

LINED GATE VALVE

Lined OS&Y Flanged Gate Valve

DN25-DN300 | 1"-12"

MODEL: KSY-LGT

» **Body Material**

ASTM CF8M, CF8, CF3,CF3M, WCB

» **Size Range**

DN: 25 - 300
NPS: 1" - 12"

» **Pressure Rating**

PN10*, PN16*,
PN25*, CL150

» **End Connection**

Flanged

» **Lining Material**

PFA, FEP, PO

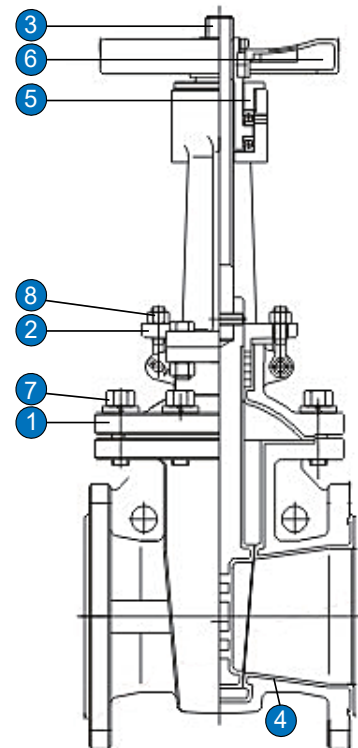
Materials List:

NO	Name	Material				
		Carbon Steel	P	R	PL	RL
1	Body/bonnet	WCB	CF8	CF8M	CF3	CF3M
2	Located clamp/Gland	WCB	CF8	CF8M	CF3	CF3M
3	Stem	2Cr13, SS304, SS410				
4	Lining material/seat	FEP, PFA, PO				
5	Stem nut	Copper				
6	Handwheel	QT400-15				
7	Bolt	A193 B7	A320 B8		A193 B8M	
8	Nut	A194 2H	A194 8		A194 8M	

Technical Specification:

Design Standard	Manufacturer Std.	API 600	
Face-to-face Standard	EN 558 S3	ASME B16.10	
Flange Standard	EN 1092-1	ASME B16.5	
Inspection and Test Standard	See below*		
Nominal Diameter	DN25-DN300	1"-12"	
Nominal Pressure (MPa)	1.0	1.6	CLASS 150
Pressure Test (MPa)	Shell Test	1.5	1.5
	High Pressure Sealing	1.1	1.1
	Low Pressure Sealing	0.6	0.6
Temperature Range (°C)	PFA: -30~200, FEP:-30~150, PO:-10~80		
Applicable Medium	Strong corrosive medium i.e. hydrochloric acid, Nitric acid, Hydrofluoric acid, Liquid chlorine, Sulfuric Acid and Aqua regia etc.		

*Note: Standards indicated are general standard used as reference, some variations exist. Other standard or tests may be available on request for fee.

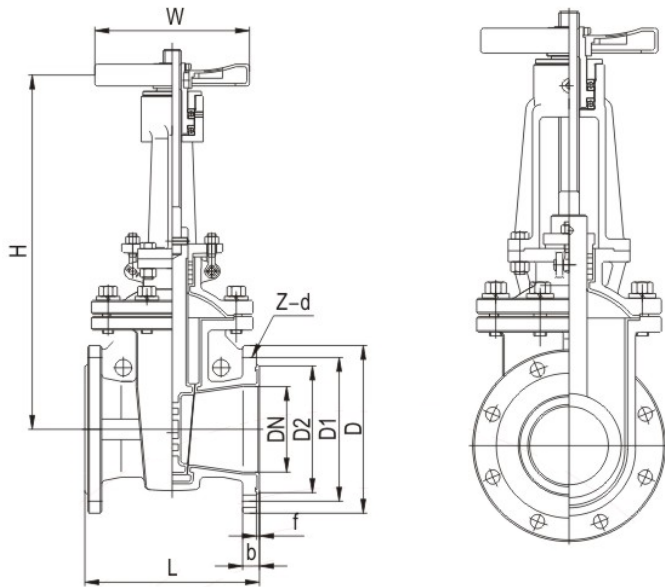


LINED GATE VALVE

Lined OS&Y Flanged Gate Valve

PN10*, DN25-DN300 | PN16*, DN25-DN300

MODEL: KSY-LGT



PN10* Dimensions (mm):

DN	L	D	D1	D2	Z-d	f	b	H	Do
25	127	115	85	65	4-14	2	14	-	160
32	140	140	100	78	4-18	3	16	-	160
40	165	150	110	85	4-18	3	16	-	180
50	178	165	125	100	4-18	3	16	295	180
65	190	185	145	120	4-18	3	18	335	220
80	203	200	160	135	8-18	3	20	402	250
100	229	220	180	155	8-18	3	20	455	280
125	254	250	210	185	8-18	3	22	605	320
150	267	285	240	210	8-23	3	24	690	360
200	292	340	295	265	8-23	3	26	727	400
250	330	395	350	320	12-23	4	28	970	450
300	356	445	400	368	12-23	4	28	1135	500

*Note: Some dimensions do not fully conform to EU standards, please be sure to confirm.

