### **3-Piece Standard Port Ball Valves**

Offer maximum flow capacity, minimum pressure loss and optional fire safe design



VALBOL Series 59 three-piece ball valves. A major design, and testing program brings you a valve designed to ANSI B16.34 specifications with advanced seal technology.

Series 59 valves are also available in a fire safe configuration F59In sizes up to 2".

Series 59 valves are available with flanged ANSI class 150 & 300.

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 59 valves to be adapted to fit standard and more unusual piping situations. Series 59 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 59 three-piece ball valves are designed to seal bidirectionally 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 inservice 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. The VAL-BOL design results in smoother, more efficient valve operation.

# Swing – Out Design for Easy In Line Maintenance

The Series 59 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.



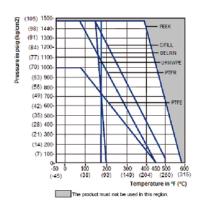
#### **Automation**

VALBOL offers a complete line of pneumatic and electric automation packages for Series 59 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

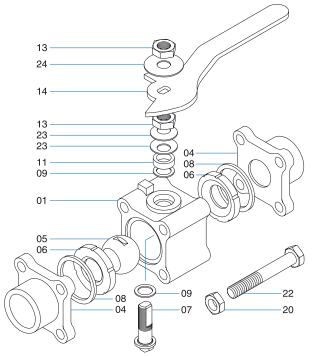
## Cv Data & Seat Pressure/Temperature Ratings

Valve Size	Cv (USGPM)
1/2"	32
3/4"	54
1"	105
1 1/2"	275
2"	460
2 1/2"	780
3"	1330
4"	2420



#### **Dimensions**

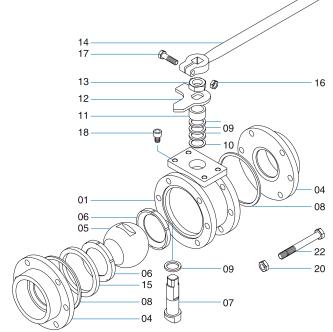




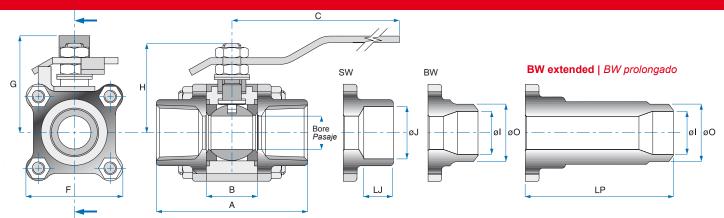
- 01 Valve body
- 04 Pipe ends
- 05 Ball
- 06 Seats
- **07** Stem
- 08 Body seals
- 09 Thrust bearing
- 10 Centering washer 11 Stem seal follower
- 12 Stop plate

- 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





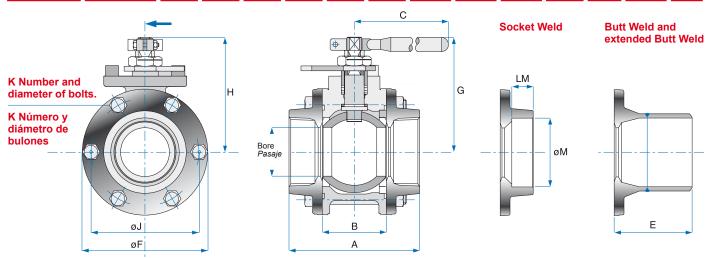
- 01 Cuerpo
- **04** Tapa
- 05 Esfera
- 06 Asiento
- 07 Vástago
- 08 Junta cuerpo
- 09 Arandela
- 10 Arandela inoxidable
- 11 Separador 12 Placa stop
- 13 Tuerca de vástago
- 14 Palanca
- 15 Anillo de suplemento
- 16 Tuerca
- 17 Tornillo
- 18 Tornillo tope
- 20 Tuerca
- 22 Tornillo
- 23 Arandela Bellville
- 24 Placa identificación



