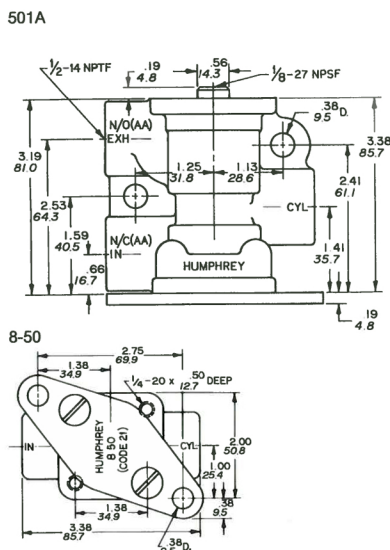


Air-piloted valves of this series are of piston poppet design that require lubrication and offer the convenience of straight-line plumbing. 4-way valves are also available in the 501 Series. 501 Series valves have full 0.500-inch orifices and can be mounted in any position.



**501AA** 501AA-3-10-21  
Model 501AA is a 3-way or "detented" 3-way, normally closed valve with an internal compensating orifice which maintains actuated position after momentary pilot signal, maintains "trapped" pilot pressure to compensate for minor leaks, and speeds the opening and closing response time. See further information in introductory material about piloted valves.



**501A** Model 501A is a multi-purpose valve offering high flow rates (to 275 scfm at 125 psig). With all ports on the same vertical plane, the 501A offers straight-line plumbing. It is constructed of lightweight aluminum which has been hardcoated for greater resistance to wear. With the pilot pressure connected to pilot port, four functions are possible:

**Normally closed:** Supply to NC port. NO port becomes exhaust port. CYL port to work.

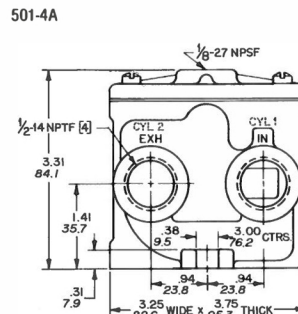
**Normally open:** Supply to NO port. NC port becomes exhaust port. CYL to work.

**Directional:** Supply to CYL port. Pilot air shifts NC open and NO closed.

**Bi-Media:** Supply #1 to NO; Supply #2 to NC. CYL port is common.



**501-4A** Model 501-4A valve offers high flow rates (to 212 scfm at 125 psig). With all ports on the same horizontal plane, it provides convenient straight-line plumbing. The 501-4A can be mounted in any position: in-line or with body mounting lugs.



**501-4AA** 501AA-3-12-20

Model 501-4AA is a 4-way or "detented" 4-way valve with an internal compensating orifice which maintains actuated position after momentary pilot signal, maintains "trapped" pilot reserve to compensate for minor leaks, and speeds both the opening and the closing response time. Furnished with gold-colored cap to visually distinguish it from the 501-4A.



<b>MEDIA:</b> Compressed Air (Consult factory for others)	<b>OPERATING SPEEDS:</b> <b>501-4A/AA:</b> To 360 CPM
<b>PRESSURE RANGE:</b> <b>501-4A:</b> 0 to 125 psig (0 to 8.6 bars) <b>501A:</b> 0 to 125 psig (0 to 8.6 bars) <b>501AA:</b> 15 to 125 psig (1.0 to 8.6 bars)	<b>MATERIALS:</b> Cast Aluminum, Zinc Plated Steel, Stainless Steel, Buna N
<b>TEMPERATURE RANGE:</b> -30 to 225°F (-34.4 to 107.2°C) <b>501A/AA</b> -30 to 225°F (-34.4 to 107.2°C)	<b>LUBRICATION</b> ..... Recommended <b>FILTRATION</b> ..... Recommended

MODEL	30 PSIG CFM	(2.1 BARS) LPM	120 PSIG CFM	(8.3 BARS) LPM	ACTUAL LBS	KGS
501-4A/AA	55.0	1557.0	195.0	5521.0	1.65	0.74
501A/AA	72.0	2037.6	267.0	7556.1	0.9	0.4

	SUPPLY PRESSURE							
	At 50 psig (3.5 bars)				At 100 psig (7.0 bars)			
	Chamber Fill 0-40 psig (0-2.8 bars)		Exhaust 50-10 psig (3.5- 7 bars)		Chamber Fill 0-80 psig (0-5.5 bars)		Exhaust 100-20 psig (7.0-1.4 bars)	
	10 Cubic Inches (164cc)		100 Cubic Inches (1640cc)		10 Cubic Inches (164cc)		100 Cubic Inches (1640cc)	
MODEL	FILL	EXHAUST	FILL	EXHAUST	FILL	EXHAUST	FILL	EXHAUST
501-4A/AA	0.012	0.014	0.121	0.104	0.013	0.017	0.134	0.125
501A/AA	0.008	0.012	0.082	0.096	0.009	0.015	0.094	0.119
VALVED PRESSURE		25 psig	1.7 bars	75 psig	5.2 bars	125 psig	8.6 bars	
PILOT PRESSURE								
MODEL	501-4A	24.3	1.7	37.6	4.0	94.2	6.5	
	501-4AA	15.5	1.1	39.0	2.7	64.2	4.4	
	501A	19.3	1.3	43.2	3.0	71.3	4.9	
	501AA	17.8	1.2	42.0	2.9	69.8	4.8	