

General Description

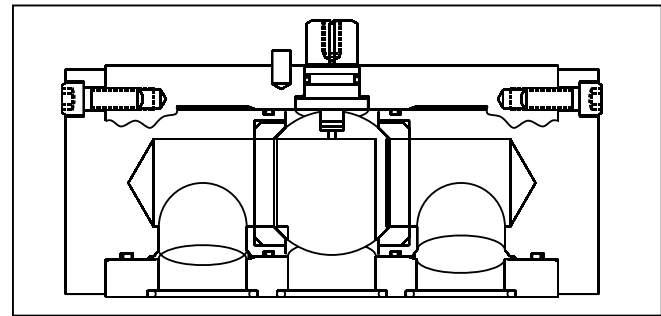
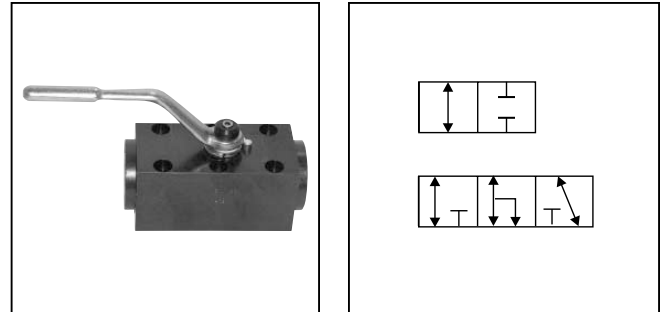
Series BVMM is a manifold mounted high pressure 414 Bar (6000 PSI) 2 or 3-way ball valve. Manifold mounting eliminates an external fluid connection.

Operation

Series BVMM valves operate through either 90° or 180° depending on the ball pattern chosen. For 3-way valves, pressure is applied to Port 1.

Specifications

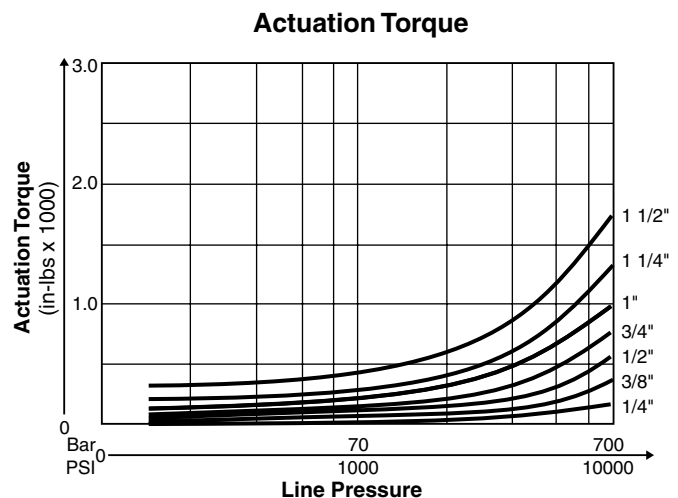
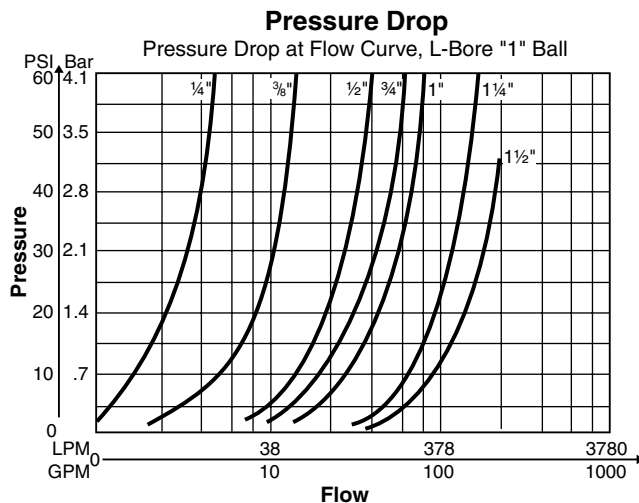
Maximum Pressure	414 Bar (6000 PSI)
Body Material	Carbon Steel, Black Oxide
Ball Material	Steel, Chrome Plated
Spindle Material	Steel, Nickel Plated
Standard Handle	Steel, Offset, Nickel Plated
Ball Seals	Delrin + MoS ₂
Spindle Seals	O-Rings & Backup, Nitrile
Operating Temperature	-30°C to +100°C (-22°F to +212°F)



Features

- Variety of ball patterns allow for different flow paths and flexibility for many applications.
- Thrust bearings in the spindle and delrin moly ball seals result in low actuation torque as well as extended service life.

