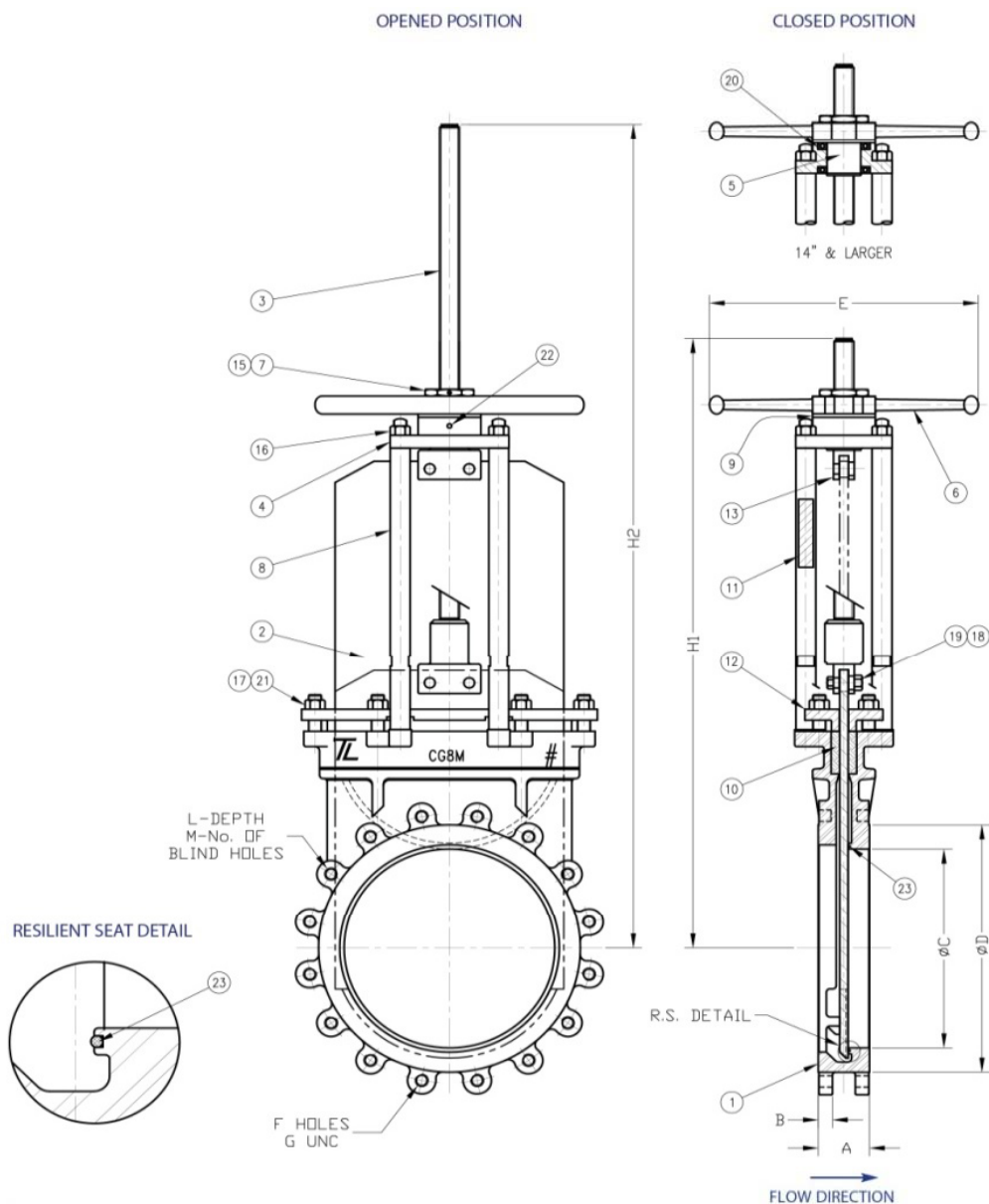


### Design Features

- Trueline knife gate valves meets TAPPI TIS 405-8 & MSS SP-81 design requirements.
- Lug bolt pattern holes are tapped according to ASME B16.5 Class 150.
- All metal seated valves meet or exceed seat test requirements of the design standards.
- Body casted in various materials such as SS 316, 317, 254 SMO & others upon request.
- Size available 2" ~ 48"

