



ROTECH BALL CHECK VALVE

FRICTIONLESS • DROPLESS • NON CLOG • MAINTENANCE FREE



Principle

The heart of this valve is a reinforced rubber ball. The unique design of the valve allows free movement of the ball. The ball moves to open position when the pump starts and allows free flow of liquid without any interference (Pic. 1). As the pumps stops the ball seats firmly against the metal seat due to its own weight & back pressure of the liquid (Pic. 2). This results in DROPLESS sealing.



(Picture 1)

Rotech ball check valves are ideally designed to prevent undesired backward flow of:



(Picture 2)

Muddy, Sandy & Clear water, Sewage, Waste water, Viscous liquid, Paper stock, Slurry.

Comparison

Rotech Ball Check Valves

Conventional Non-Return Valves

1. Head Loss (Pressure Drop)	Low, Due to light, free flowing rubber ball, without causing any interference, resulting in lower power consumption (Friction less)	High, Due to interference of the heavy hinge/disc mechanism, with the flow resulting in higher power consumption.
2. Perfect Sealing	The sealing face is deposit free since it remains inclined in any position of the valve, ensuring perfect sealing. (Dropless)	Deposits on the sealing face due to its flatness may not ensure perfect sealing.
3. Solid Handling Capacity	Clear Passage, equal to the nominal valve dia., gives larger solid handling capacity.	The above interference leaves a clear passage less than the nominal valve dia. hence smaller solid handling capacity.
4. Self Cleaning	Any deposits formed on the ball and in the valve passage are removed due to the rolling of the ball in operation.	No such possibility.
5. Non-Clogging Nature	No moving parts other than the free rolling ball, hence no jamming/clogging.	Moving parts may jam due to deposits.
6. Applications	Unlimited. Ideal for slurries, sewage, viscous, erosive and corrosive liquids.	Limited. Trouble some for slurries, sewage and viscous liquids.
7. Maintenance	Abrasion resistance of rubber ensures longer life. Also the cleanout port does not necessitate valve removal from the pipeline. Hence much shorter downtime.	Parts may wear out due to abrasion. Also valve has to be removed from the pipe line for maintenance / cleaning. Hence longer down time.

Model # 3100

Rotech Ball Check Valve (Threaded)

The ball check valve has threaded ends and works vertically or horizontally.

The valve can be supplied with NPT & BSP threaded connections.

Sizes : 1" to 4"

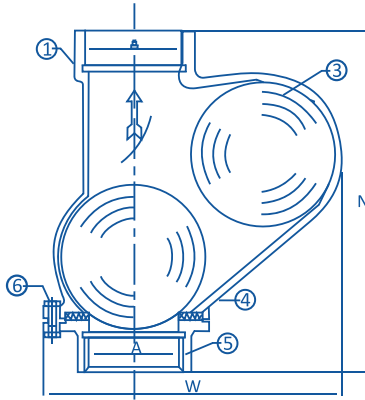
Max. Temp.: 90°C

Working Pressure: 145 PSI

(For higher working pressure please contact us)

Material of Constructions

Part	Description	Material
1	Body	Cast Iron
2	Strainer	Cast Iron
3	Ball	Nitrile Rubber
4	Seal Ring	Nitrile Rubber
5	Fastener	Carbon Steel
6	Adaptor	Cast Iron



Dimensions (A = Valve Size in Inch)

A	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
W	3.543	3.543	4.921	5.827	7.480	9.133	10.827
N	3.937	3.937	5.315	6.496	7.874	9.606	11.181
Wt. Lbs	4.4	4.4	4.4	7.7	10.12	15.4	28.6

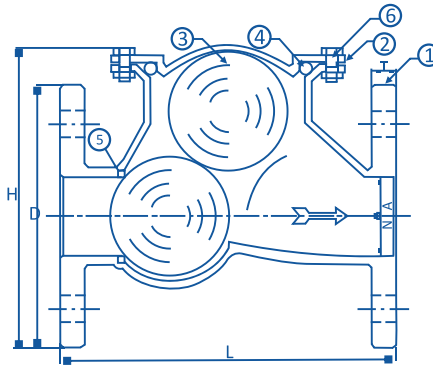
Model # 5100

Rotech Ball Check Valve (Flanged)-ASA-125

The ball check valve has flanged ends and works vertically or horizontally.

Material of Constructions

Part	Description	Standard	Special
1	Body	Cast Iron	St. Steel, Cast Steel
2	Cover	Cast Iron	St. Steel, Cast Steel
3	Ball	Nitrile Reinforced	EPDM, Neoprene Butyle, Viton
4	Cover Ring	Nitrile Rubber	
5	Ball Seat Ring	L. T. Bronze	St. Steel, Hard Rub
6	Fastener	Carbon Steel	St. Steel



Sizes : 1" to 14"

Max. Temp.: 90°C

Working Pressure: 145 PSI

(For higher working pressure please contact us)

Dimensions (A = Valve Size in Inch)

A	1"	1 1/2"	2"	2 1/2"	3"	4"	5"	6"	8"	10"	12"	14"
D	4.527	5.905	6.496	7.283	7.874	8.661	9.842	11.220	13.386	15.551	17.520	20.748
L	5.669	6.860	7.874	9.449	10.236	11.811	13.780	15.748	19.685	23.622	27.560	31.496
H	4.527	6.230	7.087	8.268	9.055	11.023	13.385	15.748	19.685	22.441	26.772	31.496
T	0.590	0.590	0.630	0.630	0.748	0.787	0.827	0.827	0.866	0.945	0.984	1.142
Wt. Lbs	7.92	15.4	18.26	26.4	36.08	57.2	92.4	127.6	220.0	374.0	440.0	682.0

Rotech reserves right to change or modify designs / dimensions without any prior notice.