



DUAL PNEUMATIC DIAPHRAGM VALVE (DPDV)

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.



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

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.

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

Valve Closed

DIMENSIONS AND WEIGHTS

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
5	Bolts and Nuts
6	Paint