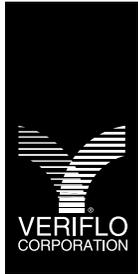


QUANTUM Valve Selection Guide

Selection Guide for Multi-Port, Angle and Elbow Diaphragm Valves



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Selection Guide

Customize a valve to meet your system requirements. Your choice of Valve Actuation, End Connections and Flow Path are described below. The model designation options start with selection of the actuator in Figure #1.

Valve Actuation

Figure #1

Actuator Style	Pressure Range Vacuum to...	Description of Actuator	Actuator Designator
Manual	3500 psig (240 bar) ¹	Round handwheel 1/4" Turn Lever Indicator Handle Short 1/4" turn lever	S L I M
Pneumatic (low pressure system)	125 psig (8.6 bar)	Normally Closed ² Normally Open ²	AOP LP NC AOP LP NO
Pneumatic	3500 psig (240 bar) ¹	Normally Closed ²	AOP HP NC

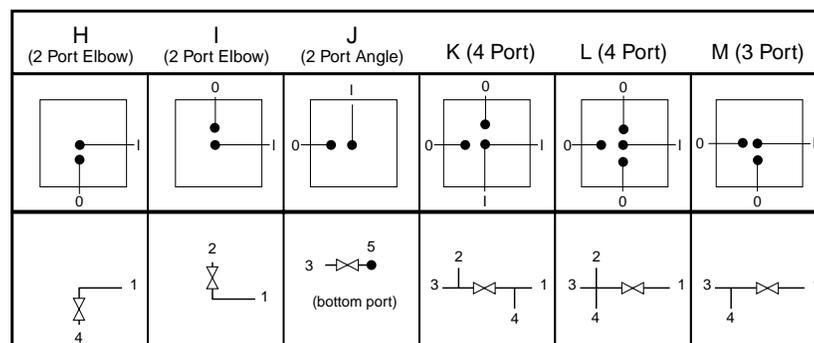
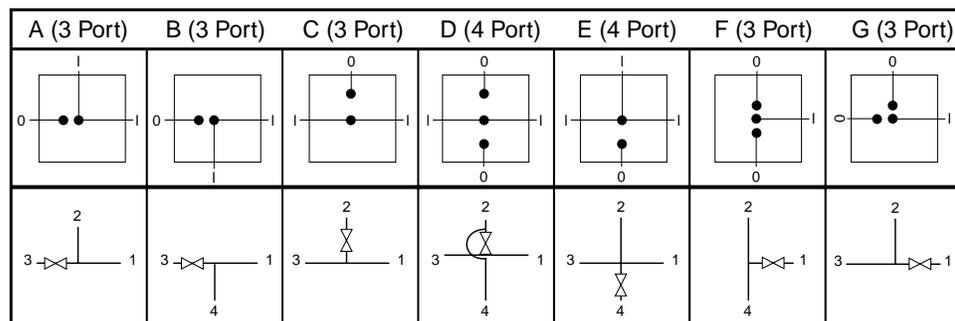
1. For oxygen: 2200 psig (150 bar)

2. Actuation pressure - 75 psig nominal (60-120 psig)

Flow Path

Select a body configuration with the desired internal flow path in Figure #2. The flow path is shown as viewed from the top of the body. The "O" next to the port number indicates a port above the valve seat; the "I" indicates a port below the valve seat. Although the 944/945/955 will operate in either flow direction, the "O" port is generally used as the outlet or downstream port and the "I" port is normally used as the inlet or upstream port. The Flow Path Designator will be used in the Valve Ordering or model number. Figure #3 and #4 on the following page address port numbering sequence and end connection styles.

Flow Path Designator - Figure #2



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End Connections

Select the desired End Connection using the End Connection Style Chart (Figure #4) for each port on the body starting with Port 1 and continuing in numerical sequence with Ports 2, 3, 4, and 5 as necessary shown in Figure #3. Always select a designator for each port that will be used, i.e. two designators for a two port body, three designators for a three port body, and so on, even if the connections are identical.

