



3 Piece Forged

TRUNNION

DBB/DIB-1/DIB-2 Ball Valve



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48/24 *Standard* WARRANTY

Meridian™ products feature an industry leading warranty of 48 months from date of shipment or 24 months from the date of start-up (whichever is sooner) for all Meridian™ brand API 6D check valves, flanged or buttweld trunnion ball valves, and floating ball valves.

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SIL *Rated*

Meridian™ 3 piece forged trunnion ball valves and 2 piece cast floating ball valves are certified for use in SIL 3 applications.

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KEY FEATURES & BENEFITS

GENERAL FEATURES

- Body joint integrity and fire safety is ensured by dual independent seals.
- A tight tolerance overlapping metal to metal body joint ensures valve is capable of handling pipeline stress and misalignment.
- Standard forged body, bonnet and ball ensures high strength and higher integrity grain structure.
- All designs use 2 antistatic devices.
- Manual body vent design allows safe relief of pressure prior to servicing.
- Manual body drain can be used to safely drain or flush the valve prior to being serviced or removed from line.
- All trunnion ball valves are equipped with a locking device to API 608. For gear operated valves, this feature is included on the gear operator.
- All trunnion ball valves are equipped with ISO 5211 actuator mounting flanges.
- All Meridian™ trunnion ball valves are low emission capable due to the O-ring design.
- All O-rings are of AED (anti-explosive decompression) design.
- Standard trim in either full stainless steel (DBB only) or 3 mil high phosphorus electroless nickel plated for superior corrosion protection.
- **All Meridian™ 3 piece forged trunnion ball valves and 2 piece cast floating ball valves are certified for use in Safety Integrity Level (SIL 3) applications.**

STEM DESIGN FEATURES

- Blow out proof stem.
- Stems and trunnions are manufactured separately from the ball and supported by a bearing and thrust washer to ensure low consistent torques.
- Triple independent low emission stem seals ensure stem seal integrity.
- All valves include emergency secondary stem sealant injection system.

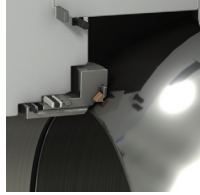
SEAT DESIGN FEATURES

- Special wide seat insert design provides an increased life in difficult service conditions.
- Seat ring sealing includes separate graphite seals for fire safe design and O-rings for tight sealing.
- Seat sealant injection: Meridian trunnion ball valves include seat sealant injection systems. 16" and larger sizes use 2 sealant injection valves per seat to ensure uniform and complete sealant injection around the entire seat. For smaller size valves where space does not permit, body cavity injection is used instead of seat sealant injection.
- All seat sealant injection fittings include an internal check valve and another independent buried check valve beneath the injection fitting. Should an injection fitting be damaged it can be replaced without the requirement of re-hydro testing the valve.
- All valves are hydro-tested utilizing the check valve only (seat sealant injection fitting removed). This ensures check valve integrity.
- DBB - Double block and bleed design with self relieving body cavity per API 6D for all trunnion ball valves with single piston effect seats.
- DIB - Double isolation and bleed design per API 6D for all trunnion ball valves with double piston effect seats.

OPTIONAL FEATURES

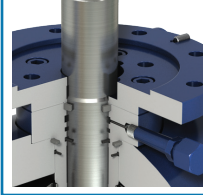
- "Safe relieving" DIB-2/combination seats (single piston on one side and double piston on the other side) available upon request.
- Body may be coated for corrosion protection
- Top entry, welded body and high temperature designs also available.
- Cryogenic design and a world class cryogenic test and design facility also available.





DBB/DIB-1/DIB-2 DESIGN

Seats have preloaded springs to ensure a bubble tight seal even at low pressures.



INTEGRAL VALVE STOPS

The valve stops are integral facilitating easy correct actuation stop setting when the valve is retrofitted in the field.

DIB OVERPRESSURE RELIEF

DIB designs include drilled and tapped body cavity and flanges (space permitting) for convenient venting of body cavity overpressure relief system.

TRIPLE STEM SEALING

Triple independent low emission stem seals ensure stem seal integrity.

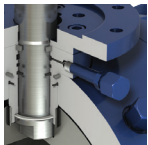
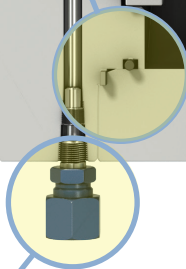


DOUBLE SEALED BODY JOINTS

All body joints have a primary o-ring seal backed by a secondary fire safe ss/graphite gasket seal. A tight tolerance, metal to metal, overlapped joint construction ensures joint integrity in the event of pipe misalignment.

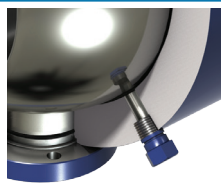
DOUBLE ANTI-STATIC DEVICE

2 antistatic devices ensure safe discharge of static build up.



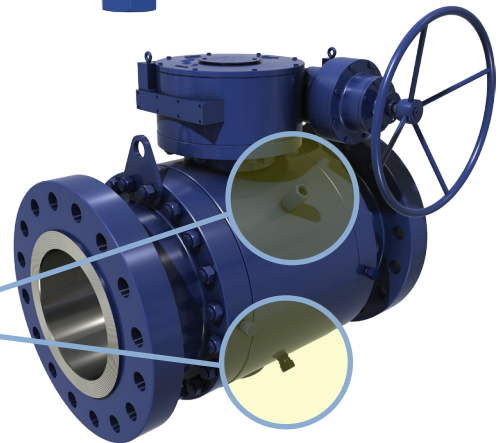
EMERGENCY STEM & SEAT INJECTION FITTINGS

The standard design incorporates both stem and seat injection fittings (smaller sizes use cavity injection).



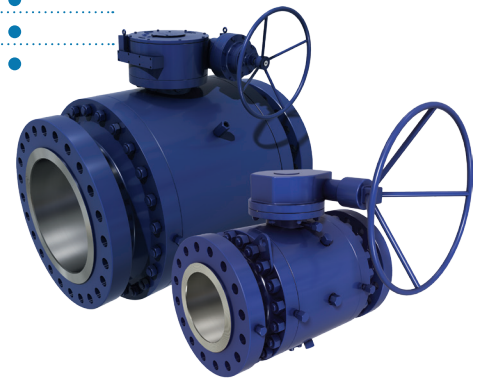
BODY VENT & DRAIN

For pressure relief prior to servicing and to allow for draining or flushing prior to servicing or removal.



3 PIECE FORGED TRUNNION MOUNTED BALL VALVES

Size	150 ASME PN 20	300 ASME PN 50	600 ASME PN 100	900 ASME PN 150	1500 ASME PN 250	2500 ASME PN 420
2	●	●	●	●	●	●
3	●	●	●	●	●	●
4	●	●	●	●	●	●
6	●	●	●	●	●	●
8	●	●	●	●	●	●
10	●	●	●	●	●	●
12	●	●	●	●	●	●
14	●	●	●	●	●	●
16	●	●	●	●	●	●
18	●	●	●	●	●	●
20	●	●	●	●	●	●
24	●	●	●	●	●	●
30	●	●	●	●	●	●
36	●	●	●	●	●	●
42	●	●	●	●	●	●
48	●	●	●	●	●	●
56	●	●	●	●	●	●



CERTIFICATIONS & TESTING:

All Meridian™ ball valves come complete with hydrostatic test certificates and MTRs (material test reports). All floating and trunnion ball valves are tested to the requirements of API 6D. In addition, floating and trunnion ball valves are ALL tested with low pressure air to ensure seat sealing at lower pressures.

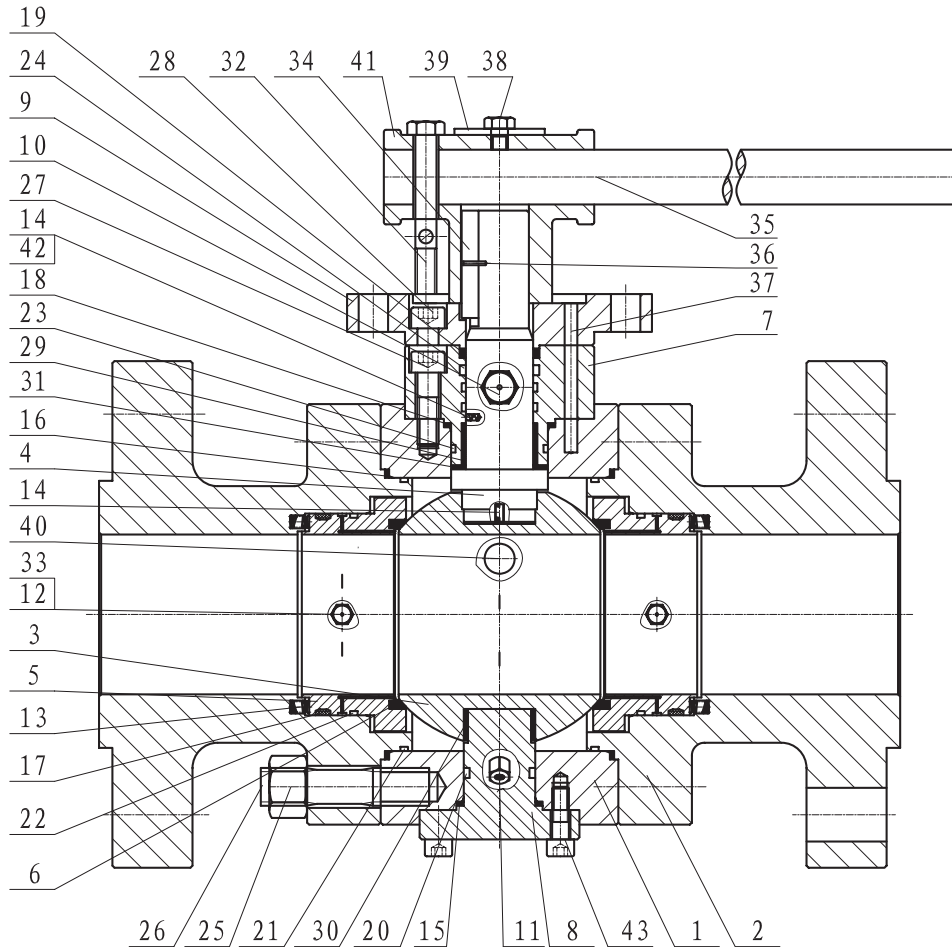
- For Canadian customers CRNs (Canadian Registration Numbers) are available for all provinces where required.
- Tagging is per the requirements of API 6D, MSS SP-25 and CSA Z245.15.
- SIL (Safety Integrity Level) – Meridian™ 3 piece forged trunnion ball valves and 2 piece cast floating ball valves are certified for use in SIL 3 applications.

REFERENCE STANDARDS

GENERAL STANDARDS	API 608; API 6D; ISO 17292; CSA Z245.15; CSA B51		
PRESSURE / TEMPERATURE	ASME B16.34	END FLANGES	ASME B16.5
FACE TO FACE	ASME B16.10	FIRE SAFE DESIGN	ISO 10497 API 607, API 6FA
MARKINGS	MSS SP-25	SOUR SERVICE	NACE MR0175 ISO 15156
QUALITY	MSS SP-55	DOCUMENTATION	BS/EN 10204-3.1
INSPECTION	API 598	PRESSURE TESTING	API 6D ISO 5208

3 PIECE FORGED LEVER OPERATED DBB

CROSS SECTIONAL DRAWING

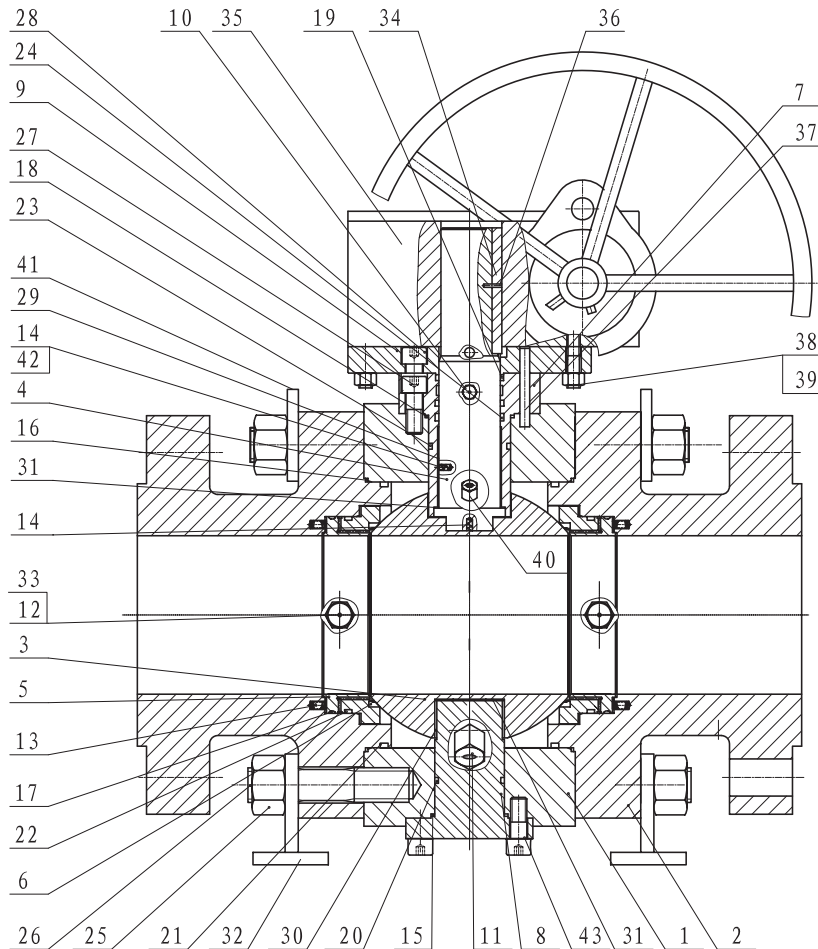


ITEM	DESCRIPTIONS	ITEM	DESCRIPTIONS	ITEM	DESCRIPTIONS
1	BODY	16	FIRE SAFE GASKET	30	BEARING
2	END CAP	17	FIRE SAFE GASKET	31	THRUST WASHER
3	BALL	18	FIRE SAFE GASKET	32	HEX HEAD BOLT
4	STEM	19	FIRE SAFE GASKET	33	CHECK VALVE
5	SEAT	20	TRUNNION SEAL O-RING	34	KEY
6	SEAT RING	21	BODY SEAL O-RING	35	LEVER
7	UPPER CAP	22	SEAT SEAL O-RING	36	PIN
8	TRUNNION	23	UPPER CAP SEAL O-RING	37	PIN
9	LIMIT STOP PLATE	24	STEM SEAL O-RING	38	HEX HEAD BOLT
10	SEALANT INJECTION VALVE	25	STUD	39	INDICATING PLATE
11	DRAIN VALVE	26	NUT	40	VENT VALVE
12	SEALANT INJECTION VALVE	27	ALLEN HEAD BOLT	41	LEVER HEAD
13	SEAT SPRING	28	ALLEN HEAD BOLT	42	ANTISTATIC BALL
14	ANTISTATIC SPRING	29	BEARING	43	ALLEN HEAD BOLT
15	FIRE SAFE GASKET				

NOTE: Drawings are representative. Please contact Meridian for specific and current PDF drawings. Space permitting, most valves include seat sealant injection (items 12/33). Select small valves use body cavity injection due to space constraints.

3 PIECE FORGED GEAR OPERATED DBB

CROSS SECTIONAL DRAWING



ITEM	DESCRIPTIONS	ITEM	DESCRIPTIONS	ITEM	DESCRIPTIONS
1	BODY	16	FIRE SAFE GASKET	30	BEARING
2	END CAP	17	FIRE SAFE GASKET	31	THRUST WASHER
3	BALL	18	FIRE SAFE GASKET	32	SUPPORT FEET
4	STEM	19	FIRE SAFE GASKET	33	CHECK VALVE
5	SEAT	20	TRUNNION SEAL O-RING	34	KEY
6	SEAT RING	21	BODY SEAL O-RING	35	GEAR OPERATOR
7	UPPER CAP	22	SEAT SEAL O-RING	36	PIN
8	TRUNNION	23	UPPER CAP SEAL O-RING	37	PIN
9	LIMIT STOP PLATE	24	STEM SEAL O-RING	38	STUD
10	SEALANT INJECTION VALVE	25	STUD	39	NUT
11	DRAIN VALVE	26	NUT	40	VENT VALVE
12	SEALANT INJECTION VALVE	27	ALLEN HEAD BOLT	41	LIFTING LUGS
13	SEAT SPRING	28	ALLEN HEAD BOLT	42	ANTISTATIC BALL
14	ANTISTATIC SPRING	29	BEARING	43	ALLEN HEAD BOLT
15	FIRE SAFE GASKET				

NOTE: Drawings are representative. Please contact Meridian for specific and current PDF drawings.
Support legs and lifting lugs supplied on sizes 6" and larger.
Valve sizes $\geq 16"$ use 2 seat sealant injection valves per seat.

