

General Description

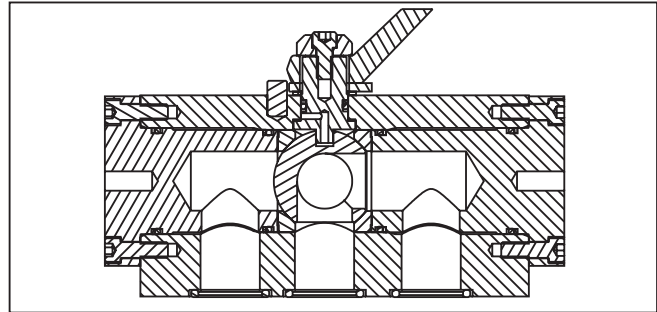
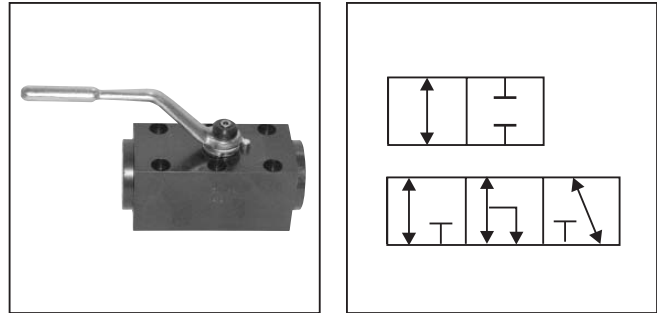
Series BVMM is a manifold mounted high pressure 414 Bar (6000 PSI) 2 or 3-way ball valve. Manifold mounting eliminates an external fluid connection.

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

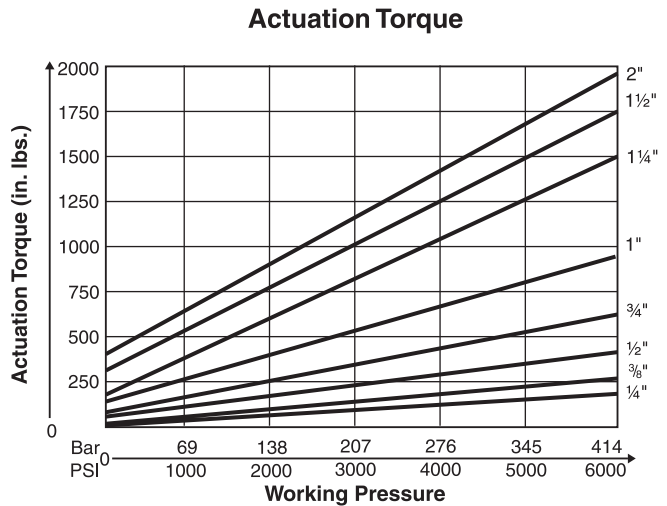
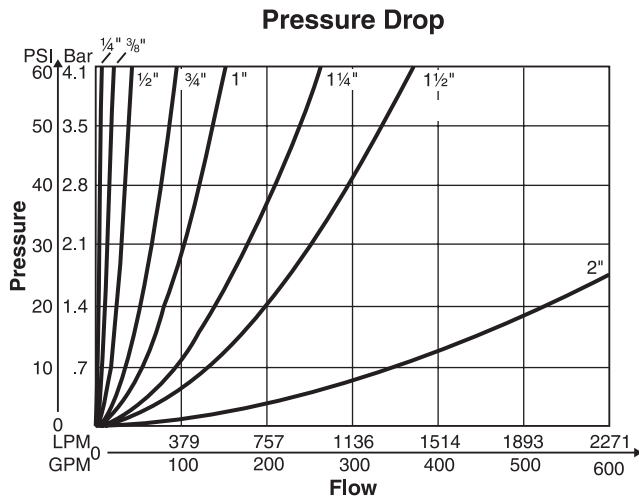
Maximum Pressure	414 Bar (6000 PSI)
Body Material	Carbon Steel, Black Oxide
Ball Material	Steel, Chrome Plated
Spindle Material	Steel, Nickel Plated
Standard Handle	Steel Offset, Nickel Plated
Standard Ball Seals	Delrin + MoS ₂
Standard Shaft Seals	O-Ring & Backup, Nitrile
Temperature Range with Standard Seals	-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	Shaft 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	Description
N	Nitrile
V	Fluorocarbon
E	EPR

Code	Description
1	Delrin
2 *	PTFE
4 †	Peek

* Valve pressure rating reduced. Consult factory.
 † Typically not available with Nitrile. Consult factory.

