

WHEATLEY Valves—Short-Pattern Wafer Check Valve

Lightweight, compact design for backflow prevention in gas and liquid applications

APPLICATIONS

- Pipeline applications

ADVANTAGES

- Prevention of liquid and gas backflow
- Lightweight, compact design

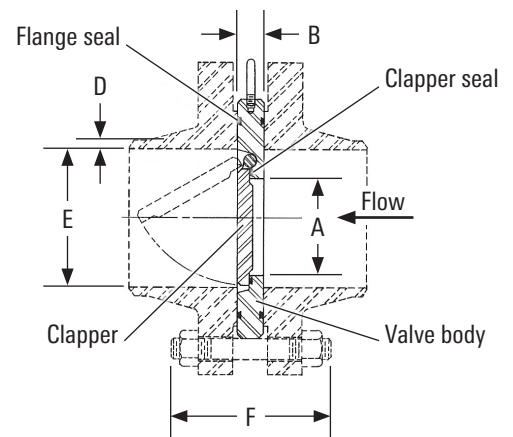
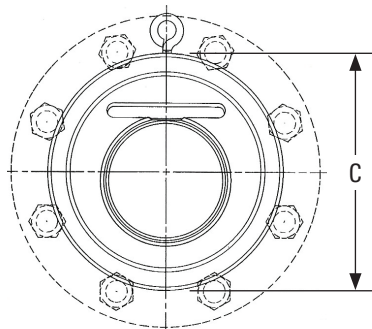
The Cameron portfolio of WHEATLEY* check valves includes short-pattern wafer check valves, which are ideal in applications where

- media is clean (abrasives are not present)
- flow is steady and nonpulsating
- flow rates are low
- pigs or spheres are not intended to run through the valve
- seat velocity does not exceed
 - liquids at 15 ft/s
 - gases at 100 ft/s.

Note: The wafer check valve clapper can open approximately 50° out when the bore of the adjoining outlet flange (downstream) is equal to that listed in column "E", entitled "Bore Minimum". If a larger-bore flange is used, the maximum possible clapper angle can be increased. However, since "drop-in" type clappers are retained by the flange face, too large a bore will result in the clapper falling out of the valve. As a result, this model cannot be used with a slip-on flange on the downstream side.



Short-pattern wafer check valves.



Drop-in clapper design for 2-in through 12-in ASME and ANSI Class 150 through 600.

