

FEATURES

Mitech Knife Gate Valve Features

- Valves available in PN7, 10, 16 and 25 depending on size and service conditions
- On/off bi-directional sealing capability
- Cavity-free body prevents build-up of media. Solids are flushed downstream as the gate closes
- Heavy-section, precision machined stainless steel gate with burnished faces for long life and excellent sealing performance
- Deep gland fitted with multiple layers of high-quality PTFE braided packing. Easily adjustable
- Mitech KGV's are self-cleaning due to the bank of scrapers installed beneath the gland packing
- All Mitech KGV's are tested in accordance with MSS SP-61
- Can be operated by handwheel, gearbox, pneumatic or electric actuator

Body style

Two-piece body manufactured from profile-cut plate in carbon steel and stainless steel. This configuration accommodates all flange designations whether wafer or lugged. A laser cut spacer ensures correct compression of the body seal.

Moulded rubber body lining

The full wetted area is rubber lined and bonded to the body. A replaceable viton seal joins the two body halves preventing any external leakage. The valve seat seals tightly around the blade edge. Natural is standard, while EPDM, Nitrile and Viton materials are also available. Unlined options are available on request.

Blade

The blade is guided and supported by a machined groove. Sealing takes place around the periphery of the blade, which is precision machined. A leading chamfer machined around the bottom end of the blade cuts through slurry and seals against the replaceable viton seal. The surfaces of the blade are burnished to prevent slurry sticking to the blade and enabling a leak-proof seal through the gland. Available in 304 and 316 stainless steel, other material grades available on request.

Spindle

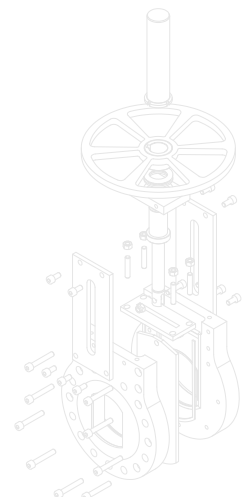
Precision machined ACME thread and clevis. Standard material is EN57/431.

Gland packing

Deep gland with a minimum of 3 rows of braided PTFE. Adjustment is made by easily accessible nuts loading a robust gland plate. Tightening sequence and torques are available in the Mitech KGV IOM. Packing is replaceable in line in accordance with the IOM.

Scrapers

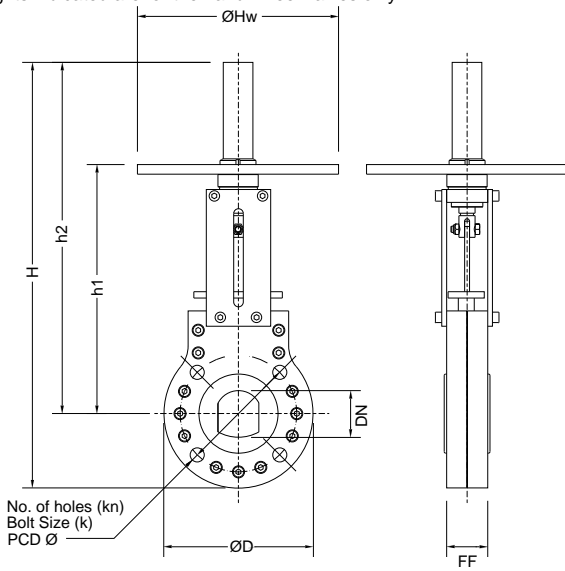
A set of packing scrapers clean the blade as it rises, protecting the gland and extending the time between maintenance adjustments.



