 5px;">3 to 8 psi spring range valve</td> <td style="padding-left: 5px;">257</td> </tr> <tr> <td style="border-right: 1px solid black; padding-right: 5px;">8 to 13 spring range valve</td> <td style="padding-left: 5px;">258</td> </tr> </table>	10 to 15 psi spring range valve	256	3 to 8 psi spring range valve	257	8 to 13 spring range valve	258
10 to 15 psi spring range valve	256							
3 to 8 psi spring range valve	257							
8 to 13 spring range valve	258							
<b>Ordering Information</b>	To order a complete valve plus actuator assembly from the factory, combine the actuator prefix code with the suffix of the valve product number. See <i>Technical Bulletin (TB) 251</i> (155-306P25) for selection procedures.  To order an actuator only, use the product number listed above							
<b>Specifications</b>	Effective diaphragm area Diaphragm material Nominal spring range Span Nominal stroke Maximum diaphragm pressure Air Connection  Ambient temperature Transportation Operating	3.4 inch <sup>2</sup> (22 cm <sup>2</sup> ) Silicone Valve dependent 5 psi (34 kPa) valve dependent 7/32-inch (5.5 mm) 35 psi (241 kPa) 1/8" N.P.T. fitting for 1/4-inch OD plastic tubing  -40 to 180°F (-40 to 82°C) 35 to 120°F (-2 to 49°C)						

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**Specifications,  
Continued**

Mounting location	NEMA 1 (interior only)
Dimensions	See Figure 2
Weight	0.43 lb (0.2 kg)

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**Service Kit**

Diaphragm replacement kit (Package of five)	656-736
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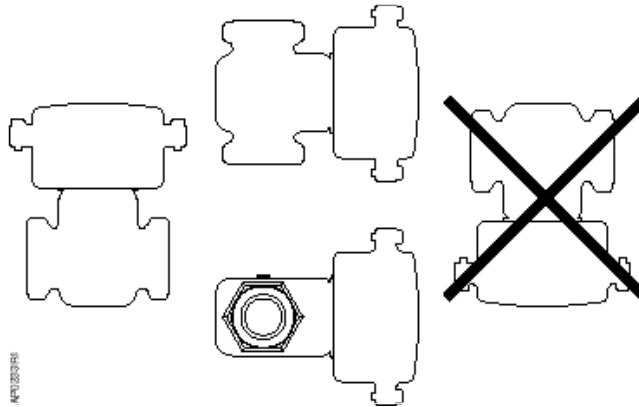
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**Operation**

The control air signal upon the diaphragm causes the valve to modulate whenever the air pressure is within the spring range of the valve.

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**Mounting and  
Installation**



**Figure 1. Acceptable Mounting Positions.**

Allow 8 inches (200 mm) headroom and 6 inches (150 mm) on either side of the actuator.

For best performance install the actuator vertically above the valve. The actuator can be installed in any position between vertical and horizontal. We do not recommend installing the actuator below horizontal or up side down. See Figure 1 for allowable mounting positions.

Complete instructions for field mounting the actuator are included with the actuator.

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**Service**

**Diaphragm replacement**

Complete instructions are included in the diaphragm replacement kit.

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## Dimensions

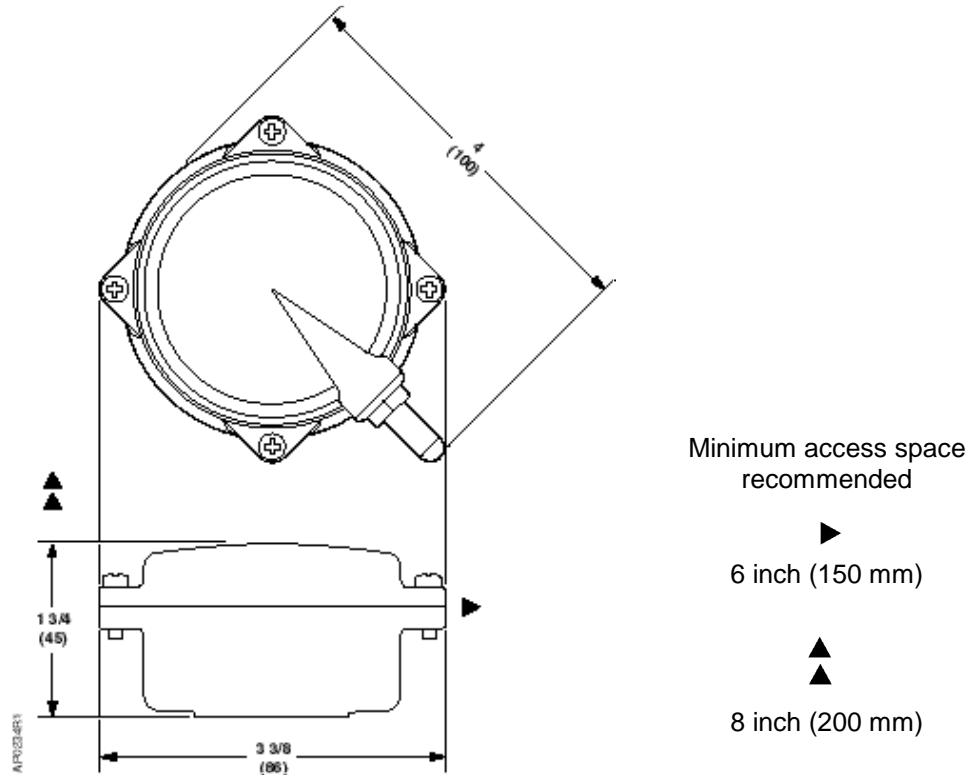


Figure 2. Dimensions in inches. Millimeters in parentheses.

Actuator Details

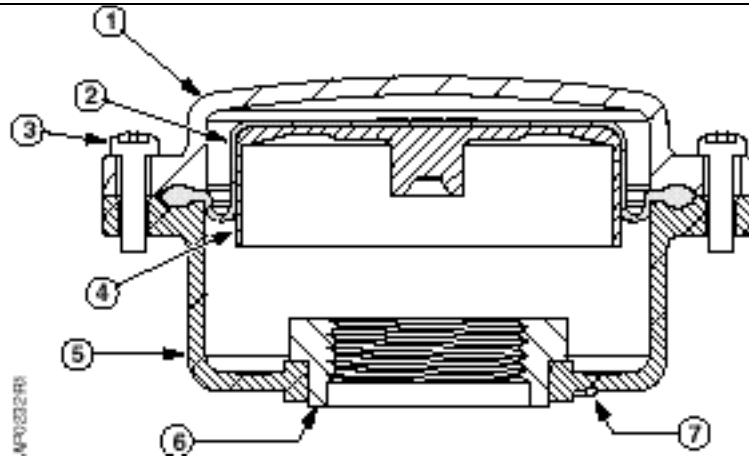


Figure 3. Powermite AP 599 Series 2-inch Pneumatic Valve Actuator.

Table 1. Parts of the Actuator. See Figure 3.

Item	Description	Q'ty	Material
1	Upper housing	1	Aluminum
2	Diaphragm	1	Silicone
3	Thread forming screw	4	Zinc plated steel
4	Piston cup	1	Aluminum
5	Lower housing	1	Aluminum
6	Lower housing retaining nut	1	Brass
7	Retaining clip	1	Galvanized steel
Not shown	1/8" N.P.T. fitting for 1/4 OD plastic tubing	1	Brass

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