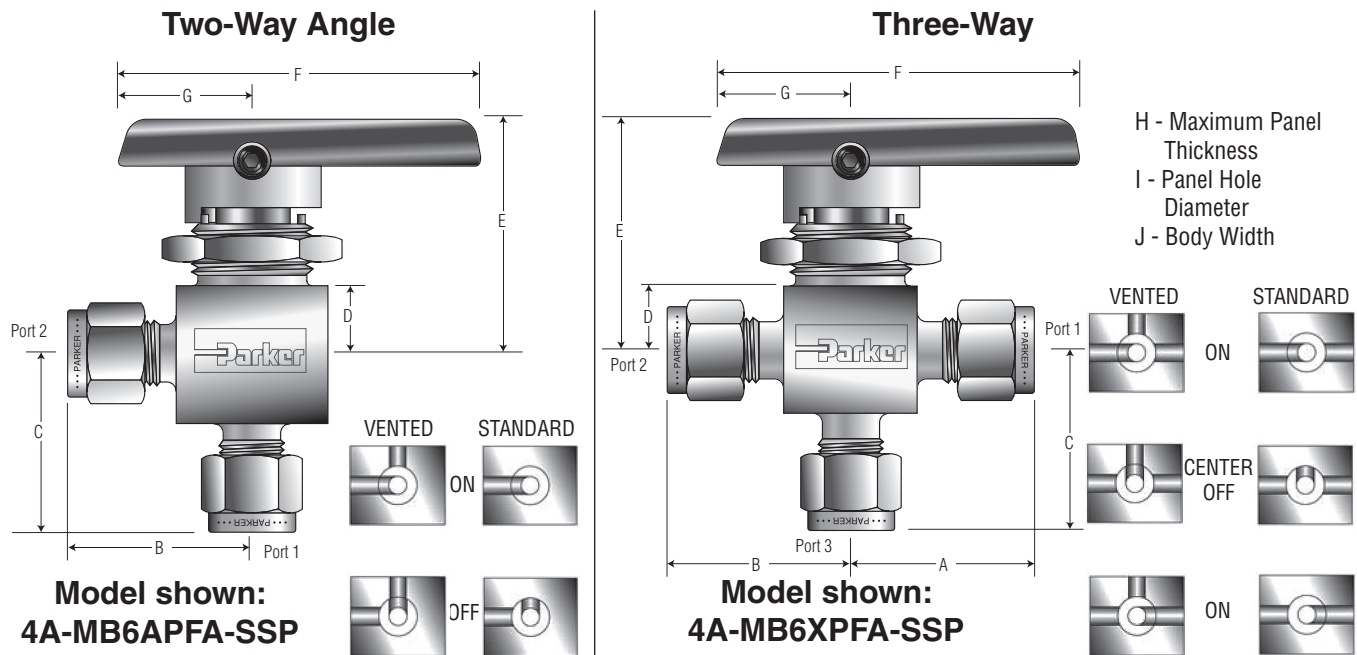


Two-Way Angle and Three-Way Dimensions, Flow Data



Port Size	Basic Part #	Flow Data				End Connections			Dimensions Inches (mm)									
		Inch	mm	Cv	X _T *	Port 1	Port 2	Port 3 ‡	A †	B †	C	C	E	F	G	H	I	J
1Z	MB2A MB2X	0.052	1.3	0.02	0.58	1/16" CPI™			0.84	0.84	0.81	0.34 (8.6)	1.31 (33.3)	1.88 (47.8)	0.75 (19.1)	0.25 (6.4)	0.58 (14.7)	0.58 (14.7)
1A						1/16" A-LOK®			(21.3)	(21.3)	(20.6)							
2Z		0.093	2.4	0.18	0.48	1/8" CPI™			1.00	1.00	0.97							
2A						1/8" A-LOK®			(25.4)	(25.4)	(24.6)							
M3Z						3mm CPI™			1.00	1.00	0.97							
M3A	0.086	2.2	0.15	0.47	3mm A-LOK®			(25.4)	(25.4)	(24.6)								
2F	MB4A MB4X	0.125	3.2	0.34	0.45	1/8" Female NPT			0.81	0.81	0.81	0.34	1.31	1.88	0.75	0.25	0.58	0.58
4Z						1/4" CPI™			1.12	1.12	1.12							
4A						1/4" A-LOK®			(28.4)	(28.4)	(28.4)							
M6Z						6mm CPI™			1.12	1.12	1.12							
M6A						6mm A-LOK®			(28.4)	(28.4)	(28.4)							
4Z	MB6A MB6X	0.187	4.7	0.70	0.58	1/4" CPI™			1.19	1.19	1.15	0.44 (11.2)	1.56 (39.6)	2.37 (60.2)	0.88 (22.4)	0.25 (6.4)	0.77 (19.6)	0.80 (20.3)
4A						1/4" A-LOK®			(30.2)	(30.2)	(29.2)							
4F						1/4" Female NPT			1.03	1.03	1.03							
									(26.2)	(26.2)	(26.2)							
						1/4" VacuSeal			1.03	1.03	1.03							
4V									(26.2)	(26.2)	(26.2)							
						1/4" CPI™ 1/4" CPI™ 1/4" Male NPT			1.19	1.19	1.03							
