

How To Order

Specifying PBV® Series 5700/6700 Valve Figure Numbers

Example: 6" C-6710-71-2200-GH-NG-DIB-1 This number represents a 6" ANSI Class 150, Full Port, Three-Piece Trunnion Ball Valve, Fire Tested with Emergency Grease Seals, with Raised Face, Carbon Steel Body Material, Carbon Steel Trim, Glass Filled TFE Seats, HNBR Seals, for NACE MR0175/ISO 15156 Service, Gear Operated, and DIB-1 Seats, with Cavity Relief Valve.

C - 6 7 10 - 7 1 - 22 00 - G H - N G - DIB-1 -

Internal/MFG Designator	Port Config.	Valve Type	Pressure Class	Fire Tested	End Conn.	Body Material	Trim Material (4)	Seat Material	Seal Material	NACE Option	Operator	Seat Config.	Modifier Code
C Carbon Steel	5 Std.	7 3 Pc. Trunnion Type Bolted Body	10 150 CL	3 Fire Tested w/No Emerg. Grease Seals	1 RF	22* A105/A350 LF2	00 Same as Body	G Glass Filled PTFE	B Buna-N	N NACE	A Actuator	No denotation for DBB Valves	EXX Stem Exten. inches
S Stainless Steel	6 Full	9 3 Pc. Trunnion Type Welded Body	30 300 CL	7 Fire Tested w/ Emerg. Grease Seals	2 Non-Std.	25*(1) A105/A350 LF2	36(3) Stainless Steel	D Devlon®	E EPDM	S Non NACE	B Bare Stem	DBB-1 DPE x DPE	XXX Modifier Code
P Import		Z Tandem	60 600 CL		3 RTJ	34 304SS	40 410	N Nylon	H(1)(2) HNBR		G Gear Operator	DIB-1N DPE x DPE	HXXX Buried Valve Exten. inches
			90 900 CL		4 RF x WE	36 316SS	55 F55 Duplex	P PEEK™	R(1) Low Temp Buna-N		L Lever	DIB-1N DPE x DPE	XXXX No Cavity Relief
			15 1500 CL		5 WE x WE	55 F55 Duplex	55 F55 Duplex	V Viton® A	T(1)(2) Lip Seal PTFE		S 2 inch Square Nut	DIB-2N SPE x DPE	PXXX Pinion Shaft Exten. inches
			25 2500 CL		6 RTJ x WE	81 ENP		Z Tungsten Carbide Coating or Special	U(1)(2) Viton® GLT			DIB-2N SPE x DPE	SXXX 2" Nut Exten. inches
						82 CRA Weld Overlay			V(2) Viton® B				

Notes: 1) For Low Temperature Service & Severe Service.

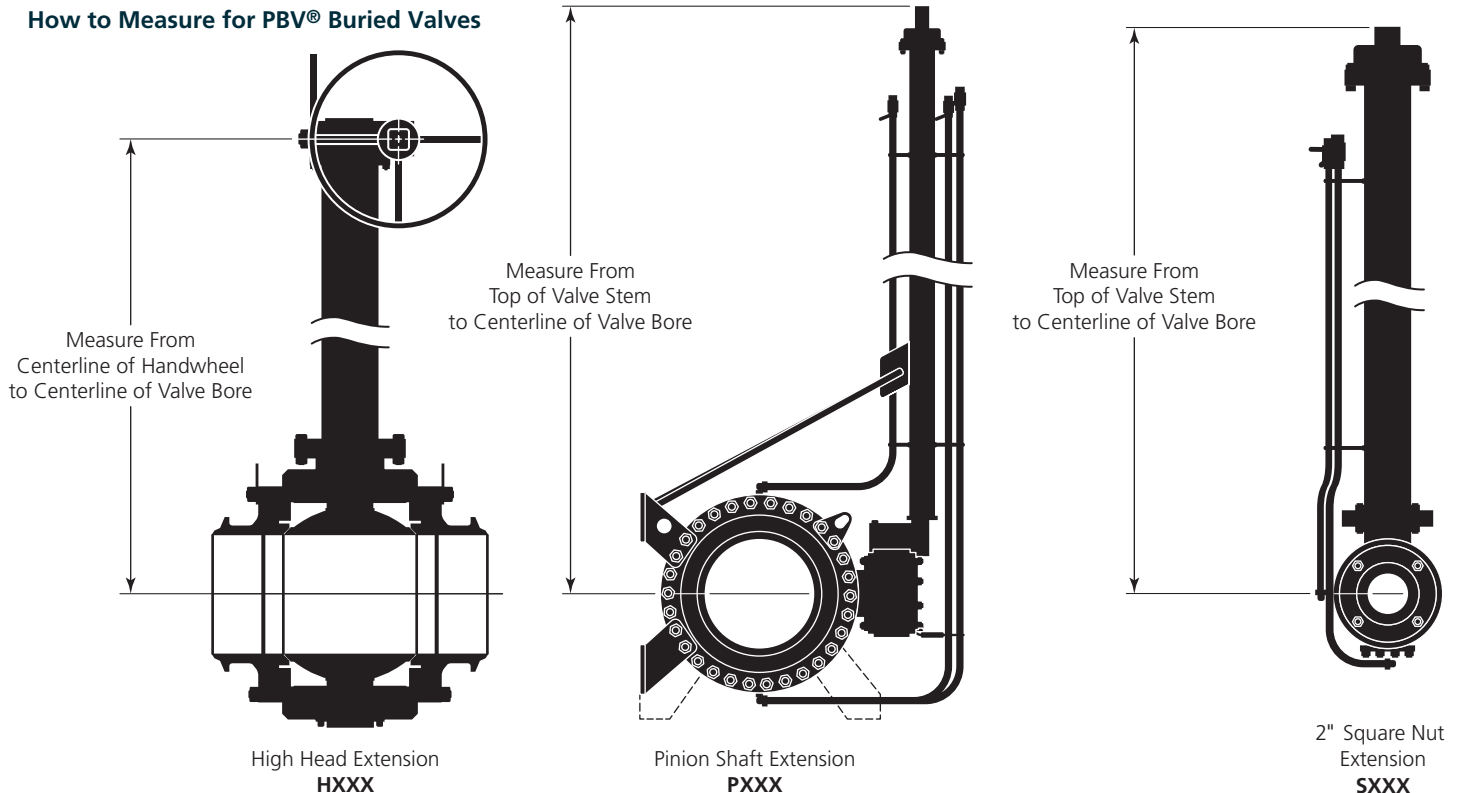
2) For Explosive Decompression Service. Other body, trim, seat and seal materials are available upon request.

3) For "36" trim, large diameter and Class 900 and higher, 17-4PH material is standard for ball and stem. All valves 6" and larger have 17-4PH stems when "36" trim is specified. Stronger material may be used to satisfy design requirements. Stems can be 316SS, S20910, (XM-19), 17-4PH, etc.

4) Trim Components Include Ball, Seats, and Stem.

* Dual rated A105/A350 LF2. "25" used F/ Low Temp Services.

How to Measure for PBV® Buried Valves



Ball Valve Stem Torques

Series 5700/6700 • 2"FP- 36"FP, Class 150 thru 2500

To calculate torque at any pressure use the formula located under Class for each valve size.

Example: An 8" Class 600 at 1100 psi = 4060 + (5.64 x 1100) = 10,264 in.-lbs.

G/PTFE Seats, Class 150-300, 2" - 14"

Port Size (in.)	Class 150 - 300 Stem Torque Formula, (in.-lbs.)	Class 150 Stem Torque (in.- lbs.)	Class 300 Stem Torque (in.- lbs.)
	MOP (psi)	285	740
2	$617 + 0.55*\Delta P$	770	1020
3	$1034 + 0.87*\Delta P$	1280	1680
4	$1450 + 1.56*\Delta P$	1890	2600
6	$3352 + 2.80*\Delta P$	4150	5420
8	$4060 + 5.64*\Delta P$	5670	8230
10	$5837 + 8.29*\Delta P$	8200	11,970
12	$12019 + 10.75*\Delta P$	15,080	19,970
14	$16327 + 12.36*\Delta P$	19,850	25,470

G/PTFE Seats, Class 150-300, 16" - 36"

Port Size (in.)	Class 150 - 300 Stem Torque Formula, (in.-lbs.)	Class 150 Stem Torque (in.- lbs.)	Class 300 Stem Torque (in.- lbs.)
	MOP (psi)	285	740
16	$20415 + 18.21*\Delta P$	25,600	33,890
18	$18152 + 32.57*\Delta P$	27,430	42,250
20	$31395 + 40.50*\Delta P$	43,790	63,580
24	$31060 + 56.26*\Delta P$	55,185	93,700
30	$74000 + 83*\Delta P$	97,770	170,940 ⁽¹⁾
34	$102760 + 127*\Delta P$	138,960	222,640 ⁽¹⁾
36	$119040 + 109*\Delta P$	150,100	199,700

⁽¹⁾ For torque calculation for pressures between 285 psi and 740 psi contact PBV® sales/engineering.

Nylon/Devlon® Seats, Class 600-2500, 2" - 36"

Port Size (in.)	Class 600 Stem Torque Formula, (in.-lbs.)	Cl. 600 Stem Torque (in.- lbs.)	Class 900 Stem Torque Formula	Cl. 900 Stem Torque (in.- lbs.)	Class 1500 Stem Torque Formula, (in.- lbs.)	Cl. 1500 Stem Torque (in.- lbs.)	Class 2500 Stem Torque Formula, (in.- lbs.)	Cl. 2500 Stem Torque (in.- lbs.)
	MOP (psi)	1480	MOP (psi)	2220	MOP (psi)	3705	MOP (psi)	6170
2	$617 + 0.55*\Delta P$	1430	$617 + 0.55*\Delta P$	1840	$617 + 0.55*\Delta P$	2660	$966 + 0.31*\Delta P$	2890
3	$1034 + 0.87*\Delta P$	2320	$1034 + 0.87*\Delta P$	2970	$1034 + 0.87*\Delta P$	4260	$1204 + 0.55*\Delta P$	4570
4	$1450 + 1.56*\Delta P$	3750	$1450 + 1.56*\Delta P$	4900	$1628 + 1.41*\Delta P$	6850	$1800 + 0.88*\Delta P$	7240
6	$3352 + 2.80*\Delta P$	7490	$3352 + 2.80*\Delta P$	9560	$3042 + 3.05*\Delta P$	14,320	$4077 + 2.73*\Delta P$	20,910
8	$4060 + 5.64*\Delta P$	12,400	$4060 + 5.64*\Delta P$	16,570	$7733 + 5.70*\Delta P$	28,830	$6425 + 5.48*\Delta P$	40,250
10	$5837 + 8.29*\Delta P$	18,100	$4809 + 9.45*\Delta P$	25,790	$7621 + 10.75*\Delta P$	47,450	$10007 + 10.21*\Delta P$	72,980
12	$12019 + 10.75*\Delta P$	27,930	$12079 + 12.54*\Delta P$	39,910	$10491 + 14.32*\Delta P$	63,550	$17049 + 14.36*\Delta P$	105,630
14	$16327 + 12.36*\Delta P$	34,620	$15028 + 22.39*\Delta P$	64,730	$18462 + 19.41*\Delta P$	90,380	—	—
16	$20415 + 18.21*\Delta P$	47,360	$18820 + 30.88*\Delta P$	116,500	$18385 + 30.74*\Delta P$	177,000	—	—
18	$18152 + 32.57*\Delta P$	66,350	$18024 + 60.89*\Delta P$	152,000	$14790 + 60.25*\Delta P$	238,000	—	—
20	$31395 + 40.50*\Delta P$	95,770	$28546 + 83.99*\Delta P$	215,000	$64400 + 74.39*\Delta P$	340,000	—	—
24	$31060 + 56.26*\Delta P$	157,500	$49264 + 87.65*\Delta P$	243,850	$71144 + 202.62*\Delta P$	520,900	—	—
30	$159000 + (201*(P-700))$	315,780	—	—	—	—	—	—
34	$206700 + (258*(P-700))$	407,940	—	—	—	—	—	—
36	$216215 + (270*(P-700))$	426,820	—	—	—	—	—	—

Torque values are for new valves with clean water.

No additional safety factors have been added.

For powered actuators, it is recommended to add an additional 25% minimum.

For dirty service, add an additional 25% minimum.

For dry gas service, add 50% minimum.

For Double Block w/body cavity bleed to zero, add 25% minimum.

To prevent stem side loading and eliminate potential stem galling, the following tolerances for mounting actuators are recommended.

