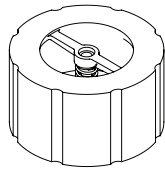


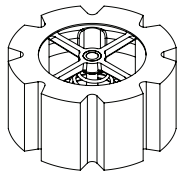


Series 580

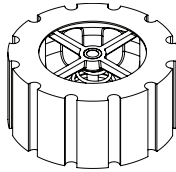
SILENT WAFER CHECK VALVE



150# & 300# - 1-6 inches



150# - 8-10 inches



300# - 8-10 inches

- Operates Horizontally or Vertically
- Watertight Metal-to-Metal Seating
- Field Replaceable Parts
- Factory Mutual Approved - 4 through 10 inches
- Optional Resilient Seat

The Cla-Val Series 580 Silent Wafer Check Valve has a spring-loaded poppet that allows the valve to close before flow reversal occurs, resulting in a silent, non-slam closure. It is a truly silent check valve. For ease of installation, the valve can be installed in vertical or horizontal positions with flow up or flow down. The short lay length of the valve allows for a space-saving design. Silent Wafer Check Valves are available in sizes 1" to 10", with either a 125/150# or 250/300# pressure class rating.

Constructed of an epoxy coated ductile iron body with stainless steel trim, the Cla-Val Silent Wafer Check Valve offers watertight shutoff with metal-to-metal seating. For special applications, Buna-N® resilient seats are available as options. All materials conform to ASTM specifications, ensuring long lasting reliable performance. As a confirmation of Cla-Val's commitment to quality, all Series 580 125/250# class valves are Factory Mutual approved except those supplied with Buna-N® resilient seats.

Approvals & Certifications



- 125/150 Class Valves 4 - 10-inches - FM Approved
- 125/150 & 250/300 Class Valves 1 - 10-inches meet Federal Mandate for Lead Content Limits

Pressure Ratings

- 125/150 (Rated to 250 psi)
- 250/300 (Rated to 400 psi)

Typical Applications

Cla-Val 580 Series Silent Wafer 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



Specifications

The silent wafer check valve shall consist of a heavy ductile iron body, stainless steel seat, disc, and steel 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.