4Z4Z4M						1/4" A-LOK® 1/4" A-LOK® 1/4" Male NPT			(30.2)	(30.2)	(26.2)							
4A4A4M						3/8" CPI™			1.31	1.31	1.23							
6Z						3/8" A-LOK®			(33.3)	(33.3)	(31.2)							
M6Z						6mm CPI™			1.19	1.19	1.15							
M6A						6mm A-LOK®			(30.2)	(30.2)	(29.2)							
M8Z						8mm CPI™			1.22	1.22	1.18							
M8A						8mm A-LOK®			(31.0)	(31.0)	(30.0)							
8A						MB8A MB8X	0.406	10.3	5.4	0.36	1/2" A-LOK®							
8Z	1/2" A-CPI™			(44.5)	(44.5)						(44.5)							
8F	1/2" Female NPT			1.56	1.56		1.56											
				(39.6)	(39.6)		(39.6)											
12A	3/4" A-LOK®			1.75	1.75		1.75											
12Z	3/4" CPI™			(44.5)	(44.5)		(44.5)											
M12A	12mm A-LOK®			1.75	1.75		1.75											
M12Z	12mm CPI™			(44.5)	(44.5)		(44.5)											

* Tested in accordance with ISA S75.02. Gas flow will be choked when $P_1 - P_2 / P_1 = x_T$.

‡ Not applicable for the two-way Angle pattern.

† For CPI™ and A-LOK®, dimensions are measured with nuts in the finger tight position.

Dimensions in inches/millimeters are for reference only, subject to change.

How to Order Two-Way In-Line, Two-Way Angle and Three-Way Patterns

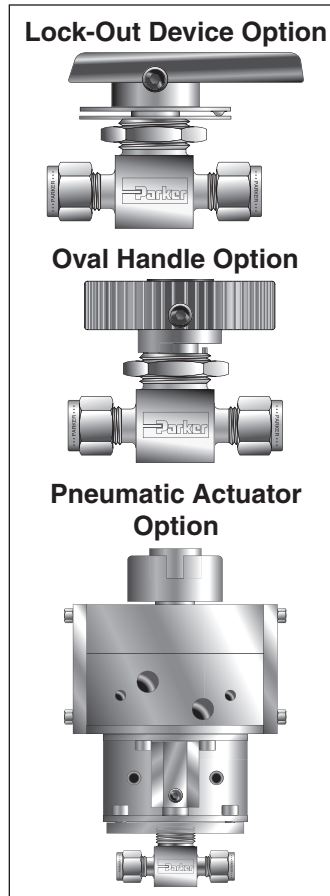
The correct part number is easily derived from the following example and ordering chart. The six product characteristics required are coded as shown in the chart.

