



Series 585

Swing Check Valve



- Full Pipe Size Flow Area - Unrestricted flow
- Heavy Duty Disc Connections
- Non-Clog Design
- Fusion Bonded Epoxy Coating NSF-61
- Designed, Manufactured and Tested in Accordance with ANSI/AWWA C508 Standard
- Resilient Seat - Drip Tight Seating
- Three field adjustable closure options:
 - Lever and Weight (LW)
 - Air Cushion (AC)
 - Lever and Spring (LS)

The Cla-Val 585 Swing Check Valve is designed for long service life and maintenance free operation. It has a full-flow area body and is equipped with a disc arm with dual precision pins for optimum disc connection and protection against damage due to vibration. The body is fitted with a raised 300 Series Stainless Steel seat as well as a resilient seat to help ensure drip tight seating, even in applications with high solids. The seats are replaceable in the field without removing the valve from the pipeline.

The valve is constructed of Ductile Iron to provide greater durability and protection in applications with high stresses and shock loads. The body and cover are fusion bonded NSF-61 epoxy coated in accordance with AWWA C550 for long service life in potable and non-potable systems.

During system flowing conditions the disc swings up to the open position allowing unrestricted flow through the valve. When system reverse flow conditions occur, the disc swings down to the closed position, preventing reverse flow.

Pressure Ratings (Ambient Temperature)

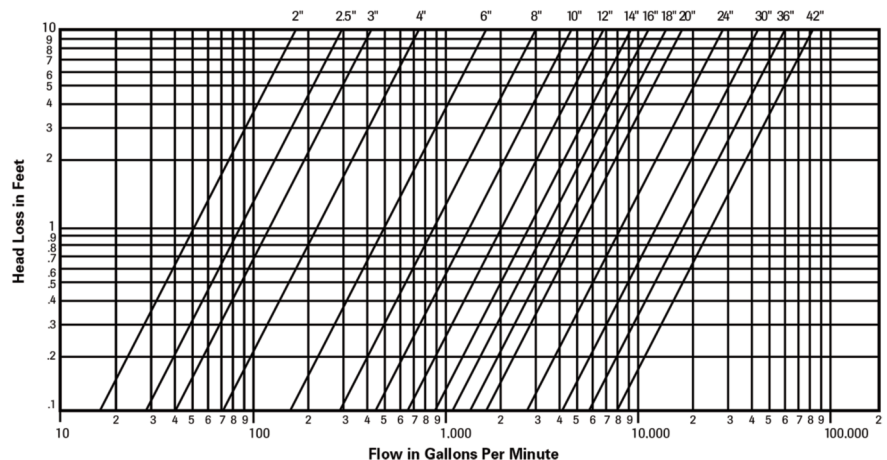
For Valve Sizes 2 through 42-inches:
250 psi CWP

For Valve Sizes 20 through 1100mm:
1724 kPA CWP

Material Specifications

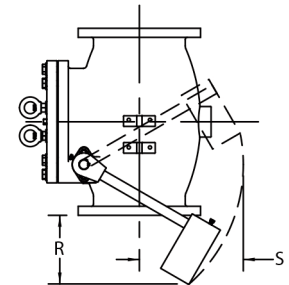
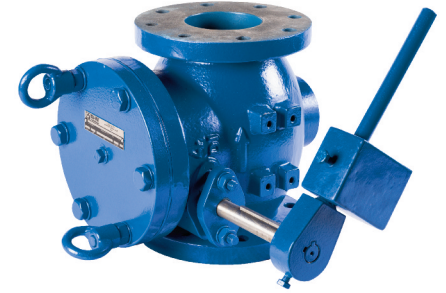
Component	Standard
Body and Cover 2-24" C508-09 Compliant	Ductile Iron ASTM A536 GR 65-45-12
Body and Cover 30-42"	Ductile Iron ASTM A536 GR 65-45-12
Disc and Disc Arm	Ductile Iron ASTM A536 GR 65-45-12
Shaft	304 Stainless Steel
Seat	316 Stainless Steel
Disc Seat	NBR

