

Style CW

Wafer Silent Check Valve

Cast Iron (ASTM A 126, Class B)

125 lb. / 250 lb.

Sizes 2" - 6" are 125/250 lb. dual rated.
 Sizes 8" - 12" are 125 lb. rated.

Carbon Steel (ASTM A 216, Grade WCB)

150 lb. / 300 lb.

Sizes 2" - 6" are 150/300 lb. dual rated.
 Sizes 8" - 12" are 150 lb. rated.

Stainless Steel (ASTM A 351, Grade CF8M)

150 lb. / 300 lb.

Sizes 2" - 6" are 150/300 lb. dual rated.
 Sizes 8" - 12" are 150 lb. rated.



APPLICATIONS

Liquid or gas where protection from flow reversal in a pipeline is required.

CONSTRUCTION

The Keckley Style CW Wafer Silent Check Valves are constructed from rugged castings that are machined to exacting specifications. Reference individual technical data pages for standard disc, seat, spring, and bushing.

FEATURES

- A short face-to-face dimension.
- A spring automatically closes the disc at zero flow, which prevents flow reversal and water hammer.
- The seat and disc's mating surfaces are hand lapped.
- The disc is fully guided at the top and bottom to prevent binding and cocking.
- Designed for a minimum open area equal to 110% of the pipe size.
- All sizes feature discs, which lift 1/3 of an inch from their seats for every 1" of pipe size.
- Epoxy coating is standard.
- Optional soft seat provides bubble tight shut off.
- Field serviceable without the need for special tools.

INSTALLATION

The Style CW is used in both vertical and horizontal applications. Contact Keckley for downward vertical flow installations.

ORDERING

Reference page **C2** for Keckley Check Valve Product Numbers.

WORKING PRESSURES - NON SHOCK

NOM. RATING	BODY MATERIAL	MEDIA	2" to 12"
125#	CAST IRON (ASTM A 126, CLASS B)	W.O.G.	200 PSI @ 150°F
NOM. RATING	BODY MATERIAL	MEDIA	2" to 6"
250#	CAST IRON (ASTM A 126, CLASS B)	W.O.G.	500 PSI @ 150°F
NOM. RATING	BODY MATERIAL	MEDIA	2" to 12"
150#	CARBON STEEL (ASTM A 216, GRADE WCB)	W.O.G.	285 PSI @ 150°F
	STAINLESS STEEL (ASTM A 351, GRADE CF8M)	W.O.G.	275 PSI @ 150°F
NOM. RATING	BODY MATERIAL	MEDIA	2" to 6"
300#	CARBON STEEL (ASTM A 216, GRADE WCB)	W.O.G.	740 PSI @ 150°F
	STAINLESS STEEL (ASTM A 351, GRADE CF8M)	W.O.G.	720 PSI @ 150°F

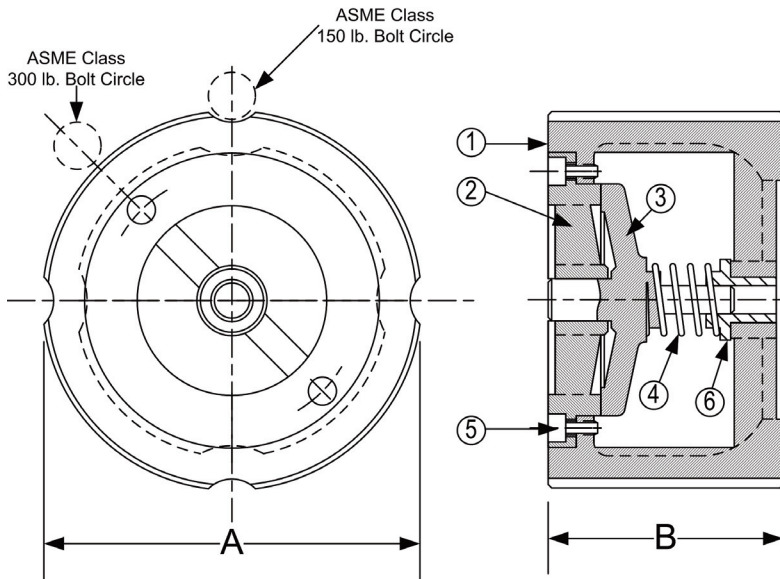
Style CW

Wafer Silent Check Valve, 150 lb. / 300 lb.

