



FGLV

GLOBE VALVE

GENERAL FEATURES

Ayvaz FGLV Globe valves are manufactured according to API 602 design standards and have a wide range of use in industrial applications thanks to their high pressure and temperature resistant structure. Ayvaz FGLV globe valves can be designed in different body materials, trim materials, pressure classes and connection types in accordance with API standards according to fluid conditions.

Advantages

- Compact and robust design in high temperature and pressure fluids
- Variety of designs suitable for fluid conditions
- Various flap designs
- Full tightness thanks to the tightened packing group
- Easily removable and repairable shaft and disc design
- They can be used for ON-OFF and control purposes

Design

- Bolted Cover (BB) or Welded Cover (WB)
- OS&Y spindle or RS spindle
- T type or Y type
- Standard Pass or Full Pass
- On-Off Valve, Control Valve or Needle Valve

Fluids

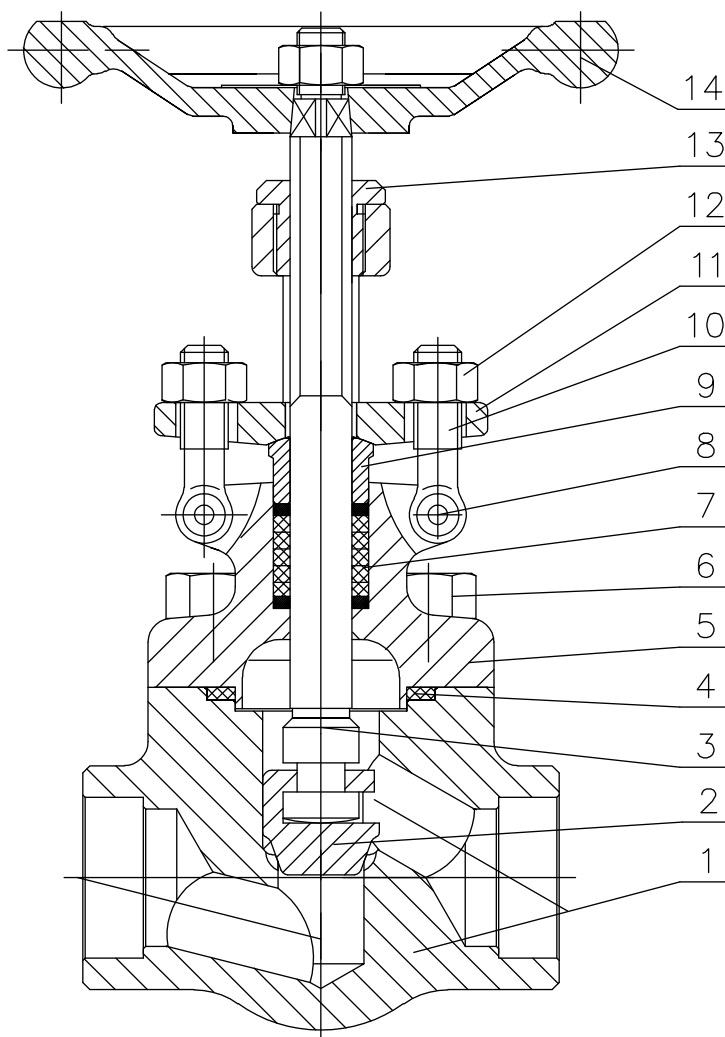
- Saturated Steam
- Superheated steam
- Gas
- Petroleum and Derivatives
- This
- Weather
- Various Chemical fluids
- Acid

Applications

- Saturated Steam
- Superheated steam
- Gas
- Petroleum and Derivatives
- Water
- Air
- Various Chemical fluids
- Acid

FGLV GLOBE VALVE

MATERIALS		
CODE	MATERIAL	MAX WORKING TEMPERATURE
A105	ASTM A105	-29 °C/+425 °C
LF2	ASTM A350 LF2	-46 °C/+425 °C
F316	ASTM A182 F316	-196 °C/+538 °C
316H	ASTM A183 F316H	-196 °C/+593 °C
F5	ASTM A182 F5	-29 °C/+600 °C
F9	ASTM A182 F9	-29 °C/+600 °C
F91	ASTM A182 F91	-29 °C/+600 °C
F11	ASTM A182 F11	-29 °C/+595 °C
F22	ASTM A182 F22	-29 °C/+595 °C



