3-Piece Standard Port Ball Valves

VALBOL Series 44 three-piece ball valves. A major design, and testing program brings you a valve designed to ANSI B16.34 specifications with advanced seal technology.

This means a very strong and tough valve that can handle pressure and unforeseen piping strains with a stem seal that extends operational life cycle.

Full CMTRS (Certified Material Test Reports) on pressure vessel parts are optionally available. Valve identification is provided on a stainless steel nameplate meeting MSS SP-25.

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 And Seal Combinations

Features which make this tough reliable ball valve so unique include tight shut-off, smooth two-way flow, advanced seat materials, 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 44 valves to be adapted to fit standard and more unusual piping situations. Series 44 valves can also be welded in place, fully assembled with “G” graphoil, “S” PTFE coated stainless steel body seals, reinforced PTFE, C/Fill, or Peek seats.
The range of seat materials includes PTFE, Reinforced TFE, C/Fill, Delrin, Metal, Peek and UHMWPE. These seats easily handle a great majority of industrial fluids with temperatures from -50°F to +600°F including steam, chemicals, petrochemicals, petroleum products, caustics and fluids containing solids or fibers and or abrasive materials.

Bi-Directional Sealing

Series 44 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 even with seats of relatively non-resilient materials such as PTFE or C/Fill. The seats are also designed to perform a wiping action during each cycle cleaning foreign materials off both the seat and ball, assuring leak-tight sealing. The downstream sealing of VALBOL three-piece valves overcomes the two most common difficulties in the use of conventional ball valves: seat damage and high operating torque. A hole in the stem slot prevents any possibility of damage due to trapped cavity pressure when the ball is open. An optional ball cavity vent is available for specific applications. This design results in smoother, more efficient valve operation.

Swing – Out Design for Easy In Line Maintenance

The Series 44 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.

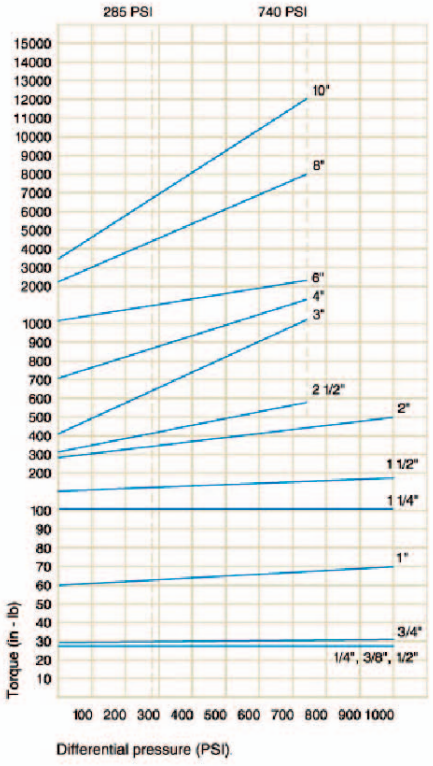
Automation

VALBOL offers a complete line of pneumatic and electric automation packages for Series 44 valves. Both pneumatic and electric packages are offered for on/off or proportional control. Available options include:

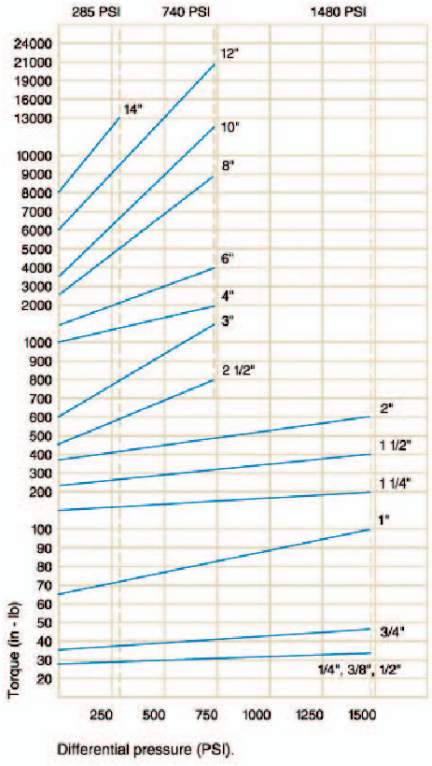
- Top mounted limit switches
- Proximity switches
- Single and double acting pneumatic actuators
- TYPE 4, 4x, 7 and 9 enclosures
- Remote position indication
- Positioners

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 factor for media and the type of service such as on-off operation, cycle frequency, etc.

