K.S.T Since 2012
KST korea valve

GLOBE CONTROL VALVE

GENERAL PURPOSE GLOBE VALVES

Specification

Body Size	1/2" to 20" (15A to 500A)
Body Style	2Way Straight Globe, Angle Globe
Pressure Rating	ASME Class 150 to 1500
End Connection	Flanged, Socket welded, Butt welded, Ring joint type, etc.
Trim Design	Unbalanced, Balanced Conventional P-Port Cage, Window Cage, Multi-hole 1,2,3stage
Bonnet Type	Bolted design, Pressure seal design Standard, Extension, Cryogenic, Bellows seal
Seat Leakage	ANSI B16.34 / FCI 20-1 Class IV(Standard), V(Optional), VI(Optional, Soft seat)
Characteristic	Equal %, Linear, Modified %, Quick opening Custom engineered
Standard Materials	
Body & Bonnet	A216 WCB / A105, A217 WC6 / A182 F11, A217 WC9 / A182 F22, A182 F91 Stainless steel, Tungsten, Titanium, Monel, Hastelloy, etc.
Trim	316SS, 410SS, 420SS, 420J2 SS, 630SS F-11, F-22, F-91 with Stellite overlay Inconel, Others special materials.

Body Materials Selection

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Body Materials Selection

Carbon Steel or Low Alloy Steel

Part No.	Temperature Range	-20℉ (-29℃)	450℉ (232℃)	650℉ (343℃) 800℉ (427℃)
	Description	Standard Materials		
1	Body	A216 Gr. WCB		
2	Bonnet	A216 Gr. WCB		
3	Seat Ring	304 Stainless Steel		
		410 Stainless Steel + Heat Treatment		
		304 Stainless Steel + Stellite #6 Hard Facing		
4	Plug/Disc	304 Stainless Steel		
		410 Stainless Steel + Heat Treatment		
		304 Stainless Steel + Stellite #6 Hard Facing		
5	Valve Stem	304 Stainless Steel		
		410 Stainless Steel + Heat Treatment		
		17-4PH(630) Stainless Steel		
6	Cage	304 Stainless Steel		
		410 Stainless Steel + Heat Treatment		
7	Guide Bushing	410 Stainless Steel + Heat Treatment		
		304 Stainless Steel + Stellite #6 Hard Facing		
8	Body Gasket	316 Stainless Steel + Graphite - Spiral Wound		
		316 S.S. +Teflon - Spiral Wound		
9	Seat Gasket	316 Stainless Steel + Graphite - Spiral Wound		
		316 S.S. +Teflon - Spiral Wound		
10	Packing	V-PTFE	Graphite	

Body Materials Selection

Stainless Steel

Part No.	Temperature Range	-20℉ (-29℃)	450℉ (232℃)	650℉ (343℃) 800℉ (427℃)
	Description	Standard Materials		
1	Body	A351 Gr. CF8M		
2	Bonnet	A351 Gr. CF8M		
3	Seat Ring	316 Stainless Steel		
		316 Stainless Steel + Stellite #6 Hard Facing		
4	Plug/Disc	316 Stainless Steel		
		316 Stainless Steel + Stellite #6 Hard Facing		
5	Valve Stem	316 Stainless Steel		
		17-4PH(630) Stainless Steel		
6	Cage	316 Stainless Steel		
8	Body Gasket	316 Stainless Steel + Graphite - Spiral Wound		
		316 S.S. +Teflon - Spiral Wound		
9	Seat Gasket	316 Stainless Steel + Graphite - Spiral Wound		
		316 S.S. +Teflon - Spiral Wound		
10	Packing	V-PTFE	Graphite	

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Cv, FL Travel Chart

Linear Standard Type

Percent of Travel			10	20	30	40	50	60	70	80	90	100
FL			0.94	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.9
Valve Size	Orifice Dia	Travel (mm)	Rated Cv									
1	1"	20	1.6	2.7	3.9	5.0	6.2	7.4	8.5	9.7	10.8	12
1.5	1.25"	20	2.6	4.5	6.5	8.4	10.3	12.3	14.2	16.1	18.1	20
	1.5"	20	3.6	6.3	9.1	11.8	14.5	17.2	19.9	22.6	25.3	28
2	2"	30	6.5	11.3	16.2	21.0	25.8	30.7	35.5	40.3	45.2	50
3	2.5"	40	9.1	15.9	22.6	29.4	36.2	42.9	49.7	56.5	63.2	70
	3"	40	14.3	24.9	35.6	46.2	56.8	67.5	78.1	88.7	99.4	110
4	4"		23.4	40.8	58.2	75.6	93.0	110.4	127.8	145.2	162.6	180
6	5"	60	39.0	68.0	97.1	126.0	155.0	184.1	213.0	242.0	271.1	300
	6"		52.0	90.6	129.4	168.0	206.6	245.4	284.0	322.6	361.4	400
8	7"	80	75.4	131.4	187.6	243.6	299.6	355.8	411.8	467.8	524.0	580
	8"		93.6	163.1	232.9	302.4	371.9	441.7	511.2	580.7	650.5	720
10	9"	90	117.0	203.9	291.2	378.0	464.9	552.2	639.0	725.9	813.2	900
	10"	120	156.0	271.8	388.2	504.0	619.8	736.2	852.0	967.8	1084.2	1200
12	12"	120	208.0	362.4	517.6	672.0	826.4	981.6	1136.0	1290.4	1445.6	1600
		130	286.0	498.3	711.7	924.0	1136.3	1349.7	1562.0	1774.3	1987.7	2200