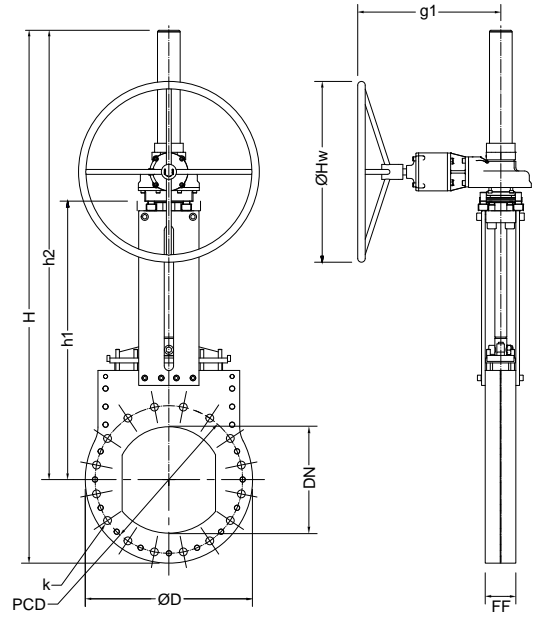
FEATURES

Valve Ref.	DN	PN Rating	FF	ØD	PCD	k	kn	h1	g1	h2	H	ØHw	j1	j2	J	ØP	WEIGHT H/W (kg)	Thrust (N)	Torque (Nm)
D	50	PN10	40	165	125	M16	4	289	-	396	480	250	260	400	500	215	17	10059	45
F	65	PN10	50	185	145	M16	4	310	-	437	530	250	270	423	532	215	22	11025	52
G	80	PN10	50	200	160	M16	8	323	-	490	590	250	300	475	600	215	25	12395	63
H	100	PN10	60	220	180	M16	8	357	-	524	635	250	332	515	640	215	39	13459	77
K	150	PN10	70	285	240	M20	8	503	-	714	860	350	466	723	865	250	41	19233	88
M	200	PN10	70	340	295	M20	8	595	-	839	1010	450	551	861	1055	320	86	24447	95
N	250	PN10	80	395	350	M20	12	682	-	997	1195	450	682	1050	1260	390	115	33060	120
P	300	PN10	80	445	400	M20	12	795	-	1151	1400	450	756	1188	1420	430	142	41673	180
Q	350	PN10	100	505	460	M20	16	924	480	1491	1770	600	893	1335	1638	490	175	50286	240
R	400	PN10	100	565	515	M24	16	1005	490	1637	1926	600	974	1499	1518	525	250	58899	288
S	450	PN7	100	615	565	M24	20	1124	500	1811	2141	600	1058	1624	1962	685	285	67512	381
T	500	PN7	120	670	620	M24	20	1317	500	2039	2404	600	1243	1869	2281	685	360	76126	520
V	600	PN7	120	780	725	M24	20	1390	500	2219	2636	600	1390	2124	2571	850	480	84739	779
W	700	PN7	120	910	840	M24	24	1570	500	2399	2816	600	1568	2462	2939	850	705	93352	1050

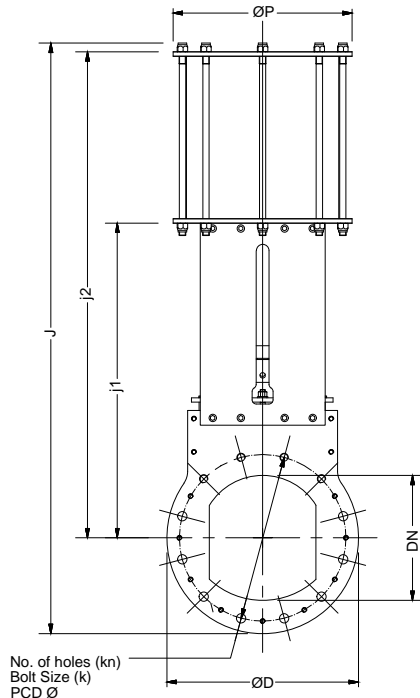
Note:
Dimensions are in mm. Dimension FF excludes bonded rubber lining on the valve face which acts as a gasket. Fitment of a separate gasket is not required for installation.
Valves larger than DN300 are fitted with bevel gearbox for manual hand wheel operation
Standard drilling is wafer design. Lugged option is available on request.
For PN25 Face to Face (FF) - DN150 upto DN300, add 20mm
** - Weights indicated are for the hand wheel valves only



