



Smarter pipeline solutions



Waterworks[®] Foot Valves

Waterworks® Foot Valves

Design

The Waterworks® range of Swing Foot Valves includes the PVC Flanged Foot Valve and the Glass-Reinforced Polypropylene BSP Threaded Foot Valve.

A Foot Valve combines a suction screen and a non-return valve. They are usually positioned at the bottom of a suction line with the screen preventing unwanted debris from entering the pipeline while the non-return valve prevents backflow and allows a pump to retain its prime.

The Waterworks® Foot Valves are designed to optimise flow capacity, provide rapid response, and ensure a reliable shutdown. The PVC Flanged Foot Valve has a robust design, utilising rigid uPVC material with 316 stainless steel components. The GRPP Lever Swing Foot Valves are made from Glass-Reinforced Polypropylene making them high-strength and durable. They also have the addition of 316 stainless steel components including a lever which activates a self-cleaning mechanism allowing you to easily drain the suction line.

Both Foot Valves can be easily disassembled, allowing for easy maintenance.

Sizes

1. PVC Flanged Swing Foot Valve: 100mm, 150mm
2. GRPP Lever BSP Swing Foot Valve: 80mm, 100mm

Pressure Rating

1. Flanged Swing Foot Valve: 100mm - PN10, 150mm – PN6 @ 22°C.
2. Lever Swing Foot Valve: 80mm and 100mm - PN10 @ 22°C.

Standards

Thread: BSP

Flange: Universal Specification

Socket: ANSI, BS, DIN, ISO, JIS, NTP

**Socket connections are available on an indent basis. Contact the Waterworks® team to discuss further.*

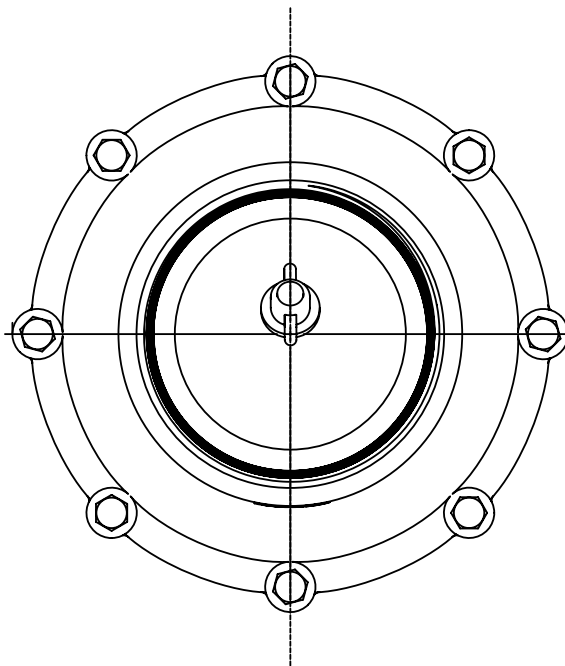
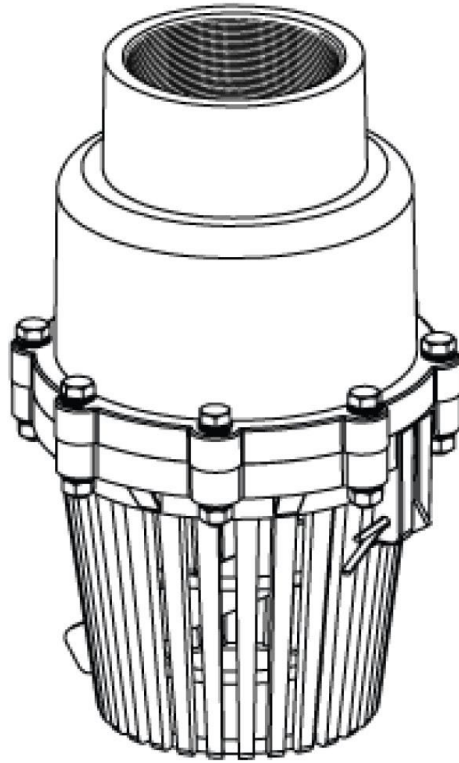
Temperature Range