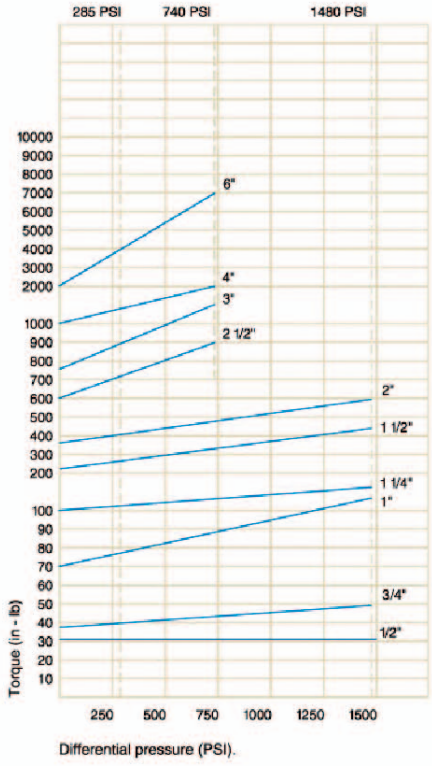
PTFE Seat



Reinforced PTFE Seat

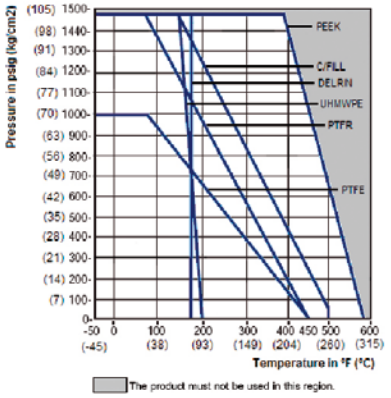


C/Fill Seat



Cv Data & Seat Pressure/Temperature Ratings

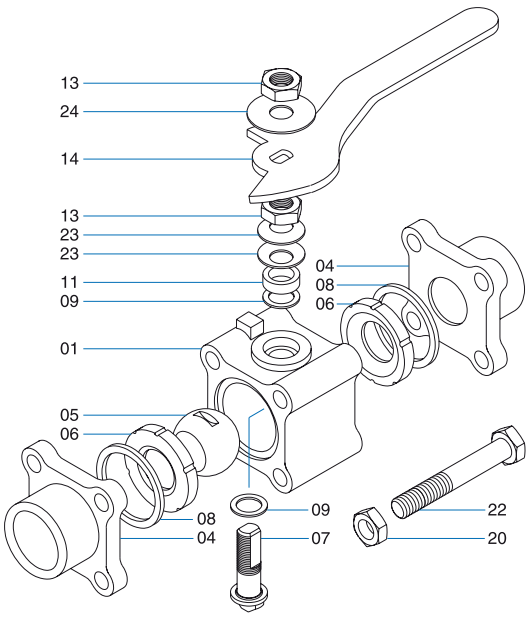
Valve Size	Cv (USGPM)
1/2”	7
3/4”	10
1”	30
1 1/2”	89
2”	130