3 PIECE FORGED DBB SIZES & DIMENSIONS

150 - 600 ASME TRUNNION 2" - 6" LEVER OPERATED

Size in inches. Dimensions in mm and inches. Weights in kilograms and pounds.

	SIZE	B-Port	L-RF	L-RTJ	H	H1	L1	d	Weight
PN	in	mm	mm	mm	mm	mm	mm	mm	kg
ASME		in	in	in	in	in	in	in	lb
20	2x1-1/2	38	178	191	*	*	*	*	15
150		1.50	7.01	7.52					33.07
20	2	50	178	191	166	90	300	20	17
150		1.97	7.01	7.52	6.54	3.54	11.81	0.79	37.48
20	3x2	50	203	216	166	90	300	20	30
150		1.97	7.99	8.50	6.54	3.54	11.81	0.79	66.14
20	3	75	203	216	199	111	400	25	37
150		2.95	7.99	8.50	7.83	4.37	15.75	0.98	81.57
20	4x3	75	229	241	199	111	400	25	42
150		2.95	9.02	9.49	7.83	4.37	15.75	0.98	92.59
20	4	100.1	229	241	222	130	450	25	49
150		3.94	9.02	9.49	8.74	5.12	17.72	0.98	108.03
20	6x4	100.1	394	406	222	130	450	25	100
150		3.94	15.51	15.98	8.74	5.12	17.72	0.98	220.46
50	2x1-1/2	38	216	232	158	90	300	20	20
300		1.50	8.50	9.13	6.22	3.54	11.81	0.79	44.09
50	2	50	216	232	166	90	300	20	22
300		1.97	8.50	9.13	6.54	3.54	11.81	0.79	48.50
50	3x2	50	282	298	166	90	300	20	40
300		1.97	11.10	11.73	6.54	3.54	11.81	0.79	88.18
50	3	75	282	298	199	111	500	25	45
300		2.95	11.10	11.73	7.83	4.37	19.69	0.98	99.21
50	4x3	75	305	321	199	111	500	25	60
300		2.95	12.01	12.64	7.83	4.37	19.69	0.98	132.28
50	4	100.1	305	321	221	130	600	25	70
300		3.94	12.01	12.64	8.70	5.12	23.62	0.98	154.32
50	6x4	100.1	403	419	221	130	600	25	150
300		3.94	15.87	16.50	8.70	5.12	23.62	0.98	330.69
100	2x1-1/2	38	292	295	158	90	404	20	28
600		1.50	11.50	11.61	6.22	3.54	15.91	0.79	61.73
100	2	50	292	295	168	95	500	20	32
600		1.97	11.50	11.61	6.61	3.74	19.69	0.79	70.55
100	3x2	50	356	359	168	95	500	20	48
600		1.97	14.02	14.13	6.61	3.74	19.69	0.79	105.82
100	3	75	356	359	204	115	600	25	56
600		2.95	14.02	14.13	8.03	4.53	23.62	0.98	123.46
100	4x3	75	432	435	204	115	600	25	80
600		2.95	17.01	17.13	8.03	4.53	23.62	0.98	176.37
100	4	100.1	432	435	225	137	700	25	105
600		3.94	17.01	17.13	8.86	5.39	27.56	0.98	231.48
100	6x4	100.1	559	562	225	137	700	25	210
600		3.94	22.01	22.13	8.86	5.39	27.56	0.98	462.97

NOTE: Please contact Meridian for specific and current drawings and data.
*Confirmation at time of order or upon request.

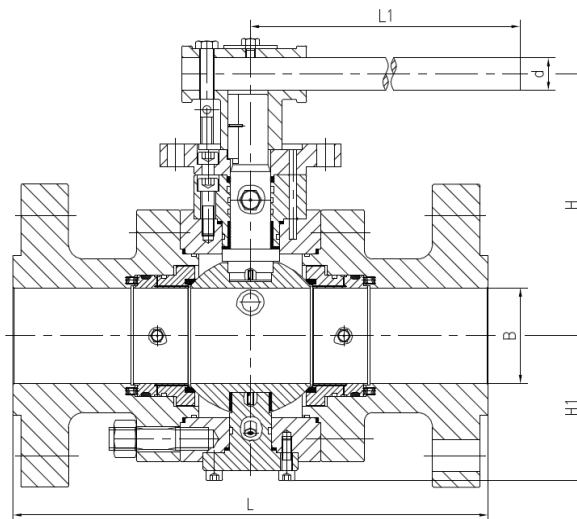
3 PIECE FORGED DBB SIZES & DIMENSIONS

900 - 2500 ASME TRUNNION 2" - 4" LEVER OPERATED

Size in inches. Dimensions in mm and inches. Weights in kilograms and pounds.

PN ASME	SIZE	B-Port	L-RF	L-RTJ	H	H1	L1	d	Weight
	in	mm in	mm in	mm in	mm in	mm in	mm in	mm in	kg lb
150	2x1-1/2	38	368	371	*	*	*	*	40
900		1.50	14.49	14.61					88.18
150	2	49	368	371	178	101	600	25	48
900		1.93	14.49	14.61	7.01	3.98	23.62	0.98	105.82
150	3x2	49	381	384	178	101	600	25	55
900		1.93	15.00	15.12	7.01	3.98	23.62	0.98	121.25
150	3	74	381	384	208	114	760	25	83
900		2.91	15.00	15.12	8.19	4.49	29.92	0.98	182.98
150	4x3	74	457	460	208	114	760	25	100
900		2.91	17.99	18.11	8.19	4.49	29.92	0.98	220.46
250	2x1-1/2	38	368	371	183	104	500	25	45
1500		1.50	14.49	14.61	7.20	4.09	19.69	0.98	99.21
250	2	49	368	371	178	101	600	25	62
1500		1.93	14.49	14.61	7.01	3.98	23.62	0.98	136.69
250	3x2	49	470	473	178	101	600	25	110
1500		1.93	18.50	18.62	7.01	3.98	23.62	0.98	242.51
250	3	74	470	473	262	147	882	35	135
1500		2.91	18.50	18.62	10.31	5.79	34.72	1.38	297.62
250	4x3	74	546	549	262	147	882	35	150
1500		2.91	21.50	21.61	10.31	5.79	34.72	1.38	330.69
420	2	42	451	454	237	139	900	35	120
2500		1.65	17.76	17.87	9.33	5.47	35.43	1.38	264.55
420	3x2	42	578	584	237	139	900	35	182
2500		1.65	22.76	22.99	9.33	5.47	35.43	1.38	401.24

NOTE: Please contact for specific and current drawings and data.
*Confirmation at time of order or upon request.



NOTE: Drawing applies to data on pages 9 and 10.

3 PIECE FORGED DBB SIZES & DIMENSIONS

150 ASME TRUNNION 6" - 48" GEAR OPERATED

Size in inches. Dimensions in mm and inches. Weights in kilograms and pounds.

PN ASME	SIZE	B-Port	L-RF	L-RTJ	H	H1	A	Dia A	Weight
	in	mm in	mm in	mm in	mm in	mm in	mm in	mm in	kg lb
20	6	151	394	406	266	205	229	465	154
150		5.94	15.51	15.98	10.47	8.07	9.02	18.31	339.51
20	8x6	151	457	470	266	205	229	465	218
150		5.94	17.99	18.50	10.47	8.07	9.02	18.31	480.60
20	8	202	457	470	315	243	360	600	270
150		7.95	17.99	18.50	12.40	9.57	14.17	23.62	595.24
20	10x8	202	533	546	315	243	360	600	370
150		7.95	20.98	21.50	12.40	9.57	14.17	23.62	815.70
20	10	252	533	546	360	300	402	600	462
150		9.92	20.98	21.50	14.17	11.81	15.83	23.62	1018.53
20	12x10	252	610	622	360	300	402	600	535
150		9.92	24.02	24.49	14.17	11.81	15.83	23.62	1179.46
20	12	303	610	622	393	335	402	600	646
150		11.93	24.02	24.49	15.47	13.19	15.83	23.62	1424.17
20	14x12	303	686	699	393	335	402	600	845
150		11.93	27.01	27.52	15.47	13.19	15.83	23.62	1862.89
20	14	334	686	699	421	357	402	600	958
150		13.15	27.01	27.52	16.57	14.06	15.83	23.62	2112.01
20	16x14	334	762	775	421	357	402	600	1160
150		13.15	30.00	30.51	16.57	14.06	15.83	23.62	2557.34
20	16	385	762	775	550	410	520	600	1248
150		15.16	30.00	30.51	21.65	16.14	20.47	23.62	2751.34
20	18x16	385	864	876	550	410	520	600	1350
150		15.16	34.02	34.49	21.65	16.14	20.47	23.62	2976.21
20	18	436	864	876	640	488	543	750	1440
150		17.17	34.02	34.49	25.20	19.21	21.38	29.53	3174.62
20	20x18	436	914	927	640	488	543	750	1850
150		17.17	35.98	36.50	25.20	19.21	21.38	29.53	4078.51
20	20	487	914	927	*	*	*	*	1960
150		19.17	35.98	36.50					4321.02
20	24x20	487	1067	1080	*	*	*	*	2540
150		19.17	42.01	42.52					5599.68
20	24	589	1067	1080	681	617	604	750	2810
150		23.19	42.01	42.52	26.81	24.29	23.78	29.53	6194.93
20	30x24	589	1295	*	681	617	604	750	4550
150		23.19	50.98		26.81	24.29	23.78	29.53	10030.93
20	30	735	1295	*	*	*	*	*	4850
150		28.94	50.98						10692.31
20	36x30	735	1524	*	*	*	*	*	*
150		28.94	60.00						
20	36	874	1524	*	*	*	*	*	8950
150		34.41	60.00						19731.17
20	42x36	874	1855	*	*	*	*	*	*
150		34.41	73.03						
20	42	1020	1855	*	*	*	*	*	14450
150		40.16	73.03						31856.47
20	48x42	1020	2134	*	*	*	*	*	*
150		40.16	84.02						
20	48	1166	2134	*	*	*	*	*	21750
150		45.91	84.02						47950.05

NOTE: Please contact for specific and current drawings and data.
*Confirmation at time of order or upon request.

3 PIECE FORGED DBB SIZES & DIMENSIONS

300 ASME TRUNNION 6" - 48" GEAR OPERATED

Size and inches. Dimensions in mm and inches. Weights in kilograms and pounds.

PN ASME	SIZE	B-Port	L-RF	L-RTJ	H	H1	A	Dia A	Weight
	in	mm in	mm in	mm in	mm in	mm in	mm in	mm in	kg lb
50	6	151	403	419	266	205	229	465	175
300		5.94	15.87	16.50	10.47	8.07	9.02	18.31	385.81
50	8x6	151	502	518	266	205	229	465	238
300		5.94	19.76	20.39	10.47	8.07	9.02	18.31	524.69
50	8	202	502	518	315	243	360	600	327
300		7.95	19.76	20.39	12.40	9.57	14.17	23.62	720.90
50	10x8	202	568	584	315	243	360	600	382
300		7.95	22.36	22.99	12.40	9.57	14.17	23.62	842.16
50	10	252	568	584	360	300	402	600	500
300		9.92	22.36	22.99	14.17	11.81	15.83	23.62	1102.30
50	12x10	252	648	664	360	300	402	600	570
300		9.92	25.51	26.14	14.17	11.81	15.83	23.62	1256.62
50	12	303	648	664	475	345	520	600	735
300		11.93	25.51	26.14	18.70	13.58	20.47	23.62	1620.38
50	14x12	303	762	778	475	345	520	600	980
300		11.93	30.00	30.63	18.70	13.58	20.47	23.62	2160.51
50	14	334	762	778	525	388	520	600	1162
300		13.15	30.00	30.63	20.67	15.28	20.47	23.62	2561.75
50	16x14	334	838	854	525	388	520	600	1250
300		13.15	32.99	33.62	20.67	15.28	20.47	23.62	2755.75
50	16	385	838	854	590	422	543	750	1492
300		15.16	32.99	33.62	23.23	16.61	21.38	29.53	3289.26
50	18x16	385	914	930	590	422	543	750	1620
300		15.16	35.98	36.61	23.23	16.61	21.38	29.53	3571.45
50	18	436	914	930	639	488	543	750	1752
300		17.17	35.98	36.61	25.16	19.21	21.38	29.53	3862.46
50	20x18	436	991	1010	639	488	543	750	1910
300		17.17	39.02	39.76	25.16	19.21	21.38	29.53	4210.79
50	20	487	991	1010	*	*	*	*	2695
300		19.17	39.02	39.76					5941.40
50	24x20	487	1143	1165	*	*	*	*	2860
300		19.17	45.00	45.87					6305.16
50	24	589	1143	1165	705	600	642	750	3210
300		23.19	45.00	45.87	27.76	23.62	25.28	29.53	7076.77
50	30x24	589	1397	1422	705	600	642	750	4560
300		23.19	55.00	55.98	27.76	23.62	25.28	29.53	10052.98
50	30	735	1397	1422	*	*	*	*	5590
300		28.94	55.00	55.98					12323.71
50	36x30	735	1727	1756	*	*	*	*	7854
300		28.94	67.99	69.13					17314.93
50	36	874	1727	1756	*	*	*	*	10280
300		34.41	67.99	69.13					22663.29
50	42x36	874	2083	*	*	*	*	*	*
300		34.41	82.01						
50	42	1020	2083	*	*	*	*	*	16300
300		40.16	82.01						35934.98
50	48x42	1020	2170	*	*	*	*	*	*
300		40.16	85.43						
50	48	1166	2170	*	*	*	*	*	24300
300		45.91	85.43						53571.78

NOTE: Please contact for specific and current drawings and data.
*Confirmation at time of order or upon request.

3 PIECE FORGED DBB SIZES & DIMENSIONS

600 ASME TRUNNION 6" - 48" GEAR OPERATED

Size and inches. Dimensions in mm and inches. Weights in kilograms and pounds.

