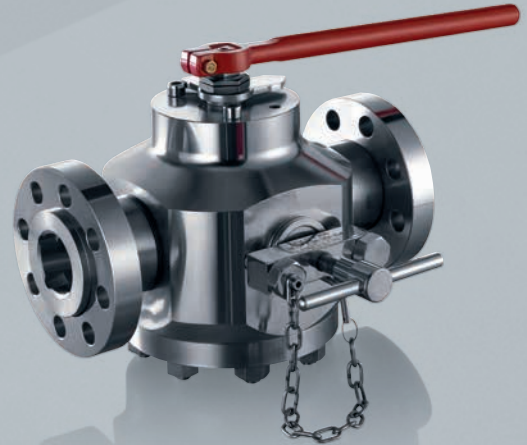
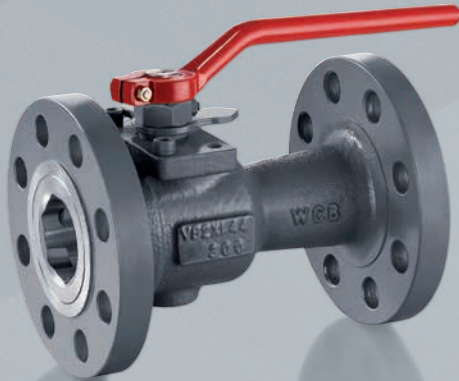


CATÁLOGO GENERAL DE PRODUCTOS  
General Product Catalog





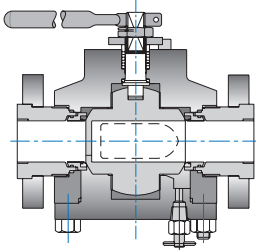
Información General	General Information	Recomendación / Recommendation	Pág.
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Válvulas Esféricas   Ball Valves	Modelos   Model	Tamaño   Size	Paso   Bore	Serie   Psi.	Pág.
<b>3 Cuerpos   Para rosca y soldar.</b> <i>Three piece   Screwed, SW or BW ends.</i>	44	1/4" - 2 1/2"	Standard	1000 / 2000 Psi.	4 - 5
	59	1/4" - 2"	Full	1000 / 2000 Psi.	4 - 5
	23	1/4" - 4"	Full	1000 Psi.	6
<b>Cuerpo Enterizo   Para rosca y Soldar.</b> <i>One piece   Screwed or SW ends.</i>	71 - 72 - 73	1/2" - 2"	Full	2000 - 5000 Psi.	6
<b>Asiento Metálico Caracterizado.</b> <i>Characterized Metallic Seats.</i>	26 - 44 - 51 - 59 - 82	1/4" - 3"	Full / Standard	1000 - 1440 Psi.	7
<b>Fundida   Bridada.</b> <i>Cast   Flanged.</i>	82 - 83 - 84 - 85 - 86	1/2" - 12"	Full	S150 / S1500	8 - 9
	51 - 52 - 53	1/2" - 16"	Standard	S150 / S600	10 - 11
<b>Forjada big valves   Bridada</b> <i>Forged big valves   Forged.</i>	82J - 83J - 84J - 85J	12" - 36"	Full	S150 / S900	13
<b>Esclusa API 6A   Bridada, para rosca y soldar.</b> <i>Gate Valve API 6A   Flanged, Screwed or SW ends.</i>	E2 - E3 - E5	2 1/16" - 4 1/16"	Full	2000 / 5000 Psi.	12
<b>3 Cuerpos   Para rosca y soldar.</b> <i>Three piece   Screwed, SW or BW ends.</i>	45	2 1/2" - 6"	Standard	720 Psi.	14
	59	2" - 4"	Full	720 Psi.	14
	92	1 1/2" - 4"	Full	3000 Psi.	14
<b>Modelo corto para colocar entre bridas   Bridada.</b> <i>Flangeless short pattern design   Flanged.</i>	50	2 1/2" - 4"	Standard	S150 - S300	15
<b>Cuerpo Enterizo   Para rosca.</b> <i>One piece   Screwed.</i>	58	1/4" - 1"	Standard	400 Psi.	15
<b>Cuerpo Enterizo   Para rosca.</b> <i>One piece   Screwed.</i>	43	2" - 2 1/2"	Standard	1500 - 3000 Psi.	15
	46	1 1/2" - 2"	Full	1500 - 3000 Psi.	15
<b>Alta Presión, a prueba de Fuego, Antiestática.</b> <b>Para rosca y soldar.</b> <i>High pressure, Fire Safe, Antistatic.</i> <i>Screwed, SW or BW ends.</i>	HP 44	1/4" - 2"	Standard	3000 / 4000 Psi.	16
	HP 59	1/4" - 1 1/2"	Full	3000 / 5000 Psi.	16
	15	3/4" - 2"	Standard	2200 / 5000 Psi.	16
	19	1/4" - 1 1/2"	Full	2200 / 5000 Psi.	16
<b>Lanzadora / Receptora de Scrapers   Bridada.</b> <i>Pig launch &amp; receiving   Flanged.</i>	16	2" - 12"	Full	S300 / S900	17
<b>Cierre Metal-Metal   Bridada.</b> <i>Metal-Metal Seat   Flanged.</i>	91	2" - 6"	Full	S300 / S900	17
<b>3 Vías Entrada Inferior   Para rosca y soldar.</b> <i>Three way bottom entry   Screwed, SW or BW ends.</i>	T44	1/4" - 2"	Standard	1000 / 2000 Psi.	18
<b>3 Vías Entrada Lateral   Bridada</b> <i>Three way lateral entry   Flanged.</i>	17	1 1/2" - 6"	Standard	S150	18
<b>3 y 4 Vías Entrada Lateral   Bridada.</b> <i>Three and four way lateral entry   Flanged.</i>	18	1" - 6"	Full	S150 - S300	18
<b>3 Vías Entrada Inferior   Bridada.</b> <i>Three way bottom entry   Flanged.</i>	T51 - T52	1/2" - 10"	Standard	S150 - S300	19



Catalogue on request  
Solicite folleto específico

| Request our custom product department for other special applications.  
| Consulte con nuestro Departamento de Ingeniería para aplicaciones especiales.

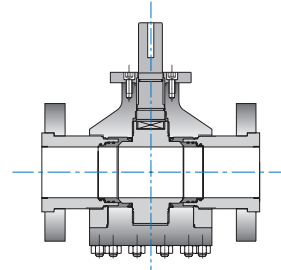


### Pig Valve

Pig launchers and receivers  
Trunnion ball.  
150 to 900 ASME series.  
Diameters from 2" to 10".  
No tools required to operate.

### Válvula PIG

Lanzadora y receptora  
de pigs/scrapers.  
Esfera guiada integral.  
Series ASME 150 a 900.  
Diámetros desde 2" hasta 10".  
Operable sin herramientas.

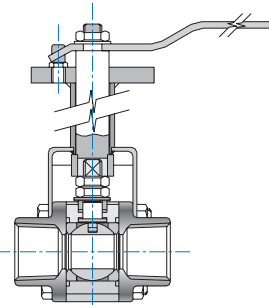


### Cut Valve

All Metal-Metal, Seats  
full bore ball valve  
WE RF, RTJ.  
300 to 1500 ASME Series.  
Diameters from 2" to 6"  
Enhanced recovery.

### Válvula CUT

Asiento Metal-Metal,  
paso total. WE RF, RTJ.  
Series ASME 300 a 1500.  
Diámetros desde 2" hasta 6".  
Recuperación secundaria.

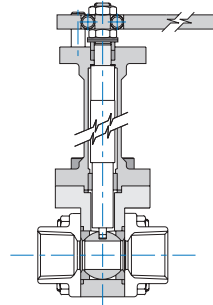


### Extended Stem

For insulated piping  
screwed, socket ends  
Flanged ASME 150 & 300  
Diameters from 1/4" to 10".

### Vástago Prolongado

para Instalaciones con  
Aislación Térmica.  
Extremos Roscados SW- BW  
Bridados ASME 150 - 300.  
Diámetros desde 1/4" hasta 10".

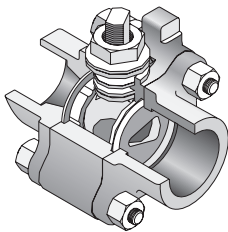


### Cryogenic Service (- 325°F)

Screwed, socket ends.  
Flanged ASME 150 & 300.  
Diameters from 1/2" to 8".

### Criogénica (- 198°C)

Extremos Roscados SW.  
Bridados ASME 150 - 300.  
Diámetros desde 1/2" hasta 8".

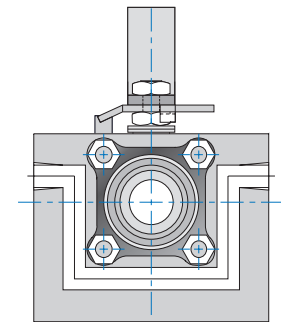


### Metal Seats

w/ round port metal seats  
or characterized "V" port  
metal seats.  
Screwed, socket ends.  
Flanged ASME 150 & 300.  
Diameters from 1/4" to 6".

### Asientos Metálicos y Asientos Metálicos Caracterizados (VPV)

Extremos Roscados, SW- BW.  
Bridados ASME 150 - 300.  
Diámetros desde 1/4" hasta 6".

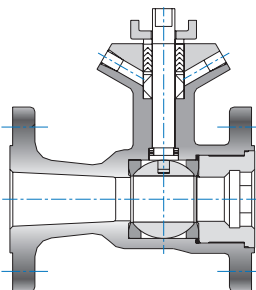


### Jacketed Valves

Screwed, socket ends.  
Flanged ASME 150 & 300.  
Diameters from 1/4" to 6".

### Calefaccionada

Extremos Roscados SW.  
Bridados ASME 150 - 300.  
Diámetros desde 1/4" hasta 6".

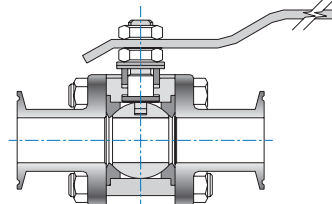


### Fugitive Emission

Special stem protection  
for fugitive emission.  
Flanged ASME 150 & 300.  
Diameters from 1/4" to 12".

### Emisiones Fugitivas

Protección especial de vástago  
para emisiones fugitivas.  
Bridados ASME 150 - 300  
Diámetros desde 1/4" hasta 12".

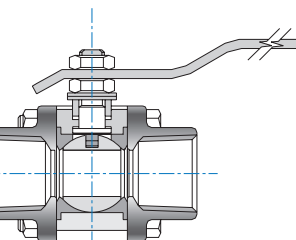


### Sanitary Valves

Screwed, socket  
and clamp ends.  
Diameters from 1/4" to 2".

### Válvulas Sanitarias

Extremos Roscados SW- BW  
Clamp.  
Diámetros desde 1/4" hasta 2".

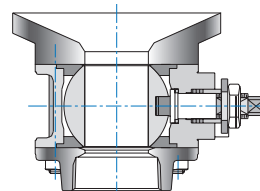


### Cavity Filled

Screwed, socket ends  
Flanged ASME 150 & 300  
Diameters from 1/2" to 8".

### Cavity Filled

Extremos roscados  
SW - BW de 1/4" a 2"  
Bridados ASME 150 - 300  
Diámetros desde 1/2" hasta 8".



### Flush Tank Bottom Valve

Diameters from 1/2" to 12".

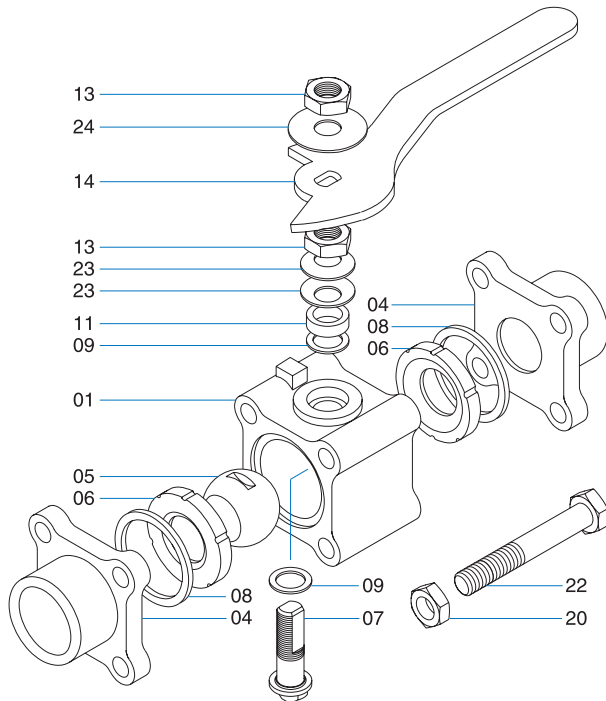
### Fondo de Tanque

Diámetros desde 1/2" hasta 12".

Typical valve parts assembly | *Despiece de los componentes.*

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

Model | Modelo | 59 | 1/4" - 2"

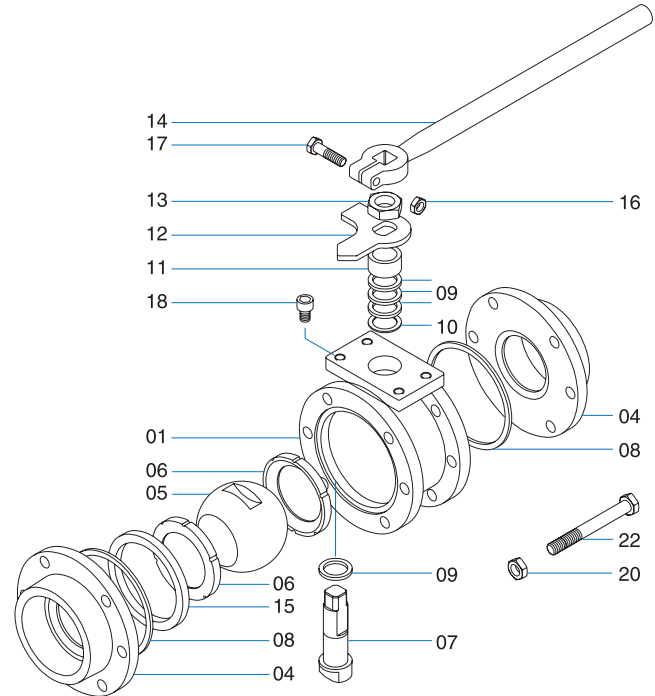


- 01 Valve body
- 04 Pipe ends
- 05 Ball
- 06 Seats
- 07 Stem
- 08 Body seals
- 09 Thrust bearing
- 10 Centering washer
- 11 Stem seal follower
- 12 Stop plate

- 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

Model | Modelo | 45 | 2 1/2" - 6"

Model | Modelo | 59 | 2" - 4"

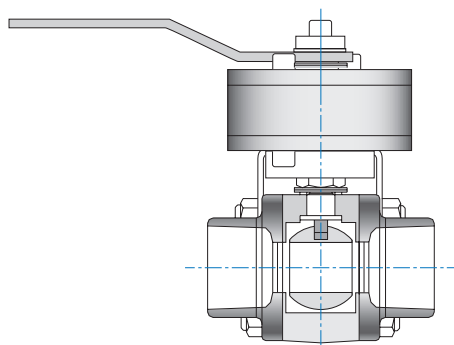


- 01 Cuerpo
- 04 Tapa
- 05 Esfera
- 06 Asiento
- 07 Vástago
- 08 Junta cuerpo
- 09 Arandela
- 10 Arandela inoxidable
- 11 Separador
- 12 Placa stop

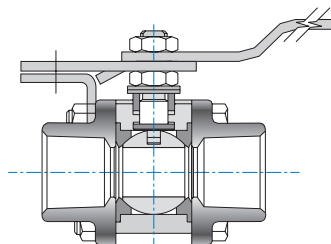
- 13 Tuerca de vástago
- 14 Palanca
- 15 Anillo de suplemento
- 16 Tuerca
- 17 Tornillo
- 18 Tornillo tope
- 20 Tuerca
- 22 Tornillo
- 23 Arandela Bellville
- 24 Placa identificación

Accessories | *Accesorios*

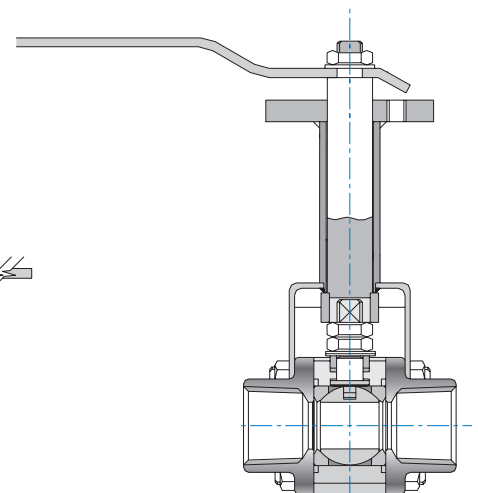
- Safety handle. | *Traba de Seguridad.*
- Locking handle. | *Traba Candado.*
- Spring return handle. | *Palanca de Retorno a Resorte.*
- Stem extentions. | *Vástago Prolongado AG/LQ.*



