

General Description

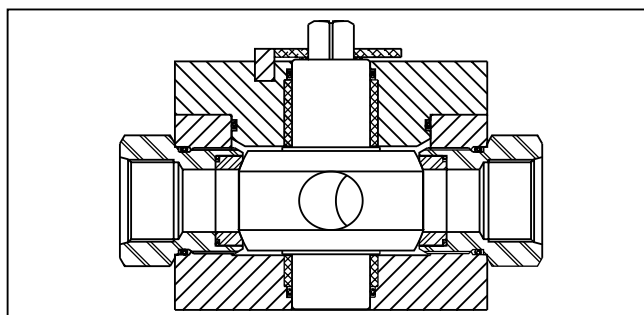
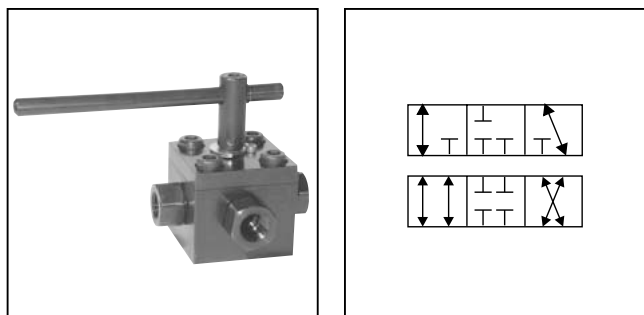
Series BV3H and BV4H are true 3-way and 4-way high pressure valves, incorporating many of the advanced features of the 2-way product. These products come in steel and are rated at 414 Bar (6000 PSI). Ports range from 1/4" to 2" with a variety of porting options.

Operation

The BV3H Series operates by rotating the handle 90° and BV4H operates through 180° rotation of the handle, depending on the flow path. A BV4H with ball #4 is 90° operation. There is no port-to-port overlap during transition.

Specifications

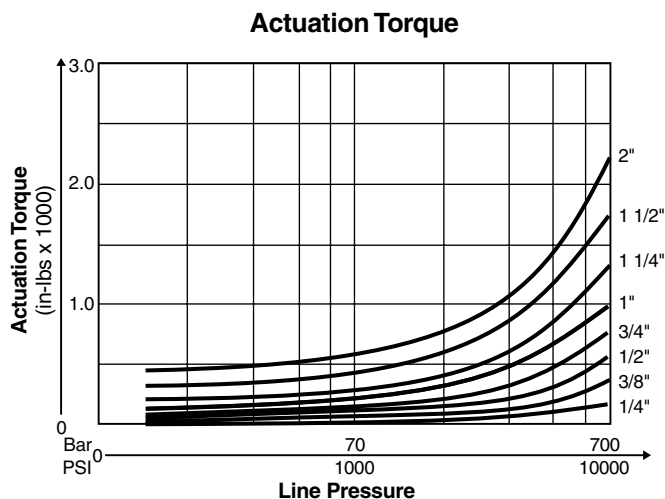
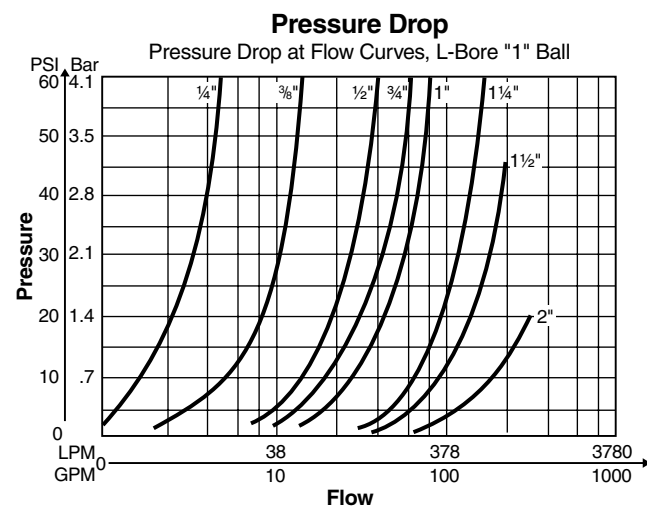
Maximum Pressure	414 Bar (6000 PSI)
Body Material	Carbon Steel, Black Oxide
Ball Material	Steel, Chrome Plated, Trunnion mount
Standard Pattern	"L" Bore (3W), "T" Bore (4W)
Spindle Material	Steel, Zinc Plated
Standard Handle	T-Type Handle
Ball Seals	Delrin + MoS ₂
Spindle Seals	O-Rings + Bearing Stacks
Operating Temperature	-30C° to +100°C (-22°F to +212°F)