Performance Curves



BVMM			S	S				
Series	Size	Ball Pattern	Body Material	Ball & Stem Material	Ball Seals	Stem Seals	Options	Design Series
								NOTE: Not required when ordering.

Code	Size
04	1/4"
06	3/8"
08	1/2"
12	3/4"
16	1"
20	1 1/4"
24	1 1/2"
32	2"

Code	Type
N	Nitrile
V	Fluorocarbon
E	EPR

Code	Type
1	Delrin
2 *	PTFE
4	Peek

* Valve pressure rating reduced. Consult factory.

Code	Type
S	Steel

Code	Type
S	Steel

Code	Type
A	Locking Handle
★C	1 Way Limit Switch
G	Flat Non-offset Handle
★*K	1 Way Limit Switch w/Lock

* Switch is set to indicate valve open condition
 ★ When selecting this option, your ball valve will come with limit switch bracket, but does not include the switch. The switch is sold separately (Part #LSB)

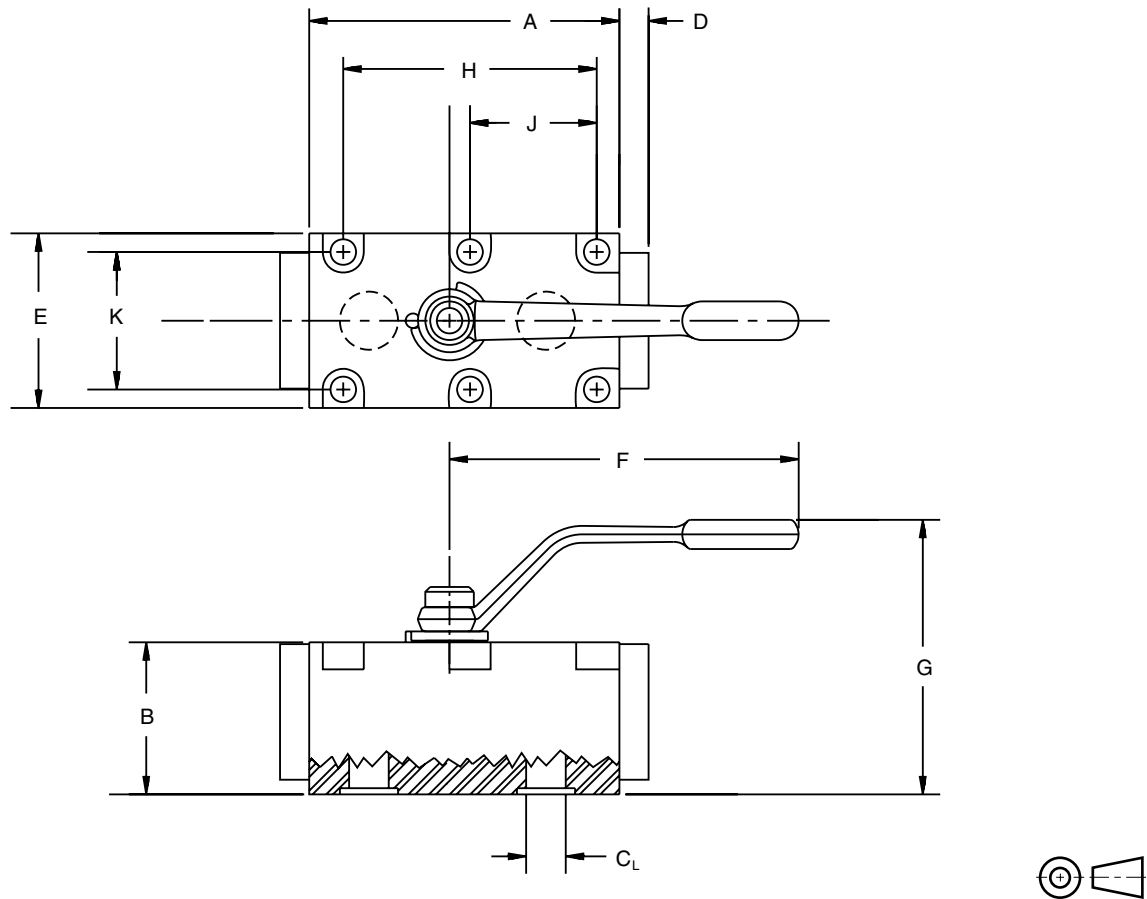
Weights		
Code	kg	(lbs.)
04	1.1	(2.5)
06	2.0	(4.4)
08	2.3	(5.1)
12	3.4	(7.5)
16	5.2	(11.5)
20	10.5	(23.1)
24	15.1	(33.3)
32	24.0	(52.9)

