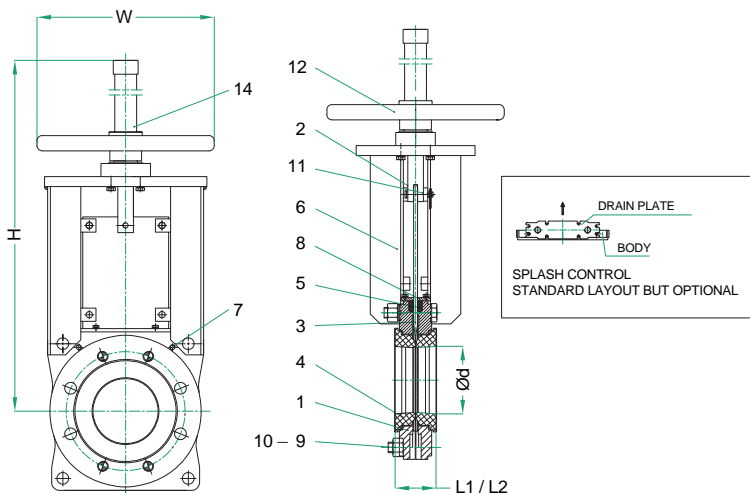


Features / Design



- 1.- KCS is designed⁽¹⁾ for heavy-duty service - with elastomer sleeves, particularly for abrasive slurries in different industries such as mining, cement, chemical, and others.
- 2.- **100% isolation**, bubble-tight shut-off results in absolutely zero downstream leakage.
- 3.- Double seat design provides bi-directional flow & shut-off.
- 4.- Unobstructed flow eliminates turbulence, minimizes pressure drop across valve.
- 5.- No solids accumulation. No seat cavity where solids can collect and prevent full gate closure.
- 6.- Dynamic self-adjusting secondary seal.
- 7.- No gate or stem packing is required, eliminating packing leakage and maintenance.
- 8.- Long lasting lubrication.
- 9.- No metal parts in contact with the flowing slurry.
- 10.- Materials: Ductile iron (body); EPDM, NR (seat).
- 11.- **Maximum Working Differential Pressures:**
 Sizes 2" to 16" : 150 psi CWP.
 Sizes 18" to 24" : 90 psi CWP.
- 12.- **Maximum Temperatures:**
 EPDM < 110°C.
 NR < 70°C.
- 13.- Ends: ASME B16.5; face to face: MFS.

Design for 2" to 6"



Material List

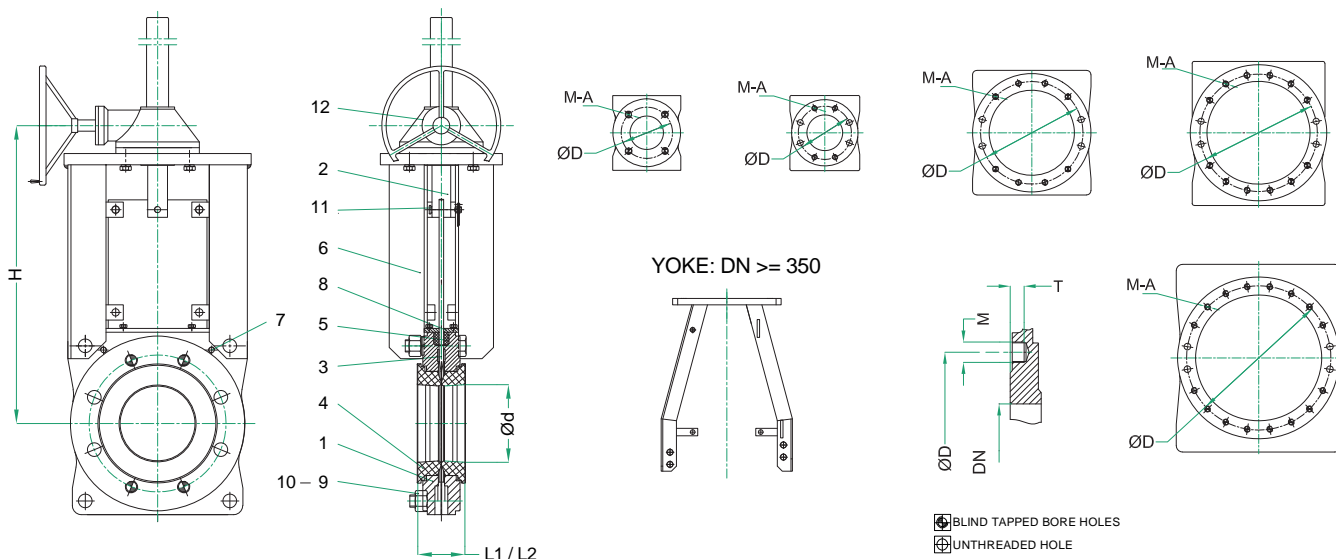
NO.	DESCRIPTION	MATERIAL
1	BODY	ASTM A536 65-45-12
2	STEM	ASTM A182 F6a
3	GATE	SS316
4	SLEEVES	NATURAL GUM RUBBER
5	PACKING	EPDM
6	YOKE	ASTM A36
7	PLUG	AISI 1035 + NI
8	GLAND FOLLOWER	AISI 1045
9	BOLT	ASTM A193 B8
10	NUT	ASTM A194 8
11	PIN	ASTM S276 410
12	HANDHEEL	CARBON STEEL
13	BEVEL GEAR	COMBINATION
14	STEM PROTECTOR	ASTM A36

