

OVC

OHIO VALVE COMPANY



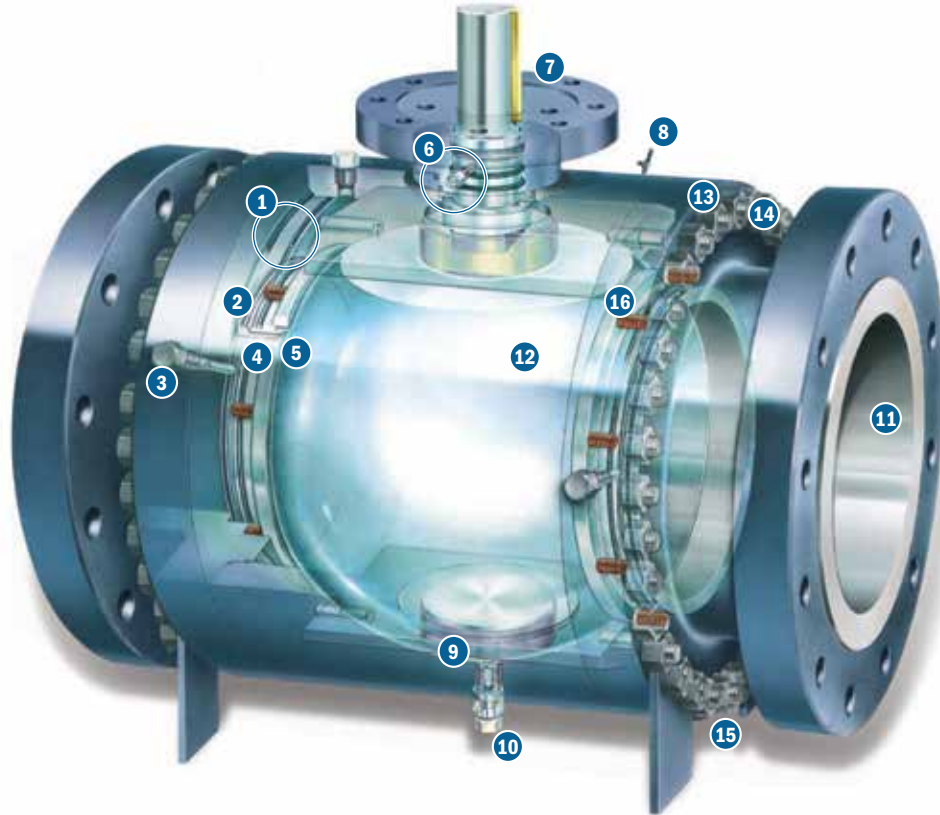
CARBON AND STAINLESS STEEL
TRUNNION MOUNTED BALL VALVES

888.433.1433

www.ohiovalve.com
sales@ohiovalve.com



OVC TRUNNION BALL VALVE INTERNAL ILLUSTRATION



- 1 Double sealing on stem, stem gland, and closure connections
- 2 Seats insure low and high pressure sealing and body cavity self relief for double block and bleed (DBB)
- 3 Seat injection fitting with internal check valve for emergency sealing
- 4 Secondary metal-to-metal sealing accomplishes fire safe requirements
- 5 Standard seat insert materials Devlon®
- 6 Stem injection fitting for secondary sealing

- 7 Large pre-drilled adapter plate for ease in actuation
- 8 Cavity relief valves
- 9 Self-lubrication steel trunnion bearings for smooth operation
- 10 Drain valve for block and bleed function and seat integrity verification
- 11 Bi-directional flow
- 12 Smooth electroless nickel plated ball for bubble-tight sealing and low operating torque

- 13 Valve serialization provides complete traceability
- 14 Flanged x Flanged, Weld End x Weld End, and Flanged x Weld End body connections
- 15 Serviceable in the field
- 16 Inconel X750® springs

Options available include stem extensions, locking devices, transition pieces and direct mounted actuation. Body and trim materials include A105N, A350 LF2, and A182 F316.

ABOUT OVC

OHIO VALVE COMPANY (OVC) was established in 1985 in Ohio to satisfy the need for a high-quality, dependable ball valve line required by Midwestern distribution and end users. Over time, as our customer base grew and requirements expanded, the breadth of our product line also evolved into industrial valve product design. Today, OVC is a vertically integrated division within the Texas Pipe Family of Companies, with corporate offices based in Houston, Texas.

Our dedicated team takes great pride in manufacturing the highest-quality designed valves that are in accordance with many industry standards within the upstream, midstream, and gas transmission applications. All valves undergo extensive third-party quality inspection and testing processes to ensure accuracy to design standards and achieve successful critical testing results each time.

We take enormous pride in every single valve we manufacture.

Welcome to Ohio Valve Company (OVC)!



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Small Bore Valves

Carbon Steel & Stainless Steel

2" - 4" CL 150, 300, 600

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Medium Bore Valves

Carbon Steel, Full Port

6" - 12" CL 150, 300, 600

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Large Bore Valves

Carbon Steel & Stainless Steel

14" FP - 24" FP CL 150, 300, 600

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PRODUCT RANGE

Product Range: Carbon & Stainless Steel Full/Reduced Port Ball Valves															
Body Material	Class		Port	Size (in.)											
	API 6D			2	3	4	6	8	10	12	14	16	18	20	24
Carbon Steel, Stainless Steel, Special	150	Full & Reduced	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	300		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
	600		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	

Sizes and classes not listed are available upon request.

HOW TO ORDER

SPECIFYING OVC SERIES 39 & 29 / 38 & 28 FULL/REDUCED PORT TRUNNION VALVE FIGURE NUMBERS

Sample Valve Figure # 39-F-E-F-D-H-TR-150-FS-L-2

3	9	F	E	F	D	H	TR	150	FS	L	2
Piece Design	Body Material	End Connection	Trim	Port Config.	Seat Material	Seal Material	Valve Type	Pressure Class	Fire Tested	Operation	Size
2-Piece 3-Piece	9 A105N/ LF2	F Flanged	E ENP	F Full Port	G RTFE	B BUNA-N	Trunnion	150	FS Pre-Tested with Emergency Grease Seals	L Lever	2" - 36"
	8 A182- 316	WE Buttweld R RTJ	6 316	R Reduced Port	T PTFE D Devlon® N Nylon V Viton™ P PEEK	E EPDM H HNBR V Viton™ T PTFE		300 600 900 1500 2500			

OVC CERTIFICATIONS

ICR
Certificate of Registration

This is to certify that:
PE ENG Co., Ltd.

Has been assessed by International Certification Registrar Ltd., in respect of their Quality Management Systems and found to comply with:

ISO 9001:2015

Approval is hereby granted for registration providing the rules and conditions relating to certification are observed at all times.

Certification Scope:
Design and Manufacture of Valve

Certificate Issue Date: 23rd November 2021 Initial Issued Date: 07th December 2019
Expiration Date: 18th December 2024 Certificate No.: QM3858

The Seal of ICR Limited may be used in the presence of:

Certificate of Authority to use the Official API Monogram
License Number: 6D-2016 ORIGINAL

The American Petroleum Institute hereby grants to
PE ENG CO., LTD

the right to use the Official API Monogram® on manufactured products under the conditions in the official publications of the American Petroleum Institute entitled API Spec Q1® and **API-6D** and in accordance with the provisions of the License Agreement.

