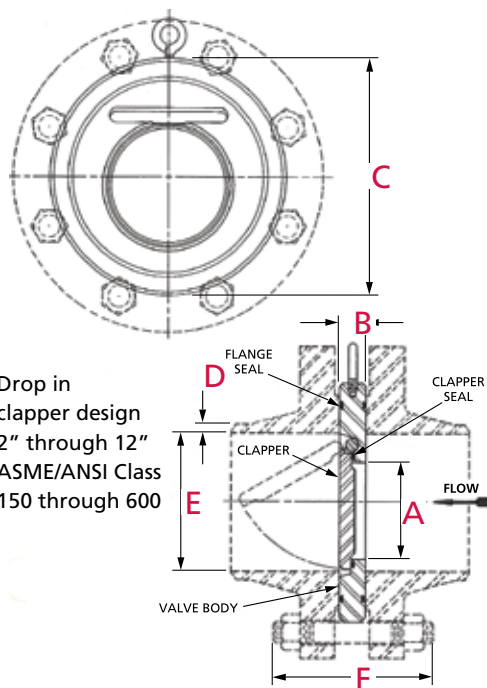


# WHEATLEY® Short-Pattern Wafer Check Valve

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



## Reduced-Port Check Valves



Reduced-port check valves are ideal in applications where:

- Media is clean (abrasives are not present)
- Flow is steady and non pulsating
- Flow rates are low
- Pigs or spheres are not intended to run through the valve
- Seat velocity does not exceed:
  - Liquids at 15 ft/sec
  - Gases at 100 ft/sec

### Note:

The wafer check valve clapper can open approximately 50 degrees 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.

## Dimensions

Working Pressure	Nominal Size (in.)	Body-Seat Bore (in.)	Body Thickness (in.)	Body Outside Dia. (in.)	Companion Flange			Recommended Stud Length		Weight (lb)	Order Number	
					Max. Pipe Wall	Bore Min.	Ring Number	O-ring	RTJ		Serrated O-ring Face	Ring-Type Joint (RTJ) Face
					D	E		F	F			
ASME 150 275 psi	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	1-7/8	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	5-5/8	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
ASME 300 720 psi	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	1-7/8	3/4	5-7/8	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	5-5/8	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
ASME 600 1440 psi	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	1-7/8	3/4	5-7/8	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	11-5/8	152	9D-973-120144-XXX	9D-979-120144-XXX

## How to Order

Part Number	Descriptions
9D-973-XXXXXX-167	2" to 8" CL. 300 phosphorus coated carbon steel body, 316 stainless steel trim, HSN seals, NACE, -50° F to 300° F (-46° C to 149° C) service. (sour low-temp trim)
9D-973-XXXXXX-169	2" to 8" CL. 300 phosphorus coated carbon steel body, 316 stainless steel trim, Viton GLT seals, NACE, -20° F to 400° F (-29° C to 204° C) service. (sour low-temp trim)
9D-973-XXXXXX-170	8" CL. 600 to 12" phosphorus coated carbon steel body and trim, HSN seals, NACE, -50° F to 300° F (-46° C to 149° C) service. (sour low-temp trim)
9D-973-XXXXXX-171	8" CL. 600 to 12" phosphorus coated carbon steel body and trim, Viton GLT seals, NACE, -20° F to 400° F (-29° C to 204° C) service. (sour low-temp trim)
9D-973-XXXXXX-167	2" to 12" 316 stainless steel body and trim, HSN seals, NACE, -50° F to 300° F (-46° C to 149° C) service. (sour low-temp trim)
9D-973-XXXXXX-169	2" to 12" 316 stainless steel body and trim, Viton GLT seals, NACE, -20° F to 400° F (-29° C to 204° C) service. (sour low-temp trim)

## Materials of Construction

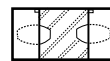
Body	Clapper		O-ring Seal
	2" to 8" CL. 300	8" CL. 600 to 12"	
Carbon Steel (Phosphorus Coating)	316 SS	Carbon Steel (Phosphorus Coating)	HSN
316 SS	316 SS	316 SS	Viton GLT

Consult Cameron for other materials.

## Body Face Sealing Surfaces



O-ring



RTJ (Ring-Type Joint)

3250 Briarpark Drive, Suite 300  
Houston, TX 77042  
USA  
Tel 1 281 499 8511