Figure #3

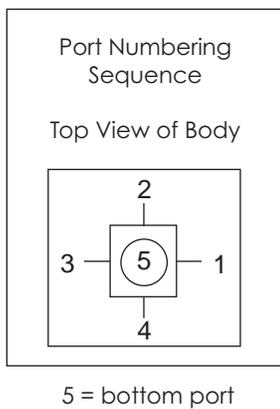


Figure #4

End Connection Size/Style	Designator
1/4" Tube Stub (.250 x .035)	1
1/4" Face Seal Male Swivel	2
1/4" Face Seal Female Swivel	3
3/8" Tube Stub (.375 x .035)	4
1/2" Face Seal Male Swivel	5
1/2" Face Seal Female Swivel	6
1/2" Tube Stub (.500 x .049)	7

Safe Valve Selection

When selecting a valve, the total system design must be considered to ensure safe, trouble-free performance. Valve function, material compatibility, adequate ratings, proper installation, operation, and maintenance are the responsibility of the system designer and user.

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955 Dimensions

Overall height and actuator dimensions are shown in Figure #9. Centerline to port dimensions are shown in Figure #10. Port to port dimensions are determined by adding the "A" dimensions together. Note: All dimensions are in inches — for reference only.

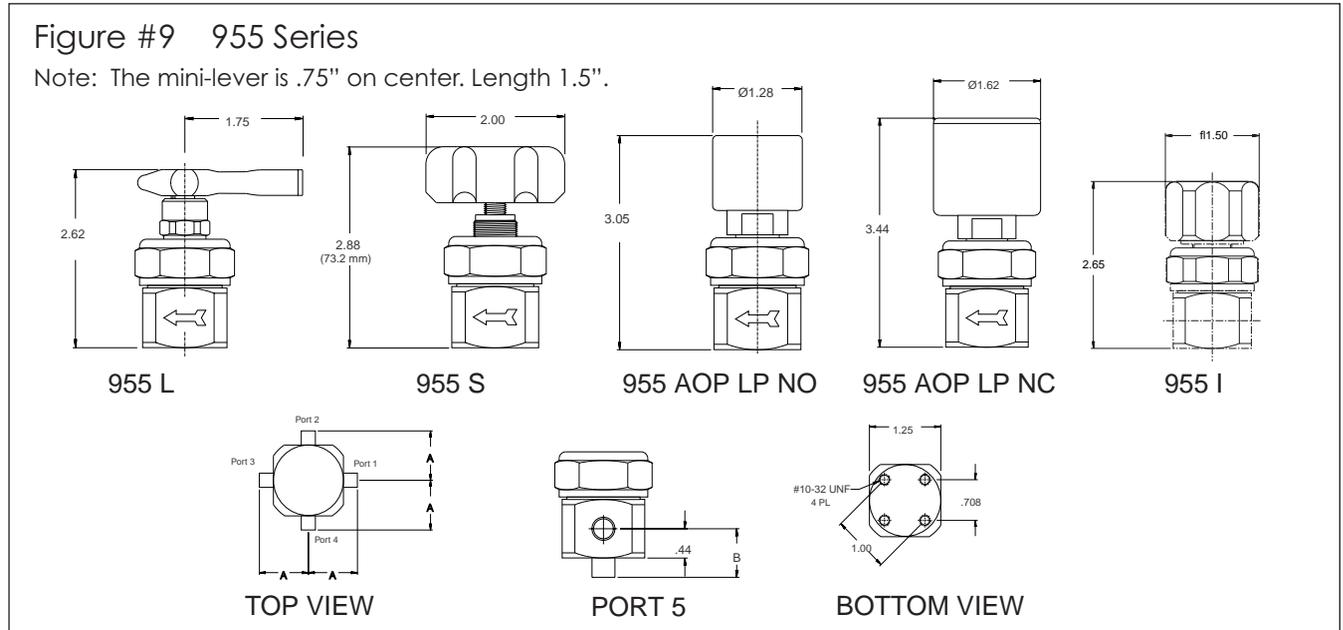
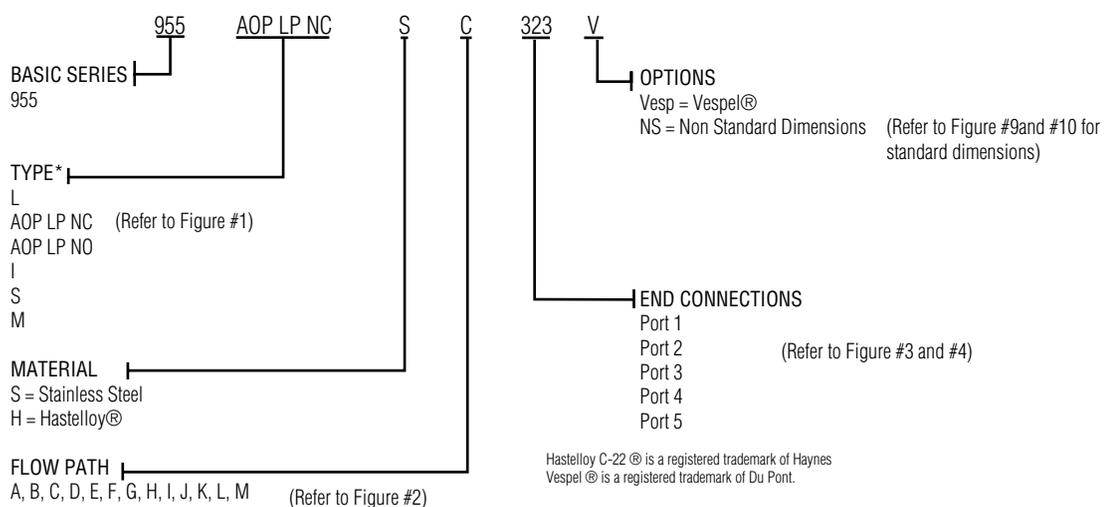