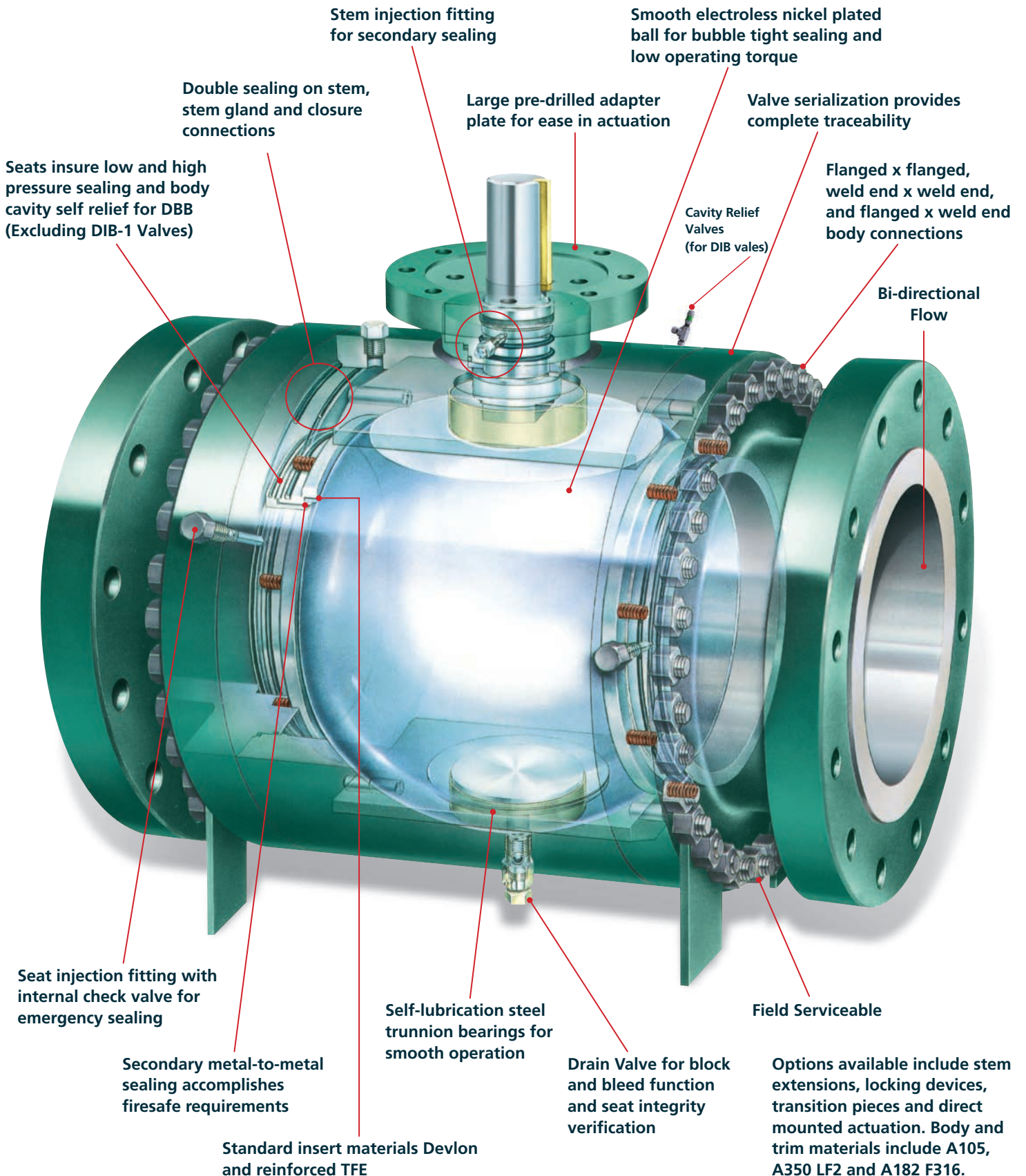
- Actuator mounting bracket flanges must be parallel within .015".
- The max allowed runout on the stem coupling bores are .008".

PBV® Engineering Excellence at Work

PBV® Series 5700/6700 Three-Piece, Side-Entry, Trunnion Ball Valve

2"- 56" ANSI Class 150/300, 600, 900, 1500 & 2500 • Full and Standard Port

PBV's trunnion ball valves are available in a variety of materials and configurations to meet your specific project requirements. Typical construction is shown here.



Design Standards and Specifications

Valve designs covered in this catalog conform to the following industry standards and specifications.

American Petroleum Institute

- API 6D • Specifications for pipeline valves
- API 607 • Fire test for soft-seated ball valves (Div. of Refining)
- API 6FA • Fire test for valves (Div. of Production)
- API Q1 • Specifications for quality programs
- API 6A • Specifications for Wellhead and Christmas Tree Equipment

Manufacturers Standardization Society

- MSS SP-25 • Standard marking system for valves

National Association of Corrosion Engineers

- NACE MR0175 • Sulfide stress cracking resistant metallic materials for oilfield equipment
- NACE MR0103 • Metallic Materials Resistant to Sulfide Stress Cracking in Corrosive Petroleum Refining Environments

American National Standard

- ASME/ANSI B 16.10 • Face-to-face and end-to-end dimensions on ferrous valves
- ASME/ANSI B 16.5 • Steel pipe flanges and flanged fittings
- ASME/ANSI B 31.1 • Power Piping
- ASME B 16.47 • Large Diameter Steel Flanges
- ASME B 31.3 • Process Piping
- ASME B 31.4 • Pipeline transportation systems for liquid
- ASME B 31.8 • Gas transmission and distribution piping systems


Canadian Standards

- CSA Z245.15 • Steel Valves

Code of Federal Regulations

- Title 49 -Part 192 • Transportation of natural and other gas by pipeline: Minimum federal safety standards

European Community

- Pressure Equipment Directive 2014/68/EU  0038
- EN 12516 Shell Design Strength

Flow Coefficients (C_v)

PBV® Series 5700/6700 Trunnion Ball Valves

C_v, by definition, is the volume of water in gallons per minute at 60°F that will flow through a given element with a pressure drop of 1 psi.

Size (in.)	Flow Coefficients (C _v) Rating					
	Cl. 150	Cl. 300	Cl. 600	Cl. 900	Cl. 1500	Cl. 2500
2 x 2	500	460	400	330	330	300
3 x 2	180	195	180	187	187	150
3 x 3	1350	1150	1050	935	830	740
4 x 3	545	535	550	510	510	410
4x 4	2500	2200	1850	1760	1660	1460
6x 4	790	765	745	740	740	590
6x 6	5300	5290	4460	4405	4100	2600
8x 6	1945	1945	2220	2035	1930	1400
8x 8	10,500	9600	8730	8475	8010	5370
10 x 8	4050	4040	4065	4050	3860	3050
10 x 10	17,500	16,750	14,250	14,205	13,310	8630
12 x 10	6900	7100	7050	7025	6670	5350
12 x 12	26,300	25,500	22,550	21,430	17,070	12,500
14 x 12	13,100	13,200	13,350	13,300	12,630	—
14 x 14	31,850	30,050	28,400	26,800	24,275	—
16 x 14	14,600	14,580	14,300	14,200	13,490	—
16 x 16	43,300	41,700	38,150	36,700	33,215	—
18 x 16	19,750	19,800	20,350	19,750	18,760	—
18 x 18	57,300	55,370	50,950	48,700	43,400	—
20 x 18	27,750	28,050	28,300	27,300	20,470	—
20 x 20	74,500	72,300	65,600	62,500	55,930	—
24 x 20	27,100	27,130	27,250	26,900	25,500	—
24 x 24	112,300	109,150	98,150	94,050	84,025	—
26 x 24	85,270	82,470	77,630	67,880	53,190	—

Size (in.)	Flow Coefficients (C _v) Rating					
	Cl. 150	Cl. 300	Cl. 600	Cl. 900	Cl. 1500	Cl. 2500
26 x 26	116,800	111,900	103,750	93,240	71,670	—
28 x 24	62,590	61,470	59,380	53,880	43,750	—
28 x 28	136,850	131,600	122,650	112,200	84,220	—
30 x 24	49,980	49,390	48,030	44,540	37,130	—
30 x 30	161,700	155,650	143,200	131,500	98,390	—
32 x 30	143,600	137,400	128,600	116,950	90,690	—
32 x 32	182,650	173,300	160,450	151,250	113,800	—
34 x 30	109,950	107,050	101,950	94,300	76,200	—
34 x 34	207,800	197,800	181,550	172,950	129,550	—
36 x 30	90,830	88,660	85,210	78,690	65,010	—
36 x 32	127,750	123,350	116,650	112,150	88,850	—
36 x 36	233,600	219,450	199,800	197,600	145,950	—
40 x 36	160,850	160,850	157,250	148,650	—	—
40 x 40	282,300	282,300	271,550	248,400	—	—
42 x 40	265,250	265,250	253,450	232,050	—	—
42 x 42	312,350	312,350	297,100	275,550	—	—
44 x 40	218,100	218,100	209,800	196,700	—	—
44 x 44	351,600	351,600	331,000	306,400	—	—
46 x 46	379,700	379,700	358,450	352,400	—	—
48 x 42	201,050	201,050	196,400	187,150	—	—
48 x 44	275,950	275,950	266,850	248,200	—	—
48 x 48	412,500	412,500	393,150	373,200	—	—
56 x 56	605,150	605,150	587,750	—	—	—

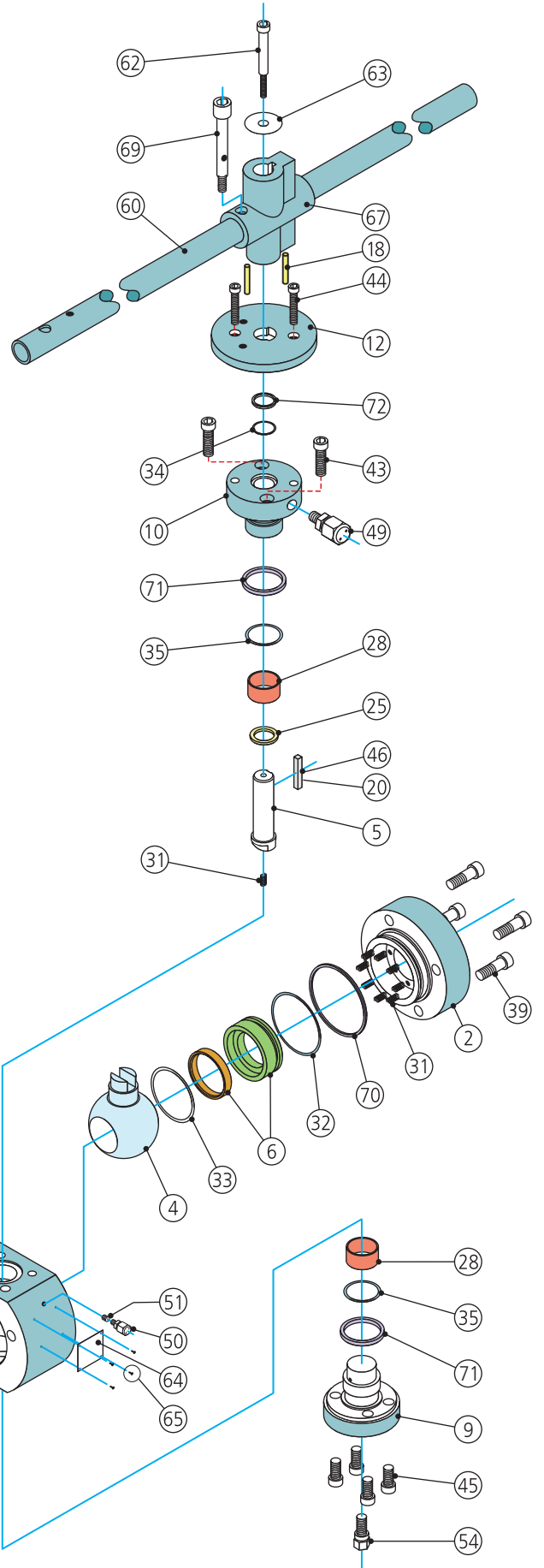
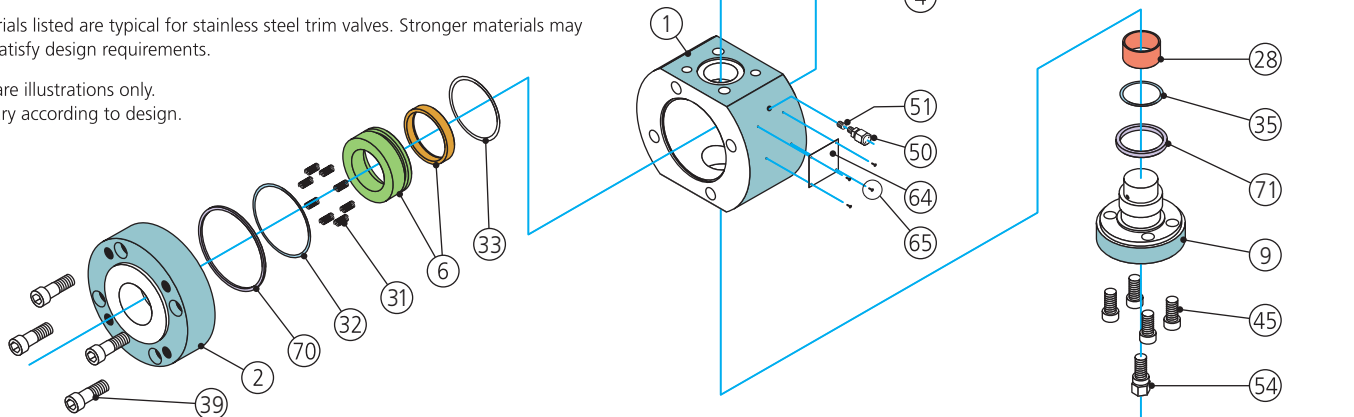
Parts for Low Pressure Small Size Diameter Valves