Working Temperature: 4°C to 40°C

Max Operating Temperature: 60°C

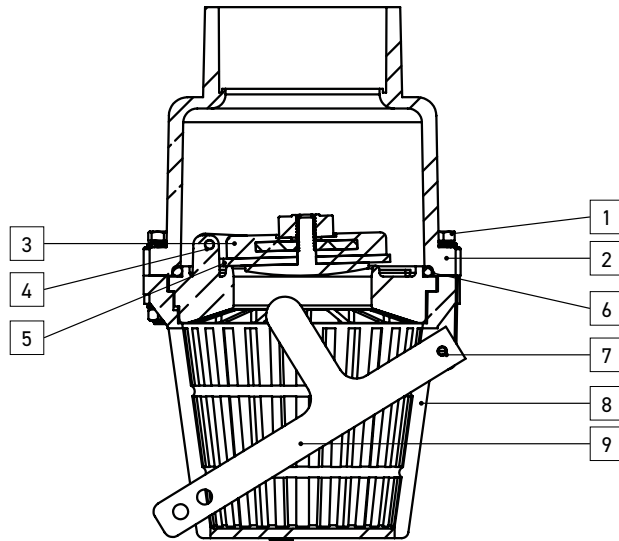
Threaded Lever Swing Foot Valve

Glass Reinforced Polypropylene (GRPP)

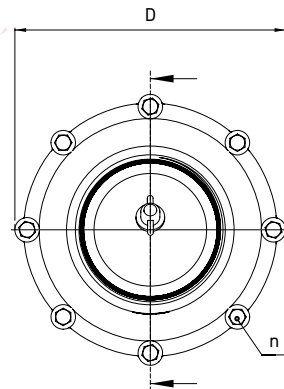


Material Specifications

Threaded Lever Swing Foot Valve



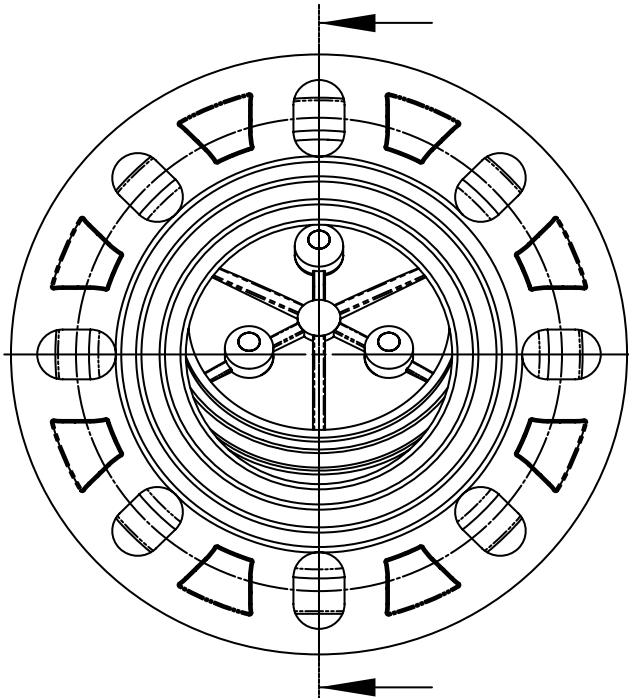
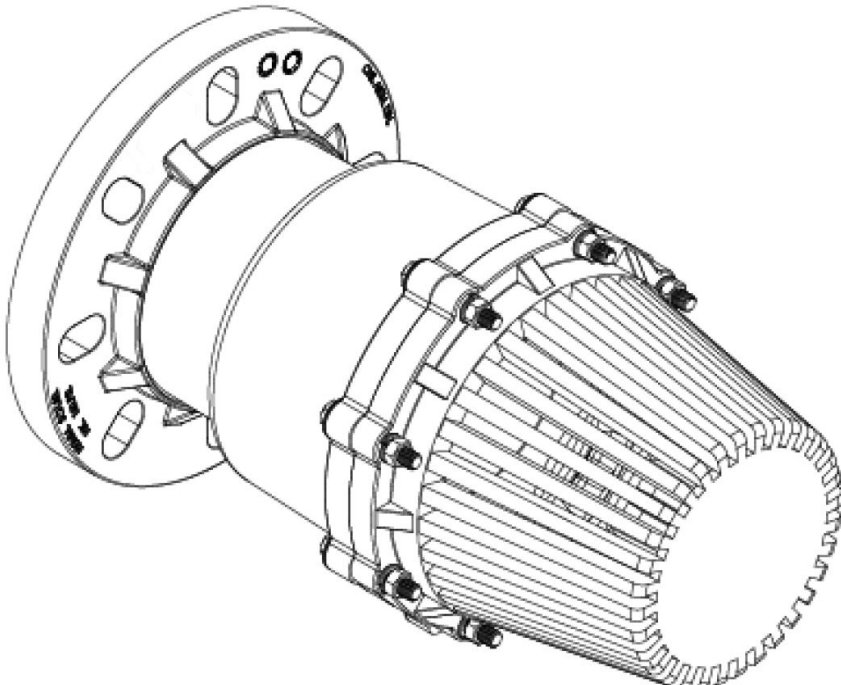
No.	Description	Material
1	Fasteners	316 Stainless Steel
2	Body	GRPP
3	Disc	GRPP
4	Pivot Pin	316 Stainless Steel
5	Gasket	EPDM
6	O-Ring	EPDM
7	Lever Pin	316 Stainless Steel
8	Filter/Screen	GRPP
9	Lever	316 Stainless Steel