Figure #10	Standard Dimensions (inches)			Dimension Tolerance ± 0.03			
End Connection	A	B	Designator	A	B	Designator	
1/4" Tube Stub (.250 x .035)	1.12	0.94	1	3/8" Tube Stub (.375 x .035)	1.12	.94	4
1/4" Face Seal Male Swivel	1.48	1.26	2	1/2" Face Seal Male Swivel	2.10	1.89	5
1/4" Face Seal Female Swivel	1.48	1.26	3	1/2" Face Seal Female Swivel	2.10	1.89	6
				1/2" Tube Stub (.500 x .049)	1.12	.94	7

Ordering information

Build a Valve Ordering Number by combining the modular designators in the sequence shown below.



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944 Dimensions

Overall height and actuator dimensions are shown in Figure #5. Centerline to port dimensions are shown in Figure #6. Port to port dimensions are determined by adding the "A" dimensions together.
 Note: All dimensions are in inches — for reference only.

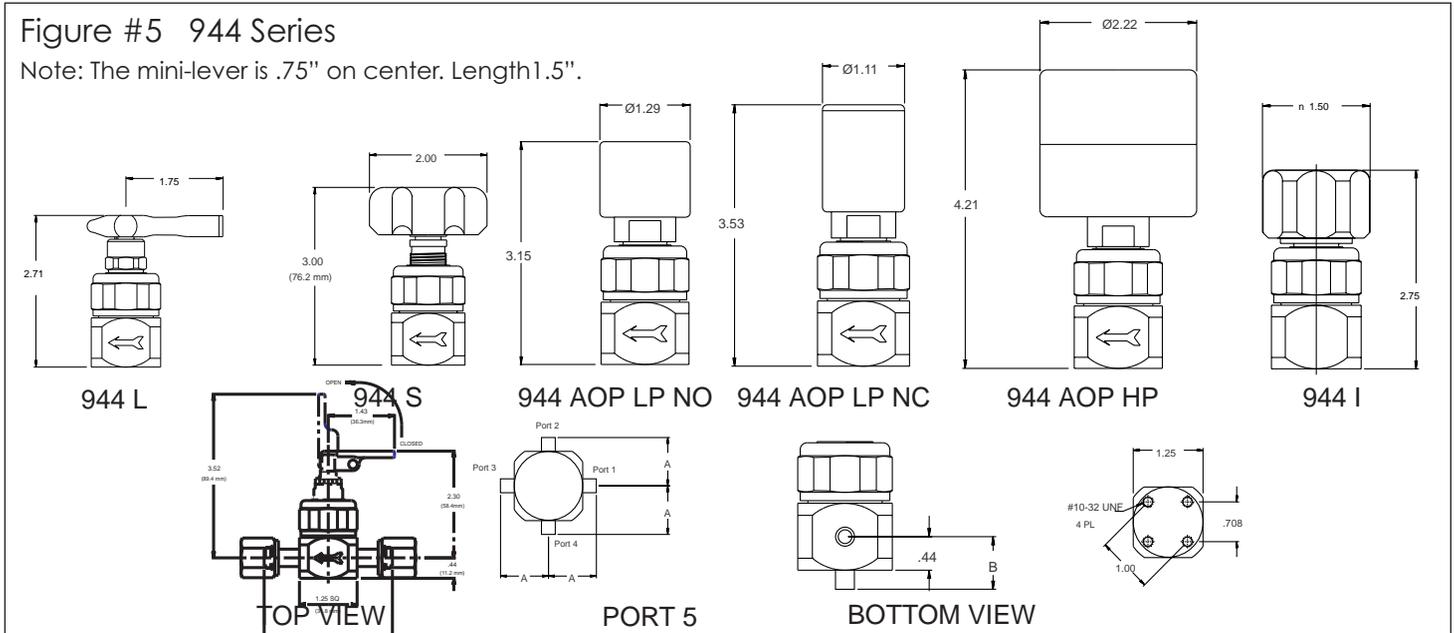
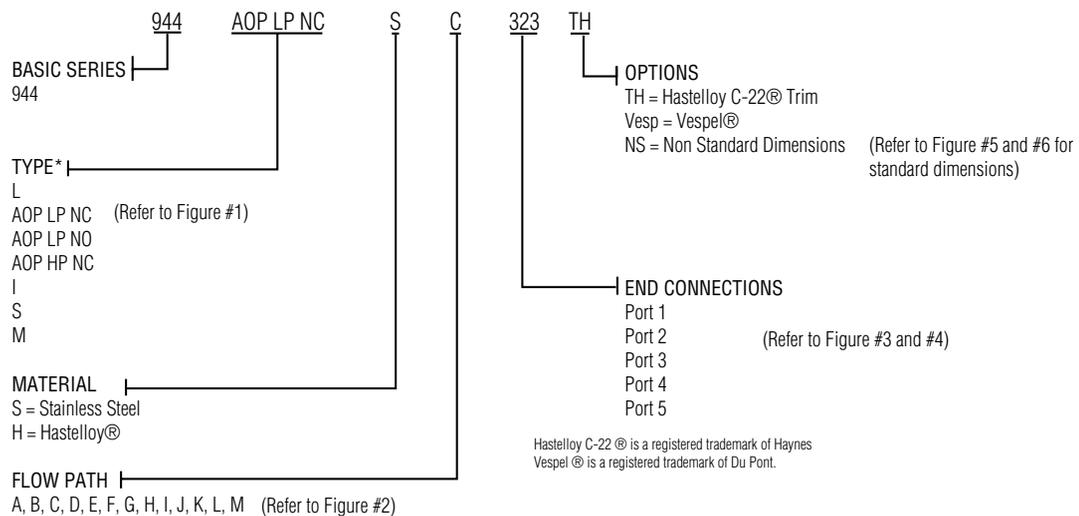


Figure #6 Standard Dimensions (inches)				Dimension Tolerance ± 0.03			
End Connection	A	B	Designator	End Connection	A	B	Designator
1/4" Tube Stub (.250 x .035)	0.875	0.69	1	3/8" Tube Stub (.375 x .035)	1.12	.94	4
1/4" Face Seal Male Swivel	1.39	1.26	2	1/2" Face Seal Male Swivel	2.07	1.89	5
1/4" Face Seal Female Swivel	1.39	1.26	3	1/2" Face Seal Female Swivel	2.07	1.89	6

Ordering information

Build a Valve Ordering Number by combining the modular designators in the sequence shown below.



