



# Gate, Globe, & Check Valves

Company Overview & Engineering Specifications

*We Make Our Valves™*

**EVERY VALVE.  
OUR FOUNDRY.  
OUR FACTORY.**





**PREMIER QUALITY. PREMIER PERFORMANCE.**

### **Our Legacy and Our Future**

With over 40 years of quality manufacturing serving as our legacy, YVI Valve (YVI) presses forward into the future by providing unwavering commitment to developing and delivering superior quality cast industrial valves to the approved End User markets around the globe. Headquartered in Houston, TX, YVI is a family-owned and managed company with unrivaled passion for quality manufacturing and high performance. Dedicated to providing solutions that bring our customers a competitive advantage in an ever-evolving global marketplace, YVI is confident in their goal of being recognition as a preferred global manufacturer.

### **Every Valve. Our Foundry, Our Factory**

YVI maintains a dedicated workforce focused on utilizing our integrated foundry and factory manufacturing processes to achieve highly reliable, and predictable quality products. Our facilities consist of two professional casting foundries, multiple machining, assembly, and testing operations totaling approximately 1.9Mft<sup>2</sup>. Placing top priority on quality ensures every YVI valve meet the strictest requirements for manufacturing as examined through our rigorous testing processes where all types of non-destructive testing, including mag-particle and radiography, are utilized every day to verify our products.

### **On-Time, Every Time**

YVI considers performance to delivery assurance expectations a cornerstone to its reputation. By controlling all aspects of the manufacturing process, from raw materials receipt to finished product, YVI maintains notable competence in providing world-class lead times. No matter whether the opportunity is large or small, YVI will always meet its customers' expectations.

**Out of this commitment and drive to be recognized as the world's next premier valve manufacturer is YVI born.**

## Quality Guaranteed

YVI manufacturers and tests every valve for 100% compliance to the latest edition regulatory standards, therefore, YVI guarantees its valves will conform with the applicable API600, API623, API594, API598, API624, API6D, ISO15848-1, CE/PED, UK/CA, CRN standards. Demanding a level of reliability and craftsmanship unrivaled in the industry, it is YVI's goal not only to meet but always exceed the need of its customer.

## Certified Performance.

YVI places the greatest emphasis on the achievement and retention of certification from many leading global agencies governing the manufacturing of cast industrial valves. These certificates are part of the bedrock and promise of YVI Valve to remain in full compliance with the latest editions of global industry standards. This commitment begins with the Li family ownership and is carried out by its valued employees, every day.

- |                            |                           |
|----------------------------|---------------------------|
| <b>1.</b> ISO 9001:2015    | <b>6.</b> BV              |
| <b>2.</b> ISO 14001:2015   | <b>7.</b> ABS             |
| <b>3.</b> OSHAS 18001:2007 | <b>8.</b> CRN             |
| <b>4.</b> CE / PED         | <b>9.</b> ISO 15848-1, -2 |
| <b>5.</b> UKCA             |                           |

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## *In-House Competency: Our Foundries*

Since its beginning, YVI has maintained a mission of being a premier valve manufacturer. Challenging themselves every day, with the truth that to make a quality valve you first need to own your manufacturing facilities and processes, YVI utilizes its own professional foundries, capable of outputting over 30,000 metric tons of product annually, to meet the growing demand for quality cast industrial valves. Casting solely from the highest-grade metals under the strictest chemical and mechanical controls and pouring practices, YVI valves exceed industry standards for quality and workmanship. It's with these truths that YVI confidently and resolutely marches into the future proclaiming; **We Make Our Valves.**



## *In-House Competency: Our Factories*

At each step of the manufacturing process spanning 1.3M ft<sup>2</sup> of advanced machining, assembly, and testing operations, YVI demands a high level of precise craftsmanship discoverable in every part, details and finish. Drawing on the talents of its craftspeople with tireless attention to quality and workmanship, our factory turns out a full range of highly predictable and reliable products ready for the toughest and most difficult requirements. We are proud to proclaim; **We Make Our Valves.**



# YVI VALVE - CAST STEEL **GATE, GLOBE, & CHECK VALVES**

YVI Cast Steel Gate, Globe, and Check Valves are designed, manufactured, and tested in accordance with ASME B16.34, API 600, API 594, API 623, and API 598. Items have been examined in accordance with API RP-591 and are Low Emissions Certified to API 624, ISO 15848-1, and TA Luft. YVI offers sizes ranging from 2" through 60" diameters in pressure classes 150# through 2500# with end configurations in either RFFE, RTJ, and Butt weld. YVI also has the capabilities to automate valves in-house using pneumatic, hydraulic, or electric actuation. Common materials of construction such as WCB, LCB, LCC, WC6, WC9, and C5 are all available along with other materials upon request. To ensure casting quality, all pressure-containing castings are produced in-house.



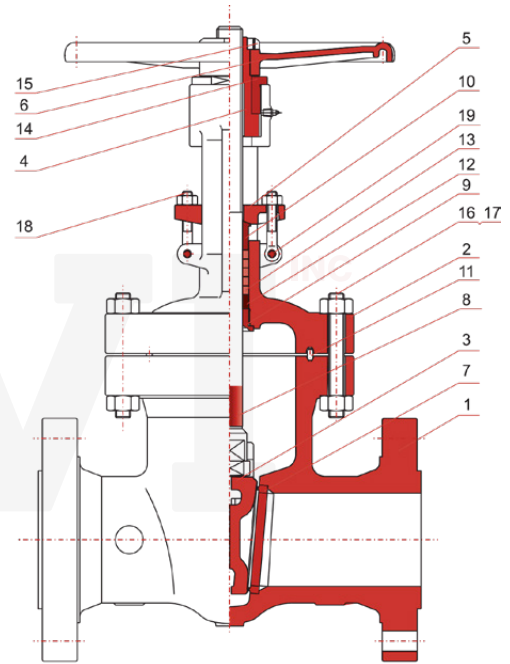
# YVI Valve - Cast Steel Gate Valve

## Design Features

- › API 624 / ISO 15848-1 Low Fugitive Emission Compliant
- › Flexible Wedge (NPS 2.5 and Larger)
- › Seal Welded Seat Rings
- › Gland Eye Bolt Pins are Welded on Both Ends
- › 26" and Larger Items have Hard-faced Wedge Guides

### Available Optional Features Include:

- › Optional Stem Extension
- › Optional Double Packing with Lantern Ring
- › Optional Live Loaded Gland Flange
- › Optional Bellow Seal



No.	Part	Carbon Steel	Stainless Steel	Low Temperature	High Temperature	NACE Service
1	Body	ASTM A216 WCB	ASTM A351 CF8M	ASTM A352 LCC	ASTM A217 WC9	ASTM A216 WCB
2	Bonnet	ASTM A216 WCB	ASTM A351 CF8M	ASTM A352 LCC	ASTM A217 WC9	ASTM A216 WCB
3	Wedge	ASTM A216 WCB+CR13	ASTM A351 CF8M	ASTM A352 LCC + 316	ASTM A217 WC9+HF	ASTM A216 WCB+CR13
4	Stem Nut	ASTM A439 D-2	ASTM A439 D-2	ASTM A439 D-2	ASTM A439 D-2	ASTM A439 D-2
5	Gland Flange	ASTM A216 WCB	ASTM A351 CF8M	ASTM A352 LCC	ASTM A217 WC9	ASTM A216 WCB
6	Handwheel	DUCTILE IRON	DUCTILE IRON	DUCTILE IRON	DUCTILE IRON	DUCTILE IRON
7	Seat Ring	ASTM A105N+HF	ASTM A182 F316+HF	ASTM A350 LF2+HF	ASTM A182 F22+HF	ASTM A105N+HF
8	Stem	ASTM A182 F6A	ASTM A182 F316	ASTM A182 F316	ASTM A 182 F6A	ASTM A182 F6A (NACE)
9	Back Seat	ASTM A276 410	ASTM A276 316	ASTM A276 316	ASTM A276 410	ASTM A276 410 (NACE)
10	Gland	ASTM A276 410	ASTM A276 316	ASTM A276 316	ASTM A276 410	ASTM A276 410 (NACE)
11	Gasket	SPW SS+GRAPHITE RTJ.SS	SPW SS+GRAPHITE RTJ.SS	SPW SS+GRAPHITE RTJ.SS	SPW SS+GRAPHITE RTJ.SS	SPW SS+GRAPHITE RTJ.SS
12	Spacer Ring	ASTM A276 410	ASTM A276 316	ASTM A276 316	ASTM A276 410	ASTM A276 410 (NACE)
13	Packing	GRAPHITE	GRAPHITE	GRAPHITE	GRAPHITE	GRAPHITE
14	Retaining Nut	CARBON STEEL	STAINLESS STEEL	CARBON STEEL	CARBON STEEL	CARBON STEEL
15	Handwheel Nut	CARBON STEEL	STAINLESS STEEL	CARBON STEEL	CARBON STEEL	CARBON STEEL
16	Bonnet Stud	ASTM A193 B7	ASTM A193 B8	ASTM A320 L7	ASTM A193 B16	ASTM A 193 B7M
17	Bonnet Nut	ASTM A194 2H	ASTM A194 8	ASTM A194 7	ASTM A194 7	ASTM A194 2HM
18	Eye Bolt	ASTM A193 B7	ASTM A193 B8	ASTM A320 L7	ASTM A193 B16	ASTM A193 B7M
19	Eye Bolt Pin	CARBON STEEL	STAINLESS STEEL	STAINLESS STEEL	STAINLESS STEEL	CARBON STEEL

Material list, other materials available/provided.