### Parts & Material



### Parts & Material

ITEM #	ITEM	Fig. F8112	Fig. F8113	Fig. F8114
1	BODY	CF8M	CG8M	250 SMO
2	KNIFE	316	317	254 SMO
3	STEM	304	304	304
4	BRIDGE	D.I	D.I	D.I
5	YOKE SLEEVE	BRONZE	BRONZE	BRONZE
6	HANDWHEEL	D.I	D.I	D.I
7	HANDWHEEL NUT	BRONZE	BRONZE	BRONZE
8	STANCHION	SS 303	SS 303	SS 303
9	THRUST WASHER (2" ~ 12")	BRONZE	BRONZE	BRONZE
10	PACKING (SEE NOTE 1)	TEFLON*	TEFLON*	TEFLON*
11	NAME PLATE	ADHEESIVE	ADHESIVE	ADHESIVE
12	GLAND FLANGE	CF8M	CG8M	254 SMO
13	STEM COUPLING (SEE NOTE 2)	CF8M	CF8M	CF8M
15	GRUB SCREW	SS 304	SS 304	SS 304
16	STANCHION NUTS	SS 304	SS 304	SS 304
17	GLAND PACKING NUTS	SS 304	SS 304	SS 304
18	COUPLING BOLTS	SS 304	SS 304	SS 304
19	COUPLING NUTS	SS 304	SS 304	SS 304
20	THRUST BEARING (>= 14")	BALL	BALL	BALL
21	GLAND PACKING STUDS	SS 304	SS 304	SS 304
22	GREASE NIPPLE	ZINC PLATED	ZINC PLATED	ZINC PLATED
23	RESILIENT SEAT 'O'-RING	VITON	VITON	VITON

Fig. F8116 - Special material of construction.

NOTE 1: 'O'-ring and packing retainer in stuffing box.

NOTE 2: Investment cast

\* Teflon braided or Impregnated

## Dimensions

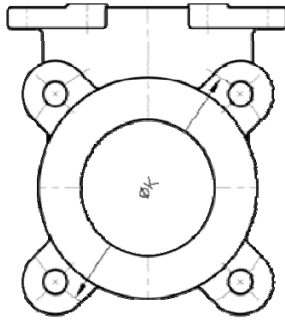
SIZE	A	B	C	D	E	F	G	H1	H2	K	L	M	WEIGHT	
2	IN	1.88	0.50	1.89	3.62	11.02	4	5/8"-11	10.66	12.83	4.75	0.51	2	13 LBS
	MM	48	13	48	92	280			271	326	121	13		6 KG
3	IN	2.00	0.50	2.70	5.00	11.02	4	5/8"-11	12.79	16.18	6.00	0.47	2	23 LBS
	MM	51	13	69	127	280			325	411	152	12		10 KG
4	IN	2.00	0.63	3.62	6.19	11.02	8	5/8"-11	14.64	18.81	7.50	0.39	2	30 LBS
	MM	51	16	92	157	280			372	478	191	10		14 KG
6	IN	2.25	0.63	5.51	8.50	11.02	8	3/4"-10	17.95	24.05	9.50	0.51	2	52 LBS
	MM	57	16	140	216	280			456	611	241	13		24 KG
8	IN	2.75	0.63	7.20	10.62	11.81	8	3/4"-10	23.78	31.81	11.75	0.71	2	93 LBS
	MM	70	16	183	270	300			604	808	298	18		42 KG
10	IN	2.75	0.75	9.02	12.75	11.81	12	7/8"-9	25.70	35.70	14.25	0.71	4	120 LBS
	MM	70	19	229	324	300			653	907	362	18		54 KG
12	IN	3.00	0.75	11.26	15.00	13.98	12	7/8"-9	31.61	43.70	17.00	0.71	4	185 LBS
	MM	76	19	286	381	355			803	1110	432	18		84 KG
14	IN	3.00	0.81	13.08	16.75	15.75	12	1"-8	39.84	53.07	18.75	0.63	4	312 LBS
	MM	76	21	332	425	400			1012	1348	476	16		142 KG
16	IN	3.50	1.05	14.81	19.01	19.69	16	1"-8	44.60	59.92	21.25	0.91	6	411 LBS
	MM	89	27	376	483	500			1133	1522	540	23		186 KG
18	IN	3.50	1.05	16.46	21.00	19.69	16	1 1/8"-7	48.03	65.39	22.75	0.75	6	489 LBS
	MM	89	27	418	533	500			1220	1661	578	19		222 KG
20	IN	4.50	1.24	18.35	23.00	23.62	20	1 1/8"-7	52.28	71.69	25.00	1.10	8	701 LBS
	MM	114	31	466	584	600			1328	1821	635	28		318 KG
24	IN	4.50	1.24	22.00	27.25	23.62	20	1 1/4"-7	59.92	83.34	29.50	0.98	8	1000 LBS
	MM	114	31	559	692	600			1522	2117	749	25		454 KG
30	IN	4.50	1.44	27.50	33.75	28.35	28	1 1/4"-7	74.21	102.75	36.00	0.98	10	1500 LBS
	MM	114	37	699	857	720			1885	2610	914	25		680 KG
36	IN	5.00	1.56	33.50	40.26	36.00	32	1 1/2"-6	89.17	123.62	42.75	0.98	12	2500 LBS
	MM	127	40	851	1023	914			2265	3140	1086	25		1134 KG
42	IN	5.00	1.63	38.75	47.00	36.00	36	1 1/2"-6	114.50	154.25	49.50	1.50	14	3700 LBS
	MM	127	41	984	1194	914			2908	3918	1257	38		1378 KG
48	IN	6.00	2.00	43.50	53.50	36.00	44	1 1/2"-6	134.38	178.88	56.00	1.22	16	
	MM	152	51	1105	1359	914			3413	4544	1422	31		

