

General Description

Series BVAL ball valves are designed to meet the needs of suction line and low pressure applications. This series is available from 1/4" to 4" ports NPT, SAE and BSPP, and is designed to assure leak free hydraulic suction and return line durability.

Operation

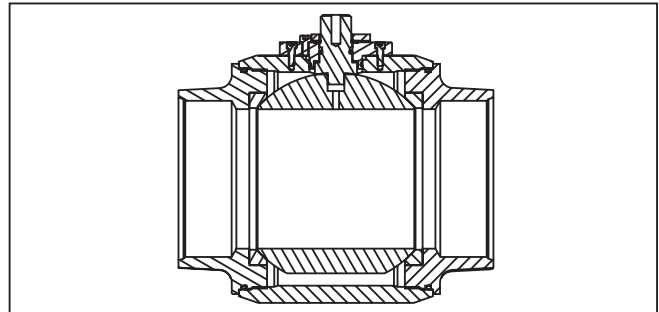
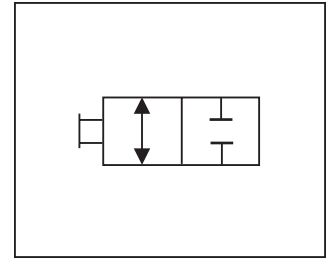
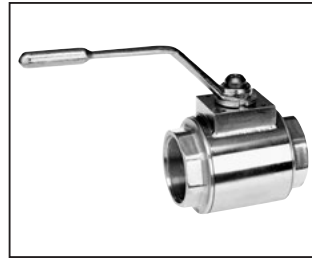
Parker's 2-way ball valves operate to either off or full flow by rotating the handle 90°. Ball valves are not designed to be a metering or flow control device.

Specifications

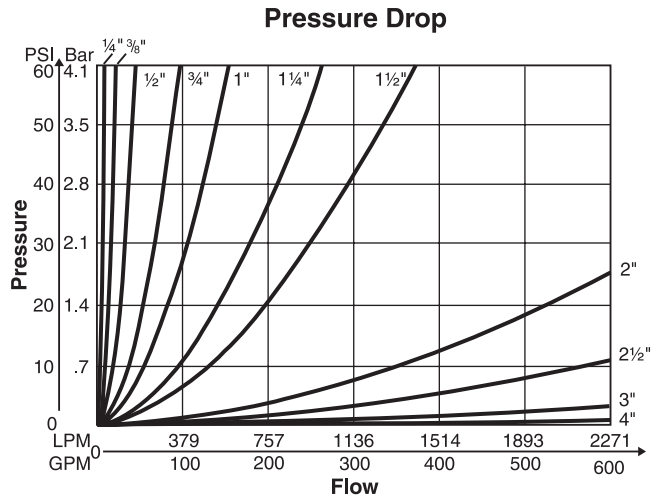
Maximum Pressure	28 Bar (400 PSI)
Body Material	Aluminum
Ball Material	Brass, Chrome Plated
Stem Material	Brass, Oversize Bearing Area
Standard Handle	Aluminum Offset
Standard Ball Seals	PTFE standard
Standard Shaft Seals	O-Ring & Backup, Nitrile
Temperature Range with Standard Seals	-30°C to +100°C (-22°F to +212°F)

Features

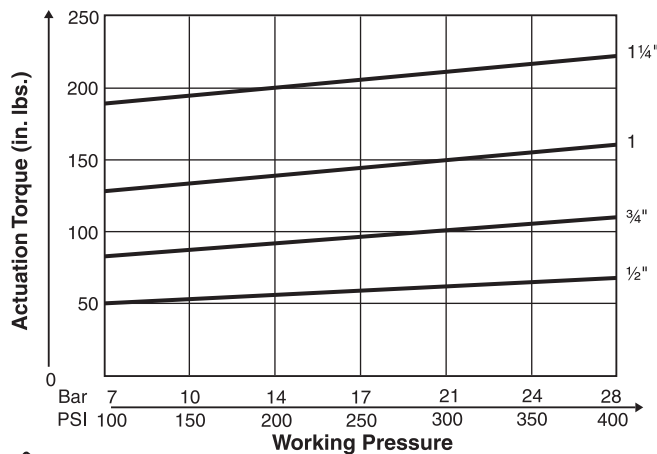
- Unrestricted bore from 1/4" to 4".
- Unrestricted flow and cavitation eliminated.
- Availability of NPT, BSPP and SAE O-ring sealed ports assure leak-free service.
- Choice of optional seal materials allows use with phosphate esters, water glycols and other media.
- Utilizes top grade PTFE ball seats with O-ring seals throughout to assure smooth and leak-free operation.