Series 6700 • 2"-4", Class 150 • 2", Class 300

No.	Description	Material	Spares
1	Body	A105/A350 LF2	
2	Closure	A105/A350 LF2	
4	Ball	316SS	
5	Stem	316SS	
6	Seat Ring Sub Assembly	316SS-G/PTFE	S
9	Trunnion	4130 ENP	
10	Gland	4130 ENP	
12	Adapter Plate	A36	
18	Gland Pin	Carbon Steel	
20	Stem Key	DU Dry Bearing	
25	Stem Thrust Washer	Graphite	S
28	DU Bearing	DU Dry Bearing	
31	Seat/Stem Spring	X-750	
32	Body O-ring	Viton® or HNBR	S
33	Seat O-ring	Viton® or HNBR	S
34	Stem O-ring	Viton® or HNBR	S
35	Gland & Trunnion O-ring	Viton® or HNBR	S
39	Body Cap Screw	A193 B7M	
43	Gland Cap Screw	A193 B7M	
44	Adapter Plate Cap Screw	A193 B7M	
45	Trunnion Cap Screw	A193 B7M	
46	Stem Key Cap Screw	Carbon Steel	
49	Stem Grease Fitting	Carbon Steel	
50	Body Grease Fitting	Carbon Steel	
51	Check Valve	Stainless Steel	
54	Drain Valve	Carbon Steel	
60	Handle	Carbon Steel	
62	Indicator Screw	Carbon Steel	
63	Retainer Washer	Carbon Steel	
64	Name Plate	Stainless Steel	
65	Drive Screw	Stainless Steel	
67	Handle Adapter	Carbon Steel	
69	Lock Screw	Carbon Steel	
70	Body Gasket	Graphite	S
71	Gland & Trunnion Gasket	Graphite	S
72	Stem Packing	Graphite	S

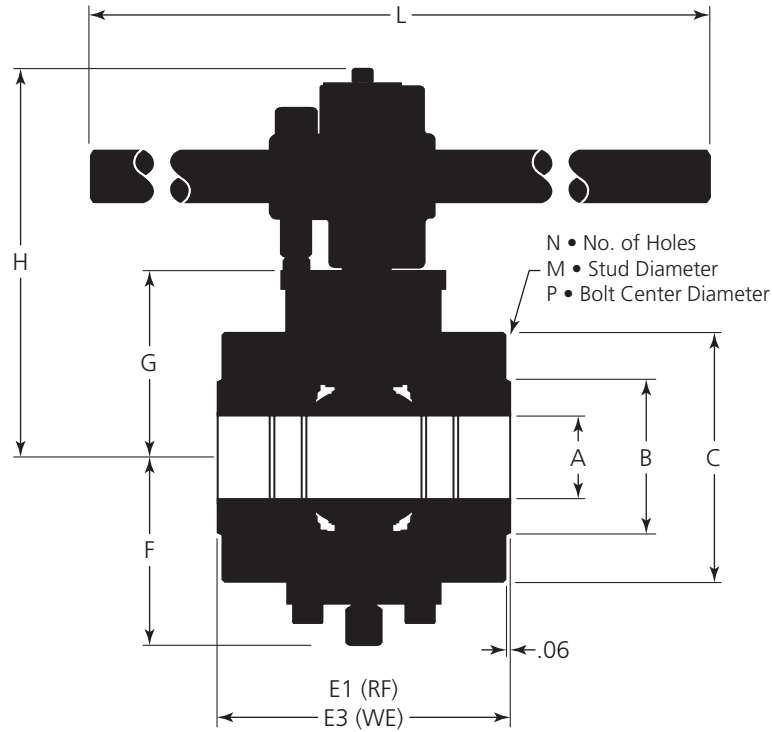
Note: Materials listed are typical for stainless steel trim valves. Stronger materials may be used to satisfy design requirements.

Assemblies are illustrations only.
Parts may vary according to design.



Dimensional Data for Low Pressure Small Size Diameter Valves

Series 6700 • 2"-4", Class 150 • 2", Class 300



Class 150, 2"FP-4"FP

Size (in.)	A	B	C	D1	E1-RF	E3-WE	F	G	H	N	M	P	L
2x2	2.00x2.00	3.62	6.00	NA	7.00	8.50	4.89	4.87	9.55	4	5/8-11 UNC	4.75	30
3x3	3.00x3.00	5.00	7.87	NA	8.00	11.12	5.87	5.94	10.92	4	5/8-11 UNC	6.00	30
4x4	4.00x4.00	6.19	9.49	NA	9.00	12.00	7.30	7.35	12.93	8	5/8-11 UNC	7.50	48

Class 300, 2"FP

Size (in.)	A	B	C	D1	E1-RF	E3-WE	F	G	H	N	M	P	L
2x2	2.00x2.00	3.62	6.50	NA	8.50	8.50	4.89	4.87	9.55	8	5/8-11 UNC	5.00	30

Small Bore Valve Design Utilizes Tapped Holes In The End Flanges to Maintain API 6D Face-to-Face Specifications

Small diameter trunnion ball valves often require tapped holes on the end flanges in order to maintain the face-to-face dimensions specified in API 6D. The full bore valves have tapped holes in accordance with API 6D instead of straight holes on both ends.

The recommended stud length is listed at right.

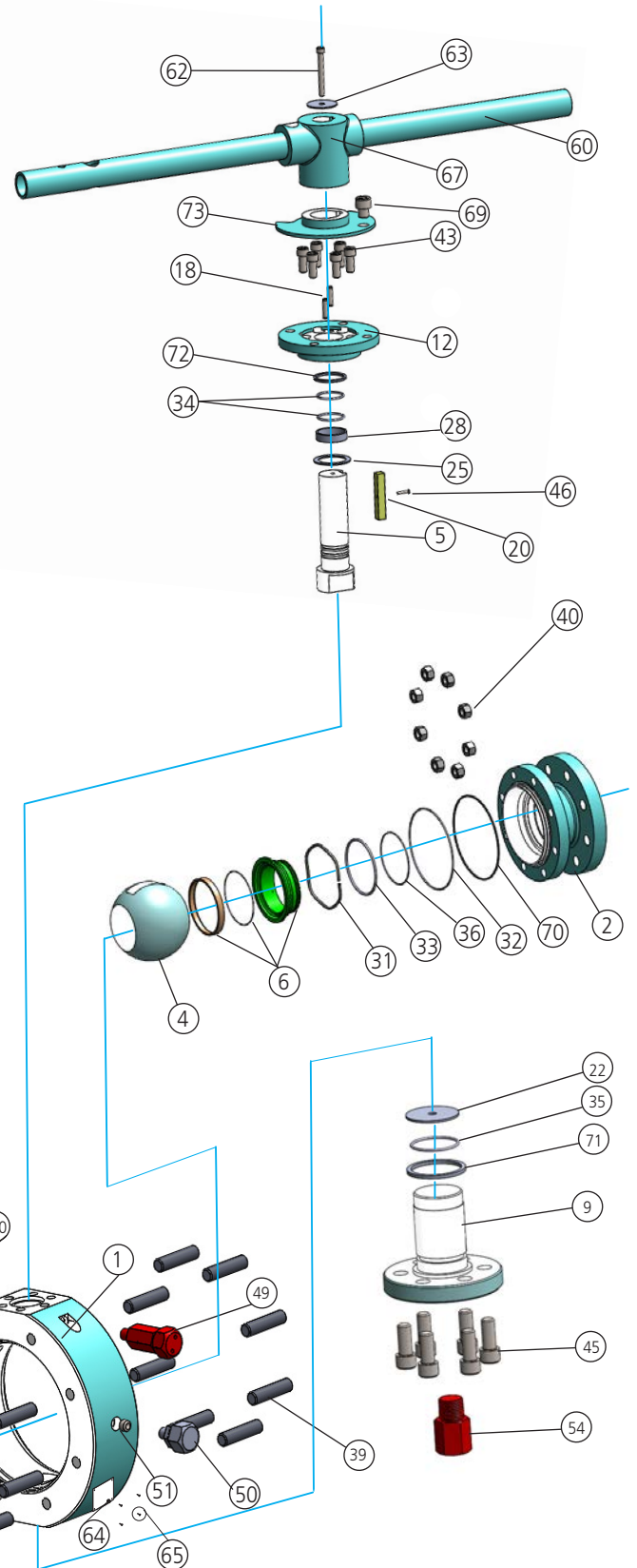
As of 2017 2" - 4" are available with through bolted design (see Page 17).

For Reference Only Stud Length to Install Valve

Bore Size	Stud Bolt Size	Quantity/Flange
2-150	5/8-11 UNC X 2.25	4
3-150	5/8-11 UNC X 2.38	4
4-150	5/8-11 UNC X 2.50	8
2-300	5/8-11 UNC X 2.50	8

Parts for Low Pressure Small Size Diameter Valves Through Bolted Series 6700 • 2"-4", Class 150 ,and Class 300

No.	Description	Material	Spares
1	Body	A105 /A350 LF2	
2	Closure	A105 /A350 LF2	
4	Ball	316SS	
5	Stem	316SS	
6	Seat Ring Sub Assembly	316SS - G/PTFE	S
9	Trunnion	4130 ENP	
12	Adapter Plate	A36	
18	Spring Pins	Carbon Steel	
20	Stem Key	Carbon Steel	
22	Ball Thrust Washer	DU Bearing	
25	Stem Thrust Washer	DU Bearing	S
28	DU Bearing	DU Dry Bearing	
31	Seat Spring	X -750	
32	Body O-ring	Viton or HNBR	S
33	Seat O-ring	Viton or HNBR	S
34	Stem O-ring	Viton or HNBR	S
35	Trunnion O-ring	Viton or HNBR	S
36	Emergency Sealant O-ring	Viton or HNBR	S
39	Body Stud	A193 B7M	
40	Body Nut	A194 2HM	
43	Adapter Plate Cap Screw	A193 B7M	
45	Trunnion Cap Screw	A193 B7M	
46	Stem Key Cap Screw	Carbon Steel	
49	Stem Grease Fitting	Carbon Steel	
50	Body Grease Fitting	Carbon Steel	
51	Check Valve	Stainless Steel	
54	Drain Valve	Carbon Steel	
60	Handle	Carbon Steel	
62	Indicator Screw	Carbon Steel	
63	Retainer Washer	Carbon Steel	
64	Name Plate	Stainless Steel	
65	Drive Screw	Stainless Steel	
67	Handle Adapter	Carbon Steel	
69	Lock Screw	Carbon Steel	
70	Body Gasket	Graphite	S
71	Trunnion Gasket	Graphite	S
72	Stem Packing	Graphite	S
73	Stop Plate	Carbon Steel	
100*	Cavity Relief Valve	316	



Note: Materials listed are typical for stainless steel trim valves. Stronger materials may be used to satisfy design requirements.