The following example describes a MB Series, two-way, in-line pattern ball valve with 1/8" CPI™ compression end connections for ports 1 and 2 Inline

Example:

2Z				MB2LPFA		SSP		
Port 1*	Port 2*	Port 3*	Valve Series	Seat Material		Body Material		
Ports 1, 2 and 3*			Valve Series	Seat Material		Body Material		
1Z	1/16" CPI™	M3Z	3mm CPI™	MB2L	PFA Perfluoro alkoxy	SSP	Stainless Steel (Stainless Steel with Stainless Steel Panel Nut)	
1A	1/16" A-LOK®	M3A	3mm A-LOK®					
2Z	1/8" CPI™	M3Z	3mm CPI™					
2A	1/8" A-LOK®	M3A	3mm A-LOK®	MB4L	BP			Brass (Brass with Stainless Steel Panel Nut) (Only available in MB 2, 4, 6)
2F	1/8" Female NPT	M6Z	6mm CPI™					
4Z	1/4" CPI™	M6A	6mm A-LOK®					
4A	1/4" A-LOK®	M6A	6mm A-LOK®	MB6L				
2Z	1/8" CPI™	6Z	3/8" CPI™					
2A	1/8" A-LOK®	6A	3/8" A-LOK®					
2F	1/8" Female NPT	M6Z	6mm CPI™	MB6A				
4Z	1/4" CPI™	M6A	6mm A-LOK®					
4A	1/4" A-LOK®	M8Z	8mm CPI™					
4F	1/4" Female NPT	M8A	8mm A-LOK®	MB6X				
4M	1/4" Male NPT							
4V	1/4" VacuSeal							
8Z	1/2" CPI™	12Z	3/4" CPI™	MB8A				
8A	1/2" A-LOK®	12A	3/4" A-LOK®					
8F	1/2" Female NPT	M12Z	12mm CPI™					
		M12A	12mm A-LOK®	MB8L				
								MB8X

* Valves with identical port connections for port 1 and port 2 require only one designator.



How to Order Options (Two-Way, Angle, and Three-Way)

Lock-Out Devices – For field installation, simply substitute the correct valve series number in the following nomenclature: **LD**-valve series.
Example: LD-MB6L

Colored Handles – **Example:** MB6-HANDLE-BLUE
NOTE: Not offered in MB8 series.

Stainless Steel Handles – **Example:** MB6-HANDLE-SS (MB6 series only)

Oval Handles – **Example:** MB6-OV-HANDLE-BLACK. If requesting a colored oval handle. **Example:** MB6-OV-HANDLE-RED
NOTE: MB6 series only.

Vented Valves – Add the designator **V** after the **MB** in the part number for the vent option.
Example: 2Z-MBV2XPFA-SSP.

Oxygen Cleaning – Add the suffix **-C3** to the end of the part number to receive valves cleaned and assembled for oxygen service in accordance with Parker Specification ES8003. **Example:** 4A-MB4LPFA-SSP-C3

Pneumatic Actuators – For detailed actuator information, refer to the Pneumatic Actuators section of this catalog. For factory assembly, add the actuator part number as the suffix to the valve part number. **Example:** 4A-MB4LPFA-SSP-61AC-2. For field installation, specify the actuator desired. **Example:** 61AC-2. The appropriate mounting hardware may be obtained by adding the valve series and actuator size to the prefix **MK**-. **Example:** MK-MB4L-61

Electric Actuators – For detailed actuator information, refer to the Electric Actuators section of this catalog. For factory assembly, add the actuator part number as the suffix to the valve part number. **Example:** M6A-MB6XPFA-SSP-71C. For field installation, specify the actuator desired. **Example:** 71C. The appropriate mounting hardware may be obtained by adding the valve series and actuator series to the prefix **MK**-. **Example:** MK-MB6X-70