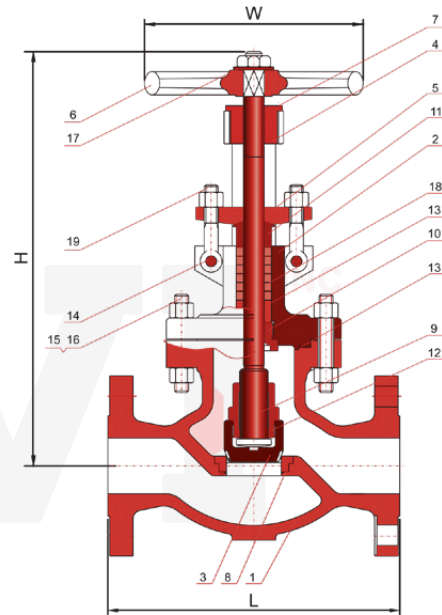
# YVI Valve - Cast Steel Globe Valve

## Design Features

- › API 624 / ISO 15848-1 Low Fugitive Emission Compliant
- › Body Guided Disc
- › Seal Welded Seat Ring
- › Gland Eye Bolt Pins are Welded on Both Ends

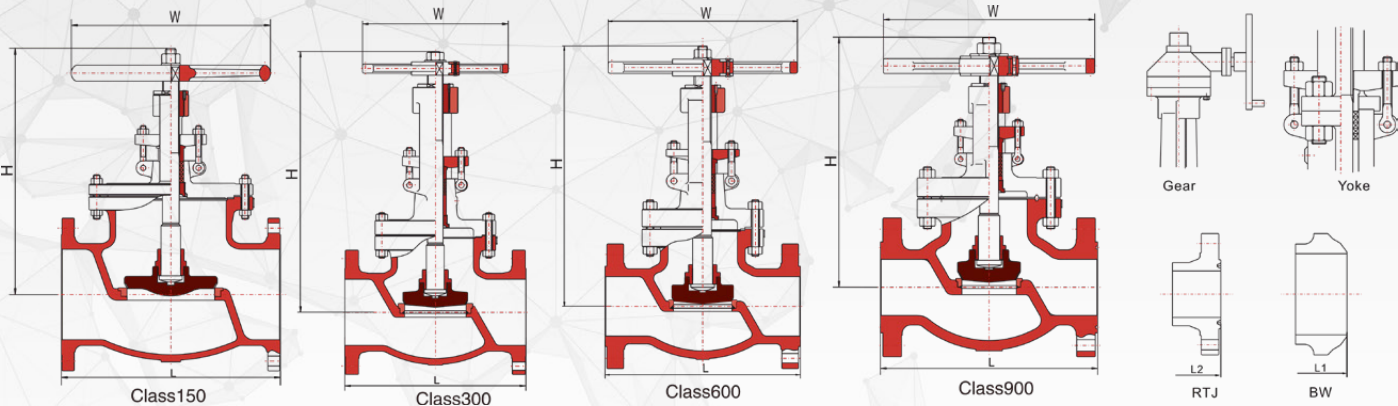
### Available Optional Features Include:

- › Optional Bellow Seal
- › Optional Double Packing With Lantern Ring
- › Optional Live Loaded Gland Flange
- › Optional Stop Check / Non-return



No.	Part	Carbon Steel	Stainless Steel	Low Temperature	High Temperature	NACE Service
1	Body	ASTM A216 WCB	ASTM A351 CF8M	ASTM A352 LCC	ASTM A217 WC9	ASTM A216 WCB
2	Bonnet	ASTM A216 WCB	ASTM A351 CF8M	ASTM A352 LCC	ASTM A217 WC9	ASTM A216 WCB
3	Disc	ASTM A182 F6A ASTM A105N+CR 13	ASTM A182 F316+HF	ASTM A350 LF2+HF	ASTM A182 F22+HF	ASTM A182 F6A(NACE)
4	Stem Nut	ASTM A439 D-2	ASTM A439 D-2	ASTM A439 D-2	ASTM A439 D-2	ASTM A439 D-2
5	Gland Flange	ASTM A216 WCB	ASTM A351 CF8M	ASTM A352 LCB	ASTM A217 WC9	ASTM A216 WCB
6	Handwheel	DUCTILE IRON	DUCTILE IRON	DUCTILE IRON	DUCTILE IRON	DUCTILE IRON
7	Set Screw	ASTM A193 B7	ASTM A193 B8	ASTM A320 L7	ASTM A193 B16	ASTM A193 B7M
8	Seat Ring	ASTM A105N+HF	ASTM A182 F316+HF	ASTM A350 LF2+HF	ASTM A182 F22+HF	ASTM A105N+HF
9	Stem	ASTM A182 F6A	ASTM A182 F316	ASTM A182 F316	ASTM A182 F6A	ASTM A182 F6A(NACE)
10	Back Seat	ASTM A276 410	ASTM A276 316	ASTM A276 316	ASTM A276 410	ASTM A276 410(NACE)
11	Gland	ASTM A276 410	ASTM A276 316	ASTM A276 316	ASTM A276 410	ASTM A276 410(NACE)
12	Disc Nut	ASTM A276 410	ASTM A276 316	ASTM A276 316	ASTM A276 410	ASTM A276 410(NACE)
13	Bonnet Gasket	SPW.SS-GRAPHITE RTJ.SS	SPW.SS-GRAPHITE RTJ.SS	SPW.SS-GRAPHITE RTJ.SS	SPW.SS-GRAPHITE RTJ.SS	SPW.SS-GRAPHITE RTJ.SS
14	Eye Bolt Pin	CARBON STEEL	STAINLESS STEEL	STAINLESS STEEL	STAINLESS STEEL	CARBON STEEL
15	Bonnet Stud	ASTM A193 B7	ASTM A193 B8	ASTM A320 L7	ASTM A193 B16	ASTM A193 B7M
16	Bonnet Nut	ASTM A194 2H	ASTM A194 8	ASTM A194 7	ASTM A194 7	ASTM A194 2HM
17	Handwheel Nut	ASTM A439 D-2	ASTM A439 D-2	ASTM A439 D-2	ASTM A439 D-2	ASTM A439 D-2
18	Packing	GRAPHITE	GRAPHITE	GRAPHITE	GRAPHITE	GRAPHITE
19	Eyebolt	ASTM A194 2H	ASTM A194 8	ASTM A194 7	ASTM A194 7	ASTM A194 2HM

Material list, other materials available/provided.



# YVI Valve - Engineering Data

## Globe Valve Engineering Specifications

\*Gear Operator

NPS	in	2"	2½"	3"	4"	5"	6"	8"	10"	12"	14"	16"	18"	20"	24"
DN	mm	50	65	80	100	125	150	200	250	300	350	400	450	500	600
L-L1 (RF-BW)	in	8	8.5	9.5	11.5	14	16	19.5	24.5	27.5	31	36	38.5	38.5	51
	mm	203	216	241	292	356	406	495	622	698	787	914	978	978	1295
W	in	7.9	7.9	9.8	11.8	13.8	13.8	17.7	17.7	25.2	25.2	28.3	*24	*24	*31.9
	mm	200	200	250	300	350	350	450	450	640	640	720	*610	*610	*810
H	in	12.4	15	14.3	17	18.3	18.3	21.4	23.9	32.4	34.3	33.3	44.9	49.7	60
	mm	315	382	363	433	466	466	543	608	825	871	847	1140	1283	1524
WT(RF)	kg	21	29	35	58	78	104	162	289	485	550	724	1400	2600	3700
WT(BW)	kg	17	20	30	47	71	86	138	219	362	491	650	1250	2300	3250

NPS	in	2"	2½"	3"	4"	5"	6"	8"	10"	12"	14"	16"	18"	20"
DN	mm	50	65	80	100	125	150	200	250	300	350	400	450	500
L-L1 (RF-BW)	in	10.5	11.5	12.5	14	15.7	17.5	22	24.5	28	33	34	38.5	40
	mm	267	292	318	356	400	444	559	622	711	838	864	978	1016
W	in	7.9	9.8	9.8	13.8	17.7	17.7	17.7	22	25.2	28.3	*24	*24	*31.9
	mm	200	250	250	350	450	450	450	560	640	720	*610	*610	*810
H	in	13.0	15.9	15.7	18.2	22	22.6	28.6	30.9	35.1	36	61.1	57.5	64.3
	mm	330	404	398	463	560	574	727	784	891	914	1552	1460	1632
WT(RF)	kg	26	38	51	76	125	173	297	500	724	1125	1650	2700	3650
WT(BW)	kg	21	29	38	59	104	137	237	432	632	975	1450	2400	3200

NPS	in	2"	2½"	3"	4"	5"	6"	8"	10"	12"	14"	16"	18"
DN	mm	50	65	80	100	125	150	200	250	300	350	400	450
L-L1 (RF-BW)	in	11.5	13	14	17	20	22	26	31	33	35	39	43
	mm	292	330	356	432	508	559	660	787	838	889	991	1092
L2 (RTJ)	in	11.6	13.1	14.1	17.1	20.1	22.1	26.1	31.1	33.1	35.1	39.1	43.1
	mm	295	333	359	435	511	562	663	790	841	892	994	1095
W	in	9.8	13.8	13.8	17.7	19.7	19.7	25.2	28.3	28.3	*24	*31.9	*31.9
	mm	250	350	350	450	500	500	640	720	720	*610	*810	*810
H	in	15.1	21.1	21.1	20.9	27.8	28.7	34.4	36.1	38.3	55.1	63.4	70.9
	mm	384	537	537	531	700	730	875	918	972	1400	1610	1801
WT(RF)	kg	37	50	62	150	187	294	543	1006	1350	1620	2160	3300
WT(BW)	kg	30	40	58	132	142	227	460	729	1060	1330	1750	2800

NPS	in	3"	4"	6"	8"	10"	12"	14"	16"
DN	mm	80	100	150	200	250	300	350	400
L-L1 (RF-BW)	in	15	18	24	29	33	38	40.5	44.5
	mm	381	457	610	737	838	965	1029	1130
12(RTJ)	in	15.1	15.1	24.1	29.1	33.1	38.1	40.9	44.9
	mm	384	460	613	740	841	968	1038	1140
W	in	13.8	17.7	22	28.3	29.7	28.3	*31.9	*31.9
	mm	350	450	560	720	720	*810	*810	*810
H	in	21.9	26.7	31.9	32.9	35.9	54.1	76.1	87
	mm	555	676	809	835	912	1374	1934	2210
WT(RF)	kg	110	197	435	720	1070	1920	2670	3520
WT(BW)	kg	112	158	360	597	890	1690	2390	3170

For 2-1/2" and smaller see Class 1500

NPS	in	2"	2½"	3"	4"	6"	8"	10"	12"
DN	mm	50	65	80	100	150	200	250	300
L-L1 (RF-BW)	in	14.5	16.5	18.5	21.5	27.8	32.8	39	44.5
	mm	368	419	470	546	705	832	991	1130
L2 (RTJ)	in	14.6	16.6	18.6	21.6	28	33.1	39.4	45.1
	mm	371	422	473	549	711	842	1000	1146
W	in	13.8	13.8	17.7	19.7	24	31.9	31.9	31.9
	mm	350	350	450	500	*610	*810	*810	*810
H	in	17.6	22.5	25.4	29.7	44.2	69.6	96.5	114.3
	mm	448	572	646	755	1124	1769	2450	2904
WT(RF)	kg	95	138	145	350	560	990	1530	2570
WT(BW)	kg	80	112	129	299	462	830	1330	2270

NPS	in	2"	2½"	3"	4"	6"	8"	10"
DN	mm	50	65	80	100	150	200	250
L-L1 (RF-BW)	in	17.8	20	22.8	26.5	36	40.2	50
	mm	451	508	578	673	914	1022	1270
L2 (RTJ)	in	17.9	20.2	23	26.9	36.5	40.9	50.9
	mm	454	514	584	683	927	1038	1292
W	in	17.7	19.7	22	24	24	31.9	31.9
	mm	450	500	560	610	*610	*810	*810
H	in	23.9	31.5	34.8	49.6	75	97	122.4
	mm	606.6	800	885	1260	1905	2465	3108
WT(RF)	kg	176	264	308	759	1990	4390	5290
WT(BW)	kg	141	214	238	644	1700	3950	4390

All technical data is subject to change without notice.

