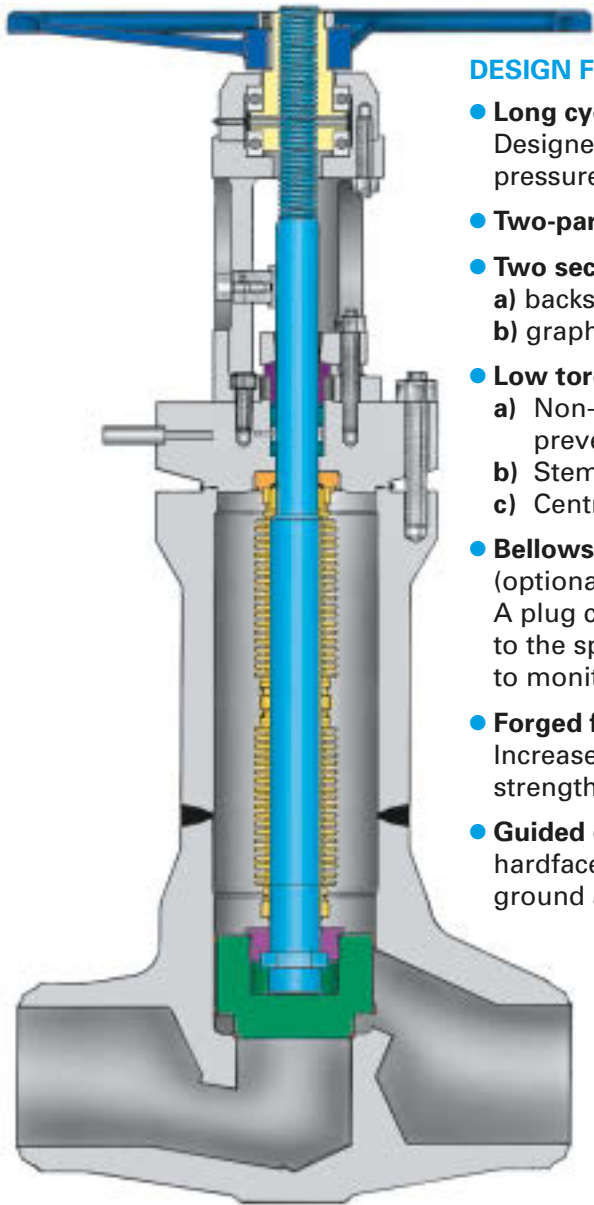




# FORGED STEEL BELLOWS SEAL BOLTED BONNET GLOBE VALVES

2½–10" (65–250 mm) ASME CLASSES 600, 900, 1500  
WITH OPTIONAL PROVISION FOR SEAL WELDING



### DESIGN FEATURES:

- **Long cycle life bellows (3000 cycles)** in Gr. 321 (stainless) or Inconel. Designed and successfully tested in high pressure/temperature conditions.
- **Two-part bellows.**
- **Two secondary stem seals:**
  - a) backseat in open position
  - b) graphite packing.
- **Low torque.**
  - a) Non-rotating stem prevents torsion of bellows
  - b) Stem nut thrust bearings
  - c) Central lubrication.
- **Bellows monitoring port** (optional). A plug can be connected to the space above the bellows to monitor performance.
- **Forged for higher safety.** Increased toughness, strength and fatigue resistance.
- **Guided disc.** Seat and disc hardfaced with Stellite 6, ground and lapped.

### STANDARD MATERIALS

Part	Carbon steel	Stainless steel
Body/bonnet	A 105	A 182 Gr. F316
Stem	Gr. 13 CR	Gr. 316
Disc <sup>(1)</sup>	A 105 <sup>(2)</sup>	Gr. F 316 <sup>(2)</sup>
Bellows	Gr. 321 (stainless), Inconel or Hastelloy	
Bellows fitting	Gr. 321 (stainless)	
Packing	Graphite	
Seat	Integral Hardfaced Stellite 6	
Stem nut	Manganese bronze	

(1) Soft disc inserts available for gas or vacuum service.

(2) Hardfaced Stellite 6

### FIGURE NUMBERS

Class	Figure No.
600	2074R
900	7074R
1500	3074R

### PRESSURE/TEMPERATURE RATINGS

Material	Temp. °F °C	Working Pressure psig bar			Shell Test Pressure psig bar		
		600	900	1500	600	900	1500
A 105	100	1480	2220	3705	2225	3350	5575
	38	102	153	256			
	800	825	1235	2060	153	231	384
	427	57	85	142			
A 182 Gr. F316	100	1440	2160	3600	2175	3250	5400
	38	99	149	248			
	1000	700	1050	1750	150	224	372
	538	48	72	121			

### DIMENSIONS AND WEIGHTS

Size in mm	Center to Top of Handwheel in mm			End to End in mm			Weight (Butt Weld) lb kg		
	600	900	1500	600	900	1500	600	900	1500
2½ 65	22 559	26 660	29 737	8.50 216	10 254	10 254	120 55	135 61	145 66
3 80	23 584	28 711	31 787	10 254	12 305	12 305	225 102	240 109	250 113
4 100	31 787	35 889	38 965	12 305	14 356	16 406	305 139	325 147	345 157
6 150	41 1041	47 1194	51 1295	22 559	20 508	22 559	790 359	880 399	925 420
8 200	44 1118	55 1270	60 1524	26 660	26 660	28 711	1350 613	1580 717	1650 748
10 250	48 1219	59 1499	65 1651	31 787	31 787	34 864	1800 817	2050 930	2175 987