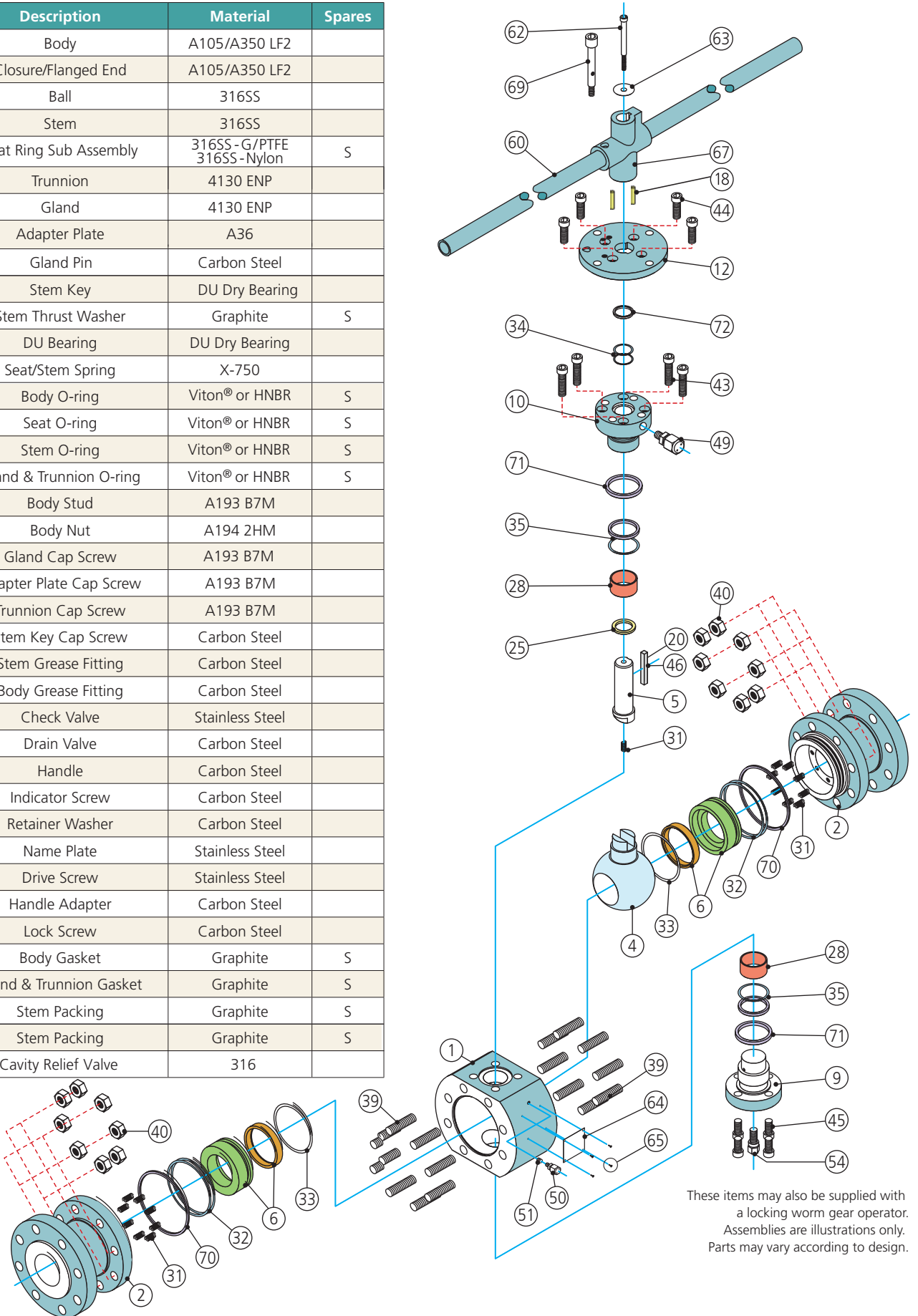
Assemblies are illustrations only. Parts may vary according to design. *DIB-1 Valves only.

Parts for High Pressure Small Size Diameter Valves

Series 5700/6700 • 2"-4", Class 600, 900, 1500 and 2500

No.	Description	Material	Spares
1	Body	A105/A350 LF2	
2	Closure/Flanged End	A105/A350 LF2	
4	Ball	316SS	
5	Stem	316SS	
6	Seat Ring Sub Assembly	316SS-G/PTFE 316SS-Nylon	S
9	Trunnion	4130 ENP	
10	Gland	4130 ENP	
12	Adapter Plate	A36	
18	Gland Pin	Carbon Steel	
20	Stem Key	DU Dry Bearing	
25	Stem Thrust Washer	Graphite	S
28	DU Bearing	DU Dry Bearing	
31	Seat/Stem Spring	X-750	
32	Body O-ring	Viton® or HNBR	S
33	Seat O-ring	Viton® or HNBR	S
34	Stem O-ring	Viton® or HNBR	S
35	Gland & Trunnion O-ring	Viton® or HNBR	S
39	Body Stud	A193 B7M	
40	Body Nut	A194 2HM	
43	Gland Cap Screw	A193 B7M	
44	Adapter Plate Cap Screw	A193 B7M	
45	Trunnion Cap Screw	A193 B7M	
46	Stem Key Cap Screw	Carbon Steel	
49	Stem Grease Fitting	Carbon Steel	
50	Body Grease Fitting	Carbon Steel	
51	Check Valve	Stainless Steel	
54	Drain Valve	Carbon Steel	
60	Handle	Carbon Steel	
62	Indicator Screw	Carbon Steel	
63	Retainer Washer	Carbon Steel	
64	Name Plate	Stainless Steel	
65	Drive Screw	Stainless Steel	
67	Handle Adapter	Carbon Steel	
69	Lock Screw	Carbon Steel	
70	Body Gasket	Graphite	S
71	Gland & Trunnion Gasket	Graphite	S
72	Stem Packing	Graphite	S
72	Stem Packing	Graphite	S
100*	Cavity Relief Valve	316	

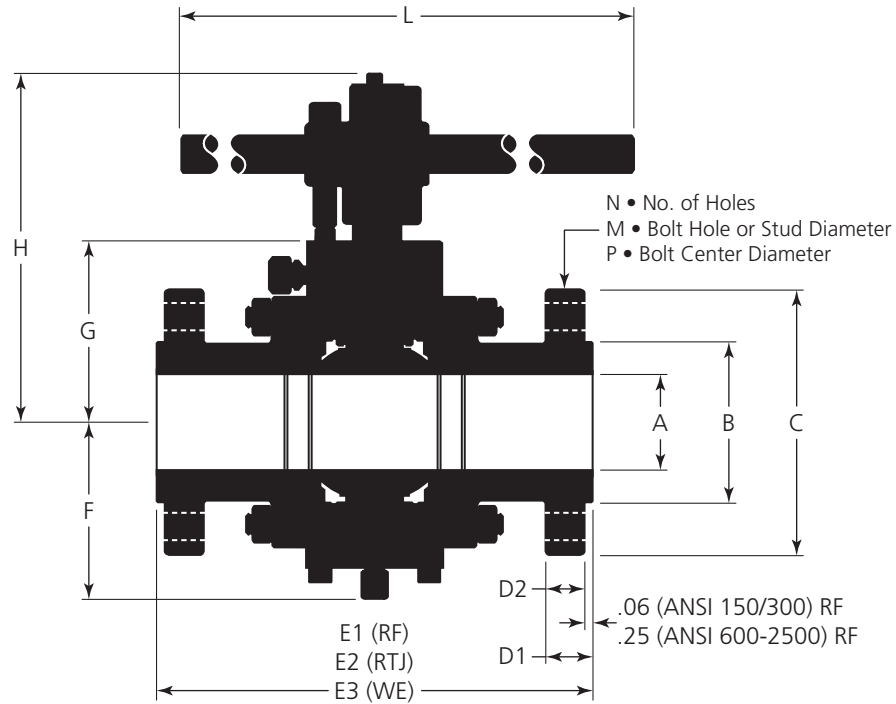
Note: Materials listed are typical for stainless steel trim valves. Stronger materials may be used to satisfy design requirements.
*DIB-1 Valves Only (Not shown in picture)



These items may also be supplied with a locking worm gear operator. Assemblies are illustrations only. Parts may vary according to design.

Dimensional Data for High Pressure Small Size Diameter Valves

Series 5700/6700 • 6"RP, Class 150 • 3"RP-6"RP, Class 300 • 2"FP-6"RP, Class 600



Class 150, 6"RP

Size (in.)	A	B	C	D1	E1-RF	E2-RTJ	E3-WE	F	G	H	N	M	P	L
6x4	6.00x4.00	8.50	11.00	1.00	15.50	16.00	18.00	7.30	7.35	12.93	8	0.88	9.50	48

Class 300, 3"RP-6"RP

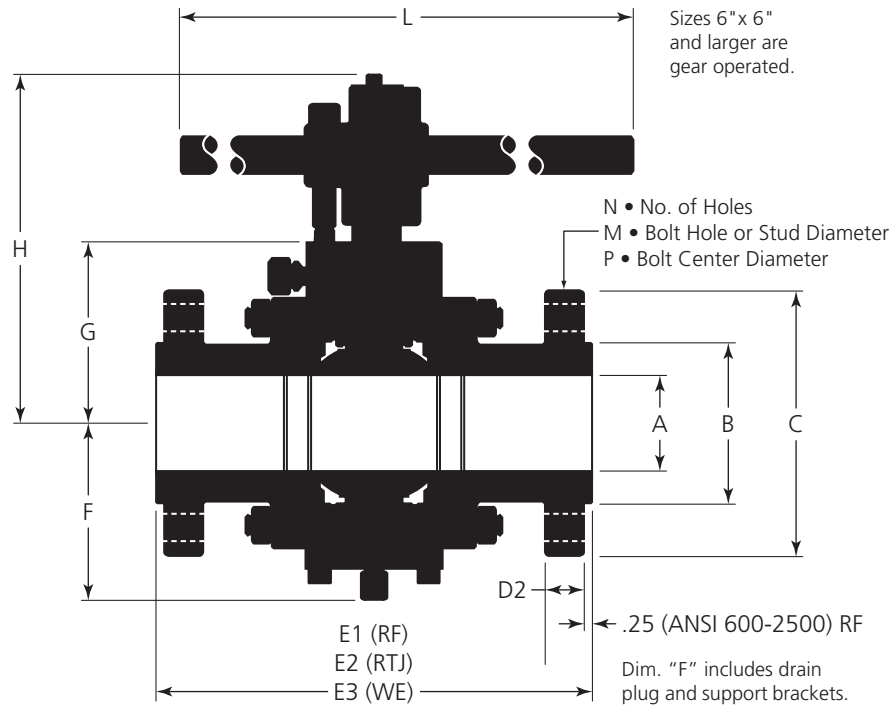
Size (in.)	A	B	C	D1	E1-RF	E2-RTJ	E3-WE	F	G	H	N	M	P	L
3x2	3.00x2.00	5.00	8.25	1.12	11.12	11.75	11.12	4.89	4.87	9.55	8	0.88	6.62	30
3x3	3.00x3.00	5.00	8.25	1.12	11.12	11.75	11.12	5.87	5.94	10.92	8	3/4-10 UNC	6.62	30
4x3	4.00x3.00	6.19	10.00	1.25	12.00	12.62	12.00	5.87	5.94	10.92	8	0.88	7.88	30
4x4	4.00x4.00	6.19	10.00	1.25	12.00	12.62	12.00	7.30	7.35	12.93	8	3/4-10 UNC	7.88	48
6x4	6.00x4.00	8.50	12.50	1.44	15.88	16.50	18.00	7.30	7.35	12.93	12	0.88	10.62	48

Class 600, 2"FP-6"RP

Size (in.)	A	B	C	D2	E1-RF	E2-RTJ	E3-WE	F	G	H	N	M	P	L
2x2	2.00x2.00	3.62	6.50	1.00	11.50	11.62	11.50	4.89	4.87	9.55	8	0.75	5.00	30
3x2	3.00x2.00	5.00	8.25	1.25	14.00	14.12	14.00	4.89	4.87	9.55	8	0.88	6.62	30
3x3	3.00x3.00	5.00	8.25	1.25	14.00	14.12	14.00	5.87	5.94	10.92	8	0.88	6.62	30
4x3	4.00x3.00	6.19	10.75	1.50	17.00	17.12	17.00	5.87	5.94	10.92	8	1.00	8.50	30
4x4	4.00x4.00	6.19	10.75	1.50	17.00	17.12	17.00	7.30	7.35	12.93	8	1.00	8.50	48
6x4	6.00x4.00	8.50	14.00	1.88	22.00	22.12	22.00	7.30	7.35	12.93	12	1.12	11.50	48

Dimensional Data for High Pressure Small Size Diameter Valves

Series 5700/6700 • 2"FP-6"RP, Class 900, 1500 and 2500



Class 900, 2"FP-6"RP

Size (in.)	A	B	C	D2	E1-RF	E2-RTJ	E3-WE	F	G	H	N	M	P	L
2x2	2.00x2.00	3.62	8.50	1.50	14.50	14.62	14.50	4.89	4.87	9.55	8	1.00	6.50	30
3x2	3.00x2.00	5.00	9.50	1.50	15.00	15.12	15.00	4.89	4.87	9.55	8	1.00	7.50	30
3x3	3.00x3.00	5.00	9.50	1.50	15.00	15.12	15.00	5.87	5.94	10.92	8	1.00	7.50	30
4x3	4.00x3.00	6.19	11.50	1.75	18.00	18.12	18.00	5.87	5.94	10.92	8	1.25	9.25	30
4x4	4.00x4.00	6.19	11.50	1.75	18.00	18.12	18.00	7.30	7.35	12.93	8	1.25	9.25	48
6x4	6.00x4.00	8.50	15.00	2.19	24.00	24.12	24.00	7.30	7.35	12.93	12	1.25	12.50	48

Class 1500, 2"FP-6"RP

Size (in.)	A	B	C	D2	E1-RF	E2-RTJ	E3-WE	F	G	H	N	M	P	L
2x2	2.00x2.00	3.62	8.50	1.50	14.50	14.62	14.50	5.32	5.47	10.30	8	1.00	6.50	30
3x2	3.00x2.00	5.00	10.50	1.88	18.50	18.62	18.50	5.32	5.47	10.30	8	1.25	8.00	30
3x3	3.00x3.00	5.00	10.50	1.88	18.50	18.62	18.50	6.89	6.42	11.60	8	1.25	8.00	30
4x3	4.00x3.00	6.19	12.25	2.12	21.50	21.62	21.50	6.89	6.42	11.60	8	1.38	9.50	30
4x4	4.00x4.00	6.19	12.25	2.12	21.50	21.62	21.50	8.14	7.88	13.75	8	1.38	9.50	48
6x4	5.75x4.00	8.50	15.50	3.25	27.75	28.00	27.75	8.14	7.88	13.75	12	1.50	12.50	48