Head Loss Characteristics for Swing Check Valves



585LW Lever and Weight Check Valve

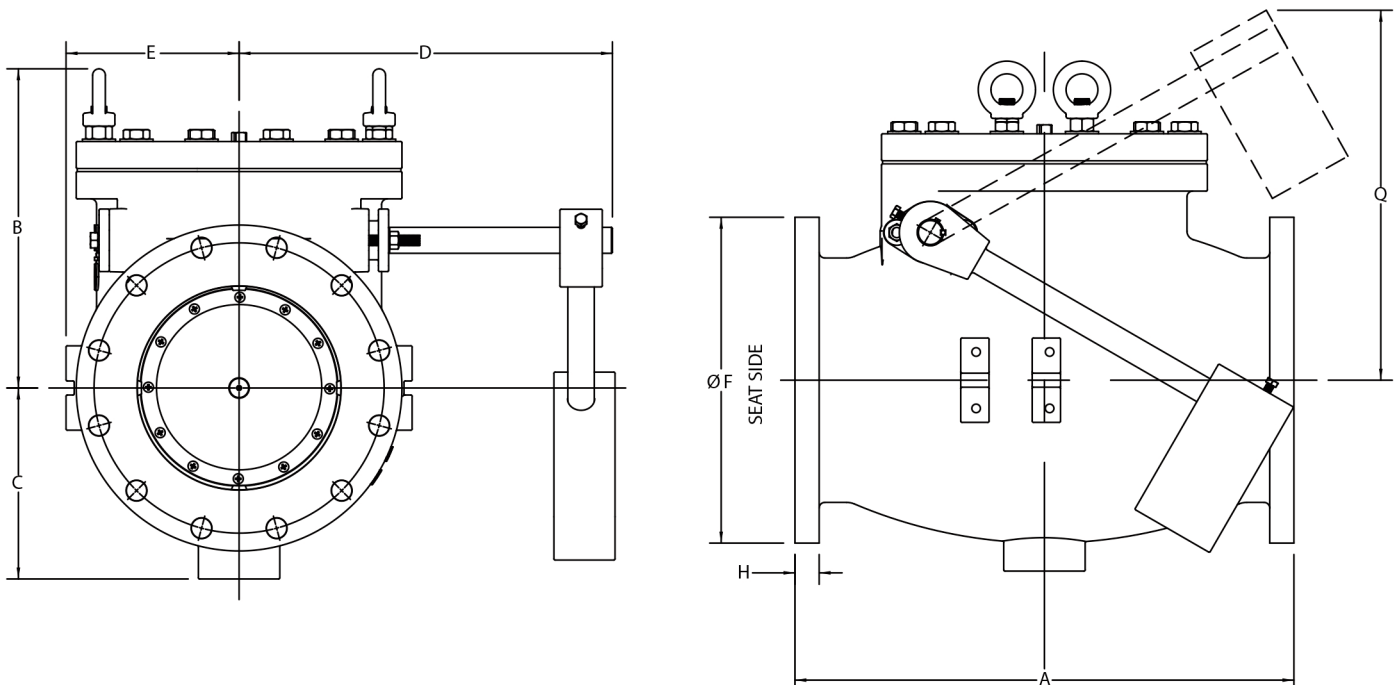
Valve Size	A	B	C	D	E	F	H	Q	R	S
2" 50mm	8.00 203	9.25 235	3.50 89	10.92 277	4.12 105	6.00 152	0.63 16	10.00 254	6.00 152	9.38 238
2.5" 65mm	8.50 216	9.72 247	3.50 89	10.92 277	4.12 105	7.00 178	0.88 22	9.88 251	6.13 156	9.38 238
3" 80mm	9.50 241	10.00 254	4.50 114	11.00 279	4.00 102	7.50 191	0.75 19	10.13 257	5.50 140	9.25 235
4" 100mm	11.50 292	10.75 273	5.00 127	11.75 299	5.00 127	9.00 229	0.94 24	10.75 273	4.88 124	8.75 222
6" 150mm	14.00 356	11.75 299	5.75 146	13.50 343	6.50 165	11.00 279	1.00 25	11.63 295	4.63 118	7.88 200
8" 200mm	19.50 495	13.75 349	7.25 184	17.00 432	7.50 191	13.50 343	1.13 29	15.50 394	5.88 149	10.38 264
10" 250mm	24.50 622	15.00 381	9.38 238	16.25 413	9.00 229	16.00 406	1.19 30	18.38 467	9.00 229	13.63 346
12" 300mm	27.50 699	19.00 483	11.00 279	18.25 464	11.00 279	19.00 483	1.25 32	21.13 537	9.00 229	14.25 362
14" 350mm	31.00 787	22.50 572	13.50 343	26.00 660	14.00 356	21.00 533	1.38 35	25.88 657	11.75 299	18.75 476
16" 400mm	36.00 914	24.50 622	14.25 362	29.50 749	15.00 381	23.50 597	1.44 37	32.00 813	7.25 184	15.88 403
18" 450mm	40.00 1016	26.50 673	17.38 441	31.00 787	18.63 473	25.00 635	1.56 40	36.00 914	9.25 235	21.25 540
20" 500mm	40.00 1016	28.75 730	17.63 448	32.38 822	18.63 473	27.50 699	1.69 43	41.00 1041	—	—
24" 600mm	48.00 1219	32.50 826	20.13 511	34.00 864	21.00 533	32.00 813	1.88 48	38.00 965	8.75 222	19.25 489
30" 750mm	56.00 1422	44.13 1121	29.75 756	39.00 991	24.00 610	38.75 984	2.13 54	53.13 1349	15.50 394	24.00 610
36" 900mm	63.00 1600	50.50 1283	33.50 851	42.00 1067	27.00 686	46.00 1168	2.38 60	57.50 1461	15.00 381	21.00 533
42" 1100mm										



