DUAL

ONE STOP SLURRY SOLUTION

DFFV

DUAL FREE FLOW SLURRY BALL CHECK VALVE

DUAL's Free Flow Valve operates on the discharge side of the pump. As the flow through the pipeline starts or stops, the ball automatically rises or falls, opening or closing the valve. This occurs without noticeable shock or hammer, regardless of the line pressure or the speed of closure.

FEATURES

- Long ball life due to ball rotation.
- Long seat life, Seats are out of the flow and can be rotated in line to increase seat life fourfold.
- Easy maintenance. Seat and ball can be inspected or replaced without removing the free flow from the pipeline.
- Virtually maintenance free because of the simple design.
- Rotating and floating ball - self adjusts to flow.
- Self cleaning due to the freely rotating ball.
- Full port opening. No obstruction to the flow.
- Virtually no pressure drop. Eliminates pipe hammer.

PRODUCT SPECIFICATION

- Valve housing is constructed of high quality Carbon Steel. Stainless Steel is an option.
- Valve housing can be Natural Rubber lined. A range of elastomer grades are available for corrosive duties (Urethane or Ceramic).
- Ball is made of hollow Carbon Steel and is Urethane coated. Other elastomers are also available (Stainless Steel for high pressure).
- The seat is made in Abrasive Resistant AR Steel (500 Brinnell hardness), Urethane or Stainless Steel and is replaceable.
- Flanges comply with AS, ANSI, DIN, SABS or BS.
- Working pressure standards are 16, 25, 40, 80 and 100 Bar.
- Operating temperature to 80°C. Higher conditions are possible if the valve is constructed from suitable material.
- The Free Flow Valve can work in the horizontal and vertical position.
- Flushing ports are fitted to the upper ball body.
- **SIZE RANGE:** 80mm to 600mm.

MINING APPLICATION (300mm - 25 Bar)

DFFV

FULLY AUTOMATIC OPERATION

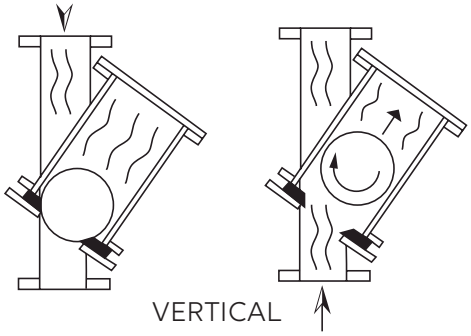
CLOSED OR REFLUX POSITION

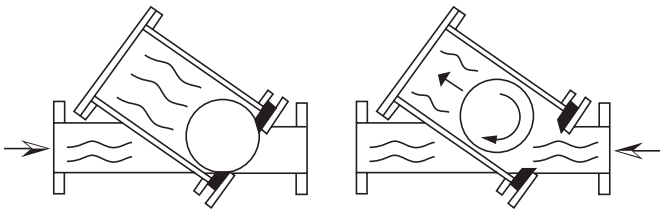
When installed the ball falls automatically into a closed position, this is possible both horizontal and vertical pipes.

START UP AND CLEANING OF THE BALL CHAMBER

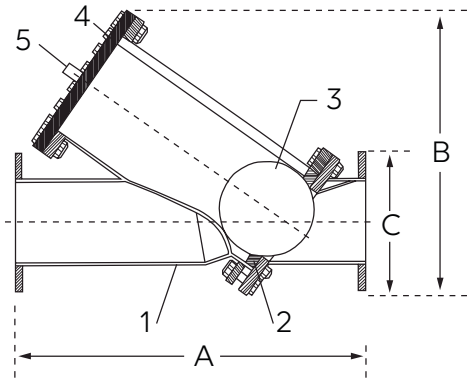
As the pressure on the upstream side of the valve exceeds that of below the valve, the ball rises and starts to turn, cleaning the ball body.

FREE FLOW VALVES IN THE FACTORY





DIMENSIONS AND SPECIFICATIONS



APPLICATIONS

- Mining and mineral processing.
- Power generation.
- Sand and gravel.
- Chemical and soda ash.
- Pulp and paper.
- Environmental and effluent.

VALVE SIZE mm	A	B	C	WEIGHT (kg)
80	500	300	200	80
100	640	400	235	120
150	780	440	300	200
200	930	560	350	250
250	1070	720	423	370
300	1120	930	485	440
350	1460	930	555	500
400	1680	1150	597	950
450	1680	2000	635	980
500	1680	2000	698	1200
600	1880	2500	698	1500

	PART	DESCRIPTION
1	Body	Carbon Steel / Stainless Steel
2	Body Seat (Replaceable)	Abrasion Resistant AR Steel, S.S. or Urethane
3	Ball (Replaceable)	Solid S.S. or Steel W/Urethane or Viton Coating
4	Cover Plate	Carbon Steel / Stainless Steel
5	Flushing Port	Carbon Steel / Stainless Steel

Dimensions and weights are for guidance only - detailed dimension drawings available on request. All Dimensions are in millimeters, unless stated.

CHAIRMAN'S AWARD 1985 FOR EXCELLENCE

1985 DESIGN INSTITUTE Shell Design Award

DFFV

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