PN16* Dimensions (mm):

DN	L	D	D1	D2	Z-d	f	b	H	Do
25	127	115	85	65	4-14	2	14	-	160
32	140	140	100	78	4-18	3	16	-	160
40	165	150	110	85	4-18	3	16	-	180
50	178	165	125	100	4-18	3	16	295	180
65	190	185	145	120	4-18	3	18	335	220
80	203	200	160	135	8-18	3	20	402	250
100	229	220	180	155	8-18	3	20	455	280
125	254	250	210	185	8-18	3	22	605	320
150	267	285	240	210	8-23	3	24	690	360
200	292	340	295	265	12-23	3	26	727	400
250	330	410	355	320	12-26	4	28	970	450
300	356	465	410	375	12-26	4	28	1135	500

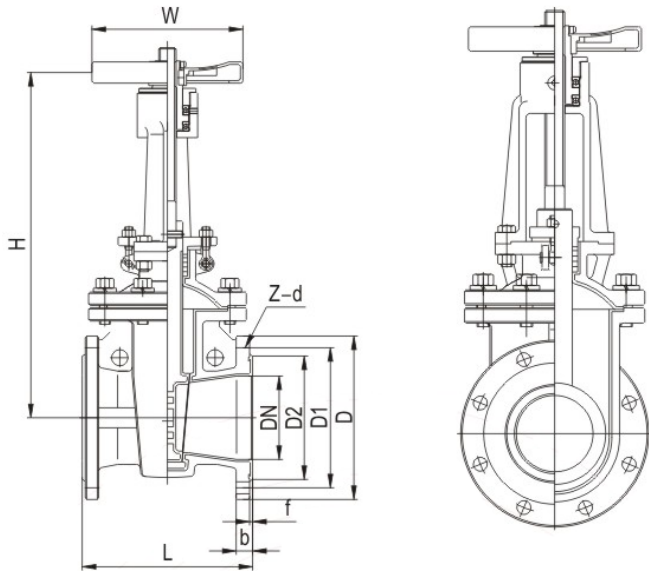
*Note: Some dimensions do not fully conform to EU standards, please be sure to confirm.

LINED GATE VALVE

Lined OS&Y Flanged Gate Valve

PN25*, DN25-DN300 | CL150, 1"-12"

MODEL: KSY-LGT



PN25* Dimensions (mm):

DN	L	D	D1	D2	Z-d	f	b	H	Do
25	127	115	85	65	4-14	2	16	-	160
32	140	140	100	78	4-18	3	18	-	160
40	165	150	110	85	4-18	3	18	-	180
50	178	165	125	100	4-18	3	20	295	180
65	190	185	145	120	8-18	3	22	335	220
80	203	200	160	135	8-18	3	22	402	250
100	229	235	190	160	8-23	3	24	455	280
125	254	270	220	188	8-26	3	28	605	320
150	267	300	250	218	8-26	3	30	690	360
200	292	360	310	278	12-26	3	34	727	400
250	330	425	370	332	12-30	4	36	970	450
300	356	485	430	390	16-30	4	40	1135	500

*Note: Some dimensions do not fully conform to EU standards, please be sure to confirm.

CL150 Dimensions (mm):

IN	L	D	D1	D2	Z-d	f	b	H	Do
1"	127	108	79.5	51	4-16	2	14	-	160
1¼"	140	117	89.0	64	4-16	3	16	-	160
1½"	165	127	98.5	73	4-16	3	17.5	-	180
2"	178	152	120.5	92	4-19	3	19	295	180
2½"	190	178	139.5	105	4-19	3	22	335	220
3"	203	190	152.5	127	4-19	3	24	402	250
4"	229	229	190.5	157	8-19	3	24	455	280
5"	254	254	216.0	186	8-22	3	24	605	320
6"	267	279	241.5	216	8-22	3	25	690	360
8"	292	343	298.5	270	8-22	3	28	727	400
10"	330	406	362.0	324	12-25	4	30	970	450
12"	356	483	432.0	381	12-25	4	32	1135	500