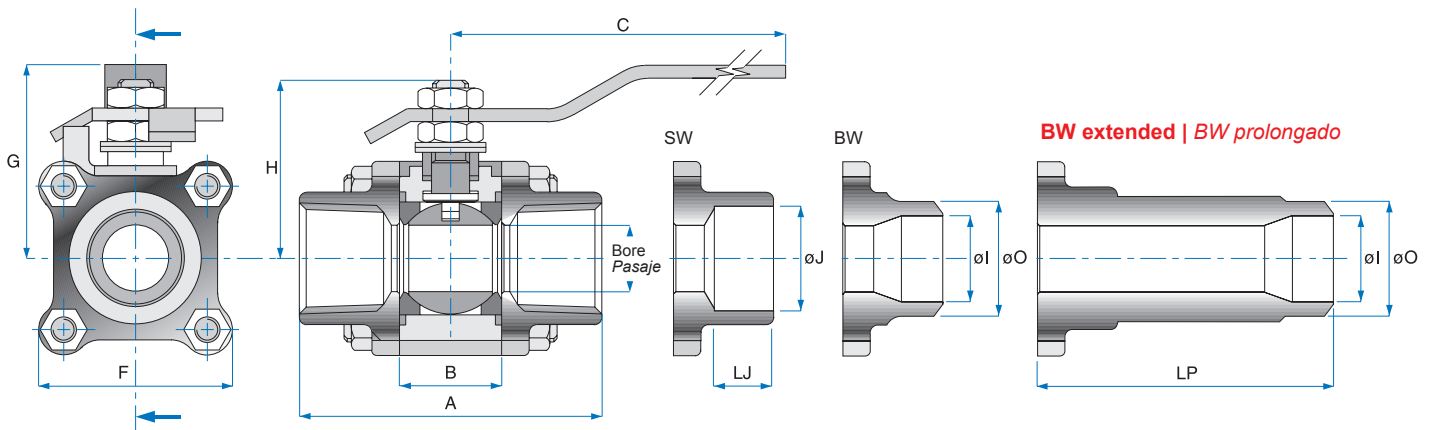
**Spring return handle**  
*Palanca de Retorno a Resorte*



**Locking Handle**  
*Traba candado*



**Stem Extentions**  
*Vástago prolongado LQ*



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	
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	0.52
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	
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	0.71
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	
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	2.08
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	
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	3.90
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	

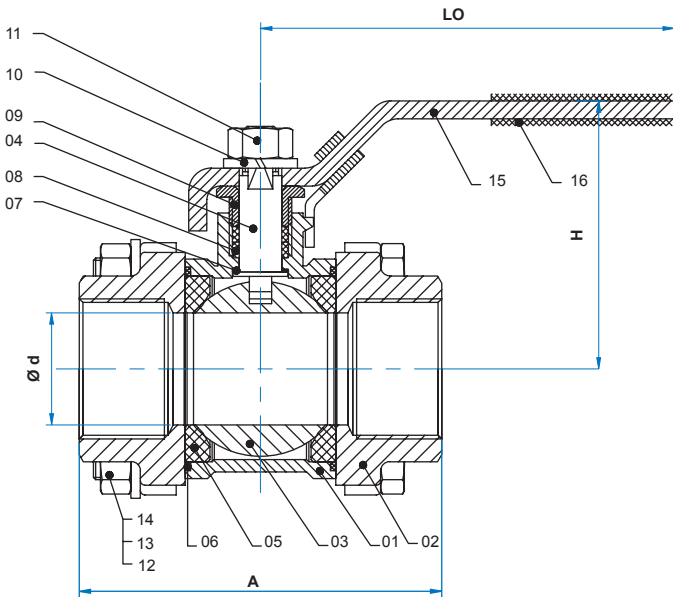
Model | Modelo | 59

Ball valve, three piece design, full bore blowout - proof stem | Válvula Esférica de Pasaje Total, 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	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	
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	0.52
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	
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	1.34
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	
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	3.06
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	
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	8.00

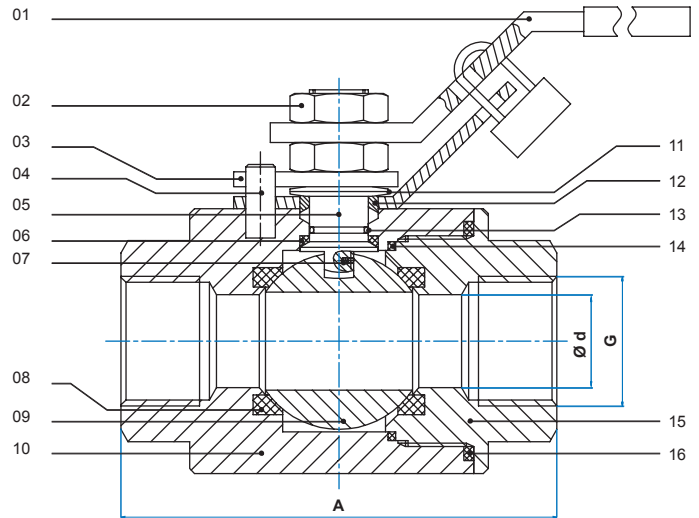


Model | Modelo | 23



- 01 Cuerpo **01 Body**
- 02 Tapas **02 Cap**
- 03 Esfera **03 Ball**
- 04 Vástago **04 Steam**
- 05 Asiento **05 Seat**
- 06 Junta de Asiento **06 Gasket**
- 07 Arandela de empuje **07 Thrust Washer**
- 08 Empaquetadura **08 Packing**
- 09 Tuerca de vástago **09 Gland**
- 10 Arandela grower **10 Spring Washer**
- 11 Tuerca **11 Nut**
- 12 Tornillo **12 Bolt**
- 13 Arandela grower **13 Spring Washer**
- 14 Tuerca **14 Nut**
- 15 Palanca **15 Handle**
- 16 Cobertura plástica **16 Handle Cover**

Model | Modelo | 71 - 72 - 73



- 01 Palanca **01 Handle**
- 02 Tuerca **02 Nut**
- 03 Placa Stop **03 Stop plate**
- 04 Tope **04 Stop**
- 05 Vástago **05 Steam**
- 06 O'ring de tope **06 Trust washer**
- 07 Antiestático **07 Anti-Static**
- 08 Asiento **08 Seat**
- 09 Esfera **09 Ball**
- 10 Cuerpo **10 Body**
- 11 Arandela belleville **11 Belleville Washer**
- 12 Empaquetadura **12 Packing**
- 13 O'ring **13 O'ring**
- 14 Junta **14 Gasket**
- 15 Tapón roscado **15 End Plug**
- 16 Junta **16 Seal**

Model | Modelo | 23 | Stainless Steel | Acero Inoxidable ASTM A351 CF8M.

Ball valve, three piece design, Full bore, 1000 Psi.

Válvula Esférica de Pasaje Total, de 3 Piezas, 1000 Psi.

Size Tamaño	Bore Ø d Pasaje	H	LO	A	kg
1/4"	0.43	1.67	3.99	1.98	0.34
	11	42.5	101.5	50.4	
3/8"	0.47	1.67	3.99	1.98	0.34
	12	42.5	101.5	50.4	
1/2"	0.59	1.95	3.99	2.41	0.46
	15	49.6	101.5	61.4	
3/4"	0.78	2.28	4.88	2.76	0.62
	20	58.1	124	70.2	
1"	0.98	2.41	4.88	3.13	0.96
	25	61.3	124	79.6	
1 1/4"	1.25	3.08	5.98	3.66	1.49
	32	78.3	152	93	
1 1/2"	1.57	3.24	5.98	4.01	2
	40	82.5	152	102	
2"	1.96	3.57	7.48	4.88	3.12
	50	90.9	190	124.2	
2 1/2"	2.55	4.50	9.52	6.14	6.5
	65	114.5	242	156.2	
3"	2.95	4.88	9.52	7.05	10.42
	75	124	242	179.2	
4"	3.93	6.92	12.87	8.59	20.2
	100	176	327	218.4	

Model | Modelo | 71 - 72 - 73 | Carbon Steel | Acero al Carbono A105.

Ball valve, one piece design, Full bore. 2000, 3000 and 5000 Psi.

Válvula Esférica de Pasaje Total, Cuerpo Enterizo. 2000, 3000 y 5000 psi.

Size Tamaño	Bore Ø d Pasaje	M. 71 2000 Psi. M. 72 3000 Psi.		M. 73 5000 Psi.		kg 2000psi	kg 3000psi	kg 5000psi
		G	A	G	A			
1/2"	0.51	0.55	3.34	0.55	3.93	1.05	*	1.57
	13	14	85	14	100			
3/4"	0.74	0.55	3.74	0.55	4.72	1.45	*	2.60
	19	14	95	14	120			
1"	0.94	0.45	4.13	0.45	5.31	2.19	*	3.70
	24	11.5	105	11.5	135			
1 1/4"	1.22	0.45	4.52	0.45	6.29	*	*	*
	31	11.5	115	11.5	160			
1 1/2"	1.45	0.45	5.11	0.45	7.28	4.80	*	10.00
	37	11.5	130	11.5	185			
2"	1.92	0.45	5.90	0.45	8.66	7.00	8.00	18.00
	49	11.5	150	11.5	220			

# Characterized seats for valves

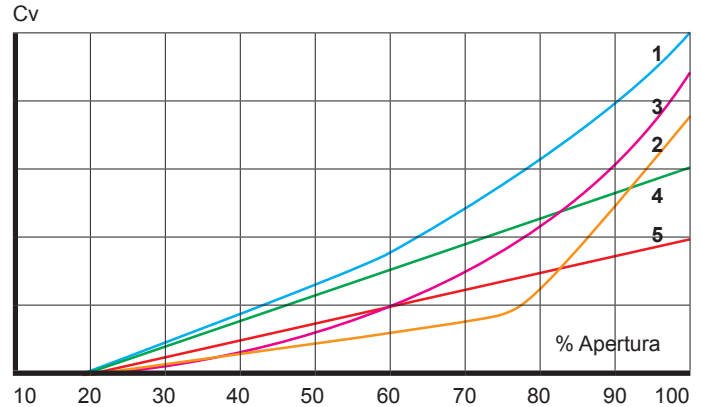
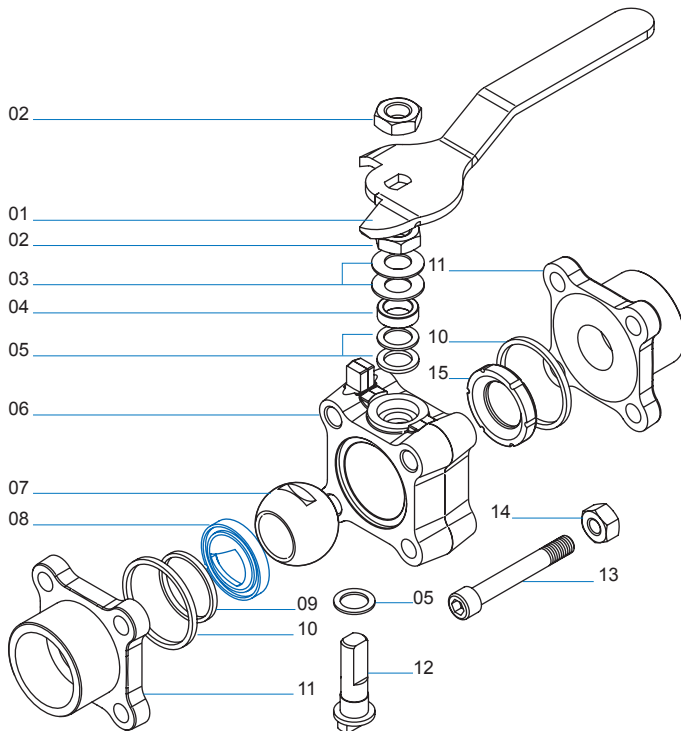
Asientos caracterizados para válvulas



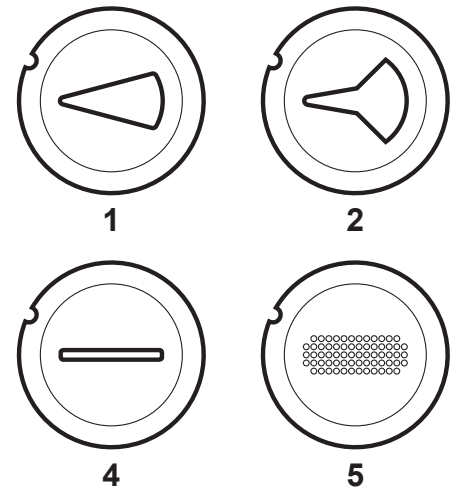
**VALBOL**

Válvulas Worcester de Argentina S.A.

## Modulating Valves with Characterized Metallic Seats / Válvulas Modulantes con Asientos Metálicos Caracterizados



Characterized seats  
Asientos caracterizados



- 01 Handle
- 02 Retaining nut
- 03 Bellville washers
- 04 Stem seal follower
- 05 Thrust bearing
- 06 Valve body
- 07 Ball
- 08 Characterized Metallic Seats

- 09 Seals
- 10 Body seals
- 11 Pipe ends
- 12 Stem
- 13 Body bolts
- 14 Body nuts
- 15 Seats

- 01 Palanca
- 02 Tuerca de vástago
- 03 Arandela Bellville
- 04 Separador
- 05 Arandela
- 06 Cuerpo
- 07 Esfera
- 08 Asiento caracterizado

- 09 Junta
- 10 Junta cuerpo
- 11 Tapas
- 12 Vástago
- 13 Tornillo
- 14 Tuerca
- 15 Asiento

This new generation of valves remove the problems associated with the control valves used up to now.

The anti-cavitation characterized seats offer an excellent solution given by their specific construction as it minimize the possibility that the cavitation occur. When an accurate control is required at low flow rates, the number and sizes of holes can be calculated to provide Cv as low as 0.07 with a wide range of control.

The control capacity of the valve is increased to pressure differentials of 250 Psi in steam and 500 Psi in liquids, with an process temperatures of 430 ° C.

This new technology implies excellent closure, thus exceeding Class VI Standard. A bubble-free closure can be achieved by placing a resilient seat downstream.

High range ability, repeatable in 95% of the way. Low and high control capacity Cv from 0.07 to 380.

Esta nueva generación de válvulas elimina los problemas asociados a las válvulas de control hasta ahora utilizadas.

Los asientos caracterizados anticavitación ofrecen una excelente solución dada su específica construcción ya que minimizan la posibilidad de que la cavitación ocurra. Cuando se requiere realizar un preciso control en bajos caudales la cantidad y tamaños de los orificios puede ser calculada para brindar Cv tan bajos como 0.07 con un amplio rango de control.

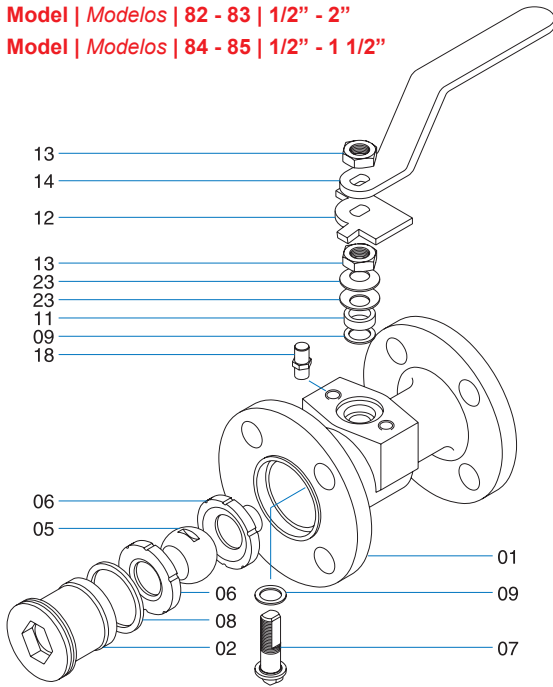
Se incrementa la capacidad de control de la válvula a diferenciales de presión de 250 Psi en vapor y 500 Psi en líquidos, con temperaturas de proceso de 430 ° C.

Esta nueva tecnología implica excelente cierre, excediendo así la clase VI Standard. Se puede lograr un cierre libre de burbujas colocando un asiento resiliente aguas abajo.

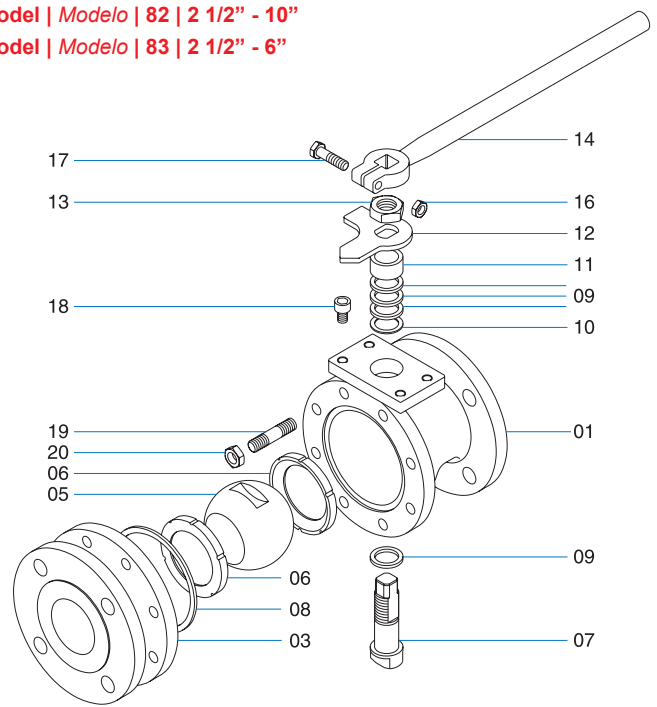
Alta habilidad de rango, repetible en el 95% del recorrido. Baja y alta capacidad de control Cv desde 0.07 hasta 380.

