RHINOFLEX

Duckbill Check Valves

RUBBER DUCKBILL CHECK VALVE

RHINOFLEX offers a variety of Rubber Duckbill Check Valves, and Inline Rubber Check Valves that are an exceptionally reliable and cost effective method to control back pressures in sewage treatment plants. These valves are fully passive flow devices, which require absolutely no maintenance whatsoever, no source of power or manual operating assistance, and are an excellent alternative to conventional flap-gate valves and other check valves. The flexible Rubber Duckbill Valve is normally closed but will open with the very minimum of head pressure and always providing maximum flow with minimal pressure drop across the valve. Conventional Flap-Gate Check valves, and other check valves are mechanical and have metal components that are commonly know to malfunction, rust, and seize. Rubber Duckbill Check Valves will even handle large obstructions without jamming or binding, and guarantee trouble free back flow prevention, and can even seal around trapped or suspended solids with minimum back pressure. The finest of engineering elastomers are used, and the outer layers, are designed to repel marine organisms.

Features:

Full rubber construction, totally wear resistant to abrasives
No water hammer and noise, prevents back flow.
Absolutely "NO" energy, actuation, energy costs and
maintenance. Valve will not deform or freeze.
Extremely easily exchangeable with other check valves.
Designed to suit all diameters, and pressure ratings.
Flanged type and Slip On Type available

Typical Applications:

- * Storm water outfall * Sewer Interceptor Check Valve
- * Flood control systems * CSO / SSO / Effluent Discharge
- * Pumping stations / Wet wells * Submerged Outfall Diffuser Nozzles



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SERIES RFL- FLANGED DUCKBILL CHECK VALVE

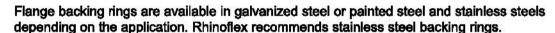
Manufactured with an integral reinforced rubber flange complete with metal backing rings the Series RFL can be bolted directly to a headwall, tank wall or pipe flange.

Available in standard sizes up to 96" we will also manufacture any valve size to meet your exact needs.

Flanges and Backing Rings

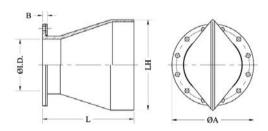
Flat faced, reinforced rubber flanges with metal backing rings are drilled in accordance with customer specifications.

In addition to piping industry standards, unique dimensions and shapes of flanges are also available.



Larger diameter valves are supplied with a lifting clevis to assist the installation of the valve. The same clevis can be used to support the valve and water weight in service.

Design Specifications



| Pipe Size ID (in) | B (in) | Maximum Length - L (In) | Maximum Height - LH (in) | Pipe Size ID (in) | B (ln) | Maximum Length - L (in) | Maximum Height - LH (in) |
|-------------------|-------------------|-------------------------------|--------------------------------|----------------------|-----------|-------------------------------|--------------------------------|
| 2 | 3/4 | 6 | 4 | 24 | 1 5/8 | 40 | 39 |
| 2 1/2 | 3/4 | 7 | 5 | 26 | 1 5/8 | 42 | 42 |
| 3 | 1 1/8 | 9 | 6 | 28 | 1 5/8 | 42 | 45 |
| 4 | 1 1/8 | 12 | 8 | 30 | 1 5/8 | 44 | 47 |
| 5 | 1 1/8 | 15 | 9 | 32 | 1 5/8 | 52 | 52 |
| 6 | 1 1/8 | 15 | 11 | 36 | 2 | 50 | 56 |
| 8 | 1 ³/8 | 16 | 14 | 42 | 2 1/2 | 54 | 68 |
| 10 | 1 ³ /8 | 21 | 17 | 48 | 21/2 | 60 | 77 |
| 12 | 1 ³ /8 | 26 | 22 | 54 | 2 1/2 | 70 | 86 |
| 14 | 1 ³ /8 | 26 | 24 | 60 | 2 1/2 | 72 | 97 |
| 16 | 1 ³/8 | 31 | 27 | 66 | 2 1/2 | 76 | 99 |
| 18 | 1 5/8 | 30 | 30 | 72 | 2 1/2 | 94 | 114 |
| 20 | 1 5/8 | 32 | 32 | 84 | 21/2 | 96 | 135 |
| 22 | 1 5/8 | 35 | 36 | 96 | 2 1/2 | 100 | 150 |



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Available Elastomers

PGR: Pure Gum Natural Rubber has excellent abrasion resistance and flexibility

SBR: Styrene Butadiene Rubber for general purpose use

CR: Choroprene Rubber – Neoprene resists a wide range of moderate chemicals and inhibits growth of marine

organisms

EPDM: Ethylene Propylene Rubber is used for water

service and is also available in food grade

CSM: Chlorosulphonated Polyethylene – Hypalon provides excellent resistance to a wide range of strong chemicals and oxidizing agents, ozone, weathering, heat and sunlight

NBR: Nitrile Butadiene Rubber- Buna-N is used for resistance to fuels, oils, grease and other hydrocarbons

CIIR: Chlorobutyl Rubber – Butyl resists oxidizing chemicals, organic oils and greases and heat

Examples for Series RFL / RFS Duckbill Check Valves