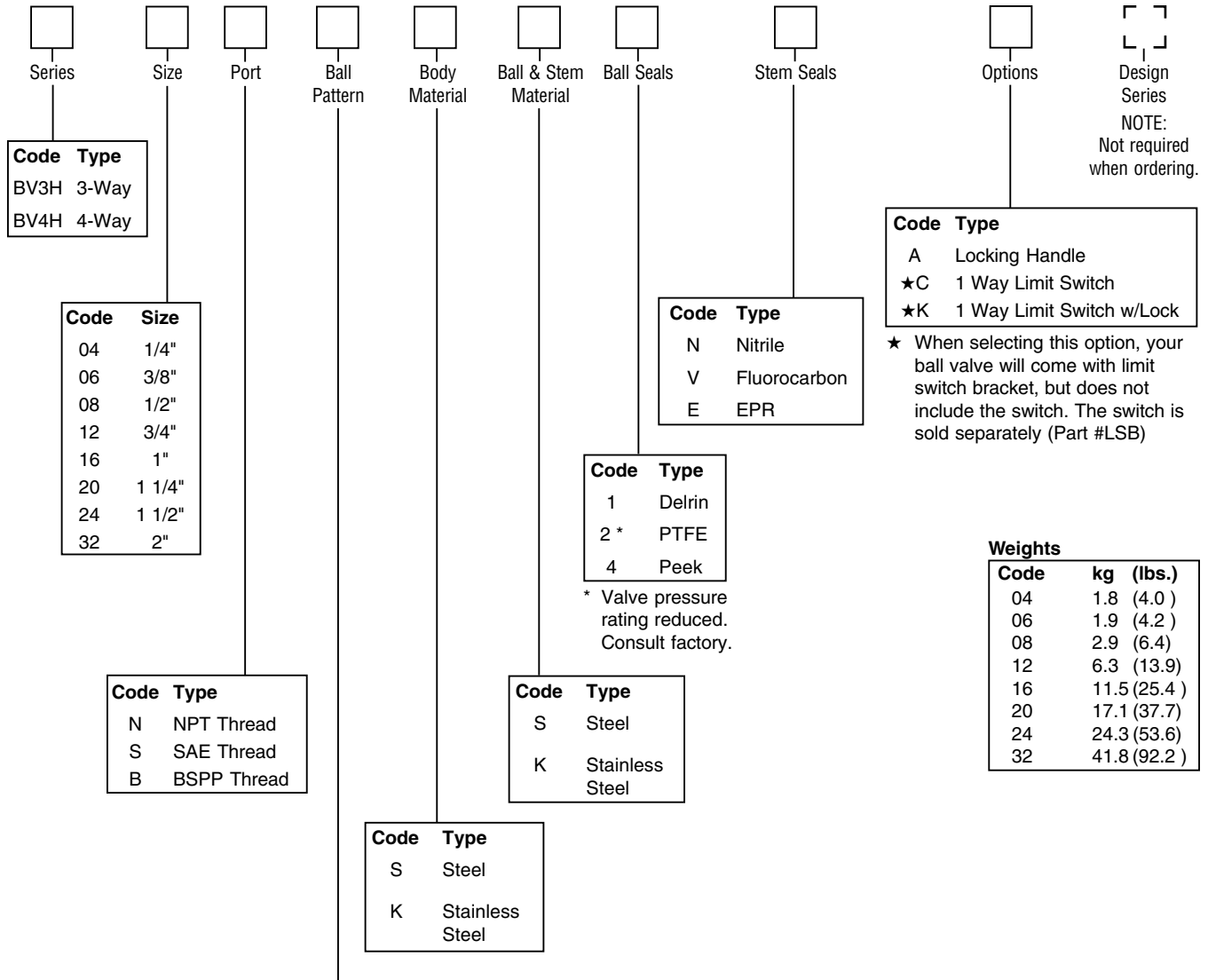


Features

- Three dimensional balanced sealing for near zero leakage in any circuit.
- The unique thrust bearing spindle design reduces actuation torque and reduces the chance of the valve seizing when inactive for periods of time.
- Special seal design enables high port to port ΔP application suitability.
- A variety of ball patterns allows flexibility in many applications.