Code	Description
S	Steel

Code	Description
S	Steel

Code	Description
Omit	No Options
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)
 ** Cannot be combined with other options.

Weights		
Code	kg	(lbs.)
04	1.1	(2.5)
06	1.9	(4.25)
08	2.3	(5.0)
12	5.2	(11.5)
16	7.9	(16.5)
20	15.0	(33.0)
24	25.4	(56.0)
32	33.3	(73.5)

Multiway Manifold Mount Valve Porting Options

Ball Code	ISO Circuit Symbol	Ball Pattern	Handle Phase					Stop Washer Type
			0°	45°	90°	135°	180°	
1		2-Way						
2		L-Bore Port Overlap						
3		L-Bore 180°						
4		T-Bore 90°						
5		T-Bore 180°						

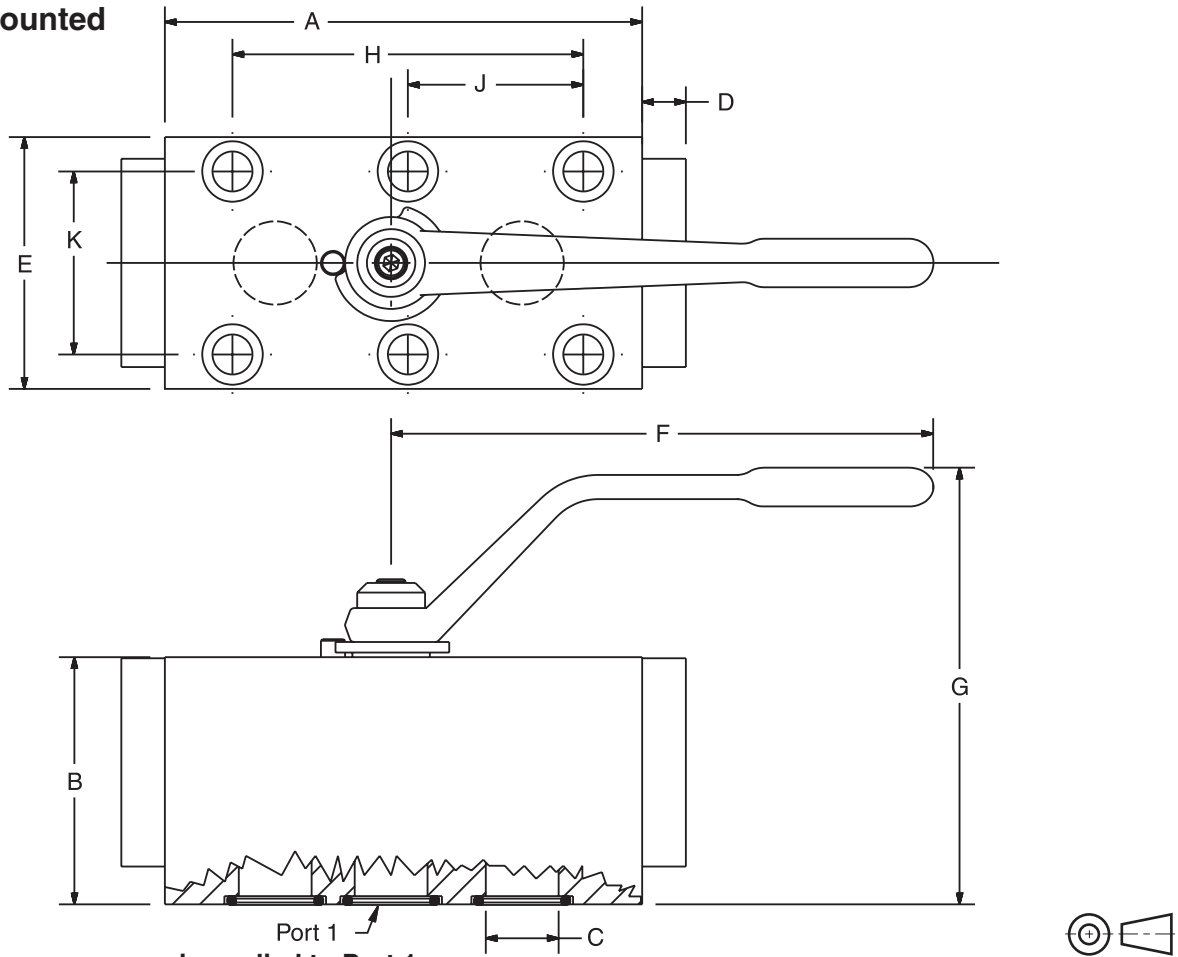
Replacement Handles Standard Steel Offset