PN	SIZE	B-Port	L-RF	L-RTJ	H	H1	A	Dia A	Weight
ASME	in	mm	mm	mm	mm	mm	mm	mm	kg
		in	in	in	in	in	in	in	lb
100	6	151	559	562	271	221	360	600	260
600		5.94	22.01	22.13	10.67	8.70	14.17	23.62	573.20
100	8x6	151	660	664	271	221	360	600	382
600		5.94	25.98	26.14	10.67	8.70	14.17	23.62	842.16
100	8	202	660	664	335	280	402	600	465
600		7.95	25.98	26.14	13.19	11.02	15.83	23.62	1025.14
100	10x8	202	787	791	335	280	402	600	591
600		7.95	30.98	31.14	13.19	11.02	15.83	23.62	1302.92
100	10	252	787	791	448	326	520	600	750
600		9.92	30.98	31.14	17.64	12.83	20.47	23.62	1653.45
100	12x10	252	838	841	448	326	520	600	856
600		9.92	32.99	33.11	17.64	12.83	20.47	23.62	1887.14
100	12	303	838	841	520	355	543	750	1090
600		11.93	32.99	33.11	20.47	13.98	21.38	29.53	2403.01
100	14x12	303	889	892	520	355	543	750	1150
600		11.93	35.00	35.12	20.47	13.98	21.38	29.53	2535.29
100	14	334	889	892	546	390	543	750	1335
600		13.15	35.00	35.12	21.50	15.35	21.38	29.53	2943.14
100	16x14	334	991	994	546	390	543	750	1560
600		13.15	39.02	39.13	21.50	15.35	21.38	29.53	3439.18
100	16	385	991	994	511	420	604	750	1810
600		15.16	39.02	39.13	20.12	16.54	23.78	29.53	3990.33
100	18x16	385	1092	1095	511	420	604	750	2300
600		15.16	42.99	43.11	20.12	16.54	23.78	29.53	5070.58
100	18	436	1092	1095	*	*	*	*	2500
600		17.17	42.99	43.11					5511.50
100	20x18	436	1194	1200	*	*	*	*	2750
600		17.17	47.01	47.24					6062.65
100	20	487	1194	1200	664	543	660	750	3000
600		19.17	47.01	47.24	26.14	21.38	25.98	29.53	6613.80
100	24x20	487	1397	1407	664	543	660	750	4150
600		19.17	55.00	55.39	26.14	21.38	25.98	29.53	9149.09
100	24	589	1397	1407	*	*	*	*	5000
600		23.19	55.00	55.39					11023.00
100	30x24	589	1651	1664	*	*	*	*	6100
600		23.19	65.00	65.51					13448.06
100	30	735	1651	1664	*	*	*	*	7570
600		28.94	65.00	65.51					16688.82
100	36x30	735	2083	2099	*	*	*	*	9266
600		28.94	82.01	82.64					20427.82
100	36	874	2083	2099	*	*	*	*	13530
600		34.41	82.01	82.64					29828.24
100	42x36	874	2437	2437	*	*	*	*	*
600		34.41	95.94	95.94					
100	42	1020	2437	2437	*	*	*	*	21590
600		40.16	95.94	95.94					47597.31
100	48x42	1020	2540	2540	*	*	*	*	*
600		40.16	100.00	100.00					
100	48	1166	2540	2540	*	*	*	*	31550
600		45.91	100.00	100.00					69555.13

NOTE: Please contact for specific and current drawings and data.
*Confirmation at time of order or upon request.

3 PIECE FORGED DBB SIZES & DIMENSIONS

900 ASME TRUNNION 4" - 30" GEAR OPERATED

Size and inches. Dimensions in mm and inches. Weights in kilograms and pounds.

PN ASME	SIZE	B-Port	L-RF	L-RTJ	H	H1	A	Dia A	Weight
	in	mm in	mm in	mm in	mm in	mm in	mm in	mm in	kg lb
150	4	100	457	460	234	200	229	465	127
900		3.94	17.99	18.11	9.21	7.87	9.02	18.31	279.98
150	6x4	100	610	613	234	200	229	465	240
900		3.94	24.02	24.13	9.21	7.87	9.02	18.31	529.10
150	6	150	610	613	283	242	402	600	305
900		5.91	24.02	24.13	11.14	9.53	15.83	23.62	672.40
150	8x6	150	737	740	283	242	402	600	480
900		5.91	29.02	29.13	11.14	9.53	15.83	23.62	1058.21
150	8	201	737	740	420	283	520	600	560
900		7.91	29.02	29.13	16.54	11.14	20.47	23.62	1234.58
150	10x8	201	838	841	420	283	520	600	750
900		7.91	32.99	33.11	16.54	11.14	20.47	23.62	1653.45
150	10	252	838	841	500	320	543	750	858
900		9.92	32.99	33.11	19.69	12.60	21.38	29.53	1891.55
150	12x10	252	965	968	500	320	543	750	1050
900		9.92	37.99	38.11	19.69	12.60	21.38	29.53	2314.83
150	12	303	965	968	467	355	604	750	1343
900		11.93	37.99	38.11	18.39	13.98	23.78	29.53	2960.78
150	14x12	303	1029	1038	467	355	604	750	1520
900		11.93	40.51	40.87	18.39	13.98	23.78	29.53	3350.99
150	14	322	1029	1038	*	*	*	*	1610
900		12.68	40.51	40.87					3549.41
150	16x14	322	1130	1140	*	*	*	*	1850
900		12.68	44.49	44.88					4078.51
150	16	373	1130	1140	*	*	*	*	2525
900		14.69	44.49	44.88					5566.62
150	18x16	373	1219	1232	*	*	*	*	2690
900		14.69	47.99	48.50					5930.37
150	18	423	1219	1232	*	*	*	*	2870
900		16.65	47.99	48.50					6327.20
150	20x18	423	1321	1334	*	*	*	*	2950
900		16.65	52.01	52.52					6503.57
150	20	471	1321	1334	*	*	*	*	3480
900		18.54	52.01	52.52					7672.01
150	24x20	471	1549	1568	*	*	*	*	3600
900		18.54	60.98	61.73					7936.56
150	24	570	1549	1568	*	*	*	*	7030
900		22.44	60.98	61.73					15498.34
150	30x24	570	1880	1902	*	*	*	*	10200
900		22.44	74.02	74.88					22486.92
150	30	712	1880	1902	*	*	*	*	12440
900		28.03	74.02	74.88					27425.22

NOTE: Please contact for specific and current drawings and data.
*Confirmation at time of order or upon request.

3 PIECE FORGED DBB SIZES & DIMENSIONS

1500 ASME TRUNNION 4" - 24" GEAR OPERATED

Size in inches. Dimensions in mm and inches. Weights in kilograms and pounds.

PN ASME	SIZE	B-Port	L-RF	L-RTJ	L-WE	H	H1	A	Dia A	Weight
	in	mm	mm	mm	mm	mm	mm	mm	mm	kg lb
250	4	100	546	549	546	261	209	360	600	195
1500		3.94	21.50	21.61	21.50	10.28	8.23	14.17	23.62	429.90
250	6x4	100	705	711	705	261	209	360	600	410
1500		3.94	27.76	27.99	27.76	10.28	8.23	14.17	23.62	903.89
250	6	144	705	711	705	429	270	520	600	461
1500		5.67	27.76	27.99	27.76	16.89	10.63	20.47	23.62	1016.32
250	8x6	144	832	841	832	429	270	520	600	560
1500		5.67	32.76	33.11	32.76	16.89	10.63	20.47	23.62	1234.58
250	8	192	832	841	832	509	320	543	750	640
1500		7.56	32.76	33.11	32.76	20.04	12.60	21.38	29.53	1410.94
250	10x8	192	991	1001	991	509	320	543	750	930
1500		7.56	39.02	39.41	39.02	20.04	12.60	21.38	29.53	2050.28
250	10	239	991	1001	991	481	380	604	750	1210
1500		9.41	39.02	39.41	39.02	18.94	14.96	23.78	29.53	2667.57
250	12x10	239	1130	1146	1130	481	380	604	750	1356
1500		9.41	44.49	45.12	44.49	18.94	14.96	23.78	29.53	2989.44
250	12	287	1130	1146	1130	*	*	*	*	1592
1500		11.30	44.49	45.12	44.49					3509.72
250	14x12	287	1257	1276	1257	*	*	*	*	1830
1500		11.30	49.49	50.24	49.49					4034.42
250	14	315	1257	1276	1257	*	*	*	*	2260
1500		12.40	49.49	50.24	49.49					4982.40
250	16x14	315	1384	1406	1384	*	*	*	*	2560
1500		12.40	54.49	55.35	54.49					5643.78
250	16	360	1384	1406	1384	*	*	*	*	3760
1500		14.17	54.49	55.35	54.49					8289.30
250	18x16	360	1537	1559	1537	*	*	*	*	5554
1500		14.17	60.51	61.38	60.51					12244.35
250	18	406	1537	1559	1537	*	*	*	*	6400
1500		15.98	60.51	61.38	60.51					14109.44
250	20x18	406	1664	1686	1664	*	*	*	*	7521
1500		15.98	65.51	66.38	65.51					16580.80
250	20	454	1664	1686	1664	*	*	*	*	8060
1500		17.87	65.51	66.38	65.51					17769.08
250	24x20	454	1944	1972	*	*	*	*	*	10922
1500		17.87	76.54	77.64						24078.64
250	24	546	1944	1972	*	*	*	*	*	14550
1500		21.50	76.54	77.64						32076.93

NOTE: Please contact for specific and current drawings and data.
*Confirmation at time of order or upon request.

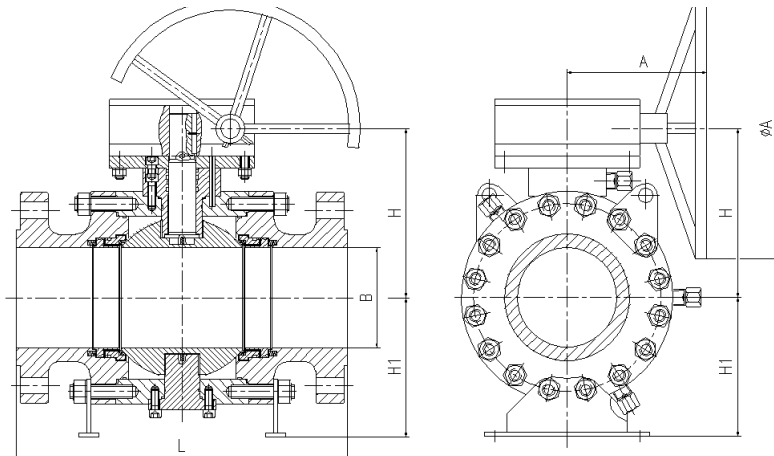
3 PIECE FORGED DBB SIZES & DIMENSIONS

2500 ASME TRUNNION 3" - 12" GEAR OPERATED

Size in inches. Dimensions in mm and inches. Weights in kilograms and pounds.

PN ASME	SIZE	B-Port	L-RF	L-RTJ	L-WE	H	H1	A	Dia A	Weight
	in	mm in	mm in	mm in	mm in	mm in	mm in	mm in	mm in	kg lb
420	3	62	578	584	578	251	187	360	600	215
2500		2.44	22.76	22.99	22.76	9.88	7.36	14.17	23.62	473.99
420	4x3	62	673	683	673	251	187	360	600	275
2500		2.44	26.50	26.89	26.50	9.88	7.36	14.17	23.62	606.27
420	4	87	673	683	673	288	240	402	600	389
2500		3.43	26.50	26.89	26.50	11.34	9.45	15.83	23.62	857.59
420	6x4	87	914	927	914	288	240	402	600	526
2500		3.43	35.98	36.50	35.98	11.34	9.45	15.83	23.62	1159.62
420	6	131	914	927	914	*	*	*	*	1524
2500		5.16	35.98	36.50	35.98					3359.81
420	8x6	131	1022	1038	1022	*	*	*	*	1623
2500		5.16	40.24	40.87	40.24					3578.07
420	8	179	1022	1038	1022	*	*	*	*	1880
2500		7.05	40.24	40.87	40.24					4144.65
420	10x8	179	1270	1292	1270	*	*	*	*	2421
2500		7.05	50.00	50.87	50.00					5337.34
420	10	223	1270	1292	1270	*	*	*	*	3140
2500		8.78	50.00	50.87	50.00					6922.44
420	12x10	223	1422	1444	1422	*	*	*	*	3536
2500		8.78	55.98	56.85	55.98					7795.47
420	12	265	1422	1444	1422	*	*	*	*	4260
2500		10.43	55.98	56.85	55.98					9391.60

NOTE: Please contact Meridian for specific and current drawings and data.
*Confirmation at time of order or upon request.

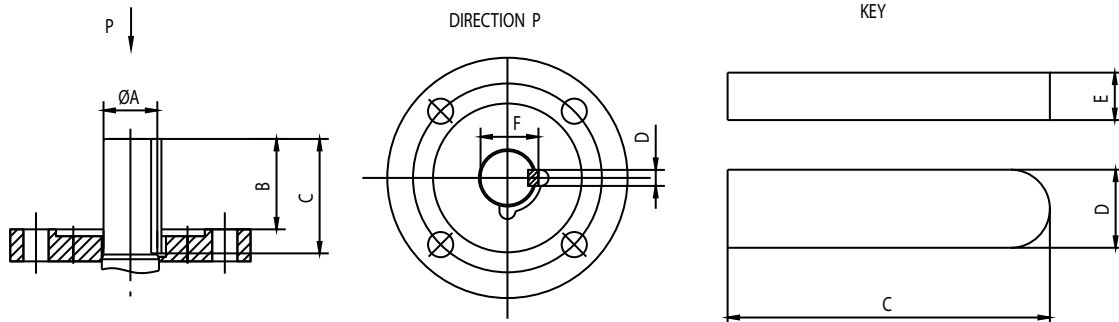


NOTE: Drawing applies to data on pages 11-16.

3 PIECE FORGED DBB TOP WORKS DIMENSIONS

PN 20 / 150 ASME FULL AND REDUCED PORT TRUNNION

Size in inches. Dimensions in mm and inches.



SIZE	A	B	C	D	E	F	ISO
in	mm	mm	mm	mm	mm	mm	
	in	in	in	in	in	in	
2x1 1/2"	*	*	*	*	*	*	*
2"	26	35	45	8	7	29	F10
	1.02	1.38	1.77	0.31	0.28	1.14	
3x2"	26	35	45	8	7	29	F10
	1.02	1.38	1.77	0.31	0.28	1.14	
3"	30	40	50	8	7	33	F12
	1.18	1.57	1.97	0.31	0.28	1.30	
4x3"	30	40	50	8	7	33	F12
	1.18	1.57	1.97	0.31	0.28	1.30	
4"	35	41	56	10	8	38	F12
	1.38	1.61	2.20	0.39	0.31	1.50	
6x4"	35	41	56	10	8	38	F12
	1.38	1.61	2.20	0.39	0.31	1.50	
6"	47	79	100	14	9	50.5	F16
	1.85	3.11	3.94	0.55	0.35	1.99	
8x6"	47	79	100	14	9	50.5	F16
	1.85	3.11	3.94	0.55	0.35	1.99	
8"	52	88	110	16	10	56	F16
	2.05	3.46	4.33	0.63	0.39	2.20	
10x8"	52	88	110	16	10	56	F16
	2.05	3.46	4.33	0.63	0.39	2.20	
10"	62	85	110	18	11	66	F25
	2.44	3.35	4.33	0.71	0.43	2.60	
12x10"	62	85	110	18	11	66	F25
	2.44	3.35	4.33	0.71	0.43	2.60	
12"	62	88	110	18	11	66	F25
	2.44	3.46	4.33	0.71	0.43	2.60	
14x12"	62	88	110	18	11	66	F25
	2.44	3.46	4.33	0.71	0.43	2.60	

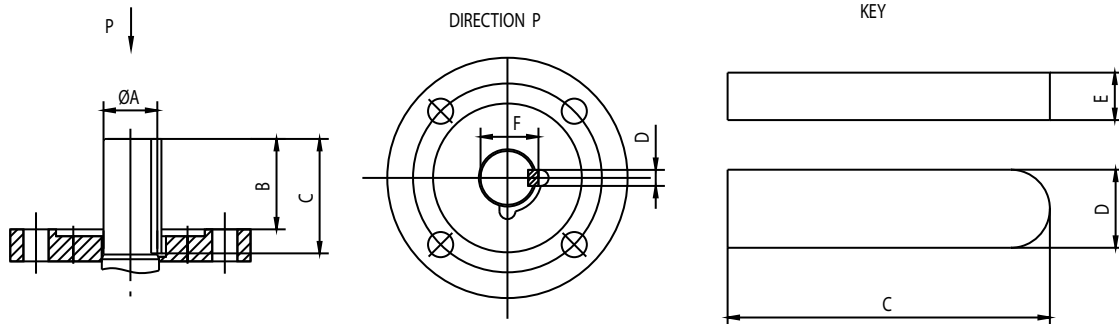
SIZE	A	B	C	D	E	F	ISO
in	mm	mm	mm	mm	mm	mm	
	in	in	in	in	in	in	
14"	72	94	120	20	12	76.5	F25
	2.83	3.70	4.72	0.79	0.47	3.01	
16x14"	72	94	120	20	12	76.5	F25
	2.83	3.70	4.72	0.79	0.47	3.01	
16"	72	116	140	20	12	76.5	F25
	2.83	4.57	5.51	0.79	0.47	3.01	
18x16"	72	116	140	20	12	76.5	F25
	2.83	4.57	5.51	0.79	0.47	3.01	
18"	80	120	150	22	14	85	F25
	3.15	4.72	5.91	0.87	0.55	3.35	
20x18"	80	120	150	22	14	85	F25
	3.15	4.72	5.91	0.87	0.55	3.35	
20"	*	*	*	*	*	*	*
24x20"	*	*	*	*	*	*	*
24"	105	130	165	28	16	111	F30
	4.13	5.12	6.50	1.10	0.63	4.37	

NOTE: Please contact Meridian for specific and current drawings and data.
*Confirmation at time of order or upon request.