VP, VERTICAL FLOW UP
POSITION INSTALLATION
LEVER ARM SWING

Inches
Millimeters

Series 585 Swing Check Valves
meet the Federal Mandate for
Lead Content Limits

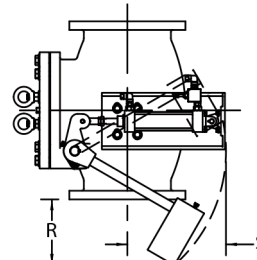


585AC Air Cushioned Check Valve

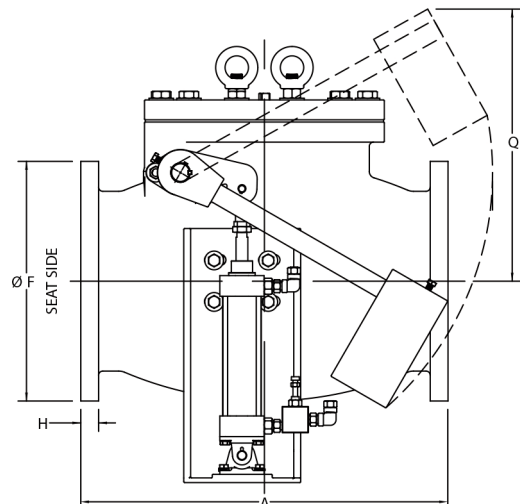
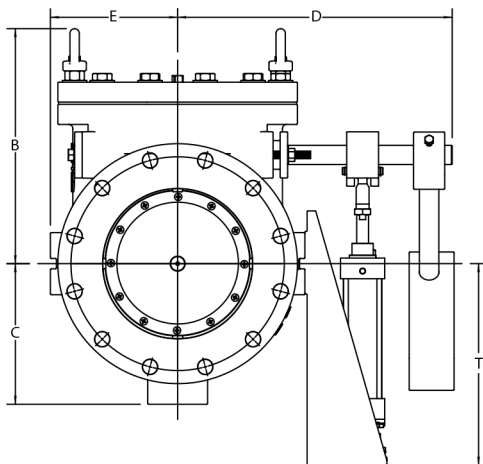
Valve Size	A	B	C	D	E	F	H	Q	R	S	T
2" 50mm	8.00 203	9.25 235	3.50 89	10.92 277	3.83 97	6.00 152	0.63 16	10.00 254	6.00 152	9.38 238	11.25 286
2.5" 65mm	8.50 216	9.72 247	3.50 89	10.92 277	3.83 97	7.00 178	0.88 22	9.88 251	6.13 156	9.38 238	11.13 283
3" 80mm	9.50 241	10.00 254	4.50 114	11.00 279	4.00 102	7.50 191	0.75 19	10.13 257	5.50 140	9.25 235	12.00 305
4" 100mm	11.50 292	10.75 273	5.00 127	11.75 299	5.00 127	9.00 229	0.94 24	10.75 273	4.88 124	8.75 222	10.88 276
6" 150mm	14.00 356	11.75 299	5.75 146	13.50 343	6.50 165	11.00 279	1.00 25	11.63 295	4.63 118	7.88 200	10.88 276
8" 200mm	19.50 495	13.75 349	7.25 184	17.00 432	7.50 191	13.50 343	1.13 29	15.50 394	5.88 149	10.38 264	13.50 343
10" 250mm	24.50 622	15.00 381	9.38 238	16.25 413	9.00 229	16.00 406	1.19 30	18.38 467	9.00 229	13.63 346	13.50 343
12" 300mm	27.50 699	19.00 483	11.00 279	18.25 464	11.00 279	19.00 483	1.25 32	21.13 537	9.00 229	14.25 362	13.50 343
14" 350mm	31.00 787	22.50 572	13.50 343	26.00 660	14.00 356	21.00 533	1.38 35	25.88 657	11.75 299	18.75 476	13.50 343
16" 400mm	36.00 914	24.50 622	14.25 362	29.50 749	15.00 381	23.50 597	1.44 37	32.00 813	7.25 184	15.88 403	14.50 368
18" 450mm	40.00 1016	26.50 673	17.38 441	31.00 787	18.63 473	25.00 635	1.56 40	36.00 914	9.25 235	21.25 540	13.00 330
20" 500mm	40.00 1016	28.75 730	17.63 448	32.38 822	18.63 473	27.50 699	1.69 43	41.00 1041	—	—	14.50 368
24" 600mm	48.00 1219	32.50 826	20.13 511	34.00 864	21.00 533	32.00 813	1.88 48	38.00 965	8.75 222	19.25 489	11.75 299
30" 750mm	56.00 1422	44.13 1121	29.75 756	39.00 991	24.00 610	38.75 984	2.13 54	53.13 1349	15.50 394	24.00 610	17.25 438
36" 900mm	63.00 1600	50.50 1283	33.50 851	42.00 1067	27.00 686	46.00 1168	2.38 60	57.50 1461	15.00 381	21.00 533	13.00 330
42" 1100mm											