Class 2500, 2"FP-6"RP

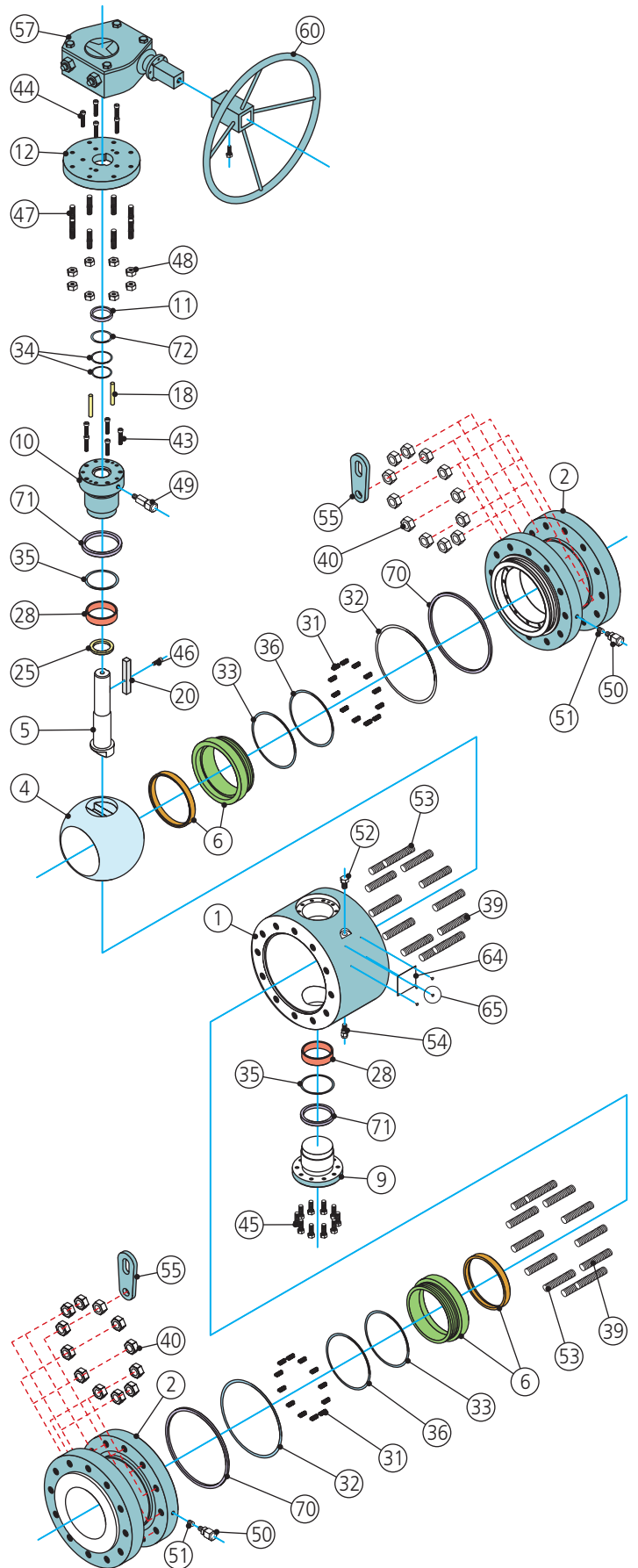
Size (in.)	A	B	C	D2	E1-RF	E2-RTJ	E3-WE	F	G	H	N	M	P	L
2x2	1.75x1.75	3.62	9.25	2.00	17.75	17.87	17.75	6.39	7.25	13.19	8	1.12	6.75	30
3x2	2.50x1.75	5.00	12.00	2.62	22.75	23.00	22.75	6.39	7.25	13.19	8	1.38	9.00	30
3x3	2.50x2.50	5.00	12.00	2.62	22.75	23.00	22.75	8.20	8.42	14.68	8	1.38	9.00	30
4x3	3.50x2.50	6.19	14.00	3.00	26.50	26.88	26.50	8.20	8.42	14.68	8	1.63	10.75	30
4x4	3.50x3.50	6.19	14.00	3.00	26.50	26.88	26.50	9.43	10.56	16.93	8	1.63	10.75	48
6x4	5.25x3.50	8.50	19.00	4.25	36.00	36.50	36.00	9.43	10.56	16.93	8	2.12	14.50	48

Parts for Mid Size Diameter Valves

Series 5700 • 8"- 14"RP, Class 150, 300, 600, 900 and 1500 • 6"- 12"RP, Class 2500

Series 6700 • 6"- 12"FP, Class 150, 300, 600, 900 and 1500 • 6"- 10"FP, Class 2500

No.	Description	Material	Spares
1	Body	A105/A350 LF2	
2	Closure/Flanged End	A105/A350 LF2	
4	Ball	A105/A350 LF2 ENP	
5	Stem	4130 ENP	
6	Seat Ring Sub Assembly	A105/A350 LF2 ENP G/PTFE or Nylon	S
9	Trunnion	4130 ENP	
10	Gland	4130 ENP	
11	Bushing	Carbon Steel	
12	Adapter Plate	A36	
18	Gland Pin	Carbon Steel	
20	Stem Key	Carbon Steel	
25	Stem Thrust Washer	Graphite	S
28	DU Bearing	DU Dry Bearing	
31	Seat Spring	X-750	
32	Body O-ring	Viton® or HNBR	S
33	Seat O-ring	Viton® or HNBR	S
34	Stem O-ring	Viton® or HNBR	S
35	Gland & Trunnion O-ring	Viton® or HNBR	S
36	Emergency Sealant O-ring	Viton® or HNBR	S
39	Body Stud	A193 B7M	
40	Body Nut	A194 2HM	
43	Gland Cap Screw	A193 B7M	
44	Adapter Plate Cap Screw	A193 B7M	
45	Trunnion Cap Screw	A193 B7M	
46	Stem Key Cap Screw	Carbon Steel	
47	Gear Stud	A193 B7	
48	Gear/Adapter Plate Nut	A194 2H	
49	Stem Grease Fitting	Carbon Steel	
50	Seat Grease Fitting	Carbon Steel	
51	Check Valve	Stainless Steel	
52	Vent Plug	Carbon Steel	
53	Lifting Lug Stud	A193 B7M	
54	Drain Valve	Carbon Steel	
55	Lifting Lug	Carbon Steel	
57	Worm Gear Operator	Commercial	
60	Handwheel	Carbon Steel	
64	Name Plate	Stainless Steel	
65	Drive Screw	Stainless Steel	
70	Body Gasket	Graphite	S
71	Gland & Trunnion Gasket	Graphite	S
72	Stem Packing	Graphite	S
100*	Cavity Relief Valve	316	



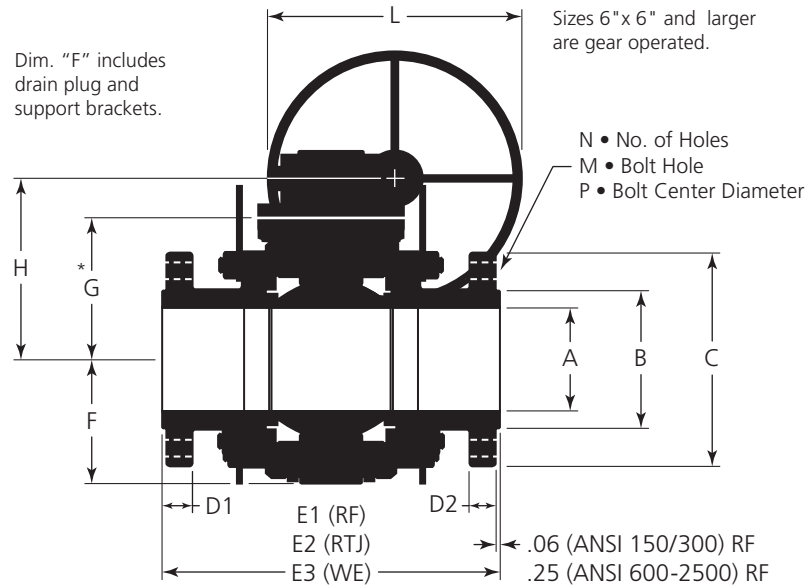
Note: Sizes 6" and 8" may be supplied with locking levers. Sizes 10" and 12" are supplied with support feet, not shown. Materials listed are typical for carbon steel valves. Ball, stem & seat rings will be 316, 17-4PH, or XM-19 for stainless steel trim depending on design requirements.

*DIB-1 Valves Only (Not shown in picture)

Assemblies are illustrations only.
Parts may vary according to design.

Dimensional Data for Mid Size Diameter Valves

Series 5700/6700 • 6"FP-14"RP, Class 150, 300 and 600



Class 150, 6"FP-14"RP

Size (in.)	A	B	C	D1	E1-RF	E2-RTJ	E3-WE	F*	G	H	N	M	P	L
6x6	6.00x6.00	8.50	11.00	1.00	15.50	16.00	18.00	7.25	8.48	10.63	8	0.88	9.50	24
8x6	8.00x6.00	10.62	13.50	1.12	18.00	18.50	20.50	7.25	8.48	10.63	8	0.88	11.75	24
8x8	8.00x8.00	10.62	13.50	1.12	18.00	18.50	20.50	8.72	10.13	12.26	8	0.88	11.75	24
10x8	10.00x8.00	12.75	16.00	1.19	21.00	21.50	22.00	8.72	10.13	12.26	12	1.00	14.25	24
10x10	10.00x10.00	12.75	16.00	1.19	21.00	21.50	22.00	10.56	11.96	14.09	12	1.00	14.25	24
12x10	12.00x10.00	15.00	19.00	1.25	24.00	24.50	25.00	10.56	11.96	14.09	12	1.00	17.00	24
12x12	12.00x12.00	15.00	19.00	1.25	24.00	24.50	25.00	12.26	13.75	15.88	12	1.00	17.00	24
14x12	13.25x12.00	16.25	21.00	1.38	27.00	27.50	30.00	12.26	13.75	15.88	12	1.12	18.75	24

Class 300, 6"FP-14"RP

Size (in.)	A	B	C	D1	E1-RF	E2-RTJ	E3-WE	F*	G	H	N	M	P	L
6x6	6.00x6.00	8.50	12.50	1.44	15.88	16.50	18.00	7.25	8.48	10.63	12	0.88	10.62	24
8x6	8.00x6.00	10.62	15.00	1.62	19.75	20.38	20.50	7.25	8.48	10.63	12	1.00	13.00	24
8x8	8.00x8.00	10.62	15.00	1.62	19.75	20.38	20.50	8.72	10.13	12.26	12	1.00	13.00	24
10x8	10.00x8.00	12.75	17.50	1.88	22.38	23.00	22.00	8.72	10.13	12.26	16	1.12	15.25	24
10x10	10.00x10.00	12.75	17.50	1.88	22.38	23.00	22.00	10.56	11.96	14.09	16	1.12	15.25	24
12x10	12.00x10.00	15.00	20.50	2.00	25.50	26.12	25.00	10.56	11.96	14.09	16	1.25	17.75	24
12x12	12.00x12.00	15.00	20.50	2.00	25.50	26.12	25.00	12.26	13.75	15.88	16	1.25	17.75	24
14x12	13.25x12.00	16.25	23.00	2.12	30.00	30.62	30.00	12.26	13.75	15.88	20	1.25	20.25	30

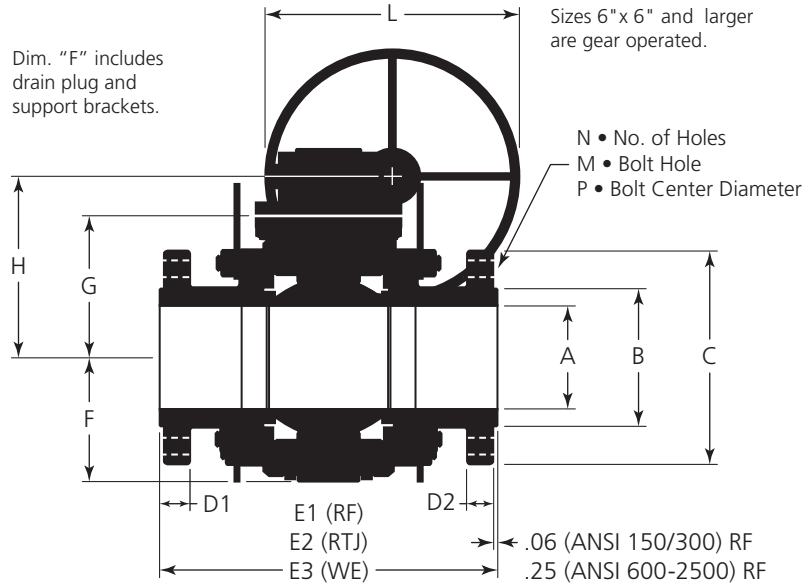
Class 600, 6"FP-14"RP

Size (in.)	A	B	C	D1	E1-RF	E2-RTJ	E3-WE	F*	G	H	N	M	P	L
6x6	6.00x6.00	8.50	14.00	1.88	22.00	22.12	22.00	7.25	8.48	10.63	12	1.12	11.50	24
8x6	8.00x6.00	10.62	16.50	2.19	26.00	26.12	26.00	7.25	8.48	10.63	12	1.25	13.75	24
8x8	8.00x8.00	10.62	16.50	2.19	26.00	26.12	26.00	11.25	11.57	13.70	12	1.25	13.75	24
10x8	10.00x8.00	12.75	20.00	2.50	31.00	31.12	31.00	11.25	11.57	13.70	16	1.38	17.00	24
10x10	10.00x10.00	12.75	20.00	2.50	31.00	31.12	31.00	12.76	13.32	15.45	16	1.38	17.00	24
12x10	12.00x12.00	15.00	22.00	2.62	33.00	33.12	33.00	12.76	13.32	15.45	20	1.38	19.25	24
12x12	12.00x12.00	15.00	22.00	2.62	33.00	33.12	33.00	13.86	14.94	21.52	20	1.38	19.25	30
14x12	13.25x12.00	16.25	23.75	2.75	35.00	35.12	35.00	13.86	14.94	21.52	20	1.50	20.75	30

* Legs are for shipping purpose only. Dimensions are subject to change without notice.