3 PIECE FORGED DBB TOP WORKS DIMENSIONS

PN 50 / 300 ASME FULL AND REDUCED PORT TRUNNION

Size in inches. Dimensions in mm and inches.



SIZE	A	B	C	D	E	F	ISO
in	mm	mm	mm	mm	mm	mm	
	in	in	in	in	in	in	
2x1 1/2"	20	29.5	40	6	6	22.5	F10
	0.79	1.16	1.57	0.24	0.24	0.89	
2"	26	35	45	8	7	29	F10
	1.02	1.38	1.77	0.31	0.28	1.14	
3x2"	26	35	45	8	7	29	F10
	1.02	1.38	1.77	0.31	0.28	1.14	
3"	30	40	50	8	7	33	F12
	1.18	1.57	1.97	0.31	0.28	1.30	
4x3"	30	40	50	8	7	33	F12
	1.18	1.57	1.97	0.31	0.28	1.30	
4"	35	41	56	10	8	38	F12
	1.38	1.61	2.20	0.39	0.31	1.50	
6x4"	35	41	56	10	8	38	F12
	1.38	1.61	2.20	0.39	0.31	1.50	
6"	47	79	100	14	9	50.5	F16
	1.85	3.11	3.94	0.55	0.35	1.99	
8x6"	47	79	100	14	9	50.5	F16
	1.85	3.11	3.94	0.55	0.35	1.99	
8"	52	88	110	16	10	56	F16
	2.05	3.46	4.33	0.63	0.39	2.20	
10x8"	52	88	110	16	10	56	F16
	2.05	3.46	4.33	0.63	0.39	2.20	
10"	62	85	110	18	11	66	F25
	2.44	3.35	4.33	0.71	0.43	2.60	
12x10"	62	85	110	18	11	66	F25
	2.44	3.35	4.33	0.71	0.43	2.60	
12"	62	88	110	18	11	66	F25
	2.44	3.46	4.33	0.71	0.43	2.60	
14x12"	62	88	110	18	11	66	F25
	2.44	3.46	4.33	0.71	0.43	2.60	

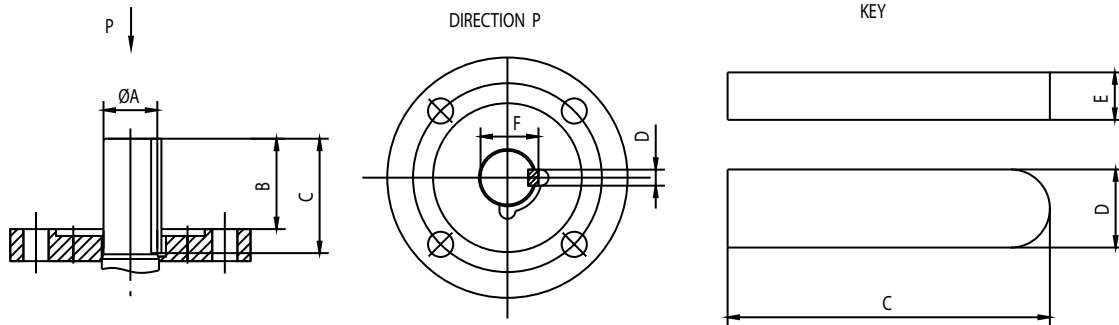
SIZE	A	B	C	D	E	F	ISO
in	mm	mm	mm	mm	mm	mm	
	in	in	in	in	in	in	
14"	72	100	130	20	12	76.5	F25
	2.83	3.94	5.12	0.79	0.47	3.01	
16x14"	72	100	130	20	12	76.5	F25
	2.83	3.94	5.12	0.79	0.47	3.01	
16"	72	116	140	20	12	76.5	F25
	2.83	4.57	5.51	0.79	0.47	3.01	
18x16"	72	116	140	20	12	76.5	F25
	2.83	4.57	5.51	0.79	0.47	3.01	
18"	80	110	140	22	14	85	F25
	3.15	4.33	5.51	0.87	0.55	3.35	
20x18"	80	110	140	22	14	85	F25
	3.15	4.33	5.51	0.87	0.55	3.35	
20"	*	*	*	*	*	*	*
24x20"	*	*	*	*	*	*	*
24"	105	130	165	28	16	111	F35
	4.13	5.12	6.50	1.10	0.63	4.37	

NOTE: Please contact Meridian for specific and current drawings and data.
*Confirmation at time of order or upon request.

3 PIECE FORGED DBB TOP WORKS DIMENSIONS

PN 100 / 600 ASME FULL AND REDUCED PORT TRUNNION

Size in inches. Dimensions in mm and inches.



SIZE	A	B	C	D	E	F	ISO
in	mm	mm	mm	mm	mm	mm	
2x1 1/2"	20	29.5	40	6	6	22.5	F10
	0.79	1.16	1.57	0.24	0.24	0.89	
2"	26	35	45	8	7	29	F10
	1.02	1.38	1.77	0.31	0.28	1.14	
3x2"	26	35	45	8	7	29	F10
	1.02	1.38	1.77	0.31	0.28	1.14	
3"	30	40	50	8	7	33	F12
	1.18	1.57	1.97	0.31	0.28	1.30	
4x3"	30	40	50	8	7	33	F12
	1.18	1.57	1.97	0.31	0.28	1.30	
4"	35	41	56	10	8	38	F12
	1.38	1.61	2.20	0.39	0.31	1.50	
6x4"	35	41	56	10	8	38	F12
	1.38	1.61	2.20	0.39	0.31	1.50	
6"	47	79	100	14	9	50.5	F16
	1.85	3.11	3.94	0.55	0.35	1.99	
8x6"	47	79	100	14	9	50.5	F16
	1.85	3.11	3.94	0.55	0.35	1.99	
8"	52	88	110	16	10	56	F25
	2.05	3.46	4.33	0.63	0.39	2.20	
10x8"	52	88	110	16	10	56	F25
	2.05	3.46	4.33	0.63	0.39	2.20	
10"	62	85	110	18	11	66	F25
	2.44	3.35	4.33	0.71	0.43	2.60	
12x10"	62	85	110	18	11	66	F25
	2.44	3.35	4.33	0.71	0.43	2.60	
12"	72	117	140	20	12	76.5	F25
	2.83	4.61	5.51	0.79	0.47	3.01	
14x12"	72	117	140	20	12	76.5	F25
	2.83	4.61	5.51	0.79	0.47	3.01	

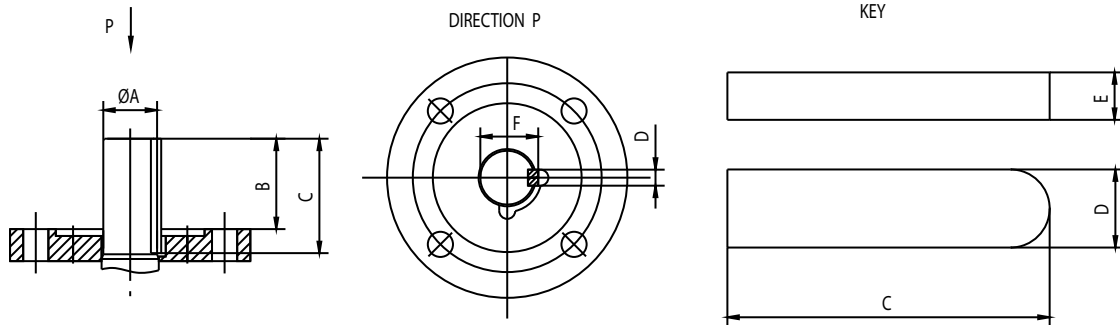
SIZE	A	B	C	D	E	F	ISO
in	mm	mm	mm	mm	mm	mm	
14"	85	117	140	22	14	90	F30
	3.35	4.61	5.51	0.87	0.55	3.54	
16x14"	85	117	140	22	14	90	F30
	3.35	4.61	5.51	0.87	0.55	3.54	
16"	92	133	160	25	14	97	F30
	3.62	5.24	6.30	0.98	0.55	3.82	
18x16"	92	133	160	25	14	97	F30
	3.62	5.24	6.30	0.98	0.55	3.82	
18"	*	*	*	*	*	*	*
20x18"	*	*	*	*	*	*	*
20"	110	130	165	28	16	116	F35
	4.33	5.12	6.50	1.10	0.63	4.57	
24x20"	110	130	165	28	16	116	F35
	4.33	5.12	6.50	1.10	0.63	4.57	

NOTE: Please contact Meridian for specific and current drawings and data.
*Confirmation at time of order or upon request.

3 PIECE FORGED DBB TOP WORKS DIMENSIONS

PN 150 / 900 ASME FULL AND REDUCED PORT TRUNNION

Size in inches. Dimensions in mm and inches.



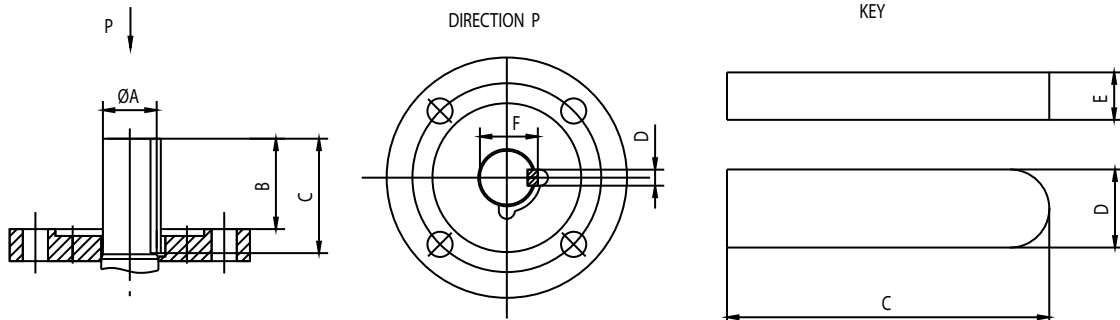
SIZE	A	B	C	D	E	F	ISO
in	mm	mm	mm	mm	mm	mm	
	in	in	in	in	in	in	
2x1 1/2"	*	*	*	*	*	*	*
2"	26	36	50	8	7	29	F12
	1.02	1.42	1.97	0.31	0.28	1.14	
3x2"	26	36	50	8	7	29	F12
	1.02	1.42	1.97	0.31	0.28	1.14	
3"	30	41	55	8	7	33	F12
	1.18	1.61	2.17	0.31	0.28	1.30	
4x3"	30	41	55	8	7	33	F12
	1.18	1.61	2.17	0.31	0.28	1.30	
4"	35	61	80	10	8	38	F14
	1.38	2.40	3.15	0.39	0.31	1.50	
6x4"	35	61	80	10	8	38	F14
	1.38	2.40	3.15	0.39	0.31	1.50	
6"	47	78	100	14	9	50.5	F25
	1.85	3.07	3.94	0.55	0.35	1.99	
8x6"	47	78	100	14	9	50.5	F25
	1.85	3.07	3.94	0.55	0.35	1.99	
8"	72	78	100	20	12	76.5	F25
	2.83	3.07	3.94	0.79	0.47	3.01	
10x8"	72	78	100	20	12	76.5	F25
	2.83	3.07	3.94	0.79	0.47	3.01	
10"	72	76	100	20	12	76.5	F25
	2.83	2.99	3.94	0.79	0.47	3.01	
12x10"	72	76	100	20	12	76.5	F25
	2.83	2.99	3.94	0.79	0.47	3.01	
12"	90	120	150	25	14	95	F25
	3.54	4.72	5.91	0.98	0.55	3.74	
14x12"	90	120	150	25	14	95	F25
	3.54	4.72	5.91	0.98	0.55	3.74	

NOTE: Please contact Meridian for specific and current drawings and data.
*Confirmation at time of order or upon request.

3 PIECE FORGED DBB TOP WORKS DIMENSIONS

PN 250 / 1500 ASME FULL AND REDUCED PORT TRUNNION

Size in inches. Dimensions in mm and inches.



SIZE	A	B	C	D	E	F	ISO
in	mm	mm	mm	mm	mm	mm	
	in	in	in	in	in	in	
2x1 1/2"	26	36.5	50	8	7	29	F12
	1.02	1.44	1.97	0.31	0.28	1.14	
2"	26	36	50	8	7	29	F12
	1.02	1.42	1.97	0.31	0.28	1.14	
3x2"	26	36	50	8	7	29	F12
	1.02	1.42	1.97	0.31	0.28	1.14	
3"	38	61	75	10	8	41	F16
	1.50	2.40	2.95	0.39	0.31	1.61	
4x3"	38	61	75	10	8	41	F16
	1.50	2.40	2.95	0.39	0.31	1.61	
4"	47	79	100	14	9	50.5	F16
	1.85	3.11	3.94	0.55	0.35	1.99	
6x4"	47	79	100	14	9	50.5	F16
	1.85	3.11	3.94	0.55	0.35	1.99	
6"	57	83	105	16	10	61	F25
	2.24	3.27	4.13	0.63	0.39	2.40	
8x6"	57	83	105	16	10	61	F25
	2.24	3.27	4.13	0.63	0.39	2.40	
8"	80	120	149	22	14	85	F25
	3.15	4.72	5.87	0.87	0.55	3.35	
10x8"	80	120	149	22	14	85	F25
	3.15	4.72	5.87	0.87	0.55	3.35	
10"	95	130	160	25	14	100	F30
	3.74	5.12	6.30	0.98	0.55	3.94	
12x10"	95	130	160	25	14	100	F30
	3.74	5.12	6.30	0.98	0.55	3.94	

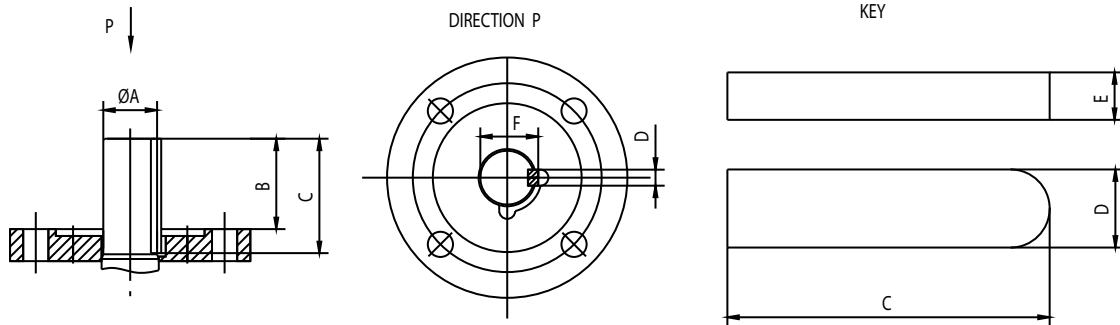
NOTE: Please contact Meridian for specific and current drawings and data.

*Confirmation at time of order or upon request.

3 PIECE FORGED DBB TOP WORKS DIMENSIONS

PN 420 / 2500 ASME FULL AND REDUCED PORT TRUNNION

Size in inches. Dimensions in mm and inches.