HAND WHEEL OPERATED KGV



MANUAL BEVEL GEARBOX OPERATED KGV

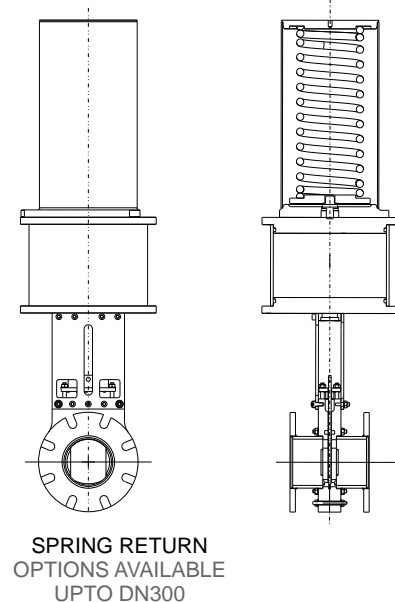
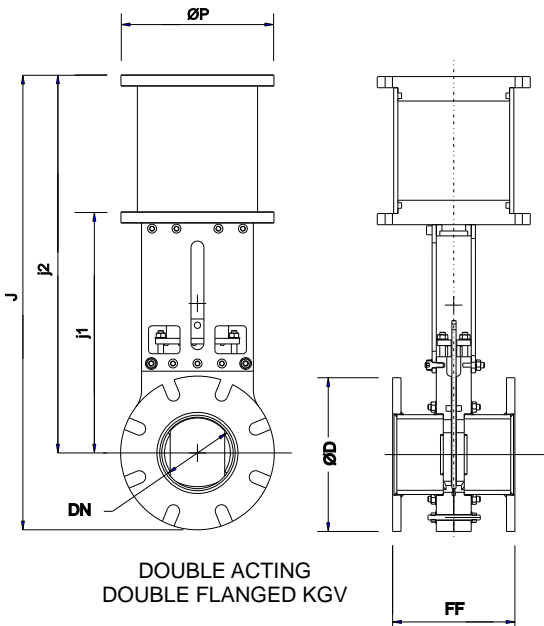
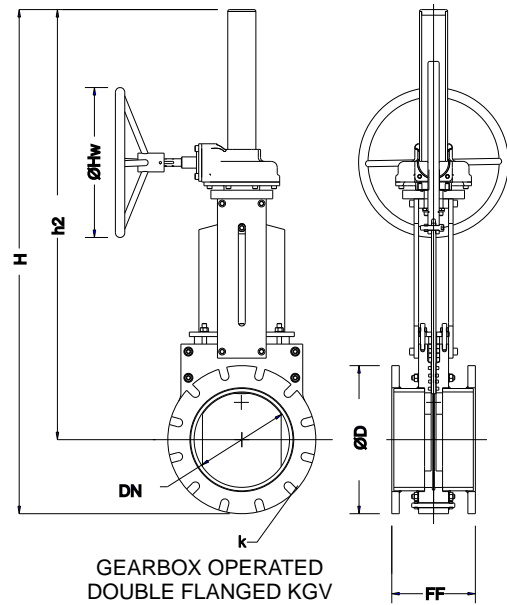
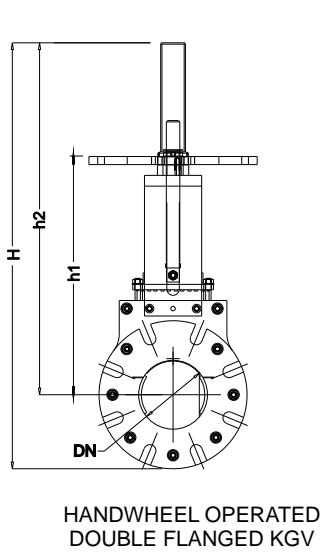