### Options available:

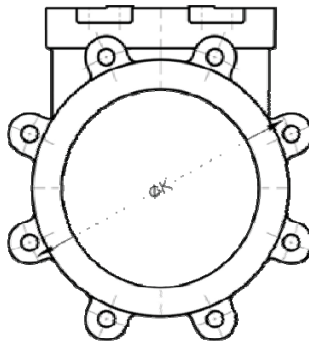
- Resilient seat for drip tight shut-off
- Two-way shut off
- Vee-port for throttling service
- Operators such as bevel gear, pneumatic cylinder, electric actuator, etc.
- Control accessories such as positioners, limit switches, etc.

### Bolt Configurations

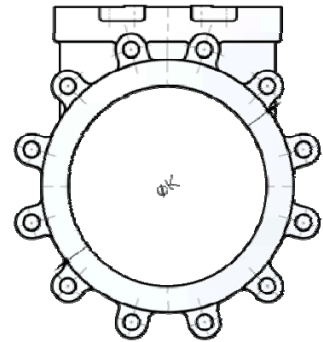
BOLT CIRCLE CONFIGURATION FOR SIZE 2" TO 3"



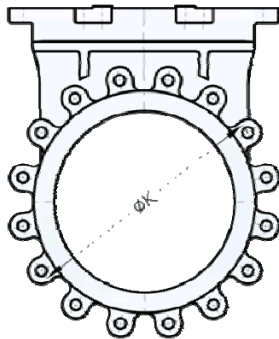
BOLT CIRCLE CONFIGURATION FOR SIZE 4" TO 8"



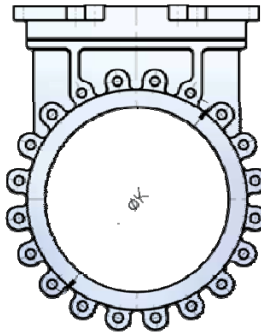
BOLT CIRCLE CONFIGURATION FOR SIZE 10" TO 14"



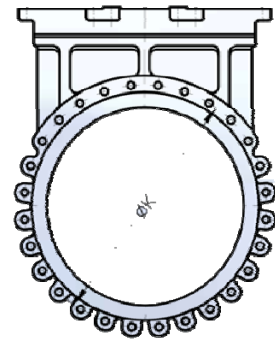
BOLT CIRCLE CONFIGURATION FOR SIZE 16" TO 18"



