



# DUAL WEIR TYPE (WO-TYPE) DIAPHRAGM VALVE (DWTDV)

**DUAL** manufacture a full range of diaphragm valves. Both WO(Weir Orifice) and SO(Straight Orifice) type. The SO valve can safely handle a line pressure of up to 1600kPa(16 Bar) and they are tested to 2500kPa(25 Bar). All bodies and Bonnets are made from high grade SG42 cast iron and are suitable for lining with various rubber, urethane, ceramic, Halar and Fluoropolymers like PTFE and ECTFE.



## 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

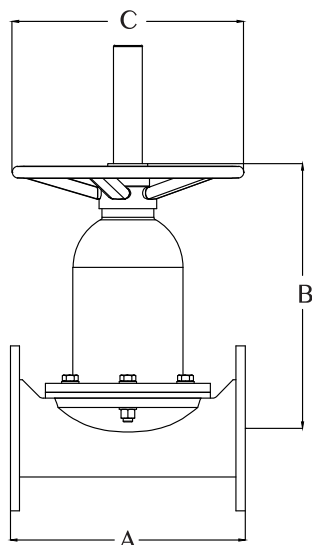
- No glands which require regular adjustment
- Pneumatic or hydraulic medium can be used to operate the valve
- Ideal for remote operations

## PRODUCT SPECIFICATION

<b>BODY:</b>	Cast Aluminium, Cast SG42 and Cast Iron
<b>DIAPHRAGM:</b>	Gum Black or Red Rubber, EPDM, Butyl, Chlorobutyl, Neoprene, Polyurethane, Viton and Hypalon.
<b>PRESSURE RATING:</b>	16 Bar (for higher pressures, please consult our factory).
<b>SIZE RANGE:</b>	50mm - 350mm.
<b>THRUST BEARINGS:</b>	To reduce operating torque (handwheel type).
<b>FLANGED:</b>	Drilled to SABS, ANSI, BS or DIN.
<b>VALVE INTERNALS:</b>	Spindle, Spindle nut, Compressor, Diaphragm.
<b>BODY LININGS:</b>	EPDM, Butyl, Neoprene, ECTFE, Halar and Polyurethane.
<b>MATERIAL CERTIFICATION:</b>	Certified chemical and physical reports can be supplied.
<b>TEMPERATURES:</b>	-50°C to +140°C

## HOW THE VALVE OPERATES

The valve cycles downwards, the pinch mechanism will start to compress the soft rubber diaphragm from the top of the valve only, therefore achieving a 100% drip tight enclosure, with solids in the medium.



## DIMENSIONS AND WEIGHTS

VALVE SIZE (mm)	F/F		WEIGHT (kg)		
	A	B	C	STEEL	ALUMINIUM
25	127	121	80	5	2
35	146	121	80	6	2
40	159	121	80	10	3
50	191	181	300	12	4
65	216	200	300	20	8
80	254	245	300	30	10
100	305	267	400	35	12
125	356	305	400	50	15
150	406	375	400	70	20
200	521	410	500	100	30
250	635	559	500	185	40
300	749	635	600	200	60
350	980	663	600	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.

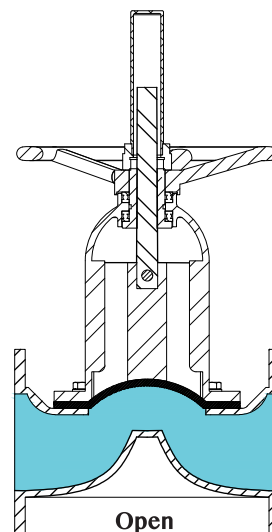
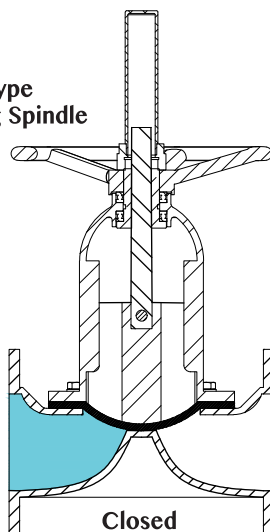
## APPLICATIONS:

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

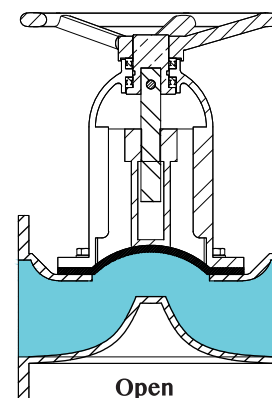
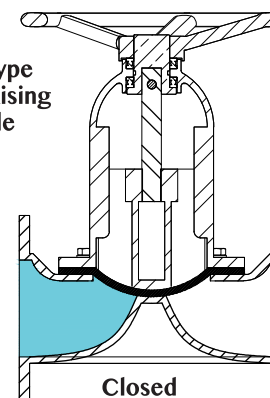
## ACTUATORS:

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

WO Type  
Rising Spindle

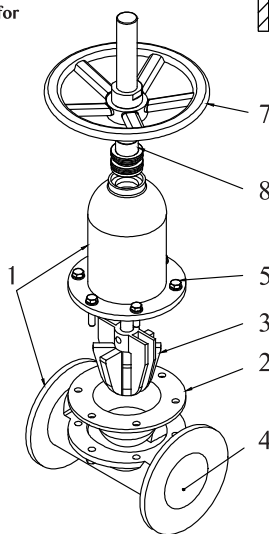


WO Type  
Non Rising Spindle



## VALVE DIAPHRAGM:

GRADE	MATERIAL
NA	Natural Rubber
Ni	Nitrile Rubber
BY	Butyl
NE	Neoprene
HY	Hypalon
V	Viton
PU	Polyurethane



PART	DESCRIPTION
1	Body/Bonnet
2	Diaphragm
3	Air Connection
4	Valve Body Lining
5	Bolts and Nuts
6	Paint
7	Hand wheel
8	Rev Nut