Equal Percentage Standard Type

Percent of Travel			10	20	30	40	50	60	70	80	90	100
FL			0.94	0.94	0.94	0.94	0.94	0.94	0.93	0.92	0.92	0.90
Valve Size	Orifice Dia	Travel (mm)	Rated Cv									
1	1"	20	0.6	0.8	1.1	1.6	2.1	3.1	4.3	6.1	8.5	12
1.5	1.25"	20	0.9	1.3	1.9	2.6	3.5	5.1	7.2	10.1	14.2	20
	1.5"	20	1.3	1.8	2.6	3.6	5.0	7.2	10.1	14.2	19.9	28
2	2"	30	2.3	3.3	4.6	6.5	8.9	12.8	18.0	25.3	35.6	50
3	2.5"	40	3.3	4.6	6.5	9.1	12.4	18.0	25.2	35.5	49.8	70
	3"	40	5.1	7.2	10.2	14.3	19.5	28.2	39.7	55.7	78.3	110
4	4"		8.4	11.8	16.7	23.4	31.9	46.2	64.9	91.2	128.1	180
6	5"	60	14.0	19.7	27.8	39.0	53.2	77.0	108.2	152.0	213.5	300
	6"		18.7	26.3	37.0	52.0	71.0	102.6	144.2	202.6	284.7	400
8	7"	80	27.1	38.1	53.7	75.4	102.9	148.8	209.1	293.8	412.8	580
	8"		33.7	47.3	66.6	93.6	127.7	184.7	259.6	364.7	512.5	720
10	9"	90	42.1	59.2	83.3	117.0	159.7	230.9	324.5	455.9	640.6	900
	10"	120	56.1	78.9	111.0	156.0	212.9	307.8	432.6	607.8	854.1	1200
12	12"	120	74.8	105.2	148.0	208.0	283.8	410.4	576.8	810.4	1138.8	1600
		130	102.9	144.7	203.5	286.0	390.3	564.3	793.1	1114.3	1565.9	2200

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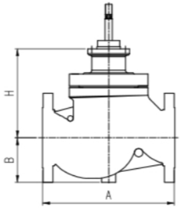
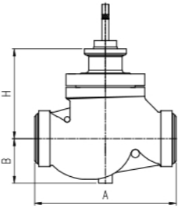
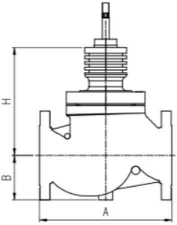
Dimensions







ANSI Class 150~600

unit/mm

valve Size (inch)	A						B		H			
	ANSI Class 150		ANSI Class 300		ANSI Class 600		ANSI Class 150~300	ANSI Class 600	ANSI Class 150~300		ANSI Class 600	
	Rf	Welding	Rf	Welding	Rf	Welding			Standard Bonnet	Extension Bonnet	Standard Bonnet	Extension Bonnet
1 ″	184	210	197	210	210	210	44	44	124	224	124	224
1.5 ″	222	251	235	251	251	251	61	61	145	245	145	245
2 ″	254	286	267	286	286	286	71	71	156	256	156	256
2.5 ″	276	292	292	292	311	311	81	85	187	287	187	287
3 ″	298	318	318	318	337	337	86	90	204	304	204	304
4 ″	352	368	368	368	394	394	111	114	235	335	235	335
6 ″	451	451	473	451	508	508	145	151	318	387	318	387
8 ″	543	543	568	543	610	610	185	192	380	450	380	450
10 ″	673	673	708	673	752	752	216	227	415	510	415	510

ANSI Class 900~2500

unit/mm

valve Size (inch)	A						B		H			
	ANSI Class 900		ANSI Class 1500		ANSI Class 2500		ANSI Class 900~1500	ANSI Class 2500	ANSI Class 900~1500		ANSI Class 2500	
	Rf	Welding	Rf	Welding	Rf	Welding			Standard Bonnet	Extension Bonnet	Standard Bonnet	Extension Bonnet
1.5 ″	333	330	333	330	381	359	90	90	187	287	185	285
2 ″	375	375	375	375	400	400	88	100	229	307	229	307
2.5 ″	410	375	410	375	441	400	-	-	-	-	-	-
3 ″	441	460	460	460	498	498	120	124	284	384	370	450
4 ″	511	530	530	530	575	575	142	155	334	434	356	456
6 ″	714	768	768	768	819	819	207	207	455	555	455	555
8 ″	781	832	838	832	1,022	1,029	250	290	455	555	557	657
10 ″	991	991	1,067	991	1,270	1,270	370	385	624	724	-	-

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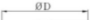
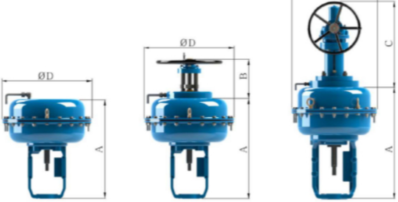
Dimensions

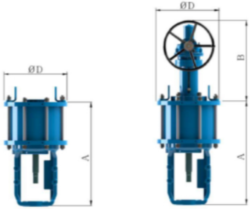
Dimension – Diaphragm Actuator



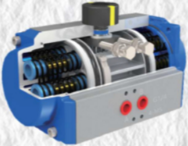


ACTUATOR SIZE	D	A	B	C
D1 (250)	252	333	140	X
D2 (290)	295	372	165	X
D3 (370)	374	413	165	X
D4 (480)	482	629	X	440
D5 (550)	560	678	X	440

Dimension – Cylinder



STROKE : 100mm Standard

ACTUATOR SIZE	D	A	B
C1 (8")	265	510	350
C2 (10")	315	510	431
C3 (12")	370	613	431
C4 (16")	475	613	431
C5 (20")	578	647	431
CE (SPECIAL)	Custom	Engineerd