



### STANDARDS

Face to Face Dimensions:	ANSI B16.10
End Flange Dimensions:	ANSI B16.5
Buttwelding Ends:	ANSI B16.25
Shell Wall Thickness:	API 600
Basic Design:	API 600
Test:	API 598

Class 150																			
DN NPS	15 1/2	25 1	40 1 1/2	50 2	65 2 1/2	80 3	100 4	125 5	150 6	200 8	250 10	300 12	350 14	400 16	450 18	500 20	600 24	750 30	900 36
L(RF)	108 4.3	127 5	165 6.5	178 7	191 7.5	203 8	229 9	254 10	267 10.5	282 11.5	330 13	356 14	381 15	407 16	432 17	457 18	508 20	610 24	711 28
L <sub>1</sub> (BW)	108 4.3	127 5	165 6.5	216 8.5	241 9.5	283 11.5	305 12	381 15	403 15.9	419 16.5	457 18	502 19.8	572 22.5	610 24	660 26	711 28	813 32	915 36	1016 40
L <sub>2</sub> (RTJ)	119 4.7	140 5.5	178 7	191 7.5	203 8	216 8.5	241 9.5	267 10.5	279 11	305 12	342 13.5	368 14.5	394 15.5	419 16.5	445 17.5	470 18.5	521 20.5	622 24.5	724 28.5
H	205 8.1	240 9.5	390 15.4	400 15.8	490 19.3	508 20	585 23	740 29.13	773 30.4	955 37.63	1160 45.8	1375 54.13	1569 61.8	1765 69.5	1978 77.9	2219 87.4	2611 102.4	3197 125.4	3737 147.1
D <sub>o</sub>	100 3.9	140 5.5	200 8	200 8	200 8	250 10	250 10	300 12	300 12	350 14	400 16	450 18	500 20	600 24	600 24	680 27	720 28.4	800 31.5	800 31.5
RF(kg) BW(kg)	7 6	8 7	14 10	18 15	28 22	30 26	50 40	72 68	85 77	127 18	195 185	283 270	398 370	524 500	690 650	900 880	1350 1100	2800 2610	3820 3600

# MATERIAL LIST

NO.	Part Name	Carbon Steel		Alloy Steel			Stainless Steel				
		WCB	LCB	WC6	WC9	C5	CF8	CF8M	CF3	CF3M	
1	Body	A216 WCB	A352 LCB	A217 WC9	A217 WC9	A217 C5	A351 CF8	A351 CF8M	A351 CF3	A351 CF3M	
2	Seat Ring	A105	A350 LF2	A182 F304	A182 F304	A182 F304	A182 F304	A182 F316	A182 F304L	A182 F316L	
3	Wedge	A216 WCB	A352 LCB	A217 WC6	A217 WC9	A217 CF5	A351 CF8	A351 CF8M	A351 CF3	A351 CF3M	
4	Stem	A182 F6	A182 F304	A182 F304	A182 F304	A182 F304	A182 F304	A182 F316	A182 F304L	A182 F316L	
5	Bonnet bolt	A193 B7		A320 L7	A193 B16	A320 B8	A193 B8M				
6	Bonnet nut	A194 2H		A194 4	A194 7	A194 8					
7	Gasket	Solid metal serrated gasket			Stainless Steel and graphite spiral wound			Non-metallic gasket			
8	Bonnet	A216 WCB	A352 LCB	A217 WC6	A217 WC9	A217 C5	A351 CF8	A351 CF8M	A351 CF3	A351 CF3M	
9	Backseat bushing	A182 F6	A182 F6	A182 F304	A182 F304	A182 F304	A182 F304	A182 F316	A182 F304L	A182 F316L	
10	Stem Packing	Graphite									
11	Lantern*	A182 F6	A182 F6	A182 F304	A182 F304	A182 F304	A182 F304	A182 F316	A182 F304L	A182 F316L	
12	Pin	Carbon Steel or Alloy Steel									
13	Gland	A182 F6	A182 F6	A182 F304	A182 F304	A182 F304	A182 F304	A182 F316	A182 F304L	A182 F316L	
14	Gland Flange	A216 WCB	A352 LCB	A217 WC6	A217 WC9	A217 C5	A351 CF8	A351 CF8M	A351 CF3	A351 CF3M	
15	Gland Eyebolt	A307 B		A307 L7	A193 B7	A193 B8					
16	Gland Nut	A194 2H		A194 4	A194 8						
17	Stem Nut	A439D2		ZCuA110Fe3	(GB standard)						
18	Retaining Nut	Carbon Steel or Alloy Steel									
19	Hand Wheel	Ductile iron or Carbon Steel									
20	H.W.Lock Nut	Carbon Steel or Alloy Steel									
21	York	A216 WCB	A352 LCB	A217 WC6	A217 WC9	A217 C5	A351 CF8	A351 CF8M	A351 CF3	A351 CF3M	
22	Nipple	Copper Alloy			Carbon Steel	or Stainless Steel					
23	Sealing face overlay	13Cr and 18Cr-8Ni or HF(Co-CrA)									

The material is according to ASTM standard.

\* must be stated in contract.