

# Valves

# Handling the world's dry bulk solids®

### VORTEX<sub>®</sub> HDP<sub>®</sub> SLIDE GATE™

The unique "rising" blade design of the patented Vortex® HDP® Slide Gate sets itself apart from traditional industry slide gates by providing positive material shut-off in applications. The HDP® offers the durability and efficiency required to meet today's material processing demands. Traditional slide gates or butterfly valves are designed to handle gases and liquids, <u>not</u> dry materials. These valves rely on soft seals susceptible to blast abrasion and material packing, eventually allowing leakage of air and material through the valve or to the atmosphere. This causes the need for frequent valve maintenance, production inefficiencies, and unsanitary plant environments. The Vortex® HDP® Slide Gate is designed to prevent these problems, enabling you to meet your objectives by increasing production, while decreasing labour and equipment costs.

#### **Vortex® HDP® Slide Gate Features**

- Designed to Handle Abrasive or Sticky Materials
- Positive Seal of Conveying Air and Fine Powders
- Seals Protected from Abrasion
- Long Service Life
- Easy Installation and Maintenance

Valve Specifications	
Size/Bore Options	100mm to 400mm Diameters
Media	Powder, Pellets, Granulars
Connection	ANSI, DIN, JIS, Custom Flanges
MediaTemperature	Up to 121°C continuous to 149°C intermittent service, Modifications allow up to 204°C continuous to 232°C intermittent service
Media Pressure	Up to +0.5 MPa, 5 barg, 75 psig, depending on size
Metal Construction Options	304, 316L Stainless Steel, Aluminium, and or Carbon Steel
Seal/Seat Material Options	Nylon, PET, UHMW, Glass Filled Teflon, Rubber, and/or Silicon
Drive/Actuation Options	Double Acting Air Cylinder and Solenoid Operated Air Control Valve
<b>Position Confirmation</b>	Magnetic Reed Switch
Compliance/Approvals	CE, ATEX, FDA
Industry Use	Plastics, Petrochemicals, Chemicals, Foods, Minerals, Textiles, Agriculture









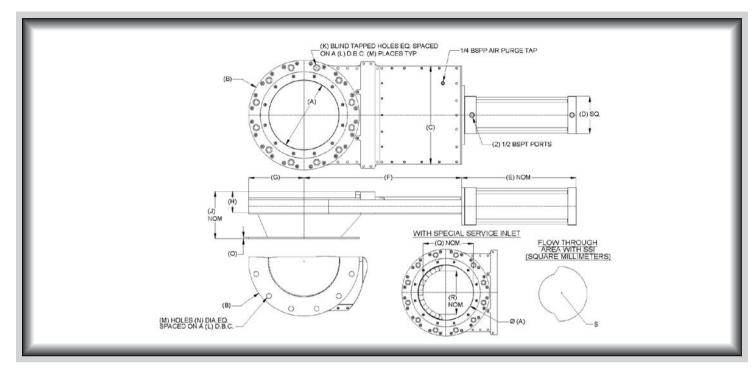
Patent No. 7163191 Patent No. 7163191

#### **Application Specific Modifications**

sc	Material contact is 304 Stainless Steel. Replace HR Carbon Steel Insert Flange and Ring, Upper Main Flange, Forward Liner, Forward Bonnet Seal Retainer, and Outlet Return Pan with 304 Stainless Steel.
S	Material contact is 316L stainless steel. Replace HR Carbon Steel Insert Flange and Ring, Upper Main Flange, Forward Liner, Forward Bonnet Seal Retainer, and Outlet Return Pan with 316LStainlessSteel.
MG	Air cylinder has a magnetic ring, which activates a magnetic reed position indication switch.
PET	PET replaces Nylon for the Blade Support Guides.
DIN	Replace Inlet ANSI pattern Flange with flange pattern to match DIN mounting pattern.
HT4	Modifications are made allowing 204°C continuous to 232°C intermittent service.
SSI	Add welded integral Special Service Inlet to standard Insert Flange and Insert Ring Assembly.



## VORTEX® HDP® SLIDE GATE™ DIMENSIONAL INFORMATION



Model	Α	В	С	D	E	F	G	Н	J	K	L	M	N	0	Q	R	s	WT (kg)
HDP100	100	229	229	130	266	349	114	95	197	M16-2.0 x 18	180	8	18	6	95	51	195	34
HDP150	150	279	279	140	324	422	140	95	197	M20-2.5 x 25	240	8	22	6	127	98	522	46
HDP200	200	343	330	140	362	508	171	95	197	M20-2.5 x 25	295	8	22	6	178	146	1010	60
HDP250	250	406	381	165	449	603	203	95	197	M20-2.5 x 25	350	12	22	6	229	197	1659	80
HDP300	300	483	432	165	500	689	241	95	210	M20-2.5 x 25	400	12	22	6	295	244	2467	102
HDP350	350	533	521	216	557	803	267	117	232	M20-2.5 x 25	460	16	22	13	333	295	3410	155
HDP400	400	597	572	216	621	918	298	117	232	M24-3.0 x 32	515	16	26	13	384	343	4536	193

All dimensions are in mm, Information subject to change without notice.