



# Series 581

## Silent Globe Check Valve



### Product Advantages

- Operates Horizontally or Vertically
- Watertight Metal-to-Metal Seating
- Field Replaceable Parts
- Factory Mutual Approved – 4 through 12-inches
- Optional Resilient Seat

The Cla-Val Series 581 Silent Globe Check Valve has a spring-loaded poppet that allows the valve to close at 1/4 psi before flow reversal occurs, resulting in a silent, non-slam closure.

Constructed of a ductile iron body with stainless steel trim, the Cla-Val Silent Globe Check Valve offers watertight shutoff with metal-to-metal seating. Buna-N® resilient seats are available as an option for special applications,

### Specifications

The silent globe check valve shall consist of an epoxy-coated ductile iron body, stainless steel seat, disc and spring. The valve disc shall be center guided at both ends with an integral shaft and shall be spring loaded for silent operation. The spring shall be helical or conical and stone tumbled to achieve a micro-finish to resist mineral deposits. For ease of maintenance, the seat and disc shall be replaceable in the field.

Check valve shall be capable of silent operation when installed in vertical or horizontal positions with either flow up or flow down. The flow area through the body shall be equal to or greater than the cross-section area of the equivalent pipe size. Sizes 2 1/2" to 10" shall allow bolting a wafer style butterfly valve directly to the outlet flange without a spool piece.

### Approvals & Certifications

- 125/150 and 250/300 Class Valves 4 through 12-inches - FM Approved
- 125/250 & 250/300 Class valves 3 through 42-inches meet Federal Mandate for Lead Content Limits

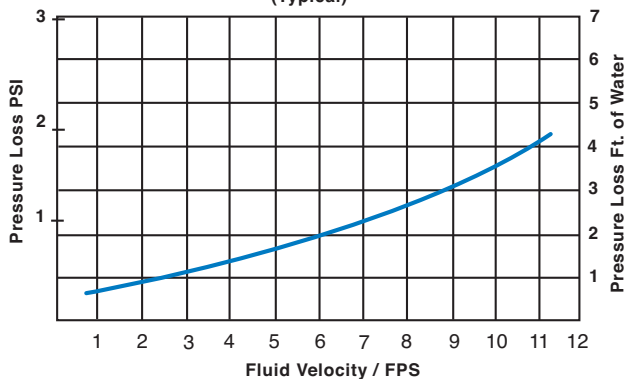


4 through 12-inches

### Pressure Ratings

- 125/150 (Rated to 250 psi)
- 250/300 (Rated to 640 psi)

Series 581P Pressure Loss Curve  
(Typical)



### Materials

#### Valve Body:

Ductile Iron - ASTM 536 65-45-12

#### Disc & Seat:

304 Stainless Steel - SS ASTM A276 T304

#### Spring:

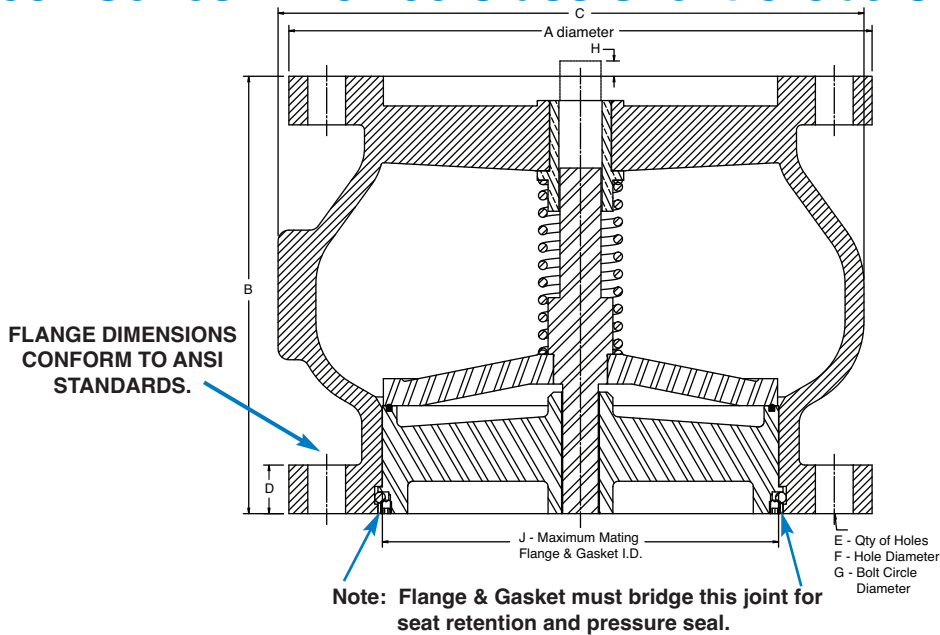
316 Stainless Steel; Stone Tumbled and Stress Relieved - SS ASTM A276 T16



