



FGAV

GATE VALVE

GENERAL FEATURES

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

General Features

- Compact and robust design in high temperature and pressure fluids
- Appropriate design diversity according to fluid conditions
- Low friction and long life
- Complete sealing thanks to the tightened seal group
- Shaft and disc design that is easily removable and suitable for repair
- High performance in ON-OFF working situations

Design

- Bolted Cover (BB) or Welded Cover (WB)
- OS&Y spindle or RS spindle
- Flexible or Solid Slider
- Standard Pass or Full Pass

Fluids

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

Applications

- Petrochemical facilities
- Refineries
- Power Plants
- Iron and Steel Factories
- Sugar Factories
- Chemical Facilities
- Food factories
- Paper Mills
- Boiler manufacturers
- Mining Facilities
- Cement Factories
- Fertilizer Facilities

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Design Standards

Design Standard:

- API602, BS5352, ANSI B16.34

Connection Standards:

- Socket Weld: ANSI B16.11(SW)
- Thread: ANSI B1.20.1(NPT)
- Butt Weld: ANSI B16.25 (BW)
- Flanged: ANSI B16.5 (RF)

Test Standard:

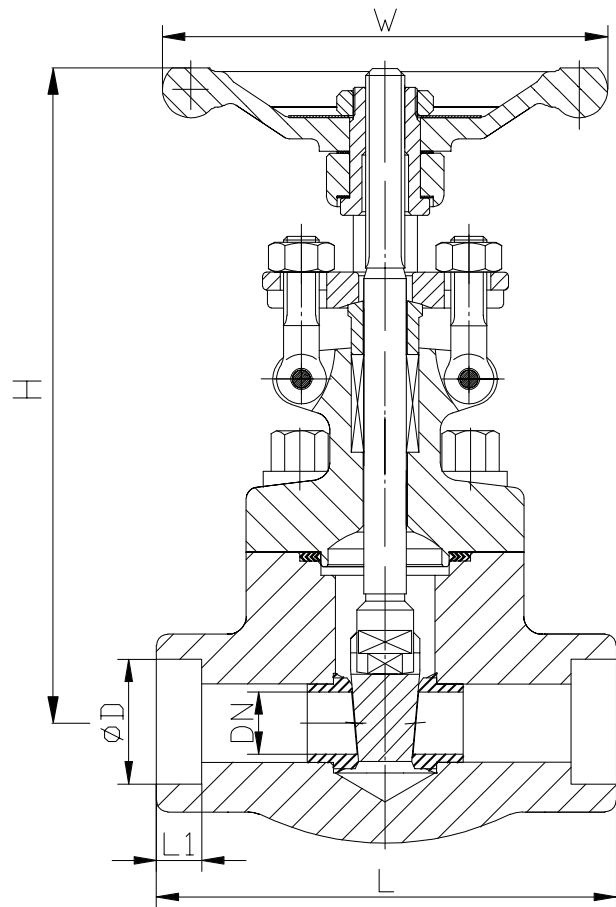
-API598

Production Diameter:

- DN15(1/2") - DN50(2")

Pressure Class:

- Class 150 - Class 1500



FGAV CLASS 800 DIMENSIONS (SW,BW,NPT)

DIA	DN	D	L1	L	H	W
1/2"	15	21.7	9.6	79	161	100
3/4"	20	27.1	12.7	92	163	100
1"	25	33.8	12.7	111	196	125
1 1/4"	32	42.5	12.7	120	223	160
1 1/2"	40	48.6	12.7	120	251	160
2"	50	61.1	15.7	140	290	180

FGAV CLASS 1500 DIMENSIONS (SW,BW,NPT)

DIA	DN	D	L1	L	H	W
1/2"	15	21.7	9.6	111	191	125
3/4"	20	27.1	12.7	111	192	125
1"	25	33.8	12.7	120	219	160
1 1/4"	32	42.5	12.7	120	243	160
1 1/2"	40	48.6	12.7	140	296	180
2"	50	61.1	15.7	178	316	200

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Operation 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			1,4	1,4	1,4			6.1	6.9				12.2	13.8	

Operation 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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	

* It is not recommended to operate at these temperatures.

FGAV GATE VANA

3D DISASSEMBLY DIAGRAM

