

Applications

Control valve isolation
Main steam isolation
Feedwater heater isolation
Boiler feed pump isolation
Economizer isolation
Bottom Ash Isolation
Isolation Applications

End Connections

Per customer specification

Sizes

1/2 to 30 inch
Larger sizes available upon request

Features

Straight-through Bore Path

- Sealing surfaces not exposed to torturous effects of high pressure steam
- Greatly minimizes any pressure drops
- Allows for higher Cv
- Available in large bore sizes

Bidirectional Sealing

- Floating ball design

Ball & Seats

- Mate-lapped for 100% sealing contact
- Ensures absolute shutoff
- Corrosion resistant
- Seats are protected from flow in open / closed position
- Seats are field replaceable

Forged Body

- Designed to withstand high temperatures up to 1652°F / 900°C
- High pressures up to 30,000 psig

Inner Stem Seals

- Provides a reliable combination of bearing and pressurized stem seal

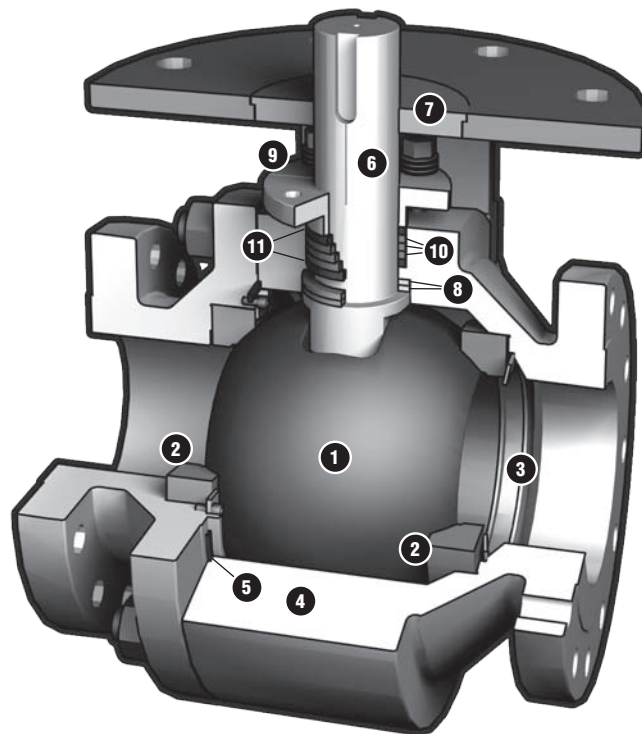
Seat Spring

- Assisted by line pressure, provides a constant mechanical force on ball against seat to maintain seal

Valve Sized Specifically for Customer Application Requirements

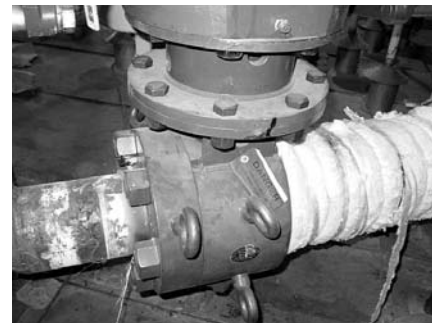
Bill of Materials

Item No.	Description	Material
1	Ball	410SS / HVOF-CC Coated
2	Seat	410SS / HVOF-CC Coated
3	Seat Spring	Inconel 718
4	Body	A182 F22 A105 A182 F91
5	Body Gasket	Inconel 600 Grafoil Filled or Inconel 718 / Gold Plated
6	Stem	17-4PH SS or A638 GR660
7	Stem Bushing	Coated Cast Iron
8	Inner Stem Seal	410SS / HVOF-CC Coated
9	Gland Flange	316SS / Moly Coated
10	Stem Packing	Expanded Graphite
11	Anti-Extrusion Rings	Braided Graphite w/ Inconel Wires



Dependable Isolation Under Extreme Conditions

Cv – Full Bore ³							
Valve Size (inches)	Class						
	150	300	600	900	1500	2500	4500 ¹
1/2	26	26	26	26	26	20	6
3/4	62	62	62	52	52	33	19
1	114	114	114	85	85	62	38
1-1/2	271	271	271	223	223	145	140
2	498	498	498	432	432	271	271
2-1/2	799	799	799	640	640	432	385
3	1176	1176	1176	1071	978	640	670
4	2159	2159	2159	2014	1749	1071	1305
6	5076	5076	5076	4641	4019	2603	3309
8	9300	9300	8985	8120	7023	4641	6634
10	14866	14866	14096	12966	11289	7561	10565
12	21800	21800	20857	18579	16045	10881	15262



The C-Series valve was chosen for our customer's Boiler Purge System because of the rapid operation available with quick, quarter-turn rotation and absolute shutoff. These photos were taken during a routine maintenance shutdown with part of the insulation removed.

Cv – Reduced Bore ³							
Valve Size (inches)	Class						
	150	300	600	900	1500	2500	4500 ²
1 x 3/4	31	31	31	41	41	29	40
1-1/2 x 1	48	48	48	54	54	81	81
3 x 2	195	195	195	206	218	333	312
4 x 3	519	519	519	549	632	1071	968
6 x 3	353	353	353	361	377	457	406
6 x 4	788	788	788	830	917	1516	1095
8 x 6	2101	2101	2162	2376	7815	4641	3053
10 x 8	4250	4250	4502	4992	6247	7561	7018
12 x 8	3177	3177	3258	3511	3948	6623	4138
12 x 10	7349	7349	7778	9269	12411	10881	13955
14 x 10	5947	5947	6278	6983	8592	13347	9071
14 x 12	13794	13794	15502	19582	19466	13347	18818
16 x 12	9301	9301	10013	11487	14864	—	—
16 x 14	19917	19917	23041	30124	25787	—	—
18 x 12	7571	7725	8074	8735	10228	—	—
18 x 14	13591	14080	15242	17642	24039	—	—
20 x 14	11010	11242	12068	13151	15594	—	—
20 x 16	18879	19553	22079	25726	35175	—	—
24 x 20	32666	33793	39620	48754	70991	—	—

¹Cv information for the ASME 4500 Class is based upon the inside diameter of the pipe schedule, while the remaining values are based upon ASME 16.34.

²Cv coefficient of a valve is defined as the flow of water at 60°F, in gallons per minute, at a pressure drop of one pound per square inch across the valve.

³For larger valves, contact factory for Cv information.