Typical valve parts assembly | *Despiece de los componentes.*

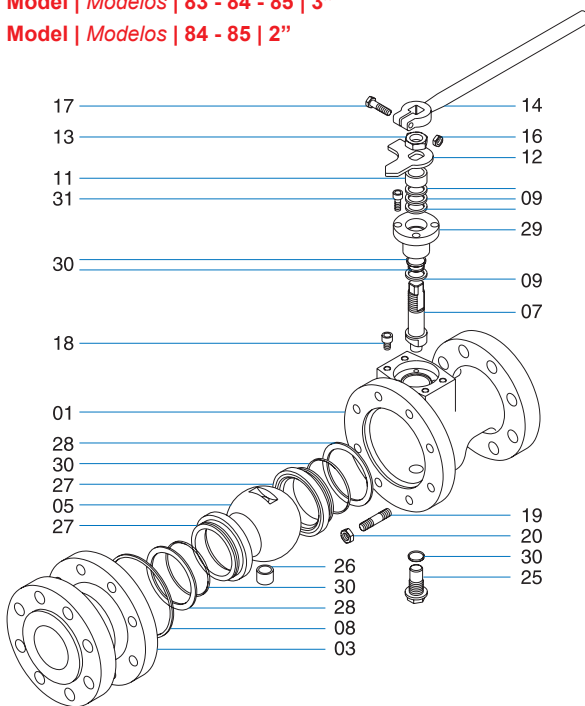
Model | Modelos | 82 - 83 | 1/2" - 2"  
 Model | Modelos | 84 - 85 | 1/2" - 1 1/2"



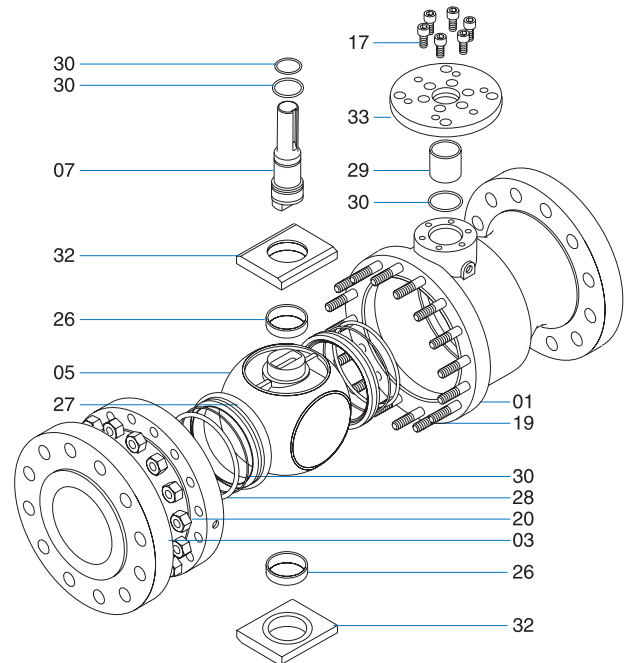
Model | Modelo | 82 | 2 1/2" - 10"  
 Model | Modelo | 83 | 2 1/2" - 6"



Model | Modelos | 83 - 84 - 85 | 3"  
 Model | Modelos | 84 - 85 | 2"



Model | Modelo | 83 | 8" - 12"  
 Model | Modelo | 85 | 4" - 6"



Model | Modelo | 84 | 4" - 12"  
 Model | Modelo | 86 | 2" - 6"

- |                     |                            |
|---------------------|----------------------------|
| 01 Body             | 17 Hex bolt                |
| 03 Body tail piece  | 18 Stop screw              |
| 05 Ball             | 23 Bellville washers       |
| 06 Seat             | 25 Inferior trunnion guide |
| 07 Stem             | 26 Stem seal follower      |
| 08 Body seal        | 27 Seat insert             |
| 09 Thrust bearing   | 28 Spring plate            |
| 10 Centering washer | 29 Stem seal follower      |
| 11 Follower         | 30 O'Ring                  |
| 12 Stop plate       | 31 Bolt                    |
| 13 Retainingnuts    | 32 Trunnion guide          |
| 14 Wrench / Handle  | 33 Upper flange            |
| 16 Hex nut          |                            |

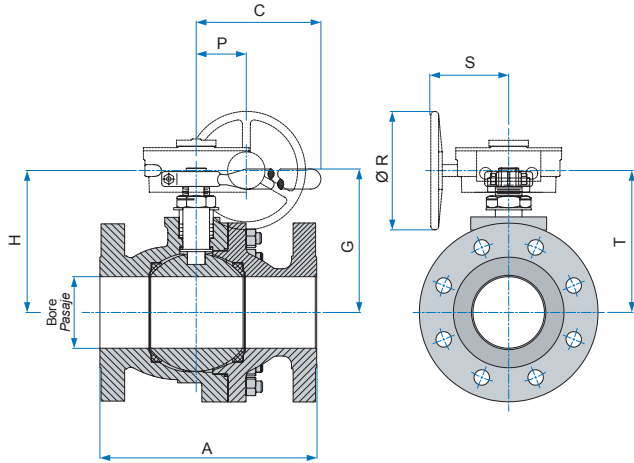
- |                        |                       |
|------------------------|-----------------------|
| 01 Cuerpo              | 17 Tornillo           |
| 03 Cuerpo chico        | 18 Tornillo tope      |
| 05 Esfera              | 23 Arandela Bellville |
| 06 Asiento             | 25 Eje inferior       |
| 07 Vástago             | 26 Buje               |
| 08 Junta cuerpo        | 27 Porta asiento      |
| 09 Arandela            | 28 Resorte platillo   |
| 10 Arandela inoxidable | 29 Buje vástago       |
| 11 Separador           | 30 O'Ring             |
| 12 Placa stop          | 31 Tornillo buje      |
| 13 Tuerca de vástago   | 32 Soporte guía       |
| 14 Palanca             | 33 Brida superior     |
| 16 Tuerca              |                       |



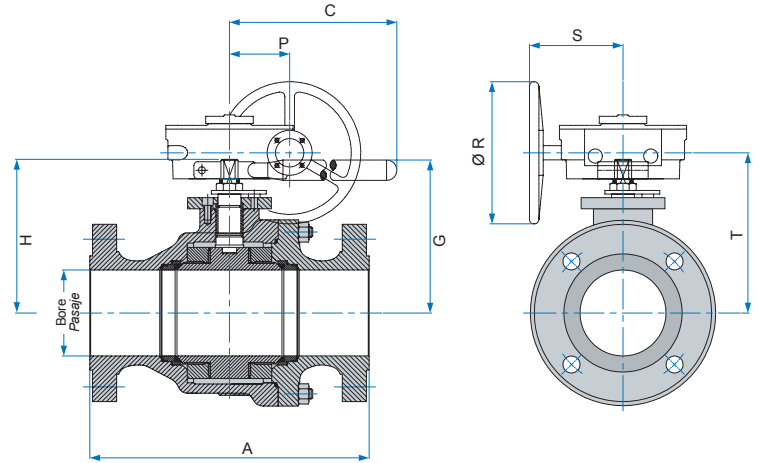


Ball valve, full bore, two piece design, blowout - proof stem | Válvula Esférica Bridada de Pasaje Total.

Model | Modelo | 82 | 83 | 84 | 85 | 86



Model | Modelo | 82 | 83 | 84 | 85 | 86  
Trunnion Ball / Esfera Guiada



Note / Nota:	Model / Modelo				
Flanged / Bridado	82	83	84	85	86
Serie / ASME	150	300	600	900	1500

Size Tamaño	Bore Pasaje	Mod.82 A	Mod.83 A	Mod.84 A	Mod.85 A	Mod.86 A	C	G	H	P	ØR	S	T	Mod.82 kg	Mod.83 kg	Mod.84 kg	Mod.85 kg	Mod.86 kg
1/2"	0.56	4.25	5.50	6.50	-	-	5.12	3.35	1.60	-	-	-	-	1.80	2.50	2.70	-	-
DN 15	14.3	107.9	139.7	165.1	-	-	130.0	85.0	40.5	-	-	-	-	1.80	2.50	2.70	-	-
3/4"	0.81	4.62	6.00	-	-	-	5.79	4.37	2.19	-	-	-	-	2.50	4.00	5.00	-	-
DN 20	20.6	117.4	152.4	-	-	-	147.0	111.1	55.6	-	-	-	-	2.50	4.00	5.00	-	-
1"	1.00	5.00	6.50	8.50	-	-	5.00	3.69	2.38	-	-	-	-	3.50	5.00	6.00	-	-
DN 25	25.4	127.0	165.1	215.9	-	-	127.8	93.7	60.5	-	-	-	-	3.50	5.00	6.00	-	-
1 1/4"	1.25	5.50	7.00	-	-	-	5.75	4.90	3.34	-	-	-	-	6.50	8.00	-	-	-
DN 32	31.7	139.7	177.8	-	-	-	146.0	124.2	84.8	-	-	-	-	6.50	8.00	-	-	-
1 1/2"	1.50	6.50	7.50	9.50	12.00	-	5.75	4.59	3.06	-	-	-	-	6.50	9.00	11.00	16.00	-
DN 40	38.1	165.1	190.5	241.3	304.8	-	146.0	116.6	77.2	-	-	-	-	6.50	9.00	11.00	16.00	-
2"	2.00	7.00	8.50	*11.50	*14.50	*14.50	10.24	5.05	4.57	-	-	-	-	9.18	17.00	19.70	32.00	60
DN 50	50.8	177.8	215.9	*292.1	*368.3	*368.3	260.0	128.2	116.1	-	-	-	-	9.18	17.00	19.70	32.00	60
2 1/2"	2.50	7.50	9.50	*13.00	*16.50	-	18.31	5.91	5.71	-	-	-	-	18.50	25.00	40.00	-	-
DN 65	63.5	190.5	241.3	*330.2	*419.1	-	465.0	150.1	145.1	-	-	-	-	18.50	25.00	40.00	-	-
3"	3.00	8.00	11.12	*14.00	*15.00	*19.56	18.31	7.13	6.93	-	-	-	-	24.00	33.00	45.00	59.00	109
DN 80	76.2	203.2	282.6	*355.6	*381.0	*469.9	465.0	181.1	176.1	-	-	-	-	24.00	33.00	45.00	59.00	109
4"	4.00	9.00	**12.00	*17.00	*18.00	*21.50	18.31	7.13	6.93	3.35	17.71	9.45	8.46	34.50	55.00	86.00	101.00	170
DN 100	101.2	228.6	**304.8	*431.8	*457.2	*546.1	465.0	181.1	176.1	85.1	450.0	240.0	215.0	34.50	55.00	86.00	101.00	170
6"	6.00	**15.50	**15.87	*22.00	*24.00	*27.75	21.30	10.3	9.99	3.35	17.71	9.45	10.65	80.00	101.00	211.00	-	338.5
DN 150	152.4	**393.7	**403.2	*558.8	*609.6	*704.9	541.0	261.8	253.8	85.1	450.0	240.0	270.6	80.00	101.00	211.00	-	338.5
8"	8.00	**18.00	*16.50	*26.00	*29.00	-	-	-	16.54	4.92	23.62	12.28	16.54	159.00	210.00	329.00	-	-
DN 200	203.2	**457.2	*419.1	*660.4	*136.3	-	-	-	420.0	1250	600.0	312.0	420.0	159.00	210.00	329.00	-	-
10"	10.00	**21.00	*22.37	*31.00	-	-	-	-	17.72	7.87	35.43	16.77	17.72	-	-	610.00	-	-
DN 250	254.0	**533.4	*568.3	*787.4	-	-	-	-	450.0	200.0	900.0	426.0	450.0	-	-	610.00	-	-
12"	12.0	**24.00	*25.50	*33.00	-	-	-	-	18.23	7.87	35.43	16.77	18.23	-	-	803.00	-	-
DN 300	304.8	**609.6	*647.7	*838.2	-	-	-	-	463.0	200.0	900.0	426.0	463.0	-	-	803.00	-	-

Notes:

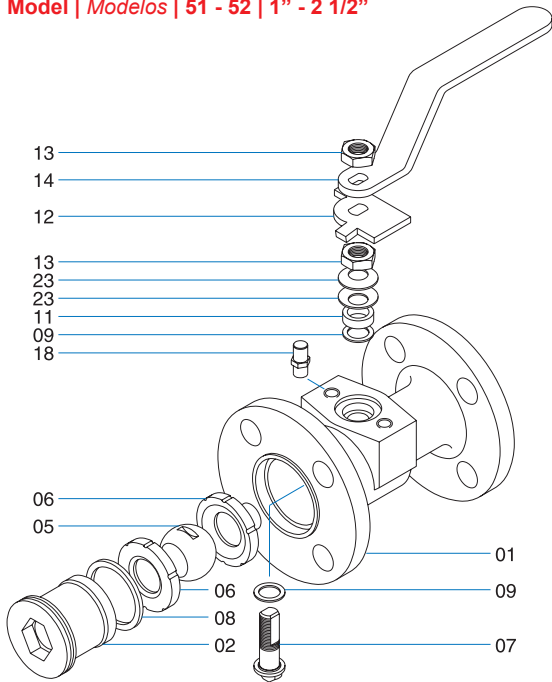
- 1) Series 600/1500 2" and above trunnion ball. Series 300 10" and above trunnion ball.
  - 2) Above 6" series 150 and 300 - 4" series 600/1500. Gear box recommended.
  - 3) Series 150- 300 2" to 8" trunnion ball optional.
  - 4) Model 84 /86 BW ends optional.
  - 5) 1/2 - 2" models 82/83 / 84 / 85/86 one piece design.
- \* Trunnion ball.  
 \*\* Floating or trunnion ball.  
 The dimensions where it is not indicated \*\*/\*\*\*, are floating ball valve.

Notas:

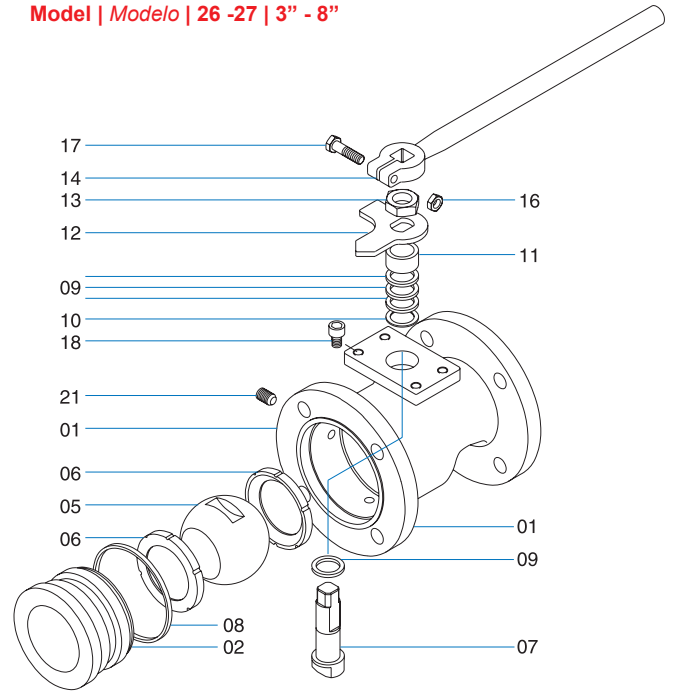
- 1) Serie 600 /1500 2" y mayores Esfera Guiada. Serie 300 10" y mayores Esfera Guiada.
  - 2) Mayores a 6" series 150 / 300 y 4" series 600 /1500, recomendamos usar caja de engranajes.
  - 3) Serie 150 - 300 2" a 8" Guiada Opcional.
  - 4) Modelos 84 / 86 extremos biselados opcional.
  - 5) 1/2" - 2" modelos 82/ 83/ 84/ 85/86 cuerpo enterizo.
- \* Esfera guiada.  
 \*\* Esfera flotante o guiada.  
 Las dimensiones donde no se indica \*\*/\*\*\* son válvulas con esfera flotante.