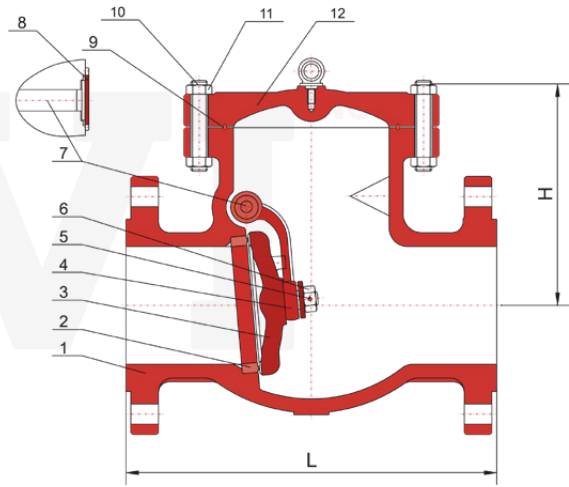
# YVI Valve - Cast Steel Swing Check Valve

## Design Features

- Seal Welded Seat Ring
- Disc Anti-rotational Device to Prevent 360° Rotation
- Disc Nut Pin is Welded
- 2" – 12" Class 150 & Class 300 and 2" – 10" Class 600 Swing Check Valves Provided with Optional Internal Hinge Pin Design

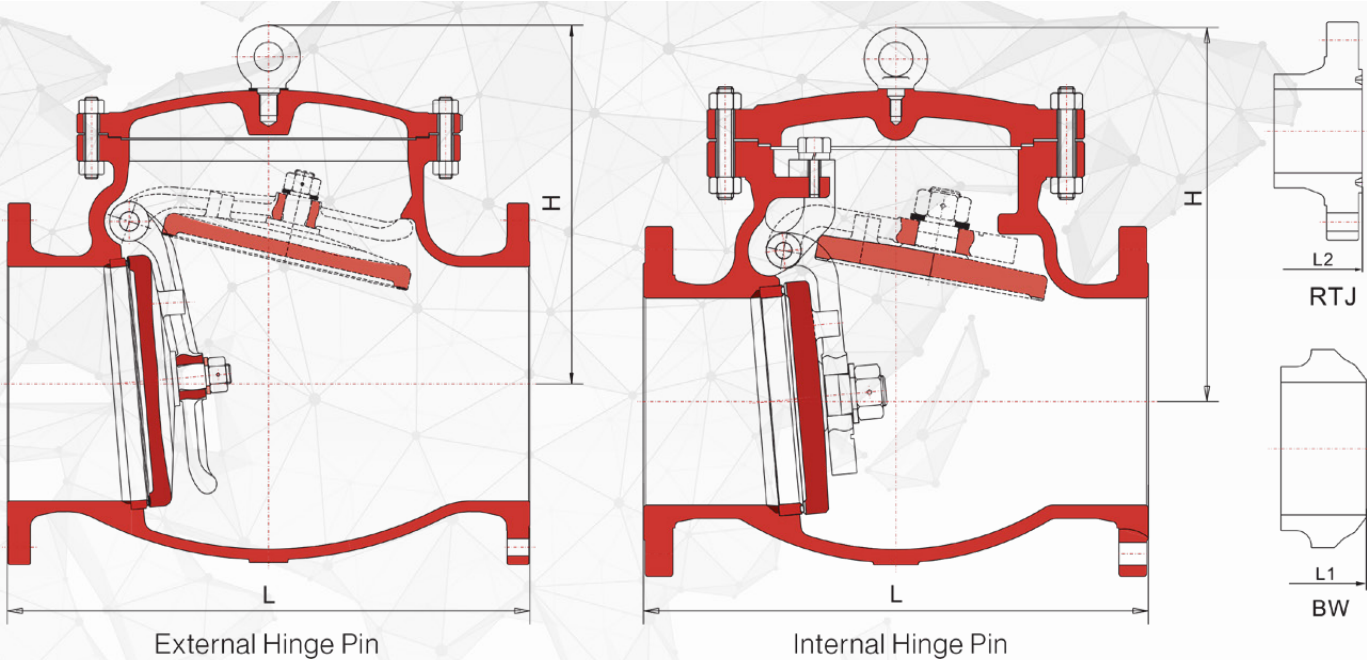
### Available Optional Features Include:

- Optional Threaded Seat ring
- Optional Non-slam Design



No.	Part	Carbon Steel	Stainless Steel	Low Temperature	High Temperature	NACE Service
1	Body	ASTM A216 WCB	ASTM A351 CF8M	ASTM A352 LCC	ASTM A217 WC9	ASTM A216 WCB
2	Seat Ring	ASTM A105N+HF	ASTM A182 F316+HF	ASTM A350 LF2+HF	ASTM A182 F22+HF	ASTM A105N+HF
3	Disc	ASTM A216 WCB+CR13	ASTM A351 CF8M	ASTM A352 LCC+HF	ASTM A217 WC9+HF	ASTM A216 WCB+CR13(NACE)
4	Hinge	ASTM A216 WCB	ASTM A351 CF8M	ASTM A352 LCC	ASTM A217 WC9	ASTM A216 WCB
5	Pin	ASTM A276 410	ASTM A276 316	ASTM A276 316	ASTM A276 410	ASTM A276 410(NACE)
6	Disc Nut	ASTM A276 410	ASTM A276 316	ASTM A276 316	ASTM A276 410	ASTM A276 410(NACE)
7	Hinge Pin	ASTM A276 410	ASTM A276 316	ASTM A276 316	ASTM A276 420	ASTM A276 410(NACE)
8	Plug	ASTM A105N	ASTM A182 F316	ASTM A350 LF2	ASTM A182 F22	ASTM A105N
9	Gasket	SPW.SS+GRAPHITE RTJSS	SPW.SS+GRAPHITE RTJSS	SPW.SS+GRAPHITE RTJSS	SPW.SS+GRAPHITE RTJSS	SPW.SS+GRAPHITE RTJSS
10	Bonnet Bolt	ASTM A193 B7	ASTM A193 B8	ASTM A320 L7	ASTM A193 B16	ASTM A193 B7M
11	Bonnet Nut	ASTM A194 2H	ASTM A194 8	ASTM A194 7	ASTM A194 7	ASTM A194 2HM
12	Cover	ASTM A216 WCB	ASTM A351 CF8M	ASTM A352 LCC	ASTM A219 WC9	ASTM A216 WCB

Material list, other materials available/provided.



Class 150 / Class 300



# YVI VALVE - CAST STEEL **PRESSURE SEAL VALVE**

YVI Cast Steel Pressure Seal Valves are designed, manufactured, and tested in accordance with ASME B16.34, API 594, API 600, API 623, BS1868, MSS SP-144, and API 598. YVI offers size ranges from 2" through 48" diameters in pressure classes 600# through 2500# with end connections in either RFFE, RTJ, and Butt weld. Common materials of construction such as WCB, LCB, LCC, WC6, WC9, and C5 are all available along with other materials upon request. To assure casting quality, all pressure-containing castings are produced in-house.



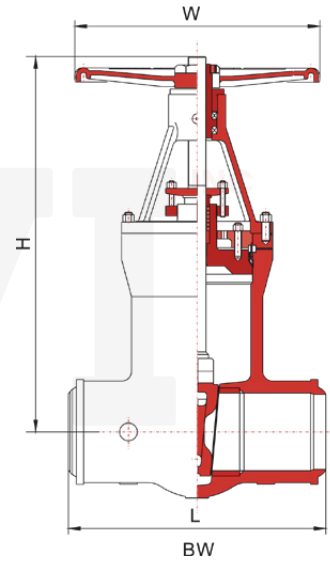
# YVI Valve - Cast Steel Pressure Seal Gate Valve

## Design Features

- Seal Welded Seat Rings
- Gland Eye Bolt Pins are Welded on Both Ends
- API 622 Certified Graphite Stem Packing
- 26" and Larger Items have Hardfaced Wedge Guides

### Available Optional Features Include:

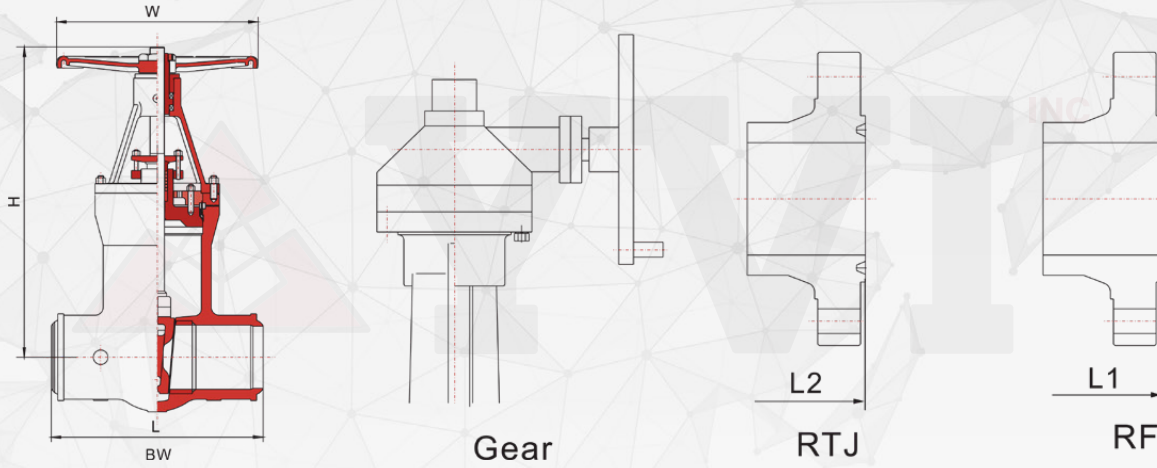
- Optional Double Packing With Lantern Ring
- Optional Live Loaded Gland Flange and/or Bonnet Studs
- Optional Parallel Slide Design



