

STANDARD MATERIALS (Other materials available)

PART	MATERIALS
Body	A351 Gr. CF3M
Bonnet	A351 Gr. CF8M
Yoke	A351 Gr. CF8M
Disc or Disc Holder (2)	A276 316
Disc Insert (2)	PCTFE
Disc Washer (2)	SST 316
Disc Insert Nut (2)	A194 Gr. 8
Disc Locknut	A276 316
Stem	A276 316
Gland Flange	A351 Gr. CF8
Eye Bolt	A193 Gr. B8
Eye Bolt Nut	A194 Gr. 8
Gland	A276 316
Packing	PTFE
Gasket	Graphite
Extension Column	SST 304
Hand Wheel	Malleable Iron or Steel
Hand Wheel Nut	Steel
Stem Bushing	A582 416
Body / Bonnet Bolt	A193 Gr. B8
Body / Bonnet Nut	A194 Gr.8
Set Screw	Steel
Identification Plate	Series 300 SST

- 1) See pages 33-34 for flanged and butt weld designs.
- 2) Soft seat design.

Design Specifications

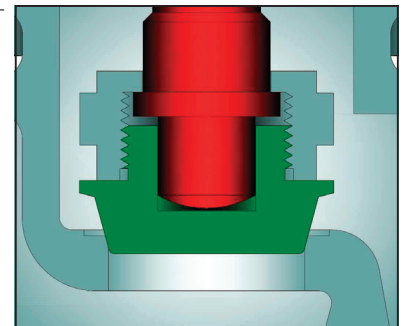
Class	Figure Number	Item	Applicable Specification
150	2474	Wall thickness	ASME B16.34
300	2447 (1)	Pressure - temperature ratings	ASME B16.34
600	1983 (1)	General valve design	ASME B16.34
		End Threads-NPT	ASME B1.20.1
		Socket Weld Ends	ASME B16.11
		Materials	ASTM

DESIGN FEATURES:

- **Seat face:** Ground and lapped to a smooth finish.
- **Body and bonnet joint** accurately machined.
- **Swivel disc** for optimal seating and longer seat life .
- **Stems** are rotating / rising design.
- **Each** valve is shell, seat and backseat pressure tested.
- **Body and bonnet** castings are precision machined.
- **Gland** has two-piece construction for easy alignment.
- **Valves** are specially cleaned and processed for oxygen or cryogenic service and are then sealed to prevent contamination.

- **Each** valve has a unique certification number that is traceable to the valve certification sheet which includes MTR data, pressure test, inspection result and certificate of conformance.
- **Other** available options as follows:
 - Alternate valve materials
 - Alternate trim materials
 - Non-extended design
 - Other options available as specified

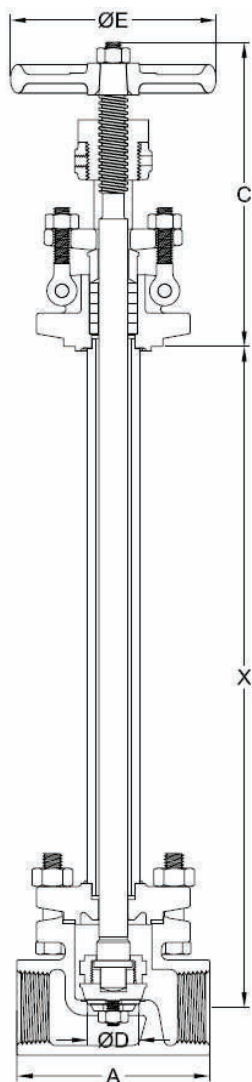
NOTE: Powell reserves the right to convert threaded ends to socket weld when needed, which will result in thread remnants as pipe stop.



Metal Disc

GLOBE VALVE DIMENSIONS (CLASSES 200-600)

SIZE	ASME 200								ASME 300							
in	A	C	D	E	X (1)	WT	lb	C _v	A	C	D	E	X (1)	WT	lb	C _v
mm							kg								kg	
¼	2.88	5.5	0.50	3.0	12.0	5.3		2.5	2.88	5.5	0.50	3.0	12.0	5.4		2.5
7	73	140	13	76	305	2.4			73	140	13	76	305	2.4		
¾	2.88	5.5	0.50	3.0	12.0	5.3		2.5	2.88	5.5	0.50	3.0	12.0	5.4		2.5
10	73	140	13	76	305	2.4			73	140	13	76	305	2.4		
½	2.88	5.5	0.50	3.0	12.0	5.3		2.5	2.88	5.5	0.50	3.0	12.0	5.6		2.5
13	73	140	13	76	305	2.4			73	140	13	76	305	2.5		
¾	3.25	5.9	0.75	3.5	12.0	6.1		5.8	3.25	5.9	0.75	3.5	12.0	6.2		5.8
20	83	149	19	89	305	2.8			83	149	19	89	305	2.8		
1	3.75	6.5	1.00	4.0	13.0	9.8		10.7	3.75	6.5	1.00	4.0	13.0	10.2		10.7
25	95	165	25	102	330	4.4			95	165	25	102	330	4.6		
1½	5.50	7.6	1.50	5.0	13.0	18.3		25	5.50	7.6	1.50	5.0	13.0	23.7		25
38	140	194	38	127	330	8.3			140	194	38	127	330	10.8		
2	6.00	8.2	2.00	6.0	14.0	25.9		50	6.00	8.2	2.00	6.0	14.0	31.9		50
50	152	208	51	152	356	11.7			152	208	51	152	356	14.5		



SIZE	ASME 600							
	in	A	C	D	E	X (1)	WT	lb
	mm							kg
½		2.88	5.5	0.50	3.0	12.0	5.5	2.5
13		73	140	13	76	305	2.5	
¾		3.25	5.9	0.75	3.5	12.0	6.4	5.8
20		83	149	19	89	305	2.9	
1		3.75	6.6	1.00	5.0	13.0	10.5	10.7
25		95	167	25	127	330	4.8	
1½		5.63	8.1	1.50	7.0	13.0	27.1	25
38		143	206	38	178	330	12.3	
2		6.25	9.1	2.00	8.0	14.0	54.4	50
50		159	232	51	203	356	24.7	

(1) Other extensions available. **C** = Bottom of yoke flange to top open
Consult Powell Engineering. **X** = Center to bottom of yoke flange (Std)

WT = Weight
C_V = Flow coefficient