Size		L	D	BSPT	Working Pressure
Inch	DN	mm	mm	thd/in	
3"	80	313	164	11	PN10BAR @22°C
4"	100	358	196	11	

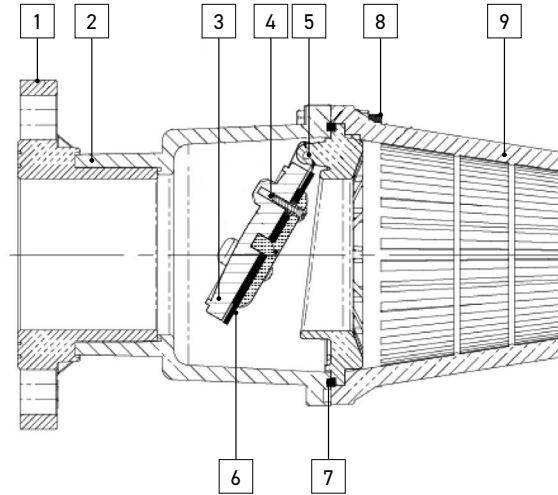
*Universal Flange Bolt Pattern - Suits common flange specs; ANSI, DIN, Table E and JIS.

PVC Flanged Foot Valve

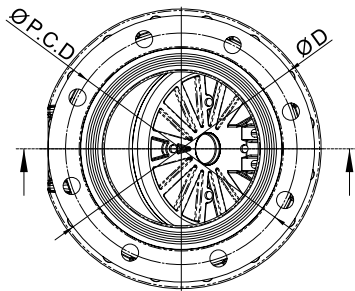


Material Specifications

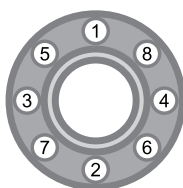
PVC Flanged Foot Valve



No.	Description	Material
1	Flange	PVC
2	Body	PVC
3	Disc	ABS
4	Fasteners	316 Stainless Steel
5	Pivot Pin	316 Stainless Steel
6	Gasket	EPDM
7	O-Ring	EPDM
8	Fasteners	316 Stainless Steel
9	Filter/Screen	PVC