Performance Curves



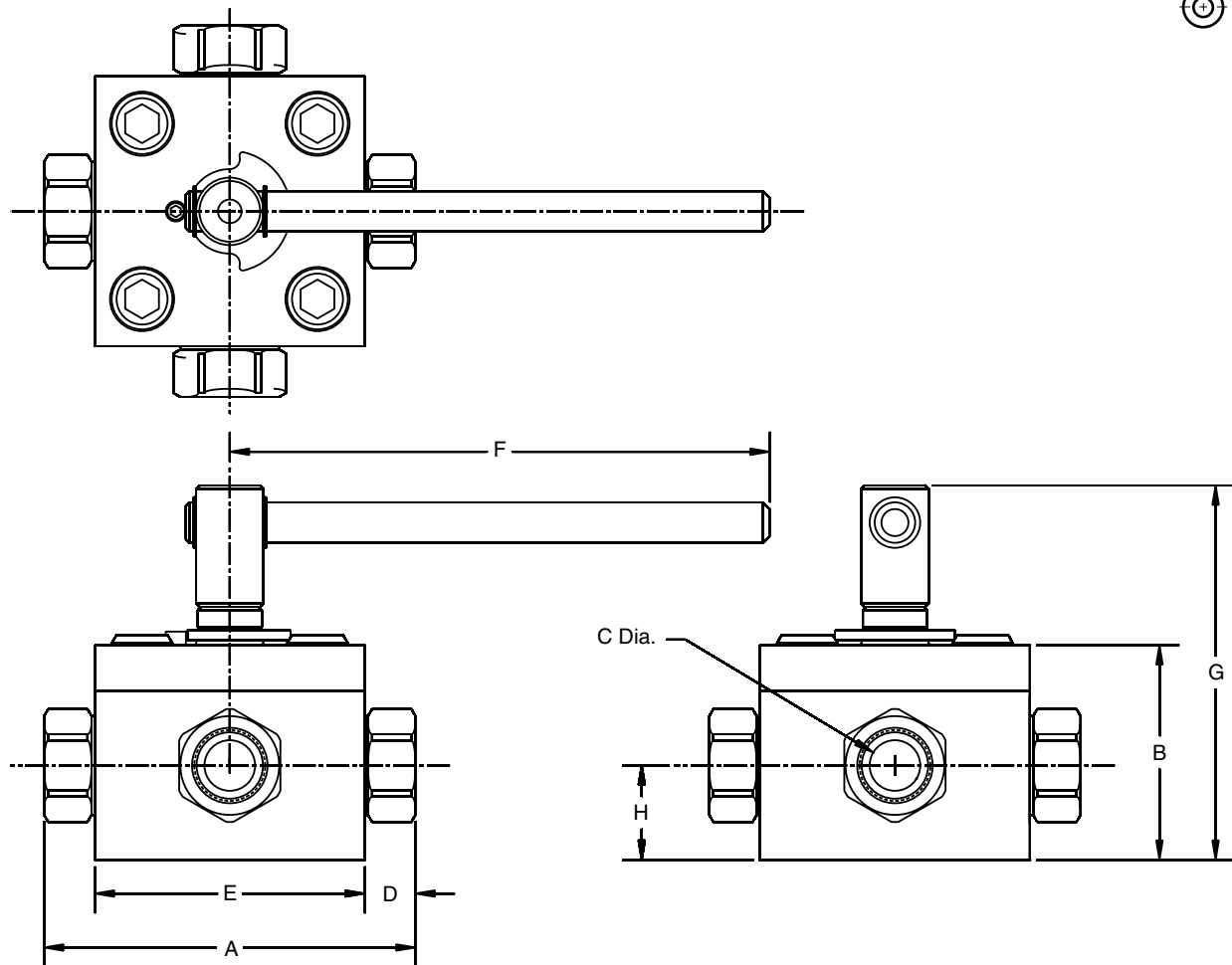
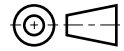


Multiway Manifold Mount Valve Porting Options

BV3H and BV4H valves are designed with no port-to-port overlap (see ISO symbols) during transition. Use the table below to select the ball pattern ordering code.

