

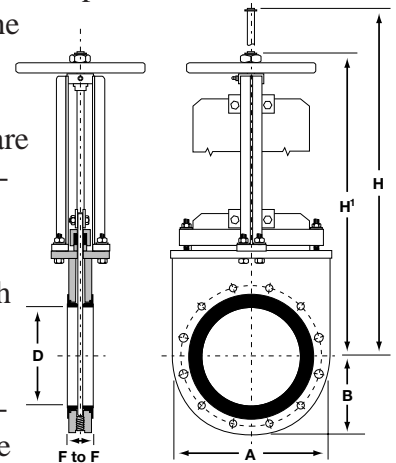
Manual Operated Flexgate



Red Valve's Flexgate Slurry Knife Gate Valve is built with a cast iron or fabricated steel body and features a heavy-duty stainless steel gate. Removable rubber cartridge seats on either side of the gate provide a bi-directional seal and excellent wear resistance. The seats are metal reinforced and available in a wide variety of elastomers for abrasion resistance and chemical compatibility. A port at the base of the valve allows for flushing.

The Flexgate Valve provides a bi-directional shutoff. A heavy-duty topworks is standard. The relatively simple design eliminates expensive overhauls, unscheduled shutdowns and costly replacement parts – the only replacement parts are the slurry seats and packing.

Flexgate Valves of 3" - 12" are provided with standard hand-wheel mechanisms featuring cast handwheels, machined 303 stainless steel stems with yoke sleeves and thrust washers designed to reduce operating torque. It is recommended that manual Flexgate Valves 12" and larger be specified with a 4:1 bevel gear actuator to reduce rim pull. Pneumatic and electric operators are available.



Materials of Construction

- ▶ Cast iron body through 30"; fabricated steel 36" - 72"; optional 304SS or 316SS body
- ▶ Gate ASTM A240 T-316
Optional 17-4 pH, Hastelloy C or teflon-coated 316 stainless steel
- ▶ Slurry sleeves available in Pure Gum Rubber, Buna-N, EPDM and Viton®

Valve Size D	F to F	A	B	Height Close H'	Height Open H	Height Pneumatic Actuated C	Stem Diameter	Gate Thickness	Max. Working Pressure (psi)	
									Gate Material	
									316SS	17-4pH
3"	2"	8"	3 7/8"	17 1/8"	20 3/8"	27 1/2"	3/4"	1/4"	150	150
4"	2"	9 1/4"	4 3/4"	18 1/4"	22 5/8"	29 1/2"	3/4"	1/4"	150	150
6"	2 1/4"	11 1/2"	5 7/8"	21 1/16"	27 3/16"	33 1/2"	1"	1/2"	150	150
8"	2 3/4"	14"	7"	26 9/16"	34 9/16"	38 5/8"	1"	1/2"	150	150
10"	2 3/4"	16 3/4"	8 3/8"	32 7/16"	43 5/8"	49 7/8"	1"	1/2"	150	150
12"	3"	20 1/8"	10 1/16"	37"	50 7/8"	55"	1"	1/2"	100	150
14"	3"	21 1/2"	11"	43 5/8"	57 5/8"	59"	1"	9/16"	100	150
16"	3 1/2"	24"	12 1/2"	47 1/2"	63"	63"	1 1/2"	5/8"	100	150
18"	3 1/2"	25 3/4"	13 1/4"	52 5/8"	70"	83 3/4"	1 1/2"	3/4"	100	150
20"	4 1/2"	27 1/2"	13 3/4"	57 15/16"	74 1/8"	*	1 1/2"	7/8"	100	150
24"	4 1/2"	32 1/2"	16"	66 11/16"	86 15/16"	*	1 1/2"	1"	100	150
30"	5"	38 3/4"	19"	88 5/8"	120 5/8"	*	2"	1 1/8"	75	125
36"	5 1/8"	46"	23"	96"	134 7/8"	*	2"	1 1/4"	75	125
42"	5 1/8"	53"	26 1/2"	100"	137 1/4"	*	2 1/2"	1 1/4"	50	75
48"	6 3/8"	59 1/2"	29 3/4"	108 3/4"	154 1/4"	*	2 3/4"	1 1/2"	50	75
54"	9"	66 1/4"	33 1/4"	135"	195"	*	3 1/2"	1 1/2"	40	50
60"	9"	73"	36 1/2"	150"	216"	*	3 1/2"	1 1/2"	30	50
66"	9"	80"	40"	165"	237"	*	4"	1 1/2"	25	50
72"	9 1/4"	86 1/2"	43 1/4"	180"	258"	*	4"	1 3/4"	25	50