Materials

Valve Body

Ductile Iron - ASTM 536 65-45-12

Disc & Seat

304 Stainless Steel - SS ASTM A276 T304

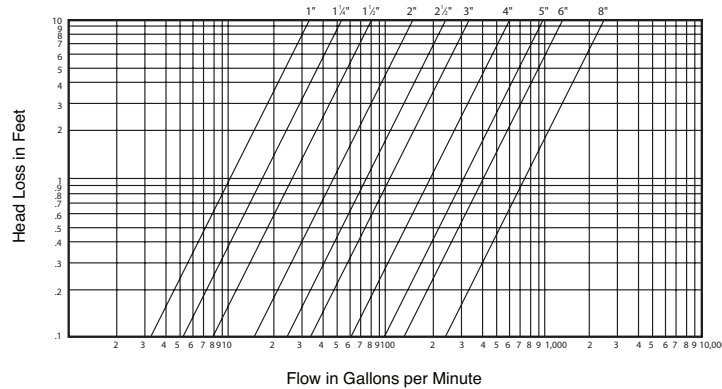
Spring

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

Note: Standard offering is two-part epoxy coating interior and exterior

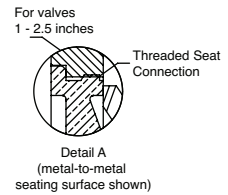


Head Loss Characteristics for 580 Series
Wafer Style Silent Check Valves

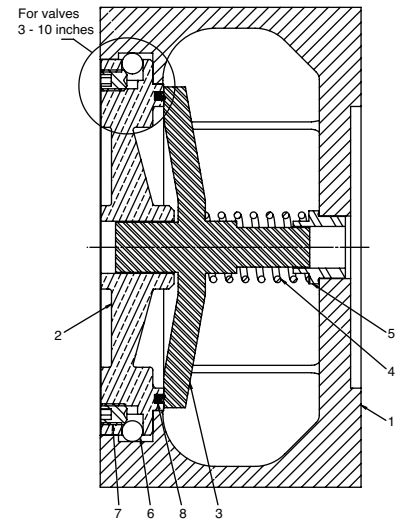


580 Series Silent Wafer Check Valve Technical Data

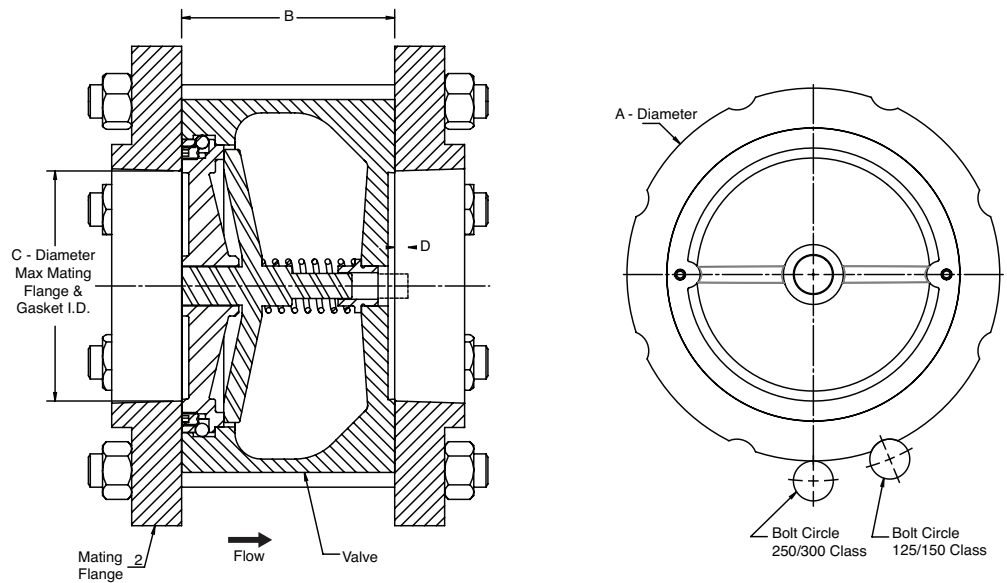
Item	Description	Item	Description
1	Body	1	Ductile Iron 536 65-45-12
2	Seat	1	SS ASTM A276 T304
3	Plug	1	SS ASTM A276 T304
4	Spring	1	SS ASTM A276 T316
5	Bushing	1	SS ASTM A276 T304
6	Seat Retaining Ball (3"-10")	2	SS ASTM A276 T304
7	Seat Retaining Screw (3"-10")	2	SS ASTM A276 T304
8	Optional Resilient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



Maximum Non-Shock Service Pressure, PSI/kPa																		
Temp °F °C	Cast Iron ASTM A126 GR.B						Ductile Iron ASTM A536		Bronze ASTM B62		Carbon Steel ASTM A216 GR WCB				Stainless Steel ASTM A351 CF 8M			
	Class 125#			Class 250#			Pressure Class		Pressure Class		Pressure Class				Pressure Class			
	1-12" 25-300	14-24" 350-600	30"≥ 750 ≥	1-12" 25-300	14-24" 350-600	30"≥ 750 ≥	150	300	150	300	150	300	400	600	150	300	400	600
0-150 -18-66	—	—	—	—	—	—	—	—	225 155.1	500 344.7	—	—	—	—	—	—	—	—
-20-100 -29-38	—	—	—	—	—	—	250 172.4	640 441.3	—	—	285 196.5	740 510.2	990 682.6	1480 1020.4	275 189.6	720 496.4	960 661.9	1440 992.8
-20-150 -29-66	200 137.9	150 103.4	150 103.4	500 344.7	300 206.8	300 206.8	242 166.9	620 427.5	—	—	272 187.5	707 487.5	945 651.6	1415 975.6	257 177.2	670 461.9	892 615.0	1340 923.9
200 93	190 131.0	135 93.1	115 79.3	460 317.2	280 193.1	250 172.4	235 162.0	600 413.7	210 144.8	465 320.6	260 179.3	675 465.4	900 620.5	1350 930.8	240 165.5	620 427.5	825 568.8	1230 854.9
250 121	175 120.7	125 86.2	85 58.6	415 286.1	260 179.3	200 137.9	235 162.0	582 401.3	195 134.4	425 293.0	245 168.9	665 458.5	887 611.6	1332 918.4	227 156.5	590 406.8	785 541.2	1180 813.6
300 149	165 113.8	110 75.8	50 34.5	375 258.6	240 165.5	150 103.4	215 148.2	565 389.6	180 124.1	390 268.9	230 158.6	875 603.3	1315 906.7	215 148.2	560 386.1	745 513.7	1120 772.2	—
Seat Test PSI kPa	200 137.9	150 103.4	150 103.4	500 344.7	300 206.8	300 206.8	275 189.6	720 496.4	300 206.8	1000 689.5	315 217.2	815 561.9	1090 751.5	1630 1123.8	305 210.3	795 548.1	1060 730.8	1585 1092.8
Shell Test PSI kPa	300 206.8	230 158.6	230 158.6	750 517.1	450 310.3	450 310.3	400 275.8	975 672.2	450 310.3	1500 1034.2	450 310.3	1125 775.7	1500 1034.2	2225 1534.1	425 293.0	1100 758.4	1450 999.7	2175 1499.6



