



Series 76/77 High Performance
ANSI 300 Torque (Inch-Pounds)

Soft Seat				
Valve	Seat Upstream		Seat Downstream	
Size	0-150psi	700psi	0-150psi	700psi
2"	185	620	184	623
2.5"	219	698	213	691
3"	231	721	231	721
4"	263	1000	483	1339
5"	605	1615	973	2781
6"	630	1679	998	2833
8"	1050	3492	1890	5408
10"	1890	6706	3045	9013
12"	2930	11732	4830	13236
14"	4337	15389	8610	22660
16"	6447	25174	14700	36153
18"	7980	30344	18375	45835
20"	11697	44280	24675	61182
24"	21389	87633	39900	92700

Fire Safe Seat				
Valve	Seat Upstream		Seat Downstream	
Size	0-150psi	700psi	0-150psi	700psi
2"	521	797	624	1024
2.5"	549	871	689	1181
3"	578	938	723	1219
4"	840	1556	1050	2022
5"	1801	2871	3005	5064
6"	1838	3090	3124	5253
8"	2835	5974	4820	10156
10"	4935	9579	8390	16285
12"	7035	17943	11960	30504
14"	9555	26080	15299	44332
16"	12495	40603	21242	69010
18"	18165	50573	30881	85975
20"	24885	80505	42305	136857
24"	38535	146054	57803	204455

Metal Seat				
Valve	Seat Upstream		Seat Downstream	
Size	0-150psi	500psi	0-150psi	500psi
2"	884	1388	Consult Factory	
2.5"	921	1424		
3"	945	1597		
4"	1260	1906		
5"	2791	5732		
6"	2940	5871		
8"	4305	8343		
10"	7140	14935		
12"	9555	24308		
14"	12705	30694		
16"	20055	39964		
18"	30135	54796		
20"	41160	83430		
24"	70350	112476		

Notes:

1. This chart is to be used as a guideline only.
2. These torque ratings do not apply to every possible service criteria, which may effect seating and undeating torque.
3. Torque values are applicable to Flow Line Series 76/77.
4. Dynamic torque should always be a consideration when sizing valves with higher differential pressures.
5. For 3 way tee assemblies, multiply the above torque by 1.6

Flow Line Valve and Controls, L.L.C.