STANDARD MODELS PARTS LIST							
NO	PART NAME	FGLV-10	FGLV-20	FGLV-30	FGLV-40	FGLV-50	FGLV-60
1	Body	A105+STL	A182 F22+STL	A350 LF2	A182 F11+STL	A182 F304	A182 F316
2	Disc	A182 F6A	A182 F6A + STL	A182 F304	A182 F6A + STL	A182 F304	A182 F316
3	Stem	A276 410	A276 410	A276 304	A276 410	A276 F304	A276 F316
4	Gasket	SS304+Graphite	SS304+Graphite	SS304+Graphite	SS304+Graphite	SS304+Graphite	SS316+Graphite
5	Cover	A105	A182 F22	A350 LF2	A182 F11	A182 F304	A182 F316
6	Bolt	A193 B7	A193 B16	A320 L7	A193 B16	A193 B8	A193 B8
7	Seal	Graphite	Graphite	Graphite	Graphite	Graphite	Graphite
8	Bolt	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel	Stainless Steel	Stainless Steel
9	Seal Cover	A276 410	A276 410	A276 410	A276 410	A276 F304	A276 F316
10	Bolt	A193 B7	A193 B16	A320 L7	A193 B16	A193 B8	A193 B8
11	Seal Flange	A105	A105	A105	A105	A182 F304	A182 F304
12	Nut	A194 2H	A194 4	A194 7	A194 4	A194 8	A194 8
13	Stem Part	A276 410	A276 410	A276 410	A276 410	A276 410	A276 410
14	Volan	Cast Iron	Cast Iron	Cast Iron	Cast Iron	Cast Iron	Cast Iron

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Design Standards

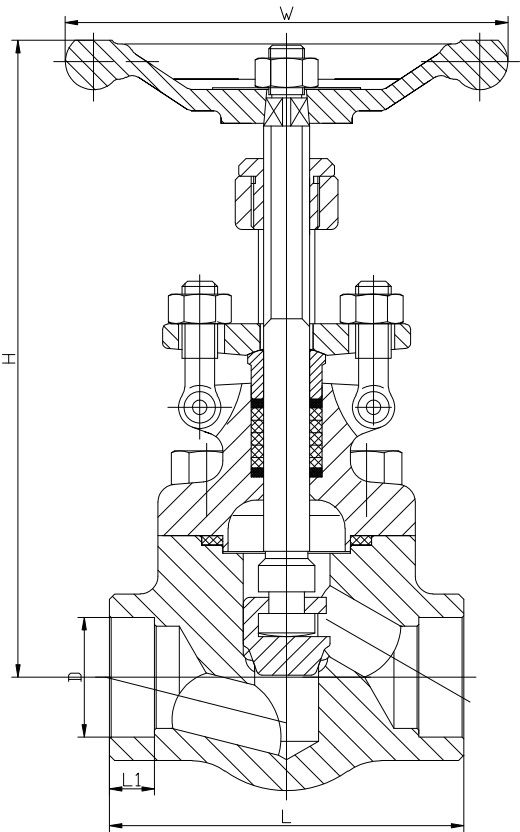
Design Standard:
- API602, BS5352, ANSI B16.34

Connection Standards:
- ANSI B16.11(SW)
- ANSI B1.20.1(NPT)
- ANSI B16.25 (BW)
- ANSI B16.5 (RF)

Test Standard:
- API598

Production Diameter:
- DN15(1/2") - DN50(2")

Pressure Class:
- Class 150 - Class 1500



FGLV CLASS 800 (SW,BW,NPT)						
DIA	DN	D	L1	L	H	W
1/2"	15	21.7	9.6	79	164	100
3/4"	20	27.1	12.7	92	164	100
1"	25	33.8	12.7	111	203	125
1 1/4"	32	42.5	12.7	120	224	160
1 1/2"	40	48.6	12.7	152	260	160
2"	50	61.1	15.7	172	300	180

FGLV CLASS 1500 (SW,BW,NPT)						
DIA	DN	D	L1	L	H	W
1/2"	15	21.7	9.6	111	207	125
3/4"	20	27.1	12.7	111	207	125
1"	25	33.8	12.7	120	240	160
1 1/4"	32	42.5	12.7	152	258	160
1 1/2"	40	48.6	12.7	172	330	180
2"	50	61.1	15.7	220	355	200