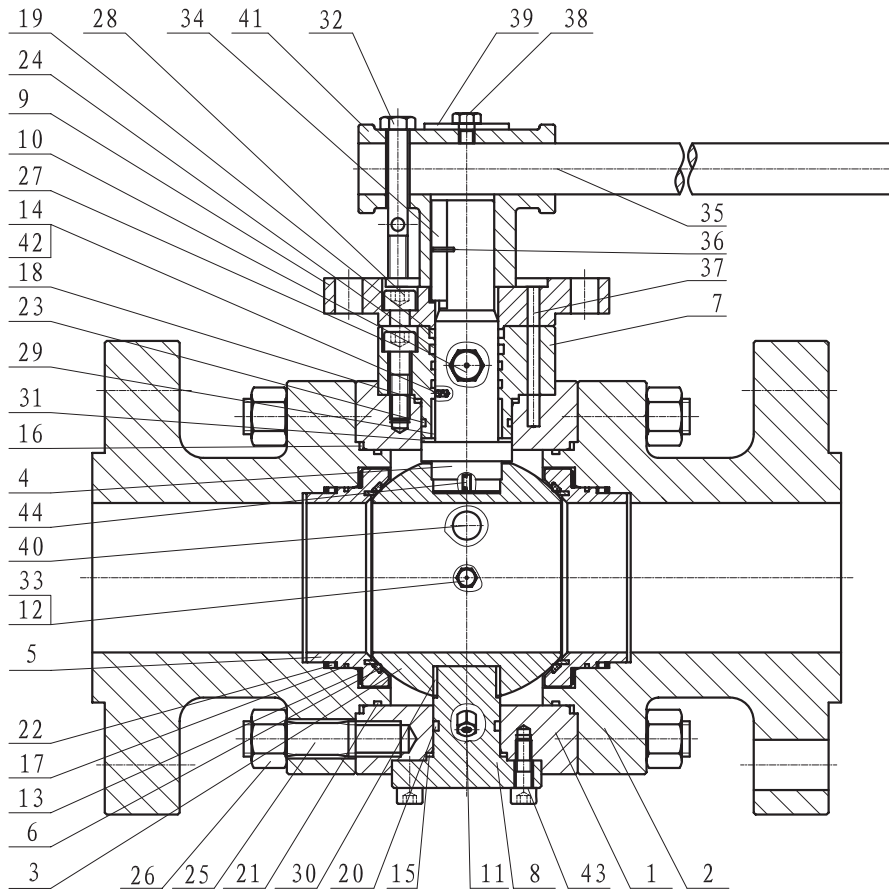
SIZE	A	B	C	D	E	F	ISO
in	mm	mm	mm	mm	mm	mm	
	in	in	in	in	in	in	
2x1 1/2"	35	43	60	10	8	38	F16
	1.38	1.69	2.36	0.39	0.31	1.50	
2"	35	43	60	10	8	38	F16
	1.38	1.69	2.36	0.39	0.31	1.50	
3x2"	35	43	60	10	8	38	F16
	1.38	1.69	2.36	0.39	0.31	1.50	
3"	42	68	90	12	8	45	F16
	1.65	2.68	3.54	0.47	0.31	1.77	
4x3"	42	68	90	12	8	45	F16
	1.65	2.68	3.54	0.47	0.31	1.77	
4"	52	79	100	16	10	56	F25
	2.05	3.11	3.94	0.63	0.39	2.20	
6x4"	52	79	100	16	10	56	F25
	2.05	3.11	3.94	0.63	0.39	2.20	

NOTE: Please contact Meridian for specific and current drawings and data.
*Confirmation at time of order or upon request.



3 PIECE FORGED LEVER OPERATED DIB

CROSS SECTIONAL DRAWING

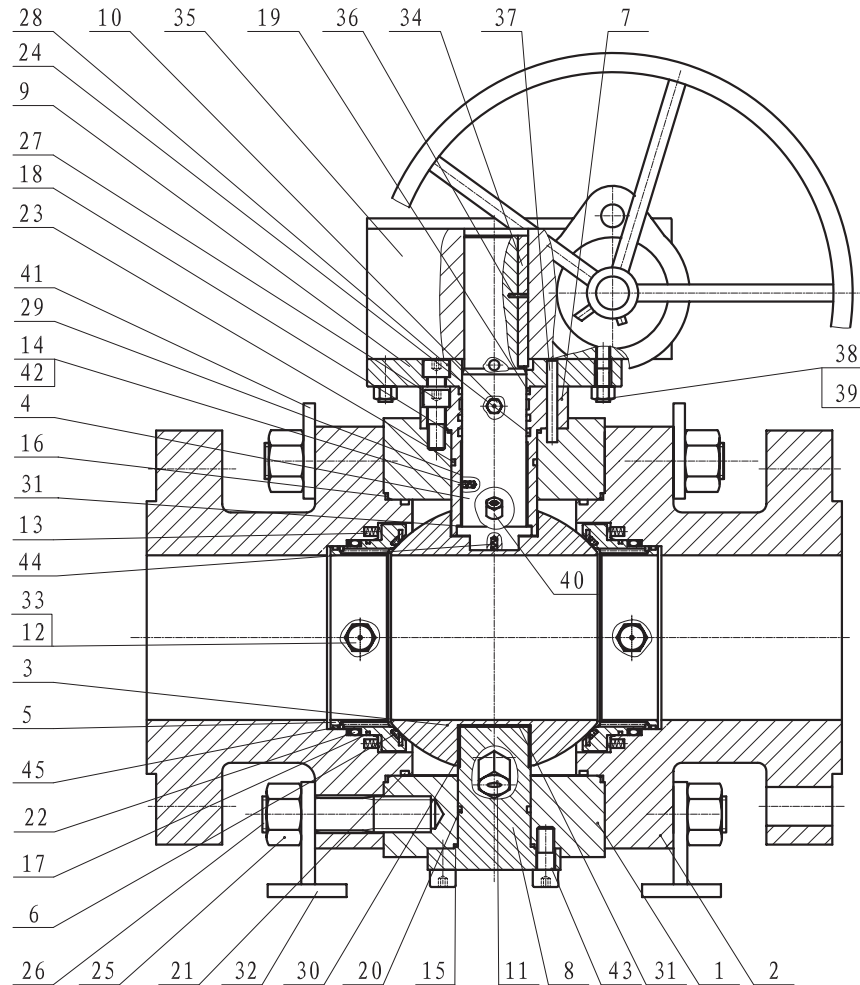


ITEM	DESCRIPTIONS	ITEM	DESCRIPTIONS	ITEM	DESCRIPTIONS
1	BODY	16	FIRE SAFE GASKET	31	THRUST WASHER
2	END CAP	17	FIRE SAFE GASKET	32	HEX HEAD BOLT
3	BALL	18	FIRE SAFE GASKET	33	CHECK VALVE
4	STEM	19	FIRE SAFE PACKING	34	KEY
5	SEAT	20	TRUNNION SEAL O-RING	35	LEVER
6	SEAT RING	21	BODY SEAL O-RING	36	PIN
7	UPPER CAP	22	SEAT SEAL O-RING	37	PIN
8	TRUNNION	23	UPPER CAP SEAL O-RING	38	HEX HEAD BOLT
9	LIMIT STOP PLATE	24	STEM SEAL O-RING	39	INDICATING PLATE
10	SEALANT INJECTION VALVE	25	STUD	40	VENT VALVE
11	DRAIN VALVE	26	NUT	41	LEVER HEAD
12	SEALANT INJECTION VALVE	27	ALLEN HEAD BOLT	42	ANTISTATIC BALL
13	SEAT SPRING	28	ALLEN HEAD BOLT	43	ALLEN HEAD BOLT
14	ANTISTATIC SPRING	29	BEARING	44	ANTISTATIC SPRING
15	FIRE SAFE GASKET	30	BEARING		

NOTE: Drawings are representative. Please contact Meridian for specific and current PDF drawings. All DIB valves are drilled and tapped for body cavity overpressure relief if required. Space permitting, all flanges are drilled and tapped for venting of body cavity overpressure relief system. Select small valves use body cavity sealant injection. Other valves use seat sealant injection (12/33).

3 PIECE FORGED GEAR OPERATED DIB

CROSS SECTIONAL DRAWING



ITEM	DESCRIPTIONS	ITEM	DESCRIPTIONS	ITEM	DESCRIPTIONS
1	BODY	16	FIRE SAFE GASKET	31	THRUST WASHER
2	END CAP	17	FIRE SAFE GASKET	32	SUPPORT FEET
3	BALL	18	FIRE SAFE GASKET	33	CHECK VALVE
4	STEM	19	FIRE SAFE PACKING	34	KEY
5	SEAT	20	TRUNNION SEAL O-RING	35	GEAR OPERATOR
6	SEAT RING	21	BODY SEAL O-RING	36	PIN
7	UPPER CAP	22	SEAT SEAL O-RING	37	PIN
8	TRUNNION	23	UPPER CAP SEAL O-RING	38	STUD
9	LIMIT STOP PLATE	24	STEM SEAL O-RING	39	NUT
10	SEALANT INJECTION VALVE	25	STUD	40	VENT VALVE
11	DRAIN VALVE	26	NUT	41	LIFTING LUGS
12	SEALANT INJECTION VALVE	27	ALLEN HEAD BOLT	42	ANTISTATIC BALL
13	SEAT SPRING	28	ALLEN HEAD BOLT	43	ALLEN HEAD BOLT
14	ANTISTATIC SPRING	29	BEARING	44	ANTISTATIC SPRING
15	FIRE SAFE GASKET	30	BEARING		

NOTE: Drawings are representative. Please contact Meridian for specific and current PDF drawings.
 All DIB valves are drilled and tapped for body cavity overpressure relief if required.
 Space permitting, all flanges are drilled and tapped for venting of body cavity overpressure relief system.
 Select small valves use body cavity sealant injection. Other valves use seat sealant injection (12/33).

3 PIECE FORGED DIB SIZES & DIMENSIONS

150 - 600 ASME TRUNNION 2" - 6" LEVER OPERATED

Size in inches. Dimensions in mm and inches. Weights in kilograms and pounds.

PN	SIZE	B-Port	L-RF	L-RTJ	H	H1	L1	d	Weight
ASME	in	mm	mm	mm	mm	mm	mm	mm	kg
		in	in	in	in	in	in	in	lb
20	2X1.5	38	178	191	*	*	*	*	15
150		1.50	7.01	7.52					33.07
20	2	50	178	191	172	96	300	20	17
150		1.97	7.01	7.52	6.77	3.78	11.81	0.79	37.48
20	3X2	50	203	216	172	96	300	20	30
150		1.97	7.99	8.50	6.77	3.78	11.81	0.79	66.14
20	3	75	203	216	199	111	400	25	37
150		2.95	7.99	8.50	7.83	4.37	15.75	0.98	81.57
20	4X3	75	229	241	199	111	400	25	42
150		2.95	9.02	9.49	7.83	4.37	15.75	0.98	92.59
20	4	100.1	229	241	222	130	450	25	49
150		3.94	9.02	9.49	8.74	5.12	17.72	0.98	108.03
20	6X4	100.1	394	406	222	130	450	25	100
150		3.94	15.51	15.98	8.74	5.12	17.72	0.98	220.46
50	2X1.5	38	216	232	*	*	*	*	20
300		1.50	8.50	9.13					44.09
50	2	50	216	232	172	96	300	20	22
300		1.97	8.50	9.13	6.77	3.78	11.81	0.79	48.50
50	3X2	50	283	298	172	96	300	20	40
300		1.97	11.14	11.73	6.77	3.78	11.81	0.79	88.18
50	3	75	283	298	199	111	500	25	45
300		2.95	11.14	11.73	7.83	4.37	19.69	0.98	99.21
50	4X3	75	305	321	199	111	500	25	60
300		2.95	12.01	12.64	7.83	4.37	19.69	0.98	132.28
50	4	100.1	305	321	221	130	600	25	70
300		3.94	12.01	12.64	8.70	5.12	23.62	0.98	154.32
50	6X4	100.1	403	419	221	130	600	25	150
300		3.94	15.87	16.50	8.70	5.12	23.62	0.98	330.69
100	2X1.5	38	292	295	158	90	404	20	28
600		1.50	11.50	11.61	6.22	3.54	15.91	0.79	61.73
100	2	50	292	295	176	102	500	20	32
600		1.97	11.50	11.61	6.93	4.02	19.69	0.79	70.55
100	3X2	50	356	359	176	102	500	20	48
600		1.97	14.02	14.13	6.93	4.02	19.69	0.79	105.82
100	3	75	356	359	204	115	600	25	56
600		2.95	14.02	14.13	8.03	4.53	23.62	0.98	123.46
100	4X3	75	432	435	204	115	600	25	80
600		2.95	17.01	17.13	8.03	4.53	23.62	0.98	176.37
100	4	100.1	432	435	225	137	700	25	105
600		3.94	17.01	17.13	8.86	5.39	27.56	0.98	231.48

NOTE: Please contact Meridian for specific and current drawings and data.
*Confirmation at time of order or upon request.

3 PIECE FORGED DIB SIZES & DIMENSIONS

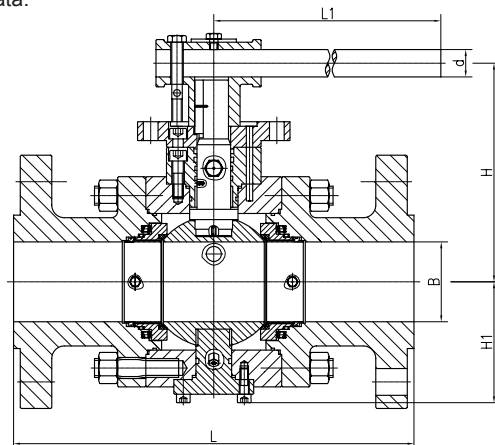
900 - 2500 ASME TRUNNION 2" - 4" LEVER OPERATED

Size in inches. Dimensions in mm and inches. Weights in kilograms and pounds.

	SIZE	B-Port	L-RF	L-RTJ	H	H1	L1	d	Weight
PN	in	mm	mm	mm	mm	mm	mm	mm	kg
ASME		in	in	in	in	in	in	in	lb
150	2x1-1/2	38	368	371	*	*	*	*	40
900		1.50	14.49	14.61					88.18
150	2	49	368	371	183	106	600	25	48
900		1.93	14.49	14.61	7.20	4.17	23.62	0.98	105.82
150	3x2	49	381	384	183	106	600	25	55
900		1.93	15.00	15.12	7.20	4.17	23.62	0.98	121.25
150	3	74	381	384	215	126	760	25	83
900		2.91	15.00	15.12	8.46	4.96	29.92	0.98	182.98
150	4x3	74	457	460	215	126	760	25	100
900		2.91	17.99	18.11	8.46	4.96	29.92	0.98	220.46
250	2x1-1/2	38	368	371	*	*	*	*	45
1500		1.50	14.49	14.61					99.21
250	2	49	368	371	183	106	600	25	62
1500		1.93	14.49	14.61	7.20	4.17	23.62	0.98	136.69
250	3x2	49	470	473	183	106	600	25	110
1500		1.93	18.50	18.62	7.20	4.17	23.62	0.98	242.51
250	3	74	470	473	267	152	885	35	135
1500		2.91	18.50	18.62	10.51	5.98	34.84	1.38	297.62
250	4x3	74	546	549	267	152	885	35	150
1500		2.91	21.50	21.61	10.51	5.98	34.84	1.38	330.69
420	2x1-1/2	38	451	454	*	*	*	*	80
2500		1.50	17.76	17.87					176.37
420	2	42	451	454	249	143	900	35	120
2500		1.65	17.76	17.87	9.80	5.63	35.43	1.38	388.82
420	3x2	42	578	584	249	143	900	35	182
2500		1.65	22.76	22.99	9.80	5.63	35.43	1.38	401.24

NOTE: Please contact Meridian for specific and current drawings and data.
*Confirmation at time of order or upon request.

NOTE: Drawing applies to data on pages 25 and 26.



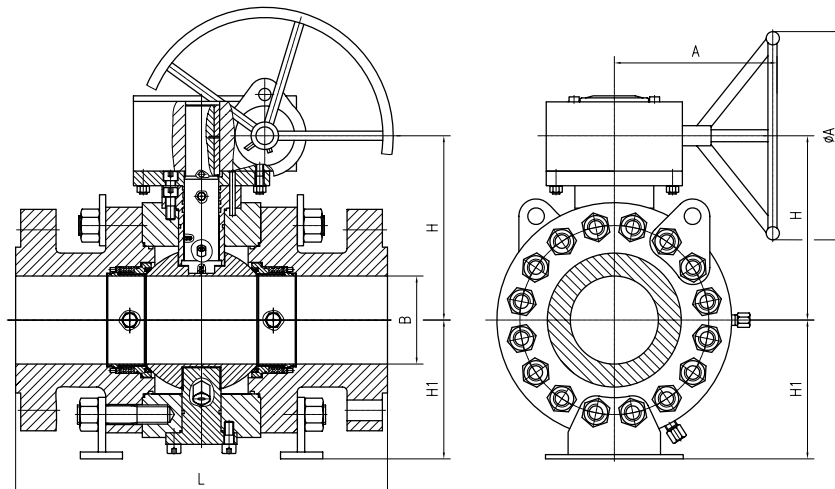
3 PIECE FORGED DIB SIZES & DIMENSIONS

150 ASME TRUNNION 6" - 18" GEAR OPERATED

Size in inches. Dimensions in mm and inches. Weights in kilograms and pounds.

