

### DUAL PNEUMATIC DIAPHRAGM VALVE



WEIR TYPE

#### FEATURES

- Valve can be installed in any position.
- Housing acts as a built in indicator.
- Long operating life.
- Full bore, low friction loss.
- 100% Drip tight closure even with solids in the medium.
- Light weight.
- Seals in both directions.
- High flexible diaphragm design reducing closing forces, improves recovery to full open position.
- Enclosed body protects diaphragm from the environment and contaminants in the event of diaphragm failure.
- Fast and easy diaphragm change.
- Single wearing part.
- No glands which require regular adjustment.
- Pneumatic or hydraulic medium can be used to operate the valve.

**DUAL's** Pneumatic Diaphragm Valve consists of a tough but flexible Diaphragm in an enclosed body. Actuated by means of air or hydraulic fluid, the valve acts as an actuator. When the media is introduced, the sleeve is compressed and forming a complete and effective seal. All bodies and bonnets are made from a high grade SG 42 Cast Iron or Cast Aluminium and is suitable for lining with various Rubber, Urethane, Ceramic, Halar and Butyl.

#### PRODUCT SPECIFICATION

**BODY:** Cast Aluminium, Cast SG42, Cast Iron or Stainless Steel.

**DIAPHRAGM:** Gum Black or Red Rubber, EPDM, Butyl, Chlorobutyl, Neoprene, Polyurethane, Viton and Hypalon.

**PRESSURE RATING:** 10 Bar  
(for higher pressures, please consult our factory).

**SIZE RANGE:** 25mm - 350mm.

**VALVE INTERNALS:** Rubber Diaphragm.

**MATERIAL CERTIFICATION:** Certified chemical and physical reports can be supplied.

**VALVE TYPE:** Straight Through Weir.

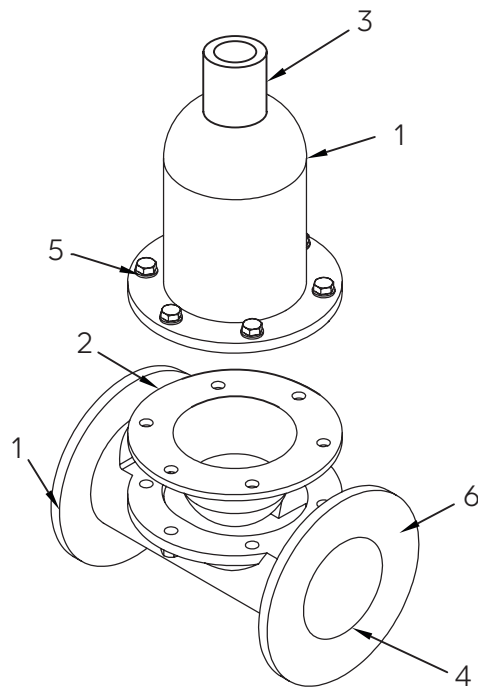
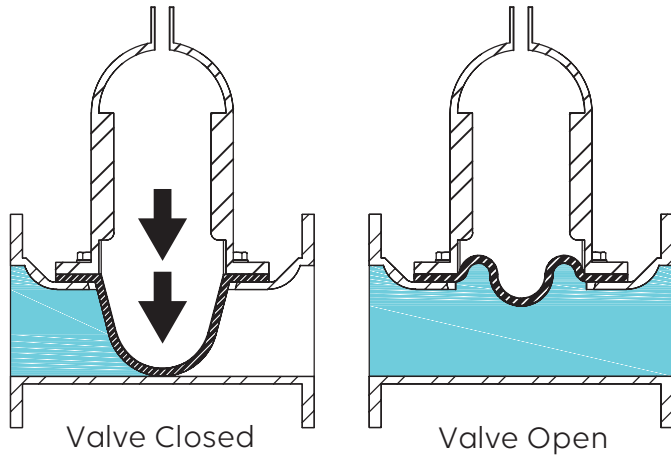
**TEMPERATURES:** -50°C to 140°C.



## HOW THE VALVE OPERATES

The valve closes by means of air or hydraulic pressure placed on the diaphragm through the top of the valve housing. The valve acts as a built-in actuator.

**NOTE:** Air pressure must be vented from the valve to permit opening.



PART	DESCRIPTION
1	Body/Bonnet Cast Aluminium or SG Iron
2	Diaphragm Rubber or Urethane
3	Air Connection Steel Ball Valve
4	Valve Body Lining Rubber, Urethane, Halar or Ceramic
5	Bolts and Nuts Cadmium Plated Steel
6	Paint Epoxy Powder coated, Rilsan Lined or Painted to Custom Spec.

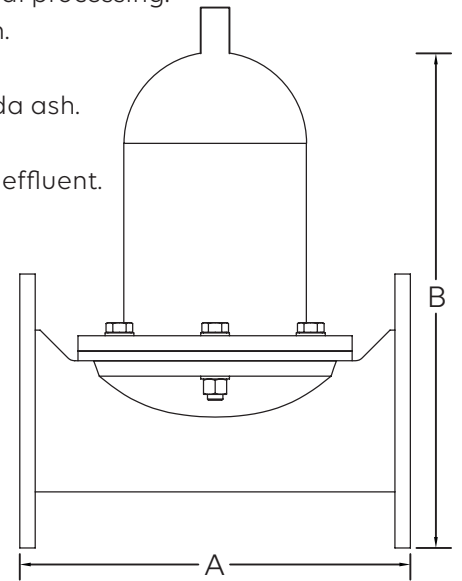
## DIAPHRAGM MATERIAL:

Dual offers the following alternative diaphragm materials, providing chemical and abrasive resistance to most media such as:

- Polyurethane
- Natural Red Rubber
- Natural Black Rubber
- Neoprene Rubber
- Nitrile Rubber
- EPDM Rubber

## APPLICATIONS:

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



## DIMENSIONS AND WEIGHTS

VALVE SIZE (mm)	F/F		WEIGHT (kg)	
	A	B	STEEL	ALUMINIUM
25	127	121	5	2
35	146	121	6	2
40	159	121	10	3
50	191	181	12	4
65	216	200	20	8
80	254	245	30	10
100	305	267	35	12
125	356	305	50	15
150	406	375	70	20
200	521	410	100	30
250	635	559	185	40
300	749	635	200	60
350	980	663	450	100

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



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