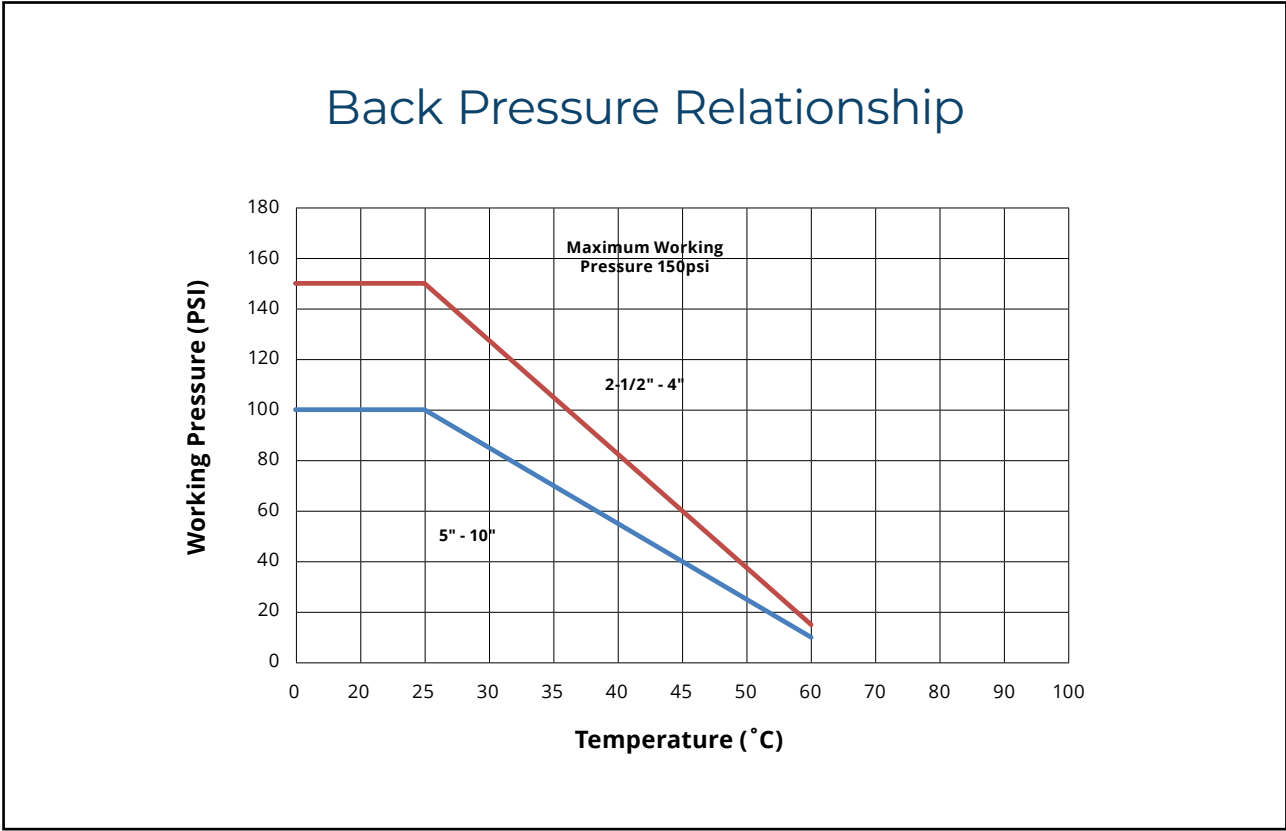


Size		L	D	Working Pressure
Inch	d(mm)	mm	mm	
4"	100	360	229	PN10BAR @22°C
6"	150	488	284	PN6BAR @22°C



Installation Note: The PVC Flanged Swing Foot Valve has a universal Bolt Pattern. When installing flanges, it is crucial to tighten bolts in a sequence that is diametrically opposite to each other to ensure equal tightening as per the picture on the right.

Swing Foot Valve



Cv Factors

Valve Size	Factor
4"	614
6"	1183

Pressure Loss Calculation Formula

$$\Delta P = \left[\frac{Q}{Cv} \right]^2 \quad \Delta P = \text{Pressure Drop} \quad Q = \text{Flow in GPM} \quad Cv = \text{Flow Coefficient}$$



Contact us to discuss your pipeline project 0800 387 677



90 Hurlstone Drive, New Plymouth

p: +64 6 769 6373

e: support@waterworks.nz

www.waterworks.nz