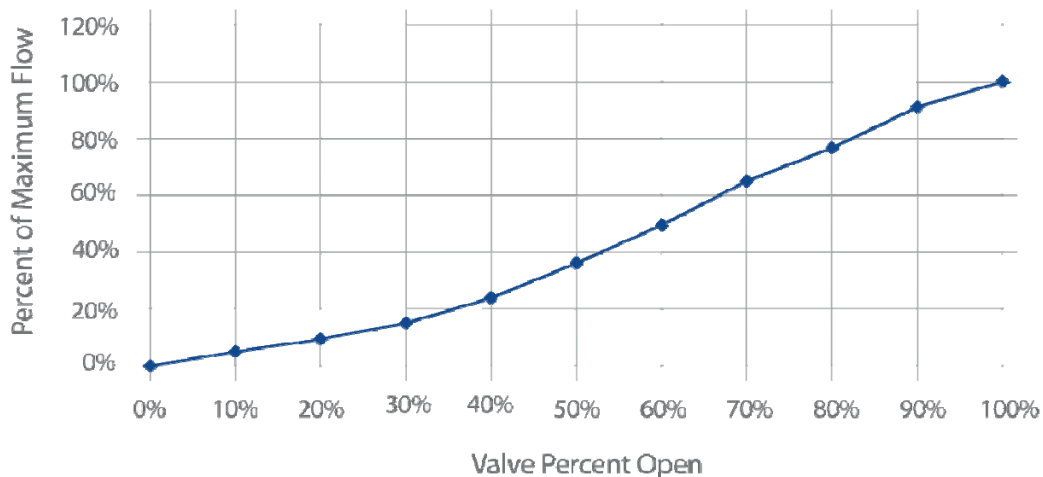
BOLT CIRCLE CONFIGURATION FOR SIZE 20" TO 24"



BOLT CIRCLE CONFIGURATION FOR SIZE 30"



### V-orifice KGV Flow Characteristics



## Flow Coefficients (Cv) V-Orifice Metal Seated

VALVE		PERCENTAGE OPEN								
SIZE	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
2"	1.3	4	9	14	22	32	40	50	58	64
3"	3.7	12	24	42	65	91	116	145	168	185
4"	7.2	23	47	83	126	177	228	282	329	362
6"	16	53	107	186	283	401	515	636	739	815
8"	32	105	203	356	539	765	981	1,209	1,416	1,555
10"	50	164	329	582	886	1,244	1,593	1,975	2,302	2,531
12"	75	243	487	861	1,312	1,835	2,360	2,918	3,411	3,744
14"	101	319	651	1,160	1,753	2,449	3,151	3,908	4,549	5,000
16"	133	422	868	1,546	2,336	3,259	4,196	5,200	6,068	6,657
18"	161	538	1,048	1,858	2,821	3,951	5,085	6,285	7,338	8,055
20"	201	661	1,298	2,295	3,501	4,898	6,291	7,798	9,091	9,989
24"	294	989	1,932	3,408	5,191	7,261	9,330	11,576	13,441	14,811

## V-orifice KGV Flow Characteristics

VALVE		PERCENTAGE OPEN								
SIZE	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
2"	23	46	65	85	100	120	135	145	155	165
3"	70	142	200	255	310	360	405	440	475	500
4"	120	235	340	435	525	610	690	755	800	850
6"	285	565	810	1,025	1,250	1,460	1,635	1,795	1,920	2,020
8"	505	1,015	1,440	1,835	2,240	2,600	2,920	3,215	3,430	3,610
10"	810	1,615	2,310	2,950	3,590	4,160	4,680	5,140	5,490	5,780
12"	1,290	2,565	3,670	4,675	5,690	6,610	7,430	8,175	8,720	9,180
14"	1,485	2,965	4,240	5,410	6,570	7,630	8,565	9,410	10,090	10,600
16"	2,140	4,275	6,120	7,800	9,460	11,035	12,425	13,630	14,560	15,300
18"	2,805	5,600	8,000	10,185	12,430	14,390	16,170	17,760	18,970	20,000
20"	2,640	7,260	10,370	13,250	16,030	18,620	21,020	23,040	24,670	26,000
24"	5,390	10,760	15,420	19,590	28,860	27,700	31,320	32,240	36,570	38,200
30"	8,330	16,700	23,800	30,300	36,800	42,800	48,190	52,900	56,500	59,680
36"	12,550	25,110	35,930	45,780	55,700	64,700	72,700	79,980	85,390	89,900