DOUBLE ACTING FIBRE BARREL ACTUATED KGV

L and W SERIES KGV - STANDARD FACE TO FACE DIMENSIONS

Valve Ref.	NB	PN Rating	FF (D/FLG)	ØD	PCD	k	kn	h1	g1	h2	H	ØHw	j1	j2	J	ØP	Approx Weight (kg)	Thrust (N)	Torque (Nm)
D	50	PN10	175	165	125	M16	4	289	-	396	500	250	260	400	515	215	19	10059	45
F	65	PN10	175	185	145	M16	4	310	-	437	545	250	270	423	557	215	26	11025	52
G	80	PN10	175	200	160	M16	8	323	-	490	605	250	300	475	615	215	29	12395	63
H	100	PN10	175	220	180	M16	8	357	-	524	650	250	332	515	665	215	43	13459	77
K	150	PN10	178	285	240	M20	8	503	-	714	885	350	466	723	890	250	50	19233	88
M	200	PN10	184	340	295	M20	8	595	-	839	1025	450	551	861	1080	320	99	24447	95
N	250	PN10	225	395	350	M20	12	682	-	997	1220	450	682	1050	1290	390	132	33060	120
P	300	PN10	257	445	400	M20	12	795	-	1151	1430	450	756	1188	1450	430	163	41673	180
Q	350	PN10	257	505	460	M20	16	924	480	1491	1800	600	893	1335	1678	490	210	50286	240
R	400	PN10	279	565	515	M24	16	1005	490	1637	1955	600	974	1499	1542	525	291	58899	288
S	450	PN7	311	615	565	M24	20	1124	500	1811	2175	600	1058	1624	1992	685	339	67512	381
T	500	PN7	360	670	620	M24	20	1317	500	2039	2444	600	1243	1869	2321	685	426	76126	520
V	600	PN7	372	780	725	M24	20	1390	500	2219	2676	600	1390	2124	2601	850	576	84739	779
W	700	PN7	380	910	840	M24	24	1570	500	2399	2846	600	1568	2462	2979	850	847	93352	1050

Note:
Dimension FF excludes bonded rubber lining on the valve face which acts as a gasket. Fitment of a separate gasket is not required for installation.
Valves larger than DN300 are fitted with bevel gearbox for manual hand wheel operation.
Standard drilling is slotted design. Lugged option is available on request.
Dimensional references tabulated for manually operated units can be referred to using the diagrams under the KGV Dimensions page



K SERIES - DOUBLED FLANGED KGV

ASSEMBLY PART NUMBER EXPLAINED

KGV D/FLG Valve,	DN	, Flange Slotted	, Body/Blade Material:	, Lining Option -	-	, Drive/Actuator -	, Actuator :	, Driver Material :
K	100	SANS 1000/3 PN10	Mild Steel Body / SS304 Blade	Natural Rubber	-	DA Actuated Fibre Barrel	160	Mild Steel
K	04	0	0	1	-	2	L	A

K04001-2LA (Example)

Valve Series	Code
Standard Face to face - Wafer	W
Standard Face to face - Lugged	L
Double Flanged	K

DN	CODE
50	2
65	2.5
80	3
100	4
150	6
200	8
250	10
300	12
350	14
400	16
450	18
500	20
600	24
700	28

Drilling	PN	Code
SANS 1000/3 PN10	10	0
SANS 1600/3 PN16	16	1
SANS 2500/3 PN25	25	2
TABLE D PN7	7	3
ANSI 150 PN16	16	4
ANSI 150 PN16	16	5

Valve Body/Blade Combination Material	Code
Mild Steel Body / SS304 Blade	0
Mild Steel Body / SS316 Blade	1
SS304 Body/SS316 Blade	2
SS316 Body/SS316 Blade	3
Mild Steel Body/NM400 Blade	4