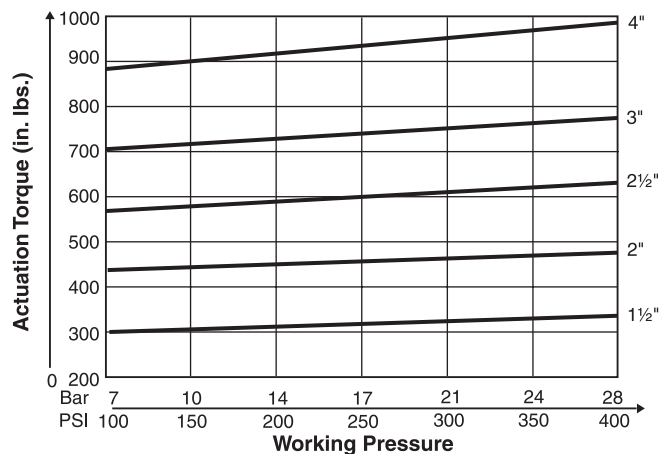
Performance Curves



Actuation Torque



Actuation Torque



WARNING: This product can expose you to chemicals including Lead, Nickel (Metallic), or 1,3-Butadiene which are known to the State of California to cause cancer, and Lead or 1,3-Butadiene which is known to the State of California to cause birth defects and other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Cat3300_02.indd, ddp, 04/19



BVAL	□	□	S	S	2	□	□	□ □ □ □
Series	Size	Port	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"
40	2 1/2"
48	3"
64	4"

Code	Description
N	NPT Thread
S	SAE Thread
B	BSPP Thread
U	ISO 6149 Thread

Code	Description
N	Nitrile
V	Fluorocarbon
E	EPR

Code	Description
2	PTFE

Code	Description
S	Aluminum
S	Brass

Code	Description
Omit	No Options
A	Locking Handle
B	Security Locking Handle
★C	1-Way Limit Switch
D	2-Way Limit Switch
*E	Panel Mount
G	Flat Non-offset Handle
★★K	1-Way Limit Switch w/Lock
★L	2-Way Limit Switch w/Lock

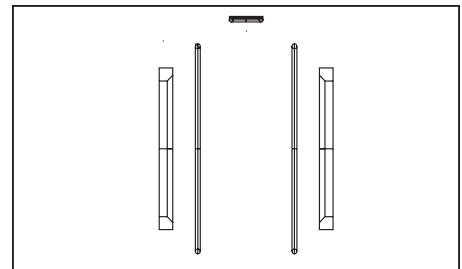
* Cannot be combined with other options
 ** Switch is set to indicate valve open condition
 ★ When selecting this option, your ball valve will come with limit switch bracket, but does not include the switch. The switch is sold separately (Part #LSB)

Code	Weight kg (lbs.)	Code	Weight kg (lbs.)	Code	Weight kg (lbs.)
4	0.2 (0.5)	16	0.5 (1.0)	40	3.5 (7.75)
6	0.2 (0.5)	20	0.8 (1.75)	48	4.8 (10.5)
8	0.2 (0.5)	24	1.1 (2.5)	64	7.4 (16.25)
12	0.3 (0.75)	32	1.8 (4.0)		

Seal Kit Accessories

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 for most 2-way valves is provided at the right.



Ordering Information

SK	□	□	2	□	□ □ □ □
Accessory	Series	Size	Ball Seals	Shaft Seals	Design Series NOTE: Not required when ordering.

