

3-piece high pressure ball valves

High performance ball valves capable of pressures to 5000 psi, temperatures to 450°F

VALBOL Series HP44 three-piece ball valve is designed to handle high pressure applications beyond the capabilities of the 44 line of valves. Valve is designed to ANSI B16.34 specifications.

This means a very strong and tough valve that can handle high pressure and unforeseen piping strains with a seat design that assures bi-directional tight shutoff and adjusts automatically for changing pressures and temperatures.

The stem seal design, consisting of a variety of optional materials like live-loaded PEEK and C/Fill thrust bearings and seals which significantly increases valve cycle life over conventional ball valves and extends time between adjustments.



Multiple end connections, seat & seal combinations

Features which make this tough reliable ball valve so unique include tight shut-off, smooth two-way flow, advanced seat material, a variety of interchangeable end connections, swing away three-piece construction.

A variety of pipe ends, including socket weld, screw ends, butt weld or any combination of these, enables Series HP44 valves to be adapted to fit standard and more unusual piping situations. Series HP44 valves can also be welded in place fully assembled with extended weld ends.

The range of seat material includes Delrin and Peek. These seats easily handle a great majority of industrial fluids with temperatures from -20°F to +180°F including chemicals, petrochemicals, petroleum products, etc.

Swing-out for easy maintenance

The Series HP44 is especially suited for use in piping systems where line breaks are required and total entry into the line is necessary. The centre section can swing out, eliminating the need to cut a valve out of line and having to replace both the valve and the pipe. Because of this design, the seats, seals and ball can all be replaced quickly and easily without disturbing pipe alignment. Acting as both a valve and a union.

Bi-Directional Sealing

Series HP44 three-piece ball valves are designed to seal bi-directionally against resilient seats. The relief slots assist in downstream sealing and reduce torque. The ball is forced to the downstream side under pressure and forced against the downstream seat to effect and maintain a seal. Consequently, the valve will give bubble-tight shut-off throughout a long in-service life.

Automation

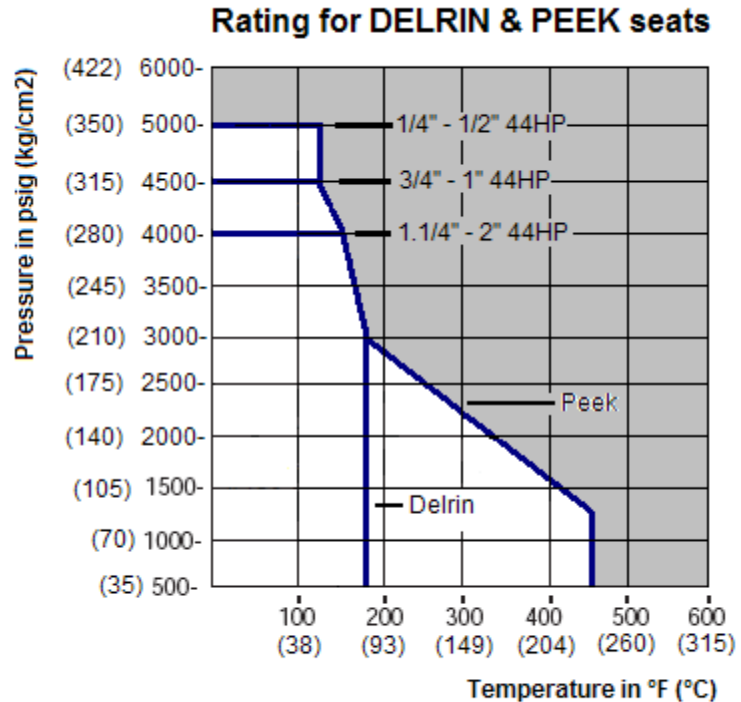
VALBOL offers a complete line of pneumatic and electric automation packages for Series HP44 valves. Both pneumatic and electric packages are offered for on/off control. Available options include:

- Failsafe operation
- Top mounted limit switches
- Proximity switches
- Single and double acting
- TYPE 4, 4x, 7 and 9 enclosures
- Remote position indication
- Electronic positioners
- Single loop, PID controller
- Computer interface

Before the actuator can be sized for any given valve application, the operating torque required for the valve must be determined. The operating torque of the ball valve is influenced by a number of factors, some are design and materials related, others are application and service conditions related. Design related factors include the type and material of the valve seats, while application factors include system pressure, media and frequency of operation. For complete valve operating torque data refer to the torque curves given for each seat material and provide the correction factors for media and the type of service such as on-off operation, cycle frequency, etc.

Cv DATA & SEAT PRESSURE/TEMPERATURE RATINGS

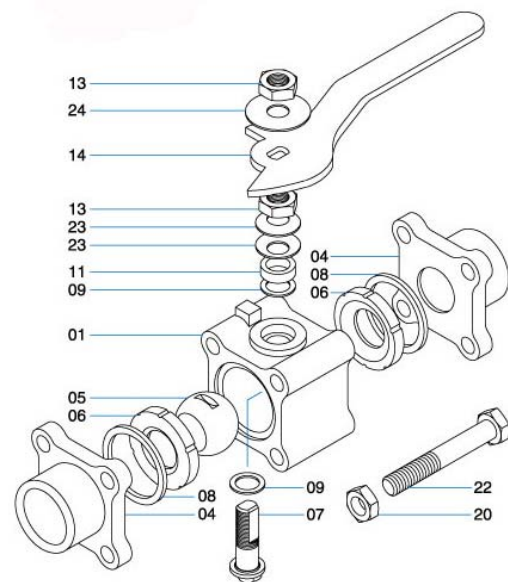
Valve Size	Cv USGPM)
1/2"	7
3/4"	10
1"	30
1.1/2"	89
2"	130



The product must not be used in this region.