Lining	Code
Unlined	0
Natural Rubber	1
EPDM	2
Viton	3

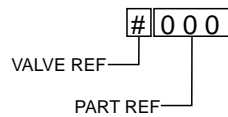
	Code
Handwheel	0
Gearbox	1
DA Actuated Fibre Barrel	Fibre Barrel Option 2
SR Fail Open Fibre Barrel	Fibre Barrel Option 3
SR Fail Close Fibre Barrel	Fibre Barrel Option 4
DA Actuated Stainless 304	Stainless Barrel 5
SR Fail Open Stainless 304	Stainless Barrel 6
SR Fail Close Stainless 304	Stainless Barrel 7
DA Actuated Mild Steel Barrel	Mild Steel Barrel 8
SR Fail Open Mild Steel Barrel	Mild Steel Barrel 9
SR Fail Close Mild Steel Barrel	Mild Steel Barrel 10
DA Actuated Mild Steel Barrel	Aluminium Barrel 11
SR Fail Open Mild Steel Barrel	Aluminium Barrel 12
SR Fail Close Mild Steel Barrel	Aluminium Barrel 13

Actuator Size (mm)	Code
50	D
65	F
80	G
100	H
125	J
150	K
160	L
200	M
250	N
300	P
350	Q
400	R
450	S
500	T
550	U
600	V
700	W
750	X
None	0

End Cap Material	Code
Mild Steel	A
SS304	B
SS316	C

COMPONENT LEVEL PART NUMBERS EXPLAINED

Code	Valve Size
D	50
F	65
G	80
H	100
K	150
M	200
N	250
P	300
Q	350
R	400
S	450
T	500
V	600
W	700



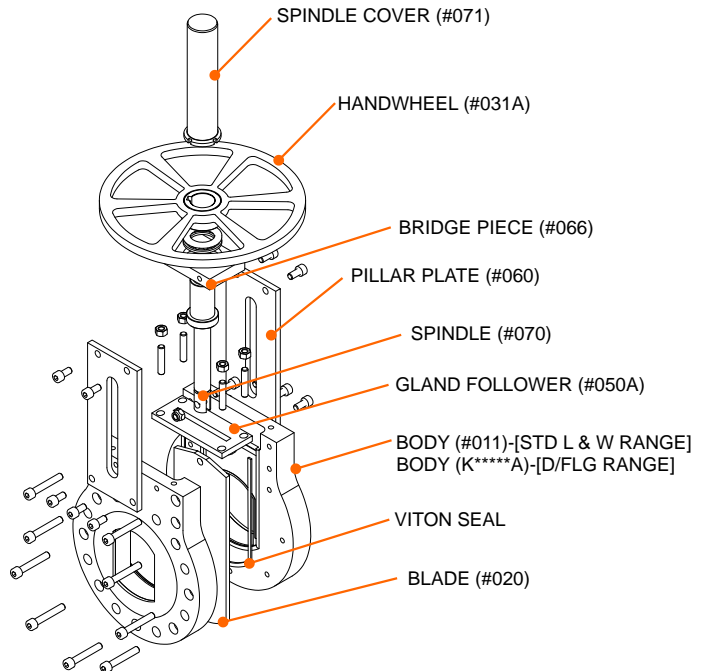
EXAMPLE:

50mm KGV BLADE = D020
 200mm PILLAR = M060
 300mm BODY = P011

Body Set Drilling	Code
SANS 1000/3 PN10 LUGGED	A/B
SANS 1000/3 PN10 WAFER	C/D
TABLE D PN7 LUGGED	E/F
TABLE D PN7 WAFER	G/H

Examples

K011RA / K011RB	
KGV DN150 PN10 1000/3 LUGGED SET	
A - Side A - C/Bore	
B - Side B - Tapped	
K011RC / K011RD	
KGV DN150 PN10 1000/3 WAFER SET	
C - Side C - C/Bore	
D - Side D - Tapped	