F° PSI Inch
C° kPa Millimeter



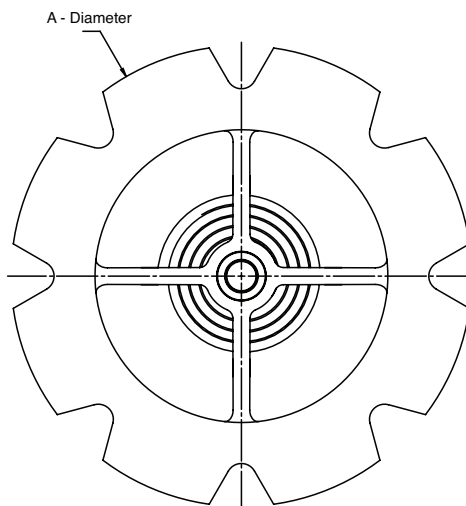
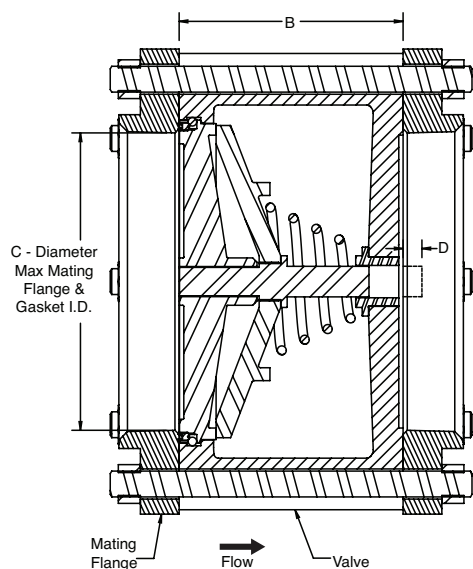
Valve Size (Inches)	A	B	C	D
1	2.75	2.06	1.25	0.06
1.25	3.13	2.06	1.50	0
1.50	3.63	2.38	1.81	0.09
2	4.25	2.63	2.38	0
2.50	5.00	2.88	2.88	0
3	5.75	3.13	3.38	0.06
4	7.00	4.00	4.75	0.06
5	8.38	4.63	5.50	0.50
6	9.75	5.50	6.50	0.88

Valve Size (mm)	A	B	C	D
25	69.9	52.4	31.8	1.6
32	79.4	52.4	38.1	0
40	92.1	60.3	46.0	2.4
50	108.0	66.7	60.3	0
65	127.0	73.0	73.0	0
80	146.1	79.4	85.7	1.6
100	177.8	101.6	120.7	1.6
125	212.7	117.5	139.7	12.7
150	247.7	139.7	165.1	22.2

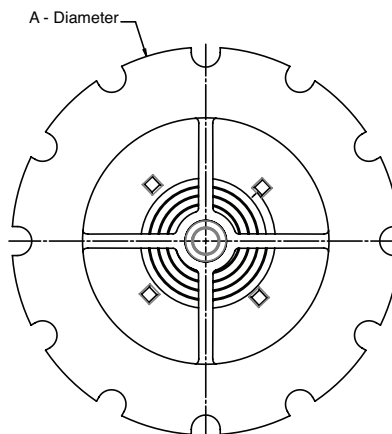
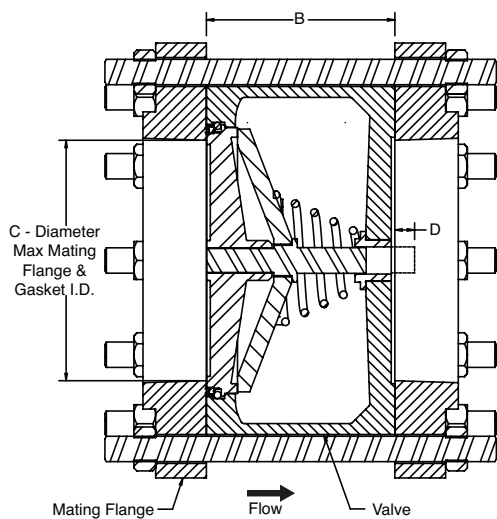
Note: Dimensions are the same for both 125/150 and 250/300 Class Valves.



125/150 Class Silent Wafer Check Valve: 8 & 10-inches



250/300 Class Silent Wafer Check Valve: 8 & 10-inches



Valve Size (Inches)	A	B	C	D
8	13.38	6.50	8.50	1.88
10	16.00	8.25	10.50	1.19

Valve Size (mm)	A	B	C	D
200	339.7	165.1	215.9	47.6
250	406.4	209.6	266.7	30.2

Note: Dimensions are the same for both 125/150 and 250/300 Class Valves.