	SIZE	B-Port	L-RF	L-RTJ	H	H1	A	Dia A	Weight
PN ASME	in	mm in	mm in	mm in	mm in	mm in	mm in	mm in	kg lb
20	6	151	394	406	266	205	229	465	154
150		5.94	15.51	15.98	10.47	8.07	9.02	18.31	339.51
20	8X6	151	457	470	266	205	229	465	218
150		5.94	17.99	18.50	10.47	8.07	9.02	18.31	480.60
20	8	202	457	470	315	243	360	600	270
150		7.95	17.99	18.50	12.40	9.57	14.17	23.62	595.24
20	10X8	202	533	546	315	243	360	600	370
150		7.95	20.98	21.50	12.40	9.57	14.17	23.62	815.70
20	10	252	533	546	360	300	402	600	462
150		9.92	20.98	21.50	14.17	11.81	15.83	23.62	1018.53
20	12X10	252	610	622	360	300	402	600	535
150		9.92	24.02	24.49	14.17	11.81	15.83	23.62	1179.46
20	12	303	610	622	390	335	402	600	646
150		11.93	24.02	24.49	15.35	13.19	15.83	23.62	1424.17
20	14X12	303	686	699	390	335	402	600	845
150		11.93	27.01	27.52	15.35	13.19	15.83	23.62	1862.89
20	14	334	686	699	*	*	*	*	958
150		13.15	27.01	27.52					2112.01
20	16X14	334	762	775	*	*	*	*	1160
150		13.15	30.00	30.51					2557.34
20	16	385	762	775	550	410	520	600	1248
150		15.16	30.00	30.51	21.65	16.14	20.47	23.62	2751.34
20	18X16	385	864	876	550	410	520	600	1350
150		15.16	34.02	34.49	21.65	16.14	20.47	23.62	2976.21

NOTE: Please contact Meridian for specific and current drawings and data.
*Confirmation at time of order or upon request.



NOTE: Drawing applies to data on pages 27-32.

3 PIECE FORGED DIB SIZES & DIMENSIONS

300 ASME TRUNNION 6" - 18" GEAR OPERATED

Size in inches. Dimensions in mm and inches. Weights in kilograms and pounds.

	SIZE	B-Port	L-RF	L-RTJ	H	H1	A	Dia A	Weight
PN	in	mm	mm	mm	mm	mm	mm	mm	kg
ASME		in	in	in	in	in	in	in	lb
50	6	151	403	419	266	205	229	465	175
300		5.94	15.87	16.50	10.47	8.07	9.02	18.31	385.81
50	8X6	151	502	518	266	205	229	465	238
300		5.94	19.76	20.39	10.47	8.07	9.02	18.31	524.69
50	8	202	502	518	315	243	360	600	327
300		7.95	19.76	20.39	12.40	9.57	14.17	23.62	720.90
50	10X8	202	568	584	315	243	360	600	382
300		7.95	22.36	22.99	12.40	9.57	14.17	23.62	842.16
50	10	252	568	584	360	300	402	600	500
300		9.92	22.36	22.99	14.17	11.81	15.83	23.62	1102.30
50	12X10	252	648	664	360	300	402	600	570
300		9.92	25.51	26.14	14.17	11.81	15.83	23.62	1256.62
50	12	303	648	664	480	342	520	600	735
300		11.93	25.51	26.14	18.90	13.46	20.47	23.62	1620.38
50	14X12	303	762	778	480	342	520	600	980
300		11.93	30.00	30.63	18.90	13.46	20.47	23.62	2160.51
50	14	334	762	778	*	*	*	*	1162
300		13.15	30.00	30.63					2561.75
50	16X14	334	838	854	*	*	*	*	1250
300		13.15	32.99	33.62					2755.75
50	16	385	838	854	590	422	543	750	1492
300		15.16	32.99	33.62	23.23	16.61	21.38	29.53	3289.26
50	18X16	385	914	930	590	422	543	750	1620
300		15.16	35.98	36.61	23.23	16.61	21.38	29.53	3571.45

NOTE: Please contact Meridian for specific and current drawings and data.
*Confirmation at time of order or upon request.

3 PIECE FORGED DIB SIZES & DIMENSIONS

600 ASME TRUNNION 6" - 16" GEAR OPERATED

Size in inches. Dimensions in mm and inches. Weights in kilograms and pounds.

	SIZE	B-Port	L-RF	L-RTJ	H	H1	A	Dia A	Weight
PN	in	mm	mm	mm	mm	mm	mm	mm	kg
ASME		in	in	in	in	in	in	in	lb
100	6	151	559	562	272	221	402	600	260
600		5.94	22.01	22.13	10.71	8.70	15.83	23.62	573.20
100	8X6	151	660	664	272	221	402	600	382
600		5.94	25.98	26.14	10.71	8.70	15.83	23.62	842.16
100	8	202	660	664	334	280	402	600	465
600		7.95	25.98	26.14	13.15	11.02	15.83	23.62	1025.14
100	10X8	202	787	791	334	280	402	600	591
600		7.95	30.98	31.14	13.15	11.02	15.83	23.62	1302.92
100	10	252	787	791	448	326	520	600	750
600		9.92	30.98	31.14	17.64	12.83	20.47	23.62	1653.45
100	12X10	252	838	841	448	326	520	600	856
600		9.92	32.99	33.11	17.64	12.83	20.47	23.62	1887.14
100	12	303	838	841	520	355	543	750	1090
600		11.93	32.99	33.11	20.47	13.98	21.38	29.53	2403.01
100	14X12	303	889	892	520	355	543	750	1150
600		11.93	35.00	35.12	20.47	13.98	21.38	29.53	2535.29
100	14	334	889	892	*	*	*	*	1335
600		13.15	35.00	35.12					2943.14
100	16X14	334	991	994	*	*	*	*	1560
600		13.15	39.02	39.13					3439.18
100	16	385	991	994	511	420	604	750	1810
600		15.16	39.02	39.13	20.12	16.54	23.78	29.53	3990.33

NOTE: Please contact Meridian for specific and current drawings and data.
*Confirmation at time of order or upon request.

3 PIECE FORGED DIB SIZES & DIMENSIONS

900 ASME TRUNNION 4" - 18" GEAR OPERATED

Size in inches. Dimensions in mm and inches. Weights in kilograms and pounds.

	SIZE	B-Port	L-RF	L-RTJ	H	H1	A	Dia A	Weight
PN	in	mm	mm	mm	mm	mm	mm	mm	kg
ASME		in	in	in	in	in	in	in	lb
150	4	100	457	460	238	200	229	465	127
900		3.94	17.99	18.11	9.37	7.87	9.02	18.31	279.98
150	6X4	100	610	613	238	200	229	465	240
900		3.94	24.02	24.13	9.37	7.87	9.02	18.31	529.10
150	6	150	610	613	283	242	402	600	305
900		5.91	24.02	24.13	11.14	9.53	15.83	23.62	672.40
150	8X6	150	737	740	283	242	402	600	480
900		5.91	29.02	29.13	11.14	9.53	15.83	23.62	1058.21
150	8	201	737	740	432	283	520	600	560
900		7.91	29.02	29.13	17.01	11.14	20.47	23.62	1234.58
150	10X8	201	838	841	432	283	520	600	750
900		7.91	32.99	33.11	17.01	11.14	20.47	23.62	1653.45
150	10	252	838	841	*	*	*	*	858
900		9.92	32.99	33.11					1891.55
150	12X10	252	965	968	*	*	*	*	1050
900		9.92	37.99	38.11					2314.83
150	12	303	965	968	*	*	*	*	1343
900		11.93	37.99	38.11					2960.78
150	14X12	303	1029	1038	*	*	*	*	1520
900		11.93	40.51	40.87					3350.99
150	14	322	1029	1038	*	*	*	*	1610
900		12.68	40.51	40.87					3549.41
150	16X14	322	1130	1140	*	*	*	*	1850
900		12.68	44.49	44.88					4078.51
150	16	373	1130	1140	*	*	*	*	2525
900		14.69	44.49	44.88					5566.62
150	18X16	373	1219	1232	*	*	*	*	2690
900		14.69	47.99	48.50					5930.37

NOTE: Please contact Meridian for specific and current drawings and data.
*Confirmation at time of order or upon request.

3 PIECE FORGED DIB SIZES & DIMENSIONS

1500 ASME TRUNNION 4" - 18" GEAR OPERATED

Size in inches. Dimensions in mm and inches. Weights in kilograms and pounds.

	SIZE	B-Port	L-RF	L-RTJ	H	H1	A	Dia A	Weight
PN	in	mm	mm	mm	mm	mm	mm	mm	kg
ASME		in	in	in	in	in	in	in	lb
250	4	100	546	549	*	*	*	*	195
1500		3.94	21.50	21.61					429.90
250	6X4	100	705	711	*	*	*	*	350
1500		3.94	27.76	27.99					771.61
250	6	144	705	711	*	*	*	*	461
1500		5.67	27.76	27.99					1016.32
250	8X6	144	832	841	*	*	*	*	560
1500		5.67	32.76	33.11					1234.58
250	8	192	832	841	*	*	*	*	640
1500		7.56	32.76	33.11					1410.94
250	10X8	192	991	1000	*	*	*	*	930
1500		7.56	39.02	39.37					2050.28
250	10	239	991	1000	*	*	*	*	1210
1500		9.41	39.02	39.37					2667.57
250	12X10	239	1130	1146	*	*	*	*	1356
1500		9.41	44.49	45.12					2989.44
250	12	287	1130	1146	*	*	*	*	1592
1500		11.30	44.49	45.12					3509.72
250	14X12	287	1257	1276	*	*	*	*	1830
1500		11.30	49.49	50.24					4034.42
250	14	315	1257	1276	*	*	*	*	2260
1500		12.40	49.49	50.24					4982.40
250	16X14	315	1384	1407	*	*	*	*	2560
1500		12.40	54.49	55.39					5643.78
250	16	360	1384	1407	*	*	*	*	3760
1500		14.17	54.49	55.39					8289.30
250	18X16	360	1537	1559	*	*	*	*	5554
1500		14.17	60.51	61.38					12244.35

NOTE: Please contact Meridian for specific and current drawings and data.
*Confirmation at time of order or upon request.

3 PIECE FORGED DIB SIZES & DIMENSIONS

2500 ASME TRUNNION 3" - 12" GEAR OPERATED

Size in inches. Dimensions in mm and inches. Weights in kilograms and pounds.

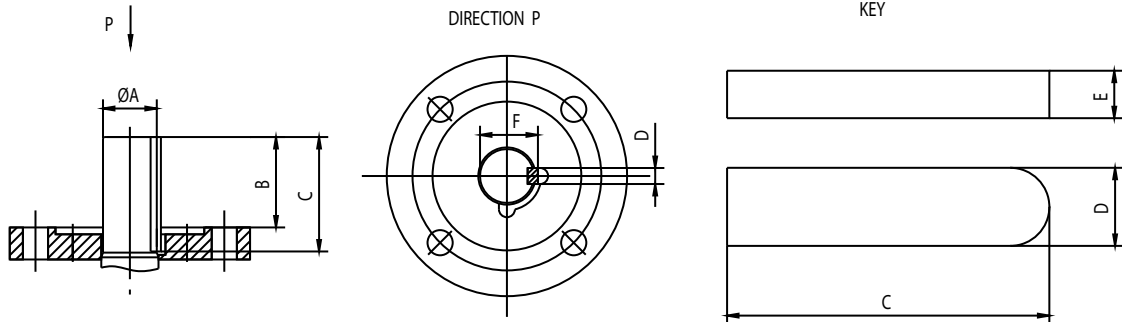
	SIZE	B-Port	L-RF	L-RTJ	H	H1	A	Dia A	Weight
PN	in	mm	mm	mm	mm	mm	mm	mm	kg
ASME		in	in	in	in	in	in	in	lb
420	3	62	578	584	*	*	*	*	215
2500		2.44	22.76	22.99					473.99
420	4X3	62	673	683	*	*	*	*	275
2500		2.44	26.50	26.89					606.27
420	4	87	673	683	*	*	*	*	389
2500		3.43	26.50	26.89					857.59
420	6X4	87	914	927	*	*	*	*	526
2500		3.43	35.98	36.50					1159.62
420	6	131	914	927	*	*	*	*	1524
2500		5.16	35.98	36.50					3359.81
420	8X6	131	1022	1038	*	*	*	*	1623
2500		5.16	40.24	40.87					3578.07
420	8	179	1022	1038	*	*	*	*	1880
2500		7.05	40.24	40.87					4144.65
420	10X8	179	1270	1292	*	*	*	*	2421
2500		7.05	50.00	50.87					5337.34
420	10	223	1270	1292	*	*	*	*	3140
2500		8.78	50.00	50.87					6922.44
420	12X10	223	1422	1445	*	*	*	*	3536
2500		8.78	55.98	56.89					7795.47
420	12	265	1422	1445	*	*	*	*	4260
2500		10.43	55.98	56.89					9391.60

NOTE: Please contact Meridian for specific and current drawings and data.
*Confirmation at time of order or upon request.

3 PIECE FORGED DIB TOP WORKS DIMENSIONS

PN 20 / 150 ASME FULL AND REDUCED PORT TRUNNION

Size in inches. Dimensions in mm and inches.



SIZE	A	B	C	D	E	F	ISO
in	mm	mm	mm	mm	mm	mm	
	in	in	in	in	in	in	
2X1 1/2"	*	*	*	*	*	*	*
2"	26	35	45	8	7	29	F10
	1.02	1.38	1.77	0.31	0.28	1.14	
3X2"	26	35	45	8	7	29	F10
	1.02	1.38	1.77	0.31	0.28	1.14	
3"	30	40	50	8	7	33	F12
	1.18	1.57	1.97	0.31	0.28	1.30	
4X3"	30	40	50	8	7	33	F12
	1.18	1.57	1.97	0.31	0.28	1.30	
4"	35	41	56	10	8	38	F12
	1.38	1.61	2.20	0.39	0.31	1.50	
6X4"	35	41	56	10	8	38	F12
	1.38	1.61	2.20	0.39	0.31	1.50	
6"	47	79	100	14	9	50.5	F16
	1.85	3.11	3.94	0.55	0.35	1.99	
8X6"	47	79	100	14	9	50.5	F16
	1.85	3.11	3.94	0.55	0.35	1.99	
8"	52	88	110	16	10	56	F16
	2.05	3.46	4.33	0.63	0.39	2.20	
10X8"	52	88	110	16	10	56	F16
	2.05	3.46	4.33	0.63	0.39	2.20	
10"	62	85	110	18	11	66	F25
	2.44	3.35	4.33	0.71	0.43	2.60	
12X10"	62	85	110	18	11	66	F25
	2.44	3.35	4.33	0.71	0.43	2.60	
	2.83	4.57	5.51	0.79	0.47	3.01	

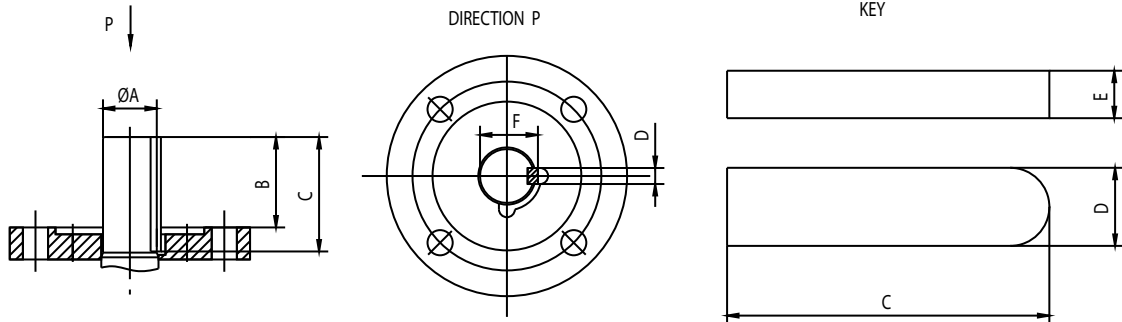
SIZE	A	B	C	D	E	F	ISO
in	mm	mm	mm	mm	mm	mm	
	in	in	in	in	in	in	
12"	62	88	110	18	11	66	F25
	2.44	3.46	4.33	0.71	0.43	2.60	
14x12"	62	88	110	18	11	66	F25
	2.44	3.46	4.33	0.71	0.43	2.60	
14"	*	*	*	*	*	*	*
16x14"	*	*	*	*	*	*	*
16"	72	116	140	20	12	76.5	F25
	2.83	4.57	5.51	0.79	0.47	3.01	
18x16"	72	116	140	20	12	76.5	F25
	2.83	4.57	5.51	0.79	0.47	3.01	

NOTE: Please contact Meridian for specific and current drawings and data.
*Confirmation at time of order or upon request.