Dimensional Data for Mid Size Diameter Valves

Series 5700/6700 • 6"FP-14"RP, Class 900 and 1500



Class 900, 6"FP-14"RP

Size (in.)	A	B	C	D2	E1-RF	E2-RTJ	E3-WE	F*	G	H	N	M	P	L
6x6	6.00x6.00	8.50	15.00	2.19	24.00	24.12	24.00	8.62	10.01	12.14	12	1.25	12.50	24
8x6	8.00x6.00	10.62	18.50	2.50	29.00	29.12	29.00	8.62	10.01	12.14	12	1.50	15.50	24
8x8	8.00x8.00	10.62	18.50	2.50	29.00	29.12	29.00	10.00	11.57	13.70	12	1.50	15.50	24
10x8	10.00x8.00	12.75	21.50	2.75	33.00	33.12	33.00	10.00	11.57	13.70	16	1.50	18.50	24
10x10	10.00x10.00	12.75	21.50	2.75	33.00	33.12	33.00	11.74	13.32	19.90	16	1.50	18.50	30
12x10	12.00x12.00	15.00	24.00	3.12	38.00	38.12	38.00	11.74	13.32	19.90	20	1.50	21.00	30
12x12	12.00x12.00	15.00	24.00	3.12	38.00	38.12	38.00	13.86	15.46	21.52	20	1.50	21.00	30
14x12	12.75x12.00	16.25	25.25	3.38	40.50	40.88	40.50	13.86	15.46	21.52	20	1.62	22.00	30

Class 1500, 6"FP-14"RP

Size (in.)	A	B	C	D2	E1-RF	E2-RTJ	E3-WE	F*	G	H	N	M	P	L
6x6	5.75x5.75	8.50	15.50	3.25	27.75	28.00	27.75	9.72	10.67	12.80	12	1.50	12.50	24
8x6	7.63x5.75	10.62	19.00	3.62	32.75	33.13	32.75	9.72	10.67	12.80	12	1.75	15.50	24
8x8	7.63x7.63	10.62	19.00	3.62	32.75	33.13	32.75	12.16	12.88	19.46	12	1.75	15.50	30
10x8	9.50x7.63	12.75	23.00	4.25	39.00	39.38	39.00	12.16	12.88	19.46	12	2.00	19.00	30
10x10	9.50x9.50	12.75	23.00	4.25	39.00	39.38	39.00	14.40	15.48	22.06	12	2.00	19.00	30
12x10	11.38x9.50	15.00	26.50	4.88	44.50	45.12	44.50	14.40	15.48	22.06	16	2.12	22.50	30
12x12	11.38x11.38	15.00	26.50	4.88	44.50	45.12	44.50	16.98	17.83	24.41	16	2.12	22.50	30
14x12	12.50x11.38	16.25	29.50	5.25	49.50	50.25	49.50	16.98	17.83	24.41	16	2.38	25.00	30

Class 2500, 6"FP-12"RP

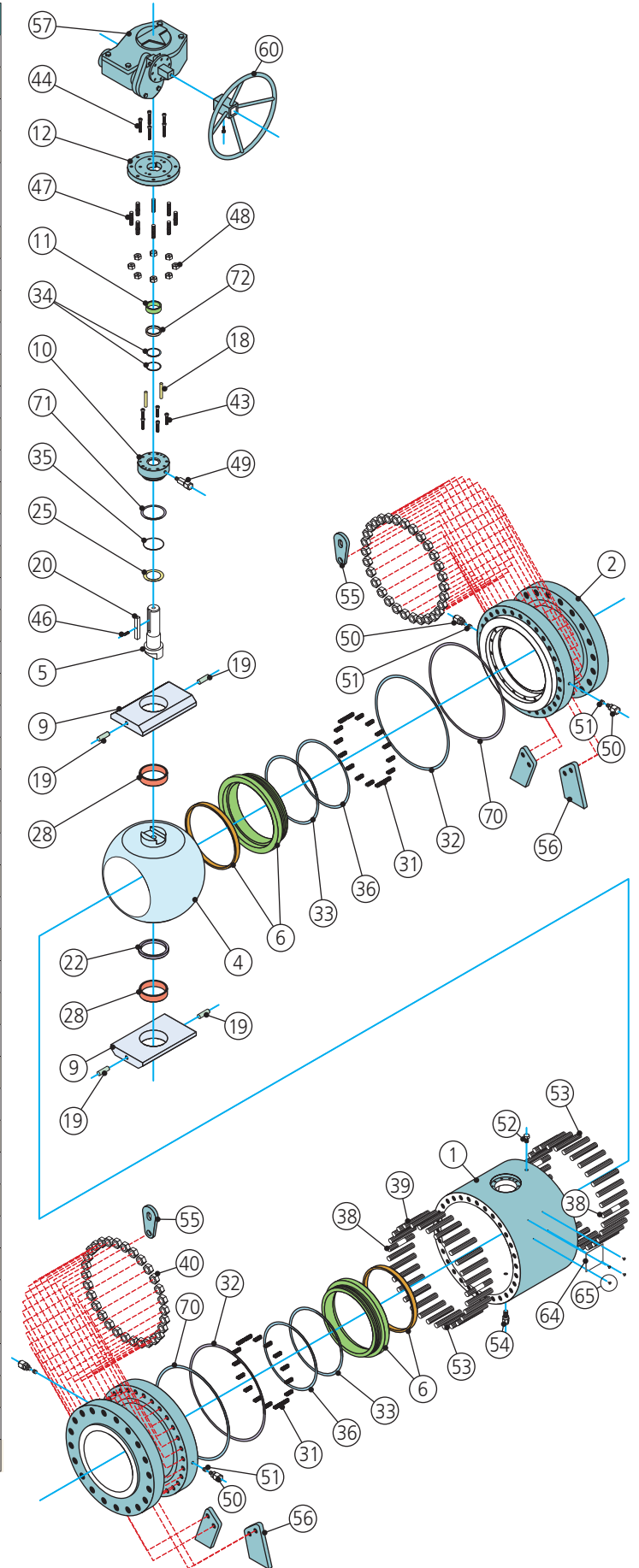
Size (in.)	A	B	C	D2	E1-RF	E2-RTJ	E3-WE	F*	G	H	N	M	P	L
6x6	5.25x5.25	8.50	19.00	4.25	36.00	36.50	36.00	12.74	12.70	19.28	8	2.12	14.50	30
8x6	7.14x5.25	10.62	21.75	5.00	40.25	40.87	40.25	12.74	12.70	19.28	12	2.12	17.25	30
8x8	7.14x7.14	10.62	21.75	5.00	40.25	40.87	40.25	15.22	16.63	18.76	12	2.12	17.25	30
10x8	8.88x7.14	12.75	26.50	6.50	50.00	50.88	50.00	15.22	16.63	18.76	12	2.62	21.25	30
10x10	8.88x8.88	12.75	26.50	6.50	50.00	50.88	50.00	19.73	18.25	24.83	12	2.62	21.25	30
12x10	10.50x8.88	15.00	30.00	7.25	56.00	56.88	56.00	19.73	18.25	24.83	12	2.88	24.38	30
12x12	10.50x10.50	15.00	30.00	7.25	56.00	56.88	56.00	22.06	20.79	27.69	12	2.88	24.38	30

* Legs are for shipping purpose only. Dimensions are subject to change without notice.

Parts for Large Size Diameter Valves

Series 5700/6700 • 14"FP-56"FP, Class 150, 300, 600, 900 and 1500 • 12", Class 2500

No.	Description	Material	Spares
1	Body	A105/A350 LF2	
2	Closure/Flanged End	A105/A350 LF2	
4	Ball	A105/A350 LF2 ENP	
5	Stem	4130 ENP	
6	Seat Ring Sub Assembly	A105/A350 LF2 ENP G/PTFE or Nylon	S
9	Bearing Retainer	Carbon Steel	
10	Gland	4130 ENP	
11	Bushing	Carbon Steel	
12	Adapter Plate	A36	
18	Gland Pin	Carbon Steel	
20	Stem Key	Carbon Steel	
22	Ball Thrust Washer	Phenolic	S
25	Stem Thrust Washer	Phenolic	S
28	DU Bearing	DU Dry Bearing	
31	Seat Spring	X-750	
32	Body O-ring	Viton® or HNBR	S
33	Seat O-ring	Viton® or HNBR	S
34	Stem O-ring	Viton® or HNBR	S
35	Gland O-ring	Viton® or HNBR	S
36	Emergency Sealant O-ring	Viton® or HNBR	S
38	Location Stud	A193 B7M	
39	Body Stud	A193 B7M	
40	Body Nut	A194 2HM	
43	Gland Cap Screw	A193 B7M	
44	Adapter Plate Cap Screw	A193 B7M	
46	Stem Key Cap Screw	Carbon Steel	
47	Gear Stud	A193 B7	
48	Gear/Adapter Plate Nut	A194 2H	
49	Stem Grease Fitting	Carbon Steel	
50	Seat Grease Fitting	Carbon Steel	
51	Check Valve	Stainless Steel	
52	Vent Plug	Carbon Steel	
53	Lifting Lug Stud	A193 B7M	
54	Drain Valve	Carbon Steel	
55	Lifting Lug	Carbon Steel	
56	Support Leg	Carbon Steel	
57	Worm Gear Operator	Commercial	
60	Handwheel	Carbon Steel	
64	Name Plate	Stainless Steel	
65	Drive Screw	Stainless Steel	
70	Body Gasket	Graphite	S
71	Gland & Trunnion Gasket	Graphite	S
72	Stem Packing	Graphite	S
100*	Cavity Relief Valve	316	

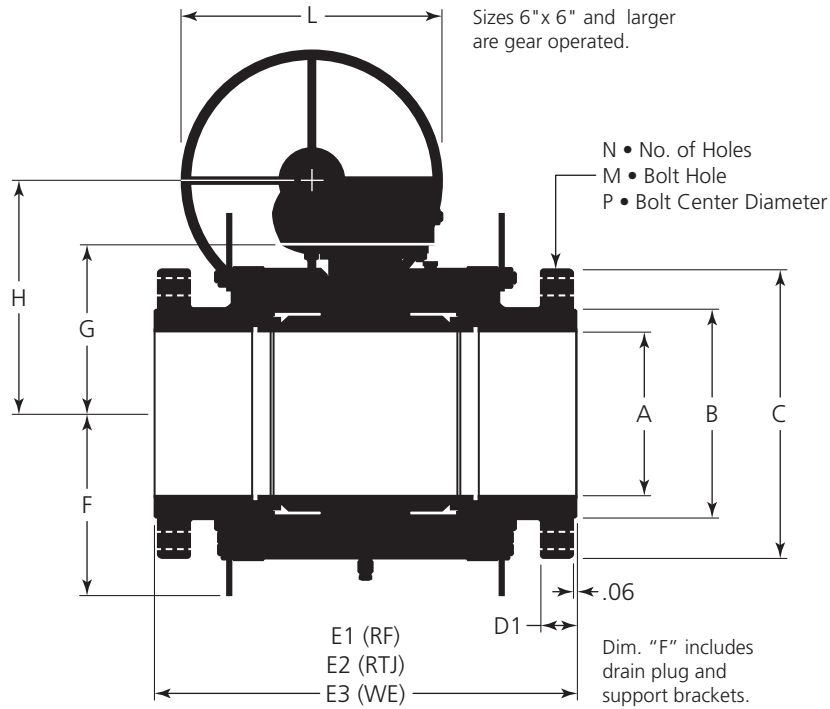


Note: Materials listed are typical for carbon steel valves. Ball, stem & seat rings will be 316, 17-4PH, or XM-19 or stainless steel trim depending on design requirements.
*DIB-1 Valves Only (not shown in picture)

Assemblies are illustrations only.
Parts may vary according to design.

