

Knife gate valve

Slurry Hose Systems



The Metso Knife Gate Valve is designed and equipped to handle tough and abrasive shut off applications involving slurries, powders or granular substances.

Product description

The SH-KG valve is a full bore valve suitable for the most abrasive and demanding slurries with total operational reliability.

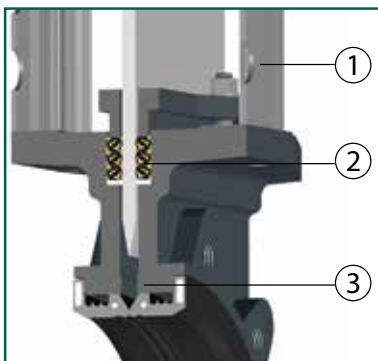
Areas of use

Shut off applications with abrasive slurry materials:

- Mineral processing concentrators
- Sand and gravel plants
- Tailing lines
- Abrasive slurry materials

Characteristics

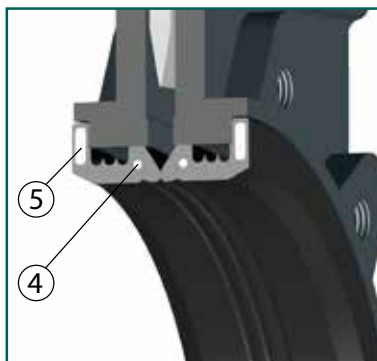
This bi-directional valve ensures for 100 % tightness within any pressure. In open position, the valve seats form a tight extension of the pipe line causing for absolutely no leakage onto the metal parts. When the valve is closed, the seats are displaced axially creating a reliable seal with the gate until it forms a complete closure.



A precise gate guidance extend the valve's service life

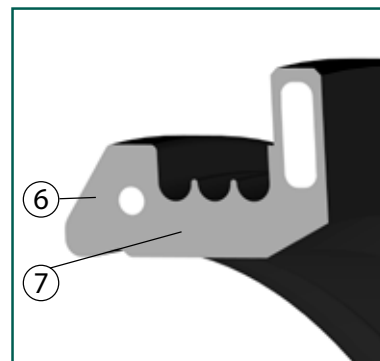
1. A solid top works
2. A robust gland box system
3. Precisely machined gate supports

It's crucial during operation to keep the gate in position and to minimize the wear on the seats.



Built in steel reinforcements improve the performance

4. The front reinforcement rings ensure the seats shape, position and strength remain during operation.
5. The flange sealing reinforcements secure a tight and exact position of the seats towards the connection flange.



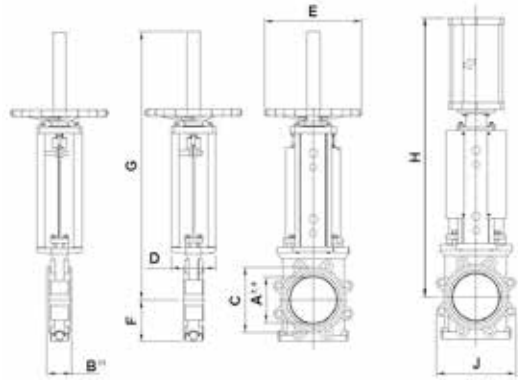
Integrated expansion areas give low operating force and minimize the stress on the seats

6. The seat entrance area is designed to give a smooth gate entry.
7. The expansion area allows the seat to be axially flexible requiring minimal operation force.

Technical description

The SH-KG valve has an epoxy coated fully lugged body in nodular iron EN-JS1050/GGG50 with integrated purge ports. The seats are flexible in an axial way and seals towards each other in the bore when the valve is in open position, protecting internal parts and the gate from the abrasive media.

The solid top works and provides excellent stability during operation. For security reasons it is always supplied ready to be locked in either open or closed position. The seats also form a sealing face on the valve flanges saving the need for gaskets.



Bare Shaft DIN

Item code Bare Shaft DIN"	ID		Dimension									Flange Drilling	Actuators		Spare Parts	
	mm	inch	A	B	C	D	E	F	G	H	J	DIN 2501 PN10	Manual	Pneumatic	Seat	Gate
SH-KGV-51-D	51	2"	51	66	94	80	315	86	614	609	124	DN50	SH-489660-51	SH-489661-51	SH-489511-51	SH-489662-51
SH-KGV-76-D	76	3"	76	69	126	80	315	94	712	729	180	DN80	SH-489660-76	SH-489661-76	SH-489511-76	SH-489662-76
SH-KGV-102-D	102	4"	102	73	158	80	315	103	748	789	206	DN100	SH-489660-102	SH-489661-102	SH-489511-102	SH-489662-102
SH-KGV-127-D	127	5"	127	80	186	145	315	124	868	899	237	DN125	SH-489660-127	SH-489661-127	SH-489511-127	SH-489662-127
SH-KGV-152-D	152	6"	152	80	213	145	315	136	878	909	259	DN150	SH-489660-152	SH-489661-152	SH-489511-152	SH-489662-152
SH-KGV-204-D	201	8"	204	92	269	145	315	169	1031	1119	312	DN200	SH-489660-204	SH-489661-204	SH-489511-204	SH-489662-204
SH-KGV-254-D	254	10"	254	96	322	145	400	204	1162	1251	388	DN250	SH-489660-254	SH-489661-254	SH-489511-254	SH-489662-254
SH-KGV-305-D	305	12"	305	102	372	175	520	236	1400	1485	457	DN300	SH-489660-305	SH-489661-305	SH-489511-305	SH-489662-305
SH-KGV-355-D	355	14"	355	102	432	200	520	266	1510	1610	516	DN350	SH-489660-355	SH-489661-355	SH-489511-355	SH-489662-355
SH-KGV-405-D	405	16"	405	115	483	200	635	300	1650	1737	516	DN400	SH-489660-405	SH-489661-405	SH-489511-405	SH-489662-405
SH-KGV-457-D	457	18"	457	115	533	300	-	330	-	1935	627	DN450	SH-489660-457	SH-489661-457	SH-489511-457	SH-489662-457
SH-KGV-508-D	508	20"	508	141	589	300	-	364	-	2019	680	DN500	SH-489660-508	SH-489661-508	SH-489511-508	SH-489662-508
SH-KGV-610-D	610	24"	610	141	690	300	-	425	-	2324	816	DN600	SH-489660-610	SH-489661-610	SH-489511-610	SH-489662-610

*B Installed face to face with load distribution rings.

Bare Shaft ANSI

Item code	ID		Dimension									Flange Drilling	Actuators		Spare Parts	
	mm	inch	A	B	C	D	E	F	G	H	J	ANSI 150 lbs.	Manual	Pneumatic	Seat	Gate
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SH-KGV-76-A	76	3"	76	69	126	80	315	94	712	729	180	DN80	SH-489660-76	SH-489661-76	SH-489511-76	SH-489662-76
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*Order example, Knife gate valve ID305, DIN Flange Drilling, Pneumatic actuator

SH-KGV-305-D Bare Shaft Valve, ID305, DIN PN10 Flange Drilling

1 pcs SH-489661-305 Pneumatic Actuator ID305

Spare Parts

Seat SH-489511-305 (51,76,102, etc)

Gate SH-489662-305 (51,76,102, etc)

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