Series	Part Number
BVMM04	BVH-HS1
BVMM06	BVH-HS1
BVMM08	BVH-HS1
BVMM12	BVH-HS2
BVMM16	BVH-HS2
BVMM20	BVH-HS3
BVMM24	BVH-HS3
BVMM32	BVH-HS3

Please request a certified print before building a manifold.

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

Manifold Mounted



For 3-way valves, pressure is applied to Port 1.
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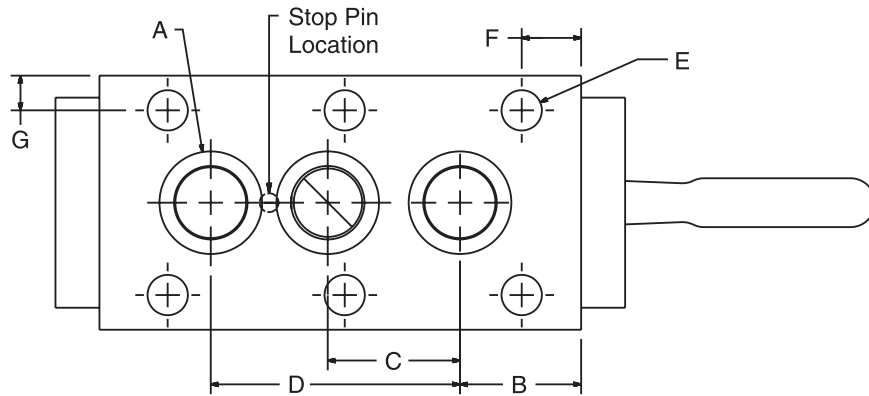
Code	Port Thread Size	Working Pressure	Dimensions mm (in)									
			A	B	C	D	E	F	G	H	J	K
BVMM – 2-Way and 3-Way Manifold Mounted												
04	1/4"	414 Bar (6000 PSI)	63.5 (2.50)	38.1 (1.50)	6.1 (0.24)	11.2 (0.44)	50.8 (2.00)	114.3 (4.50)	79.2 (3.12)	41.99 (1.653)	N/A	35.0 (1.377)
06	3/8"	414 Bar (6000 PSI)	81.8 (3.22)	43.7 (1.72)	9.7 (0.38)	11.2 (0.44)	57.2 (2.25)	114.3 (4.50)	85.1 (3.35)	54.99 (2.165)	N/A	40.0 (1.574)
08	1/2"	414 Bar (6000 PSI)	100.3 (3.95)	50.8 (2.00)	13.0 (0.51)	10.9 (0.43)	57.2 (2.25)	114.3 (4.50)	91.9 (3.62)	82.99 (3.267)	41.5 (1.633)	45.0 (1.770)
12	3/4"	414 Bar (6000 PSI)	132.3 (5.21)	69.9 (2.75)	20.1 (0.79)	10.9 (0.43)	69.9 (2.75)	177.8 (7.00)	132.8 (5.23)	96.98 (3.818)	48.5 (1.909)	51.0 (2.008)
16	1"	414 Bar (6000 PSI)	148.6 (5.85)	82.6 (3.25)	23.9 (0.94)	14.2 (0.56)	82.6 (3.25)	177.8 (7.00)	145.5 (5.73)	115.01 (4.528)	57.5 (2.264)	60.0 (2.362)
20	1 1/4"	414 Bar (6000 PSI)	177.8 (7.00)	95.3 (3.75)	31.8 (1.25)	16.0 (0.63)	101.6 (4.00)	250.4 (9.86)	176.3 (6.94)	135.99 (5.354)	68.0 (2.677)	78.0 (3.070)
24	1 1/2"	414 Bar (6000 PSI)	189.2 (7.45)	100.1 (3.94)	38.1 (1.50)	19.1 (0.75)	127.0 (5.00)	250.4 (9.86)	181.6 (7.15)	111.99 (4.409)	55.9 (2.199)	95.0 (3.740)
32	2"	414 Bar (6000 PSI)	231.1 (9.10)	120.7 (4.75)	47.8 (1.88)	22.1 (0.87)	152.4 (6.00)	250.4 (9.86)	200.9 (7.91)	135.99 (5.354)	68.2 (2.684)	112.0 (4.410)