Part	Carbon Steel	Stainless Steel	Low Temperature	High Temperature	NACE Service
Body	ASTM A216 WCB	ASTM A351 CF8M	ASTM A352 LCC	ASTM A217 WC9	ASTM A216 WCB
Seat Ring	ASTM A105N + HF	ASTM A182 F316+HF	ASTM A350 LF2+HF	ASTM A182 F22 + HF	ASTM A105N + HF
Flexible Wedge	ASTM A216 WCB + Cr13	ASIM A351 CF8M	ASTM A352 LCC	ASTM A217 WC9 + Cr13	ASTM A216 WCB + Cr13
Stem	ASTM A182 F6a	ASTM A182 F316	ASTM A182 F316	ASTM A182 F6a	ASTM A182 F6a (NACE)
Bonnet	ASTM A105N	ASTM A182 F316	ASTM A350 LF2	ASTM A182 F22	ASTM A105N
Sealing Ring	SS304 + Graphite / SS316L	SS316 + Graphite / SS316L	SS316 + Graphite / SS316L	SS304 + Graphite / SS316L	SS304 + Graphite / SS316L
Pressure Ring	ASTM A276 410	ASTM A276 316	ASTM A276 316	ASTM A276 410	ASTM A276 410 (NACE)
Segment Ring	ASTM A182 F6a	ASTM A182 F316	ASTM A182 F316	ASTM A182 F6a	ASTM A182 F6a (NACE)
Support Plate	ASTM A216 WCB	ASTM A351 CF8M	ASTM A352 LCC	ASTM A217 WC9	ASTM A216 WCB
Packing	Graphite	Graphite	Graphite	Graphite	Graphite
Box-Plate Bolt	ASTM A193 B7	ASTM A193 B8	ASTM A320 L7	ASTM A193 B16	ASTM A193 B7M
Box-Plate Nut	ASTM A194 2H	ASTM A194 8	ASTM A194 7	ASTM A194 7	ASTM A194 2HM
Bolt	ASTM A193 B7	ASTM A193 B8	ASTM A320 L7	ASTM A193 B16	ASTM A193 B7M
Nut	ASTM A194 2H	ASTM A194 8	ASTM A194 7	ASTM A194 7	ASTM A194 2HM
Gland Flange Seat	ASTM A105N	ASTM A182 F316	ASTM A350 LF2	ASTM A182 F22	ASTM A105N
Gland	ASTM A276 410	ASTM A276 316	ASTM A276 316	ASTM A276 410	ASTM A276 410 (NACE)
Gland Flange	ASTM A216 WCB	ASTM A351 CF8M	ASTM A352 LCC	ASTM A217 WC9	ASTM A216 WCB
Gland Eye Bolt	ASTM A193 B7	ASTM A193 B8	ASTM A320 L7	ASTM A193 B16	ASTM A193 B7M
Gland Eyebolt Nut	ASTM A194 2H	ASTM A194 8	ASTM A194 7	ASTM A194 7	ASTM A194 2HM
Yoke	ASTM A216 WCB	ASTM A351 CF8M	ASTM A352 LCC	ASTM A217 WC9	ASTM A216 WCB
Stem Nut	ASTM A439 D-2	ASTM A439 D-2	ASTM A439 D-2	ASTM A439 D-2	ASTM A439 D-2
Grease Nipple	Carbon Steel	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel
Retaining Nut	Carbon Steel	Stainless Steel	Stainless Steel	Carbon Steel	Carbon Steel
Handwheel	Ductile Iron	Ductile Iron	Ductile Iron	Ductile Iron	Ductile Iron
Screw	Carbon Steel	Stainless Steel	Stainless Steel	Carbon Steel	Carbon Steel
Handwheel Nut	Carbon Steel	Stainless Steel	Stainless Steel	Carbon Steel	Carbon Steel

Material list, other materials available/provided.

# Pressure Seal Gate Engineering Specifications



NPS	in	2"	2½"	3"	4"	5"	6"	8"	10"	12"	14"	16"	18"	20"	24"	26"	28"	30"
L(BW)	in	7	8.5	10	12	15	18	23	28	32	35	39	43	47	55	-	-	-
	mm	178	216	254	305	381	457	584	711	813	889	991	1092	1194	1397	-	-	-
L1(RF)	in	11.5	13	14	17	20	22	26	31	33	35	39	43	47	55	57	61	65
	mm	292	330	356	432	508	559	660	787	838	889	991	1092	1194	1397	1418	1549	1651
L2(RTJ)	in	12	13.1	14.1	17.1	20.1	22.1	26.1	31.1	33.1	35.1	39.1	43.1	47.2	55.4	58	62	66
	mm	295	333	359	435	511	562	663	790	841	892	994	1095	1200	1407	1461	1562	1664
W	in	7.9	9.8	9.8	13.8	15.7	17.7	21.3*	21.3*	24*	24*	24*	24*	24*	24*	32*	32*	39.4*
	mm	200	250	250	350	400	450	540*	540*	610*	610*	610*	610*	610*	610*	800*	800*	1000*
H	in	23.2	24.8	26.3	36	39.4	42.5	48.1	59.5	70.5	73.1	85.1	88.6	97.3	118.1	128	137.9	149
	mm	589.3	629.9	668	914.4	1000.8	1079.5	1222	1511.3	1790.7	1856.7	2161.5	2250.4	2471.4	2999.7	3251.2	3502.7	3784.6
WT(RF)	kg	70	95	100	149	208	245	320	430	515	670	905	1150	1445	2080	2445	2895	3250
WT(BW)	kg	62	80	84	115	150	171	215	268	318	435	570	720	890	1285	1510	1750	2010

NPS	in	2"	2½"	3"	4"	6"	8"	10"	12"	14"	16"	18"	20"	24"	26"	28"	30"
L(BW)	in	8.5	10	12	14	20	26	31	36	39	43	48	52	61	65	68	72
	mm	216	254	305	356	508	660	787	914	991	1092	1219	1321	1549	1651	1727.2	1816.1
L1(RF)	in	14.5	16.5	15	18	24	29	33	38	40.5	44.5	48	52	61	-	-	-
	mm	368	419	381	457	610	737	838	965	1029	1130	1219	1321	1549	-	-	-
L2(RTJ)	in	14.6	16.6	15.1	18.1	24.1	29.1	33.1	38.1	40.9	44.9	48.5	52.5	61.8	-	-	-
	mm	371	422	384	460	613	740	841	968	1039	1140	1232	1333	1570	-	-	-
W	in	10	10	15.7	15.7	22	21.3	21.3	21.3	24*	24*	32*	32*	39.4*	39.4*	39.4*	39.4*
	mm	254	254	400	400	560	540*	540*	540*	610*	610*	810*	810*	1000*	1000*	1000*	1000*
H	in	23	25	22.3	25	40	51.7	56.6	63.5	70.9	79.5	97.3	100	127.6	138.3	149	159.5
	mm	584.2	640	560	635	1016	1312	1437	1612	1800	2020	2471.4	2541	3241	3512.8	3784.6	4051.3
WT(RF)	kg	63	99	107	158	294	693	1008	1418	1785	2520	3820	4400	6770	-	-	-
WT(BW)	kg	42	67	70	108	194	520	772	1103	1470	2048	2730	3685	5430	6370	7385	8480

NPS	in	2"	2½"	3"	4"	6"	8"	10"	12"	14"	16"	18"	20"	24"
L(BW)	in	8.5	10	12	16	22	28	34	39	42	47	53	58	66
	mm	216	254	305	406	559	711	864	991	1067	1194	1346	1473	1676.4
L1(RF)	in	14.5	16.5	18.5	21.5	27.8	32.8	39	44.5	49.5	54.5	60.5	65.5	76.5
	mm	368	419	470	546	705	832	991	1130	1257	1384	1537	1664	1943
L2(RTJ)	in	14.6	16.6	18.6	21.6	28	33.18	39.4	45.1	50.3	55.4	61.4	66.4	77.6
	mm	371	422	473	549	711	842	1000	1146	1278	1407	1559.6	1686.6	1971
W	in	11.8	13.8	15.7	20	18.1	18*	24	24*	32*	32*	39.4*	39.4*	
	mm	300	350	400	500	460*	460*	610	610*	810*	810*	1000*	1000*	
H	in	20.4	22.6	24	27.3	42.6	51	59.1	66.1	74.2	84.8	111.1	122.1	148.3
	mm	517	575	611	694	1081	1295	1502	1679	1885	2155	2821.9	3101.3	3766.8
WT(RF)	kg	63	99	126	218	504	956	1481	2184	2741	3780	5960	7370	10610
WT(BW)	kg	42	67	87	150	367	718	1071	1523	1890	2888	4630	5720	8240

NPS	in	2"	2½"	3"	4"	6"	8"	10"	12"	14"	16"	18"	20"	24"
L(BW)	in	11	13	14.5	18	24	30	36	41	44	49	55	61	68
	mm	279	330	368	457	610	762	914	1041	1118	1245	1397	1549	1727
L1(RF)	in	17.8	20	22.8	26.5	36	40.3	50	56	-	-	-	-	-
	mm	451	508	578	673	914	1022	1270	1422	-	-	-	-	-
L2(RTJ)	in	17.9	20.3	23	26.9	36.5	40.8	50.9	56.9	-	-	-	-	-
	mm	454	514	584	683	927	1038	1292	1445	-	-	-	-	-
W	in	11.8	12.2	12.2	18.1	18.1	24*	24*	32	24*	24*	32*	32*	39.4*
	mm	300	310*	310*	460*	460*	610*	610*	810*	810*	810*	1000*	1000*	1000*
H	in	20.7	27.8	27.8	35.5	44.5	55	55.8	71.1	94	97.3	116.1	128.8	153.6
	mm	527	707	707	901	1130	1397	1468	1806	2388	2471	2949	3272	3901
WT(RF)	kg	89	142	173	346	851	1386	2493	3091	-	-	-	-	-
WT(BW)	kg	53	95	100	200	488	850	1680	2330	3400	4200	5000	6170	8880

All technical data is subject to change without notice.