WHEATLEY Valves—Short-Pattern Wafer Check Valve

Dimensions

Working Pressure, psi	Nominal Size, in	Body-Seat Bore, in	Body Thickness, in	Body OD, in	Companion Flange, in		Ring Number	Recommended Stud Length		Weight, lbm	Order Number	
					Max. Pipe Wall	Bore Min.		O-Ring	Ring-Type Joint (RTJ)		Serrated O-Ring Face	RTJ Face
275 (ASME 150)	2	1 ¹ / ₁₆	3/4	4 ¹ / ₈	0.281	1.939	R22	3 ³ / ₄	4 ¹ / ₂	3	9D-973-020027-XXX	9D-979-020027-XXX
	3	1 ⁷ / ₁₆	3/4	5 ³ / ₈	0.300	2.900	R29	4 ¹ / ₄	5	5	9D-973-030027-XXX	9D-979-030027-XXX
	4	2 ¹³ / ₁₆	3/4	6 ⁷ / ₈	0.237	4.026	R36	4 ¹ / ₄	5 ¹ / ₄	7	9D-973-040027-XXX	9D-979-040027-XXX
	6	4 ¹ / ₂	3/4	8 ³ / ₄	0.280	6.065	R43	4 ¹ / ₂	5 ¹ / ₄	12	9D-973-060027-XXX	9D-979-060027-XXX
	8	5 ³ / ₈	1 ¹ / ₈	11	0.322	7.981	R48	5 ¹ / ₄	6	27	9D-972-080027-XXX	9D-979-080027-XXX
	10	7 ¹ / ₂	1 ¹ / ₈	13 ³ / ₈	0.365	10.020	R52	5 ³ / ₄	6 ¹ / ₂	36	9D-973-100027-XXX	9D-979-100027-XXX
	12	18 ¹¹ / ₁₆	1 ¹ / ₂	16 ¹ / ₈	0.375	12.000	R56	6	6 ³ / ₄	74	9D-973-120027-XXX	9D-979-120027-XXX
720 (ASME 300)	2	1 ¹ / ₁₆	3/4	4 ³ / ₈	0.281	1.939	R23	4	5 ¹ / ₄	3	9D-973-020072-XXX	9D-979-020072-XXX
	3	1 ⁷ / ₁₆	3/4	5 ³ / ₈	0.300	2.900	R31	4 ³ / ₄	5 ³ / ₄	6	9D-973-030072-XXX	9D-979-030072-XXX
	4	2 ¹³ / ₁₆	3/4	7 ¹ / ₈	0.237	4.026	R37	5	6 ¹ / ₄	7	9D-973-040072-XXX	9D-979-040072-XXX
	6	4 ¹ / ₂	7/8	9 ⁷ / ₈	0.280	6.065	R45	5 ³ / ₄	6 ³ / ₄	17	9D-973-060072-XXX	9D-979-060072-XXX
	8	5 ³ / ₈	1 ¹ / ₈	12 ¹ / ₈	0.322	7.981	R49	6 ¹ / ₂	7 ¹ / ₂	33	9D-973-080072-XXX	9D-979-080072-XXX
	10	7 ¹ / ₂	1 ¹ / ₂	14 ¹ / ₄	0.365	10.020	R53	7 ¹ / ₂	8 ¹ / ₄	60	9D-973-100072-XXX	9D-979-100072-XXX
	12	8 ¹¹ / ₁₆	2	16 ⁵ / ₈	0.375	12.000	R57	8 ¹ / ₂	9 ¹ / ₄	105	9D-973-120072-XXX	9D-979-120072-XXX
1,440 (ASME 600)	2	1 ¹ / ₁₆	3/4	4 ³ / ₈	0.218	1.939	R23	4 ³ / ₄	5 ¹ / ₂	3	9D-973-020144-XXX	9D-979-020144-XXX
	3	1 ⁷ / ₁₆	3/4	5 ³ / ₈	0.300	2.900	R31	5 ¹ / ₂	6	6	9D-973-030144-XXX	9D-979-030144-XXX
	4	2 ⁵ / ₈	7/8	7 ⁵ / ₈	0.337	3.826	R37	6 ¹ / ₂	7	10	9D-973-040144-XXX	9D-979-040144-XXX
	6	4 ¹ / ₈	1 ¹ / ₈	10 ¹ / ₂	0.432	5.761	R45	7 ³ / ₄	8	26	9D-973-060144-XXX	9D-979-060144-XXX
	8	5	1 ¹ / ₂	15 ⁵ / ₈	0.500	7.625	R49	9	9 ¹ / ₄	48	9D-973-080144-XXX	9D-979-080144-XXX
	10	7	2 ¹ / ₄	15 ³ / ₄	0.500	9.750	R53	10 ³ / ₄	11 ¹ / ₄	112	9D-973-100144-XXX	9D-979-100144-XXX
	12	8 ¹ / ₂	2 ³ / ₈	18	0.500	11.750	R57	11 ¹ / ₈	11 ³ / ₈	152	9D-973-120144-XXX	9D-979-120144-XXX

How to Order

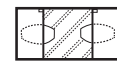
Part Number	Description [†]
9D-973-XXXXXX-167	2- to 8-in Class 300, phosphorus-coated carbon steel body, 316 stainless steel trim, highly saturated nitrile (HSN) seals, NACE compliance, service from -50 to 300 degF [-46 to 149 degC]
9D-973-XXXXXX-169	2- to 8-in Class 300, phosphorus-coated carbon steel body, 316 stainless steel trim, high-strength synthetic-rubber seals, NACE compliance, service from -40 to 400 degF [-40 to 204 degC]
9D-973-XXXXXX-170	8- to 12-in Class 600, phosphorus-coated carbon steel body and trim, HSN seals, NACE compliance, service from -50 to 300 degF [-46 to 149 degC]
9D-973-XXXXXX-171	8- to 12-in Class 600, phosphorus-coated carbon steel body and trim, high-strength synthetic-rubber seals, NACE compliance, service from -40 to 400 degF [-40 to 204 degC]
9D-973-XXXXXX-367	2- to 12-in 316 stainless steel body and trim, HSN seals, NACE compliance, service from -50 to 300 degF [-46 to 149 degC]
9D-973-XXXXXX-369	2- to 12-in 316 stainless steel body and trim, high-strength synthetic-rubber seals, NACE compliance, service from -40 to 400 degF [-40 to 204 degC]

[†] Sour-service low-temperature trim included.

Materials of Construction

Body	Clapper		O-Ring Seal
	2- to 8-in Class 300	8-in to 12-in Class 600	
Carbon steel (phosphorus coating)	316 stainless steel	Carbon steel (phosphorus coating)	HSN
316 stainless steel	316 stainless steel	316 stainless steel	High-strength synthetic rubber

Consult Cameron for other materials.



Body face sealing surfaces—O-ring (left) and RTJ (right).