

LINED GLOBE VALVE

Lined OS&Y Flanged Globe Valve
DN15-DN250 | 1/2"-10"

MODEL: KAY-LGB

- » **Body Material**
ASTM CF8M, CF8, CF3,CF3M, WCB
- » **Size Range**
DN: 15 - 250
NPS: 1/2" - 10"
- » **Pressure Rating**
PN10*, PN16*,
PN25*, CL150
- » **End Connection**
Flanged
- » **Lining Material**
PFA, FEP, PO

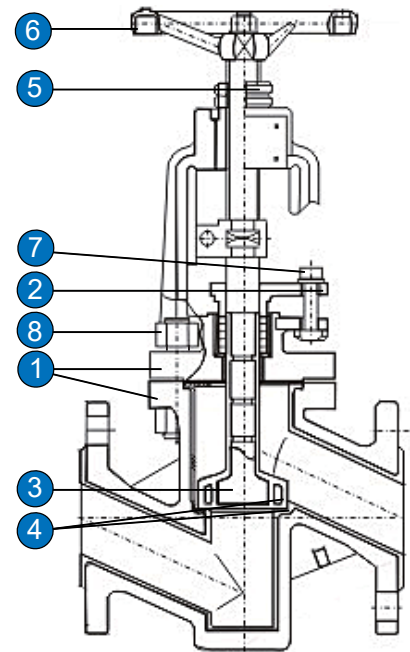
Materials List:

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.	BS 5160		
Face-to-face Standard	EN 558 S1	ASME B16.10		
Flange Standard	EN 1092-1	ASME B16.5		
Inspection and Test Standard	See below*			
Nominal Diameter	DN15-DN250	1/2"-10"		
Nominal Pressure (MPa)	1.0	1.6	CLASS 150	
Pressure Test (MPa)	Shell Test	1.5	1.5	1.5
	High Pressure Sealing	1.1	1.1	1.1
	Low Pressure Sealing	0.6	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.			

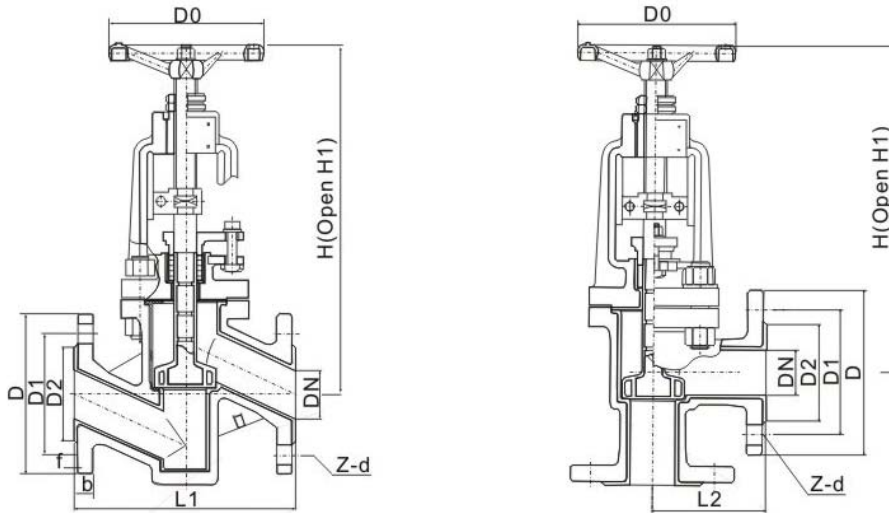
Note: Standards indicated are general standard used as reference, some variations exist. Other standard or tests may be available on request for fee.



LINED GLOBE VALVE

Lined OS&Y Flanged Globe Valve
 PN10*, DN15-DN250 | PN16*, DN15-DN250

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PN10* Dimensions (mm):

DN	L1	L2	D	D1	D2	Z-d	f	b	H	H1	Do
15	130	65	95	65	45	4-14	2	14	240	265	120
20	150	75	105	75	55	4-14	2	14	240	265	120
25	160	80	115	85	65	4-14	2	14	270	295	160
32	180	90	140	100	78	4-18	3	16	277	302	160
40	200	100	150	110	85	4-18	3	16	337	372	180
50	230	115	165	125	100	4-18	3	16	352	392	180
65	290	145	185	145	120	4-18	3	18	390	427	220
80	310	155	200	160	135	8-18	3	20	425	465	250
100	350	175	220	180	155	8-18	3	20	460	503	280
125	400	200	250	210	185	8-18	3	22	507	565	350
150	480	240	285	240	210	8-23	3	24	560	625	360
200	600	300	340	295	265	8-23	3	26	670	745	400
250	730	365	395	350	320	12-23	4	28	705	810	450

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

PN16* Dimensions (mm):