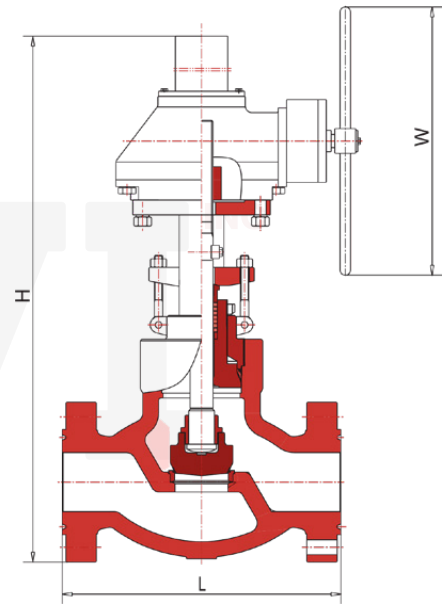
# YVI Valve - Cast Steel Pressure Seal Globe Valve

## Design Features

- › Body Guided Disc
- › Seal Welded Seat Rings
- › Gland Eye Bolt Pins are Welded on Both Ends
- › API 622 Certified Graphite Stem Packing

### Available Optional Features Include:

- › Optional Stem Extension
- › Optional Double Packing With Lantern Ring
- › Optional Live Loaded Gland Flange

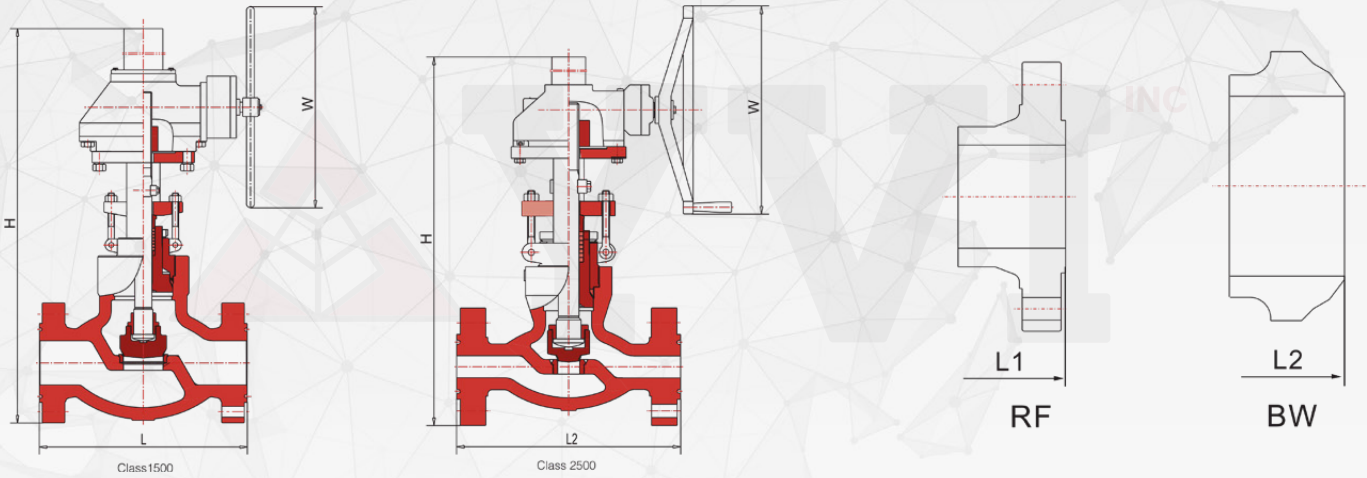


Part	Carbon Steel	Stainless Steel	Low Temperature	High Temperature	NACE Service
Body	ASTM A216 WCB	ASTM A351 CF8M	ASTM A352 LCC	ASTM A217 WC9	ASTM A216 WCB
Disc	ASTM A105N+STL.6	ASTM A182 F316+STL.6	ASTM A350-LF2+STL.6	ASTM A182 F22+STL.6	ASTM A105N+STL.6
Stem	ASTM A182 F6A	ASTM A182 F316	ASTM A182 F304	ASTM A182 F6A	ASTM A182 F6A(NACE)
Stuffing Box	ASTM A182 F6A	ASTM A182 F316	ASTM A182 F304	ASTM A182 F6A	ASTM A182 F6A(NACE)
Sealing Ring	SS304 + GRAPHITE SS316L	SS316 + GRAPHITE SS316L	SS316 + GRAPHITE SS316L	SS304 + GRAPHITE SS316L	SS304 + GRAPHITE SS316L
Yoke	ASTM A216 WCB	ASTM A351 CF8M	ASTM A352 LCC	ASTM A217 WC9	ASTM A216 WCB
Spacer Ring	ASTM A182 F6A	ASTM A182 F316	ASTM A182 F304	ASTM A182 F6A	ASTM A182 F6A(NACE)
Packing	GRAPHITE	GRAPHITE	GRAPHITE	GRAPHITE	GRAPHITE
Gland	ASTM A276 410	ASTM A276 316	ASTM A276 304	ASTM A276 410	ASTM A276 410
Gland Flang	ASTM A216 WCB	ASTM A351 CF8M	ASTM A352 LCC	ASTM A217 WC9	ASTM A216 WCB
Eye Bolt	ASTM A193 B7	ASTM A193 B8	ASTM A320 L7	ASTM A193 B16	ASTM A193 B7M
Nut	ASTM A193 2H	ASTM A193 8	ASTM A193 7	ASTM A193 7	ASTM A193 2HM
Stem Nut	ASTM A439 GR D-2	ASTM A439 GR D-2	ASTM A439 GR D-2	ASTM A439 GR D-2	ASTM A439 GR D-2
Handwheel Cover	ASTM A29 TYPE 1025	ASTM A29 TYPE 1025	ASTM A29 TYPE 1025	ASTM A29 TYPE 1025	ASTM A29 TYPE 1025
Impactor Handwheel	DUCTILE IRON	DUCTILE IRON+ZN	DUCTILE IRON	DUCTILE IRON	DUCTILE IRON
Impact Block	ASTM A29 TYPE 1045	ASTM A29 TYPE 1045	ASTM A29 TYPE 1045	ASTM A29 TYPE 1045	ASTM A29 TYPE 1045
Disc Nut	ASTM A276 410	ASTM A276 316	ASTM A276 304	ASTM A276 410	ASTM A276 410(NACE)

Material list, other materials available/provided.



# Pressure Seal Globe Engineering Specifications



NPS	in	2"	2½"	3"	4"	5"	6"	8"	10"	12"	14"	16"
L(BW)	in	7	8.5	10	12	15	18	23	28	32	-	-
	mm	178	216	254	305	381	457	584	711	813	-	-
L1(RF)	in	11.5	13	14	17	20	22	26	31	33	35	39
	mm	292	330	356	432	508	559	660	787	838	889	991
L2(RTJ)	in	11.6	13.1	14.1	17.1	20.1	22.1	26.1	31.1	33.1	35.1	39.1
	mm	295	333	359	435	511	562	663	790	841	892	994
W	in	9.8	11.8	13.8	17.7	19.7	21.3*	21.3*	24*	24*	32*	32*
	mm	248.9	299.7	350.5	449.6	500	540*	540*	610*	610*	810*	810*
H	in	21.7	24.8	26.8	29.5	39.4	45.3	49.2	55.1	61	70.9	85
	mm	551.2	629.9	680.7	749.3	1000	1150.6	1249.7	1399.5	1549.4	1800	2150
WT(RF)	kg	45	55	85	135	190	305	620	1310	1900	2720	3150
WT(BW)	kg	35	45	60	95	150	230	540	1150	1720	2530	2900

NPS	in	2"	2½"	3"	4"	6"	8"	10"	12"	14"	16"
L(BW)	in	8.5	10	12	14	20	26	31	36	39	43
	mm	216	254	305	356	508	660	787	914	991	1092
L1(RF)	in	14.5	16.5	15	18	24	29	33	38	40.5	44.5
	mm	368	419	381	457	610	737	838	965	1029	1130
L2(RTJ)	in	14.6	16.6	15.1	18.1	24.1	29.1	33.1	38.1	40.9	44.9
	mm	371	422	384	460	613	740	841	968	1038	1140
W	in	14	14	22	20*	24*	24*	24*	32*	32*	39.4*
	mm	355.6	355.6	560	540*	610*	610*	610*	810*	810*	1000*
H	in	24.4	25.2	22	33.5	39.1	53.1	61	68.9	78.8	91
	mm	619.8	640.1	561	850.9	994	1348.7	1549.4	1749.6	2000.3	23114
WT(RF)	kg	84	110	116	179	441	1050	1720	2300	3350	4000
WT(BW)	kg	58	74	84	137	378	945	1520	2050	3050	3600

NPS	in	2"	2½"	3"	4"	6"	8"	10"	12"	14"
L(BW)	in	8.5	10	12	16	22	28	34	39	42
	mm	216	254	305	406	559	711	864	991	1067
L1(RF)	in	14.5	15.5	18.5	21.5	27.8	32.8	39	44.5	49.5
	mm	368	419	470	546	705	832	991	1130	1257
L2(RTJ)	in	14.6	16.6	18.6	21.6	28.1	33.2	39.4	45.1	50.3
	mm	371	422	473	549	711	841	1000	1146	1276
W	in	13.8	17.7	17.7	18.1	24	31.9	39.4	39.4	39.4
	mm	350	450	450	460*	610*	810*	1000*	1000*	1000*
H	in	19.4	23.8	23.8	32.2	48.4	50.1	57.8	91	106
	mm	492	605	605	819	1229	1272	1468	23114	26924
WT(RF)	kg	84	116	143	236	918	1764	2680	3400	4300
WT(BW)	kg	58	62	128	168	781	1502	2280	2830	3600

NPS	in	2"	2½"	3"	4"	6"	8"	10"	12"
L(BW)	in	11	13	14.5	18	24	30	36	41
	mm	279	330	368	457	610	762	914	1041
L1(RF)	in	17.8	20	22.8	26.5	36	40.3	50	56
	mm	451	508	578	673	914	1022	1270	1422
L2(RTJ)	in	17.9	20.3	23	26.9	36.5	40.9	50.9	56.9
	mm	454	514	584	683	927	1038	1292	1445
W	in	16	20	19.7	24	24	39.4	39.38	39.38
	mm	400	500	500	610*	610*	1000*	1000*	1000*
H	in	24.3	30.7	27.8	51.2	53.9	62.3	100	106
	mm	617.2	779.8	705	1300.5	1369.1	1583	2540	2692.4
WT(RF)	kg	105	163	221	525	1313	2520	3300	4200
WT(BW)	kg	74	116	147	368	973	2100	2500	3300

All technical data is subject to change without notice.