Ball Code	ISO Circuit Symbol	Ball Pattern	Handle Phase					Stop Washer Type
			90°	45°	0°	-45°	-90°	
1		L-Bore 3-Way Std						
2		T-Bore 90° 3-Way Opt						
3		T-Bore 180° 4-Way Std						
4		X-Bore 90° 4-Way Opt						

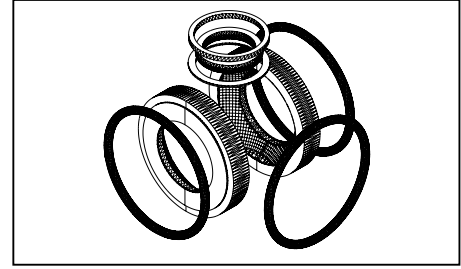
Threaded Ports



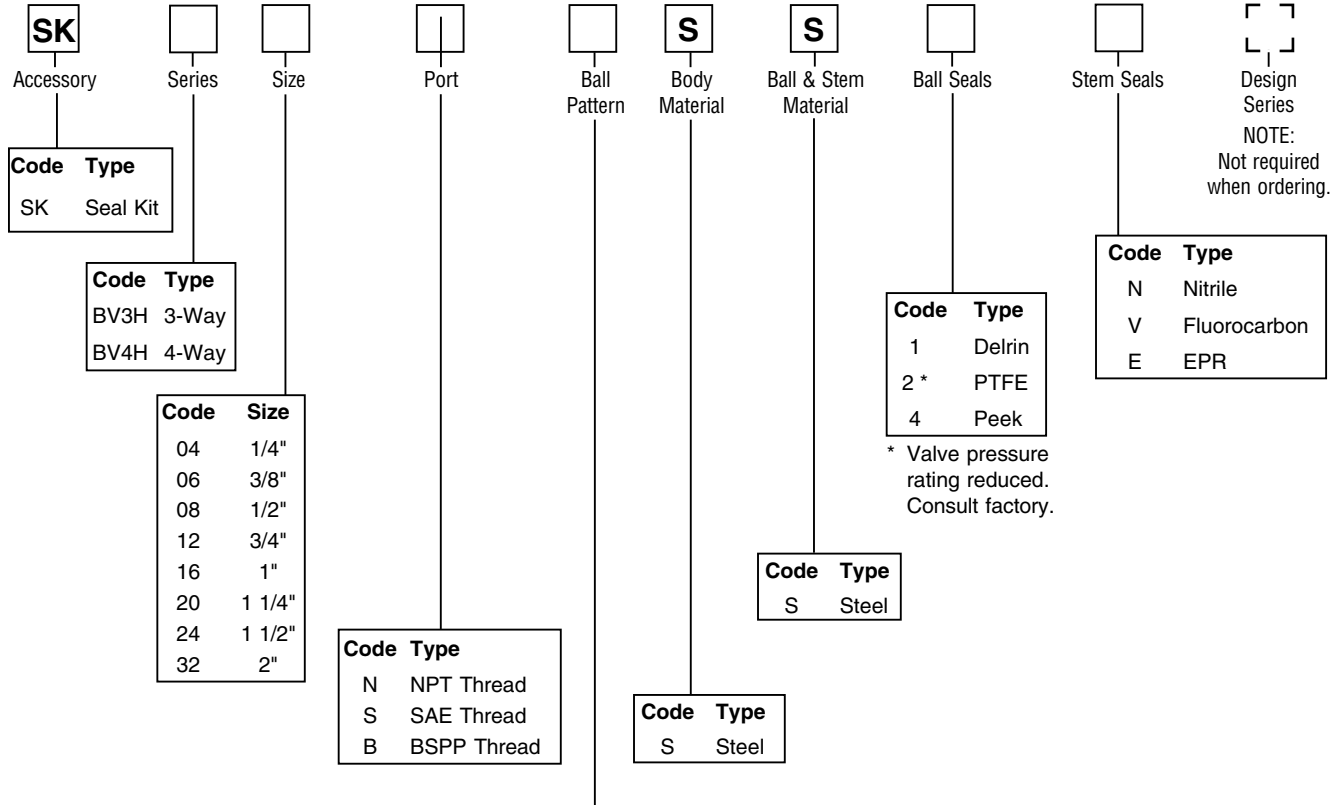
Code	Port Size	Working Pressure	Dimensions mm (in)							
			A	B	C-Dia.	D	E	F	G	H
NPT and SAE Thread										
04	1/4"	414 Bar (6000 PSI)	87.9 (3.46)	63.0 (2.48)	7.9 (0.31)	12.2 (0.48)	63.5 (2.50)	177.8 (7.00)	122.2 (4.81)	31.0 (1.22)
06	3/8"	414 Bar (6000 PSI)	87.9 (3.46)	63.0 (2.48)	7.9 (0.31)	12.2 (0.48)	63.5 (2.50)	177.8 (7.00)	122.2 (4.81)	31.0 (1.22)
08	1/2"	414 Bar (6000 PSI)	115.6 (4.55)	69.9 (2.75)	11.2 (0.44)	19.6 (0.77)	76.2 (3.00)	177.8 (7.00)	127.0 (5.00)	33.8 (1.33)
12	3/4"	414 Bar (6000 PSI)	136.1 (5.36)	82.0 (3.23)	16.0 (0.63)	17.3 (0.68)	101.6 (4.00)	254.0 (10.00)	157.2 (6.19)	38.1 (1.50)
16	1"	414 Bar (6000 PSI)	174.8 (6.88)	101.1 (3.98)	22.4 (0.88)	23.9 (0.94)	127.0 (5.00)	254.0 (10.00)	176.3 (6.94)	44.5 (1.75)
20	1 1/4"	414 Bar (6000 PSI)	188.7 (7.43)	116.6 (4.59)	28.7 (1.13)	21.1 (0.83)	146.6 (5.77)	368.3 (14.50)	206.5 (8.13)	52.8 (2.08)
24	1 1/2"	414 Bar (6000 PSI)	233.4 (9.19)	129.0 (5.08)	33.3 (1.31)	24.6 (0.97)	184.2 (7.25)	368.3 (14.50)	219.2 (8.63)	57.7 (2.27)
32	2"	414 Bar (6000 PSI)	300.0 (11.81)	157.7 (6.21)	44.5 (1.75)	32.5 (1.28)	235.0 (9.25)	368.3 (14.50)	256.0 (10.08)	68.8 (2.71)