In all cases where the Official API Monogram is applied, the API Monogram shall be used in conjunction with this certificate number: **6D-2016**

The American Petroleum Institute reserves the right to revoke this authorization to use the Official API Monogram for any reason satisfactory to the Board of Directors of the American Petroleum Institute.
The scope of this license includes the following: Ball Valves and Gate Valves

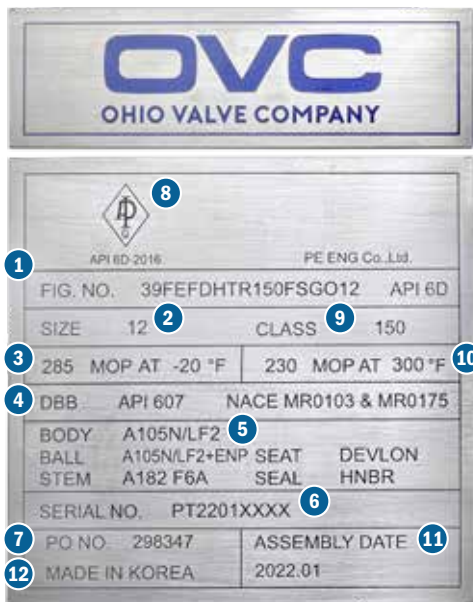
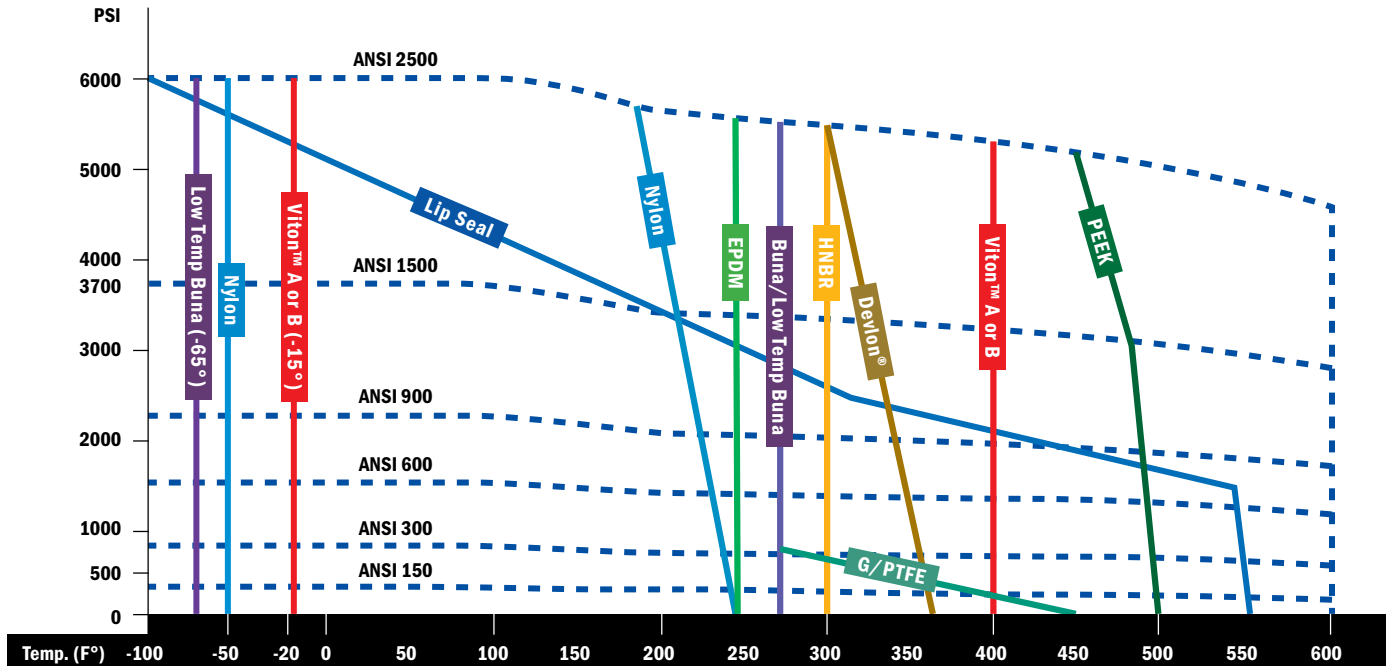
CMS Exclusions: Servicing; Customer Property

Effective Date: **JANUARY 21, 2022**
Expiration Date: **JANUARY 21, 2025**

To verify the authenticity of this license, go to www.api.org/compefflist.

Anchal Liddar
Senior Vice President of Global Industry Services

PRESSURE/TEMPERATURE FOR SEAT AND SEAL MATERIALS



HOW TO READ AN OVC TAG

Item	Description
1	Figure number describes valve construction
2	Nominal pipe size (in inches)
3	Max. operating pressure (psi) at min. valve design temperature
4	Valve features double block and bleed (DBB), NACE, and fire safe standards
5	Body and Trim materials
6	OVC Serial Number
7	OVC Manufacturing Order Number
8	API 6D monogram stamp
9	ANSI Pressure Class
10	Max. operating pressure (psi) at max. valve design temperature
11	Date of assembly (YYYY/MM)
12	Country of origin

OVC Repair Kits

Spare parts are available for quick delivery. Orders with valve serial numbers will ensure the correct parts are shipped. Contact your OVC salesperson for more information.

Our Quality Commitment

OVC is dedicated to continually improving our state-of-the-art engineering and manufacturing capabilities to improve the overall quality of our products and customer service. OVC's global network of flow control experts consist of highly-trained technicians, engineers, and superior testing laboratories to ensure that all products supplied to our customers are 100% in accordance with both industry standards and our internal Quality Management System.

DESIGN FEATURES AND BENEFITS

BODY CONSTRUCTION

The body is made of three forged parts, and the bolted construction allows disassembly in the field for repairs. The body drain is located in the lowest part of the body cavity and consists of a drain plug with safety plug. Graphite gaskets are provided for compliance with API 607/ISO and fire safe standards.

STEM CONSTRUCTION

The stem's function is to transmit torque and absorb the line pressure thrust together with the trunnion. The stem has an anti-blowout design and incorporates a double-barrier system. The pressure thrust on the stem is supported by a thrust washer in antifriction material.

SEAT TO BALL SEALING

Soft seats are standard. Seat inserts of synthetic material such as RTFE, Devlon[®], and PEEK are contained within a one-piece metal seat ring. With no, or very low, line pressure, sealing between the seats and ball is achieved by the seat springs. As line pressure increases, it begins to work in conjunction with the seat springs to assure the integrity of the seat.

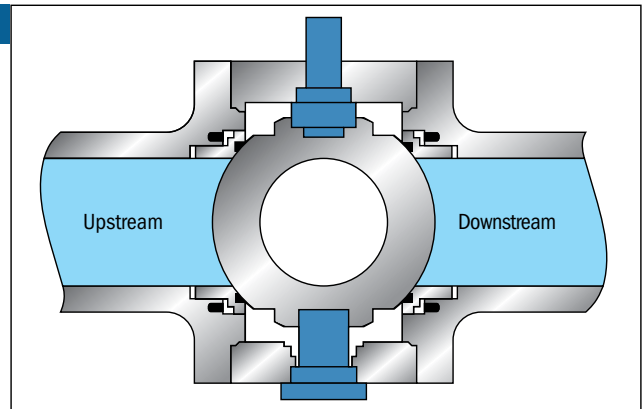
SEAT & SEAL FEATURES

Soft seats are standard. Seat inserts of synthetic material such as RTFE, Devlon[®], and PEEK are contained within a one-piece metal seat ring. With no (or very low) line pressure, sealing between the seats and ball is achieved by the seat springs.

Two different types of seats are used to isolate the line pressure from the body cavity. Primary sealing is accomplished by an electrostatic seal such as HNBR and 90 Durometer. Explosive Decompression resistant (ED) is good to 5% H₂S application. Secondary fire safe sealing is accomplished by a graphite seal ring.

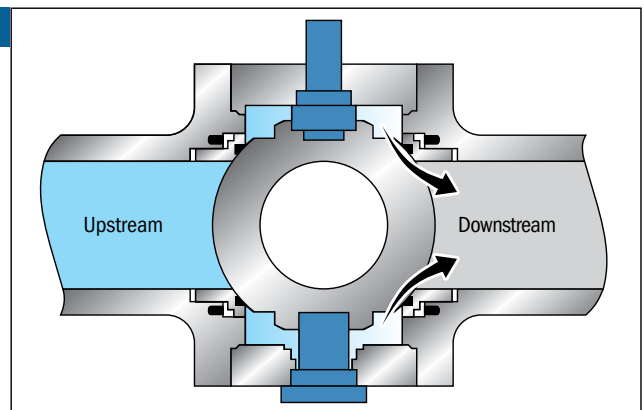
DOUBLE BLOCK AND BLEED (DBB) DESIGN

The trapped cavity pressure can bleed out by vent fitting or drain plug when the valve is in the fully open or fully closed position. The fluid is intercepted by seats of upstream and downstream side. As such, the stem packing or O-ring may be replaced under working pressure. Each seat works independently assuring tight seal against ball on both upstream and downstream side.