Valve Size	Weight lbs/kg
3"	110
80mm	50
4"	145
100mm	66
6"	205
150mm	93
8"	330
200mm	150
10"	500
250mm	227
12"	800
300mm	363
14"	1260
350mm	672
16"	1600
400mm	726
18"	2100
450mm	963
20"	2500
500mm	1134
24"	3700
600mm	1678
30"	6000
750mm	2722
36"	9100
900mm	4128
42"	Consult
1100mm	Factory

Inches
Millimeters



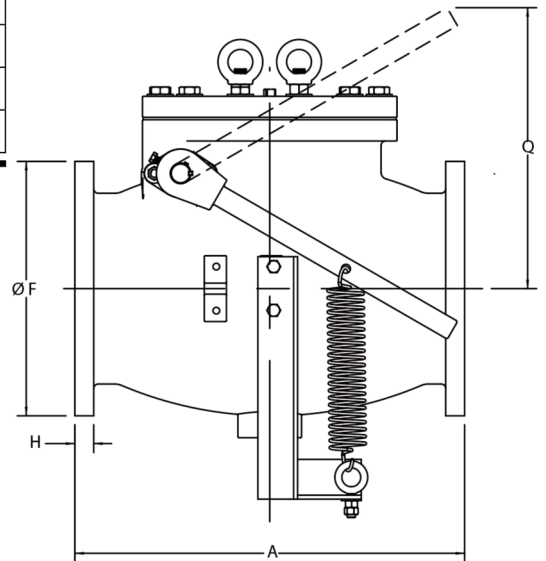
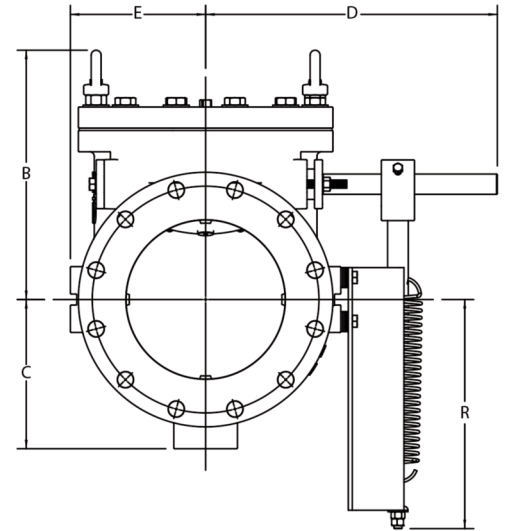
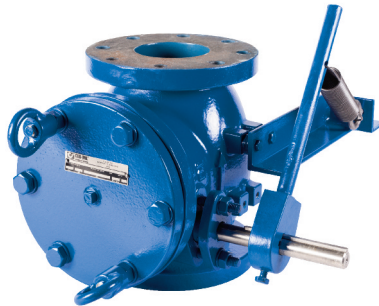
VP, VERTICAL FLOW UP
POSITION INSTALLATION
LEVER ARM SWING