Sizes 2" - 6" 150/300 lb. dual rated,

Sizes 8" - 12" 150 lb. rated.

Stainless Steel (ASTM A 351, Grade CF8M)



PARTS LIST		
ITEM	DESCRIPTION	MATERIAL
1	Body	Stainless Steel (ASTM A 351, Grade CF8M)
2	Seat	Stainless Steel (ASTM A 351, Grade CF8M)
3	Disc	Stainless Steel (ASTM A 351, Grade CF8M)
4	Spring	Stainless Steel (ASTM A 182, Grade F-316)
5	Screw	Stainless Steel (ASTM A 182, Grade F-316)
6	Bushing	Stainless Steel (ASTM A 182, Grade F-316)

Above "Standard" Product Number - **CW2R-36-36336** (150# Class)
Other Options - Reference **C2** for available materials.

SIZE		DIMENSIONS				WEIGHTS		BOLT DIAMETERS	
		A		B		150#		150#	300#
		150#		150#		lbs	kgs	Bolt Diameter	Bolt Diameter
in	mm	in	mm	in	mm				
2	50	4-1/4	108	2-5/8	67	5	2	5/8"	5/8"
2-1/2	65	5	127	2-7/8	73	8	4	5/8"	3/4"
3	80	5-3/4	146	3-1/8	79	10	5	5/8"	3/4"
4	100	7	178	4	102	18	8	5/8"	3/4"
5	125	8-3/8	213	4-5/8	117	29	13	3/4"	3/4"
6	150	9-3/4	248	5-9/16	141	42	19	3/4"	3/4"
8	200	13-1/2	343	6-1/2	165	85	39	3/4"	--
10	250	16	406	8-1/4	210	160	73	7/8"	--
12	300	19-1/4	489	11-1/4	286	340	154	7/8"	--

†This table reflects only the nearest metric equivalents.

Sizes 8" - 12" do not have a scalloped body.

Applicable Standards	
•Design ASME B16.5	•MSS SP-6
•Design ASME B16.34	•MSS SP-25
•Testing API 598	•MSS SP-55

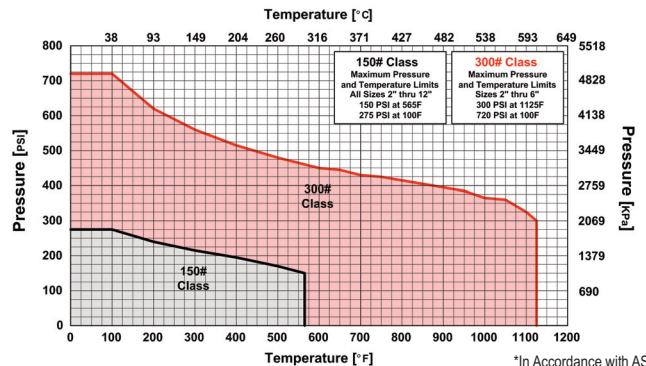
Seat Material	Operating Temperature**	
	°F	°C
Buna-N	-20 to 250	-29 to 121
Viton	-20 to 400	-29 to 204
EPDM	-40 to 300	-40 to 149

**Subject to limitations of body material.

FLOW COEFFICIENTS					
Size	2"	2-1/2"	3"	4"	5"
C _v	57	89	132	208	294
Size	6"	8"	10"	12"	
C _v	426	715	1225	1800	

PRESSURE vs. TEMPERATURE CHART

150# & 300# Cast 316 Stainless Steel (ASTM A 351, Grade CF8M)



*In Accordance with ASME B16.5



PRESSURE DROP CHART

Wafer Silent Check Valve (Style CW)

This pressure drop chart is based on the flow of clean water through the Keckley Wafer Silent Check Valve. The Keckley Style CW has a cracking pressure equal to or less than 0.5 psi when mounted horizontally. Check valves should be placed at a distance equal to 5 to 10 pipe diameters from any turbulence producing device such as elbows, pumps, etc.

TO USE CHARTS:

Find your desired rate of flow (GPM) on the left hand side of the chart. Follow its corresponding horizontal line to the point where it intersects the diagonal line indicating the check valve pipe size. From this point of intersection, follow the vertical line down to the bottom of the chart to determine the approximate pressure drop.

