

# STAINLESS STEEL KNIFEGATE METAL SEAT 50-600MM MODEL - KGV 98



## FEATURES AND BENEFITS

- Quality product, designed, manufactured and tested according to MSS SP-81.
- Heavy duty cast Stainless steel one piece body.
- Resists deflection from line loads and internal pressure
- Full port non clogging design.
- Heavy duty cast stainless steel yoke, provides inherent structural rigidity and mechanical strength.
- Uni-directional.
- Heavy duty double clevis pin design provides maintenance free long term reliability.
- Heavy duty stem nut supports any axial and side loading.
- Gate fully guided with integral guide, preventing gate deflection.
- Separate gland retainer independent of yoke is fully adjustable and ensures high integral functionality and reliability.
- Precision double sided machined gate ensures lower friction, reducing torques and maintenance downtime.
- The gates bevel design provides shut off capabilities in thick media.
- The stainless steel stem resists corrosion and is accompanied by a stainless steel retainer that protects the brass stem nut.
- Standard supply is clockwise closing.



## APPLICATIONS

Challenger Valves and Actuators are the “**Right Choice for Valves and Actuation**” when quality matters.

Servicing industries such as : Mining, Water and Waste Water.

This product can operate effectively with viscous media such as pulp, paper, slurries and powders.

## TECHNICAL SPECIFICATION

<b>Construction:</b>	Lugged design metal seated Knifegate valve
<b>Size:</b>	50mm - 600mm
<b>Pressure Rating:</b>	10 BAR
<b>Face to Face:</b>	MSS SP-81
<b>Flange Drilling:</b>	AS2129 (Table D), ANSI#150 (other drilling available on request)
<b>Design:</b>	Rising Stem
<b>Max Temp:</b>	232°C
<b>Pressure Testing:</b>	MSS SP-81

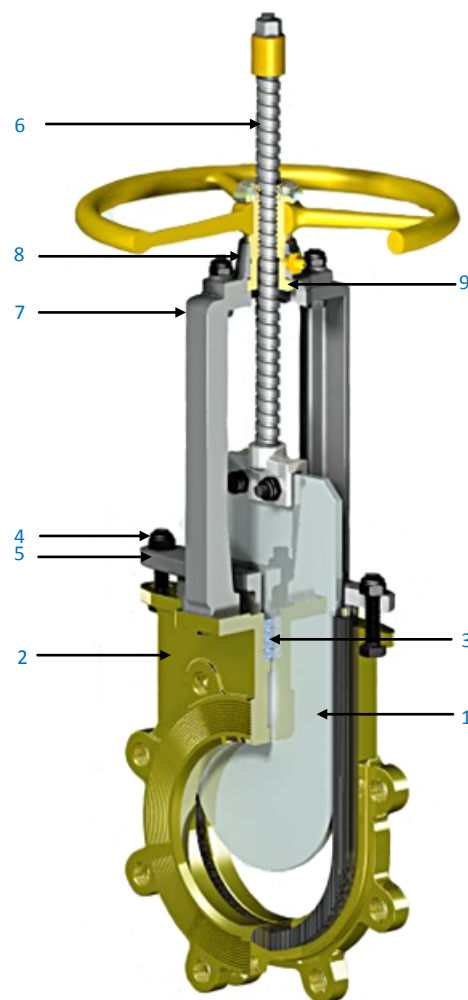
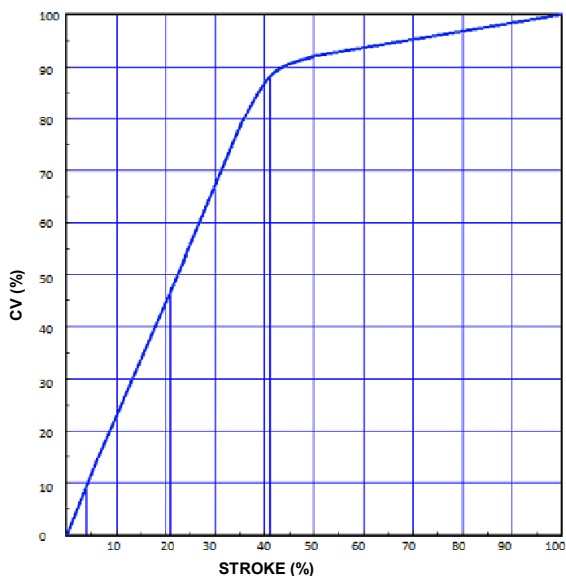
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## TECHNICAL : VALVE DETAILS

ITEM	COMPONENT	MATERIAL	GRADE
1	Gate	Stainless Steel	316 S/S(ASTM A240 - 316L)
2	Body	Stainless Steel	316 S/S(ASTM A351 - CF8M)
3	Packing	PALMETTO	PTFE Impregnated (1347 - AF)
4	Bolting	Stainless Steel	304 S/S (ASTM A193 - B8)
5	Packing Gland	Stainless Steel	304 S/S (ASTM A351 - CF8)
6	Shaft	Stainless Steel	304 S/S (ASTM A276 - 304)
7	Yoke	Stainless Steel	304 S/S (ASTM A351 - CF8)
8	Retainer Bushing	Stainless Steel	304 S/S (ASTM A351 - CF8)
9	Stem Nut	Brass	C85400 (ASTM B271-06)

FLOW CHARACTERISTIC CURVE



TORQUE AND THRUST			
SIZE	PRESSURE (BAR)	TORQUE (Nm)	THRUST (Kgs)
50	10	12.1	561
80	10	14.2	657
100	10	16.1	745
150	10	22.7	1052
200	10	31.9	1482
225	10	58.8	1927
250	10	73.2	2409
300	10	93.7	3084
350	10	148.4	3882
375	10	179.8	4705
400	10	183.5	4802
450	10	223.4	5845
500	10	268.0	7011
600	10	371.1	9711

\*Figures DO NOT include safety factors.