Typical valve parts assembly | *Despiece de los componentes.*

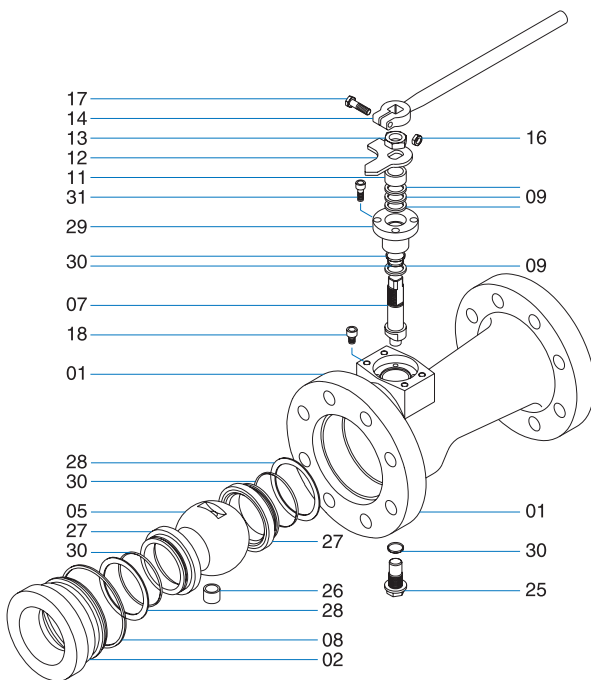
Model | Modelos | 51 - 52 | 1" - 2 1/2"



Model | Modelo | 26 - 27 | 3" - 8"



Model | Modelo | 53 | 2" - 4"

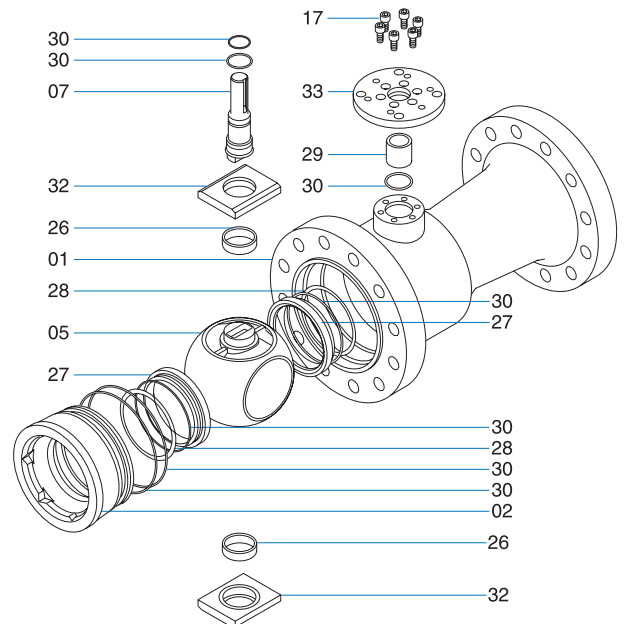


Model | Modelo | 26 - 27 | 6" - 8"

Model | Modelo | 52 | 10" - 12"

Model | Modelo | 53 | 6" to 12"

Note: 10" and 12" split body. / Nota: 10" y 12" cuerpo partido.



- |                     |                            |
|---------------------|----------------------------|
| 01 Body             | 17 Hex bolt                |
| 02 End plug         | 18 Stop screw              |
| 05 Ball             | 21 Prisoner                |
| 06 Seat             | 23 Bellville washers       |
| 07 Stem             | 25 Inferior trunnion guide |
| 08 Body seal        | 26 Stem seal follower      |
| 09 Thrust bearing   | 27 Seat insert             |
| 10 Centering washer | 28 Spring plate            |
| 11 Follower         | 29 Stem seal follower      |
| 12 Stop plate       | 30 O'Ring                  |
| 13 Retaining nuts   | 31 Bolt                    |
| 14 Wrench / Handle  | 32 Trunnion guide          |
| 16 Hex nut          | 33 Upper flange            |

- |                        |                       |
|------------------------|-----------------------|
| 01 Cuerpo              | 17 Tornillo           |
| 02 Tapón               | 18 Tornillo tope      |
| 05 Esfera              | 21 Prisionero         |
| 06 Asiento             | 23 Arandela Bellville |
| 07 Vástago             | 25 Eje inferior       |
| 08 Junta cuerpo        | 26 Buje               |
| 09 Arandela            | 27 Porta asiento      |
| 10 Arandela inoxidable | 28 Resorte platillo   |
| 11 Separador           | 29 Buje vástago       |
| 12 Placa stop          | 30 O'Ring             |
| 13 Tuerca de vástago   | 31 Tornillo buje      |
| 14 Palanca             | 32 Soporte guía       |
| 16 Tuerca              | 33 Brida superior     |

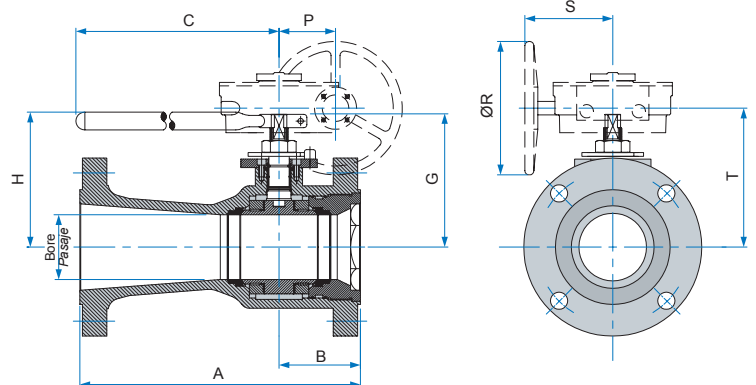
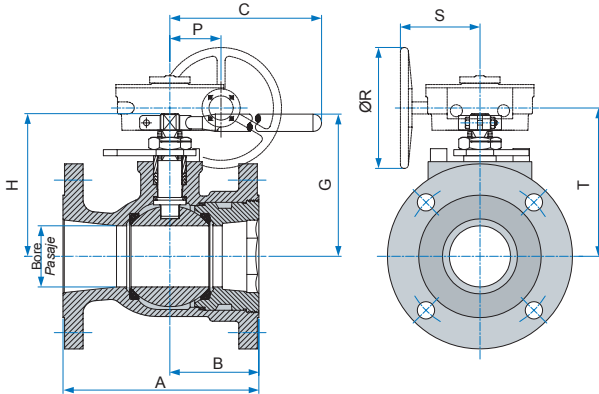


Ball valve, standard bore, one piece design, blowout - proof stem *Válvula Esférica Bridada de Pasaje Nominal.*

Model | Modelo | 51 | 52 | 53 | 26 | 27

Model | Modelo | 51 | 52 | 53 | 26 | 27

Trunnion Ball / Esfera Guiada



Note / Nota:	Model / Modelo		
Flanged / Bridado	51	52	53
Serie / ASME	150	300	600

Note / Nota:	Model / Modelo	
Flanged / Bridado	26	27
Serie / ASME	150	300

Size Tamaño	Bore Pasaje	Modelo 51		Modelo 52		Modelo 53		C	G	H	P	Ø R	S	T	Mod.51 kg	Mod.52 kg	Mod.53 kg
		A	B	A	B	A	B										
1"	0.75	5.00	2.25	6.50	2.25	-	-	6.50	2.19	2.20	-	-	-	-	3.40	4.50	6.00
DN 25	19.0	127.0	57.1	165.1	57.1	-	-	165.1	55.6	55.8	-	-	-	-	3.40	4.50	6.00
1 1/4"	1.00	5.50	2.43	7.00	2.43	-	-	6.50	2.38	2.38	-	-	-	-	4.20	6.10	-
DN 32	25.4	139.7	61.8	177.8	61.8	-	-	165.1	60.4	60.5	-	-	-	-	4.20	6.10	-
1 1/2"	1.19	6.50	2.47	7.50	2.47	-	-	7.50	2.88	2.88	-	-	-	-	5.50	8.00	11.00
DN 40	30.1	165.1	62.7	190.5	62.7	-	-	190.5	73.0	73.2	-	-	-	-	5.50	8.00	11.00
2"	1.44	7.00	2.69	8.50	2.69	*11.50	*2.67	7.50	3.06	3.06	-	-	-	-	8.50	10.00	15.00
DN 50	36.5	177.8	68.2	215.9	68.2	*292.1	*67.8	190.5	77.8	77.7	-	-	-	-	8.50	10.00	15.00
2 1/2"	2.00	7.50	2.83	9.50	2.83	-	-	10.24	5.13	4.60	-	-	-	-	13.00	16.50	-
DN 65	50.8	190.5	72.0	241.3	72.0	-	-	260.0	128.2	116.8	-	-	-	-	13.00	16.50	-
3"	2.00	-	-	-	-	*14.00	*3.96	10.24	5.05	4.57	3.35	17.71	9.44	7.20	-	-	-
DN 80	50.8	-	-	-	-	*355.6	*100.6	260.0	128.2	116.1	85.1	450.0	240.0	183.1	14.00	21.00	34.00
4"	3.00	-	-	-	-	*17.00	*4.50	18.31	6.32	6.13	3.35	17.71	9.44	7.85	-	-	-
DN 100	76.2	-	-	-	-	*431.8	*114.2	465.0	160.6	155.6	85.1	450.0	240.0	199.4	28.00	39.00	58.00
6"	4.00	-	-	-	-	*22.00	*11.00	18.31	7.13	6.74	3.35	17.71	9.44	9.55	-	-	-
DN 150	101.6	-	-	-	-	*558.8	*279.4	465.0	181.1	171.1	85.1	450.0	240.0	242.8	45.00	66.00	169.00
8"	6.00	-	-	-	-	*26.00	*13.00	21.3	10.2	10.00	3.35	17.71	9.44	10.65	-	-	-
DN 200	152.4	-	-	-	-	*660.4	*330.2	541.0	259.0	254.0	85.1	450.0	240.0	270.6	74.00	113.00	204.00
10"	7.37	13.00	7.13	*18.00	*7.13	*31.00	*15.50	-	-	13.78	4.92	23.62	12.28	13.78	-	-	-
DN 250	187.3	330.2	171.0	*457.2	*181.0	*787.4	*393.7	-	-	350.0	125.0	600.0	312.0	350.0	108.00	355	412.00
12"	8.00	14.00	7.00	*25.50	*12.75	*33.00	*16.50	-	-	15.0	4.92	23.62	12.28	15.00	-	-	-
DN 300	203.2	355.6	177.8	*647.7	*323.9	*838.2	*419.0	-	-	380.0	125.0	600.0	312.0	380.0	151.00	415	604.00
14"	10.50	27.00	13.50	*30.00	*15.00	*35.00	*17.50	-	-	18.27	4.92	23.62	12.28	18.27	-	-	-
DN 350	267.0	685.8	342.9	*762.0	*381.0	*889.0	*444.5	-	-	464.0	125.0	600.0	312.0	464.0	632.00	692	870.00
16"	12.00	*30.00	*15.00	*33.00	*16.50	-	-	-	-	19.91	4.92	23.62	12.28	17.91	-	-	-
DN 400	304.8	*762.0	*381.0	*838.2	*419.1	-	-	-	-	455.0	125.0	600.0	312.0	455.0	576.00	741.00	1310.00

Size Tamaño	Bore Pasaje	Modelo 26		Modelo 27		C	G	H	P	Ø R	S	T	Mod.26 kg	Mod.27 kg	
		A	B	A	B										
3"	Flotante	50.8	203.2	82.88	282.6	82.88	260.0	128.2	116.1	65.0	302.0	328.0	150.0	18.0	22.1
4"	Flotante	76.2	228.6	101.6	304.8	101.6	465.0	160.6	155.6	65.0	302.0	328.0	180.0	28.0	37.0
6"	Flotante	101.6	266.7	108.1	403.2	108.1	465.0	181.7	171.1	65.0	302.0	328.0	200.0	44.0	69.0
DN 150	Guiada	101.6	266.7	133.0	403.2	134.0	541.0	240.0	250.0	79.0	405.0	334.0	270.0	50	72
8"	Flotante	152.4	292.1	144.6	419.1	144.6	541.0	259.0	254.0	79.0	405.0	334.0	290.0	82.0	105.0
DN 200	Guiada	152.4	292.1	144.6	419.1	146.0	541.0	253.0	263.0	79.0	405.0	334.0	290.0	92	125

Notes:

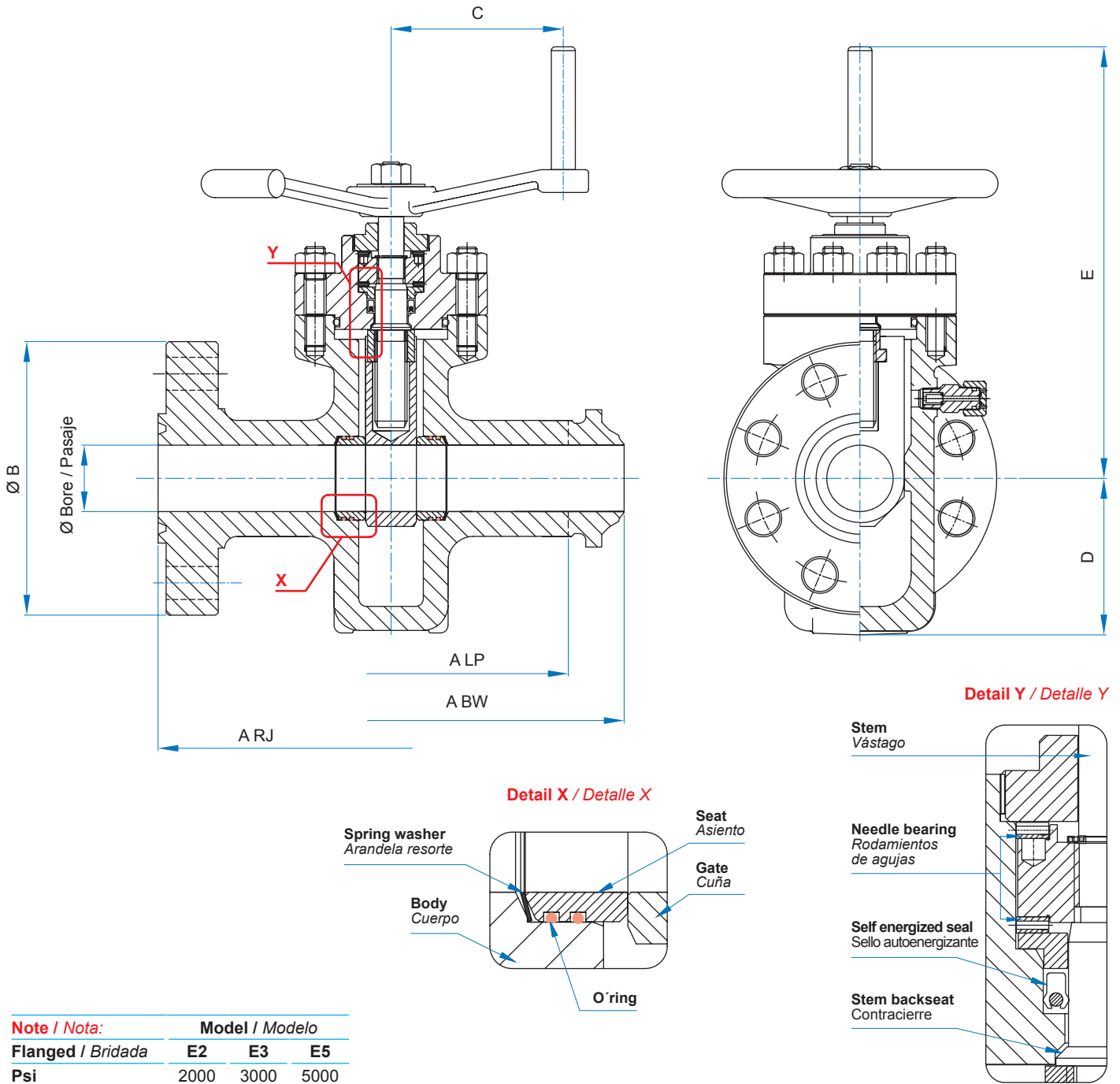
- Series 600 2" and above trunnion ball. Series 300 10" and above trunnion ball.
  - Above 8" series 150 - 6" serie 300 and 4" series 600, gear box recommended.
    - \* Trunnion ball.
    - \*\* Floating or trunnion ball.
- The dimensions where it is not indicated \*\*/\*\*, are floating ball valve.

Notas:

- 1) Serie 600 2" y mayores Esfera Guiada. Serie 300 10" y mayores Esfera Guiada.
  - 2) Mayores a 8" serie 150, 6" serie 300 y 4" serie 600, recomendamos usar caja de engranajes.
    - \* Esfera guiada.
    - \*\* Esfera flotante o guiada.
- Las dimensiones donde no se indica \*\*/\*\* son válvulas con esfera flotante.

Gate valve API 6A, Flanged, Screwed and socket-weld ends. Working pressure 2000 - 3000 y 5000 psi.

Válvula esclusa API 6A, extremos bridados, roscados y para soldar. Presión de trabajo 2000 - 3000 y 5000 psi.