#### Note:

Standard offering is two-part epoxy coating interior and exterior

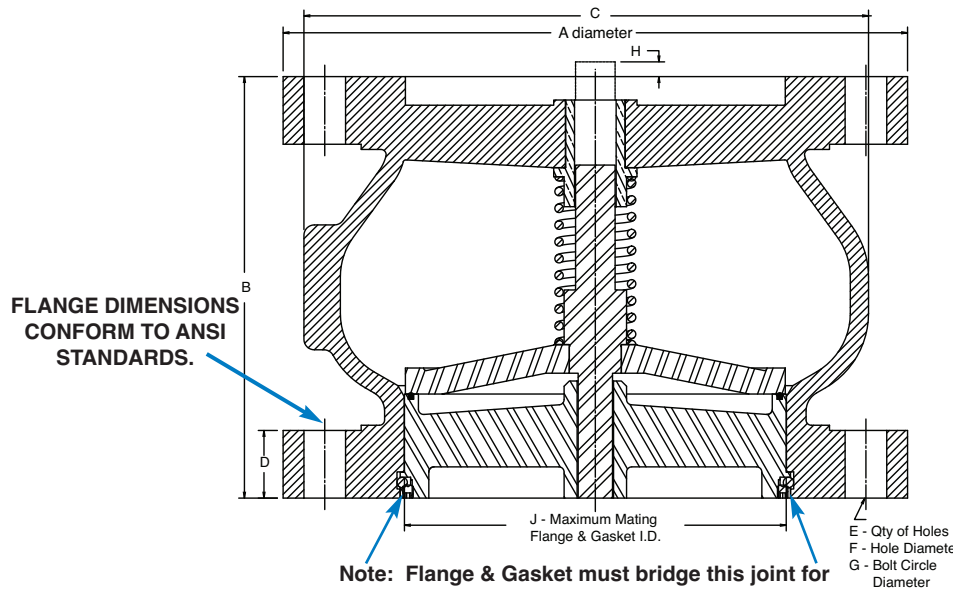
# 581 Series - 125/150 Class Silent Globe Check Valve



Valve Size (inches)	A	B	C	D	E	F	G	H	J
3	7.50	6.00	6.06	0.94	4	0.75	6.00	0	3.38
4	9.00	7.25	7.63	0.94	8	0.75	7.50	0	4.75
5	10.00	8.50	9.38	0.94	8	0.88	8.50	0	5.50
6	11.00	9.00	10.88	1.00	8	0.88	9.50	0	6.50
8	13.50	10.125	13.69	1.13	8	0.88	11.75	0	8.50
10	16.00	12.00	17.50	1.19	12	1.00	14.25	0.16	10.75
12	19.00	14.25	20.56	1.25	12	1.00	17.00	0.31	12.88
14	21.00	15.75	22.56	1.38	12	1.13	18.75	0	14.75
16	23.50	17.625	25.50	1.44	16	1.13	21.25	0.69	16.50
18	25.00	18.75	27.25	1.56	16	1.25	22.75	1.38	18.75
20	27.50	20.625	31.25	1.69	20	1.25	25.00	1.13	20.63
24	32.00	24.00	37.19	1.88	20	1.38	29.50	2.25	24.75
30	38.75	29.25	45.13	2.13	28	1.38	36.00	3.56	29.50
36	46.00	45.00	53.38	2.38	32	1.63	42.75	0	36.00
42	53.00	50.00	60.00	2.63	36	1.63	49.50	0	42.00

Valve Size (mm)	A	B	C	D	E	F	G	H	J
80	190.5	152.4	154.0	23.8	4	19.1	152.4	0	85.7
100	228.6	184.2	193.7	23.8	8	19.1	190.5	0	120.7
125	254.0	215.9	238.1	23.8	8	22.2	215.9	0	139.7
150	279.4	228.6	276.2	25.4	8	22.2	241.3	0	165.1
200	342.9	257.2	347.7	28.6	8	22.2	298.5	0	215.9
250	406.4	304.8	444.5	30.2	12	25.4	362.0	4.0	273.1
300	482.6	365.1	522.3	31.8	12	25.4	431.8	7.9	327.0
350	533.4	400.1	573.1	34.9	12	28.6	476.3	0	374.7
400	596.9	447.7	647.7	36.5	16	28.6	539.8	17.5	419.1
450	635.0	476.3	692.2	39.7	16	31.8	577.9	34.9	476.3
500	698.5	523.9	793.8	42.9	20	31.8	635.0	28.6	523.9
600	812.8	609.6	944.6	47.6	20	34.9	749.3	57.2	628.7
750	984.3	743.0	1146.2	54.0	28	34.9	914.9	90.5	749.3
900	1168.4	1143.0	1355.7	60.3	32	41.3	1085.9	0	914.4
1000	1346.2	1270.	1524.0	66.7	36	41.3	1257.3	0	1066.8