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945 Dimensions

Overall height and actuator dimensions are shown in Figure #7. Centerline to port dimensions are shown in Figure #8. Port to port dimensions are determined by adding the "A" dimensions together.

Note: All dimensions are in inches — for reference only.

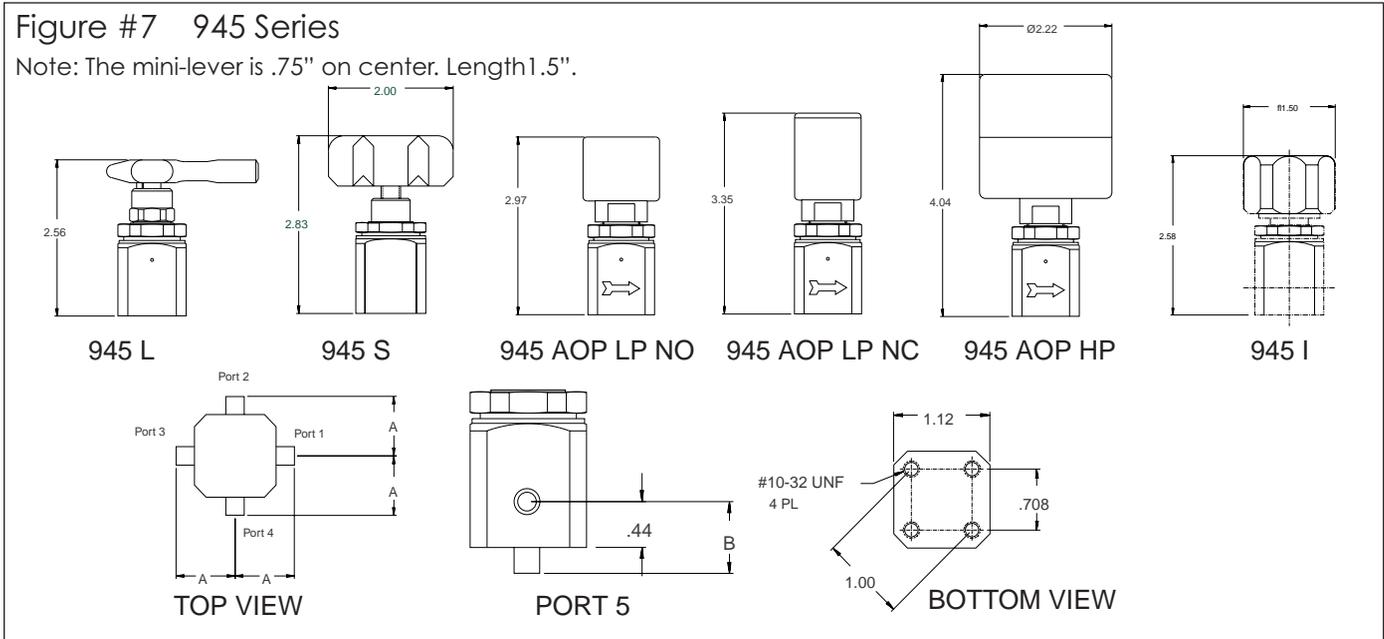


Figure #8 Standard Dimensions (inches)				Dimension Tolerance ± 0.03			
End Connection	A	B	Designator		A	B	Designator
1/4" Tube Stub (.250 x .035)	0.875	0.69	1	3/8" Tube Stub (.375" x .035)	1.12	.94	4
1/4" Face Seal Male Swivel	1.39	1.26	2	1/2" Face Seal Male Swivel	2.07	1.89	5
1/4" Face Seal Female Swivel	1.39	1.26	3	1/2" Face Seal Female Swivel	2.07	1.89	6

*Port #1 and #3 only

Ordering information

Build a Valve Ordering Number by combining the modular designators in the sequence shown below.