VALVE CAVITY PRESSURE RELIEF (SELF-RELIEVING SEAT)

This standard feature is designed to prevent excessive pressure buildup within the valve by automatically relieving pressure when body cavity pressure exceeds the spring load on the seats. When a trunnion ball valve is in the closed position, media will be trapped in the body cavity. Unless this media is drained, it will be subjected to thermal expansion and contraction. As the temperature rises, the trapped media desires to expand and the pressure increases in the area body cavity. In order to avoid excessive pressure buildup, the OVC seats are designed to self-relieve, allowing the media in the body to escape to the pipeline. This self-relieving seat design feature is standard on all OVC trunnion ball valves.

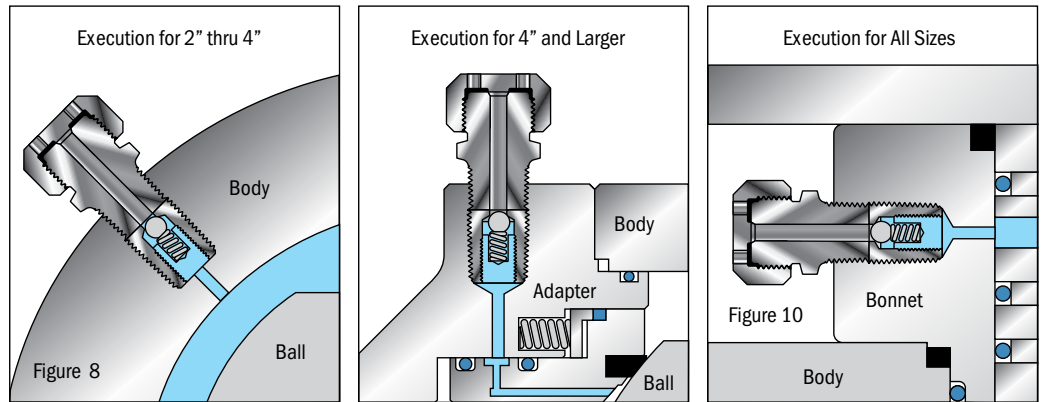


STEM SEALING

The stem is a free member and carries no side thrust. The absence of this side load and friction drag on the stem ensures lower operating torque and long service life. Precision machining of the stem, which is rigidly supported between bearings, combined with hardness control between metallic parts and double O-rings backed up by a secondary graphite seal, ensures reliable operation with the highest levels of sealing integrity. All seals can be replaced without the need to remove the stem from the valve or remove the valve from the pipeline. If leakage should ever occur through both stem seals, the outer O-ring can be replaced with the valve in the line under pressure with the ball in the closed position.

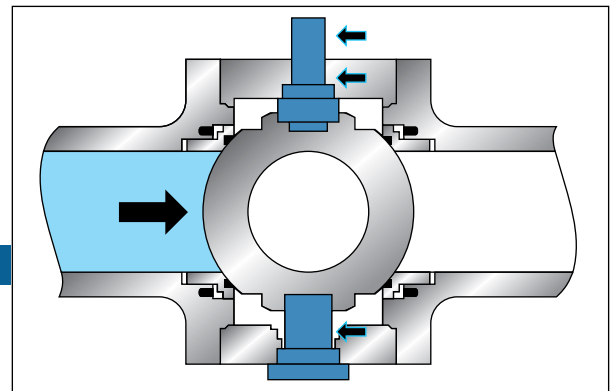
SEAT & STEM EMERGENCY SEALANT INJECTION

Sealing injection fittings are standard on all OVC trunnion ball valves. If the seat ring becomes damaged, this feature provides the user with an easy way to inject an emergency sealant to restore a tight seal. It also allows for the sealing surfaces of the ball and seat to be periodically flushed to clear away any debris that may impair sealing.



DOUBLE SEALS AT ALL JOINTS

All connecting parts employ a double sealing design incorporating an O-ring and graphite/spiral wound 316 SS + Graphite gasket to ensure positive sealing.



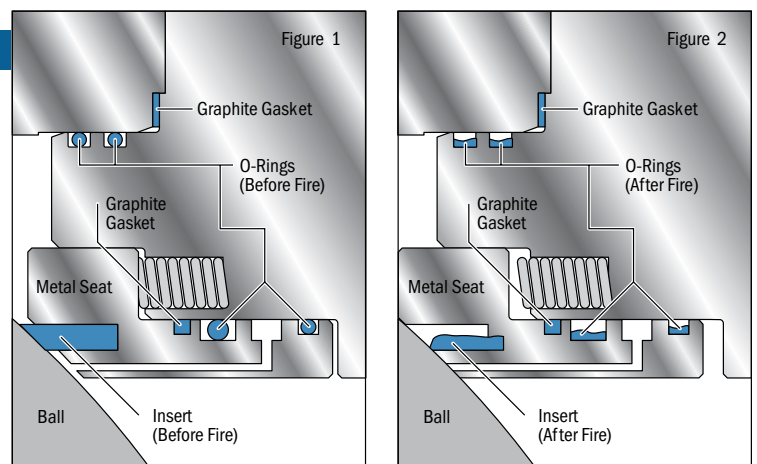
LOW FRICTION STEM/TRUNNION BEARINGS AND THRUST WASHERS

Heavy duty PTFE-lined carbon or stainless steel bearing and thrust washers ensure durable and low torque operation.