585LS Lever and Spring Check Valve

Valve Size	A	B	C	D	E	F	H	Q	R
2" 50mm	8.00 203	9.25 235	3.50 89	10.92 277	3.83 97	6.00 152	0.63 16	9.25 235	9.83 250
2.5" 65mm	8.50 216	9.72 247	3.50 89	10.92 277	3.83 97	7.00 178	0.88 22	9.25 235	9.83 250
3" 80mm	9.50 241	10.00 254	4.50 114	11.00 279	4.00 102	7.00 178	0.75 19	9.39 239	10.64 270
4" 100mm	11.50 292	10.75 273	5.00 127	11.75 299	5.00 127	9.00 229	0.94 24	10.00 254	9.50 241
6" 150mm	14.00 356	11.75 299	5.75 146	13.50 343	6.50 165	11.00 279	1.00 25	10.90 277	9.50 241
8" 200mm	19.50 495	13.75 349	7.25 184	17.00 432	7.50 191	13.50 343	1.13 29	14.84 377	6.50 165
10" 250mm	24.50 622	15.00 381	9.38 238	16.25 413	9.00 229	16.00 406	1.19 30	17.63 448	13.24 336
12" 300mm	27.50 699	19.00 483	11.00 279	18.25 464	11.00 279	19.00 483	1.25 32	20.40 518	13.25 336
14" 350mm	31.00 787	22.50 572	13.50 343	26.00 660	14.00 356	21.00 533	1.38 35	25.22 641	18.75 476
16" 400mm	36.00 914	24.50 622	14.25 362	29.50 749	15.00 381	23.50 597	1.44 37	32.00 813	15.50 394
18" 450mm	40.00 1016	26.50 673	17.38 441	31.00 787	18.63 473	25.00 635	1.56 40	36.00 914	19.45 494
20" 500mm	40.00 1016	28.75 730	17.63 448	32.38 822	18.63 473	27.50 699	1.69 43	41.00 1041	14.50 368
24" 600mm	48.00 1219	32.50 826	20.13 511	34.00 864	21.00 533	32.00 813	1.88 48	38.00 965	20.83 529
30" 750mm	56.00 1422	44.13 1121	29.75 756	39.00 991	24.00 610	38.75 984	2.13 54	53.13 1349	17.71 450
36" 900mm	63.00 1600	50.50 1283	33.50 851	42.00 1067	27.00 686	46.00 1168	2.38 60	57.50 1461	13.45 342
42" 1100mm									

Inches
Millimeters



Cla-Val 585 Series Swing Check Valve Specifications

The check valve shall be of the Swing Check Valve full body flanged type, with a domed access cover and only one moving part - the swing check valve disc.

The valve body shall have full flow equal to nominal pipe diameter at any point through the valve. The top access port of the body shall be full size, allowing removal of the disc without removal of the valve from the pipeline. The cover shall be domed to create a flushing action around the disc when valve is open. The valve body and cover shall be ASTM A536 Grade 65-45-12, Class B Ductile Iron coated and lined with an ANSI/NSF61 approved fusion bonded epoxy coating. The 585 Series Swing Check shall be designed, manufactured, and tested in accordance with ANSI/AWWA Standard C508-09.

The disc shall be raised one-piece Stainless Steel construction and equipped with a molded resilient seat mounted on the disc with an integral J-Ring for drip tight sealing. Both seats shall be secured with stainless steel fasteners and must be field replaceable without removing the valve from the pipeline.

The valve shall be available with a choice of three closure options:

- 1) Lever and Weight
- 2) Air Cushion
- 3) Lever and Spring

This valve shall be a Cla-Val 585 Swing Check Valve as supplied by Cla-Val, Newport Beach, CA 92659-0325.