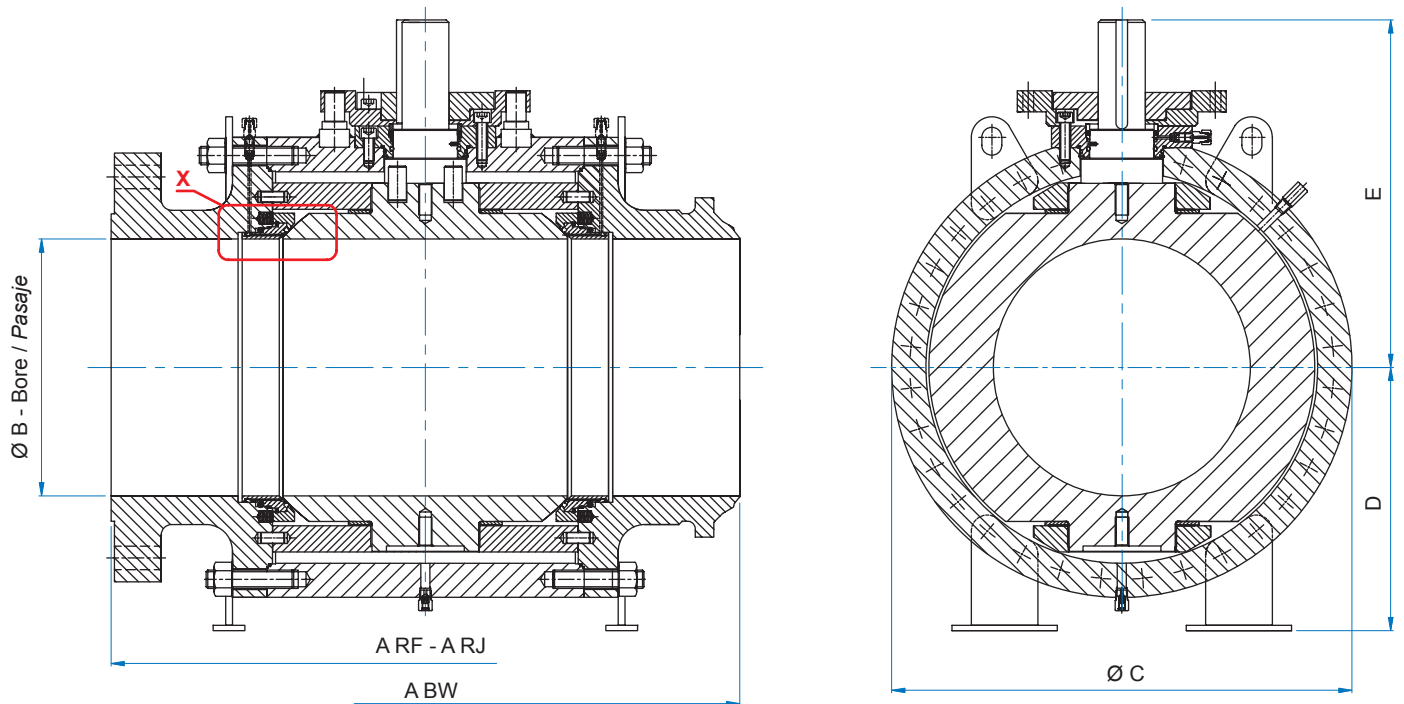
Note / Nota:	Model / Modelo		
Flanged / Bridada	E2	E3	E5
Psi	2000	3000	5000

Size Tamaño	E2		E3		E5		E2 - E3 - E5				
	A RJ-BW	B	A RJ-BW	B	A RJ-BW	B	A LP	C	D	E	Pasaje
2 1/16" DN 52	11.62 295	6.5 165	14.62 371	8.5 215	14.62 371	8.5 215	9.62 245	5.4 136	4.7 120	13.5 345	2.06 52.4
2 9/16" DN 65	13.12 333	7.5 190	16.62 422	9.62 245	16.62 422	9.62 245	10.25 260	8 203	5.9 150	15 380	2.56 65.1
3 1/8" DN 79.5	14.12 359	8.25 210	17.12 435	9.5 240	18.62 473	10.5 265	11.38 289	8 203	7.5 190	17.3 440	3.12 79.4
4 1/16" DN 103	17.12 435	10.75 275	20.12 511	11.5 290	21.62 549	12.25 310	13.4 340	10 254	9 230	20.5 520	4.06 103.2

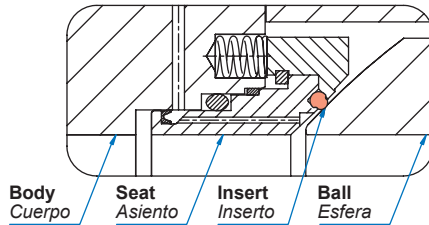


Ball valve, full bore, trunnion, API 6D three-piece design, forged body.

Válvula esférica bridada de pasaje total, guiada API 6D, cuerpo forjado, diseño tres piezas.

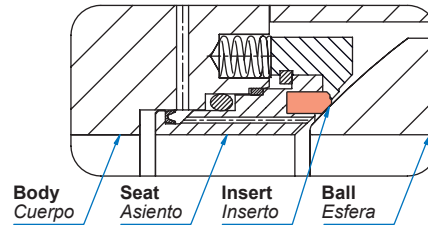


Detail X: O'ring / Detalle X: O'ring



Body / Cuerpo, Seat / Asiento, Insert / Inserto, Ball / Esfera

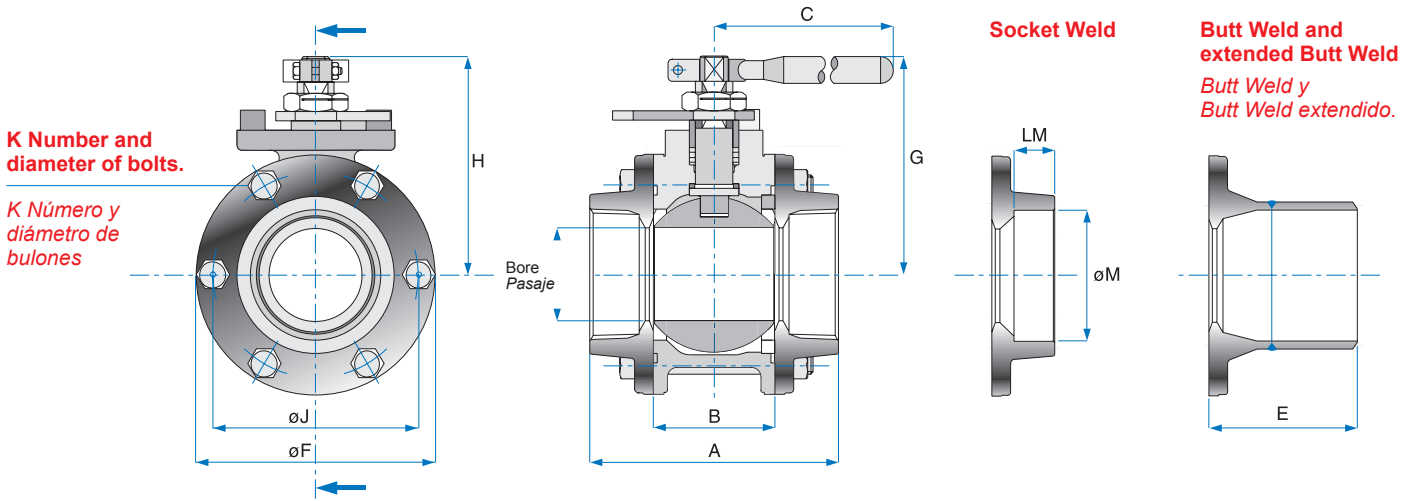
Detail X: Devlon / Detalle X: Devlon



Body / Cuerpo, Seat / Asiento, Insert / Inserto, Ball / Esfera

Note / Nota:	Model / Modelo			
Flanged / Bridada	82J	83J	84J	85J
Serie / ASME	150	300	600	900

Size / Tamaño	82J		83J		84J			85J			82J - 83J - 84J		85J	82J - 83J - 84J - 85J		
	A RF	A BW	A RF	A BW	A RF	A BW	A RJ	A RF	A BW	A RJ	B	B	C	D	E	
12" / DN 300	24 / 610	25 / 635	25.5 / 648	25 / 635	33 / 838	33 / 838	33.1 / 841	38 / 965	38 / 965	38.1 / 968	11.9 / 303	11.9 / 303	23.3 / 590	16.3 / 415	18.5 / 470	
14" / DN 350	27 / 686	30 / 762	30 / 762	30 / 762	35 / 889	35 / 889	35.1 / 892	40.5 / 1029	40.5 / 1029	40.9 / 1038	13.1 / 334	12.7 / 322	25.6 / 650	17.5 / 445	20.5 / 520	
16" / DN 400	30 / 762	33 / 838	33 / 838	33 / 838	39 / 991	39 / 991	39.1 / 994	44.5 / 1130	44.5 / 1130	44.9 / 1140	15.1 / 385	14.7 / 373	29.1 / 740	19.3 / 490	22.8 / 580	
18" / DN 450	34 / 864	36 / 914	36 / 914	36 / 914	43 / 1092	43 / 1092	43.1 / 1095	48 / 1219	48 / 1219	48.5 / 1232	17.1 / 436	16.7 / 423	32.3 / 820	20.7 / 530	25.2 / 640	
20" / DN 500	36 / 914	39 / 991	39 / 991	39 / 991	47 / 1194	47 / 1194	47.2 / 1200	52 / 1321	52 / 1321	52.5 / 1334	19.1 / 487	18.5 / 471	35.4 / 900	22.4 / 570	28.7 / 730	
24" / DN 600	42 / 1067	45 / 1143	5 / 1143	45 / 1143	55 / 1397	55 / 1397	55.4 / 1407	61 / 1549	61 / 1549	61.7 / 1568	23.2 / 590	22.4 / 570	41.7 / 1060	25.6 / 650	31.5 / 800	
30" / DN 750	51 / 1295	55 / 1397	55 / 1397	55 / 1397	65 / 1651	65 / 1651	65.5 / 1664	74 / 1880	74 / 1880	74.9 / 1902	28.9 / 735	28.0 / 712	50 / 1270	29 / 737	37 / 940	
36" / DN 900	60 / 1524	68 / 1727	68 / 1727	68 / 1727	82 / 2083	82 / 2083	82.6 / 2099	90 / 2286	90 / 2286	91.1 / 2315	34.4 / 874	33.7 / 855	60 / 1524	35 / 889	43 / 1092	



Model | Modelo | 45

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	E	Ø F	G	H	Ø J	K	Ø M	LM	kg
2 1/2"	2.00	5.86	2.86	10.24	5.13	5.82	5.13	4.60	4.90	6 X 7/16"	2.90	1.18	6.45
DN 65	50.8	148.7	72.7	260.0	130.3	148.0	128.2	116.8	125.0	UNF	73.8	30.0	
3"	2.50	6.67	3.28	18.31	5.20	6.44	5.90	5.70	5.50	6 X 1/2"	3.53	1.3	13.60
DN 80	63.5	169.3	83.3	465.0	132.2	163.5	150.0	144.8	139.7	UNF	89.8	33.0	
4"	3.25	8.42	4.28	18.31	5.39	8.12	6.52	6.32	6.88	8 X 9/16"	4.54	1.57	22.80
DN 100	82.5	213.8	108.8	465.0	136.9	206.4	165.5	160.5	174.6	UNF	115.4	39.8	
6"	4.38	11.74	5.75	21.30	6.13	11.13	9.22	8.90	9.38	8 X 3/4"	6.65	1.97	36.40
DN 150	111.1	298.1	146.1	541.0	155.3	282.6	234.2	226.2	238.1	UNF	169.0	50.0	

Model | Modelo | 59

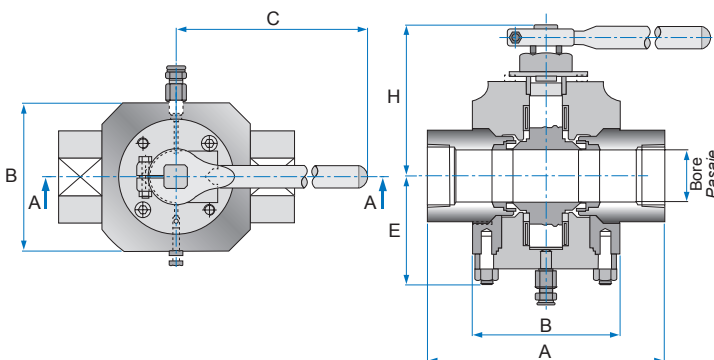
Ball valve, three piece design, full bore, blowout - proof stem | Válvula Esférica de Pasaje Total, de 3 Piezas con Vástago Inexpulsable.

Size   Tamaño	Bore   Pasaje	A	B	C	E	Ø F	G	H	Ø J	K	Ø M	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	

Model | Modelo | 92

High pressure, fire safe, and antistatic ball valves full bore, integral ball and stem. 3000 PSI trunnion mount w/ ball bearings screwed socked ends.

Válvula Esférica de Alta Presión (HP) a Prueba de Fuego (FS) Antiestática. Esfera y Vástago Integral - Guiada con Rodamientos. Pasaje Total - Extremos Roscados (NPT, BSPT, BSP - SW y BW prolongado). Presión de trabajo 3000 PSI.



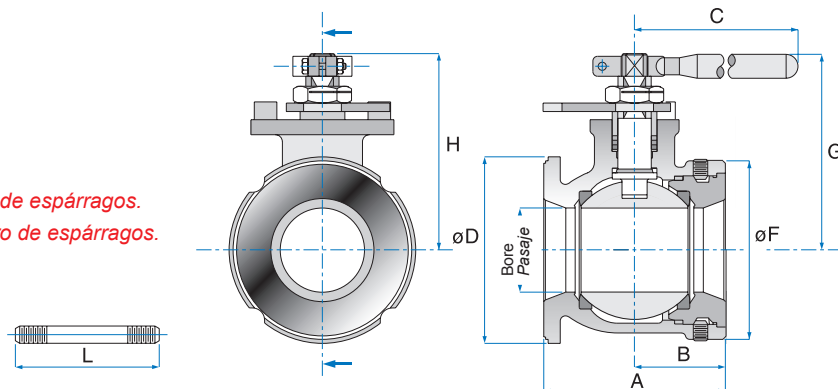
Size   Tamaño	Bore   Pasaje	A	B	C	E	H	kg
1 1/2"	1.50	8.00	4.84	18.30	3.62	5.55	22.00
DN 40	38.1	203.0	123.0	465.0	92.0	141.0	
2"	2.00	8.18	5.51	18.30	5.20	6.181	34.00
DN 50	50.8	208.0	140.0	465.0	132.0	157	
2 1/2"	2.50	10.43	7.08	21.30	5.78	7.25	58.00
DN 65	63.5	265	180.0	541.0	147	184	
3"	3.00	11.42	8.03	21.30	6.88	8.07	92.00
DN 80	76.2	290	204.0	541.0	175.0	205	
4"	4.00	14.05	10.11	27.55	8.07	10.15	180.00
DN 100	101.6	357.0	257.0	541.0	205.0	258.0	



Ball valve, flangeless short pattern design. Wafer for # 150 & # 300 flanges standard bore.

Válvula Esférica Modelo Corto para colocar entre Bridas # 150 y # 300.

J= Bolt Diameter | Diámetro de espárragos.  
K= Number of bolts | Número de espárragos.



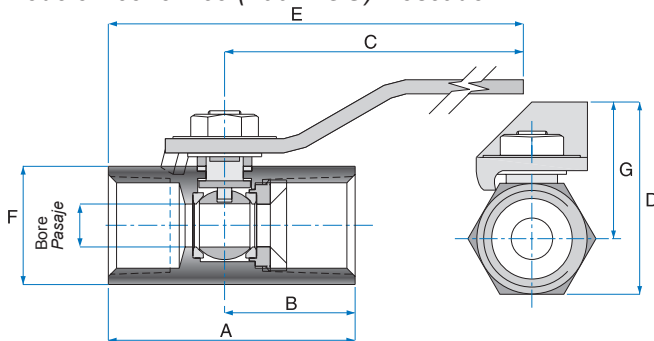
Size   Tamaño	Bore   Pasaje	A	B	C	ØD	ØF	G	H	# 150 J	# 150 K	# 150 L	# 300 J	# 300 K	# 300 L	kg
3"	2.50	4.50	2.25	18.31	5.88	5.31	5.90	5.70	0.62	4.00	8.12	0.75	8.00	8.75	8.00
DN 80	63.5	114.3	57.2	465.0	149.4	134.9	150.0	144.8	15.8		206.3	19.1	8.00	222.3	8.00
4"	3.25	5.81	2.90	18.31	7.50	6.81	6.52	6.32	0.62	8.00	9.44	0.75	8.00	10.31	15.50
DN 100	82.6	147.6	73.7	465.0	190.5	173.0	165.5	160.5	15.8		239.8	19.1	8.00	261.9	15.50
6"	4.38	7.38	3.69	21.30	9.88	8.69	9.22	8.90	0.75	8.00	11.38	0.75	12.00	12.25	30.00
DN 150	111.3	187.5	93.7	541.0	251.0	220.7	234.2	226.2	19.1		289.1	19.1	12.00	311.2	30.00

Note: screwed plug on request | Nota: opcional con tapón roscado.

Model | Modelo | 58

Ball valve, reduced bore, one piece screwed.

Modelo Económico (400 WOG) Roscado.