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

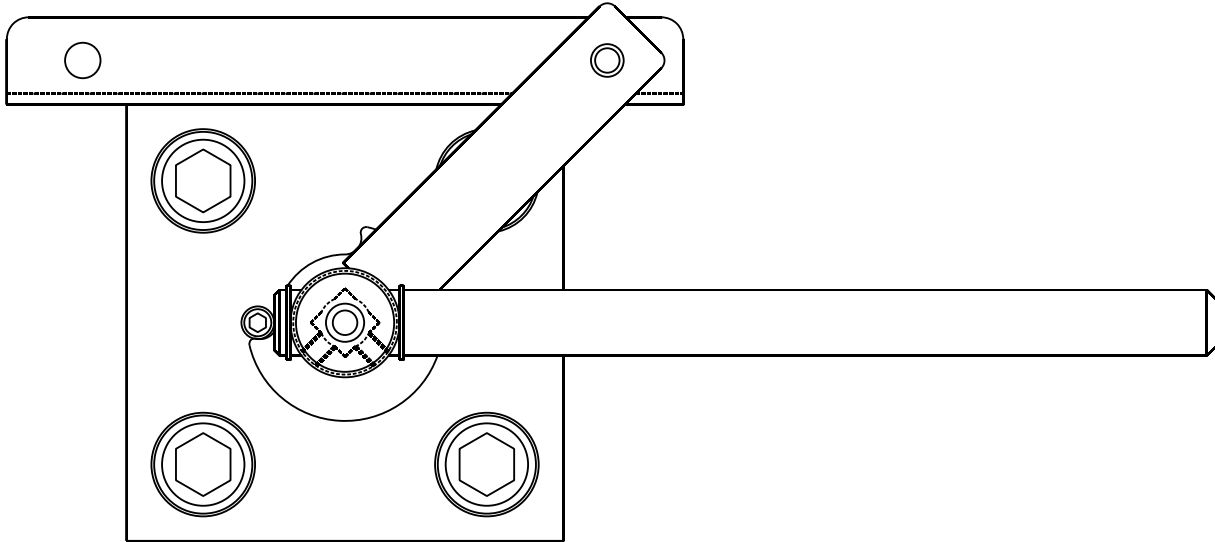


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BVHPLH: Standard Series 'BVHPLH-*' kit replaces the stopwasher with a stationary and moving plate, as illustrated below. As the handle is actuated, the moving plate aligns with one of the two locking positions in the stationary plate, enabling the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



Ordering Information

BV3H and BV4H		Standard Locking
Code	Size	(Part Number)
04	1/4"	BVHPLH-2
06	3/8"	BVHPLH-2
08	1/2"	BVHPLH-3
12	3/4"	BVHPLH-4
16	1"	BVHPLH-5
20	1 1/4"	BVHPLH-6
24	1 1/2"	BVHPLH-7
32	2"	BVHPLH-8