



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.
- Bi-directional.
- Heavy duty double clevis pin design provides maintenance free long term reliability.
- Heavy duty bronze bearing supports any axial and side loading.
- Gate fully guided with integral guide, preventing gate deflection and leakage.
- 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 stainless steel stem resists corrosion and is accompanied by a stainless steel retainer that protects the brass stem bushing.
- Various seat options available.
- Drip Tight Seal.
- Resilient seat sits flush with bottom of the valve, making replacement quick and easy, eliminating build up areas and providing a smooth flow for the medium.

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.

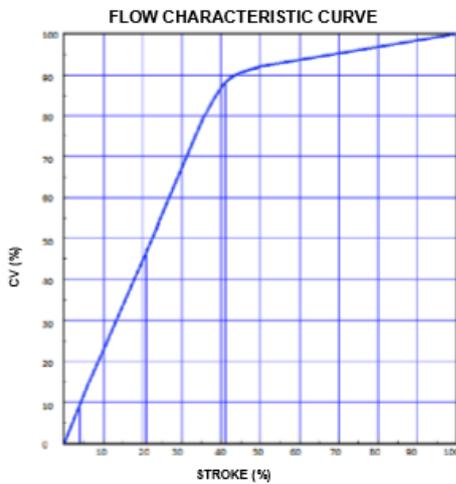


TECHNICAL SPECIFICATION

- **Construction:** Lugged design resilient seated Knifegate valve
- **Size:** 50mm - 600mm (Larger sizes are available on request)
- **Pressure Rating:** 10 BAR
- **Face to Face:** MSS SP-81
- **Flange Drilling:** AS2129 (Table D), ANSI#150 (Other drilling available on request)
- **Design:** Rising Stem
- **Temperature Range:** HY-CAR (NBR): -40°C to 80°C
EPDM: -55°C to 120°C
VITON: -20°C to 200°C



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

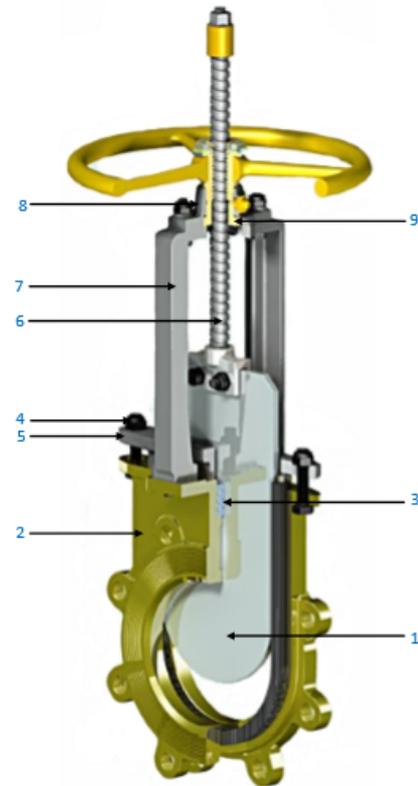


TORQUE AND THRUST			
SIZE	PRESSURE (BAR)	TORQUE (Nm)	THRUST (Kg)
50	10	12.1	561
80	10	14.2	657
100	10	16.1	745
150	10	22.7	1052
200	10	31.9	1482
225	10	58.8	1927
250	10	73.2	2409
300	10	93.7	3084
350	10	148.4	3882
375	10	179.8	4705
400	10	183.5	4802
450	10	223.4	5845
500	10	268.0	7011
600	10	371.1	9711

*Figures DO NOT include safety factors.

As a safety margin we recommend:

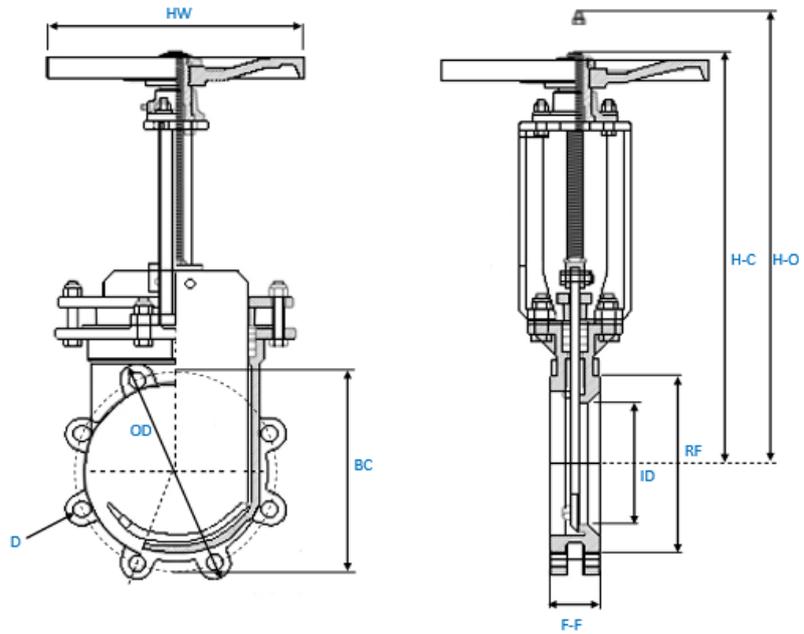
- Air Cylinder - Double above figures
- Electric Actuator - Triple above figures





OPTIONS

- Actuators:
 - Double Acting
 - Spring Return
 - Electric
 - Hydraulic
- Positioners
- Gearbox:
 - Bevel
 - Spur
- Designed to AS6401
- Chainwheel Operation
- ESD System
- Proximity Switches
- Limit Switches
- Solenoids
- Deflection Cones - Polyurathane
- Safety Guards - Shrouds
- Full 316 S/S Parts
- Anti - Clockwise Closing
- Lever Operation
- Positioners
- V-Port slide gate valve
- Non Rising Spindle
- Bonneted
- AS2129 Table E to Order
- Larger Sizes Available to 1200mm



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 of 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 (HW)	Weight (Kg)	Hy-Car Seated	
				Table D	ANSI#150		Table D	ANSI#150	Table D	ANSI #150								
50	48	92	152	114	121	51	4	4	M16	UNC ½	10	385	440	14.5	225	10	284	
80	51	127	190	146	152	76	4	4	M16	UNC ½	10	420	495	18.5	225	12	642	
100	51	157	228	178	191	102	4	8	M16	UNC ½	12	460	575	26	225	14	1190	
150	57	216	279	235	241	152	8	8	M16	UNC ½	17	570	730	39	300	22	2620	
200	70	270	343	292	299	203	8	8	M16	UNC ½	19	700	905	33.5	300	34	4854	
225	70	298	376	324	-	224	8	-	M16	-	22	780	1000	37.5	350	49	5824	
250	70	324	406	356	362	254	8	12	M20	UNC ¾	22	820	1080	41.5	350	54	6793	
300	76	381	482	406	432	305	12	12	M20	UNC ¾	22	920	1230	50	350	70	10395	
350	76	413	533	470	476	337	12	12	M24	UNC 1	22	1060	1415	55	400	105	13650	
375	89	445	548	495	-	362	12	-	M24	UNC 1	28	1170	1530	59	500	121	15790	
400	89	470	597	521	540	387	12	16	M24	UNC 1	28	1200	1610	63	500	128	17930	
450	89	533	635	584	578	438	12	16	M24	UNC 1½	28	1310	1770	71	500	178	21500	
500	114	584	698	641	635	489	16	20	M24	UNC 1½	31	1450	1960	79	500	230	26660	
600	114	692	812	756	749	591	16	20	M27	UNC 1¾	31	1630	2240	95	500	330	38950	