

TABLE 1 – TEST PRESSURE

(ASME B 16.34 & API Std. 602 for Class 800 Valves)

Class	150#			300#		
Description	CWP	Shell	Seat	CWP	Shell	Seat
Material	psig	Kg/cm ²	Kg/cm ²	psig	Kg/cm ²	Kg/cm ²
A105, A350-LF2	285	32	23	740	80	59
A182-F5,F9,F11,F22	290	32	23	750	80	59
A182-F304,F316	275	30	23	720	78	57
A182-F304L, F316L	230	25	20	600	64	48

Class	600#			800#		
Description	CWP	Shell	Seat	CWP	Shell	Seat
Material	psig	Kg/cm ²	Kg/cm ²	psig	Kg/cm ²	Kg/cm ²
A105, A350-LF2	1480	157	117	1975	210	153
A182-F5,F9,F11,F22	1500	159	117	2000	211	155
A182-F304,F316	1440	153	113	1920	204	150
A182-F304L, F316L	1200	127	94	1600	169	125

Class	1500#			2500#		
Description	CWP	Shell	Seat	CWP	Shell	Seat
Material	psig	Kg/cm ²	Kg/cm ²	psig	Kg/cm ²	Kg/cm ²
A105, A350-LF2	3705	392	289	6170	653	478
A182-F5,F9,F11,F22	3750	396	291	6250	660	484
A182-F304,F316	3600	380	280	6000	633	465
A182-F304L,F316L	3000	317	233	5000	528	387

CWP: The maximum allowable pressure at -20°F to 100°F (38°C).

TABLE 2 – TEST DURATION

NOMINAL SIZE (NPS)	MINIMUM TEST DURATIONS (Seconds)			
	Hydro Shell Test	Back Seat Test	Hydro Seat Test	Air Seat Test
≤ 2"	15	15	15	15
2 ½" – 6"	60	60	60	60
8" – 12"	120	60	120	120
≥ 14"	300	60	120	120

TABLE 3 – MAXIMUM ALLOWABLE LEAKAGE RATES

NOMINAL SIZE (NPS)	Gate & Globe Valves		Check Valves	
	Liquid Test ^(a) (Drops Per Minute)	Gas Test (Bubbles Per Minute)	Liquid Test	Gas Test
≤ 2"	0 ^(b)	0 ^(c)	3 scc x NPS / minute.	700 scc x NPS / minute
2 ½" – 6"	12	24		
8" – 12"	20	40		
≥ 14"	d	e		

(a) For the liquid test, 1 millilitre is considered equivalent to 16 drops

(b) For the liquid test, 0 drop means no visible leakage per minimum specified duration of the test.

(c) For the gas test, 0 bubble means less than 1 bubble per minimum specified duration of the test.

(d) For valves greater than or equal to 14" (NPS 14), the maximum permissible leakage rate shall be 2 drops per minute per inch NPS size.

(e) For valves greater than or equal to 14" (NPS 14), the maximum permissible leakage rate shall be 4 bubbles per minute per inch NPS size.