FIRE SAFE DESIGN AND API 607/ISO 10497

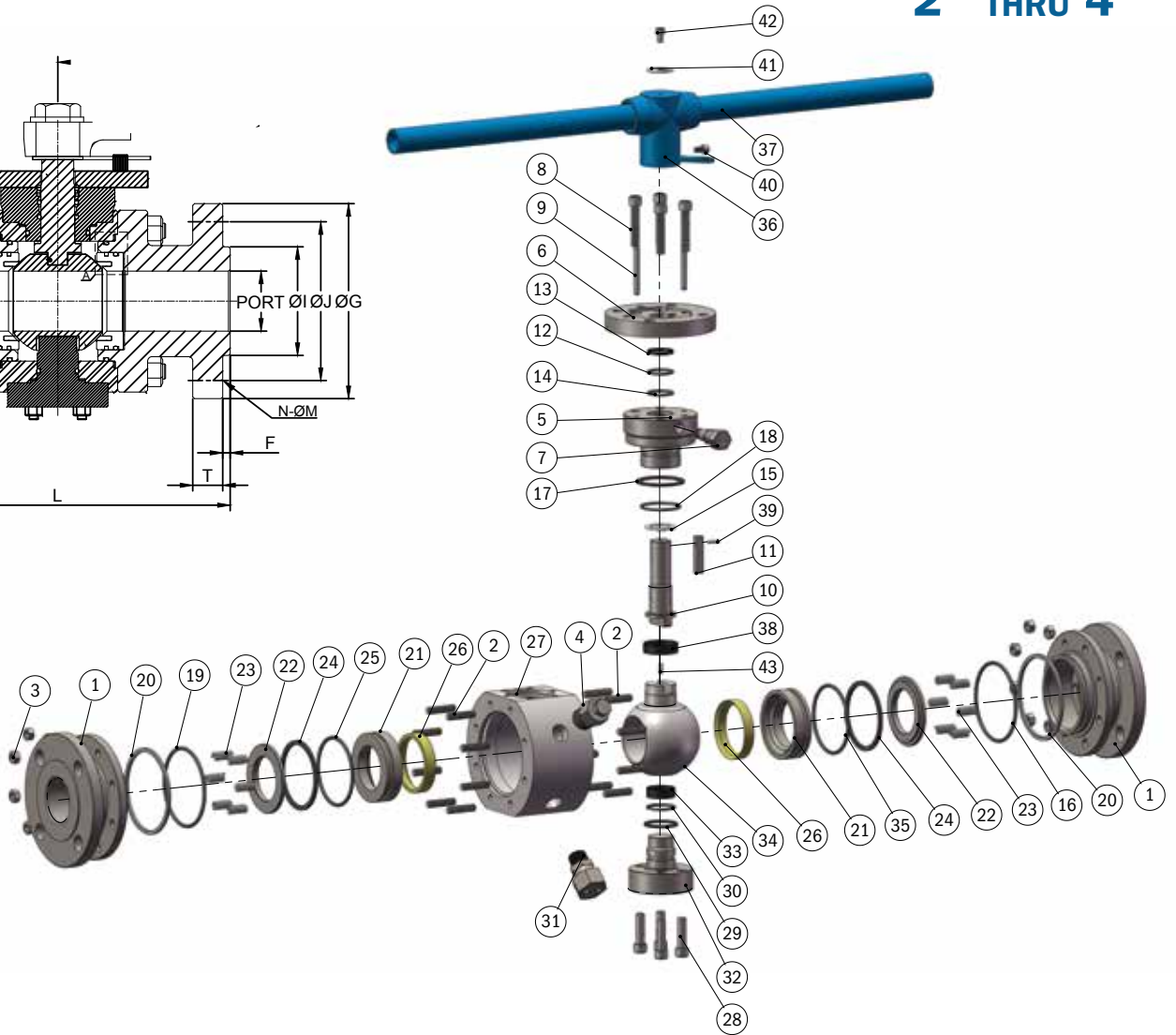
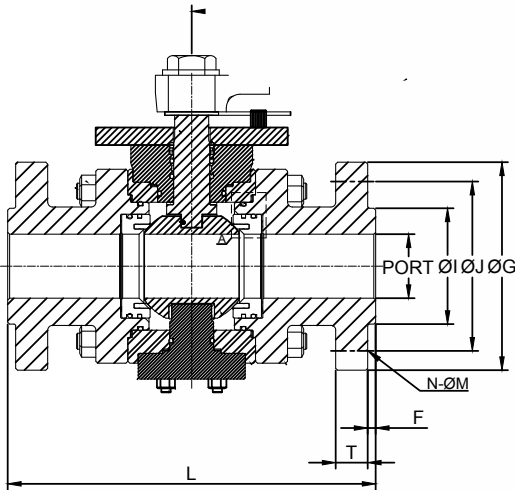
When the seat inserts are softened and burnt in case of fire or unusual temperature increase, the seat retainer, under the duty of the spring, will touch with the ball and form a metal-to-metal contact, which can prevent internal leaks.

Meanwhile, the middle flange and the upper and lower parts of the stem will form a metal-to-metal contact which can prevent external leaks and conforms to API 607/ISO 10497.



3-PIECE FORGED TRUNNION

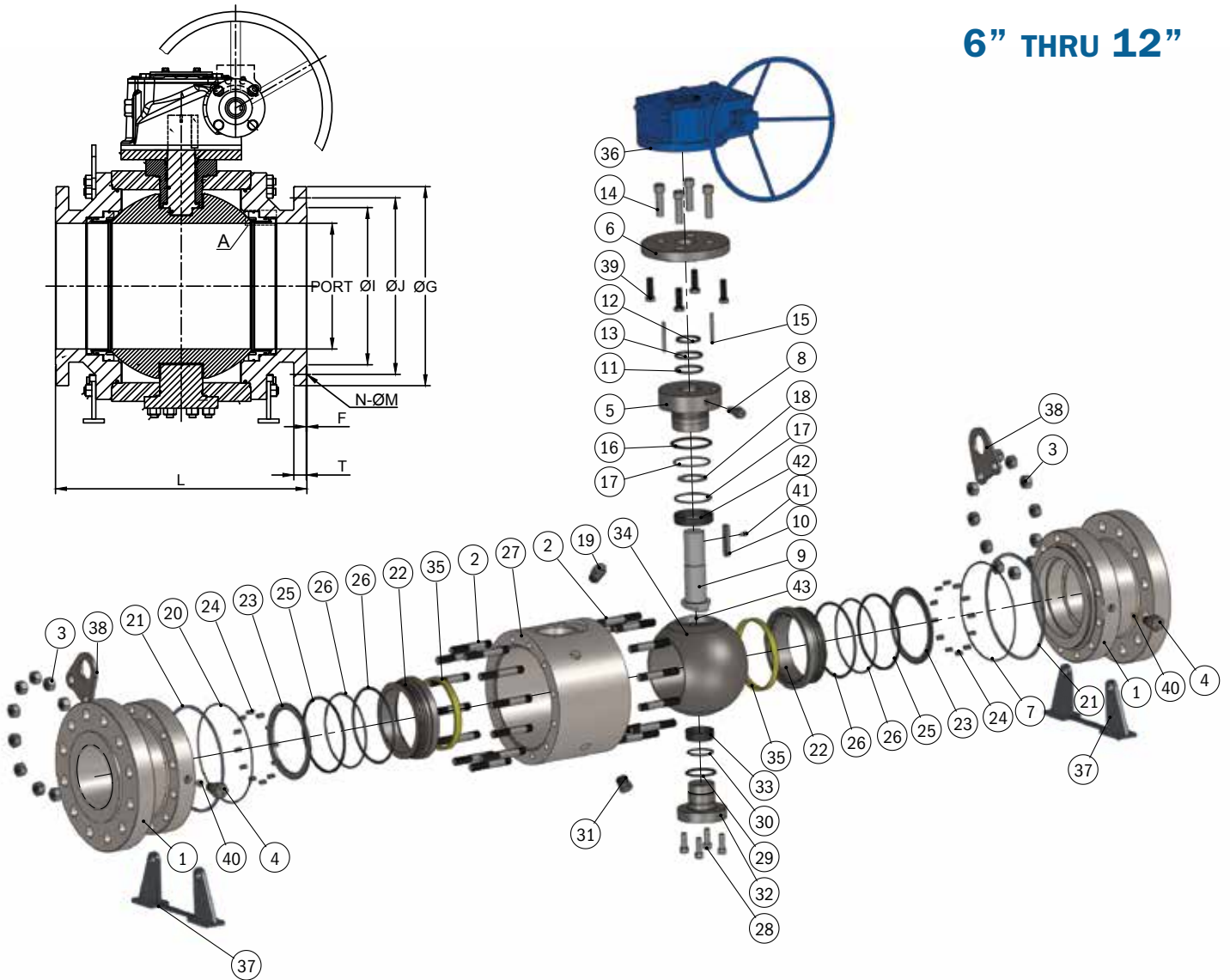
2" THRU 4"



EXPLODED VIEW MATERIAL LIST: 2" THRU 4" SIZES

No.	Part Name	No.	Part Name	No.	Part Name	No.	Part Name
1	BODY CLOSURE	11	KEY	22	SPRING HOLDER	33	BEARING
2	BOLT	12	O-RING	23	SPRING	34	BALL
3	NUT	13	GASKET	24	GASKET	35	O-RING
4	VENT VALVE	14	O-RING	25	O-RING	36	ADAPTER
5	GLAND	15	WASHER	26	SEAT INSERT	37	HANDLE/PIPE HANDLE
6	MOUNTING PLATE	16	O-RING	27	BODY	38	BEARING
7	INJECTION FITTINGS	17	GASKET	28	BOLT	39	PIN
8	BOLT	18	O-RING	29	GASKET	40	BOLT
9	PIN	19	O-RING	30	O-RING	41	INDICATOR
10	STEM	20	GASKET	31	DRAIN PLUG	42	BOLT
		21	SEAT RETAINER	32	TRUNNION	43	ANTISTATIC DEVICE

6" THRU 12"