Multiway Manifold Mount Valve Porting Options						
Ball Code	ISO Circuit Symbol	Ball Pattern	Handle Phase			
			90°	45°	0°	-45°
1		2-Way				
2		L-Bore Port Overlap				
3		L-Bore No Overlap				
4		T-Bore 90°				
5		T-Bore 180°				

Please request a certified print before building a manifold.

For 3-way valves, pressure is applied to Port 1.

Manifold Mounted



Please request a certified print before building a manifold.

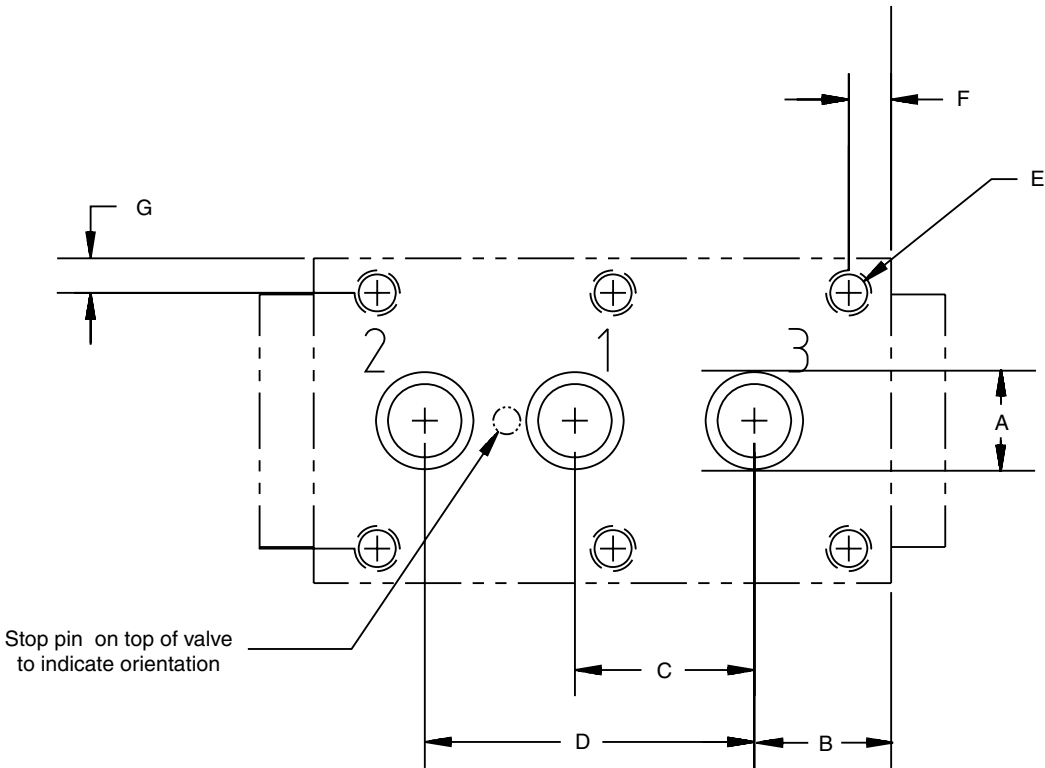
Code	Port Size	Working Pressure	Dimensions mm (in)									
			A	B	C _L	D	E	F	G	H	J	K
BVMM 2-Way and 3-Way Manifold Mounted												
04 ¹	1/4"	414 Bar (6000 PSI)	66.5 (2.62)	38.1 (1.50)	6.1 (0.24)	9.5 (0.375)	50.8 (2.00)	114.3 (4.50)	78.2 (3.08)	42.0 (1.653)	n/a (n/a)	35.0 (1.377)
06 ¹	3/8"	414 Bar (6000 PSI)	81.8 (3.22)	50.0 (1.97)	9.7 (0.38)	9.5 (0.375)	57.2 (2.25)	114.3 (4.50)	90.2 (3.55)	55.0 (2.165)	n/a (n/a)	40.0 (1.575)
08	1/2"	414 Bar (6000 PSI)	106.1 (4.00)	50.0 (1.97)	13.0 (0.51)	9.5 (0.375)	57.2 (2.25)	114.3 (4.50)	89.9 (3.54)	83.0 (3.267)	41.5 (1.634)	45.0 (1.771)
12	3/4"	414 Bar (6000 PSI)	141.5 (5.57)	69.3 (2.73)	20.1 (0.79)	9.5 (0.375)	69.9 (2.75)	177.8 (7.00)	131.6 (5.18)	97.0 (3.818)	48.5 (1.909)	51.0 (2.007)
16	1"	414 Bar (6000 PSI)	156.5 (6.16)	81.0 (3.19)	23.9 (0.94)	9.5 (0.375)	82.6 (3.25)	177.8 (7.00)	143.0 (5.63)	115.0 (4.528)	57.5 (2.264)	60.0 (2.362)
20	1 1/4"	414 Bar (6000 PSI)	180.3 (7.10)	100.1 (3.94)	31.8 (1.25)	12.7 (0.50)	101.6 (4.00)	254.0 (10.00)	179.1 (7.05)	136.0 (5.354)	68.0 (2.677)	78.0 (3.070)
24	1 1/2"	414 Bar (6000 PSI)	196.1 (7.72)	100.3 (3.95)	38.1 (1.50)	17.5 (0.69)	127.0 (5.00)	254.0 (10.00)	179.6 (7.07)	112.0 (4.409)	55.9 (2.199)	95.0 (3.740)
32	2"	414 Bar (6000 PSI)	246.9 (9.72)	124.0 (4.88)	47.8 (1.88)	22.4 (0.88)	152.4 (6.00)	254.0 (10.00)	202.9 (7.99)	136.0 (5.354)	68.2 (2.684)	112.0 (4.409)