NOTES: (1) These sizes use only the four outside mounting holes. Dimension J is not applicable.
 (2) Ball portings for multiway valves are smaller than their 2-way counterparts in some sizes.
 Please refer to dimension C to confirm suitability.

3300-ballvalves.indd, ddp



Manifold Porting Specifications

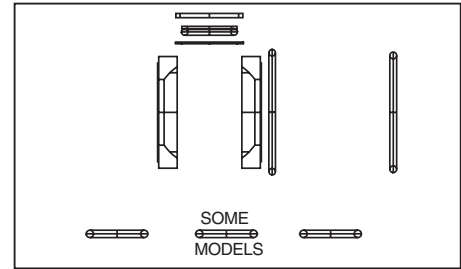


For 3-way valves, pressure is applied to Port 1.
Please request a certified print before building a manifold.

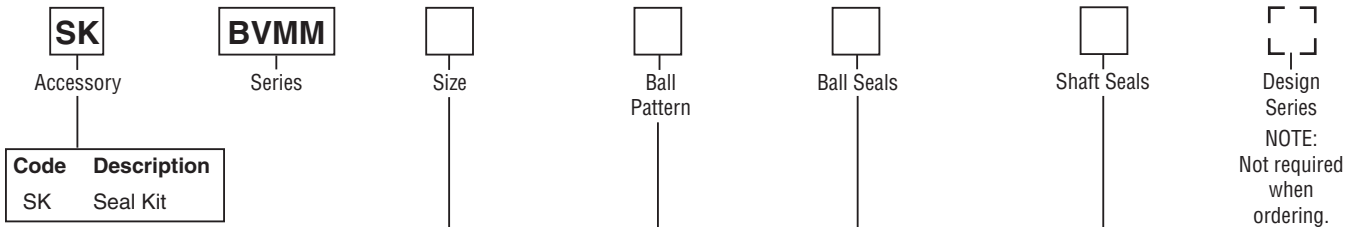
Code	Port Thread Size	Dimensions mm (in)						
		A	B	C	D	E	F	G
BVMM – Mounting Pad Specifications								
04	1/4"	12.70 (0.500)	16.31 (0.642)	21.97 (0.865)	38.99 (1.535)	8.89 (0.350)	15.54 (0.612)	7.92 (0.312)
06	3/8"	15.88 (0.625)	21.84 (0.860)	24.94 (0.982)	43.99 (1.732)	8.89 (0.350)	19.56 (0.770)	8.59 (0.338)
08	1/2"	19.05 (0.750)	24.05 (0.947)	26.42 (1.040)	57.99 (2.283)	8.89 (0.350)	7.44 (0.293)	6.10 (0.240)
12	3/4"	27.00 (1.063)	40.49 (1.594)	30.73 (1.210)	68.99 (2.716)	10.41 (0.410)	22.66 (0.892)	9.42 (0.371)
16	1"	33.35 (1.313)	39.34 (1.549)	38.00 (1.496)	80.98 (3.188)	12.95 (0.510)	19.30 (0.760)	11.28 (0.444)
20	1 1/4"	39.70 (1.563)	40.13 (1.580)	45.97 (1.810)	96.01 (3.780)	13.11 (0.516)	17.17 (0.676)	11.81 (0.465)
24	1 1/2"	47.63 (1.875)	42.19 (1.661)	56.13 (2.210)	111.99 (4.409)	16.66 (0.656)	42.19 (1.661)	16.00 (0.630)
32	2"	57.15 (2.250)	55.30 (2.177)	67.82 (2.670)	135.99 (5.354)	21.08 (0.830)	112.01 (4.410)	20.19 (0.795)