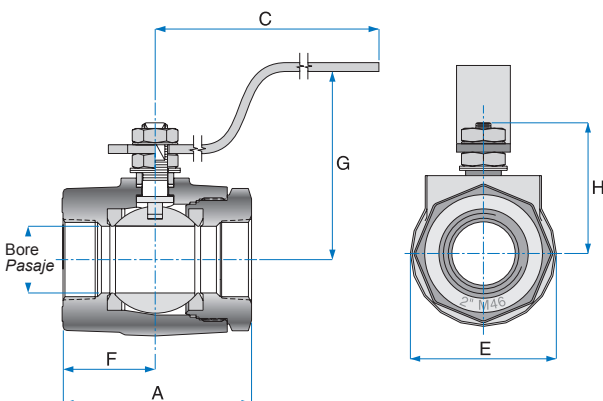


Size   Tamaño	Bore   Pasaje	A	F	G	D	C	E	B	kg
1/4"	0.364	1.95	1.00	1.25	1.75	3.78	4.64	1.09	0.25
DN 8	9.25	49.53	25.4	31.75	44.45	96.01	117.86	27.69	0.25
3/8"	0.364	1.95	1.00	1.25	1.75	3.78	4.64	1.09	0.25
DN 10	9.25	49.53	25.4	31.75	44.45	96.01	117.86	27.69	0.25
1/2"	0.364	2.09	1.00	1.25	1.75	3.78	4.76	1.11	0.20
DN 15	9.25	53.09	25.4	31.75	44.75	96.01	120.90	28.19	0.20
3/4"	0.500	2.28	1.19	1.36	1.95	3.78	4.90	1.16	0.30
DN 20	12.7	57.91	30.23	34.54	49.53	96.01	124.46	29.46	0.30
1"	0.625	2.74	1.50	1.46	2.21	3.78	5.24	1.38	0.50
DN 25	15.87	69.59	38.10	37.08	56.13	96.01	133.10	35.05	0.50

Model | Modelos | 43 - 46

Ball valve, series 600 /900 screwed plug.

Cuerpo Enterizo (1500 / 3000 WOG) Roscado.



Model 43 - Standard Bore | Dimensiones. Modelo 43 - Paso Reducido.

Size   Tamaño	Bore   Pasaje	A	H	G	C	E	F	kg
2"	1.50	4.98	3.06	3.31	7.00	3.62	2.26	4.50
DN 50	38.10	126.49	77.72	84.07	177.80	92.0	57.5	4.50
2 1/2"	2.00	5.65	4.61	5.51	10.2	4.33	2.95	9.50
DN 65	50.8	143.4	117.1	140.0	260.0	110.0	75.0	9.50

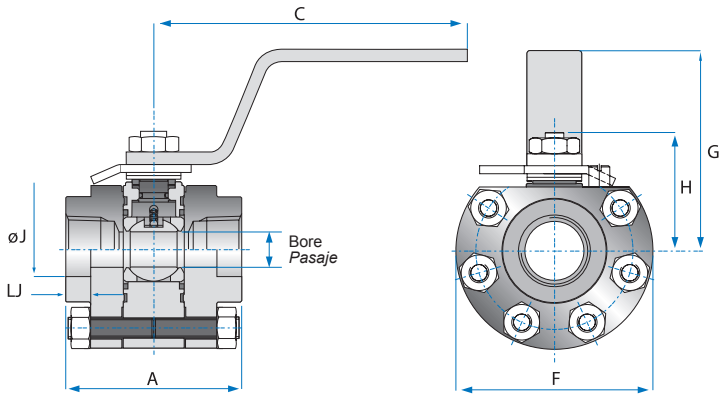
Dimensions. Model 46 - Full Bore | Dimensiones. Modelo 46 - Paso total.

Size   Tamaño	Bore   Pasaje	A	H	G	C	E	F	kg
1 1/2"	1.50	4.98	3.06	3.31	7.00	3.62	2.26	4.50
DN 40	38.10	126.49	77.72	84.07	177.80	92.0	57.5	4.50
2"	2.00	5.65	4.61	5.51	10.2	4.33	2.95	9.50
DN 50	50.8	143.4	117.1	140.0	260.0	110.0	75.0	9.50



44 API FS HP Ball valve, high pressure service, fire safe. Standard bore.  
Válvula Esférica Alta Presión Antifuego. Paso nominal.

59 API FS HP Ball valve, high pressure service, fire safe. Full bore.  
Válvula Esférica Alta Presión Antifuego. Paso total.



Dimensions. Model 44 | Dimensiones. Modelo 44.

Size	Bore	A	C	F	G	H	ØJ	LJ	
Tamaño	Pasaje								
1 1/2"	31.8	114.5	260.0	126.0	102.0	82.5	48.8	12.5	mm
	1.25	4.5	10.23	4.96	4.02	3.24	1.92	0.49	inch
2"	38.1	131.5	465.0	141.5	115.0	102.5	61.24	12.5	mm
	1.5	5.18	18.31	4.53	4.53	4.04	2.41	0.49	inch

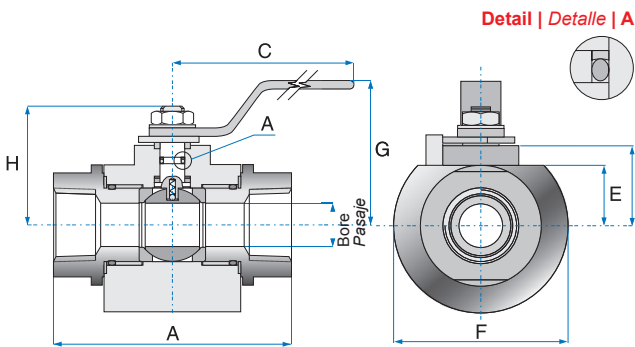
Dimensions. Model 59 | Dimensiones. Modelo 59.

Size	Bore	A	C	F	G	H	ØJ	LJ	
Tamaño	Pasaje								
1/2"	14.2	70.5	148.0	79.0	53.0	46.0	9.5	9.5	mm
	0.56	2.76	5.83	3.11	2.09	1.81	0.37	0.37	inch
3/4"	20.6	83.0	164.8	94.0	95.5	56.5	12.5	12.5	mm
	0.81	3.27	6.49	3.70	3.76	2.22	0.49	0.49	inch
1"	25.4	98.0	260.0	107.0	97.0	75.0	12.5	12.5	mm
	1.0	3.86	10.24	4.21	3.82	2.95	0.49	0.49	inch
1 1/4"	Not measured manufactured   Medida no fabricada.								
1 1/2"	38.1	131.5	465.0	141.5	115.0	102.5	12.5	12.5	mm
	1.5	5.18	18.31	5.57	4.53	4.04	0.49	0.49	inch

Model | Modelo | 15

High pressure ball valve (HP) Fire safe (FS) Antistatic - Standard bore  
Screwed ends (NPT, BSPT, BSP, SW, extended BW) Working pressure 5000 PSIG.

Válvula Esférica para Alta Presión (HP) A Prueba de Fuego (FS) Antiestática.  
Pasaje Nominal - Extremo Roscado (NPT, BSPT, BSP, SW, BW prolongado) Presión de Trabajo 5000 PSIG.

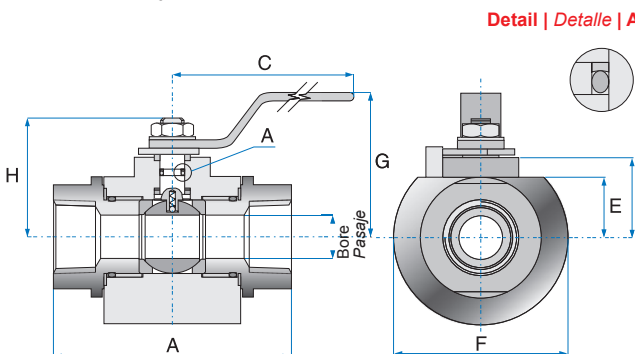


Size	Bore	A	C	E	F	G	H	I	kg
Tamaño	Pasaje								
3/4"	0.56	4.33	5.83	0.81	2.44	1.99	1.81	1.08	1.8
DN 20	14.3	110.0	148.0	20.5	62.0	50.5	45.9	27.5	
1"	0.81	5.08	6.91	1.1	2.97	2.41	2.36	1.38	3.0
DN 25	20.6	129.0	175.5	28.0	75.5	61.25	60.0	35.0	
1 1/4"	1.00	5.63	6.91	1.29	3.42	2.60	2.55	1.57	4.5
DN 32	25.4	143.0	175.5	32.8	87.0	66.0	64.8	39.8	
1 1/2"	1.25	6.70	6.91	1.47	3.71	2.78	2.73	1.75	6.8
DN 40	31.8	170.0	175.5	37.4	94.2	70.7	69.4	44.4	
2"	1.50	7.08	8.26	1.89	4.40	3.74	3.00	2.13	9.0
DN 50	38.10	180.0	210.0	48.0	112.0	95.0	76.0	54.0	

Model | Modelo | 19

High pressure ball valve (HP) Fire safe (FS) Antistatic - Full bore  
Screwed ends (NPT, BSPT, BSP, SW, extended BW) Working pressure 5000 PSIG.

Válvula Esférica para Alta presión (HP) A Prueba de Fuego (FS) Antiestática  
Pasaje Total - Extremo Roscado (NPT, BSPT, BSP, SW, BW prolongado)  
Presión de Trabajo 5000 PSIG.

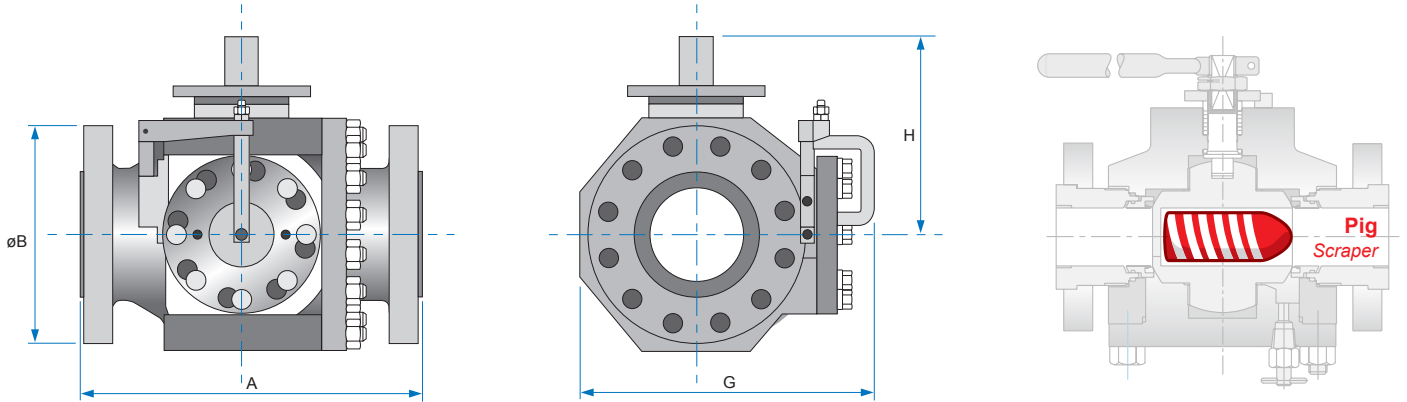


Size	Bore	A	C	E	F	G	H	I	kg
Tamaño	Pasaje								
1/4"	0.56	3.40	5.83	0.81	2.44	1.99	1.81	1.08	1.8
DN 8	14.3	86.5	148.0	20.5	62.0	50.5	45.9	27.5	
3/8"	0.56	3.56	5.83	0.91	2.44	1.99	1.81	1.08	1.8
DN 10	14.3	90.5	148.0	20.5	62.0	50.5	45.9	27.5	
1/2"	0.56	4.33	5.83	0.81	2.44	1.99	1.81	1.08	1.8
DN 15	14.3	110.0	148.0	20.5	62.0	50.5	45.9	27.5	
3/4"	0.81	5.08	6.91	1.10	2.97	2.41	2.36	1.38	3.0
DN 20	20.6	129.0	175.5	28.0	75.5	61.25	60.0	35.0	
1"	1.00	5.63	6.91	1.29	3.42	2.60	2.55	1.57	4.5
DN 25	25.4	143.0	175.5	32.8	87.0	66.0	64.8	39.8	
1 1/4"	1.25	6.70	6.91	1.47	3.71	2.78	2.73	1.75	6.8
DN 32	31.8	170.0	175.5	37.4	94.2	70.7	69.4	44.4	
1 1/2"	1.5	7.08	8.26	1.89	4.40	3.74	3.00	2.13	9.2
DN 40	38.1	180.0	210.0	48.0	112.0	95.0	76.0	54.0	



**Model 16 Pig launcher and receiver | Modelo 16 Lanzadora y receptora de Scraper**

Pig launcher and receiver, ASME # 300, 600 & 900 | Válvula Esférica, Lanzadora y Receptora de Scraper.



Note: dimensions are general for S.600, there may be differences in each series, contact us.

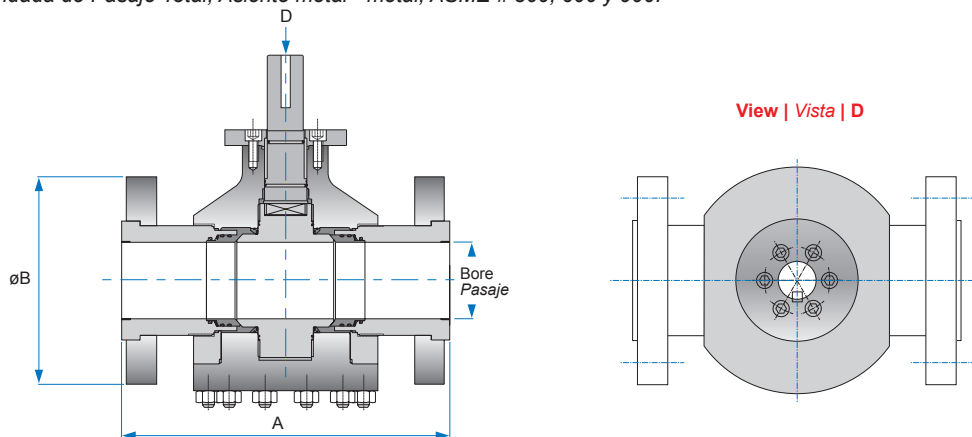
Nota: las dimensiones son generales para S.600, puede haber diferencias en cada serie, consúltenos.

Size Tamaño	Unit Unidad	A	øB	H	G	Max. Nominal Pig Size ø Máx. Nominal del Scraper
2"	mm	292.1	165	159.1	295.0	52 X 106
	in.	11.5	6.0	6.26	11.61	2.05X 4.17
3"	mm	358.8	209.6	213.0	328.0	90 X 140
	in.	14.13	8.25	8.38	12.91	3.54 X 5.51
4"	mm	431.8	273	228.0	354.5	100 X 160
	in.	17.0	10.0	8.98	13.96	3.94 X 6.29
6"	mm	558.8	355.6	363.0	520.0	158 X 255
	in.	22.0	14.0	14.29	20.47	6.22 X 10.04
8"	mm	660.4	419.1	390.0	670.0	230 X 250
	in.	26.0	16.5	15.35	26.4	9.06 X 9.84
10"	mm	787.0	508.0	500.0	850.0	280 x 330
	in.	34.3	20.0	19.7	33.5	11.0 x 12.99
12"	mm	838	560	550	1080	334 X 325
	in.	32.99	22.04	21.65	42.51	13.14 X 12.79

**Model 91 metal-metal seat | Modelo 91 cierre metal-metal**

Ball valve, flanged, full port - metal - metal seat, ASME # 300, 600 & 900.

Válvula Esférica Bridada de Pasaje Total, Asiento metal - metal, ASME # 300, 600 y 900.



Size   Tamaño	Bore   Pasaje	A / S 300	A / S 600	A / S 900	øB / S 300	øB / S 600	øB / S 900	kg
2"	2	8.5	11.5	14.5	6.5	6.35	8.5	76
DN 50	50.8	215.9	282.1	368.0	165.1	165.1	215.9	
3"	3	11.13	14	15	8.25	8.25	9.5	91.5
DN 75	76.0	283.6	355.6	381	209.6	209.6	241.3	
4"	4	12	17	18	10	10.75	11.5	160.0
DN 100	101.6	304.8	431.8	457.0	254	273.0	292.1	
6"	6	15.88	22	24	12.5	14	15	441
DN 150	152.4	403.2	558.8	609.8	317.5	355.6	381	

Note: It is also manufactured in #1500, consult factory. / Nota: Se fabrican también en Serie 1500, consultar a fabrica.

# Model | T 44 | Three way

## Modelo | T 44 | Tres vías

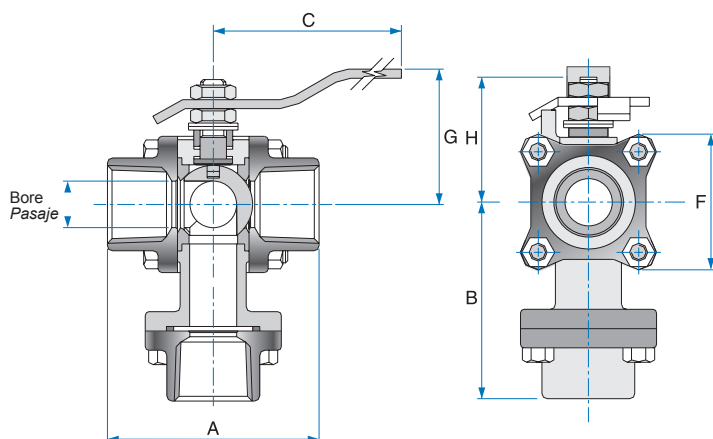


**VALBOL**

Válvulas Worcester de Argentina S.A.