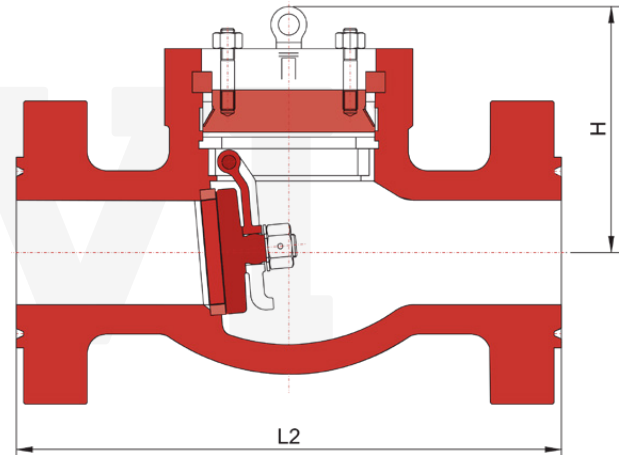
# YVI Valve - Cast Steel Pressure Seal Check Valve

## Design Features

- Seal Welded Seat Rings
- Disc Anti-rotational Device to Prevent 360° Rotation
- Disc Nut Pin is Welded

### Available Optional Features Include:

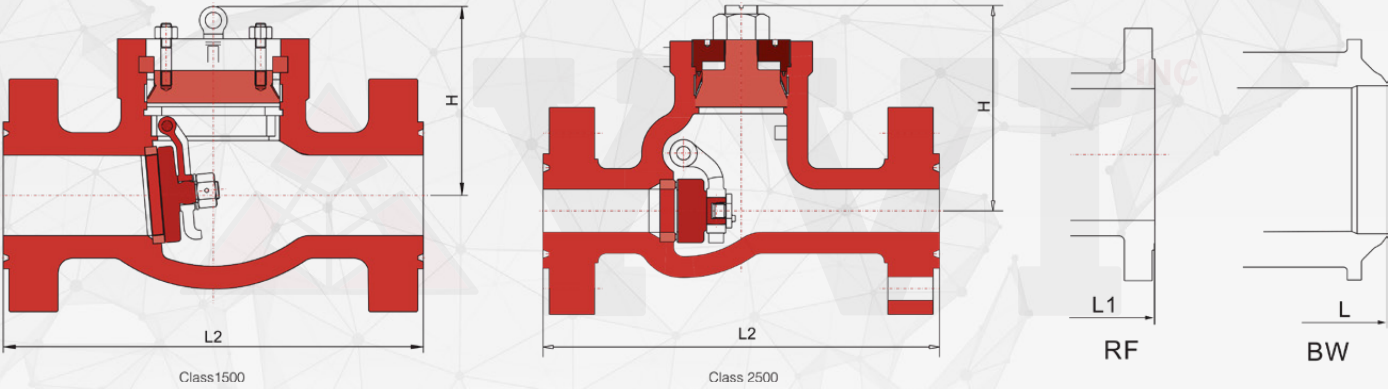
- Optional Threaded Seat Ring
- Optional Non-slam Design
- Optional Internal Hinge Pin or External Hinge Pin
- Optional Live Loaded Cover Bolting



Part	Carbon Steel	Stainless Steel	Low Temperature	High Temperature	NACE Service
Body	ASTM A216 WCB	ASTM A351 CF8M	ASTM A352 LCC	ASTM A217 WC9	ASTM A216 WCB
Seat Ring	ASTM A105N+STL.6	ASTM A182 F316	ASTM A350 LF2+STL.6	ASTM A182 F22+STL.6	ASTM A105N+STL.6
Disc	ASTM A216 WCB+CR13	ASTM A351 CF8M	ASTM A352 LCC+CR13	ASTM A217 WC9+CR13	ASTM A216 WCB+CR13
Hinge	ASTM A216 WCB	ASTM A351 CF8M	ASTM A352 LCC	ASTM A217 WC9	ASTM A216 WCB
Washer	STAINLESS STEEL GRAPHITE	STAINLESS STEEL GRAPHITE	STAINLESS STEEL GRAPHITE	STAINLESS STEEL GRAPHITE	STAINLESS STEEL GRAPHITE
Pin	ASTM A182 F6A	ASTM A276 316	ASTM A276 304	ASTM A276 304	ASTM A276 410(NACE)
Disc Nut	ASTM A276 410	ASTM A276 316	ASTM A276 304	ASTM A276 304	ASTM A276 410(NACE)
Lever Set Ring	ASTM A276 410	ASTM A182 F316	ASTM A182 F304	ASTM A182 F304	ASTM A182 F6A(NACE)
Hing Pin	ASTM A182 F6A	ASTM A182 F316	ASTM A182 F304	ASTM A182 F304	ASTM A162 F6A(NACE)
Plate	ASTM A276 410	ASTM A182 F316	ASTM A182 F304	ASTM A182 F304	ASTM A182 F6A(NACE)
Cover	ASTM A105N	ASTM A182 F316	ASTM A350 LF2	ASTM A182 F22	ASTM A105N
*Sealing Ring	SS304 + GRAPHITE	SS316 + GRAPHITE	SS304 + GRAPHITE	SS304 + GRAPHITE	SS304 + GRAPHITE
Spacer Ring	ASTM A276 410	ASTM A182 F316	ASTM A182 F304	ASTM A182 F304	ASTM A276 420(NACE)
Bonnet Nut	ASTM A194 2H	ASTM A194 8	ASTM A194 7	ASTM A194 7	ASTM A194 2HM
Bolt	ASTM A193 B7	ASTM A193 B8	ASTM A320 L7	ASTM A193 B16	ASTM A193 B7M

Material list, other materials available/provided.

# Pressure Seal Check Engineering Specifications



NPS	in	2"	2½"	3"	4"	5"	6"	8"	10"	12"	14"	16"	18"	20"	24"	26"	28"	30"
L(BW)	in	7	8.5	10	12	15	18	23	28	32	-	-	-	-	-	-	-	-
	mm	178	216	254	305	381	457	584	711	813	-	-	-	-	-	-	-	-
L1(RF)	in	11.5	13	14	17	20	22	26	31	33	35	39	43	47	55	57	63	65
	mm	292	330	356	432	508	559	660	787	838	889	991	1092	1194	1397	1448	1600	1651
L2(RTJ)	in	11.6	13.1	14.1	17.1	20.1	22.1	26.1	31.1	33.1	35.1	39.1	43.1	47.3	55.4	57.5	63.5	65.5
	mm	295	333	359	435	511	562	663	790	841	892	994	1095	1200	1407	1460	1613	1664
H	in	9.5	10.4	10.6	12.5	15.7	15.7	23.1	23.9	27.4	28.7	28.8	29.5	32.3	37.4	39.4	43.3	47.3
	mm	241.3	264.2	269.2	317.5	398.8	398.8	586.7	607.1	696	729	730.3	749.3	819.2	949.5	1000.3	1098.6	1200.2
WT(RF)	kg	27	35	45	85	135	190	350	500	670	880	1150	1480	1880	2600	3100	3500	4000
WT(BW)	kg	18	25	32	55	85	130	260	370	490	660	850	1100	1490	2040	2500	2800	3150

NPS	in	2"	2½"	3"	4"	6"	8"	10"	12"	14"	16"	18"	20"	24"	26"	28"	30"
L(BW)	in	8.5	10	12	14	20	26	31	36	39	43	48	52	61	63	67	71
	mm	216	254	305	356	508	660	787	914	991	1092	1219	1321	1549	1600.2	1701.8	1803.4
L1(RF)	in	14.5	16.5	15	18	24	29	33	38	40.5	44.5	48	52	61	65	69	73
	mm	368	419	381	457	610	737	838	965	1029	1130	1219	1321	1549	1651	1752.6	1854.2
L2(RTJ)	in	14.6	16.6	15.1	18.1	24.1	29.1	33.1	38.1	40.9	44.9	48.5	52.5	61.8	65.9	69.9	73.9
	mm	371	422	384	460	613	740	841	968	1039	1140	1232	1334	1570	1673.9	1775.5	1877.1
H	in	9.5	10.4	10.6	12.5	12.8	23.1	23.9	21	28.7	24.9	33.5	34	37.8	39.4	42.3	55.1
	mm	241.3	264.2	269.2	317.5	325	586.7	607.1	533	729	633	850.9	863.6	958.9	1000.3	1073.2	1400.3
WT(RF)	kg	42	55	58	110	242	599	893	1365	1628	1733	2300	3000	4100	4600	5200	6000
WT(BW)	kg	21	32	34	68	168	462	725	1071	1281	1418	1850	2400	2900	3600	4000	4600

NPS	in	2"	2½"	3"	4"	6"	8"	10"	12"	14"	16"	18"	20"	24"
L(BW)	in	8.5	10	12	16	22	28	34	39	42	47	53	58	77
	mm	216	254	305	406	559	711	864	991	1067	1194	1346	1473	1956
L1(RF)	in	14.5	16.5	18.5	21.5	27.8	32.8	39	44	49.5	54.4	60.5	65.5	76.5
	mm	368	419	470	546	705	832	991	1130	1257	1384	1537	1664	1943
L2(RTJ)	in	14.6	16.6	18.6	21.6	28.1	33.2	39.4	45.1	50.3	55.3	61.4	66.4	77.6
	mm	371	422	473	549	711	842	1000	1146	1276	1407	1559	1686	1972
H	in	9.5	10.4	11	14.3	13.3	17.7	20.2	25.4	28	29.5	34.63	37.38	43.25
	mm	241.3	264.2	280	363	337	450	513	645.7	711.2	749.3	879.6	949.5	1098.6
WT(RF)	kg	42	58	105	147	360	641	1103	1628	2205	2730	3300	4200	6000
WT(BW)	kg	21	34	42	74	233	504	777	1155	1481	1680	2100	2600	3500