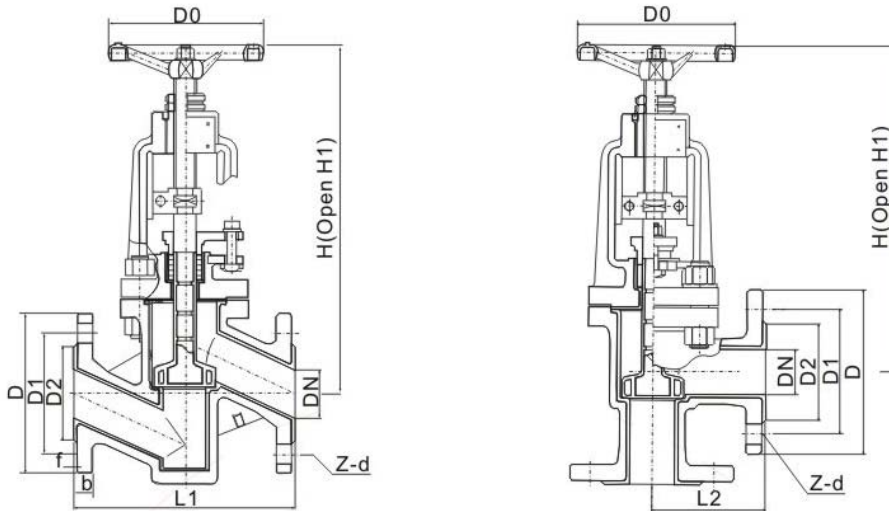
DN	L1	L2	D	D1	D2	Z-d	f	b	H	H1	Do
15	130	65	95	65	45	4-14	2	14	240	265	120
20	150	75	105	75	55	4-14	2	14	240	265	120
25	160	80	115	85	65	4-14	2	14	270	295	160
32	180	90	140	100	78	4-18	3	16	277	302	160
40	200	100	150	110	85	4-18	3	16	337	372	180
50	230	115	165	125	100	4-18	3	16	352	392	180
65	290	145	185	145	120	4-18	3	18	390	427	220
80	310	155	200	160	135	8-18	3	20	425	465	250
100	350	175	220	180	155	8-18	3	20	460	503	280
125	400	200	250	210	185	8-18	3	22	507	565	350
150	480	240	285	240	210	8-23	3	24	560	625	360
200	600	300	340	295	265	12-23	3	26	670	745	400
250	730	365	405	355	320	12-25	4	28	705	810	450

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

LINED GLOBE VALVE

Lined OS&Y Flanged Globe Valve
PN25*, DN15-DN250 | CL150, 1/2"-10"

MODEL: KAY-LGB



PN25* Dimensions (mm):

DN	L1	L2	D	D1	D2	Z-d	f	b	H	H1	Do
15	130	65	95	65	45	4-14	2	16	240	265	120
20	150	75	105	75	55	4-14	2	16	240	265	120
25	160	80	115	85	65	4-14	2	16	270	295	160
32	180	90	140	100	78	4-18	3	18	277	302	160
40	200	100	150	112	85	4-18	3	18	337	372	180
50	230	115	165	125	100	4-18	3	20	352	392	180
65	290	145	185	145	120	8-18	3	22	390	427	220
80	310	155	200	160	135	8-18	3	22	425	465	250
100	350	175	235	190	160	8-23	3	24	460	503	280
125	400	200	275	220	188	8-26	3	28	507	565	350
150	480	240	305	250	218	8-26	3	30	560	625	360
200	600	300	360	310	278	12-26	3	34	670	745	400
250	730	365	425	370	332	12-30	4	36	705	810	450

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

CL150 Dimensions (mm):

IN	L1	L2	D	D1	D2	Z-d	f	b	H	H1	Do
1/2"	130	65	89	60.5	35	4-15	2	12	240	265	120
3/4"	150	75	98	70.0	43	4-15	2	12	240	265	120
1"	160	80	108	79.5	51	4-15	2	12	270	295	160
1¼"	180	90	117	89.0	64	4-15	2	13	277	302	160
1½"	200	100	127	98.5	73	4-15	2	15	337	372	180
2"	230	115	152	120.5	92	4-19	2	16	352	392	180
2½"	290	145	178	139.5	105	4-19	2	18	390	427	220
3"	310	155	190	152.5	127	4-19	2	19	425	465	250
4"	350	175	229	190.5	157	8-19	2	24	460	503	280
5"	400	200	254	216.0	186	8-22	3	24	507	565	350
6"	480	240	279	241.5	216	8-22	3	26	560	625	360
8"	600	300	343	298.5	270	8-22	3	29	670	745	400
10"	730	365	406	362.0	324	12-25	3	31	705	810	540

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.