3 PIECE FORGED DIB TOP WORKS DIMENSIONS

PN 50 / 300 ASME FULL AND REDUCED PORT TRUNNION

Size in inches. Dimensions in mm and inches.



SIZE	A	B	C	D	E	F	ISO
in	mm	mm	mm	mm	mm	mm	
	in	in	in	in	in	in	
2X1 1/2"	*	*	*	*	*	*	*
2"	26	35	45	8	7	29	F10
	1.02	1.38	1.77	0.31	0.28	1.14	
3X2"	26	35	45	8	7	29	F10
	1.02	1.38	1.77	0.31	0.28	1.14	
3"	30	40	50	8	7	33	F12
	1.18	1.57	1.97	0.31	0.28	1.30	
4X3"	30	40	50	8	7	33	F12
	1.18	1.57	1.97	0.31	0.28	1.30	
4"	35	41	56	10	8	38	F12
	1.38	1.61	2.20	0.39	0.31	1.50	
6X4"	35	41	56	10	8	38	F12
	1.38	1.61	2.20	0.39	0.31	1.50	
6"	47	79	100	14	9	50.5	F16
	1.85	3.11	3.94	0.55	0.35	1.99	
8X6"	47	79	100	14	9	50.5	F16
	1.85	3.11	3.94	0.55	0.35	1.99	
8"	52	88	110	16	10	56	F16
	2.05	3.46	4.33	0.63	0.39	2.20	
10X8"	52	88	110	16	10	56	F16
	2.05	3.46	4.33	0.63	0.39	2.20	
10"	62	85	110	18	11	66	F25
	2.44	3.35	4.33	0.71	0.43	2.60	
12X10"	62	85	110	18	11	66	F25
	2.44	3.35	4.33	0.71	0.43	2.60	

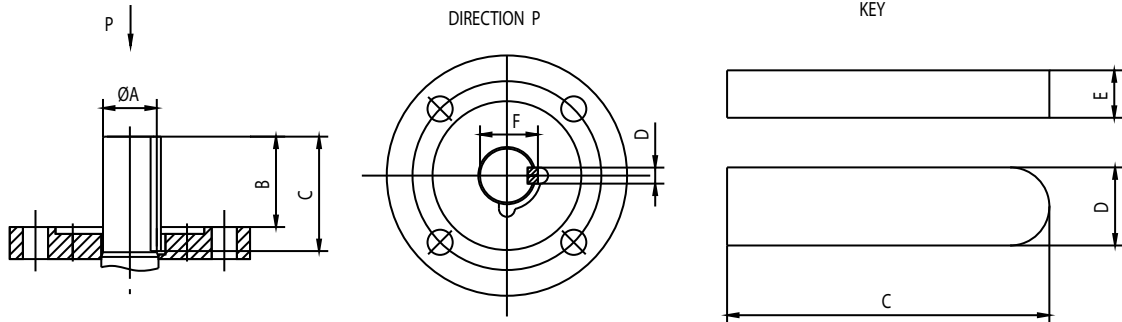
SIZE	A	B	C	D	E	F	ISO
in	mm	mm	mm	mm	mm	mm	
	in	in	in	in	in	in	
12"	62	88	110	18	11	66	F25
	2.44	3.46	4.33	0.71	0.43	2.60	
14x12"	62	88	110	18	11	66	F25
	2.44	3.46	4.33	0.71	0.43	2.60	
14"	*	*	*	*	*	*	*
16x14"	*	*	*	*	*	*	*
16"	72	116	140	20	12	76.5	F25
	2.83	4.57	5.51	0.79	0.47	3.01	
18x16"	72	116	140	20	12	76.5	F25
	2.83	4.57	5.51	0.79	0.47	3.01	

NOTE: Please contact Meridian for specific and current drawings and data.
*Confirmation at time of order or upon request.

3 PIECE FORGED DIB TOP WORKS DIMENSIONS

PN 100 / 600 ASME FULL AND REDUCED PORT TRUNNION

Size in inches. Dimensions in mm and inches.



SIZE	A	B	C	D	E	F	ISO
in	mm	mm	mm	mm	mm	mm	
	in	in	in	in	in	in	
2X1 1/2"	20	29.5	40	6	6	22.5	F10
	0.79	1.16	1.57	0.24	0.24	0.89	
2"	26	35	45	8	7	29	F10
	1.02	1.38	1.77	0.31	0.28	1.14	
3X2"	26	35	45	8	7	29	F10
	1.02	1.38	1.77	0.31	0.28	1.14	
3"	30	40	50	8	7	33	F12
	1.18	1.57	1.97	0.31	0.28	1.30	
4X3"	30	40	50	8	7	33	F12
	1.18	1.57	1.97	0.31	0.28	1.30	
4"	35	41	56	10	8	38	F12
	1.38	1.61	2.20	0.39	0.31	1.50	
6X4"	35	41	56	10	8	38	F12
	1.38	1.61	2.20	0.39	0.31	1.50	
6"	47	79	100	14	9	50.5	F16
	1.85	3.11	3.94	0.55	0.35	1.99	
8X6"	47	79	100	14	9	50.5	F16
	1.85	3.11	3.94	0.55	0.35	1.99	
8"	52	88	110	16	10	56	F25
	2.05	3.46	4.33	0.63	0.39	2.20	
10X8"	52	88	110	16	10	56	F25
	2.05	3.46	4.33	0.63	0.39	2.20	
10"	62	85	110	18	11	66	F25
	2.44	3.35	4.33	0.71	0.43	2.60	
12X10"	62	85	110	18	11	66	F25
	2.44	3.35	4.33	0.71	0.43	2.60	

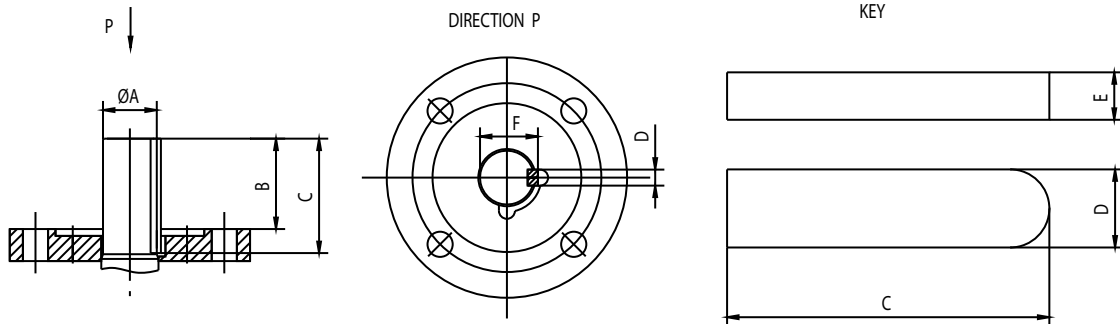
SIZE	A	B	C	D	E	F	ISO
in	mm	mm	mm	mm	mm	mm	
	in	in	in	in	in	in	
12"	72	117	140	20	12	76.5	F25
	2.83	4.61	5.51	0.79	0.47	3.01	
14x12"	72	117	140	20	12	76.5	F25
	2.83	4.61	5.51	0.79	0.47	3.01	
14"	*	*	*	*	*	*	*
16x14"	*	*	*	*	*	*	*
16"	92	133	160	25	14	97	F30
	3.62	5.24	6.30	0.98	0.55	3.82	
18x16"	92	133	160	25	14	97	F30
	3.62	5.24	6.30	0.98	0.55	3.82	

NOTE: Please contact Meridian for specific and current drawings and data.
*Confirmation at time of order or upon request.

3 PIECE FORGED DIB TOP WORKS DIMENSIONS

PN 150 / 900 ASME FULL AND REDUCED PORT TRUNNION

Size in inches. Dimensions in mm and inches.



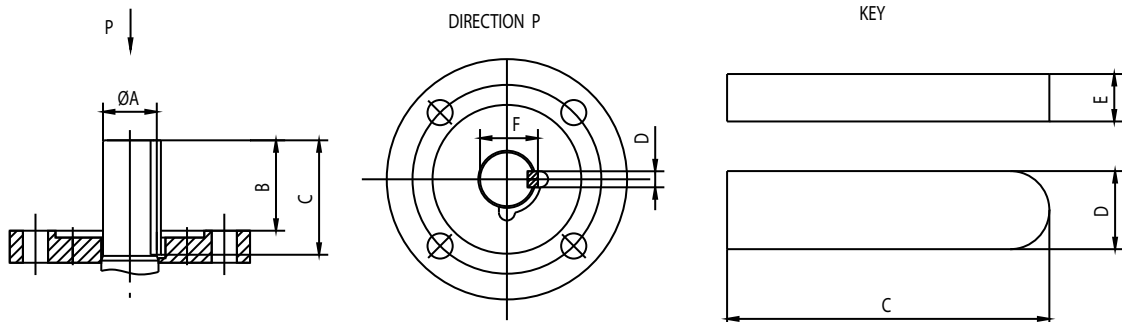
SIZE	A	B	C	D	E	F	ISO
in	mm	mm	mm	mm	mm	mm	
	in	in	in	in	in	in	
2X1 1/2"	*	*	*	*	*	*	*
2"	26	36	50	8	7	29	F12
	1.02	1.42	1.97	0.31	0.28	1.14	
3X2"	26	36	50	8	7	29	F12
	1.02	1.42	1.97	0.31	0.28	1.14	
3"	30	41	55	8	7	33	F12
	1.18	1.61	2.17	0.31	0.28	1.30	
4X3"	30	41	55	8	7	33	F12
	1.18	1.61	2.17	0.31	0.28	1.30	
4"	35	61	80	10	8	38	F14
	1.38	2.40	3.15	0.39	0.31	1.50	
6X4"	35	61	80	10	8	38	F14
	1.38	2.40	3.15	0.39	0.31	1.50	
6"	47	78	100	14	9	50.5	F25
	1.85	3.07	3.94	0.55	0.35	1.99	
8X6"	47	78	100	14	9	50.5	F25
	1.85	3.07	3.94	0.55	0.35	1.99	
8"	72	78	100	20	12	76.5	F25
	2.83	3.07	3.94	0.79	0.47	3.01	
10x8"	72	78	100	20	12	76.5	F25
	2.83	3.07	3.94	0.79	0.47	3.01	

NOTE: Please contact Meridian for specific and current drawings and data.
*Confirmation at time of order or upon request.

3 PIECE FORGED DIB TOP WORKS DIMENSIONS

PN 250 / 1500 ASME FULL AND REDUCED PORT TRUNNION

Size in inches. Dimensions in mm and inches.



SIZE	A	B	C	D	E	F	ISO
in	mm	mm	mm	mm	mm	mm	
	in	in	in	in	in	in	
2X1 1/2"	*	*	*	*	*	*	*
2"	26	36	50	8	7	29	F12
	1.02	1.42	1.97	0.31	0.28	1.14	
3X2"	26	36	50	8	7	29	F12
	1.02	1.42	1.97	0.31	0.28	1.14	
3"	38	61	75	10	8	41	F16
	1.50	2.40	2.95	0.39	0.31	1.61	
4X3"	38	61	75	10	8	41	F16
	1.50	2.40	2.95	0.39	0.31	1.61	

SIZE	A	B	C	D	E	F	ISO
in	mm	mm	mm	mm	mm	mm	
	in	in	in	in	in	in	
8"	80	120	149	22	14	85	F30
	3.15	4.72	5.87	0.87	0.55	3.35	
10x8"	80	120	149	22	14	85	F30
	3.15	4.72	5.87	0.87	0.55	3.35	

PN 420 / 2500 ASME FULL AND REDUCED PORT TRUNNION

Size in inches. Dimensions in mm and inches.

SIZE	A	B	C	D	E	F	ISO
in	mm	mm	mm	mm	mm	mm	
	in	in	in	in	in	in	
2X1 1/2"	*	*	*	*	*	*	*
2"	35	43	60	10	8	38	F16
	1.38	1.69	2.36	0.39	0.31	1.50	
3X2"	35	43	60	10	8	38	F16
	1.38	1.69	2.36	0.39	0.31	1.50	

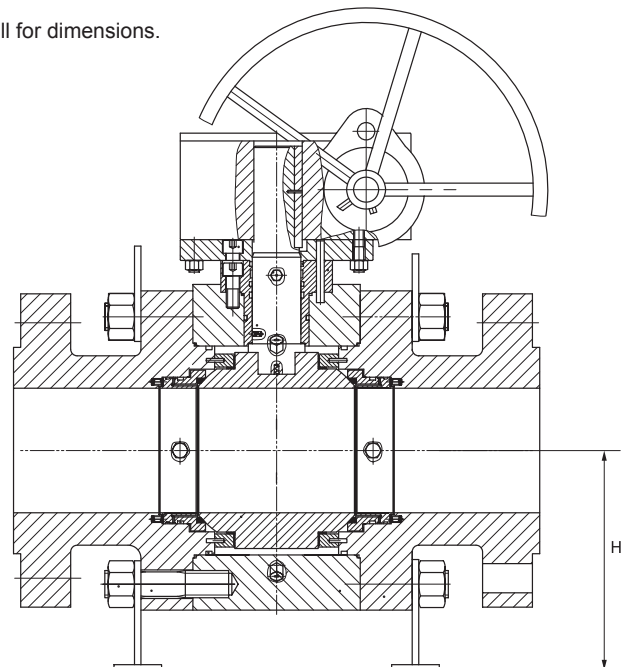
NOTE: Please contact Meridian for specific and current drawings and data.
*Confirmation at time of order or upon request.

3 PIECE FORGED DBB & DIB

LIFTING LUG AND SUPPORT FEET DATA

SIZE	150 ASME			300 ASME			600 ASME			900 ASME			1500 ASME			2500 ASME		
	Lifting Lugs	Support Feet	H	Lifting Lugs	Support Feet	H	Lifting Lugs	Support Feet	H	Lifting Lugs	Support Feet	H	Lifting Lugs	Support Feet	H	Lifting Lugs	Support Feet	H
in			mm in			mm in			mm in			mm in			mm in			mm in
2x1 1/2"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
3x2"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
3"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	YES	YES	187 7.36
4x3"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	YES	YES	187 7.36
4"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	YES	YES	200 7.87	YES	YES	209 8.23	YES	YES	240 9.45
6x4"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	YES	YES	200 7.87	YES	YES	209 8.23	YES	YES	240 9.45
6"	YES	YES	205 8.07	YES	YES	205 8.07	YES	YES	221 8.70	YES	YES	242 9.53	YES	YES	270 10.63			
8x6"	YES	YES	205 8.07	YES	YES	205 8.07	YES	YES	221 8.70	YES	YES	242 9.53	YES	YES	270 10.63			
8"	YES	YES	243 9.57	YES	YES	243 9.57	YES	YES	280 11.02	YES	YES	283 11.14						
10x8"	YES	YES	243 9.57	YES	YES	243 9.57	YES	YES	280 11.02	YES	YES	283 11.14						
10"	YES	YES	300 11.81	YES	YES	300 11.81	YES	YES	326 12.83	YES	YES	320 12.60						
12x10"	YES	YES	300 11.81	YES	YES	300 11.81	YES	YES	326 12.83	YES	YES	320 12.60						
12"	YES	YES	335 13.19	YES	YES	345 13.58	YES	YES	355 13.98									
16"	YES	YES	410 16.14	YES	YES	422 16.61	YES	YES	420 16.54									

NOTE: Valves larger than 16" come standard with support feet - please call for dimensions.