NOTES: (1) These sizes use only the four outside mounting holes. Dimension J is not applicable.

(2) Ball portings for multiway valves are somewhat smaller than their 2-way counterparts. Please refer to dimension C to confirm suitability.

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Manifold Porting Specifications

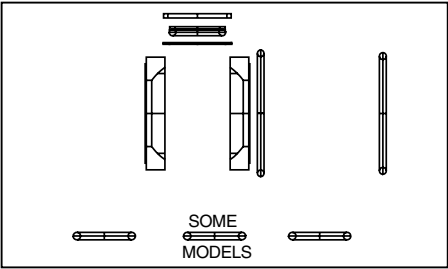


For 3-way valves, pressure is applied to Port 1.
Please request a certified print before building a manifold.

Code	Port Size	A	B	C	D	E	F	G
BVMM Mounting Pad Specifications								
04	1/4"	12.7 (0.500)	16.3 (0.642)	17.0 (0.670)	39.0 (1.535)	8.4 (0.330)	15.5 (0.612)	7.9 (0.312)
06	3/8"	15.9 (0.625)	21.8 (0.860)	19.1 (0.750)	44.0 (1.732)	8.4 (0.330)	19.6 (0.770)	8.6 (0.340)
08	1/2"	19.1 (0.750)	24.1 (0.947)	31.6 (1.243)	58.0 (2.283)	8.4 (0.330)	7.4 (0.293)	6.1 (0.240)
12	3/4"	27.0 (1.063)	40.5 (1.594)	38.3 (1.506)	69.0 (2.716)	10.4 (0.410)	22.7 (0.892)	9.4 (0.372)
16	1"	33.4 (1.313)	39.3 (1.549)	43.0 (1.692)	81.0 (3.188)	13.0 (0.510)	19.3 (0.760)	11.3 (0.444)
20	1 1/4"	39.7 (1.563)	40.1 (1.580)	50.0 (1.970)	96.0 (3.780)	13.0 (0.510)	17.2 (0.676)	11.8 (0.465)
24	1 1/2"	47.6 (1.875)	42.2 (1.661)	55.9 (2.199)	112.0 (4.409)	16.8 (0.660)	42.2 (1.661)	16.0 (0.630)
32	2"	57.2 (2.250)	55.3 (2.176)	68.2 (2.684)	136.0 (5.354)	20.6 (0.810)	55.3 (2.178)	20.2 (0.796)

Ball Valve Seal Kits restore a ball valve to factory specifications, providing no erosion or metal-to-metal wear has taken place.