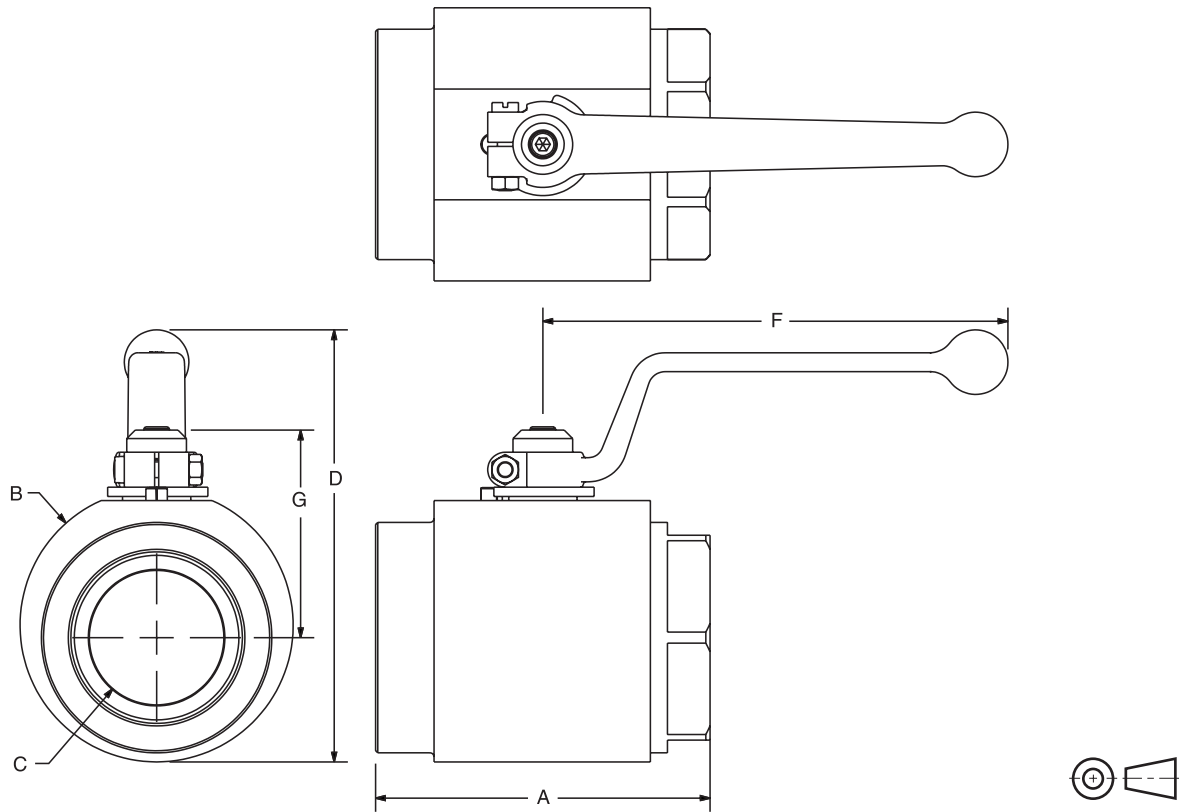
Code	Description
SK	Seal Kit

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"
40	2 1/2"
48	3"
64	4"

Code	Description
2	PTFE

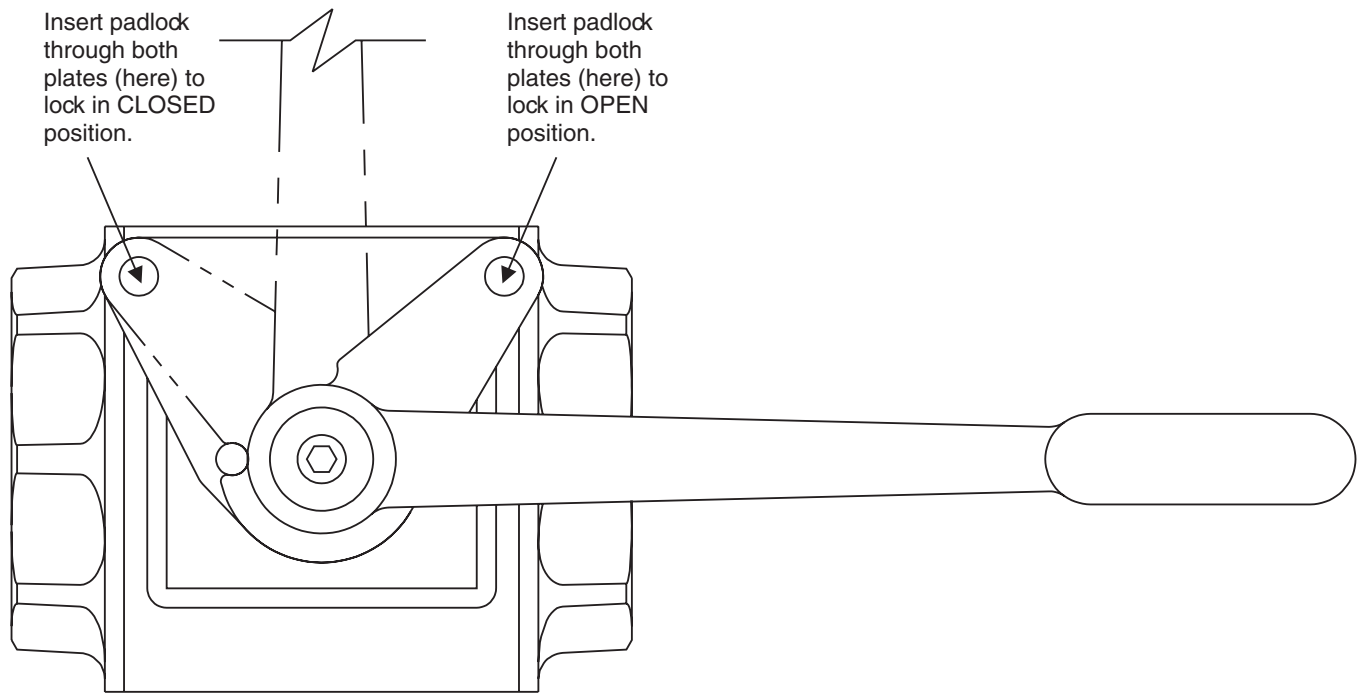
Code	Description
N	Nitrile
V	Fluorocarbon
E	EPR

