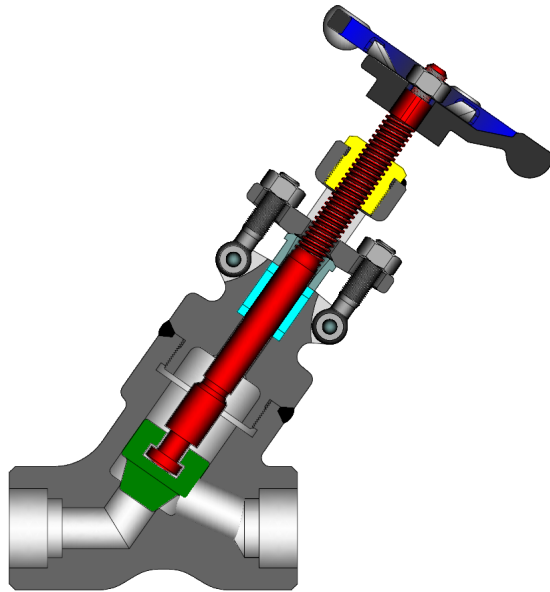


# API 602 Y-PATTERN GLOBE VALVES

FORGED CARBON, STAINLESS STEEL OR ALLOY STEEL

1/4" - 2" (6 - 50 mm)

ASME CLASSES 800 - 2680



STANDARD MATERIALS (Other materials available)

PART	MATERIALS			
Body	A105 + Stellite 6 Faced	A182 F11 + Stellite 6 Faced	A182 F22 + Stellite 6 Faced	A182 F316 (1)
Bonnet	A105	A182 F11	A182 F22	A182 F316
Disc	SST 420			A182 F316
Stem	A182 F6a			A182 F316
Gland Flange	A105			A182 F316
Eye Bolt	A193 Gr. B7	A193 Gr. B16		A193 Gr. B8M
Eye Bolt Nut	A194 Gr. 2H	A194 Gr. 7		A194 Gr. 8M
Gland	SST 420			Series 300 SST
Packing	Graphite			PTFE
Hand Wheel	Malleable Iron or Steel			
Hand Wheel Nut	Malleable Iron or Steel			
Identification Plate	Series 300 SST			

1. Threaded and weld end valve bodies A182 F316L

Class	Bore	Fig. No.
800	Standard	GY08
	Full	GYL8
1500	Standard	GY15
	Full	GYL5
1680	Standard	GY16
2500	Standard	GY25
2690	Standard	GY26

### Design Specifications

Item	Applicable Specification
Wall thickness	API 602
Pressure - temperature ratings	ASME B16.34
General valve design	API 602 & B16.34
End to End dimensions	ASME B16.10
Flange design	ASME B16.5
Thread design	ASME B1.20.1
Butt Weld design	ASME B16.25
Socket Weld design	ASME B16.11
Materials	ASTM

### DESIGN FEATURES:

- Standard trim is stellite faced seat integral to the body, 13% chrome disc, and 13% chrome stem (API trim 8). Other trims available on request.
- Wall thickness per heavy wall API 602 requirements.
- Seat faces lapped for smooth finish and superior sealing.
- Swivel disc for optimal seating and longer seat life are non-rotating.
- Stems of hand wheel operated design are rotating / rising design.
- Each valve is shell, seat and backseat pressure tested per industry standard API 598.
- Gland is two piece gland / gland flange design for optimal alignment and uniform packing compression.
- End Flanges have the following raised faces per ASME B16.5:  
Classes 150-300: 1/16" (2mm)  
Classes 600: 1/4" (7mm)
- Weld ends are available per ASME B16.25/B16.11 or per customer's specification.
- Other available options as follows:
  - » Alternate valve materials such as chrome and stainless steel alloys
  - » Alternate trim materials.
  - » NACE service.
  - » Special cleaning for applications such as oxygen or chlorine.
  - » Other options available as specified.