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



Code	Description
SK	Seal Kit

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	Description
1	Delrin
2 *	PTFE
4 †	Peek

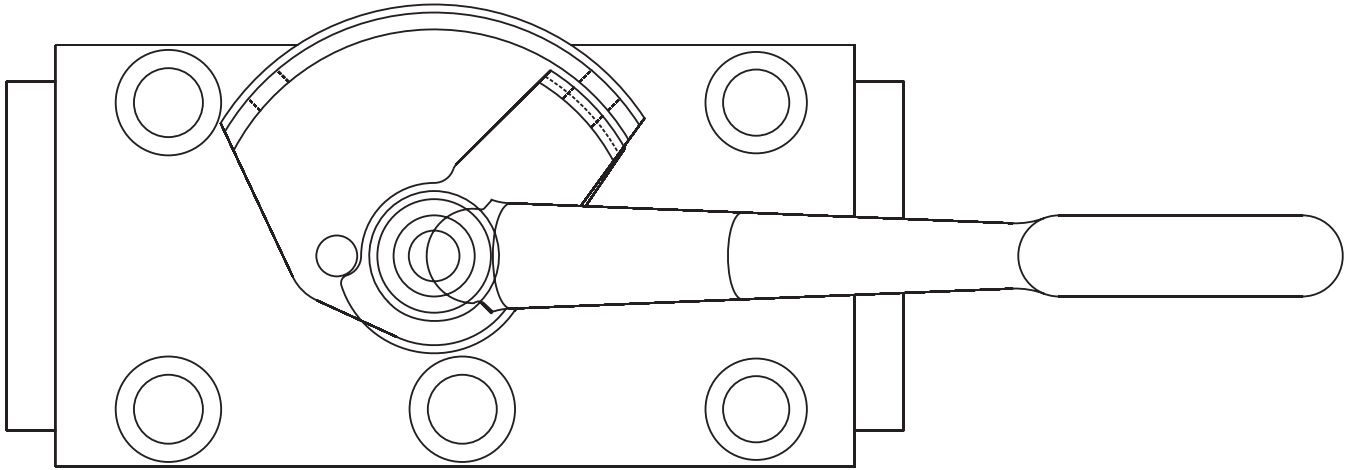
* Valve pressure rating reduced. Consult factory.
 † Typically not available with Nitrile. Consult factory.

Code	Description
N	Nitrile
V	Fluorocarbon
E	EPR

Ball Code	ISO Circuit Symbol	Ball Pattern
1		2-Way

Ball Code	ISO Circuit Symbol	Ball Pattern
2		L-Bore Port Overlap
3		L-Bore 180°
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"	BVDMLH-1
06	3/8"	BVDMLH-1
08	1/2"	BVDMLH-1
12	3/4"	BVDMLH-2
16	1"	BVDMLH-2
20	1 1/4"	BVDMLH-3
24	1 1/2"	BVDMLH-3
32	2"	BVDMLH-3