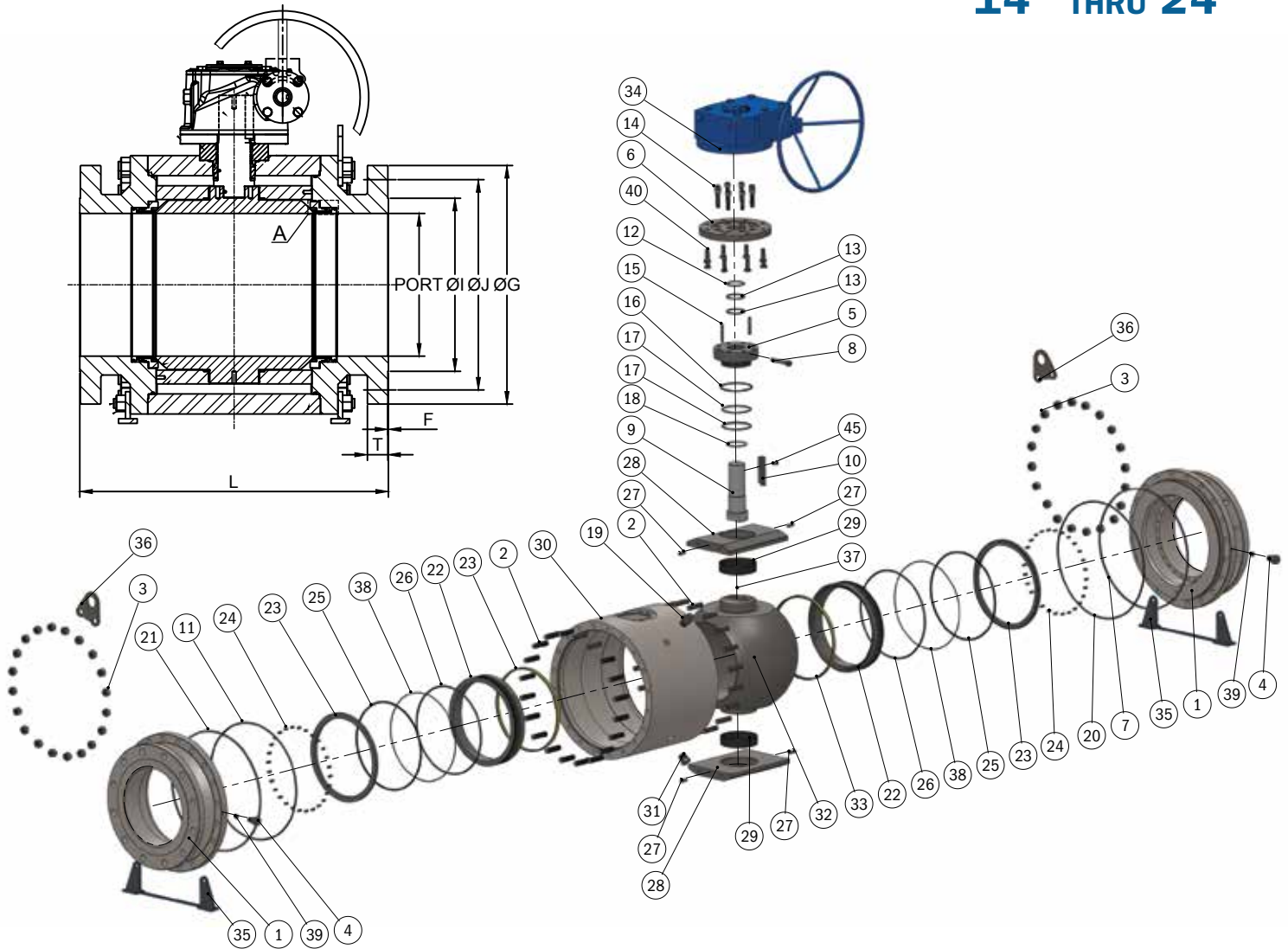


EXPLODED VIEW MATERIAL LIST: 6" THRU 12" SIZES

No.	Part Name	No.	Part Name	No.	Part Name
1	BODY CLOSURE	11	O-RING	22	SEAT RETAINER
2	BOLT	12	GASKET	23	SPRING HOLDER
3	NUT	13	O-RING	24	SPRING
4	INJECTION FITTINGS	14	BOLT	25	GASKET
5	GLAND	15	PIN	26	O-RING
6	MOUNTING PLATE	16	GASKET	27	BODY
7	O-RING	17	O-RING	28	BOLT
8	INJECTION FITTINGS	18	WASHER	29	GASKET
9	STEM	19	VENT VALVE	30	O-RING
10	KEY	20	O-RING	31	DRAIN PLUG
		21	GASKET	32	TRUNNION
				33	BEARING
				34	BALL
				35	SEAT INSERT
				36	WORM GEAR BOX
				37	BOTTOM LEG SUPPORT
				38	LIFTING LUG PLATES
				39	BOLT
				40	CHECK VALVE
				41	BOLT
				42	BEARING
				43	ANTISTATIC DEVICE

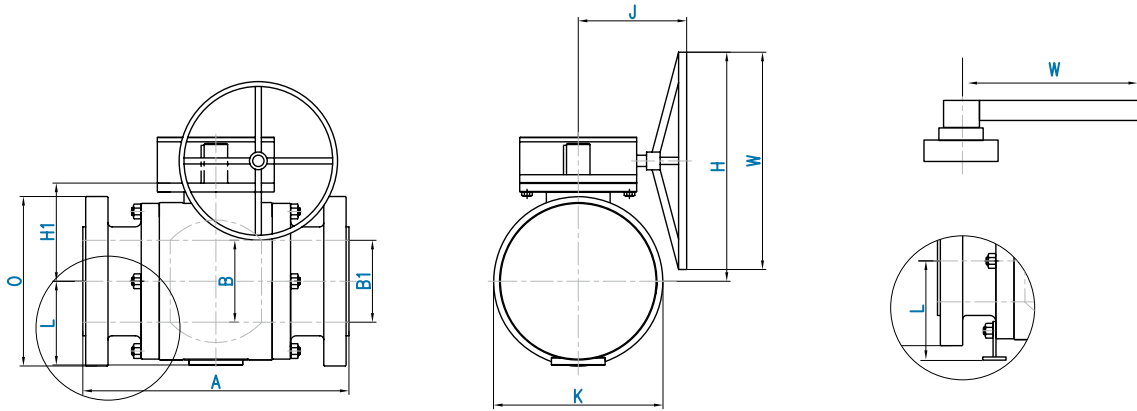
3-PIECE FORGED TRUNNION

14" THRU 24"



EXPLODED VIEW MATERIAL LIST: 14" THRU 24" SIZES

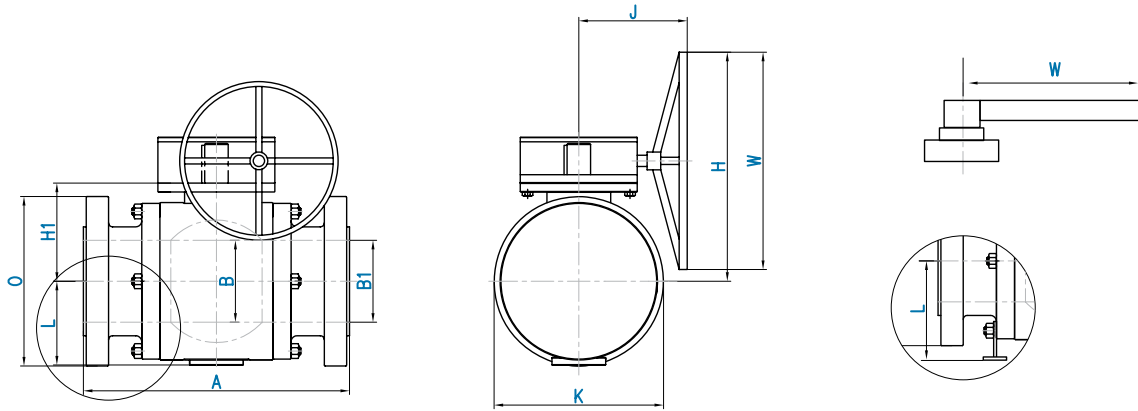
No.	Part Name	No.	Part Name	No.	Part Name	No.	Part Name
1	BODY CLOSURE	11	O-RING	21	GASKET	31	DRAIN PLUG
2	BOLT	12	GASKET	22	SEAT RETAINER	32	BALL
3	NUT	13	O-RING	23	SPRING HOLDER	33	SEAT INSERT
4	INJECTION FITTINGS	14	BOLT	24	SPRING	34	WORM GEAR BOX
5	GLAND	15	PIN	25	GASKET	35	BOTTOM LEG SUPPORT
6	MOUNTING PLATE	16	GASKET	26	O-RING	36	LIFTING LUG PLATES
7	O-RING	17	O-RING	27	PIN	37	ANTISTATIC DEVICE
8	INJECTION FITTINGS	18	WASHER	28	SUPPORT PLATE	38	O-RING
9	STEM	19	VENT VALVE	29	BEARING	39	CHECK VALVE
10	KEY	20	O-RING	30	BODY	40	BOLT



