Stock® Knife Gate Valves
Material isolation in harsh environments

- **NFPA compliant at 50psi / 3.5 barg**
- **Manual, electric or pneumatic operator**
- **Low profile design**
- **Fully retractable gate**
- **Tungsten carbide coated wear surfaces**
- **Gate seating cam(s)**
- **Adjustable, high temperature packing**

Stock® Knife Gate Valves (KGVs) are designed and manufactured in accordance with the National Fire Protection Association (NFPA) standard. The standard requires dust tight burner line isolation at the pulverizer and at the burners to provide safety during the operation and maintenance of pulverized fuel firing systems. Because of their positive shut-off capabilities, KGVs are vital for isolation in the burner line between a burner and pulverizer. This ability to isolate portions of the burner line allows routine maintenance to be performed safely.

KGVs are specially designed for extreme service. These valves are also used for the isolation of material feed downspouts located between the feeder and pulverizer, allowing safe access and maintenance of the feeders without exposure to dangerous hot air. The KGV is suitable for the adverse conditions experienced in power plants and bulk material handling applications with operating temperatures up to 700 °F / 370 °C with upgrade options available to 1000 °F / 540 °C.

KGVs are designed to handle high velocity material dust contamination, limited maintenance access, and infrequent valve operation. These valves will maintain operational integrity after continuous exposure to internal flow of high velocity material and air mixture. KGVs meet the NFPA requirements for containment of explosion pressures.

KGVs feature a low profile that adapts to new installations or retrofits. To isolate a pipe, the actuator turns the screw, which slides the knife gate into the pipe. As the valve closes, the gate seating cam lifts the gate into the seating surface for a dust tight seal. The packing gland keeps any dust from leaking out of the valve, and the tungsten carbide surface treatment slows valve surface wear. When retracted, no portion of the gate remains in the pipe, so the flowing coal does not wear the gate. Because of the tight seal provided by the gate seating cams, there is minimal leakage of gas, so workers can maintain the pulverizer without being subjected to extreme hot gases and dust.

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Features of Stock® Knife Gate Valves

Low profile design
Maintains 2-1/2 in / 63.5 mm or 3 in / 76 mm flange-to-flange dimension to minimize space requirements. Adapts easily to new installations and retrofits.

Fully retractable gate
Stainless steel gate is resistant to corrosion and is polished to prevent damage to packing seal.

Gate plow
Cleans material from the gate guide during gate closure to prevent binding.

Tungsten carbide coated wear surfaces
Protects the internal surface from abrasion to provide extended service life.

Gate seating cam(s)
Forces gate into a dust tight, metal-tometal seal to minimize leakage.

High temperature finish
Protects the exterior surface from rust and corrosion, even at high temperatures.

Adjustable, high temperature packing
Provides for external adjustments of the packing to compensate for wear. The packing is suitable for temperatures up to 700 °F / 370 °C.

Special fabrication
Metals, packing and paint can be used for operating temperatures up to 1,000 °F / 540 °C.

Manual Actuation
Standard hand-wheel or stub shaft operator

Pneumatic Acuation
Optional operators include stub shaft (for use with pneumatic wrench), pneumatic cylinder, and electric motor actuator

Electric Actuation
Rotary electric actuator with hand-wheel override

Self-cleaning actuator
As operating screw rotates, thread-cutting nut on gate cleans dust from screw and minimizes operating force on manual and electric actuators.

Anti-friction thrust bearing
Aligns and supports the actuator screw, reducing operating axial forces on manual and electric actuators.

Complete pneumatic control packages
Limit switches and solenoid valves can be piped and wired for immediate connection to power and control sources.

Standard bolting flanges
Bolts to ANSI standard flanges for easy installation.

Special dimensions
Bolting patterns and valve sizes can be designed to fit most custom and lined pipes.

Complete factory support
Application assistance, Stock Equipment field service, and one-year warranty ensures complete satisfaction.

Model	Nominal Size		Standard ID		Flange OD		Valve Body Thickness	
	in.	mm	in.	mm	in.	mm	in.	mm
BLV 12	12	300	12,00	304,8	19,00	482,6	2,50	65,0
BLV 14	14	350	13,25	336,6	21,00	533,4	2,50	65,0
BLV 16	16	400	15,25	387,4	23,50	596,9	2,50	65,0
BLV 18	18	450	17,25	438,2	25,00	635,0	2,50	65,0
BLV 20	20	500	19,25	489,0	27,50	698,5	2,50	65,0
BLV 22	22	550	21,25	539,8	29,50	749,3	3,00	75,0
BLV 24	24	600	23,25	590,6	32,00	812,8	3,00	75,0
BLV 26	26	650	25,25	641,4	34,25	870,0	3,00	75,0
BLV 28	28	700	27,25	692,2	36,50	927,1	3,00	75,0
BLV 30	30	750	29,25	743,0	38,75	984,3	3,00	75,0
BLV 32	32	800	31,25	793,8	41,75	1060,5	3,63	90,0
BLV 34	34	850	33,25	844,6	43,75	1111,3	3,63	90,0
BLV 36	36	900	35,25	895,4	46,00	1168,4	3,63	90,0
BLV 38	38	950	37,25	946,2	48,75	1238,3	3,75	96,0

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