



ABRASIVE FLOW SOLUTIONS



O-PORT SLURRY GATE VALVE

AFS's O-Port Gate Valve has a Stainless Steel gate machined with a round orifice port, in line with seat ID when the valve is in the open position. When the valve is closed the ported gate will move downwards sealing the port. Due to the seal being constantly engaged against the gate, stroking the valve closed forces the gate progressively between the two matching sleeve ends until it reaches the fully closed position - at which point the sleeves each butt up tightly against either side of the gate, effectively sealing and completely containing the line pressure. Build up of material to prevent full gate travel is eliminated as there are no areas for such material to accumulate. Any material discharged between the sleeves during stroking open or closed is collected within the containment area of the valve body and drained via the multiple flushing ports in the body. The Ported Gate Valve can be used as a man-safe line blanking valve.

Product Specifications:

Size Range:	50 - 600mm (2"-24")
Valve Type:	Slurry Knife Gate
Body Style:	Narrow Body (Wafer)
Gate Material:	17-4H Stainless Steel, 316L Stainless Steel, 2205 Duplex Stainless Steel, 2507 Duplex, Stainless Steel, C276 HASTELLOY, Fluoro-carbon coated.
Temperature Range:	-80°C (176°F)
Pressure Rating:	Up to 240psi (16 Bar)
Body Material:	Cast Ductile Iron, Stainless Steel and 2 Coat Epoxy Painted
Sleeve Material:	Gum Rubber, High-Temp EPDM, Neoprene, Nitrile, Chlorobutyl
Threaded Body:	25-80mm
Flanged body:	Drilled to SABS, ANSI, BS or DIN
Duty:	Abrasive applications
Hydro-Static Test:	1.5 Times the rated pressure

Features:

- 300 Psi (25 Bar).
- Double seat design for heavy duty slurry service.
- Ease of replacement of seat ring sleeves.
- Quick installation.
- Self cleaning.
- Bubble tight shutoff.
- No clogged bonnet to impede flow.
- External epoxy coated.
- Easily adapted to suit most actuators.
- Low maintenance requirements.
- Suitable for wet or dry service.
- Bi-directional flow.
- Open/closed indicator sleeve.
- Wide range of elastomers available.
- Light weight for easier handling.
- No seat cavity where solids can collect and prevent full gate closure.
- Lock out feature.



How the Valve Operates

Matching rubber ring sleeves with stiffener rings are placed in the valve housing to seal against the gate when the valve is closed. This tight seal contains the high internal line pressure. Double seated design provides bi-directional flow and shut off.

Actuators

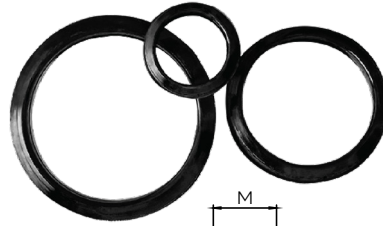
All types of actuators can be fitted; electric, gearbox, hydraulic, pneumatic and handwheel.

Applications

The valve is suited for mining and mineral processing, power generation, sand/gravel, chemical & soda ash, pulp & paper, environmental & effluent, dry feeds, coal, Alumina, Phosphate & General industry.

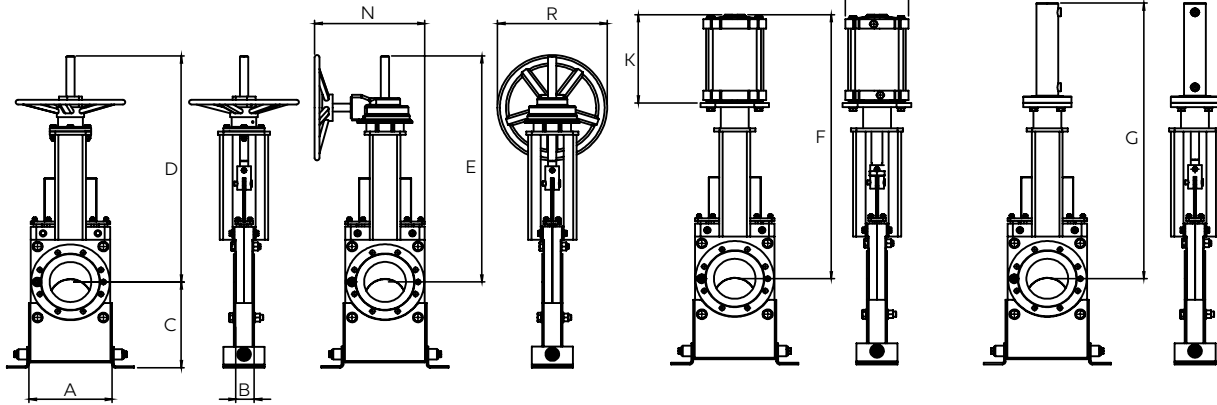
Accessories

- Limit switches
- PTFE blade coating
- Various blade materials
- Gate safety guards
- Deflector cone
- Splash Guard



Rubber & Urethane Sleeves

Dimensions & Weights



VALVE SIZE (mm)																VALVE WEIGHT (kg)			
	A	B	C	D	E	F	G	H	J	K	M	N	PØ	RØ	HW	BG	AC	HYC	
50	175	54	102	487	563	540	560	47	51	191	133.4	384	300	300	20	30	35	30	
80	203	58	124	568	611	627	640	71	76	222	162.3	400	300	300	25	35	40	40	
100	244	58	139	621	639	667	693	97	102	267	175.5	422	300	300	35	45	50	55	
150	279	64	146	748	838	803	825	147	152	320	231.9	449	500	500	40	50	65	60	
200	343	76	179	888	924	939	962	196	203	375	261.9	478	500	500	65	75	90	75	
250	416	76	209	1043	1125	1115	1138	247	254	444	339.9	604	500	500	90	100	150	100	
300	483	83	248	1207	1207	1273	1290	299	304	518	341.6	740	600	600	170	180	230	150	
350	535	83	274	1340	1340	1369	1372	329	337	573	374.7	765	600	600	200	210	300	170	
400	603	96	302	1435	1435	1500	1504	381	387	622	374.7	790	700	700	240	250	340	240	
450	648	96	324	1680	1680	1728	1740	432	440	669	431.8	790	700	700	260	270	390	285	
500	711	121	368	1823	1823	1878	1882	483	489	712	479.6	790	700	700	330	340	530	340	
600	838	121	419	2162	2162	2216	2235	589	600	889	479.6	878	700	700	480	490	720	520	
650	934	125	445	-	-	-	2494	597	624	934	500	-	-	-	-	-	993	773	
750	1054	125	515	-	-	-	2748	679	737	1054	550	-	-	-	-	-	976	976	
900	1226	130	600	-	-	-	3320	810	890	1226	550	-	-	-	-	-	1588	1588	
1000	1435	130	690	-	-	-	3898	972	1044	1435	700	-	-	-	-	-	2359	2359	
1200	1600	160	770	-	-	-	4312	1117	1160	1600	700	-	-	-	-	-	3162	3165	
1400	1710	228	860	-	-	-	4655	1244	1320	1710	700	-	-	-	-	-	3755	3755	
1500	1955	228	980	-	-	-	4780	1455	1525	1850	700	-	-	-	-	-	4000	4500	

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