Dimensional Data for Large Size Diameter Valves

Series 5700/6700 • 14"FP- 56"FP, Class 150



Class 150, 14"FP- 56"FP

Size (in.)	A	B	C	D1	E1-RF	E2-RTJ	E3-WE	F***	G	H	N	M	P	L
14x14	13.25 x 13.25	16.25	21.00	1.38	27.00	27.50	30.00	14.92	15.18**	20.89	12	1.12	18.75	30
16x14	15.25 x 13.25	18.50	23.50	1.44	30.00	30.50	33.00	14.92	15.18**	20.89	16	1.12	21.25	30
16x16	15.25 x 15.25	18.50	23.50	1.44	30.00	30.50	33.00	16.60	15.89	22.47	16	1.12	21.25	30
18x16	17.25 x 15.25	21.00	25.00	1.56	34.00	34.50	36.00	16.60	15.89	22.47	16	1.25	22.75	30
18x18	17.25 x 17.25	21.00	25.00	1.56	34.00	34.50	36.00	21.05	19.76	26.34	16	1.25	22.75	30
20x18	19.25 x 17.25	23.00	27.50	1.69	36.00	36.50	39.00	21.05	19.76	26.34	20	1.25	25.00	30
20x20	19.25 x 19.25	23.00	27.50	1.69	36.00	36.50	39.00	19.67	20.20	26.78	20	1.25	25.00	30
24x20	23.25 x 19.25	27.25	32.00	1.88	42.00	42.50	45.00	22.75	20.20	26.78	20	1.38	29.50	30
24x24	23.25 x 23.25	27.25	32.00	1.88	42.00	42.50	45.00	22.75	23.34	30.24	20	1.38	29.50	30
30x30	29.00 x 29.00	33.75	38.75	2.88	51.00	*	55.00	31.25	32.08	38.98	28	1.38	36.00	30
36x36	34.50 x 34.50	40.25	46.00	3.50	60.00	*	68.00	34.39	35.83	42.73	32	1.62	42.75	30
40x40	38.50 x 38.50	44.25	50.75	3.50	72.83	*	70.08	36.54	37.13	*	*	*	*	*
44x44	42.32 x 42.32	49.00	55.25	3.94	76.77	*	74.80	39.76	40.39	*	*	*	*	*
48x48	45.98 x 45.98	53.50	59.50	4.19	85.83	*	82.68	41.77	43.19	*	*	*	*	*
56x56	53.62 x 53.62	62.00	68.75	4.82	90.55	*	88.58	48.50	49.92	*	*	*	*	*

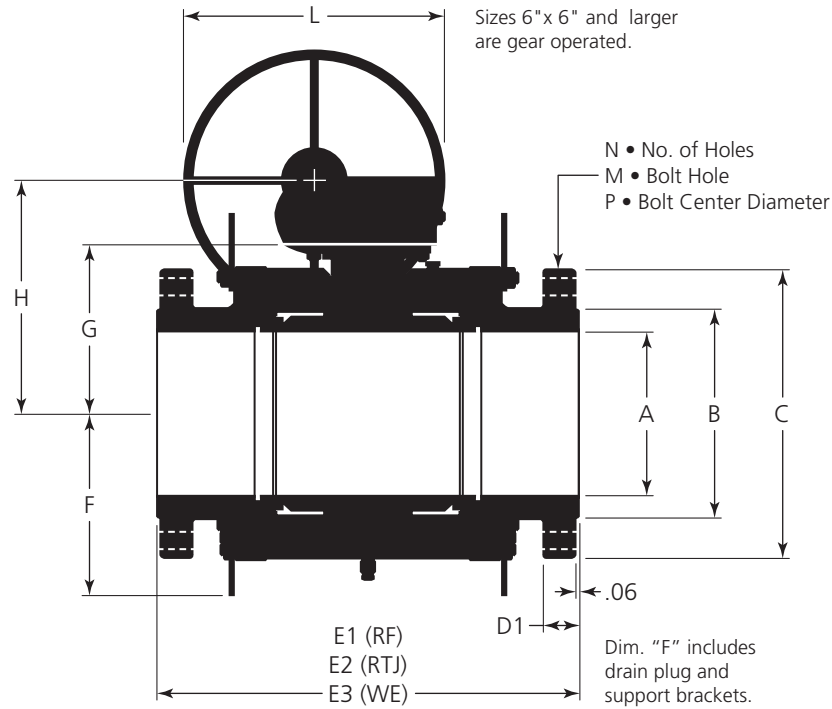
*Contact your PBV® salesperson for additional sizes and materials.

**Change introduced 2004.

*** Legs are for shipping purpose only. Dimensions are subject to change without notice.

Dimensional Data for Large Size Diameter Valves

Series 5700/6700 • 14"FP- 56"FP, Class 300



Class 300, 14"FP- 56"FP

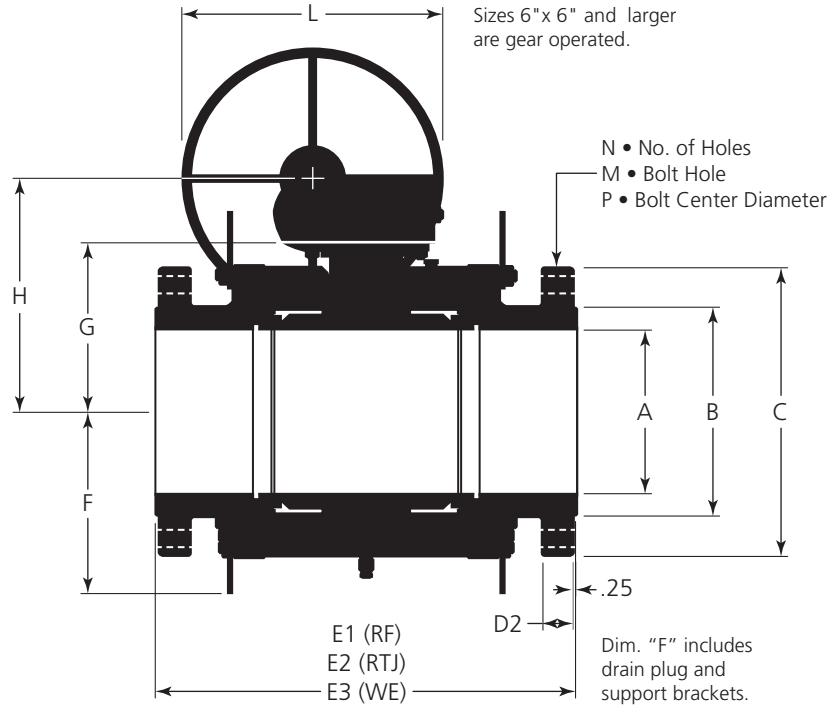
Size (in.)	A	B	C	D1	E1-RF	E2-RTJ	E3-WE	F**	G	H	N	M	P	L
14x14	13.25 x 13.25	16.25	23.00	2.12	30.00	30.62	30.00	14.92	14.31	20.89	20	1.25	20.25	30
16x14	15.25 x 13.25	18.50	25.50	2.25	33.00	33.62	33.00	14.92	14.31	20.89	20	1.38	22.50	30
16x16	15.25 x 15.25	18.50	25.50	2.25	33.00	33.62	33.00	16.60	15.89	22.47	20	1.38	22.50	30
18x16	17.25 x 15.25	21.00	28.00	2.38	36.00	36.62	36.00	16.60	15.89	22.47	24	1.38	24.75	30
18x18	17.25 x 17.25	21.00	28.00	2.38	36.00	36.62	36.00	21.05	19.76	26.34	24	1.38	24.75	30
20x18	19.25 x 17.25	23.00	30.50	2.50	39.00	39.75	39.00	21.05	19.76	26.34	24	1.38	27.00	30
20x20	19.25 x 19.25	23.00	30.50	2.50	39.00	39.75	39.00	19.67	20.20	26.78	24	1.38	27.00	30
24x20	23.25 x 19.25	27.25	36.00	2.75	45.00	45.88	45.00	19.67	20.20	26.78	24	1.62	32.00	30
24x24	23.25 x 23.25	27.25	36.00	2.75	45.00	45.88	45.00	22.75	23.34	30.24	24	1.62	32.00	30
30x30	29.00 x 29.00	33.75	43.00	3.62	55.00	56.00	55.00	31.25	32.08	38.98	28	1.88	39.25	30
36x36	34.50 x 34.50	40.25	50.00	4.12	68.00	69.12	68.00	34.39	35.83	42.73	32	2.12	46.00	30
40x40	38.50 x 38.50	42.75	48.75	4.44	72.83	*	70.08	36.54	37.13	*	*	*	*	*
44x44	42.32 x 42.32	47.00	53.25	4.82	76.77	*	74.80	39.76	40.39	*	*	*	*	*
48x48	45.98 x 45.98	51.25	57.75	5.19	85.83	*	82.68	41.77	43.19	*	*	*	*	*
56x56	53.62 x 53.62	59.75	67.25	6.00	90.55	*	88.58	48.50	49.92	*	*	*	*	*

*Contact your PBV® salesperson for additional sizes and materials.

** Legs are for shipping purpose only. Dimensions are subject to change without notice.

Dimensional Data for Large Size Diameter Valves

Series 5700/6700 • 14"FP- 56"FP, Class 600



Class 600, 14"FP- 56"FP

Size (in.)	A	B	C	D2	E1-RF	E2-RTJ	E3-WE	F***	G	H	N	M	P	L
14x14	13.25 x 13.25	16.25	23.75	2.75	35.00	35.12	35.00	14.92	14.31	20.89	20	1.50	20.75	30
16x14	15.25 x 13.25	18.50	27.00	3.00	39.00	39.12	39.00	14.92	14.31	20.89	20	1.62	23.75	30
16x16	15.25 x 15.25	18.50	27.00	3.00	39.00	39.12	39.00	16.33	15.89	22.47	20	1.62	23.75	30
18x16	17.25 x 15.25	21.00	29.25	3.25	43.00	43.12	43.00	16.33	15.89	22.47	20	1.75	25.75	30
18x18	17.25 x 17.25	21.00	29.25	3.25	43.00	43.12	43.00	21.05	19.76	23.20	20	1.75	25.75	30
20x18	19.25 x 17.25	23.00	32.00	3.50	47.00	47.25	47.00	21.05	19.76	23.20	24	1.75	28.50	30
20x20	19.25 x 19.25	23.00	32.00	3.50	47.00	47.25	47.00	19.67	20.09	23.53	24	1.75	28.50	30
24x20	23.25 x 19.25	27.25	37.00	4.00	55.00	55.38	55.00	19.67	20.09	23.53	24	2.00	33.00	30
24x24	23.25 x 23.25	27.25	37.00	4.00	55.00	55.38	55.00	23.13	25.35**	28.79	24	2.00	33.00	30
30x30	29.00 x 29.00	33.75	44.50	4.50	65.00	65.50	65.00	31.25	32.08	38.98	28	2.13	40.25	30
36x36	34.50 x 34.50	40.25	51.75	4.88	82.00	82.64	82.01	34.39	35.83	42.73	28	2.62	47.00	30
40x40	38.50 x 38.50	43.75	52.00	6.25	78.74	*	74.80	37.13	37.60	*	*	*	*	*
44x44	42.32 x 42.32	48.25	57.25	6.81	86.61	*	80.71	40.55	41.73	*	*	*	*	*
48x48	45.98 x 45.98	52.50	62.75	7.44	94.49	*	85.83	43.50	44.69	*	*	*	*	*
56x56	53.62 x 53.62	60.75	73.00	8.56	*	*	93.90	49.37	50.79	*	*	*	*	*

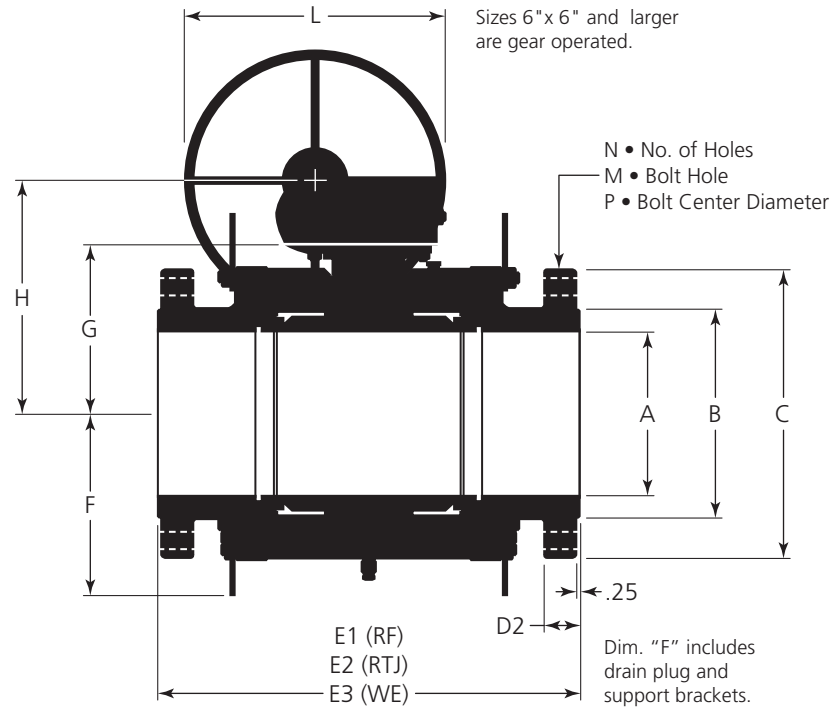
*Contact your PBV® salesperson for additional sizes and materials.

