



# DUAL VALVE (DFV)

The **DUAL** 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. The handwheel is there to lock the ball in position. The handwheel can be used to isolate, but with back pressure. The Dual valve can work in the horizontal and vertical position.



## FEATURES

The Dual Valve is the only proven maintenance and trouble-free slurry valve in the world with all these features

- Rotating and floating ball which self-adjusts to flow.
- Self-cleaning, due to the freely rotating ball.
- Long ball life, due to ball rotation.
- Replaces two valves: check valve and either a gate, knife gate, pinch or diaphragm valve.
- Full port opening - no obstruction to the flow.
- Virtually no pressure drop which eliminates water hammer.
- 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 Dual Valve from the pipeline.
- Indicator to show valve in open or closed position.

- Virtually maintenance free because of the simple design.
- Simple manual operation - manual handwheel is standard and automatic actuators are not required (but can be fitted).

## 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 is available for corrosive duties (URETHANE, Ceramic, etc.)
- 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 special Abrasion Resistant AR Steel (500 Brinnell hardness), URETHANE or Stainless Steel and is replaceable.
- Flanges comply with AS, ANSI, DIN, SABS or BS.
- The ball locking spindle mechanism is made in stainless steel as standard.
- Working pressure standards are: 16, 25, 40, 60, 80 and 100 bar
- Operating temperatures to 80°C. Higher conditions are possible if the valve is constructed from suitable material.

**FLUSHING PORT:** All valves have a minimum of one purge: one in lower body and one in bonnet area.

**PVC BELLOWS:** Optional.

## MINING APPLICATION



## FULLY AUTOMATED OPERATION

### Fully open position

With the handwheel wound up the ball lifts completely out of the flow.

### Closed, or reflux position

As the flow reduces and the pressure drops the ball falls and positively locates in the seat.

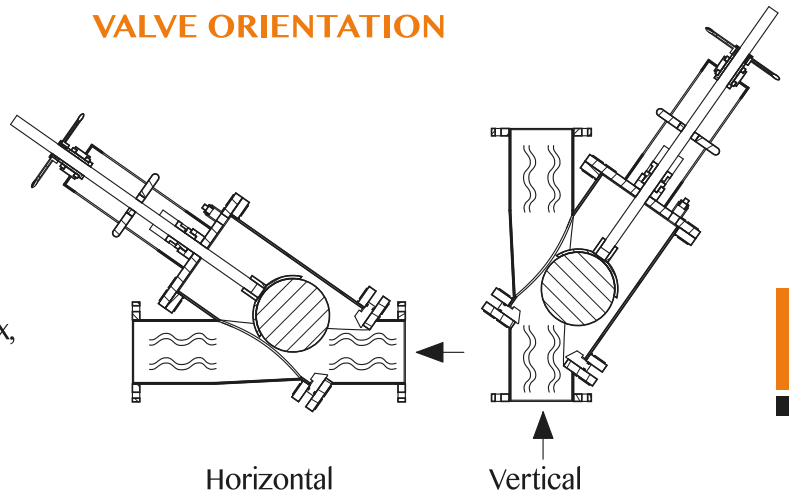
## ACTUATORS

All types of actuators can be fitted, electric, gearbox, hydraulic, pneumatic and handwheel.

## APPLICATIONS

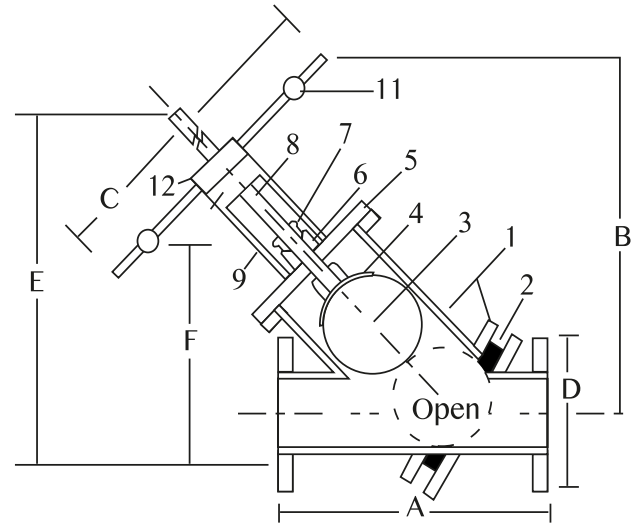
- Mining and mineral processing
- Power generation
- Sand and gravel
- Chemical and soda ash
- Pulp and paper
- Environmental and Effluent

## VALVE ORIENTATION



## DIMENSIONS AND WEIGHTS

|    | PART          | DESCRIPTION                                     |
|----|---------------|---|
| 1  | Body          | Carbon Steel / Stainless Steel                  |
| 2  | Body Seat     | Abrasion Resistant AR Steel, S.S. or Urethane   |
| 3  | Ball          | Solid S.S. or Steel W/Urethane or Viton Coating |
| 4  | Ball Control  | Mild Steel / Stainless Steel                    |
| 5  | Bonnet        | Mild Steel / Stainless Steel                    |
| 6  | Packing       | Graphite in Rope                                |
| 7  | Gland         | S.S./Carbon Steel                               |
| 8  | Spindle       | Stainless Steel                                 |
| 9  | Yoke Assembly | Mild Steel / Stainless Steel                    |
| 10 | Spindle Nut   | Bronze  |
| 11 | Handwheel     | Carbon Steel / Stainless Steel                  |
| 12 | Handwheel Nut | Carbon Steel / Stainless Steel                  |



| SIZE (MM) | F/F A | B    | C    | D   | E    | F    | WEIGHT (KG) |
|-----------|-------|------|------|-----|------|------|-------------|
| 80        | 500   | 420  | 300  | 200 | 390  | 300  | 83          |
| 100       | 640   | 590  | 350  | 235 | 640  | 400  | 120         |
| 150       | 780   | 780  | 740  | 300 | 840  | 440  | 215         |
| 200       | 930   | 1020 | 840  | 350 | 1050 | 560  | 300         |
| 250       | 1070  | 1220 | 840  | 423 | 1170 | 720  | 370         |
| 300       | 1120  | 1220 | 840  | 485 | 1500 | 930  | 440         |
| 350       | 1460  | 1420 | 990  | 555 | 1580 | 930  | 500         |
| 400       | 1680  | 1560 | 990  | 597 | 1900 | 1150 | 760         |
| 450       | 1680  | 1662 | 990  | 635 | 2300 | 2000 | 870         |
| 500       | 1680  | 1900 | 1220 | 698 | 3302 | 2000 | 1500        |
| 600       | 1880  | 1900 | 1220 | 698 | 3302 | 2000 | 2000        |

Contact Dual Valves for larger sizes. Dimensions are for guidance only - detailed dimension drawings available on request. All dimensions are in millimeters, unless stated.



CORPORATE HEADQUARTERS:  
C/O ROTTERDAM & ANTWERP AVENUE  
BENONI, SOUTH AFRICA

**DUAL**  
PRODUCTS INTL. (SA) C.C.

[www.dualvalves.com](http://www.dualvalves.com)

PO BOX 12520, BENORYN 1504  
TEL: +27 11 422 4326/7  
FAX: +27 11 421 7842  
email: [sales@dualvalves.com](mailto:sales@dualvalves.com)

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