NOTE: Material list instance for DI body. other available. Please consult with us.

NOTE: (1) Design and manufacture acc.to MFS, face to face acc. to MFS, test and inspection acc. to MFS.

Design for 8" to 24"

Flange and Bolting Detail



Dimensions (inches)

SIZE	d (in)	L1 (in)	L2 (in)	H (in)	W (in)	W2 (in)	ØD (in)	M-A (in)	T (in)			WEIGHT (lb)	TORQUE (lbf*in)
2"	2.008	2.244	2.126	19.173	11.811	/	4.752	4-5/8"-11	0.433	4	0	28.660	530.973
2 1/2"	2.520	2.244	2.126	20.512	11.811	/	5.500	4-5/8"-11	0.433	4	0	*	530.973
3"	2.992	2.241	2.244	22.047	11.811	/	6.000	4-5/8"-11	0.433	4	0	46.297	530.973
4"	4.016	2.241	2.244	22.953	11.811	/	7.500	4-5/8"-11	0.433	4	4	61.729	530.973
5"	5.000	2.559	2.362	25.315	15.748	/	8.500	4-3/4"-10	0.394	4	4	*	884.956
6"	6.063	2.677	2.500	30.315	15.748	/	9.500	4-3/4"-10	0.512	4	4	90.390	884.956
8"	8.031	3.189	2.992	24.843	/	*	11.752	4-3/4"-10	0.591	4	4	127.868	1327.434
10"	10.000	3.268	3.110	29.055	/	*	14.252	8-7/8"-9	0.669	8	4	211.644	2654.867
12"	11.654	3.504	3.268	34.055	/	*	17.008	8-7/8"-9	0.669	8	4	339.512	3362.832
14"	13.543	3.504	3.268	37.402	/	*	18.752	8-1"-8	0.551	8	4	*	3982.301
16"	15.354	4.016	3.740	43.346	/	*	21.260	12-1"-8	0.669	12	4	555.565	4247.788
18"	17.244	4.055	3.780	49.882	/	*	22.752	12-1 1/8"-7	0.709	12	4	*	4247.788
20"	19.370	5.157	4.764	51.378	/	*	25.000	16-1 1/8"-7	0.984	16	4	*	5840.708
24"	23.228	5.197	4.764	58.268	/	*	29.500	16-1 1/4"-7	0.984	16	4	1300.728	8318.584

NOTE: *Please consult with manufacturer.

- Blind tapped bore holes.
- Unthreaded hole.



How to Order

VALVE BODY DESIGN (SERIES)	SPECIAL FEATURES	MATERIAL			ENDS	CLASS	SIZE		OPERATION							
		BODY	TRIM	SEAT												
KCS Slurry Knife Gate Valve (Abrasive Services)	NONE NONE	6	DI	3	316 SS	E	EPDM	W	WAFER	0	Class 150# ⁽²⁾ (- MWP) ⁽³⁾	02	2"	H	Handwheel	
		3	CF8M			N	NR	L	LUG				02.5	2 1/2"	G	Gear Operator
													03	3"		
													04	4"	E	Electric Actuator
													06	6"		
													08	8"	P	Pneumatic Actuator
													10	10"		
													12	12"	B	Bare Shaft
													14	14"		
													16	16"		
													18	18"		
													20	20"		
													24	24"		

Example:

Slurry Knife Gate Valve, Body DI, Trim 316SS, Seat EPDM, Wafer 150# (150 psi MWP), Size 6" with Handwheel.

KCS63EW006H

NOTES:

(2) Flange and bolting acc. to ASME B16.5 (Class 150).

(3) Please check the Maximum Working Differential Pressures acc. to the valve size:

Sizes 2" to 16" : 150 psi.

Sizes 18" to 24" : 90 psi.