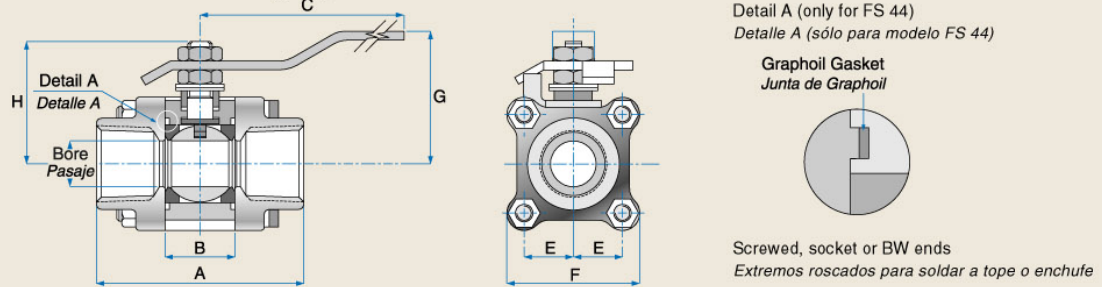
Part identification and Materials

- 01 – Valve Body, Carbon Steel, Stainless Steel
- 04 – Pipe Ends, Carbon Steel, Stainless Steel
- 05 – Ball, Stainless Steel, Monel, Alloy 20, Hastelloy C
- 06 – Seats, Delrin, Peek.
- 07 – Stem, Stainless Steel.
- 08 – Body Seals, Buna.
- 09 – Thrust Bearing, RTFE.
- 11 – Stem Seal Follower, 316 St.St.
- 12 – Stop Plate
- 13 – Retaining Nut, CS plated
- 14 – Handle, CS plated
- 20 – Body Bolts, B7
- 22 – Body Nuts, Gr. 2h.



Dimensions

HP 44 Ball valve, high pressure service. Válvula Esférica Alta Presión (HP).
 FS 44 Ball valve, fire safe. Válvula Esférica a Prueba de Fuego (FS).



Dimensions. Dimensiones.

Size Tamaño	Bore Pasaje	A	B	H	G	C	F	E	Working pressure Presión de trabajo (PSIG)		kg
									HP	FS	
1/4"	0.44	2.25	0.81	1.50	1.81	4.25	1.74	0.62	4000	2000	0.50
DN 8	11.18	57.1	20.6	38.1	46.0	107.9	44.4	15.8			
3/8"	0.44	2.25	0.81	1.50	1.81	4.25	1.74	0.62	4000	2000	0.50
DN 10	11.18	57.1	20.6	38.1	46.0	107.9	44.4	15.8			
1/2"	0.44	2.57	0.81	1.50	1.81	4.25	1.74	0.62	4000	2000	0.50
DN 15	11.18	65.3	20.6	38.1	46.0	107.9	44.4	15.8			
3/4"	0.56	2.79	0.97	1.59	1.87	4.25	2.00	0.75	4000	2000	0.70
DN 20	14.22	70.9	24.6	40.5	47.6	107.9	50.8	19.0			
1"	0.81	3.69	1.25	2.19	2.40	5.74	2.37	0.87	3000	2000	1.50
DN 25	20.57	93.7	31.7	55.6	61.1	146.0	60.3	22.2			
1 1/4"	1.00	4.19	1.62	2.37	2.59	5.74	2.62	1.00	3000	2000	2.0
DN 32	25.40	106.4	41.3	60.3	65.9	146.0	66.6	25.40			
1 1/2"	1.25	4.53	1.90	2.87	3.12	10.0	3.00	1.12	3000	2000	3.0
DN 40	31.75	115.1	48.4	73.0	79.4	254.0	76.2	28.5			
2"	1.50	4.98	2.22	3.06	3.31	10.0	3.37	1.31	3000	2000	4.0
DN 50	38.10	126.5	56.3	77.8	84.1	254.0	85.7	33.3			

Ordering instructions

1. Model	2. Size	3. Options	4. Body	5. Ball & Stem	6. Seat	7. Body Seals	8. Ends	9. Operator
44	02-DN8 (1/4") 03-DN10 (3/8") 05-DN15 (1/2") 07-DN20 (3/4") 10-DN25 (1") 12-DN32 (1.1/4") 15-DN40 (1.1/2") 20-DN50 (2")	0-Standard 1-More than one A-Antistatic F-Fire Safe H-High pressure J-Extended Stem L-B7 bolting M- W/male threads P-Relief hole Q-Vacuum Service R-Spring return handle S-SS bolting & accs.	4 - C. Steel 6 - SS316	6 - SS316	Y-Delrin H - Peek	B - Nitrile Buna E - EPR N - Neoprene T - PTFE V - Viton	B - BSPT N - NPT S - SW pipe T - SW tube V - BW tube W - BW pipe X - Ext. BW	A - Actuator M - Wrench N - Bare stem

Example

1	2	3	4	5	6	7	8	9
44	07	H	4	6	Y	B	N	M



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