LINED VALVE

Fluorine Plastic Performance

Performance	Item		PTFE	PVDF	FEP	PFA	PO	PE	PP
			F4	F2	F46	PFA	PO	PE	PP
Physical Performance	Specific Gravity	g/cm3	2.1-2.2	1.76	2.1-2.2	2.1-2.2	0.92	0.92	0.92
	Water absorption	%	0.001~0.005	0.04	≤0.01	≤0.01	0.005	0.005	0.005
	Shrinkage rate of finished product	%	1~5	2.0	2~5	1~5	1~2	1~2	1~2
	Embrittlement coefficient	10-5/K	10~12	8.5~15.3	8.3~10.5	8.3~12	-	-	-
	Embrittlement temperature T1	°C	-180~-195	-62	-260	-180~-195	-40	-40	-20
	Hot resistance T2	°C	260	150	204	260	100	100	100
	Recommend working temperature T3	°C	≤180	≤100	≤150	≤200	≤85	≤85	≤85
Mechanical Performance	Hardness	SOSIXO	D50-65	D80	(R45)	D50-65	D40	D40	D40
	Friction coefficient f	-	0.06	0.14-0.17	0.06-0.11	0.06-0.11	-	-	-
	Tensile strength σ_b	MPa	13.7-24.5	45-48.3	20.0-24.5	14-28	≥10	6.9-14	7.5-14
	Bending strength σ_w	MPa	10.7-13.7	-	-	15-28	-	-	-
	Compression strength σ_y	MPa	111	68.6	-	111	-	-	-
	Impact strength σ_k	KJ/m2	16	19.7	Continuous	1 +	-55	45	50
	Ultimate elongation $\Delta\lambda$	%	250-350	30-300	250-270	300-500	480	300-600	600-700
	Breakdown voltage v	KV/mm	25~40	10.2	40	25~40	-	-	-
Processing Performance	Compression molding		Good	Good	Good	Good	Good	Good	Good
	Injection molding		-	Good	Good	Good	Good	Good	Good
	Lamination		Good	Good	Good	Good	Good	Good	Good
	Lamination		Good	Good	Good	Good	Good	Good	Good

LINED VALVE

Fluorine Plastic Performance

Corrosion Resistance performance (theoretical reference)

Medium	Concentration (%)	Temperature (°C)	PTFE	PVDF	FEP	PFA	PO	PE	PP
Sulfuric acid	10~98	Normal temperature ~100	A	A~B	A	A	Concentration ≤50%	Concentration ≤60%	A
Nitric acid	5~98	Normal temperature ~100	A	A	A	A	Concentration ≤30%	Concentration ≤60%	A
Hydrochloric acid	10~38	Normal temperature ~100	A	A	A	A	Concentration ≤38%	Concentration ≤60%	A~B
Acetic acid	10~100	Normal temperature ~100	A	A~B	A	A	Concentration ≤10%	Concentration ≤60%	A
Chromic acid	50~100	Normal temperature ~70	A	A~B	A	A	Concentration ≤30%	Concentration ≤20%	A
Phosphoric acid	50~85	Normal tempera- ture~100	A~B	D	A~B	A~B	Concentration ≤85%	Concentration ≤80%	A
Trichloroethane	100	Normal temperature	C	B	C	C	X	X	X
Copper-sulfate	15	Normal temperature	A	C	A	A	Concentration ≤90%	Concentration ≤80%	A
Diethyl ether	100	Normal temperature	B	C	B	B	X	X	X
Ethyl acetate	100	Normal temperature	B	A	B	B	X	X	X
Petrol	100	Normal temperature	A	A~B	A	A	X	X	X
Hydrogen peroxide	3~30	Normal temperature	A	A	A	A	Concentration ≤30%	Concentration ≤60%	A
Nitrobenzene	100	Normal temperature	A	A~B	A	A	X	X	X
Superalkali	10-50	Normal tempera- ture~100	A	A	A	A	Concentration ≤80%	Concentration ≤60%	A
Sodium Hypochlorite	-	70	A	B	A	A	Concentration ≤80%	Concentration ≤60%	A~B
Hydroxyl acid	40~99	-10~30	A~B	B	A~B	A~B	Concentration ≤80%	Concentration ≤60%	A~B
Oleum	20	Normal temperature	A	B	A	A	X	X	X
Acrylonitrile	-	Normal temperature	B	C	B	B	-	-	-
Aniline	100	Normal temperature	B	B	B	B	Concentration ≤60%	Concentration ≤20%	B
Benzene	100	Normal temperature	B	C	B	B	X	X	X
Butyl acetate	100	Normal temperature	B	C	B	B	Concentration ≤60%	Concentration ≤20%	B
Tetrachloromethane	Reagent grade	Normal temperature	B	C	B	B	X	X	X

Data indicated are theoretical value for reference. Depending on valve type and DN size, temperature limitation may be reduced accordingly.

A = Excellent, B = Good, C = OK, D = Poor

Many factors influence corrosion rating such as temperature fluctuation, concentration and aeration of fluids, high velocity or abrasions in the fluid steam, etc. The physical properties of material are affected differently by each corrosive media and sometimes it is inevitable one property is sacrificed for gain in another property. The corrosion data is provided as a comprehensive theoretical guide indicating the possible range, user must consider all parameters and exercise sound engineering judgment in material selection.