**Change introduced 2007.

*** Legs are for shipping purpose only. Dimensions are subject to change without notice.

Dimensional Data for Large Size Diameter Valves

Series 5700/6700 • 14"FP-48"FP, Class 900 • 14"FP-24"FP, Class 1500



Class 900, 14"FP-48"FP

Size (in.)	A	B	C	D2	E1-RF	E2-RTJ	E3-WE	F**	G	H	N	M	P	L
14x14	12.75 x 12.75	16.25	25.25	3.38	40.50	40.88	40.50	18.61	16.76	23.34	20	1.62	22.00	30
16x14	14.75 x 12.75	18.50	27.75	3.50	44.50	44.88	44.50	18.61	16.76	23.34	20	1.75	24.25	30
16x16	14.75 x 14.75	18.50	27.75	3.50	44.50	44.88	44.50	20.63	18.87	25.77	20	1.75	24.25	30
18x16	16.75 x 14.75	21.00	31.00	4.00	48.00	48.50	48.00	20.63	18.87	25.77	20	2.00	27.00	30
18x18	16.75 x 16.75	21.00	31.00	4.00	48.00	48.50	48.00	23.39	24.91	31.81	20	2.00	27.00	30
20x18	18.63 x 16.75	23.00	33.75	4.25	52.00	52.50	52.00	23.39	24.91	31.81	20	2.12	29.50	30
20x20	18.63 x 18.63	23.00	33.75	4.25	52.00	52.50	52.00	24.30	26.18	33.08	20	2.12	29.50	30
24x20	22.50 x 18.63	27.25	41.00	5.50	61.00	61.75	61.00	24.30	24.20	28.90	20	2.62	35.50	30
24x24	22.50 x 22.50	27.25	41.00	5.50	61.00	61.75	61.00	28.00	27.92	30.90	20	2.62	35.50	30
30x30	28.11 x 28.11	33.75	48.50	5.88	74.00	70.16	65.35	30.94	31.42	*	*	*	*	*
36x36	33.74 x 33.74	40.25	57.50	6.75	90.00	81.89	74.80	36.38	36.14	*	*	*	*	*
40x40	37.56 x 37.56	45.75	59.50	7.75	85.83	*	82.68	39.88	39.65	*	*	*	*	*
44x44	41.26 x 41.26	50.00	64.88	8.44	93.70	*	88.58	41.26	45.28	*	*	*	*	*
48x48	45.00 x 45.00	54.50	70.25	9.19	96.46	*	93.70	47.64	47.72	*	*	*	*	*

*Contact your PBV® salesperson for additional sizes and materials.

Class 1500, 14"FP-24"FP

Size (in.)	A	B	C	D2	E1-RF	E2-RTJ	E3-WE	F**	G	H	N	M	P	L
14x14	12.50 x 12.50	16.25	29.50	5.25	49.50	50.25	49.50	20.60	18.83	25.73	16	2.38	25.00	30
16x14	14.25 x 12.50	18.50	32.50	5.75	54.50	55.38	54.50	20.60	18.83	25.73	16	2.62	27.75	30
16x16	14.25 x 14.25	18.50	32.50	5.75	54.50	55.38	54.50	22.27	20.50	27.40	16	2.62	27.75	30
18x16	16.75 x 14.25	21.00	36.00	6.38	60.50	61.38	60.50	22.27	20.50	27.40	16	2.88	30.50	30
18x18	16.75 x 16.75	21.00	36.00	6.38	60.50	61.38	60.50	23.39	24.91	31.81	16	2.88	30.50	30
20x18	17.88 x 16.00	23.00	38.75	7.00	65.50	66.38	65.50	23.39	24.96	31.81	16	3.12	32.75	30
20x20	18.63 x 18.63	23.00	38.75	7.00	65.50	66.38	65.50	21.70	27.50	28.90	16	3.12	32.75	30
24x20	21.50 x 18.63	27.25	46.00	8.00	80.50	81.63	80.50	21.70	27.50	28.90	16	3.62	39.00	30
24x24	21.50 x 21.50	27.25	46.00	8.00	80.50	81.63	80.50	28.00	33.70	30.90	16	3.62	39.00	30

*Contact your PBV® salesperson for additional sizes and materials.

** Legs are for shipping purpose only. Dimensions are subject to change without notice

Top Works Data, Continued

Series 5700/6700

Class 600 (in.)

Size	2	3	4	6	8	10	12	14	16	18	20	24
A	1.11**	1.54	1.74	1.98	2.63	2.63	2.63	3.28	3.28	3.88	3.88	5.27
B	0.98	1.37	1.57	1.76	2.63	2.36	2.36	2.95	2.95	3.54	3.54	4.73
D	1.53	1.83	1.80	3.64**	3.54	3.52	3.59	4.36	4.36	5.30	5.40	5.51
G	4.87**	5.94	7.35	8.48**	11.57	13.32	14.94	14.31	15.89	19.76	20.09	24.35
L	45°	45°	22.5°	22.5°	22.5°	22.5°	22.5°	22.5°	22.5°	22.5°	22.5°	22.5°
N	4	4	4	8	8	8	8	8	8	8	8	8
O	6.90	8.00	8.75	10.00	11.22	11.22	11.22	11.40	11.40	11.40	16.00	16.00
P	5.50	6.50	7.50	8.86	9.84	9.84	10.00	10.00	10.00	10.00	14.02	14.02
Q	0.32	0.39	0.39	0.50	0.63	0.63	0.63	0.75	0.75	0.88	0.88	1.25
R	0.69	0.81	0.69	0.66	0.65	0.65	0.69	0.69	0.69	0.69	1.13	1.13
V	0.53	0.60	0.53	0.91	1.09	1.09	1.09	0.75	0.75	1.00	1.00	2.00

Size	30-13 DGN	30	36	40	44	48	52	56
A	6.55	6.55	6.55	*	*	*	*	*
B	5.90	5.90	5.90	*	*	*	*	*
D	7.01	7.9**	7.90	*	*	*	*	*
G	29.83	30.08**	33.83	*	*	*	*	*
L	22.5°	22.5°	22.5°	*	*	*	*	*
N	8	8	8	*	*	*	*	*
O	22.62	22.62	22.62	*	*	*	*	*
P	20.31	20.31	20.31	*	*	*	*	*
Q	1.50	1.50	1.50	*	*	*	*	*
R	1.31	1.31	1.31	*	*	*	*	*
V	2.00	2.00	2.00	*	*	*	*	*

*Contact your PBV® salesperson for additional sizes and materials.

** Design change in 2013 dimensions varies

Class 900 (in.)

Size	2	3	4	4- Metal	6	8	10	12 - 04	12 - 96	14	16	18	20	24
A	1.11**	1.54	1.74	2.15	2.00	2.63	2.63	3.28	2.63	3.88	3.92	5.28	5.27	6.55
B	0.98	1.37	1.57	1.93	1.77	2.36	2.36	2.95	2.36	3.54	3.54	4.73	4.73	5.90
D	1.53	1.83	1.80	2.09	3.75	3.54	3.52	5.56	3.59	5.03	6.03	5.44	6.66	7.91
G	4.87**	5.94	7.35	8.51	10.01	11.57	13.32	15.46	14.94	16.76	18.87	23.84	24.18	27.92
L	45°	45°	22.5°	22.5°	0°	22.5°	22.5°	22.5°	22.5°	22.5°	22.5°	22.5°	22.5°	22.5°
N	4	4	4	4	8	8	8	8	8	8	8	8	8	8
O	6.90	8.00	8.75	8.80	11.22	11.22	11.22	13.19	11.22	11.70	16.00	16.00	16.00	22.62
P	5.50	6.50	7.50	7.50	9.84	9.84	10.00	11.78	10.00	10.00	14.02	14.02	14.02	20.31
Q	0.32	0.39	0.39	0.50	0.50	0.63	0.63	0.75	0.63	0.88	0.88	1.25	1.25	1.50
R	0.69	0.81	0.69	0.69	0.69	0.65	0.69	0.78	0.69	0.69	1.12	1.12	1.12	1.31
V	0.53	0.60	0.53	1.00	1.25	1.09	1.09	1.35	1.09	1.54	1.54	2.00	1.50	2.25

Contact your PBV® salesperson for additional sizes and materials.

*Design change May 2004. Serial number required to verify design.

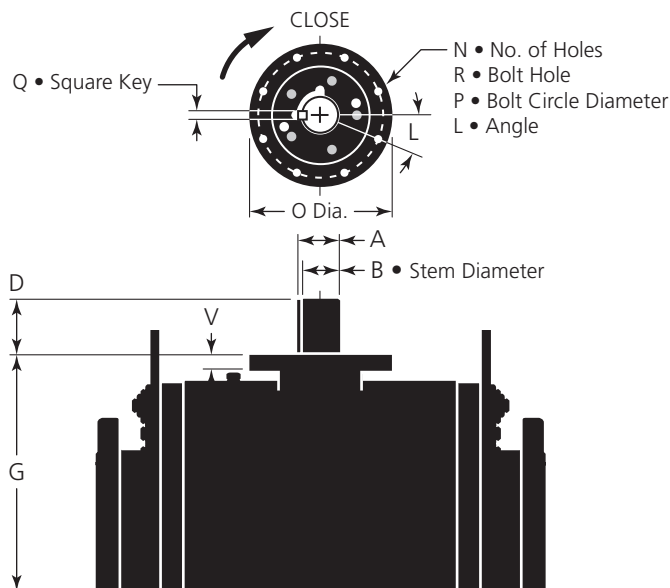
**Lip seal design may vary.

Top Works Data, Continued

Series 5700/6700

Data contained below is based on ball bore size and not end flange bore sizes. All dimensions are given in inches.

Dimensions may be changed without notice. Contact PBV® with **valve serial numbers** for exact dimensions.



Class 1500 (in.)

Size	2	3	3 - Metal	4	6	8	8 - Metal	10	12	14	16	18	20	24
A	1.11	1.54	1.82	1.74	2.639**	3.28	3.38	3.28	3.28	3.88	3.92	5.27	6.95	6.55
B	0.98	1.37	1.65	1.57	2.36	2.95	3.05	2.95	2.95	3.54	3.54	4.73	6.29	5.90
D	1.68	2.07	2.07	2.09	3.87**	5.87	5.87	5.87	5.86	6.03	6.03	5.50	6.63	6.84
G	5.47	6.42	6.91	7.88	10.67**	12.88	13.04	15.48	17.83	18.83	20.50	24.87	31.43	33.69
L	45°	45°	45°	22.5°	0°	22.5°	22.5°	22.5°	22.5°	22.5°	22.5°	22.5°	15.0°	22.5°
N	4	4	4	4	8	8	8	8	8	8	8	8	12	8
O	7.00	8.00	8.00	8.80	11.22	13.19	13.19	13.19	13.19	16.00	16.00	16.00	22.00	22.62
P	5.50	6.50	6.50	7.50	9.84	11.78	11.78	11.78	11.78	14.02	14.02	14.02	19.00	20.31
Q	0.32	0.39	0.38	0.39	0.62	0.75	0.75	0.75	0.75	0.88	0.88	1.25	1.50	1.25
R	0.69	0.81	0.81	0.69	0.65	0.78	0.78	0.78	0.78	1.12	1.12	1.12	1.38	1.31
V	0.49	0.60	0.85	1.00	1.25**	1.35	1.35	1.35	1.35	1.54	1.54	2.00	1.50	2.00

Class 2500 (in.)

Size	2	3	4	6	8	10	12
A	1.26	1.54	1.98	2.63	3.28	3.28	3.92
B	1.13	1.37	1.77	2.36	2.95	2.95	3.54
D	2.78	3.10	2.58	4.00	5.26	4.17	5.07
G	7.25	8.42	10.56	14.00	16.63	18.25	20.79
L*	22.5°	22.5°	22.5°	22.5°	22.5°	22.5°	22.5°
N	4	8	8	8	8	8	8
O	8.00	10.00	8.80	11.22	13.19	11.70	16.50
P	6.75	8.86	7.50	10.00	11.78	10.00	14.02
Q	0.32	0.39	0.50	0.63	0.75	0.75	0.88
R	0.66	0.66	0.69	0.69	0.78	0.69	1.12
V	0.80	0.85	0.90	1.75	1.75	1.50	1.50

*Contact factory for mounting details.