The Seal Kit includes all the o-rings, ball seals and thrust bearings that were originally installed at the factory. A sketch of these parts is provided at the right.



Ordering Information

SK

Accessory

Code

Type

SK

Seal Kit

BVMM

Series

Size

Code

Size

04

1/4"

06

3/8"

08

1/2"

12

3/4"

16

1"

20

1 1/4"

24

1 1/2"

32

2"

Ball Pattern

Code

Type

S

Steel

S

Body Material

Code

Type

S

Steel

S

Ball & Stem Material

Code

Type

S

Steel

Ball Seals

Code

Type

1

Delrin

2 *

PTFE

4

Peek

* Valve pressure rating reduced. Consult factory.

Stem Seals

Code

Type

N

Nitrile

V

Fluorocarbon

E

EPR

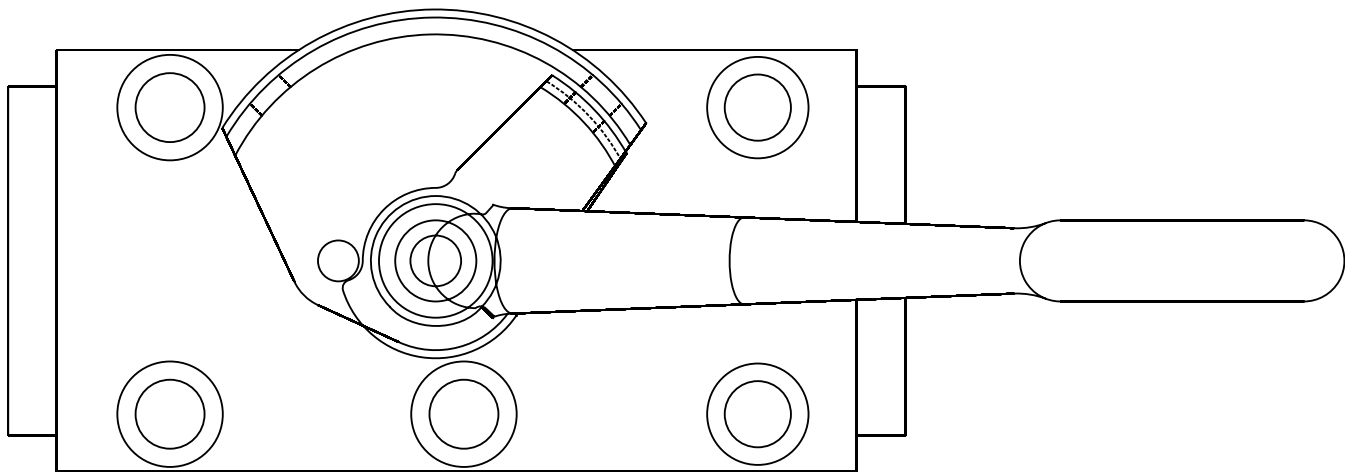
Design Series

NOTE: Not required when ordering.

Multiway Manifold Mount Valve Porting Options								
Ball Code	ISO Circuit Symbol	Ball Pattern	Handle Phase					Stop Washer Type
			90°	45°	0°	-45°	-90°	
1		2-Way						
2		L-Bore Port Overlap						
3		L-Bore No Overlap						
4		T-Bore 90°						
5		T-Bore 180°						



BVMM2LK: Standard Series 'BVMM2LK-*' kit replaces the stopwasher with a stationary and moving plate, as illustrated below. As the handle is actuated, the moving plate aligns with one of the two locking positions in the stationary plate, enabling the valve to be locked in either **fully closed** or **fully open** position.



Ordering Information

BVMM		Standard Locking
Code	Size	(Part Number)
04	1/4"	BVMM2LK-1
06	3/8"	BVMM2LK-2
08	1/2"	BVMM2LK-3
12	3/4"	BVMM2LK-4
16	1"	BVMM2LK-5
20	1 1/4"	BVMM2LK-6
24	1 1/2"	BVMM2LK-7
32	2"	BVMM2LK-8