

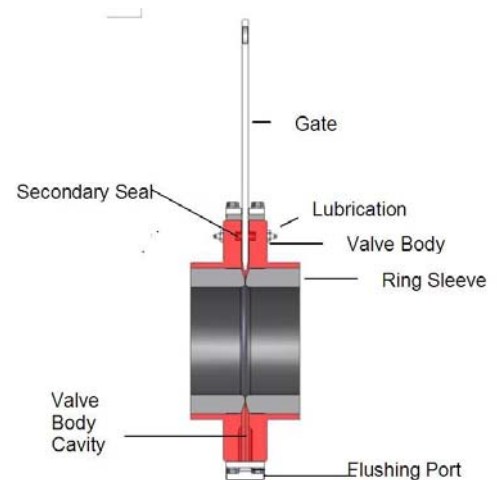
Larox Flanged Knife Gate Valve (LKF)



Larox 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.



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- When open, the knife-gate is fully withdrawn from the slurry flow.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

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 (150 psi)

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

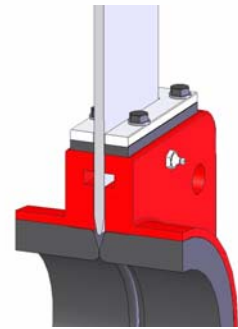
- Mining and metal industries
- Mineral processing
- Power generation
- Sand and gravel
- Chemical
- Pulp and paper
- Water and Wastewater treatment

Accessories

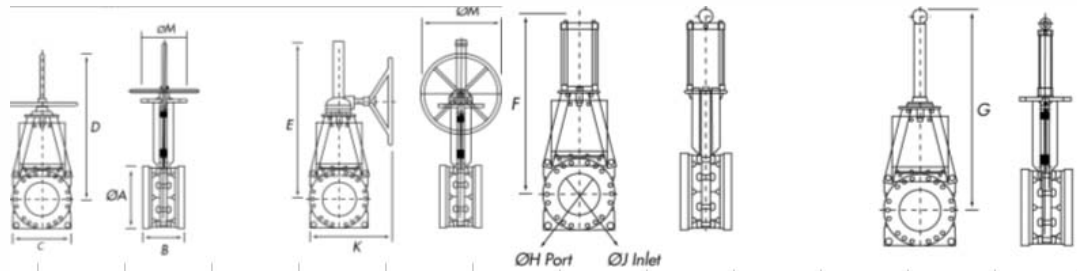
- Limit switches
- Solenoid valves
- Gate guards

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												
	AO	B	C	D	E	F	G	HO	JO	K	MO	NO	OW
80	191	175	226	481	544	545	624	62	72	403	300	300	23
100	229	175	280	553	593	609	702	85	99	429	300	300	30
150	280	178	331	712	809	676	864	137	148	455	500	500	45
200	343	185	383	836	579	890	974	175	197	483	500	500	64
250	407	226	421	985	1083	1029	1124	231	249	595	500	500	90
300	483	258	534	-	1206	1156	1350	274	293	648	600	600	-
350	536	258	578	-	1355	1358	1469	318	337	671	600	600	-
400	591	280	616	-	1453	1529	1628	356	375	703	700	700	-
450	639	312	674	-	1693	1718	1747	378	426	771	700	700	-
500	693	359	721	-	1828	1867	1891	421	470	795	700	700	-
550	813	372	859	-	2190	2236	2277	539	585	883	700	700	-
600	870	373	934	-	-	-	2379	597	636	-	700	700	-
650	985	396	1055	-	-	-	2698	680	737	-	700	700	-
700	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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