**NOTE:** See page 43 for flow, safety and maintenance information.

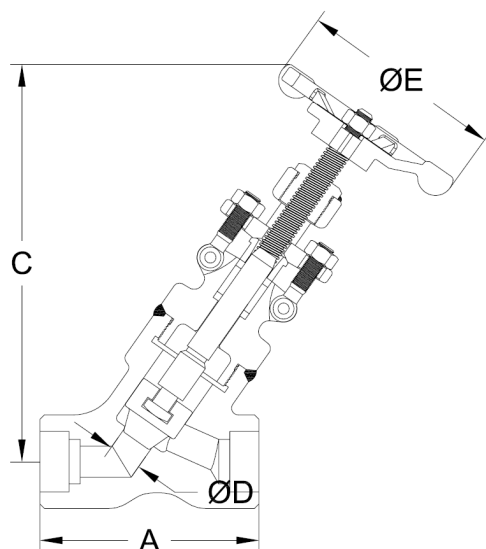
# Y-PATTERN GLOBE VALVE DIMENSIONS

CLASS 800 - 2680

SIZE	ASME 800											
	Bolted Bonnet						Welded Bonnet					
	Standard Bore						Standard Bore					
in	A	C	D	E	A	C	D	E	A	C	D	E
mm	WE				WE							
½	4.17	6.7	0.39	3.9	4.17	6.5	0.39	3.9	4.17	6.5	0.39	3.9
13	106	170	10	100	106	166	10	100	106	166	10	100
¾	4.17	6.7	0.5	3.9	4.17	6.5	0.5	3.9	4.17	6.5	0.5	3.9
19	106	170	13	100	106	166	13	100	106	166	13	100
1	4.72	8	0.69	4.9	4.72	7.8	0.69	4.9	4.72	7.8	0.69	4.9
25	120	202	18	125	120	197	18	125	120	197	18	125
1¼	5.98	9.8	0.91	6.3	5.98	9.6	0.91	6.3	5.98	9.6	0.91	6.3
32	152	249	23	160	152	243	23	160	152	243	23	160
1½	5.98	9.8	1.12	6.3	5.98	9.6	1.12	6.3	5.98	9.6	1.12	6.3
38	152	249	29	160	152	243	29	160	152	243	29	160
2	7.09	11.1	1.38	7.1	7.09	10.7	1.38	7.1	7.09	10.7	1.38	7.1
50	180	281	35	180	180	272	35	180	180	272	35	180

SIZE	ASME 1500 & 1690								ASME 2500 & 2680			
	Bolted Bonnet				Welded Bonnet				Welded Bonnet			
	Standard Bore				Standard Bore				Standard Bore			
in	A	C	D	E	A	C	D	E	A	C	D	E
mm	WE				WE							
½	4.72	7.9	0.39	4.9	4.72	7.6	0.39	4.9	5.98	9.6	0.43	6.3
13	120	200	10	125	120	192	10	125	152	243	11	160
¾	4.72	7.9	0.5	4.9	4.72	7.6	0.5	4.9	5.98	9.6	0.55	6.3
19	120	200	13	125	120	192	13	125	152	243	14	160
1	5.98	9.8	0.69	6.3	5.98	9.4	0.69	6.3	7.09	11.4	0.75	7.9
25	152	250	18	160	152	240	18	160	180	290	19	200
1¼	5.98	9.8	0.91	6.3	5.98	9.4	0.91	6.3	7.87	13.2	0.98	9.8
32	152	250	23	160	152	240	23	160	200	335	25	250
1½	7.09	11.1	1.12	7.1	7.09	10.7	1.12	7.1	7.87	13.2	1.1	9.8
38	180	283	29	180	180	273	29	180	200	335	28	250
2	7.87	12.8	1.38	7.9	7.87	12.4	1.38	7.9	9.06	15.4	1.38	11.8
50	200	324	35	200	200	316	35	200	230	390	35	300



WE = Socket Weld / Threaded Ends

C = Center to top open

ADDITIONAL SIZES, MATERIALS AND CLASSES AVAILABLE UPON REQUEST.

# API 602 Y-PATTERN GLOBE VALVES

FORGED CARBON, STAINLESS STEEL OR ALLOY STEEL

1/4" - 2" (6 - 50mm), ASME CLASSES 800 - 2680

SIZE	ASME 800						ASME 1500 & 1687						ASME 2500 & 2680		
	Bolted Bonnet			Welded Bonnet			Bolted Bonnet			Welded Bonnet			Welded Bonnet		
	Standard Bore			Standard Bore			Standard Bore			Standard Bore			Standard Bore		
in	WT	LB	CV	WT	LB	CV	WT	LB	CV	WT	LB	CV	WT	LB	CV
mm	WE	KG		WE	KG		WE	KG		WE	KG		WE	KG	
½	4.4		3.3	3.3		3.3	9.3		3.3	7.7		3.3	9.9		4
13	2			1.5			4.2			3.5			4.5		
¾	4.9		5.9	4.4		5.9	9.3		5.9	7.7		5.9	15.7		6.8
19	2.2			2			4.2			3.5			7.1		
1	9.3		11.2	8.4		11.2	12.1		11.2	11		11.2	24.3		13.3
25	4.2			3.8			5.5			5			11		
1¼	12.1		20	11		20	20.7		20	19.8		20	37.7		23.1
32	5.5			5			9.4			9			17.1		
1½	20.7		30	19.8		30	28.7		30	23.1		30	37.7		30
38	9.4			9			13			10.5			17.1		
2	28.7		49	28.7		49	36.4		49	32		49	55.1		49
50	13			13			16.5			14.5			25		

**FE** = Flanged Ends  
**WE** = Socket Weld / Threaded Ends

**WT** = Weight  
**CV** = Flow Coefficient