Threaded Ports



Code	Port Thread Size	Working Pressure	Dimensions mm (in)					
			A	B	C	D	F	G
BVAL – NPT, SAE, and BSPP								
04	1/4"	28 Bar (400 PSI)	66.8 (2.63)	38.1 (1.50)	6.4 (0.25)	68.6 (2.70)	85.1 (3.35)	41.4 (1.63)
06	3/8"	28 Bar (400 PSI)	66.8 (2.63)	38.1 (1.50)	9.7 (0.38)	68.6 (2.70)	85.1 (3.35)	41.4 (1.63)
08	1/2"	28 Bar (400 PSI)	66.8 (2.63)	38.1 (1.50)	12.7 (0.50)	68.6 (2.70)	85.1 (3.35)	41.4 (1.63)
12	3/4"	28 Bar (400 PSI)	83.3 (3.28)	44.5 (1.75)	19.1 (0.75)	95.8 (3.77)	129.3 (5.09)	47.2 (1.86)
16	1"	28 Bar (400 PSI)	88.4 (3.48)	50.8 (2.00)	25.4 (1.00)	101.9 (4.01)	129.3 (5.09)	50.3 (1.98)
20	1 1/4"	28 Bar (400 PSI)	99.1 (3.90)	69.9 (2.75)	31.8 (1.25)	131.8 (5.19)	173.0 (6.81)	64.3 (2.53)
24	1 1/2"	28 Bar (400 PSI)	109.7 (4.32)	82.6 (3.25)	38.1 (1.50)	143.5 (5.65)	173.0 (6.81)	69.6 (2.74)
32	2"	28 Bar (400 PSI)	124.5 (4.90)	101.6 (4.00)	50.8 (2.00)	162.8 (6.41)	173.0 (6.81)	78.0 (3.07)
40	2 1/2"	28 Bar (400 PSI)	152.4 (6.00)	127.0 (5.00)	63.5 (2.50)	203.2 (8.00)	218.7 (8.61)	104.4 (4.11)
48	3"	28 Bar (400 PSI)	185.7 (7.31)	152.4 (6.00)	76.2 (3.00)	228.3 (8.99)	218.7 (8.61)	116.3 (4.58)
64	4"	28 Bar (400 PSI)	225.8 (8.89)	177.8 (7.00)	101.6 (4.00)	254.3 (10.01)	218.7 (8.61)	129.8 (5.11)

BVHPLK: Standard Series 'BVHPLK-*' 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

BVAL		Standard Locking
Code	Size	(Part Number)
04	1/4"	BVHPLK-1
06	3/8"	BVHPLK-1
08	1/2"	BVHPLK-1
12	3/4"	BVHPLK-1
16	1"	BVHPLK-1
20	1 1/4"	BVHPLK-2
24	1 1/2"	BVHPLK-2
32	2"	BVHPLK-2
40	2 1/2"	BVHPLK-3
48	3"	BVHPLK-3
64	4"	BVHPLK-3