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WORKING TEMPERATURE	CLASS 150					CLASS 300					CLASS 600				
	A105	F316	F11	F22	LF2	A105	F316	F11	F22	LF2	A105	F316	F11	F22	LF2
-46 °C		19.0			19.6		49.6			51.1		99.3			102.1
-29 °C/38 °C	19.6	19.0	19.8	19.8	19.6	51.1	49.6	51.7	51.7	51.1	102.1	99.3	103.4	103.4	102.1
50 °C	19.2	18.4	19.5	19.5	19.2	50.1	48.1	51.7	51.7	50.1	100.2	96.2	103.4	103.4	100.2
100 °C	17.7	16.2	17.7	17.7	17.7	46.6	42.2	51.5	51.5	46.6	93.2	84.4	103.0	103.0	93.2
150 °C	15.8	14.8	15.8	15.8	15.8	45.1	38.5	49.7	50.3	45.1	90.2	77.0	99.5	100.3	90.2
200 °C	13.8	13.7	13.8	13.8	13.8	43.8	35.7	48.0	48.6	43.8	87.6	71.3	95.9	97.2	87.6
250 °C	12.1	12.1	12.1	12.1	12.1	41.9	33.4	46.3	46.3	41.9	83.9	66.8	92.7	92.7	83.9
300 °C	10.2	10.2	10.2	10.2	10.2	39.8	31.6	42.9	42.9	39.8	79.6	63.2	85.7	85.7	79.6
325 °C	9.3	9.3	9.3	9.3	9.3	38.7	30.9	41.4	41.4	38.7	77.4	61.8	82.6	82.6	77.4
350 °C	8.4	8.4	8.4	8.4	8.4	37.6	30.3	40.3	40.3	37.6	75.1	60.7	80.4	80.4	75.1
375 °C	7.4	7.4	7.4	7.4	7.4	36.4	29.9	38.9	38.9	36.4	72.7	59.7	77.6	77.6	72.7
400 °C	6.5	6.5	6.5	6.5	6.5	34.7	29.4	36.5	36.5	34.7	69.4	58.9	73.3	73.3	69.4
425 °C	5.5	5.5	5.5	5.5	5.5	28.8	29.1	35.2	35.2	28.8	57.5	58.3	70.0	70.0	57.5
450 °C	4.6*	4.6	4.6	4.6	4.6*	23.0*	28.8	33.7	33.7	23.0*	46*	57.7	67.7	67.7	46*
475 °C	3.7*	3.7	3.7	3.7	3.7*	17.4*	28.7	31.7	31.7	17.4*	34.9*	57.3	63.4	63.4	34.9*
500 °C	2.8*	2.8	2.8	2.8	2.8*	11.8*	28.2	25.7	28.2	11.8*	23.5*	56.5	51.5	56.5	23.5*
538 °C	1.4*	1.4	1.4	1.4	1.4*	5.9*	25.2	14.9	18.4	5.9*	11.8*	50.0	29.8	36.9	11.8*
550 °C								12.7	15.6				25.4	31.3	
575 °C								8.8	10.5				17.6	21.1	
600 °C								6.1	6.9				12.2	13.8	

WORKING TEMPERATURE	CLASS 800					CLASS 1500					
	A105	F5	F316	F316H	LF2	F9	F11	F22	"A105 LF2"	F22	F316
-46 °C			132.4		136.2				255.3		248.2
-29 °C/38 °C	136.2	137.9	132.4	132.4	136.2	137.9	137.9	137.9	255.3	258.6	248.2
50 °C	133.7	137.3	128.3	128.3	133.7	137.9	137.9	137.9	250.6	258.6	240.6
100 °C	124.3	134.5	112.5	112.5	124.3	137.4	137.3	137.4	233.0	257.6	211.0
150 °C	120.2	128.5	102.7	102.7	120.2	133.8	132.6	133.8	225.4	250.9	192.5
200 °C	116.8	123.4	95.1	95.1	116.8	129.6	127.9	129.6	219.0	243.4	178.3
250 °C	111.8	119.5	89.0	89.0	111.8	123.6	123.6	123.6	209.7	231.8	166.9
300 °C	106.2	114.3	84.3	84.3	106.2	114.3	114.3	114.3	199.1	214.4	158.1
325 °C	103.2	110.2	82.4	82.4	103.2	110.2	110.2	110.2	193.6	206.6	154.4
350 °C	100.2	107.3	80.9	80.9	100.2	107.3	107.3	107.3	187.8	201.1	151.6
375 °C	97.0	103.5	79.7	79.7	97.0	103.5	103.5	103.5	181.8	194.1	149.4
400 °C	92.6	97.6	78.5	78.5	92.6	97.6	97.6	97.6	173.6	183.1	147.2
425 °C	76.7	93.4	77.7	77.7	76.7	93.4	93.4	93.4	143.8	175.1	145.7
450 °C	61.3*	90.2	76.9	76.9	61.3*	90.2	90.2	90.2	115.0*	169.1	144.2
475 °C	46.5*	74.3	76.4	76.4	46.5*	84.5	84.5	84.5	87.2*	158.2	143.4
500 °C	31.4*	57.0	75.3	75.3	31.4*	75.3	68.6	75.3	58.8*	140.9	140.9
538 °C	15.7*	36.5	66.8	66.8	15.7*	46.7	39.7	49.2	29.5*	92.2	125.5
550 °C		32.1		66.5		40.0	33.9	41.7		78.2	
575 °C		23.5		63.8		27.9	23.5	28.1		52.6	
600 °C		16.2		53.1		19.1	16.3*	18.4*		34.4	

* We kindly advise NOT TO USE in that temperatures.

FGLV GLOBE VALVE

3D