3 PIECE FORGED DBB & DIB

TORQUE DATA

Size (In)	Open (break) torque (inch pounds) at Max. P					
	150 ASME	300 ASME	600 ASME	900 ASME	1500 ASME	2500 ASME
2X1.5"	478	597	1195	1912	2867	3823
2"	597	956	1971	3106	3823	6571
3"	717	1195	3106	5102	7169	11828
4"	1553	2509	5496	8961	13142	23417
6"	4540	6930	11350	18519	38232	65711
8"	8124	16727	24492	45401	72880	108961
10"	13142	27479	35245	65711	143370	201614
12"	19116	32258	51972	107528	209081	407410
14"	25090	45401	77659	191160		
16"	38232	65711	111112	256871	358425	
18"	41816	83650	122223	308246	387003	
20"	55556	100956	152928	346478	747197	
24"	81601	156512	253825	537638	1224619	
30x28"	136440	260456	399047	696539		
30"	164039	349703	504185	1075275		
36"	289130	545523	778738			
42"	430707	913745	1485911			
48"	475152	1044928	1664287			

- NOTE:**
1. Torque values are in inch pounds. To convert to Newton meters divide inch pounds by 8.85.
 2. For reduced port valves not shown select torque based on valve bore size. For example: 4" x 3" x 300 ASME valve – use torque for 3" x 300 ASME valve.
 3. Torque includes safety factor.
 4. For clean wet applications in low temperature service below -20 °C (-4 °F) add 10% safety.
 5. Add additional safety if service conditions dictate.
 6. Torque for sizes not shown is available upon request.
 7. Torques shown are based on the following seat materials:
 - 3 piece trunnions DBB (single piston seats)
 - Class 150 - 300 ASME valves have RPTFE seat rings
 - Class 600-1500 ASME valves have Devlon seat rings
 - Class 2500 ASME valves have PEEK seat rings
 - 3 piece trunnions DIB(double piston seats):
 - Class 150 - 600 ASME valves have Viton seat rings
 - Class 900 - 1500 ASME valves have Devlon seat rings
 - Class 2500 ASME valves have PEEK seat rings

CV Values (all trunnion designs)

FULL BORE

Size (In)	150 ASME	300 ASME	600 ASME	900 ASME	1500 ASME	2500 ASME
2	647	647	647	599	582	412
3	2086	2086	2086	1932	1879	1268
4	2694	2694	2694	2494	2426	1766
6	6062	6062	6062	5612	5030	4004
8	10885	10885	10885	10077	8943	7476
10	17109	17109	17109	15840	13857	11603
12	24734	24734	24734	22990	19982	16385
14	30055	30055	30055	25862	24071	
16	39934	39934	39934	34703	31440	
18	51214	51214	51214	44630	39988	
20	63896	63896	63896	53333	50002	
24	96465	96465	96465	81039	72321	
30	145588	145588	145588	129948		
36	211092	211092	211092			
42	280946	280946	280946			
48	383846	383846	383846			

REDUCED BORE

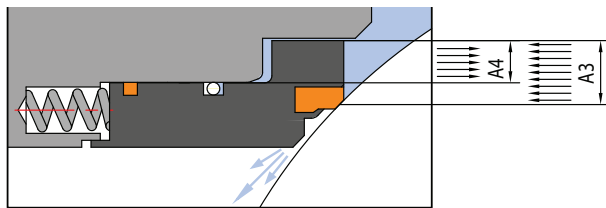
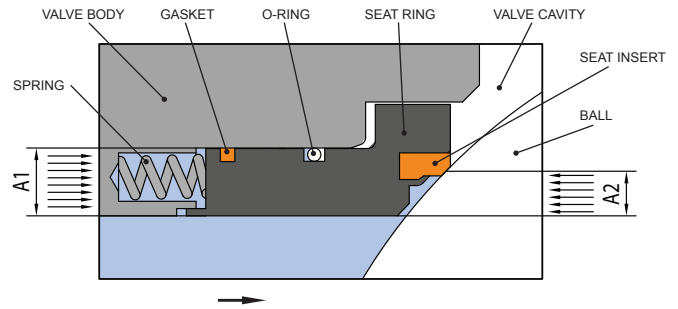
Size (In)	150 ASME	300 ASME	600 ASME	900 ASME	1500 ASME	2500 ASME
2*1 1/2	306	306	306	306	306	300
3*2	377	377	377	377	377	287
4*3	1043	1043	1043	1043	1043	681
6*4	1587	1587	1587	1587	1353	953
8*6	4364	4364	4364	4364	4065	3197
10*8	7495	7495	7495	7495	6986	6057
12*10	13470	13470	13470	13470	12171	10999
14*12	24702	24702	24702	28276	20780	
16*14	27737	27737	27737	25275	25551	
18*16	34740	34740	34740	32387	31002	
20*18	47739	47739	47739	45666	41158	
24*20	49304	49304	49304	46021	43687	
30*28	96762	96762	96762	94231		
36*30	119199	119199	119199			
42*36	180836	180836	180836			
48*42	267636	267636	267636			

NOTE: 1. Larger size data available on request.
 2. Flow coefficient Cv is the volume (in US gallons) of water at 60°F that will flow per minute through a valve with a pressure drop of 1 psi across the valve.

DOUBLE BLOCK AND BLEED VS. DOUBLE ISOLATION AND BLEED

How Do Single Piston Effect Seats Work?

1. During normal operation, upstream or downstream pressure in combination with force created by the seat springs pushes the seat ring against the ball creating positive shutoff ($A1 > A2$).



Pressure acting in the body cavity allows "self relieving" of the seat

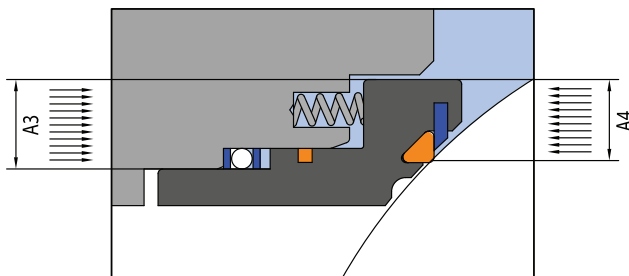
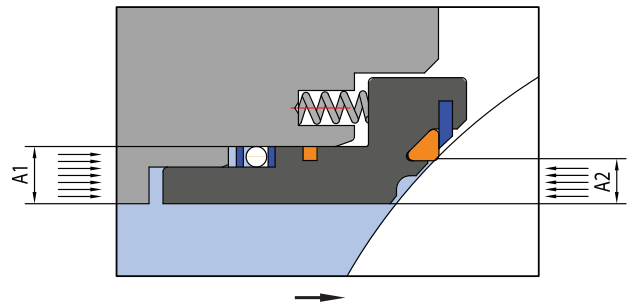
2. With media trapped in the body cavity any increase in media pressure attempts to push the seat ring away from the ball ($A3$). As pressure in the cavity continues to increase a point is reached where the pressure in the cavity can now overcome the spring force and any other forces ($A4$).

The resultant force pushes the seat assembly away from the ball ($A3 > A4$). Seat assemblies with this feature are referred to as "self relieving".

A valve with two single piston effect seats has a double block and bleed (DBB) design.

How Do Double Piston Effect Seats Work?

1. During normal operation, upstream or downstream pressure in combination with force created by the seat springs pushes the seat ring against the ball creating positive shutoff ($A1 > A2$).



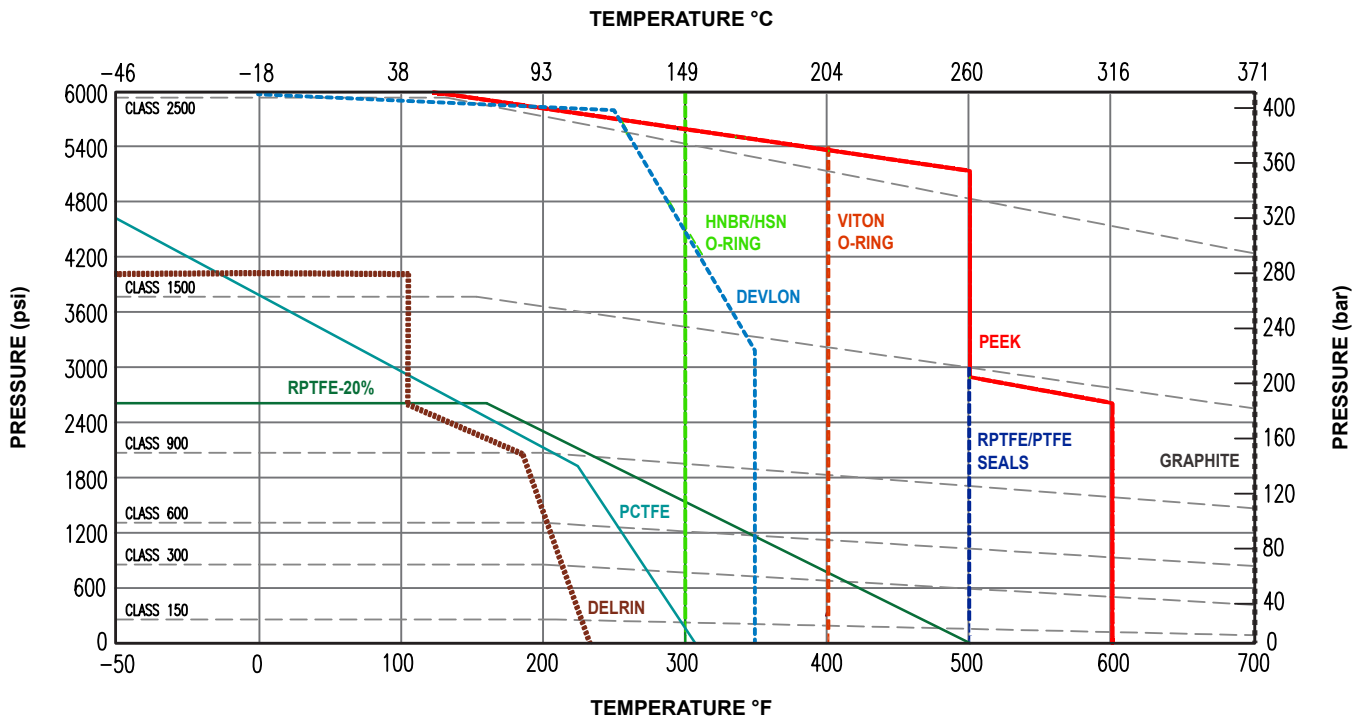
Resultant pressure acting in the body cavity pushes seat against the ball.

2. With media trapped in the body cavity any increase in media pressure acts to push the seat ring against the ball ($A3$). As a result, regardless of whether the pressure is from upstream, downstream or within the body cavity, the seat ring is always pushed against the ball.

The movement of the seat ring against the ball is created due to differences in the effective pressure influenced area of the upstream and downstream side of the seat assembly ($A3 > A4$). Seat assemblies with this feature are not self relieving.

A valve with two double piston effect seats has a double isolation and bleed (DIB-1) design.

REFERENCE PRESSURE/TEMPERATURE CHART



Please consult ASME B16.34 for specific body material pressure / temperature ratings. The above chart is for reference only, please call for specific / additional seat and seal technical information if required.

MERIDIAN™ “CHECKPOINT”

Critical Control Point Check System

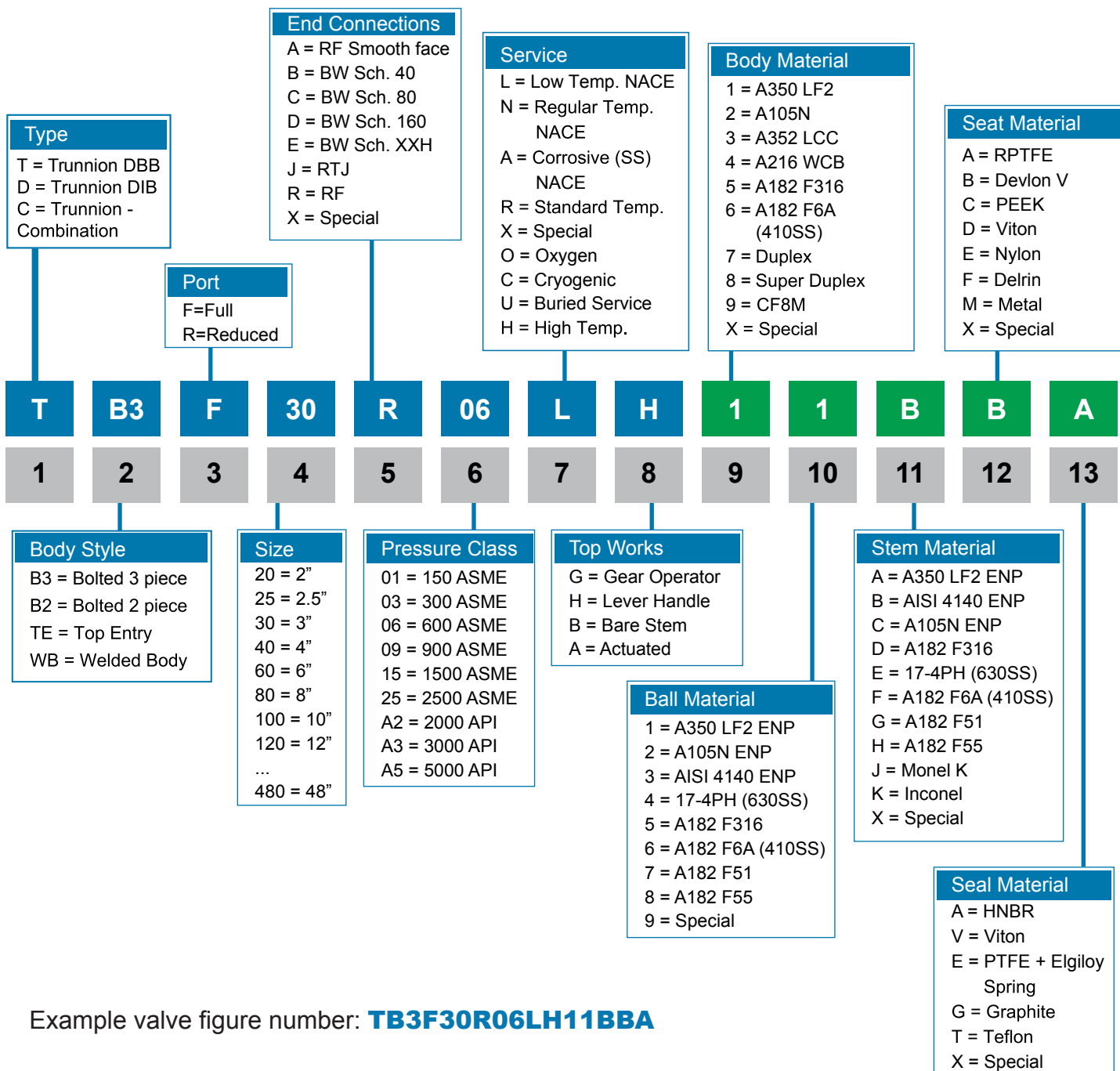
Our internal manufacturing and process quality system leverages “critical control point” data to provide a high level of quality and manufacturing control. Key components of the CHECKPOINT process include:

- A database that links CHECKPOINT manufacturing plant input to a specific valve serial number.
- Visual review and/or inspection and sign-off at each stage in the process.
- Checklist / traveler for each valve / component in production that tracks its progress from raw material to finished product.
- Ability to monitor CHECKPOINT data remotely.



HOW TO ORDER

ORDERING FIGURE NUMBER CHART



Example valve figure number: **TB3F30R06LH11BBA**

This code represents a Meridian™ trunnion ball valve with a bolted 3 piece body, full port bore, 3" size, raised face end connection, 600 ASME, with a low temperature NACE design, lever handle, A350 LF2 body, A350 LF2 ENP ball, AISI 4140 ENP stem, Devlon V seat ring, and HNBR seals.



To learn more about Meridian™ please visit our website at:
www.meridianvalve.ca

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