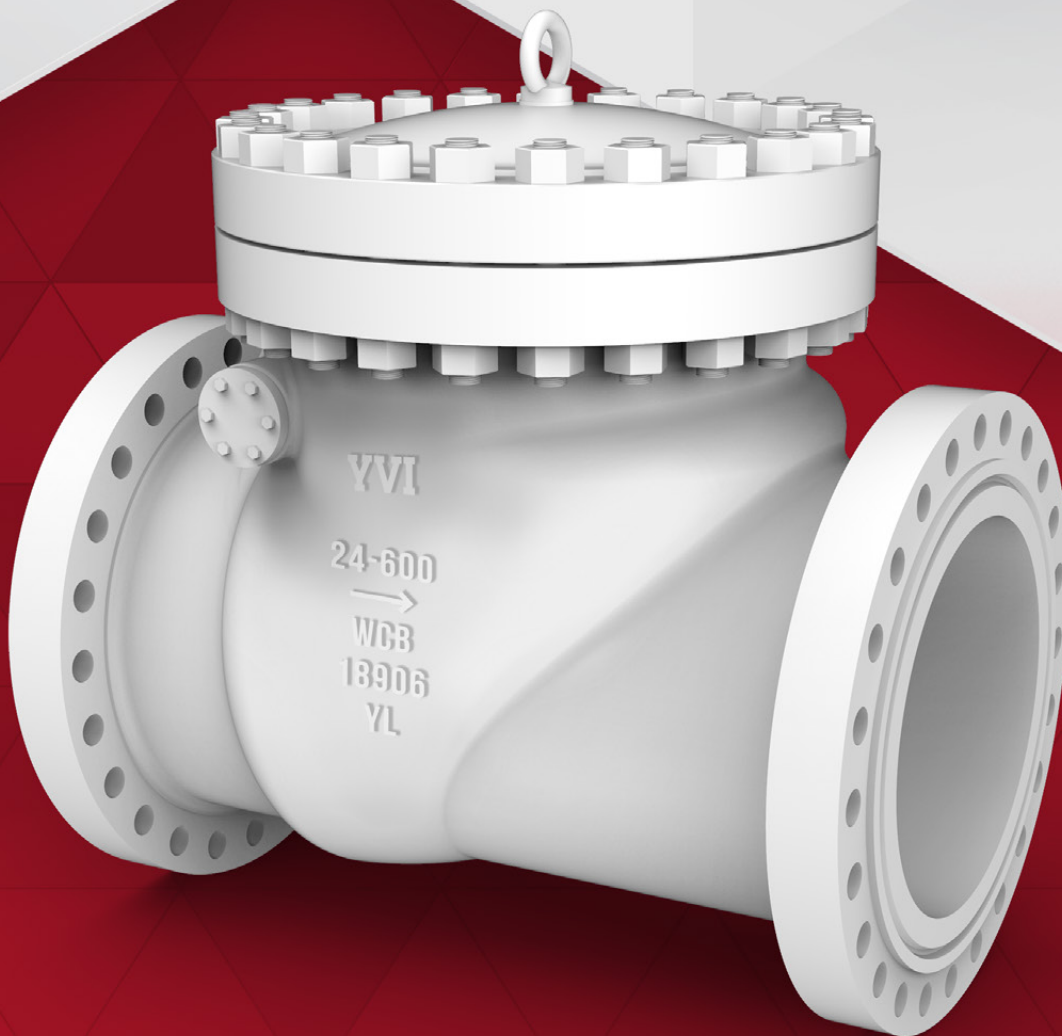
NPS	in	2"	2½"	3"	4"	6"	8"	10"	12"	14"	16"	18"	20"	24"
L(BW)	in	11	13	14.5	18	24	30	36	41	44	49	55	61	68
	mm	279	330	368	457	610	762	914	1041	1117.6	12446	1397	1549.4	1727.2
L1(RF)	in	17.8	20	22.8	26.5	36	40.2	50	56	-	-	-	-	-
	mm	451	508	578	673	914	1023	1270	1422	-	-	-	-	-
L2(RTJ)	in	17.9	20.3	23	26.9	36.5	40.9	50.9	56.9	-	-	-	-	-
	mm	454	514	584	683	927	1038	1292	1444	-	-	-	-	-
H	in	9.5	10.4	11.9	12.5	17.8	22	22.7	25.8	33.9	35.4	39.4	45.3	55.1
	mm	243.8	264.2	303	317.5	452.1	558.8	576.6	655.3	860.6	898.7	1000.3	1149.4	1400.3
WT(RF)	kg	89	124	163	299	588	1071	1676	2772	-	-	-	-	-
WT(BW)	kg	53	74	89	142	286	598	783	1512	2450	3200	4050	5000	7200

All technical data is subject to change without notice.

YVI VALVE - FULL OPENING

# API 6D CHECK VALVE

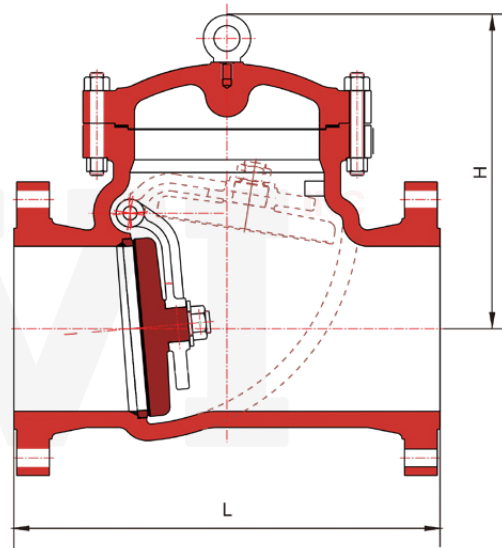
YVI Full Opening Check Valve are designed, manufactured and tested in accordance with API 6D, ASME B16.34, optional design to soft seated or metal seated, and soft seated type are certified to 6FD first edition, and the valve range is from 2 inch up to 48 inch, pressure rating is from 150LB up to 2500LB. With full opening design, this series of check valve can be capable for pig ball cleaning service. To prevent potential water hammer damage caused by disc closing, a dashpot device can be assembled to control the disc closing time. The function of a check valve is to prevent reversal of flow automatically and promptly.



# YVI Valve - Full Opening API 6D Check Valve

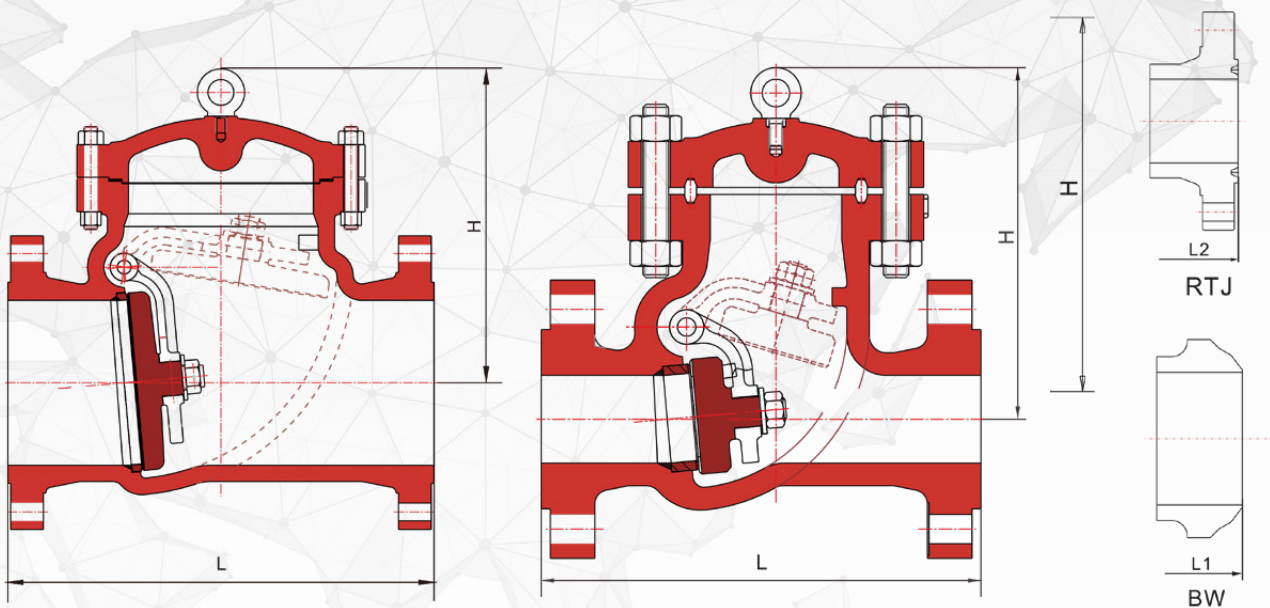
## Design Features

- Suitable for Pigging Operations
- Soft or Metal Seated
- Welded Seat Ring
- Optional Counter Weight Lever Design
- Optional 6FD Firesafe Design



Part	Carbon Steel	Stainless Steel	Low Temperature	NACE Service
Body	ASTM A216 WCB	ASTM A351 CF8M	ASTM A352 LCC	ASTM A216 WCB
Seat Ring	ASTM A105N+HF	ASTM A182 F316+HF	ASTM A350 LF2+HF	ASTM A105N+HF
Disc	ASTM A216 WCB+CR13	ASTM A351 CF8M	ASTM A352 LCC+HF	ASTM A216 WCB+CR13(NACE)
Hinge	ASTM A216 WCB	ASTM A351 CF8M	ASTM A352 LCC	ASTM A216 WCB
Pin	ASTM A276 410	ASTM A276 316	ASTM A276 316	ASTM A276 410(NACE)
Disc Nut	ASTM A276 410	ASTM A276 316	ASTM A276 316	ASTM A276 410(NACE)
Hinge Pin	ASTM A182 F6A	ASTM A276 316	ASTM A182 F316	STAINLESS STEEL
Plug	ASTM A105N	ASTM A182 F316	ASTM A350 LF2	ASTM A105N
Gasket	SPW.SS+GRAPHITE/RTJSS	SPW.SS+GRAPHITE/RTJ.SS	SPW.SS+GRAPHILE/RTJ.SS	SPW.SS+GRAPHILE/RTJ.SS
Bonnet Bolt	ASTM A193 B7	ASTM A193 B8	ASTM A320 L7	ASTM A193 B7M
Bonnet Nut	ASTM A194 2H	ASTM A194 8	ASTM A194 7	ASTM A194 2HM
Cover	ASTM A216 WCB	ASTM A351 CF8M	ASTM A352 LCC	ASTM A216 WCB
O-Ring	VITON A	VITON A	VITON A	VITON A

Material list, other materials available/provided.