Class 150 – Dimensions

SIZE	A			B	B1	O	H1	L	K	H	J	W	WEIGHT (lbs)
	RF	RTJ	WE										RF/RTJ
2x1.5"	7.00	7.50	8.50	1.50	2.01	6.00	4.37	3.89	6.00	7.2	-	9.9	-
2"	7.00	7.50	8.50	2.01	2.01	6.00	4.52	3.97	6.00	7.91	-	9.9	50
3x2"	8.00	8.50	11.12	2.01	3.03	7.50	4.52	3.97	7.50	7.91	-	9.9	-
3"	8.00	8.50	11.12	3.03	3.03	7.50	5.35	4.68	7.50	8.74	-	9.9	80
4x3"	9.00	9.50	12.00	3.03	4.02	9.00	5.35	4.68	9.00	8.74	-	9.9	-
4"	9.00	9.50	12.00	4.02	4.02	9.00	6.36	5.59	9.06	10.35	-	13.8	123
6x4"	15.50	16.00	18.00	4.02	5.99	11.00	6.36	5.59	11.00	10.35	-	13.8	-
6"	15.50	16.00	18.00	5.99	5.99	11.00	8.43	8.18	12.44	17.53	9.45	13.8	398
8x6"	18.00	18.50	20.50	5.99	7.99	13.50	8.43	8.18	13.50	17.53	9.45	13.8	-
8"	18.00	18.50	20.50	7.99	7.99	13.50	10.06	9.76	15.35	19.19	14.56	13.8	563
10x8"	21.00	21.50	22.00	7.99	10.00	16.00	10.06	9.76	16.00	21.34	14.56	18.1	-
10"	21.00	21.50	22.00	10.00	10.00	16.00	11.30	11.22	18.50	22.56	15.83	18.1	901
12x10"	24.00	24.50	25.00	10.00	12.01	19.00	11.30	11.22	19.00	25.31	15.83	23.6	-
12"	24.00	24.50	25.00	12.01	12.01	19.00	12.83	12.36	21.18	26.85	15.83	23.6	1420
14x12"	27.00	27.50	30.00	12.01	13.27	21.00	12.83	12.36	21.18	26.85	15.83	23.6	-
14"	27.00	27.50	30.00	13.27	13.27	21.00	13.78	12.59	23.23	32.52	21.38	23.6	1900
16x14"	30.00	30.50	33.00	13.27	15.24	23.50	13.78	12.69	23.50	35.47	21.38	29.5	-
16"	30.00	30.50	33.00	15.24	15.24	23.50	15.78	15.15	26.77	37.48	21.38	29.5	2510
18x16"	34.00	34.50	36.00	15.24	17.25	25.00	15.78	15.15	26.77	37.48	21.38	29.5	-
18"	34.00	34.50	36.00	17.25	17.25	25.00	17.20	16.53	29.53	39.00	21.38	29.5	3500
20x18"	36.00	36.50	39.00	17.25	19.25	27.50	17.20	16.53	29.53	39.00	21.38	29.5	-
20"	36.00	36.50	39.00	19.25	19.25	27.50	18.82	18.14	32.76	40.51	21.38	29.5	4305
24x20"	42.00	42.50	45.00	19.25	23.27	32.00	18.82	18.14	32.76	40.51	21.38	29.5	-
24"	42.00	42.50	45.00	23.27	23.27	32.00	22.32	21.45	39.37	43.97	25.27	29.5	-

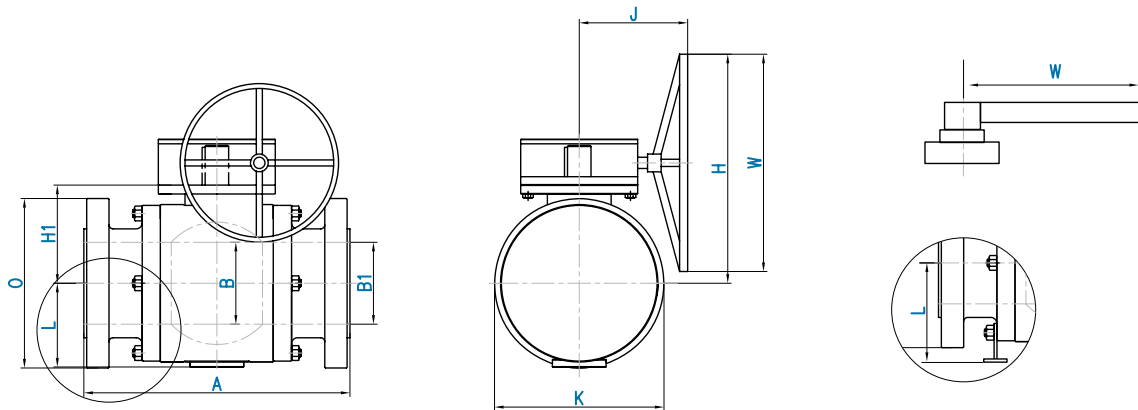
Lever operator for 4" and below, Worm Gear Box for 6" and above.



Class 300 – Dimensions

SIZE	A			B	B1	O	H1	L	K	H	J	W	WEIGHT (lbs)
	RF	RTJ	WE										RF/RTJ
2x1.5"	8.50	9.12	8.50	1.50	2.01	6.50	4.37	3.89	6.50	7.20	-	9.90	-
2"	8.50	9.12	8.50	2.01	2.01	6.50	4.52	3.97	6.50	7.91	-	9.90	60
3x2"	11.12	11.74	11.12	2.01	3.03	8.25	4.52	3.97	8.25	7.91	-	9.90	-
3"	11.12	11.74	11.12	3.03	3.03	8.25	5.35	4.68	8.25	8.74	-	9.90	110
4x3"	12.00	12.62	12.00	3.03	4.02	10.00	5.35	4.68	10.00	8.74	-	9.90	-
4"	12.00	12.62	12.00	4.02	4.02	10.00	6.36	5.59	10.00	10.35	-	13.80	160
6x4"	15.88	16.50	18.00	4.02	5.99	12.50	6.36	5.59	12.50	10.35	-	13.80	-
6"	15.88	16.50	18.00	5.99	5.99	12.50	8.43	8.18	12.50	17.53	9.45	13.80	550
8x6"	19.75	20.37	20.50	5.99	7.99	15.00	8.43	8.26	15.00	19.68	9.45	18.10	-
8"	19.75	20.37	20.50	7.99	7.99	15.00	10.06	9.76	15.35	21.34	14.56	18.10	720
10x8"	22.38	23.00	22.00	7.99	10.00	17.50	10.06	9.76	17.50	21.34	14.56	18.10	-
10"	22.38	23.00	22.00	10.00	10.00	17.50	11.30	11.22	18.50	22.56	15.83	18.10	1200
12x10"	25.50	26.12	25.00	10.00	12.01	20.50	11.30	11.22	20.50	25.31	15.83	23.60	-
12"	25.50	26.12	25.00	12.01	12.01	20.50	12.83	12.36	21.18	29.17	20.47	23.60	1900
14x12"	30.00	30.62	30.00	12.01	13.27	23.00	12.83	12.36	23.00	29.17	20.47	23.60	-
14"	30.00	30.62	30.00	13.27	13.27	23.00	13.78	12.59	23.23	35.47	21.38	29.50	-
16x14"	33.00	33.62	33.00	13.27	15.24	25.50	13.78	13.80	25.50	35.47	21.38	29.50	-
16"	33.00	33.62	33.00	15.24	15.24	25.50	15.78	15.15	26.77	37.48	21.38	29.50	-
18x16"	36.00	36.62	36.00	15.24	17.25	28.00	15.78	15.15	28.00	37.48	21.38	29.50	-
18"	36.00	36.62	36.00	17.25	17.25	28.00	17.20	16.53	29.53	39.00	21.38	29.50	-
20x18"	39.00	39.75	39.00	17.25	19.25	30.50	17.20	16.53	30.50	39.00	21.38	29.50	-
20"	39.00	39.75	39.00	19.25	19.25	30.50	18.82	18.14	32.76	40.51	21.38	29.50	-
24x20"	45.00	45.88	45.00	19.25	23.27	36.00	18.82	18.99	36.00	40.51	21.38	29.50	-
24"	45.00	45.88	45.00	23.27	23.27	36.00	22.32	21.55	39.57	41.06	25.27	29.50	-

Lever operator for 4" and below, Worm Gear Box for 6" and above.