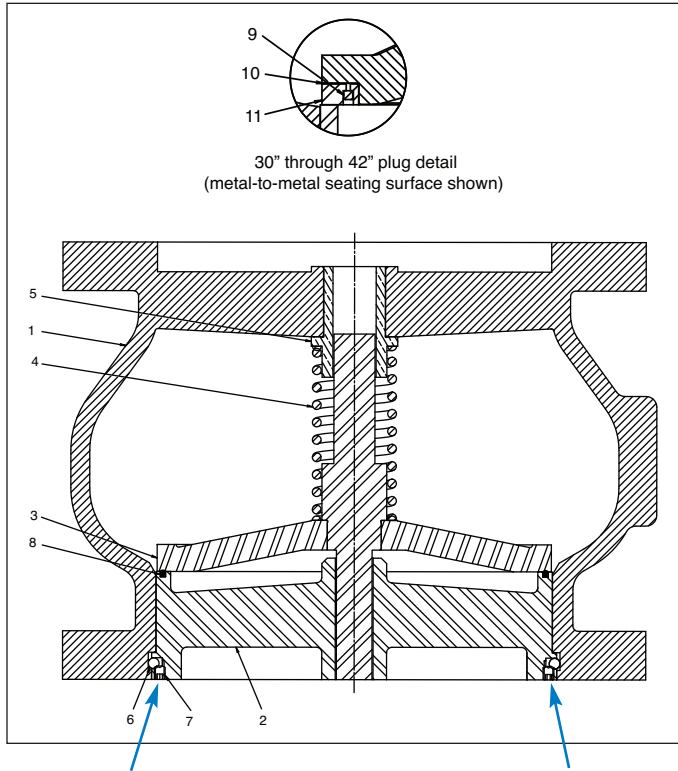
# 581 Series - 250/300 Class Silent Globe Check Valve



Valve Size (inches)	A	B	C	D	E	F	G	H	J
3	8.25	6.00	6.06	1.13	8	0.88	6.63	0	3.38
4	10.00	7.25	7.63	1.25	8	0.88	8.25	0	4.75
5	11.00	8.50	9.38	1.38	8	0.88	9.25	0	5.50
6	12.50	9.00	10.88	1.44	12	1.00	10.56	0	6.50
8	15.00	10.125	13.69	1.63	12	1.00	13.00	0	8.50
10	17.50	12.00	17.50	1.88	16	1.13	15.25	0.16	10.75
12	20.50	14.25	20.56	2.00	16	1.25	17.75	0.31	12.88
14	23.00	15.75	22.56	2.13	20	1.25	20.25	0	14.75
16	25.50	17.625	25.50	2.25	20	1.38	22.50	0.69	16.50
18	28.00	18.75	27.25	2.38	24	1.38	24.75	1.38	18.75
20	30.50	20.625	31.25	2.50	24	1.38	27.00	1.13	20.63
24	36.00	24.00	37.19	2.75	24	1.63	32.00	2.25	24.75
30	43.00	29.25	45.13	3.00	28	1.88	39.25	3.56	29.50
36	50.00	45.00	53.38	3.38	32	2.25	46.00	0	36.00
42	57.00	50.00	60.00	3.69	36	2.25	52.75	0	42.00

Valve Size (mm)	A	B	C	D	E	F	G	H	J
80	209.6	152.4	154.0	28.6	8	0.88	6.63	0	3.38
100	254.0	184.2	193.7	31.8	8	22.2	200.0	0	120.7
125	254.0	215.9	238.1	34.9	8	22.2	235.0	0	139.7
150	317.5	228.6	276.2	36.5	12	22.2	268.1	0	165.1
200	381.0	257.2	347.7	41.3	12	25.4	330.2	0	215.9
250	444.5	304.8	444.5	47.6	16	28.6	387.4	4.0	273.1
300	520.7	365.1	522.3	50.8	16	31.8	450.9	7.9	327.0
350	584.2	400.1	573.1	54.0	20	31.8	514.4	0	374.7
400	647.7	447.7	647.7	57.2	20	34.9	571.5	17.5	419.1
450	711.2	476.3	692.2	60.3	24	34.9	628.7	34.9	476.3
500	774.7	523.9	793.8	63.5	24	34.9	685.8	28.6	523.9
600	914.4	609.6	944.6	69.9	24	41.3	812.8	57.2	628.7
750	1092.2	743.0	1146.2	76.2	28	47.6	997.0	90.5	749.3
900	1270.0	1143.0	1355.7	85.7	32	57.2	1168.4	0	914.4
1000	1447.8	1270.0	1524.0	93.7	36	57.2	1339.9	0	1066.8