* Consult Factory

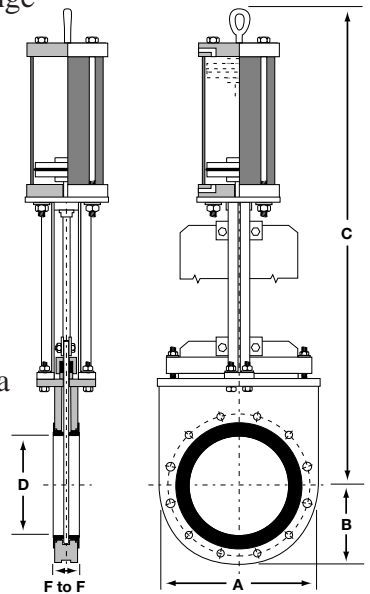
Actuated Flexgate



Red Valve's Flexgate Valves are available with pneumatic, electric or hydraulic actuators. Other options include limit switches, solenoids and air regulators.

The actuated Flexgate provides long-term abrasion resistance under high-cycle conditions. The valve self-cleans each time it is cycled and is ideal for automated operations.

Red Valve manufactures its pneumatic actuators using Black Amalgon, a fiberglass-reinforced epoxy resin. The actuator material is inert to most corrosive chemicals, hydraulic fluids, water and oil. It has an operating temperature range from -90°F to 225°F and can withstand maximum working pressures of 250 psi. Inside actuator walls are polished and impregnated with molydisulfide for reduced friction and wear. The piston seal is a long-lasting O-ring. The piston rod is sealed with a lip seal, which is protected by a rod wiper ring. This wiper ring prevents dirt from being dragged through the seal.



Elastomer Slurry Sleeve Selection *

	Pure Gum Rubber	EPDM	Viton®	Buna-N
Continuous Temperature (°F)	165°	250°	300°	180°
Intermittent Temperature (°F)	185°	300°	400°	240°
Minimum Temperature (°F)	-60°	-60°	-10°	-40°
Abrasion Resistance	Excellent	Excellent	Good	Good

*Consult the Red Valve chemical compatibility charts for final selection.

Valve Size	Working Pressure						Plant Air (psi)
	25psi	50psi	75psi	100psi	125psi	150psi	
3"-4"	RD-4	RD-4	RD-4	RD-4	RD-4	RD-4	60
	RD-4	RD-4	RD-4	RD-4	RD-4	RD-4	80
6"	RD-4	RD-4	RD-4	RD-6	RD-6	RD-6	60
	RD-4	RD-4	RD-4	RD-4	RD-6	RD-6	80
8"	RD-4	RD-6	RD-6	RD-6	RD-6	RD-8	60
	RD-4	RD-4	RD-6	RD-6	RD-6	RD-6	80
10"	RD-6	RD-6	RD-8	RD-8	RD-8	RD-10	60
	RD-4	RD-6	RD-6	RD-6	RD-8	RD-8	80
12"	RD-6	RD-8	RD-8	RD-8	RD-10	RD-10	60
	RD-6	RD-6	RD-8	RD-8	RD-8	RD-10	80
14"	RD-6	RD-8	RD-8	RD-10	RD-10	RD-12	60
	RD-6	RD-6	RD-8	RD-8	RD-10	RD-10	80
16"	RD-6	RD-8	RD-10	RD-10	RD-12	RD-12	60
	RD-6	RD-8	RD-8	RD-10	RD-10	RD-12	80
18"	RD-8	RD-10	RD-10	RD-12	RD-14	RD-14	60
	RD-6	RD-8	RD-10	RD-10	RD-12	RD-12	80

Electric actuators recommended for valve sizes 20"-72".