Class 600 – Dimensions

SIZE	A			B	B1	O	H1	L	K	H	J	W	WEIGHT (lbs)
	RF	RTJ	WE										RF/RTJ
2x1.5"	11.50	11.62	11.50	1.50	2.01	6.50	4.37	3.89	6.50	7.20	-	9.90	-
2"	11.50	11.62	11.50	2.01	2.01	6.50	4.53	3.97	6.50	7.91	-	9.90	73
3x2"	14.00	14.12	14.00	2.01	3.03	8.25	4.53	3.97	8.25	7.91	-	9.90	-
3"	14.00	14.12	14.00	3.03	3.03	8.25	5.83	4.88	8.25	9.64	-	13.80	150
4x3"	17.00	17.12	17.00	3.03	4.02	10.75	5.83	4.88	10.75	9.64	-	13.80	-
4"	17.00	17.12	17.00	4.02	4.02	10.75	6.48	5.94	10.75	10.23	-	13.80	244
6x4"	22.00	22.12	22.00	4.02	5.99	14.00	6.48	5.94	14.00	10.23	-	13.80	-
6"	22.00	22.12	22.00	5.99	5.99	14.00	8.43	8.18	14.00	19.68	9.45	18.10	631
8x6"	26.00	26.12	26.00	5.99	7.99	16.50	8.43	9.08	16.50	19.68	9.45	18.10	-
8"	26.00	26.12	26.00	7.99	7.99	16.50	9.78	9.76	16.50	23.81	15.83	23.60	839
10x8"	31.00	31.12	31.00	7.99	10.00	20.00	9.78	10.82	20.00	23.81	15.83	23.60	-
10"	31.00	31.12	31.00	10.00	10.00	20.00	11.61	11.49	20.00	27.95	20.47	23.60	1507
12x10"	33.00	33.12	33.00	10.00	12.01	22.00	11.61	11.81	22.00	27.95	20.47	23.60	-
12"	33.00	33.12	33.00	12.01	12.01	22.00	13.23	12.75	22.00	34.92	21.38	29.50	2347
14x12"	35.00	35.12	35.00	12.01	13.27	23.75	13.23	12.75	23.75	34.92	21.38	29.50	-
14"	35.00	35.12	35.00	13.27	13.27	23.75	14.37	13.11	24.21	36.06	21.38	29.50	3000
16x14"	39.00	39.12	39.00	13.27	15.24	27.00	14.37	14.50	27.00	36.06	21.38	29.50	-
16"	39.00	39.12	39.00	15.24	15.24	27.00	16.04	15.47	27.36	37.71	21.38	29.50	3981
18x16"	43.00	43.12	43.00	15.24	17.25	29.25	16.04	15.64	29.25	37.71	21.38	29.50	-
18"	43.00	43.12	43.00	17.25	17.25	29.25	17.83	17.12	30.71	39.56	21.38	29.50	5600
20x18"	47.00	47.25	47.00	17.25	19.25	32.00	17.83	17.12	32.00	39.56	21.38	29.50	-
20"	47.00	47.25	47.00	19.25	19.25	32.00	19.69	18.70	33.86	38.43	25.27	29.50	6923
24x20"	55.00	55.38	55.00	19.25	23.27	37.00	19.69	19.49	37.00	38.43	25.27	29.50	-
24"	55.00	55.38	55.00	23.27	23.27	37.00	22.93	22.05	40.55	41.70	25.27	29.50	-

Lever operator for 3" and below, Worm Gear Box for 6" and above.

GENERAL OVC DRAWING

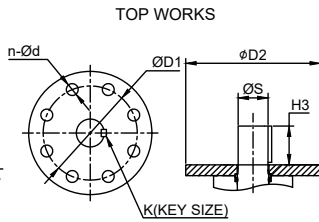
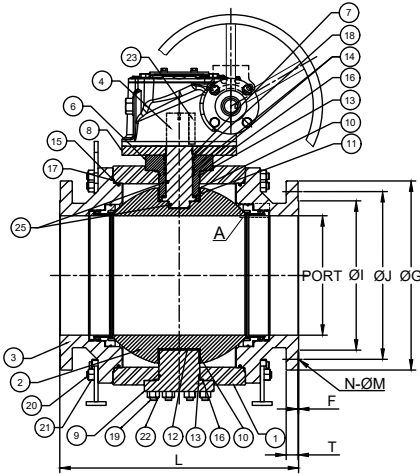
Fig No. 39F6FDHTR600FSGO

RATINGS
1480 PSIG @100F WATER, OIL, GAS
80 PSIG SATURATED STEAM

DIMENSIONS

NPS	PORT	L	A	ØE	H	H1	H2	ØI	ØJ	ØG	T	F	N	ØM	ISO FLANGE	Weight lbs	Torque (ft.in)	Cv
6	6.00	22.00	13.40	27.56	9.06	8.34	11.70	8.50	11.50	14.00	1.88	0.25	12	1 1/8	F20	631	8870	4394
8	8.00	26.00	14.64	27.56	10.28	9.17	13.60	10.62	13.75	16.50	2.19	0.25	12	1 1/4	F25	839	15469	7797
10	10.00	31.00	14.64	27.56	12.55	11.90	15.82	12.75	17.00	20.00	2.50	0.25	16	1 3/8	F25	1507	26299	12207
12	12.00	33.00	14.64	27.56	14.55	13.70	17.82	15.00	19.25	22.00	2.62	0.25	20	1 3/8	F25	2347	41788	17600

Unit: Inch



NPS	ISO FLANGE	ØD2	ØD1	n-Ød	ØS	ØH3	K (mm)
6	F20	10.04	8.07	8-Ø.71	2.165	2.16	18x10
8	F20	10.04	8.07	8-Ø.71	2.559	3.00	18x11
10	F25	11.81	10.00	8-Ø.71	2.952	3.01	20x12
12	F25	11.81	10.00	8-Ø.71	3.346	3.48	22x14



API 6D-2010 PE ENG. CO. Ltd	
FIG. NO.	39F6FDHTR600FSGO5 API 6D
SIZE	6 CLASS 600
1480 MOP AT -20 °F	1310 MOP AT 300 °F
DBB	API 607 NACE MR0103 & MR0175
BODY	A105NLF2
BALL	A182 F316
STEM	A276 316
SEAT	DEVLON
SEAL	HNBR
SERIAL NO.	
PO NO.	MANUFACTURE DATE
MADE IN KOREA	

BODY MARK
OVC
NAMEPLATE
6
600
A105NLF2
Heat No.
Serial No.