Model | 59

Threaded, SW or BW ends

Ball valve, thre	e piece design	full bor :	blowo	t - proo <sup>-</sup>	stem.							Sch 5	Sch 10	
Size   Tamaño	Bore   Pasaje	Α	В	С	F	G	Н	øͿ	LJ	LP	øΟ	ØΙ	ØΙ	kg
1/4"	0.44	2.25	0.81	4.25	1.75	1.81	1.50	0.55	0.44	3.72	0.55	-	0.41	0.52
DN 8	11.2	57.2	20.7	108.0	44.5	46.0	38.1	14.1	11.2	94.5	14.0	-	10.3	
3/8"	0.44	2.25	0.81	4.25	1.75	1.81	1.50	0.69	0.44	3.72	0.67	-	0.55	0.52
DN 10	11.2	57.2	20.7	108.0	44.5	46.0	38.1	17.5	11.2	94.5	17.0	-	13.9	
1/2"	0.56	2.79	0.97	4.25	2.00	1.88	1.62	0.85	0.44	4.02	0.84	0.71	0.67	0.71
DN 15	14.2	70.7	24.6	108.0	50.8	47.8	41.2	21.7	11.2	102.2	21.3	18.0	17.1	
3/4"	0.81	3.72	1.25	5.75	2.38	2.44	2.19	1.07	0.56	4.19	1.05	0.92	0.88	1.34
DN 20	20.6	94.5	31.8	146.0	60.5	62.02	55.6	27.1	14.2	106.4	26.7	23.4	22.2	
1"	1.00	4.22	1.63	5.75	2.62	2.62	2.44	1.33	0.72	4.31	1.31	1.18	1.09	2.08
DN 25	25.4	107.1	41.3	146.0	66.6	66.6	62.0	33.8	18.3	109.5	33.3	30.1	27.8	
1 1/4"	1.25	4.52	1.91	7.00	3.00	3.12	2.81	1.67	0.72	4.86	1.66	1.53	1.44	3.06
DN 32	31.8	114.9	48.4	117.8	76.2	79.3	71.4	42.5	18.3	123.4	42.2	38.9	36.5	
1 1/2"	1.50	4.97	2.22	7.00	3.38	3.31	3.00	1.91	0.72	5.02	1.91	1.77	1.67	3.90
DN 40	38.1	126.4	56.3	177.8	85.9	84.0	76.2	49.6	18.3	127.4	48.5	45.0	42.5	
2"	2.8	5.73	2.85	10.2	4.55	4.79	4.08	2.41	0.84	5.13	2.38	2.24	2.15	8.00
DN50	50.8	145.6	72.5	260.0	115.5	121.9	103.7	61.1	21.3	130.3	60.5	57.0	54.5	



### Model | 59

Ball valve, three piece design, full bore, blowout - proof stem.

Size   Tamaño	Bore   Pasaje	Α	В	С	E	Ø F	G	Н	øJ	K	øM	LM	kg
2"	2.00	5.61	2.86	10.24	5.13	5.82	5.13	4.60	4.90	6 X 7/16"	2.41	0.84	6.45
DN 50	50.8	142.7	72.7	260.0	130.3	148.0	128.2	116.8	125.0	UNF	61.1	21.3	
2 1/2"	2.50	6.15	3.28	18.31	4.88	6.44	5.90	5.70	5.51	6 X 1/2"	2.90	1.18	13.60
DN 65	63.5	156.3	83.3	465.0	124.0	163.5	150.0	144.8	140.0	UNF	73.8	30.0	
3"	3.25	7.55	4.28	18.31	4.72	8.12	6.52	6.32	6.87	8 X 9/16"	3.53	1.30	22.80
DN 80	82.5	191.8	108.8	465.0	119.8	206.4	165.5	160.52	174.5	UNF	89.8	33.0	
4"	4.38	11.73	5.75	21.30	4.65	11.13	9.22	8.90	9.37	8 X 3/4"	4.54	1.57	36.40
DN 100	111.1	298.1	146.0	541.0	118.2	282.6	234.2	226.2	238.1	UNF	115.4	39.8	