# 581 Series Silent Globe Check Valve Technical Data

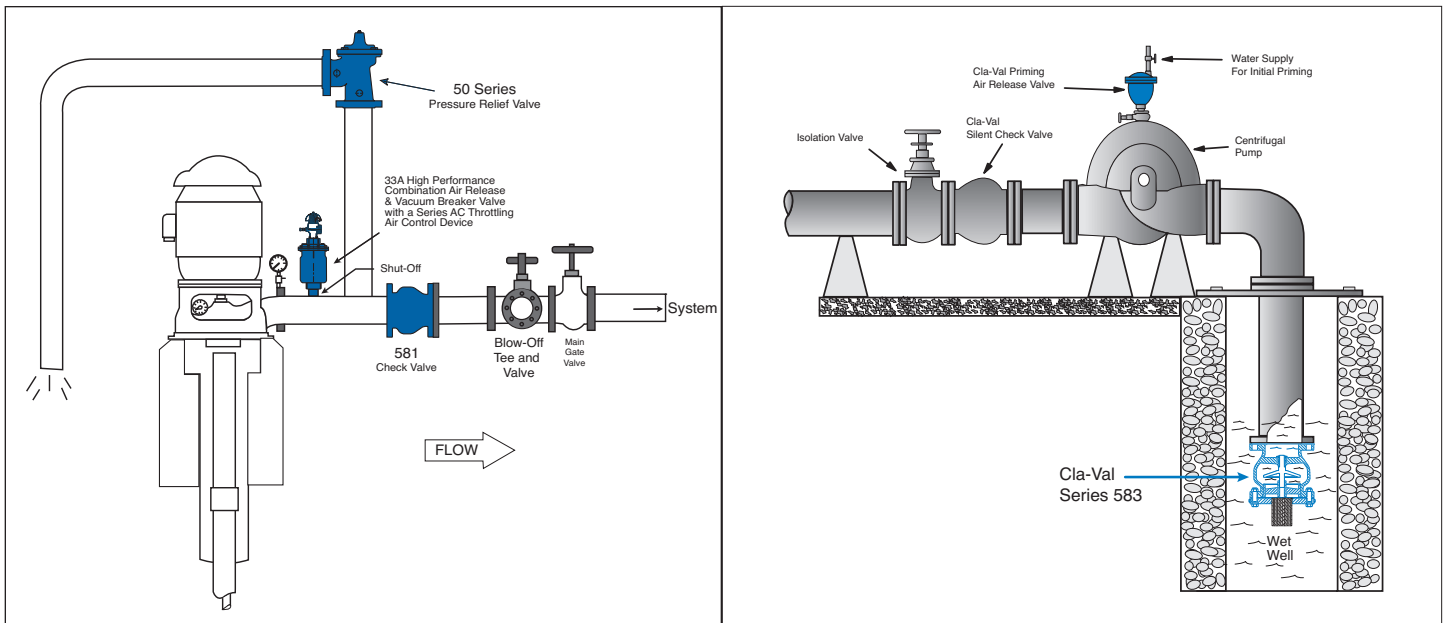


Item	Description	Qty	Material Description
1	Body	1	Ductile Iron 536 65-45-12
2	Seat	1	SS ASTM A276 T304
3	Plug	1	SS ASTM A276 T304
4	Spring	1	SS ASTM A276 T316
5	Bushing	1	SS ASTM A276 T304
6	Seat Retaining Ball	2	SS ASTM A276 T304
7	Seat Retaining Screw	2	SS ASTM A276 T304
8	Optional Resilient Seat	1	Buna-N®
9	Plug Ring (30"- 42")	1	Buna-N®
10	Gasket (30"- 42")	1	Buna-N®
11	Plug Ring Screw (30"- 42")	1	SS ASTM A276 T304

**FLANGE DIMENSIONS  
CONFORM TO ANSI  
STANDARDS.**

**Note: Flange & Gasket must bridge this joint for seat retention and pressure seal.**

## Typical Applications



Cla-Val 581 Series Silent Globe Check Valves are used anywhere a quick, quiet closure is desired and in the majority of pump applications, including the following;

- Fire Pump Applications
- Vertical Turbine Pumps
- Booster Pump Stations in High Rise Buildings
- House Pump Applications