As a safety margin we recommend:

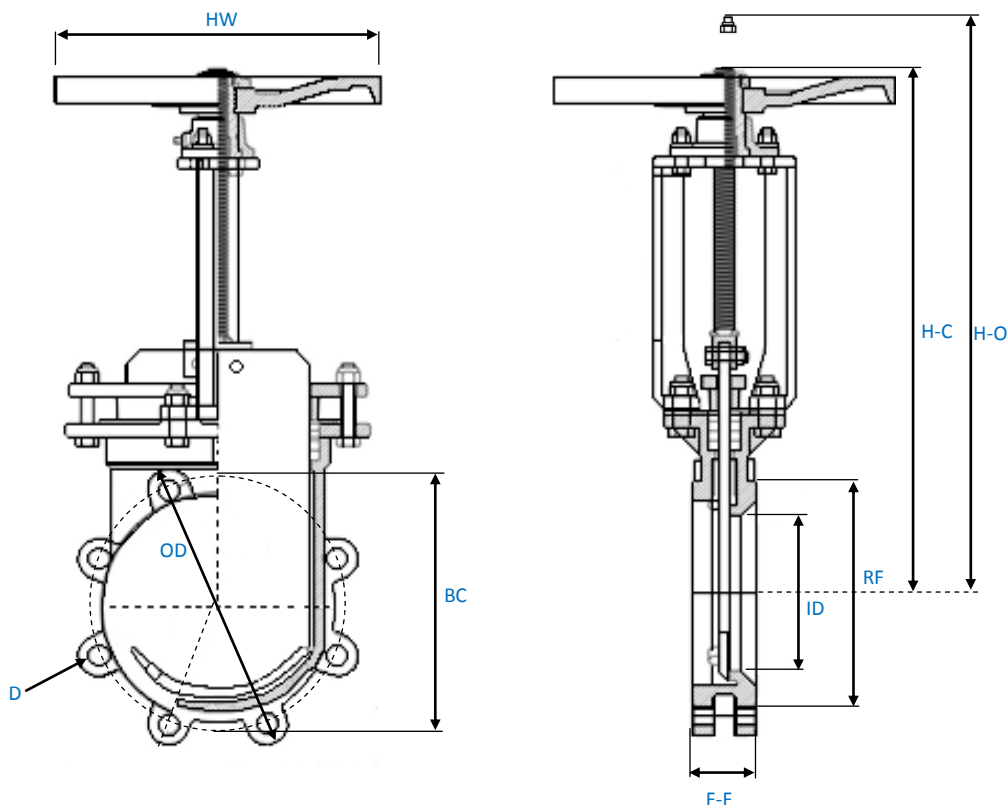
- Air Cylinder - Double above figures
- Electric Actuator - Triple above figures

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## OPTIONS

- Actuators:
  - Double Acting
  - Spring Return
  - Electric
  - Hydraulic
- Positioners
- Gearbox:
  - Bevel
  - Spur
- Chainwheel Operation
- ESD System
- Proximity Switches
- Limit Switches
- Solenoids
- Deflection Cones - Polyurathane
- Safety Guards - Shrouds
- Anti - Clockwise Closing
- Lever Operation
- V-Port slide gate valve
- Non Rising Spindle
- Bonneted
- Vacuum service (bonneted only)
- AS2129 Table E to Order



Size	DIMENSIONS AND WEIGHTS															Cv VALUES	
	Face to Face (F-F)	Raised Face Dia (RF)	Flange (OD)	Bolt Circle (BC)		Inside Dia (ID)	Number of Holes		Tap (D)		Tapping Depth Blind Holes	C/L to Top Closed (H-C)	C/L to Top Open (H-O)	No. of Turns to Fully Open	Hand wheel Dia (H/W)	Weight (Kg)	Metal Seated
				Table D	ANSI#150		Table D	ANSI#150	Table D	ANSI #150							
50	48	92	152	114	121	51	4	4	M16	UNC %	10	340	400	14.5	200	9	280
80	51	127	190	146	152	76	4	4	M16	UNC %	10	380	460	18.5	200	14	650
100	51	157	228	178	191	102	4	8	M16	UNC %	12	430	540	26	200	17	1180
150	57	216	279	235	241	152	8	8	M16	UNC ¾	17	515	680	39	300	25	2600
200	70	270	343	292	299	203	8	8	M16	UNC ¾	19	635	850	33.5	300	38	4221
225	70	295	376	324	-	224	8	-	M16	-	22	730	960	37.5	350	50	5693
250	70	324	406	356	362	254	8	12	M20	UNC %	22	750	1010	41.5	350	55	6880
300	76	381	482	406	432	305	12	12	M20	UNC %	22	850	1150	50	350	77	10370
350	76	413	533	470	476	337	12	12	M24	UNC 1	22	940	1290	55	400	100	11812
375	89	445	548	495	-	362	12	-	M24	UNC 1	28	1060	1450	59	500	132	14053
400	89	470	597	521	540	387	12	16	M24	UNC 1	28	1085	1495	63	500	141	15592
450	89	533	635	584	578	438	12	16	M24	UNC 1%	28	1200	1650	71	500	164	21400
500	114	584	698	641	635	489	16	20	M24	UNC 1%	31	1310	1850	79	500	224	26650
600	114	692	812	756	749	591	16	20	M27	UNC 1%	31	1520	2130	95	500	285	38910