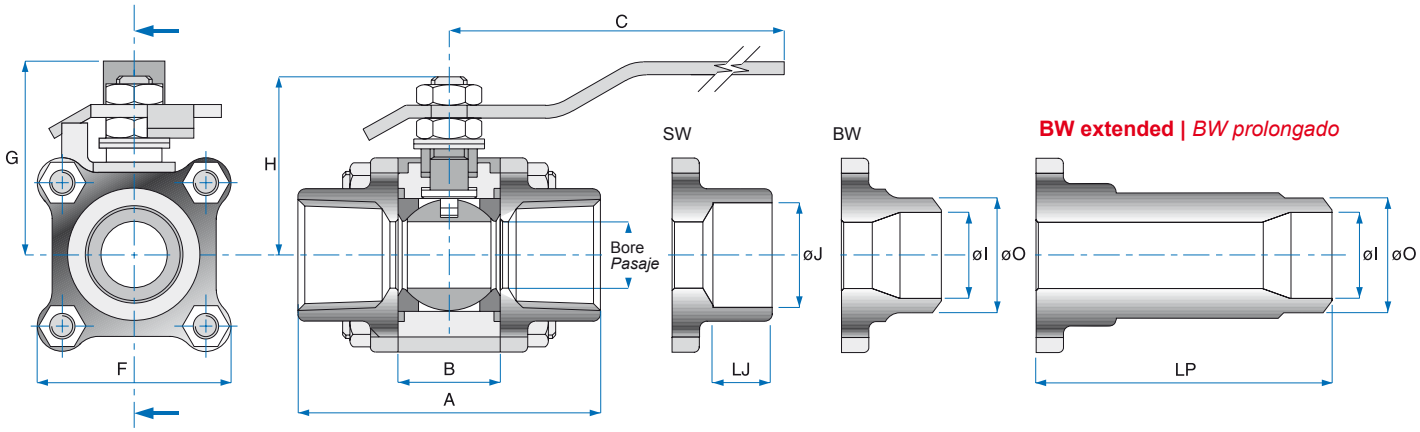


Dimensions

Model 44 | 1/4" - 2 1/2"

01 Valve body
04 Pipe ends
05 Ball
06 Seats
07 Stem
08 Body seals
09 Thrust bearing
10 Centering washer
11 Stem seal follower
12 Stop plate
13 Retaining nut
14 Handle
15 Seat retainer
16 Hex nut
17 Bolt
18 Stop screw
20 Body nuts
22 Body bolts
23 Bellville washers
24 Name plate





Threaded, SW or BW ends | *Extremos roscados para soldar a tope o enchufe.*

Model | *Modelo* | **44**

Ball valve, three piece design, standard bore blowout - proof stem | *Válvula Esférica de Pasaje Nominal, de 3 Piezas con Vástago Inexpulsable.*

Size | *Tamaño*	Bore | *Pasaje*	A	B	C	F	G	H	ø J	LJ	LP	ø O	Sch 5 ø I	Sch 10 ø I	Sch 40 ø I	kg
1/4"	0.44	2.25	0.81	4.44	1.75	1.81	1.59	0.55	0.44	3.72	0.55	-	0.41	0.27	0.52
DN 8	11.2	57.1	20.7	112.8	44.5	46.0	40.4	14.1	11.2	94.5	14.0	-	10.3	6.8	
3/8"	0.44	2.25	0.81	4.44	1.75	1.81	1.59	0.69	0.44	3.72	0.67	-	0.55	0.49	0.52
DN 10	11.2	57.1	20.7	112.8	44.5	46.0	40.4	17.5	11.2	94.5	17.0	-	13.9	12.5	
1/2"	0.44	2.57	0.81	4.44	1.75	1.81	1.59	0.86	0.44	3.72	0.84	0.71	0.67	0.62	0.52
DN 15	11.2	65.3	20.7	112.8	44.5	46.0	40.4	21.7	11.2	94.5	21.3	18.0	17.1	15.8	
3/4"	0.56	2.79	0.97	4.44	2.00	1.88	1.69	1.07	0.56	4.02	1.05	0.92	0.88	0.82	0.71
DN 20	14.2	70.7	24.6	112.8	50.8	47.8	42.8	27.1	14.2	102.2	26.7	23.4	22.2	20.09	
1"	0.81	3.72	1.25	5.75	2.38	2.44	2.20	1.33	0.72	4.19	1.31	1.18	1.09	1.05	1.34
DN 25	20.6	94.52	31.8	146.1	60.5	62.0	55.8	33.8	18.3	106.4	33.3	30.1	27.8	26.6	
1 1/4"	1.00	4.22	1.63	5.75	2.62	2.62	2.38	1.68	0.72	4.31	1.66	1.53	1.44	1.38	2.08
DN 32	25.4	107.1	41.3	146.1	66.6	66.6	60.5	42.5	18.3	109.5	42.2	38.9	36.5	35.0	
1 1/2"	1.25	4.52	1.91	7.00	3.00	3.12	2.88	1.92	0.72	4.86	1.91	1.77	1.67	1.61	3.06
DN 40	31.8	114.86	18.4	177.8	76.2	79.3	73.2	48.6	18.3	123.4	48.5	45.0	42.5	40.9	
2"	1.50	4.97	2.22	7.00	3.38	3.31	3.06	2.41	0.84	5.02	2.38	2.24	2.15	2.07	3.90
DN 50	38.1	126.9	56.3	177.8	85.9	84.1	77.7	61.1	21.3	127.0	60.5	57.0	54.5	52.5	
2 1/2"	2.0	5.73	2.85	10.2	4.55	4.79	4.55	2.91	1.01	5.13	2.88	2.71	2.64	2.47	8.00
DN 65	50.8	145.6	72.5	260.0	115.5	121.9	115.6	73.9	25.9	130.3	73.0	68.8	66.9	62.7	

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