### Ball valve, three way - Porting # 1, 2, 3. Bottom entry

Válvula Esférica Tres Vías - Porting # 1, 2, 3.



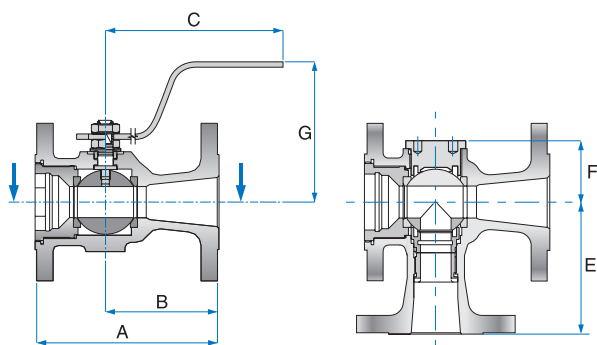
Size	Bore	A	B	H	G	C	F	kg
Tamaño	Pasaje							
1/4"	0.44	2.79	2.80	1.59	1.81	4.44	1.75	1.20
DN 8	11.2	70.7	71.1	40.4	46.0	112.8	44.5	1.20
3/8"	0.44	2.79	2.80	1.59	1.81	4.44	1.75	1.20
DN 10	11.2	70.7	71.1	40.4	46.0	112.8	44.5	1.20
1/2"	0.44	2.79	2.80	1.69	1.88	4.44	2.00	1.20
DN 15	11.2	70.7	71.1	42.8	47.8	112.8	50.8	1.20
3/4"	0.56	2.79	2.80	1.69	1.88	4.44	2.00	1.20
DN 20	14.2	70.7	71.1	42.8	47.8	112.8	50.8	1.20
1"	0.81	3.72	3.44	2.20	2.44	5.75	2.38	2.00
DN 25	20.6	94.5	87.4	55.8	62.0	146.1	60.5	2.00
1 1/4"	1.00	4.52	4.11	2.88	3.12	5.75	3.00	3.90
DN 32	25.4	114.9	104.3	73.2	79.3	146.1	76.2	3.90
1 1/2"	1.25	4.52	4.11	2.88	3.12	7.00	3.00	3.90
DN 40	31.8	114.9	104.3	73.2	79.3	177.8	76.2	3.90
2"	1.50	5.73	5.46	3.06	3.31	7.00	3.38	5.00
DN 50	38.1	126.4	137.7	77.7	84.1	177.8	85.9	5.00

Portings detailed in page 13 | Ver Porting en página 13.

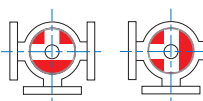
# Model | Modelo | 17 | Three way | Tres vías

### Ball valve, three way lateral port, "T" port; "L" port

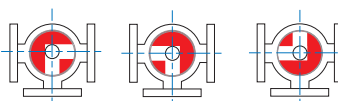
Válvula Esférica Tres Vías Bridadas S - 150 entrada lateral "T" Port, "L" Port Salida Lateral.



Size	Bore	A	E	B	C	G	F	kg
Tamaño	Pasaje							
1 1/2"	0.94	6.50	4.00	3.65	6.65	2.88	1.97	9.00
DN 40	24.0	165.1	101.6	92.6	169.0	73.0	50.0	9.00
2"	1.18	7.00	5.00	4.32	6.65	5.82	2.31	14.00
DN 50	30.0	177.8	127.0	109.8	169.0	148.0	58.7	14.00
3"	1.97	8.00	6.00	4.36	18.30	5.82	3.26	25.00
DN 75	50.0	203.2	152.4	110.9	465.0	148.0	83.0	25.00
4"	2.95	9.00	7.13	4.00	18.30	8.93	4.33	39.00
DN 100	76.0	228.6	181.1	101.6	465.0	227.0	110.0	39.00
6"	3.97	10.50	9.74	4.24	21.30	8.93	5.25	68.00
DN 150	101.0	266.7	247.6	107.9	541.0	227.0	133.3	68.00



Porting 3 option 90° "T" Ball.  
Porting 3 Opción 90° - Pasajes de la esfera "T".

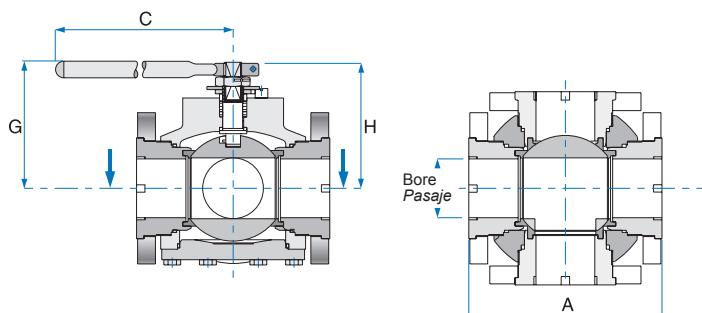


Porting 2 option 180° "L" Ball.  
Porting 2 Opción 180° - Pasajes de la esfera "L".

# Model | Modelo | 18 | Multi way | Multi-vía

### Ball valve, three and four way, lateral port - Flanges # 150, # 300 RF & # 600 RF porting "T" & "L". Full port.

Válvula Esférica 3 y 4 Vías, Pasaje Total - Extremos Bridados, ASME 150 y 300. Pasaje en "T" y "L".



Size	Bore	A	C	G	H	kg
Tamaño	Pasaje					
1"	0.94	5.00	5.83	4.65	2.87	7.00
DN 25	24.0	127.0	148.0	118.0	73.0	7.00
1 1/2"	1.46	6.50	8.27	5.47	4.37	12.00
DN 40	37.0	165.0	210.0	139.0	111.0	12.00
2"	1.93	7.99	10.24	5.83	4.72	19.00
DN 50	49.0	203.0	260.0	148.0	120.0	19.00
3"	2.95	9.61	18.31	6.26	6.26	47.00
DN 80	75.0	244.0	465.0	159.1	159.1	47.00
4"	3.86	12.01	18.31	10.83	8.62	84.00
DN 100	98.0	305.0	465.0	275.0	219.0	84.00
6"	5.83	15.51	21.30	12.28	10.08	160.00
DN 150	148.0	394.0	541.0	312.0	256.0	160.00

Note: Flanges with threaded holes.

Nota: las bridas de esta válvula tienen agujeros roscados.

# Model | T 51 | T 52 | Three way

Modelos | T 51 | T 52 | Tres vías

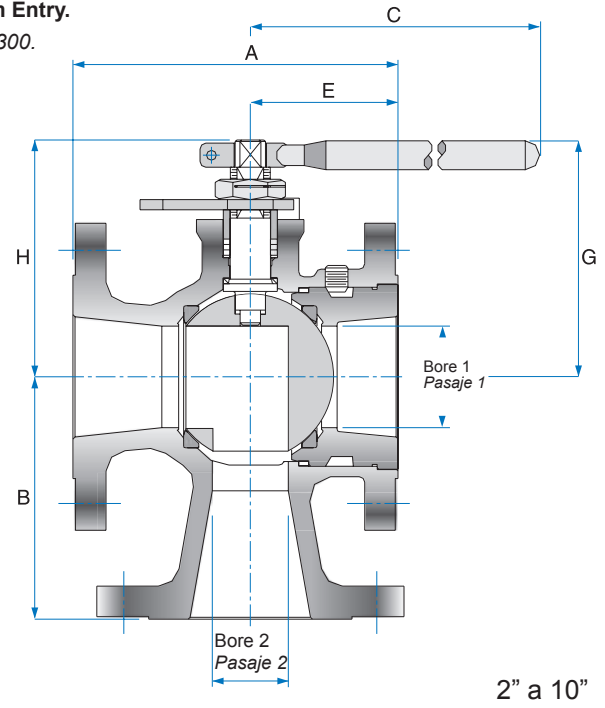
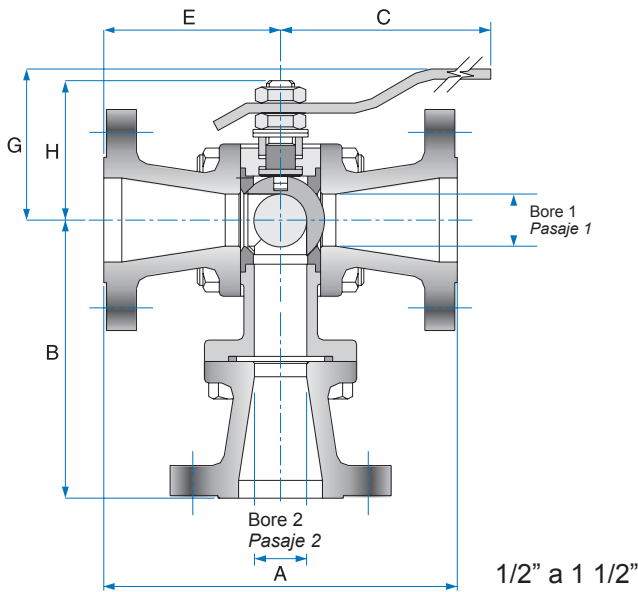


**VALBOL**

Válvulas Worcester de Argentina S.A.

**Ball valve, three way - T 51 Flanged ASME 150 - T 52 Flanged ANSI 300. Bottom Entry.**

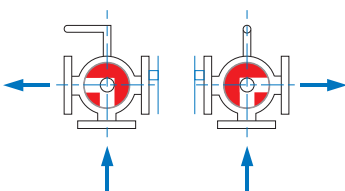
Válvula Esférica Tres Vías Bridada - T 51 Bridada ASME 150 - T 52 Bridada ASME 300.



Size   Tamaño	Bore1 Pasaje1	Bore2 Pasaje2	Mod.51 A	Mod.51 B	Mod.51 E	Mod.52 A	Mod.52 B	Mod.52 E	H	G	C	Mod.51 kg	Mod.52 kg
1/2"	0.437	0.437	4.28	3.52	2.12	5.50	4.15	2.75	1.69	3.54	4.50	2.50	3.50
DN 15	11.1	11.1	107.9	59.6	53.9	139.7	105.5	69.8	42.8	90.0	114.3	2.50	3.50
3/4"	0.562	0.562	4.62	3.71	2.31	6.00	4.40	3.00	1.69	3.54	4.50	3.20	4.80
DN 20	14.3	14.3	117.4	94.4	58.7	152.4	111.9	76.2	42.8	90.0	114.3	3.20	4.80
1"	0.811	0.811	5.00	4.07	2.50	6.50	4.83	3.25	2.20	4.37	5.75	4.60	6.50
DN 25	20.6	20.6	127.0	103.6	63.5	165.2	122.7	82.6	55.8	111.0	146.0	4.60	6.50
1 1/4"	1.25	1.25	5.50	4.59	2.75	7.00	5.34	3.50	2.88	4.60	7.00	8.40	12.50
DN 32	31.8	31.8	139.8	116.6	69.9	178.0	135.7	88.9	73.2	117.0	178.0	8.40	12.50
1 1/2"	1.25	1.25	6.50	5.09	3.25	7.49	5.59	3.75	2.88	4.60	7.00	8.40	12.50
DN 40	31.8	31.8	165.2	129.4	82.6	190.3	142.0	95.2	73.2	117.0	178.0	8.40	12.50
2"	1.50	1.50	7.00	5.00	2.68	8.50	5.51	2.68	3.06	4.80	7.00	12.00	16.50
DN 50	38.1	38.1	177.8	127.0	68.1	215.9	140.0	68.1	77.7	122.0	178.0	12.00	16.50
2 1/2"	2.00	2.00	7.50	5.00	2.83	9.50	5.89	4.75	4.60	5.13	10.24	20.00	21.00
DN 65	50.8	50.8	190.5	127.0	72.0	241.3	149.7	120.6	116.8	128.2	260.0	20.00	21.00
3"	2.50	2.00	8.00	6.00	3.63	11.12	6.50	3.62	5.70	5.90	18.31	23.60	32.00
DN 80	63.5	50.8	203.2	152.4	92.2	282.6	165.1	92.1	144.8	150.0	465.0	23.60	32.00
4"	3.25	2.50	9.00	7.13	4.00	12.00	8.00	4.00	6.32	6.52	18.31	36.60	52.00
DN 100	82.5	63.5	228.6	181.1	101.6	304.8	203.2	101.6	160.5	165.2	465.0	36.60	52.00
6"	4.38	3.00	10.50	9.75	4.25	-	-	-	8.90	9.22	21.30	62.50	-
DN 150	111.25	76.2	266.7	247.6	107.9	-	-	-	226.2	234.2	541.0	62.50	-
8"	5.69	4.00	11.50	11.00	5.69	-	-	-	10.00	10.31	21.30	92.50	-
DN 200	144.5	101.6	292.1	279.4	144.6	-	-	-	254.0	262.0	541.0	92.50	-
10"	7.36	6.00	13.00	12.00	7.13	-	-	-	13.00	12.18	-	-	-
DN 250	187.0	152.4	330.2	304.8	181.0	-	-	-	330.2	309.3	-	-	-

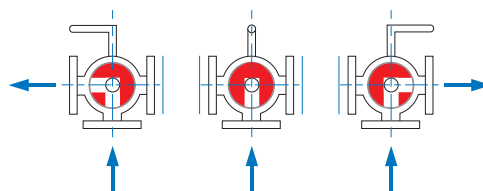
Model | Modelos | T 44 | T 51 | T 52 |

**Porting #1**



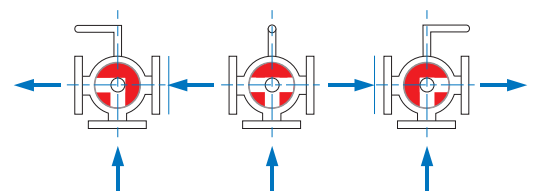
0° Position 90° Position

**Porting #2**



0° Position 90° Position 180° Position

**Porting #3**



0° Position 90° Position 180° Position



### Válvulas Esféricas Flotante - Asiento: PTFE Virgen y PTFE Reforzado.

Presión Diferencial	Bar	0.0	20.0	50.0	70.0	103.4
	Psi	0.0	0.0	725.5	1015.7	1500.3
Válvula	Unidad Torque	Torque Mínimo	Torques			
1/2" 44	Kgm	0.24	0.37	0.51	0.65	0.80
	Lb Inch	20.8	32.1	44.2	56.4	69.4
3/4" 44	Kgm	0.32	0.48	0.64	0.80	0.96
1/2" 59/82/83	Lb Inch	27.7	41.6	55.5	69.4	83.2
1" 44/51/52/53	Kgm	0.45	0.64	0.82	1.01	1.22
3/4" 59/82/83/84	Lb Inch	39.0	55.5	71.1	87.6	105.8
1 1/4" 44/51/52/53	Kgm	0.64	0.96	1.28	1.60	1.92
1" 59/82/83/84	Lb Inch	55.5	83.2	111.0	138.7	166.5
1 1/2" 44/51/52/53	Kgm	0.85	1.60	2.40	3.20	4.00
1 1/4" 59/82/83/84	Lb Inch	73.7	138.7	208.1	277.5	346.9
2" 44/51/52/53	Kgm	2	3.5	4.0	4.5	5.5
1 1/2" 59/82/83/84	Lb Inch	173.6	303.8	347.2	390.6	477.5

### Válvulas Esféricas Flotante - Asiento: PTFE Virgen.

Presión Diferencial	Bar	0	10	20	51
	Psi	0	145	290	740
Válvula	Unidad Torque	Torque Mínimo	Torques		
2" 82/83	Kgm	1.6	3.3	5.6	7.5
	Lb Inch	139	286	486	650
3" 51/52	Kgm	4	10	15	21
3" 82/83	Lb Inch	347	824	1301	1821
4" 51/52	Kgm	6.3	13	21	30
4" 82/83	Lb Inch	546	1127	1821	2602
6" 51/52	Kgm	10	20	30	40
6" 82/83	Lb Inch	867	1734	2602	3469
8" 51/52	Kgm	14	27	39	-
8" 82	Lb Inch	1214	2298	3382	-
10"/12" 51	Kgm	19	38	57	-
10" 82	Lb Inch	1648	3295	4943	-
14" 51	Kgm	35	68	97	-
12" 82	Lb Inch	3035	5897	8412	-

### Válvulas Esfera Flotante - Asiento: PTFE Reforzado.

Presión Diferencial	Bar	0	10	20	51
	Psi	0	145	290	740
Válvula	Unidad Torque	Torque Mínimo	Torques		
2" 82/83	Kgm	2	4.2	7.2	9.5
	Lb Inch	173	364	624	824
3" 51/52	Kgm	5	12	19	27
3" 82/83	Lb Inch	434	1041	1648	2341
4" 51/52	Kgm	8	17	21	38
4" 82/83	Lb Inch	694	1474	2341	3295
6" 51/52	Kgm	13	25	38	51
6" 82/83	Lb Inch	1127	2168	3295	4423
8" 51/52	Kgm	18	34	50	-
8" 82	Lb Inch	1561	2948	4336	-
10" 51	Kgm	21	49	70	-
10" 82	Lb Inch	2081	4249	6070	-
14" 51	Kgm	42	84	120	-
12" 82	Lb Inch	3642	7284	10406	-