# YVI Valve - Engineering Data

## API 6D Check Valve Engineering Specifications

NPS	in	2"	3"	4"	6"	8"	10"	12"	14"	16"	18"	20"	24"	26"	30"	36"	40"	48"
D	in	2.01	2.99	4.02	5.98	7.99	10	12.01	13.27	15.24	17.24	19.25	23.27	25	29.02	34.49	38.5	45.98
	mm	51	76	102	152	203	254	305	337	387	438	489	591	635	737	876	978	1168
L-L1 (RF-BW)	in	7.99	9.49	11.5	14.02	19.49	24.49	27.52	30.98	34.02	38.5	38.5	50.98	50.98	60	77.01	77.01	100
	mm	203	241	292	356	495	622	699	787	864	978	978	1295	1295	1524	1956	1956	2540
H	in	5.51	5.51	7.01	11.02	14.1	15.12	17.13	17.2	18.98	21.06	22.64	24.21	26.98	31.02	36.57	42.91	54.76
	mm	140	140	178	280	359	384	435	437	482	535	575	615	684	788	929	1090	1391
WT	kg	19	30	42	84	150	230	332	368	490	632	846	1370	1450	2120	2980	4870	7950

NPS	in	2"	3"	4"	6"	8"	10"	12"	14"	16"	18"	20"	24"	26"	30"	36"	40"	48"
D	in	2.01	2.99	4.02	5.87	8.11	10	12.01	13.27	15.24	17.24	19.25	23.27	25	29.02	34.49	38.5	45.98
	mm	51	76	102	149	206	254	305	337	387	438	489	591	635	737	876	978	1168
L-L1 (RF-BW)	in	10.51	12.52	14.02	17.52	20.98	24.49	27.99	32.99	34.02	38.5	40	52.99	52.99	62.76	82.01	82.52	100
	mm	267	318	356	445	533	622	711	838	864	978	1016	1346	1346	1594	2083	2096	2540
H	in	9.61	7.56	8.39	11.1	12.32	15.28	17.01	19.06	20.87	23.31	25.12	28.35	30.12	34.17	40.16	46.46	100
	mm	148	192	213	282	313	388	432	484	530	592	638	720	765	868	1020	1180	2540
WT	kg	22	42	71	127	212	297	370	490	615	735	980	1815	2115	2460	4730	6780	13900

NPS	in	2"	3"	4"	6"	8"	10"	12"	14"	16"	18"	20"	24"	26"	30"	36"	40"
D	in	2.01	2.99	4.02	5.87	7.99	10	12.01	13.27	15.24	17.24	19.25	23.27	25.16	29.02	34.49	38.5
	mm	51	76	102	149	203	254	305	337	387	438	489	591	639	737	876	978
L-L1 (RF-BW)	in	11.5	14.02	17.01	22.01	25.98	30.98	32.99	35	39.02	43	47.01	55	57.01	65	82.01	82.52
	mm	292	356	432	559	660	787	838	889	991	1092	1194	1397	1448	1651	2083	2096
L2 (RTJ)	in	11.61	14.13	17.13	22.13	26.14	31.14	33.11	35.12	39.13	43.11	47.24	55.39	57.52	65.51	-	-
	mm	295	359	435	562	664	791	841	892	994	1095	1200	1407	1461	1664	-	-
H	in	6.18	7.48	8.66	12.62	17.6	16.57	18.62	20.94	28.7	26.3	32.3	38.2	33.46	34.61	37.68	43.78
	mm	157	190	220	320.5	448	421	473	532	730	668	820	971	850	879	957	1112
WT	kg	36	61	116	217	420	570	788	1020	1440	1695	2600	3600	4715	5880	10450	15400

NPS	in	2"	3"	4"	6"	8"	10"	12"	14"	16"	18"	20"	24"
D	in	2.01	2.99	4.02	5.98	7.99	10	12.01	12.76	15.24	16.73	18.62	22.52
	mm	51	76	102	152	203	254	305	324	387	425	473	572
L-L1 (RF-BW)	in	14.49	15	17.99	24.02	29.02	32.99	37.99	40.51	44.49	47.99	52.01	60.98
	mm	368	381	457	610	737	838	965	1029	1130	1219	1321	1549
L2 (RTJ)	in	14.61	15.12	18.11	24.13	29.13	33.11	38.11	40.88	44.88	48.5	52.52	61.73
	mm	371	384	460	613	740	841	968	1038	1140	1232	1334	1568
H	in	6.38	12	7.95	16.7	16.84	18.03	19.84	27	30.7	27.87	30.39	35.31
	mm	162	305	202	423	415	458	504	686	781	708	772	897
WT	kg	76	82	160	272	548	944	1560	1660	2060	3020	3750	5400

NPS	in	2"	3"	4"	6"	8"	10"	12"	14"	16"	18"	20"	24"
D	in	2.01	2.99	4.02	5.75	7.64	9.49	11.38	12.36	14.25	16.02	17.99	21.02
	mm	51	76	102	146	194	241	289	314	362	407	457	534
L-L1 (RF-BW)	in	14.49	18.5	21.5	27.76	32.76	39.02	44.49	49.49	54.49	60.51	65.51	76.5
	mm	368	470	546	705	832	991	1130	1257	1384	1537	1664	1943
L2 (RTJ)	in	14.61	18.62	21.61	27.99	33.11	39.37	45.12	50.24	55.39	61.38	66.38	77.64
	mm	371	473	549	711	841	1000	1146	1276	1407	1559	1686	1972
H	in	7.24	9.84	14.7	19.8	23.9	17.8	29.9	22.32	24.53	27.09	29.21	33.94
	mm	184	250	373	502	608	452	760	567	623	688	742	862
WT	kg	76	128	230	506	942	1750	2350	2950	3600	5500	6800	10150

NPS	in	2"	3"	4"	6"	8"	10"	12"
D	in	1.73	2.52	3.5	5.24	7.13	8.86	10.51
	mm	44	64	89	133	181	225	267
L-L1 (RF-BW)	in	17.76	22.76	26.5	35.98	40.24	50	55.98
	mm	451	578	673	914	1022	1270	1422
L2 (RTJ)	in	17.87	22.99	26.89	36.5	40.87	50.87	56.89
	mm	454	584	683	927	1038	1292	1445
H	in	10.71	12.2	15.2	17.13	19.61	22.52	27.13
	mm	272	310	386	435	498	572	689
WT	kg	145	260	480	1020	1700	3110	3700

All technical data is subject to change without notice.

Additional valve types, materials of construction, and options are available upon request.

## 1 - Valve Size

# 20

Valve Size in Inches

## 2 - Valve Type

# GA

<b>GA</b> = API 600 Gate	<b>GAC</b> = API 600 Cryogenic Gate
<b>GL</b> = API 623 Globe	<b>GAP</b> = Pressure Seal Gate (API 600 Wall Thickness)
<b>SN</b> = API 594 Swing Check (Internal Pin)	<b>GLP</b> = Pressure Seal Globe (API 623 Wall Thickness)
<b>SX</b> = API 594 Swing Check (External Pin)	<b>SDN</b> = API 6D Swing Check (Internal Pin)
<b>GAL</b> = API 603 Gate	<b>SDX</b> = API 6D Swing Check (External Pin)

## 3 - Valve Class

# 1

1 = 150      3 = 300      6 = 600      9 = 900      15 = 1500      25 = 2500

## 4 - End Connection

# R

<b>R</b> = Raised-Face Flange	<b>J</b> = Ring-Type Joint Flanged
<b>B</b> = Butt-Weld	<b>F</b> = Flat-Faced Flange

## 5 - Operator

# G

**G** = Gear Operator      **M** = Electric Actuator      **BS** = Bare Shaft

## 6 - Body Materials

# WCB

<b>WCB</b> = A216 Gr.WCB	<b>CF8</b> = A351 Gr.CF8
<b>LCB</b> = A352 Gr.LCB	<b>CF8M</b> = A351 Gr.CF8M
<b>LCC</b> = A352 Gr.LCC	<b>CF3</b> = A351 Gr.CF3
<b>WC6</b> = A217 Gr.WC6	<b>CF3M</b> = A351 Gr.CF3M
<b>WC9</b> = A217 Gr.WC9	<b>CD4MCuN</b> = A995 Gr.CD4MCuN
<b>C5</b> = A217 Gr.C5	<b>4A</b> = A995 Gr.4A
<b>C12</b> = A217 Gr.C12	

## 7 - Trim Materials

# 5

Number	Disc	Seat	Stem
1 =	13Cr	13Cr	ASTM A182 Grade F6a
2 =	304SS	304SS	ASTM A182 Grade F304
5 =	HF	HF	ASTM A182 Grade F6a
8 =	13Cr	HF	ASTM A182 Grade F6a
9 =	Monel	Monel	Monel
10 =	316SS	316SS	ASTM A182 Grade F316
12 =	316SS	HF	ASTM A182 Grade F316

## 8 - Special Code

# NC

<b>NC</b> = NACE	<b>EB</b> = Extended Bonnet
<b>ES</b> = Extended Stem	<b>BP</b> = By Pass

### EXAMPLE



YVI - 20GA1R-G-WCB-5-NC



## Product Warranty

Seller will repair or replace without charge or refund the purchase price of products provided by seller which are determined to be defective in material or workmanship, provided in each case that the product was properly installed and was used in an acceptable service for which the product was intended. A written claim, specifying the alleged defect and service conditions must be presented to the seller within 18 months from the date of shipment or 12 months after installation, whichever occurs first. Seller shall in no event bear any labor, equipment, engineering or other costs incurred in connection with removal or replacement of the defective product.

The warranty stated in this paragraph is in lieu of all other warranties, either expressed or implied. With respect to warranties, this paragraph states Buyer's exclusive remedy and seller's exclusive liability.

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