



DUAL ROTARY DISC VALVE (DRDV)

DUAL's Rotary Disc Valve is a unique rotating gate valve designed specifically for heavy abrasive and corrosive slurries. The patented design allows the valve to cycle in heavy slurries without sticking.



FEATURES

- No blocking or leakage.
- Disc can be replaced in situ.
- No sticking, (due to no guides).
- Long wear life, (due to rotating gate/disc).
- Self clearing gate action.
- Seals in both directions.
- Wedge for positive seal.
- Cut away to clean seating area.
- Fabricated valves can be repaired in line.
- Seal out of flow when in open position.
- Rising or non-rising spindle.
- Back Seat to repack gland packing under pressure.

PRODUCT SPECIFICATION

- VALVE BODY:** Fabricated Carbon Steel for valves larger than 300mm, Cast SG Iron, High Chrome or Stainless Steel
- MATERIAL:** Gate material can be carbon steel, Abrasion Resistant AR Steel, Cast High Chrome or Stainless Steel.
- THICKNESS:** Gate to have a minimum safety factor of 2:1 based on yield strength of material.
- SHAPE:** Gate radius to be set for minimum valve height in chest area. Gate is round with metal, rubber or urethane seal.
- THRUST BEARINGS:** To reduce operating torque.
- CERTIFICATION:** All wetted parts have certified chemical and physical test reports.
- MATERIALS:**
- TESTING:** All valves are tested per SABS specifications certified.
- PRESSURE RATING:** 10 bar to 100 bar (150Psi to 1500Psi)
- FLANGES:** Flanges comply with AS, ANSI, DIN, SABS or BS.
- FACE-TO-FACE:** To suit customer specification.
- LIFTING LUGS:** Valves have lifting lugs/holes sized and located for safe hoisting of valve assembly.
- BODY LINING:** Rubber, Urethane or Ceramic.

VALVE OPERATION

As the handwheel is opened or closed, the disc rotates. This happens due to the pressure pushing against the disc, causing the disc to touch the valve body and rotate. As the valve is cycled, the disc rotates 100mm, seating in a different position each time. The valve body has a cutaway behind the disc clearing debris away and thus, ensuring the disc closes and seals.

ASH APPLICATION (FABRICATED VALVES)



VALVE FLEXIBILITY

The very nature of fabricating the large valves allows a maximum of flexibility in customizing to meet specific needs, materials, pressure rating configuration. The body is made of carbon steel and can be made out of different materials to suit the customer. The bonnet houses the rotating disc and seals around the spindle.

ACTUATORS

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

DIMENSIONS AND SPECIFICATIONS

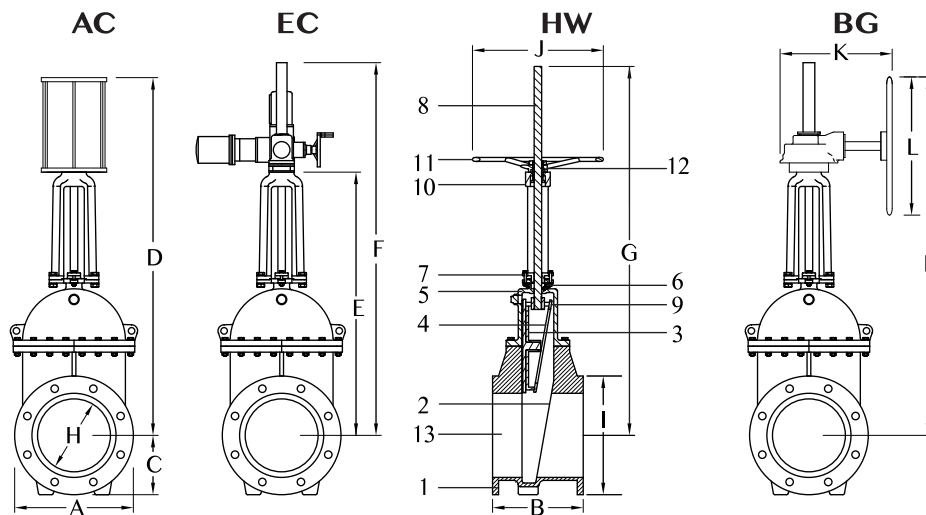
APPLICATIONS

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

ACCESSORIES

- Dust covers and PVC bellows to protect spindle.
- Flushing ports.

	PART	DESCRIPTION
1	Body	Carbon, Cast SG Iron, Steel/Stainless Steel
2	Body Seat	Abrasion Resistant AR Steel, Urethane, Rubber
3	Disc	Stainless Steel or Other
4	Wedges	Mild Steel/Stainless Steel, Cast SG Iron
5	Bonnet	Mild Steel/Stainless Steel, Cast SG Iron
6	Packing	Graphite in Rope
7	Gland	S.S./Carbon Steel, Cast SG Iron
8	Spindle	Stainless Steel
9	Yoke Assembly	Mild Steel/Stainless Steel
10	Spindle Nut	Bronze
11	Handwheel	Cast SG Iron/Stainless Steel
12	Handwheel Nut	Carbon Steel/Stainless Steel
13	Body Lining	Rubber, Urethane or Ceramic



VALVE IN FULLY OPEN POSITION

VALVE SIZE	A	F/F B	C	AC D	EC E	BG F	HW G	H	I	J	K	L	WEIGHT (kg)
50	170	216	85	559	300	370	550	50	170	300	350	300	50
80	200	229	100	659	370	440	542	80	200	300	350	300	80
100	220	254	110	710	380	470	695	100	220	400	350	400	90
150	285	280	142	1003	610	661	900	150	285	500	350	400	90
200	340	317	170	1224	770	845	1104	200	340	500	350	400	100
250	405	356	202	1411	905	1014	1360	250	405	500	350	400	250
300	460	380	230	1615	1012	1120	1560	300	460	500	350	400	300
350	520	470	260	1745	1140	1230	1840	350	520	600	350	500	450
400	580	470	290	2016	1280	1355	1940	400	580	600	350	500	500
450	640	485	320	2300	1487	1600	2180	450	640	700	500	500	600
500	720	510	360	2579	1690	1706	2350	500	720	700	500	500	720
600	840	600	450	2750	1785	1885	2800	600	840	700	500	500	900

Weights are for guidance only - detailed dimension drawings available on request. All dimensions are in millimeters, unless stated.