APPLICABLE STANDARDS:
Ball Valve: API 6D, ASME B16.34
Face to Face: ASME B16.10
End Flanges: ASME B16.5
Fire Safe Test: API 607
DBB TEST : API 6D
NACE MR0103 & MR0175
Low Emission: API 622-100 ppm
Teadit 2236

TEST PRESSURE:
Test Inspection Per API 6D
Shell (by Water): 2225 Psig
Seat (by Water): 1630 Psig
(by Air): 80 Psig

NOTES:
MOP at 300 °F: 1310 psig
MOP at -20 °F: 1480 psig

MATERIALS LIST

NO.	PART NAME	MATERIAL	REMARK
1	BODY	ASTM A105NLF2	
2	BALL	ASTM A182 Gr. F316	
3	CLOSURE	ASTM A105NLF2	
4	STEM	ASTM A276 Gr. 316	
5.1	RETAINER	ASTM A182 Gr. F316	
5.2	SEAT	DEVLON	
5.3	O-RING	HNBR	90-DR
5.4	O-RING	HNBR	90-DR
5.5	RETAINER SEAT	GRAPHITE	
6	GLAND	ASTM A105NLF2+ENP	Min. Thickness: 3mil
7	GLAND RING	ASTM A276 Gr. 316	
8	MOUNTING PLATE	ASTM A105NLF2	
9	TRUNNION	ASTM A105NLF2+ENP	Min. Thickness: 3mil
10	BEARING	COMMERCIAL	Teflon Coating
11	THRUST WASHER	316SS+PTFE	
12	TRUNNION BEARING	316SS+PTFE	
13	O-RING	HNBR	90-DR
14	O-RING	HNBR	90-DR
15	O-RING	HNBR	90-DR
16	GASKET	316SS+GRAPHITE SW	
17	GASKET	316SS+GRAPHITE SW	
18	PACKING	Teadit 2236+Expanded Graphite	
19	STUD	ASTM A193 Gr. B7M	
20	STUD	ASTM A193 Gr. B7M	
21	HVY HEX NUT	ASTM A194 Gr. 2HM	
22	HVY HEX NUT	ASTM A194 Gr. 2HM	
23	KEY	AISI 1045	
24	SPRING	INCONEL X-750	
25	ANTI-STATIC	ASTM A276 Gr. 316L	
26	VENT FITTING	ASTM A276 Gr. 316	
27	GREASE FITTING	ASTM A276 Gr. 316	
27.1	GREASE FITTING	ASTM A276 Gr. 316	
28	DRAIN PLUG	ASTM A276 Gr. 316	
29	LIFT PLATE	ASTM A36	
30	FOOT PLATE	ASTM A36	
31	GEAR BOX	ASTM A536	
32	NACE TAG	PVC	
33	FIRE SAFE TAG	PVC	
34	LOW EMISSION TAG	SS	
35	NAMEPLATE	SS	

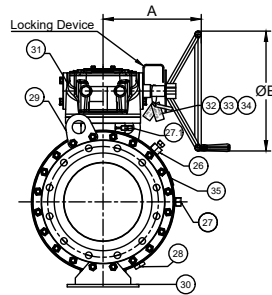
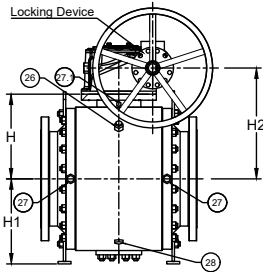
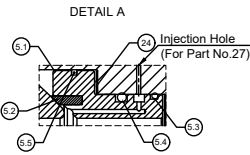
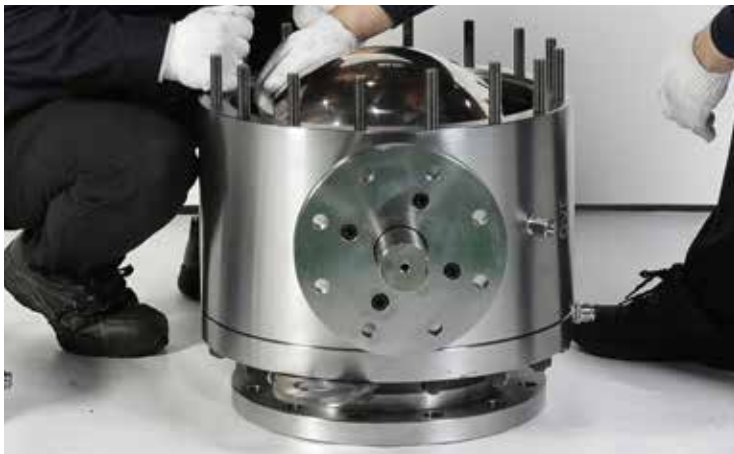
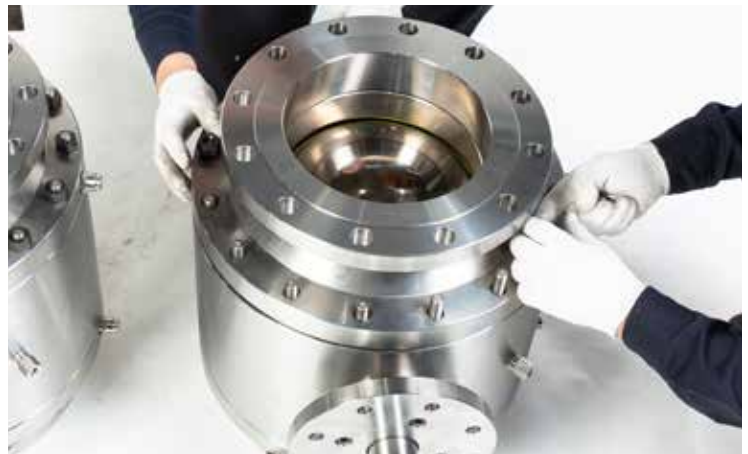


FIG NO:	A105NLF2 CARBON STEEL		
39F6FDHTR600FSGO	FP TRUNNION BALL VALVE		
	FLANGE END ANSI CLASS 600		
DRAWN BY:	PE	03/29/2022	PE
CHECK BY:	TH KUO	03/29/2022	UNIT: inch
APPROVED BY:	Discianno	03/29/2022	REV: 01



GENERAL OVC MTR

OVC		OHIO VALVE COMPANY MATERIAL TEST REPORT																						
OHIO VALVE COMPANY		2750 Holmes Road Houston, Texas 77051 (CHEMICAL, PHYSICAL & HYDROSTATIC) EN 10204: 2004 Type 3.1																						
		We hereby certify that the material described has been made and inspected in accordance with the specifications and requirements called for by the specified order.																						
Page No.:	X/X									Date:	XXX													
Order No.:	XXXXX	Article:				XXXXX				Country of Origin:				Korea										
Figure No.:	XXXXX	Size:		XX		Class:		XXX		Quantity:				XXX										
Valve Specifications																								
Design	API 6D		Pressure Test		API 6D		Visual Test		N/A		Face to Face		ASME B16.10											
End Con.	Parts Material Type																							
R.F.	Ball		Body		Closure		Gland		Seat Ring		Seat		Seal		Stem	Trunnion	Bolts & Nuts							
ASME B16.5																								
Test Result	Shell:	XXXXX psi		Seat:	XXXXX psi		Seat Air:	XXXXX psi		DBB:	XXXXX psi		DBB Air:	XXXXX psi										
Pass	x min	XXXXX kPa		x min	XXXXX kPa		x min	XXXXX kPa		x min	XXXXX kPa		x min	XXXXX kPa										
Serial No.	Part Name	Chemical Components (%)											Mechanical Properties											
		Heat No.	C	Si	Mn	P	S	Ni	Cr	Mo	Cu	V	Tensile [ksi] [MPa]	Yield [ksi] [MPa]	Elo [%]	RA [%]	HD [HB]	Ch.1 lbs-ft [J]	Ch.2 lbs-ft [J]	Ch.3 lbs-ft [J]	Ch.A lbs-ft [J]	Temp [F] [C]		
XXXXXXX	BALL																							
	BODY																							
	CLOSURE																							
	CLOSURE																							
	GLAND																							
	SEAT RING																							
	SEAT RING																							
	STEM																							
TRUNNION																								
Remarks:																								
<p>VALVES TESTED PER API 6D IN ACCORDANCE WITH EN 10204.3.1 HEAT TREATMENT: A105/LF2 XXXX, XXXX°C XXHr XXMin (XX) MATERIAL COMPLIES TO NACE MR0103 & NACE MR0175</p>												<p>Certified by _____ Manager, Q.A Department : _____ Witness Inspector : _____</p>												



OVC

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