### Válvulas Esfera Guiada con Asiento de Devlon.

Presión Diferencial	Bar	0	51	102	153
	Psi	0	740	1480	2220
Válvula	Unidad Torque	Torque Mínimo	Torques		
2" 83/84/85	Kgm	6	12	21	32
	Lb Inch	520	997	1821	2801
2 1/2" y 3" 53	Kgm	12	21	27	37
3" 83/84/85	Lb Inch	1041	1821	2307	3165
4" 53	Kgm	14	28	35	46
4" 83/84/85	Lb Inch	1214	2428	3035	3989
6" 51/52/53	Kgm	20	78	88	106
6" 82 a 85	Lb Inch	1734	6799	7649	9192
8" 51/52/53	Kgm	64	94	133	169
8" 83/84	Lb Inch	5550	8134	11533	14690
10" y 12" 51/52/53	Kgm	75	142	246	-
10" 82/83/84	Lb Inch	6504	12314	21333	-
12" 82/83/84	Kgm	100	414	504	-
14" y 16" 51/52	Lb Inch	8672	35901	43706	-

### Torque calculation

The tables show torque in function of differential pressure and diameter with the valve in the closed position and operating with clean fluid. According to application fluid, apply the following correction factor:

**Note:** for valves operated less than twice a day use factor 1.2.

### Determinación del Torque

Las tablas muestran el torque en función de la presión diferencial y el diámetro, considerando la válvula en posición cerrada, y operando con un fluido limpio. De acuerdo al tipo de fluido, el torque se deberá multiplicar por uno de los siguientes factores:

**Nota:** para operadas menos de 2 veces al día use factor 1.2.

Media   Fluido.	Factor
Oils, lubrication media (70°F - 350°F). Aceites, lubricantes (21° C / 77° C).	0.8
Liquid, clean. Líquido limpio.	1.0
Liquid, dirty (slurry), raw water. Líquido sucio (lechadas), agua sin tratar.	1.8
Gas, clean and wet. Gas limpio y húmedo.	1.0
Gas, dry. Gas seco.	1.3
Gas, dirty. Gas sucio.	1.5
Chlorine. Cloro.	1.5



### Pressure - Temperature curves

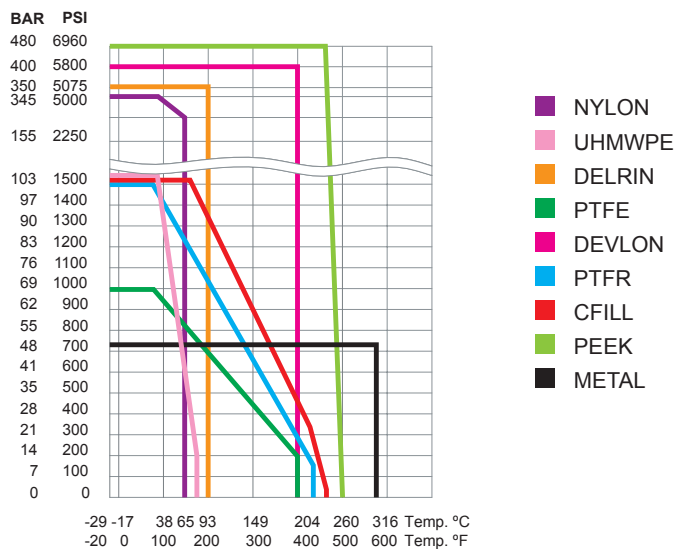
Curvas de Presión - Temperatura.

#### Attention!

These curves are approximate and valid only for the materials of the seats. To pressure-temperature range of the valves work, consult factory.

#### Atención!

Las presentes curvas son orientativas y válidas solo para los materiales de los asientos. Para rango presión-temperatura de trabajo de las válvulas, consultar a fabrica.



### CV data | Coeficiente de Flujo (aproximado).

#### Standard bore max CV | Paso Nominal Máximo Cv.

Size   Tamaño válvula.	1/2"	3/4"	1"	1 1/2"	2"	3"	4"	6"	8"	10"	12" x 8"	12" x 10"	14"
Max CV (USGPM). Máximo Cv (USGPM).	7	10	30	89	130	400	720	1020	1800	2970	5200	8120	8840

#### Full bore max CV | Paso Total Máximo Cv.

Size   Tamaño válvula.	1/2"	3/4"	1"	1 1/2"	2"	2 1/2"	3"	4"	6"	8"	10"	12"	-
Max CV (USGPM). Máximo Cv (USGPM).	32	54	105	275	460	780	1330	2420	5400	10000	18500	26800	-

### Applicable international standards | Normas Internacionales Aplicables.

Nace	Sour service sulfide   Válvulas que requieren especial resistencia al ataque del craqueo sulfurado.	Applicable to   Aplicables en:	Size   Tamaño.
MR - 01 - 75		44 - 45 - 50 - 51 - 52 - 53 59 - 82 - 83 - 84 - 85 - 86	1/2" - 24"
BS 5146	Inspection and tests   Inspección y testado. Válvula de acero para la industria del petróleo y petroquímica.	All models   Todos los modelos.	1/4" - 24"
ISO 17292 BS 5351	Oil & gas ball valves. Válvulas esféricas para la industria del petróleo y petroquímica.	44 - 45 - 50 - 51 - 52 53 - 59 - 82 - 83 - 84 - 86	1/4" - 20"
MSS- SP- 25	Valve marking   Sistema de marcación standard.	All models   Todos los modelos.	1/4" - 24"
MSS- SP- 55	Visual method for valve acceptance for casted valves. Método visual aceptación de válvulas de acero fundidas.	17- 40 - 45 - 50 - 51 - 52 53 - 59 - 82 - 83 - 84 - 85 - 86	1/2" - 24"
API 6D	Materials and tests. Specs for valves. Especificaciones de válvulas en cañerías. Materiales - Test hidrostáticos.	All models   Todos los modelos. Excepto modelo 44 y 59   Except, Model 44 and 59.	1/4" - 24"
API 607	Fire safe tests   Test a prueba de fuego.	F44 - 51 - 52 - 82 - 83 - 84 - 85 - 86	1/4" - 24"
API 598	Inspection and tests   Inspección y ensayos de válvulas.	All models   Todos los modelos.	1/4" - 24"
ASME B 16.5	Flanges   Bridas para tubos de acero.	17- 18 - 44 - 51 - 52 53 - 82 - 83 - 84 - 85 - 86	1/2" - 24"
ASME B 16.10	End dimensions   Largo entre bridas y/o para soldar.	40 - 44 - 51 - 52 - 53 82 - 83 - 84 - 85 - 86	1/2" - 24"
ASME B 16.11	End standards (SW and screwed). Dimensionamiento extremos: S.W. (Socketweld), S.E. (Roscados).	15 - 43 - 44 - 45 - 46 - 59	1/4" - 6"
ASME B 16.34	Steel valves   Válvulas de acero.	17- 18 - 40 - 43 - 44 - 45 - 46 - 51 52 - 53 - 59 - 82 - 83 - 84 - 85 - 86	1/4" - 24"

# How to Order

## Cómo especificar una Válvula



**VALBOL**

Válvulas Worcester de Argentina S.A.

**Example | Ejemplo:** Valve / Válvula: **51 S 40 0 4 6 6 R T R M**  
 Dígitos → 12 3 45 6 7 8 9 10 11 12 13



Model	Characteristics		Size		Applications		Body Material		Ball Material	
Modelo	Características		Tamaño		Aplicaciones		Material Cuerpo		Material Esfera	
2 Dígitos	1 Dígito		2 Dígitos		1 Dígito		1 Dígito		1 Dígito	
14	0	-	01	DN 4 (1/8")	0	Standard	0	-	0	-
15	1	S.150	02	DN 8 (1/4")	1	Porting 1	1	Bronce	1	Bronce
	2	S.2500	03	DN 10 (3/8")	2	Porting 2	2	-	2	ASTM 564 (17-4PH)
16	3	S.300	05	DN 15 (1/2")	3	Porting 3	3	-	3	AISI 420
17	4	DIN 2632	07	DN 20 (3/4")	4	-	4	Acero Carbono	4	Carb + ENP 25µ
18	5	S.1500	10	DN 25 (1")	5	-	5	Inox 17-4PH	5	LCB/LF2 + ENP 75µ
	6	S.600	12	DN 32 (1 1/4")	6	-	6	Acero Inox.316	6	Acero Inox 316
19	7	DIN 2633	15	DN 40 (1 1/2")	7	-	7	Monel	7	Monel K-400
26	8	DIN 2634	20	DN 50 (2")	8	-	8	Acero Inox.304	8	Acero Inox 304
27	9	S.900	25	DN 65 (2 1/2")	9	Emisión Fugitiva	9	Acero P/Baja Temp. ASTM A352 LCB: Fundido ASTM A350 LF2: Forjado	9	Acero inox 316 L
43	A	Alta Temperatura	30	DN 80 (3")	A	Antiestática			A	Alloy 20
	B	DIN 2635	40	DN 100 (4")	B	Fire Safe-Antiestática			B	-
44	C	Cavity Filled	60	DN 150 (6")	C	Uso Cloro	C	Hastelloy C	C	Hastelloy C
45	D	DIN 2636	80	DN 200 (8")	D	Desaire	D	Duplex	D	Duplex
46	E	Emisión Fugitiva	A0	DN 250 (10")	E	-	E	Carb + ENP 25µ	E	Inox.316+ ENP 25µ
49	F	Fire Safe	A2	DN 300 (12")	F	Fire Safe	F	Carb + ENP 75µ	F	Inox.316+ ENP 75µ
	G	Guiada	A4	DN 350 (14")	G	-	G	Carb + ENP 35µ	G	Inox.316+ ENP 35µ
50	H	Alta Presion	A6	DN 400 (16")	H	Alta Presión	H	-	H	Carb+ ENP 35µ
51	I	DIN 2637	B0	DN 500 (20")	I	-	I	-	I	Carb+ ENP 75µ
52	J	Tres Cuerpos	B4	DN 600 (24")	J	-	J	-	J	Inox.304+ ENP 25µ
	K	Calefaccionada	C2	DN 50 (2" Cuadrada)	K	Calefaccionada	K	Carb+Dorrtech (Delta)	K	-
53	L	-	<b>TUBOS</b>		L	-	L	Acero Inox.316 L	L	-
58	M	-	06	1/4"	M	Con Rosca Macho	M	-	M	-
59	N	-	08	5/16"	N	-	N	316 + ENP	N	-
66	O	-	09	3/8"	O	-	O	-	O	-
	P	Pivot	13	1/2"	P	Esfera Perforada	P	-	P	-
82	Q	-	16	5/8"	Q	Uso Vacio	Q	-	Q	-
83	R	-	19	3/4"	R	-	R	-	R	-
84	S	Standard	22	7/8"	S	C/accesorios en inox	S	-	S	-
	T	Diverter	26	1"	T	-	T	-	T	-
85	U	-	29	1 1/8"	U	-	U	-	U	-
86	V	-	32	1 1/4"	V	Uso Vapor	V	-	V	-
90	W	XAP (Guiada)	35	1 3/8"	W	-	W	-	W	-
91	X	XAP (Flotante)	38	1 1/2"	X	Uso Oxígeno	X	-	X	-
	Y	Especial	42	1 5/8"	Y	Esfera en X	Y	-	Y	-
92	Z	Criogenica	51	2"	Z	Criogénicas	Z	-	Z	-

# How to Order

## Cómo especificar una Válvula



**VALBOL**

Válvulas Worcester de Argentina S.A.

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Stem Material		Seat Material		Gasket Material		Ends		Operator	
Material Vástago		Material Asiento		Material Junta		Extremos		Montaje	
1 Dígito		1 Dígito		1 Dígito		1 Dígito		1 Dígito	
0	-	0	-	0	-	0	-	0	-
1	-	1	-	1	-	1	NPT Macho	1	-
2	Inox 416	2	-	2	-	2	BW prol. Caño sch 160	2	-
3	AISI 420	3	Met. Circular AISI 420	3	-	3	-	3	-
4	4140+ ENP 25µ	4	P/asto Carb+Nylon	4	-	4	-	4	-
5	Inox 17-4PH	5	P/asto Carb+TR	5	-	5	Extremo Caño XXS	5	-
6	Acero Inox 316	6	P/asto Carb+Cfill	6	-	6	SW Prolongado 6"	6	-
7	Monel K-400	7	P/asto Carb+Devlon	7	-	7	Extremo Caño 6"	7	-
8	Acero Inox 304	8	P/asto Carb+Peek	8	-	8	Extremo Caño sch.80	8	-
9	Acero inox 316 L	9	Acero inox 316 L	9	-	9	Ext. Caño std(sch.160)	9	-
A	Alloy 20	A	-	A	Grafito flex.+ Silicona	A	Rosca Danesa	A	-
B	-	B	Met.Cir. Bronce Al.	B	Buna	B	Rosca BSPT	B	Palanca barquito/funcional
C	Hastelloy C	C	P/asto Ac.P/Baja+ENP	C	Cobre	C	Tri Clamp	C	-
D	Duplex	D	-	D	AED	D	Fondo de Tanque	D	-
E	Inox.+ ENP 25µ	E	Ertalyte Natural Blanco	E	Etileno Propileno	E	Entre Bridas	E	-
F	Inox.+ ENP 75µ	F	-	F	Grafito flexible+Viton	F	Bridada FF	F	-
G	-	G	Met. Circular Inox.	G	Grafito flexible+Buna	G	BW Sch.5	G	-
H	4140+ ENP 35µ	H	High Perfill	H	Grafito flex.+HN666	H	-	H	-
I	4140+ ENP 75µ	I	A°C°+ENP	I	Junta Asiento Integ.	I	BW Caño SCH. 80	I	Manija traba Candado
J	-	J	-	J	Grafito flexible+AED	J	Ring Joint	J	-
K	Monel K-500	K	P/asto Inox+Cfill	K	Kalrez Spectrum 7090	K	RF Concéntrico	K	-
L	-	L	P/asto Inox+TR	L	-	L	Rosca Line Pipe	L	-
M	-	M	P/asto Inox+Nylon	M	-	M	BW Caño SCH 160	M	Manija
N	-	N	P/asto Inox+Devlon	N	Neoprene	N	Rosca NPT	N	Vástago libre Cuad.
O	-	O	P/asto Inox+Peek	O	-	O	Sin tapas	O	Palanca Oval
P	-	P	Cfill	P	-	P	Rosca BSP	P	Vástago libre c/chaveta
Q	-	Q	P/asto Inox + ertalyte	Q	HN666	Q	Tuerca y Doble Virola	Q	-
R	-	R	PTFE Reforzado	R	-	R	Bridada RF	R	-
S	Sulfinizado	S	-	S	Metálica	S	SW Caño	S	Traba de Seguridad
T	-	T	PTFE Virgen	T	PTFE Virgen	T	SW Tubo	T	Traba de Seg. 2 Posic.
U	-	U	UHMWPE	U	UHMWPE	U	SW Prolongado	U	Palanca en T
V	-	V	Vesconite Hilube	V	Viton	V	BW Tubo	V	-
W	-	W	-	W	-	W	BW Caño SCH. 40	W	-
X	-	X	Peek	X	-	X	BW Prolongado sch.40	X	-
Y	-	Y	Delrin - Lubetal	Y	-	Y	Vitaulic	Y	-
Z	-	Z	P/asto Inox+Vesconite Hilube	Z	-	Z	BW Prolongado sch.80	Z	-



# VALBOL

## Válvulas Worcester de Argentina S.A.



### Nuestra Empresa

**Válvulas Worcester de Argentina S.A.** fábrica y distribuye válvulas desde 1967, es una empresa certificada ISO 9001, API 6A, API 6D, CE, CRN (Canadá). Nuestra empresa tiene más de 200 empleados cuyo objetivo es satisfacer las necesidades del cliente en calidad, plazo de entrega y servicio.

Algunos de nuestros productos son: Válvulas Esféricas, Esclusas, Globo, Tapón Autolubricada y Retención de 1/4" a 24" fundidas y forjadas ASME 150 a 1500.

Actuadores Neumáticos y Eléctricos, Cajas de Monitoreo, Tableros Neumáticos para el control de Gasoductos, como así también productos para aplicaciones especiales, como ser, Válvulas Lanzadoras y Receptoras de Scrapers, Cut (cierre metal-metal), Multipuerto, Criogénicas, Válvulas para control On-Off y Modulante.

### Our Company

**Worcester Valves of Argentina S.A.** manufactures and sells valves since 1967, it is a certified company ISO 9001, API 6A, API 6D, CE, CRN (Canada). Our company employs over 200 employees whose goal is to meet customer needs with quality, delivery and service.

Some of our products are: Ball Valves, Gate, Globe, Sleeved Plug and Check in diameters 1/4" to 24" in cast and forged alloys, ASME 150-1500.

Pneumatic and Electric Actuators, Switch Boxes, Independent cabinets for Pipeline control, as well as products for special applications, such as, Pig Valves, Metal to Metal seats, Multiport, Cryogenic and Control Valves for On -Off and modular control.

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