

Model 304 Grooved Swing Check Valve

UL Listed Sizes 2" to 8" / FM Approved Sizes 2 1/2" to 8"

Features

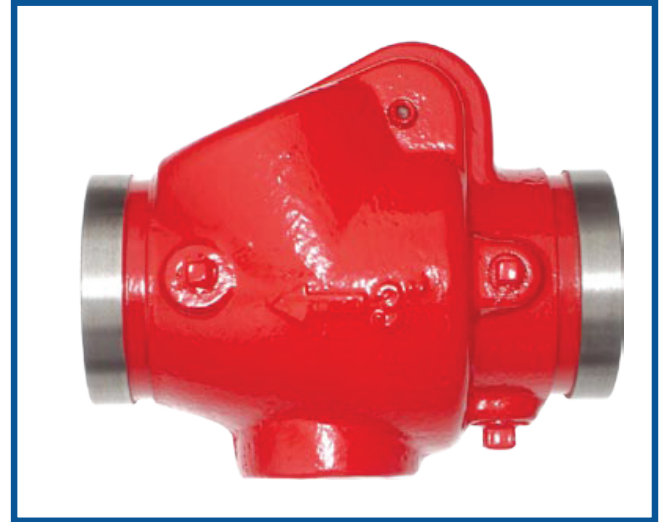
Compact, cost effective valve offering low pressure - drop, non slam performance.

Lighter and faster to install than flanged and wafer valve assemblies.

In the full-open position the swing clapper is held tightly against the valve body, out of flow stream, to provide maximum flow area and prevent clapper flutter. The clapper design allows quick, non-slam closure before flow reversal can occur, meeting the FM requirements for an anti-water hammer valve rating.

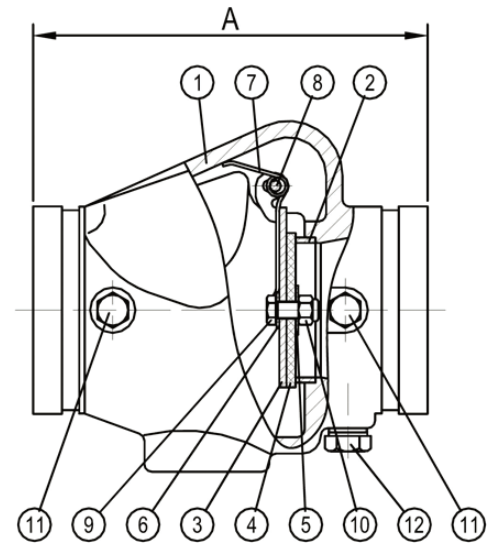
Each valve is hydrostatically tested for leak tightness to 34.5 bar. The clapper seat design permits leak free sealing of back pressures in service conditions ranging from 24 bar to as low as 0.35 bar (710mm water head.)

Suitable for installation in horizontal or vertical pipelines. Hinge pin must be aboved the centreline when mounted horizontally.



Maximum Service Pressure

350 psi/ 24 bar



Dimensions

Size		OD	A		Weight	
In.	mm	mm	In.	mm	lbs	kg
2	50	60.3	6.65	169	5.5	2.5
2 1/2	65	73.0	7.20	183	8.8	4
3 OD	65	76.1	7.20	183	8.8	4
3	80	88.9	7.80	198	13	6
4	100	114.3	8.58	218	20	9
5 1/2 OD	125	139.7	9.76	248	33	15
5	125	141.3	9.76	248	33	15
6 1/2 OD	150	165.1	10.63	270	42	19
6	150	168.3	10.63	270	42	19
8	200	219.1	12.80	325	77	35

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Material Specification

	Part	Specification
1	Body	Ductile Iron ASTM A 563
2	Seat	Bronze
3	Clapper	Stainless Steel 304
4	Facing Seal	EPDM Rubber
5	Clamping Ring	Stainless Steel 304
6	Gasket	EPDM Rubber
7	Spring	Stainless Steel 304
8	Hinge Pin	Stainless Steel 304
9	Bolt	Stainless Steel 304
10	Locknut	Stainless Steel 304
11	Plug 1/4" NPT	Carbon Steel
12	Plug 1/2" NPT	Carbon Steel

Formulas for Cv Values

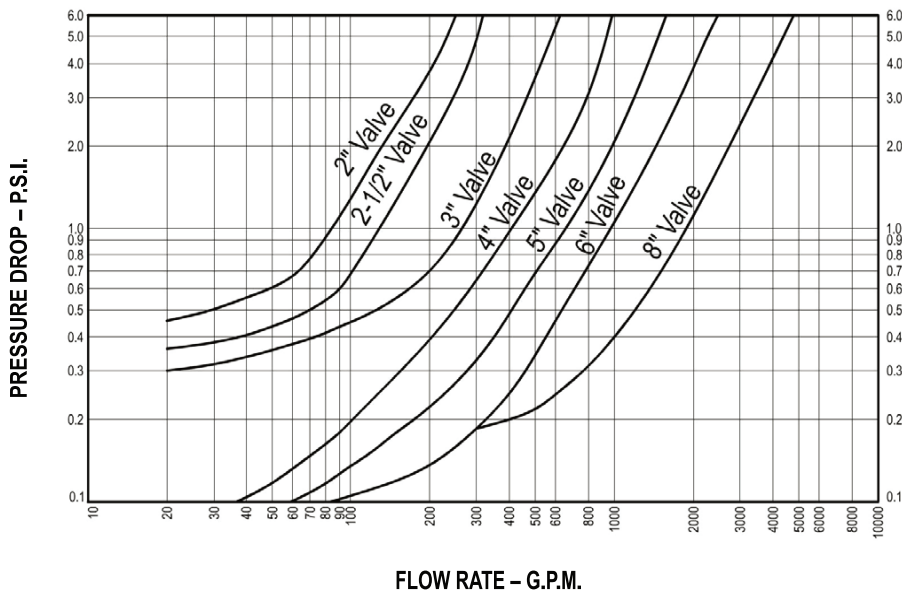
$$P = \frac{Q^2}{C_v^2} \Delta$$

Where: Q = Flow rate (gallons per minute: GPM)

ΔP = Pressure drop across valve (PSI)

$$C_v = \frac{Q}{\sqrt{\Delta P}} \times C = Q \quad C_v = \text{Flow coefficient}$$

Nominal Size	Pipe O.D.	Cv (Full Open)	Nominal Size	Pipe O.D.	Cv (Full Open)	Nominal Size	Pipe O.D.	Cv (Full Open)
2	50	60.3	4	100	114.3	6 1/2 OD	150	165.1
2 1/2	65	73.0	5 1/2 OD	125	139.7	6	150	168.3
3 OD	65	76.1	5	125	141.3	8	200	219.1
3	80	88.9						



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