PRODUCT IDENTIFIER

Wafer Std Face to face Range - Root Part Numbers for Complete Valve (Excludes Ancill & Access.)					
DN	Handwheel	GB	DA Actuator	SR Fail Open	SR Fail Close
50	W02001-00A	-	W02001-2LA	W02001-3LA	W02001-4LA
65	W025001-00A	-	W025001-2LA		
80	W03001-00A	-	W03001-2LA	W03001-3MA	W03001-4MA
100	W04001-00A	-	W04001-2LA	W04001-3MA	W04001-4NA
150	W06001-00A	W06001-10A	W06001-2MA	W06001-3PA	W06001-4PA
200	W08001-00A	W08001-10A	W08001-2NA	W08001-3PA	W08001-4RA
250	W10001-00A	W10001-10A	W10001-2PA	W10001-3PA	W10001-4SA
300	W12001-00A	W12001-10A	W12001-2QA	W12001-3RA	W12001-4UA
350	-	W14001-10A	W14001-2RA	-	-
400	-	W16001-10A	W16001-2SA	-	-
450	-	W18001-10A	W18001-2UA	-	-
500	-	W20001-10A	W20001-2UA	-	-
600	-	W24001-10A	W24001-2XA	-	-
700	-	W28001-10A	W28001-2XA	-	-

Lugged Std Face to face Range - Root Part Numbers for Complete Valve (Excludes Ancill & Access.)					
DN	Handwheel	GB	DA Actuator	SR Fail Open	SR Fail Close
50	L02001-00A	-	L02001-2LA	L02001-3LA	L02001-4LA
65	L025001-00A	-	L025001-2LA		
80	L03001-00A	-	L03001-2LA	L03001-3MA	L03001-4MA
100	L04001-00A	-	L04001-2LA	L04001-3MA	L04001-4NA
150	L06001-00A	L06001-10A	L06001-2MA	L06001-3PA	L06001-4PA
200	L08001-00A	L08001-10A	L08001-2NA	L08001-3PA	L08001-4RA
250	L10001-00A	L10001-10A	L10001-2PA	L10001-3PA	L10001-4SA
300	L12001-00A	L12001-10A	L12001-2QA	L12001-3RA	L12001-4UA
350	-	L14001-10A	L14001-2RA	-	-
400	-	L16001-10A	L16001-2SA	-	-
450	-	L18001-10A	L18001-2UA	-	-
500	-	L20001-10A	L20001-2UA	-	-
600	-	L24001-10A	L24001-2XA	-	-
700	-	L28001-10A	L28001-2XA	-	-

Double Flange Range - Root Part Numbers for Complete Valve (Excludes Ancill & Access.)					
DN	Handwheel	Gearbox	DA Actuator	SR Fail Open	SR Fail Close
50	K02001-00A	-	K02001-2LA	K02001-3LA	K02001-4LA
65	K025001-00A	-	K025001-2LA		
80	K03001-00A	-	K03001-2LA	K03001-3MA	K03001-4MA
100	K04001-00A	-	K04001-2LA	K04001-3MA	K04001-4NA
150	K06001-00A	K06001-10A	K06001-2MA	K06001-3PA	K06001-4PA
200	K08001-00A	K08001-10A	K08001-2NA	K08001-3PA	K08001-4RA
250	K10001-00A	K10001-10A	K10001-2PA	K10001-3PA	K10001-4SA
300	K12001-00A	K12001-10A	K12001-2QA	K12001-3RA	K12001-4UA
350	-	K14001-10A	K14001-2RA	-	-
400	-	K16001-10A	K16001-2SA	-	-
450	-	K18001-10A	K18001-2UA	-	-
500	-	K20001-10A	K20001-2UA	-	-
600	-	K24001-10A	K24001-2XA	-	-
700	-	K28001-10A	K28001-2XA	-	-