

## Flowrox Flanged Knife Gate Valve (LKF)



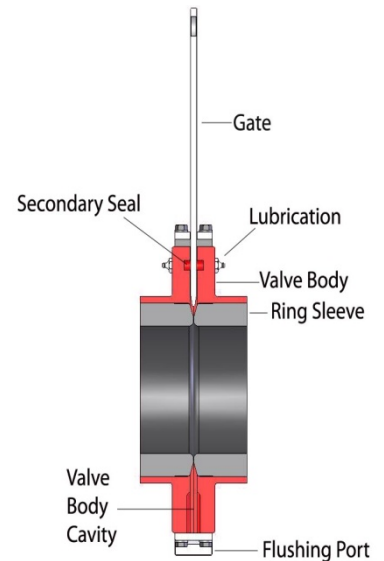
### Features

- Double seat design for heavy duty slurry service
- Easily replaceable ring sleeves
- Full bore
- When open, the knife-gate is fully withdrawn from the slurry flow
- No metal parts in contact with the flowing slurry
- 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
- No packing gland to maintain
- Wide range for elastomer available
- No seat cavity where solids can collect and prevent full gate closure
- Flanged connections

Flowrox Heavy Duty Flanged Knife Gate Valve is built with a cast body and features a heavy-duty stainless steel gate. Removable seats on either side of the blade provide a bi-directional bubble tight seal, with no metal parts in contact with the slurry. LKF is available with pressure rating up to 10 bars.

### Valve Operation

In the open position the two sleeves seal against each other in the centre of the valve, providing a full bore through which the slurry can travel without being in contact with any metallic components. Closing the valve forces the gate progressively down between the two mating sleeve ends until it reaches the fully closed position, at which point the sleeves seal tight against either side of the gate, effectively sealing and completely containing the line pressure. Any material/medium 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.



### Valve Body

- Heavy duty cast body
- Heavy duty yoke frame
- Lubrication ports
- Flushing ports
- Open/closed lockout brackets standard

### Actuators

- Manual
- Manual gear
- Pneumatic
- Hydraulic
- Electromechanical

### How the rubber ring sleeves work

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

## Product Specification

**Body:**  
Wafer pattern SG Iron as standard.  
**Elastomer Sleeves:**  
NR (Standard) Nitrile, others on request

**Pressure Rating:**  
10 Bar, standard (150psi)

**Diameter**  
80-600 mm

**Gate Material:**  
316 Stainless Steel with optional wear coatings.  
Various blade materials optional.

**Stem protection as standard**

**Drilling patterns:**  
DN80 to DN600 drilled and Tapped DIN, ANSI.  
Other in request.

**Flushing port as standard**

**Material Certification:**  
Certified chemical and physical test reports can be supplied

## Applications

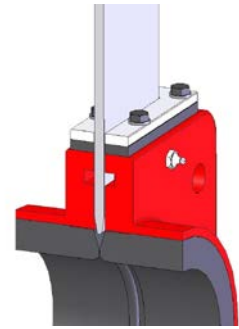
- Mining and metal industries
- Mineral processing
- Power generation
- Sand and gravel
- Chemical
- Pulp and paper
- Water and Wastewater treatment

## Accessories

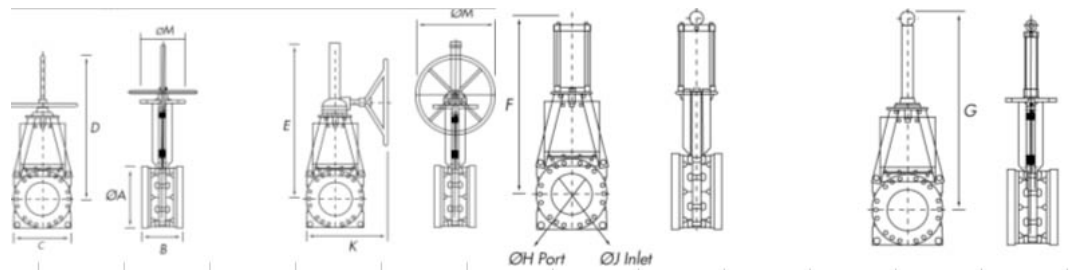
- Limit switches
- Solenoid valves
- Gate guards

## Secondary Seal

The field replaceable elastomer secondary seal replaces conventional gland packing, providing both wiping and lubricating actions to the blade as it strokes - via contact between the blade surface and the silicone grease filled contours of the seal itself. Lubrication of the blade allows for easier actuation and movement. There is no need to remove the valve from the line when replacing the secondary seal.



## Dimension and weights



Valve													Valve Weight (KG)			
	A0	B	C	D	E	F	G	H0	J0	K	M0	M0	HW	BG	AC	HYC
80	191	175	226	481	544	545	624	62	72	403	300	300	23	58	39	23
100	229	175	280	553	593	609	702	85	99	429	300	300	30	65	60	35
150	280	178	331	712	809	676	864	137	148	455	500	500	45	80	85	45
200	343	185	383	836	379	890	974	175	197	483	500	500	64	97	96	64
250	407	226	421	985	1083	1029	1124	231	249	595	500	500	90	125	141	80
300	483	258	534	-	1206	1156	1350	274	293	648	600	600	-	194	304	164
350	536	258	578	-	1355	1358	1469	318	337	671	600	600	-	204	327	188
400	591	280	616	-	1453	1529	1628	356	375	703	700	700	-	260	512	250
450	639	312	674	-	1693	1718	1747	378	426	771	700	700	-	397	604	431
500	693	359	721	-	1828	1867	1891	421	470	795	700	700	-	479	763	545
600	813	372	859	-	2190	2236	2277	539	585	883	700	700	-	-	993	636
650	870	373	934	-	-	-	2379	597	636	-	700	700	-	-	-	773
700	985	396	1055	-	-	-	2698	680	737	-	700	700	-	-	-	978

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

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