



Elite High Performance Butterfly Valve

CLASS 150 SEATING/UNSEATING TORQUES (lbf-in)

SIZE		SOFT SEAT				METAL SEAT				FIRE SAFE SEAT				
inch	mm	100 psi	150 psi	200 psi	285 psi	100 psi	150 psi	200 psi	285 psi	100 psi	150 psi	200 psi	285 psi	
2	50	lbf-in	230	246	261	288	644	703	762	863	575	637	700	805
		N.M	26	28	30	33	73	79	86	98	65	72	79	91
2.5	65	lbf-in	265	286	308	345	690	752	815	920	621	683	746	851
		N.M	30	32	35	39	78	85	92	104	70	77	84	96
3	80	lbf-in	288	319	350	403	851	932	1,013	1,151	782	863	944	1,081
		N.M	33	36	40	46	96	105	114	130	88	98	107	122
4	100	lbf-in	483	539	595	690	1,058	1,161	1,264	1,438	943	1,043	1,142	1,312
		N.M	55	61	67	78	120	131	143	163	107	118	129	148
5	125	lbf-in	667	726	785	886	1,404	1,544	1,683	1,921	1,289	1,419	1,550	1,772
		N.M	75	82	89	100	159	174	190	217	146	160	175	200
6	150	lbf-in	863	956	1,049	1,208	1,956	2,152	2,348	2,681	1,783	1,970	2,156	2,474
		N.M	98	108	119	137	221	243	265	303	202	223	244	280
8	200	lbf-in	1,611	1,928	2,245	2,784	2,968	3,267	3,565	4,073	2,761	3,159	3,557	4,234
		N.M	182	218	254	315	335	369	403	460	312	357	402	478
10	250	lbf-in	2,819	3,232	3,646	4,349	4,947	5,463	5,979	6,857	4,314	4,784	5,253	6,052
		N.M	319	365	412	491	559	617	676	775	488	541	594	684
12	300	lbf-in	3,567	4,235	4,904	6,040	7,766	8,568	9,370	10,734	6,788	7,528	8,268	9,526
		N.M	403	479	554	683	878	968	1,059	1,213	767	851	934	1,076
14	350	lbf-in	6,098	7,093	8,088	9,779	11,332	12,492	13,652	15,624	9,089	10,068	11,048	12,713
		N.M	689	801	914	1,105	1,281	1,412	1,543	1,765	1,027	1,138	1,248	1,437
16	400	lbf-in	8,629	9,966	11,303	13,576	14,381	15,846	17,310	19,800	11,620	12,845	14,070	16,153
		N.M	975	1,126	1,277	1,534	1,625	1,790	1,956	2,237	1,313	1,451	1,590	1,825
18	450	lbf-in	12,080	13,977	15,874	19,098	20,709	22,783	24,857	28,383	16,682	18,430	20,177	23,148
		N.M	1,365	1,579	1,794	2,158	2,340	2,574	2,809	3,207	1,885	2,082	2,280	2,616
20	500	lbf-in	16,107	18,626	21,144	25,426	28,187	30,855	33,523	38,059	22,435	24,674	26,912	30,718
		N.M	1,820	2,105	2,389	2,873	3,185	3,486	3,788	4,300	2,535	2,788	3,041	3,471
24	600	lbf-in	25,081	29,185	33,290	40,268	41,188	45,370	49,552	56,662	32,904	36,486	40,068	46,158
		N.M	2,834	3,298	3,762	4,550	4,654	5,127	5,599	6,403	3,718	4,123	4,528	5,216
30	750	lbf-in	43,144	47,031	50,917	57,525								
		N.M	4,875	5,314	5,753	6,500								
36	900	lbf-in	61,552	71,657	81,763	98,943								
		N.M	6,955	8,097	9,239	11,180								

- Torques shown included 30% safety factor.
- All torque values in the table are for the wetted line media. If media is dry then add additional 10% to torque.
- If service is modulating then add additional 10% to torque.
- Torque may vary with the valve material.

This figure is based on the following seat material - Soft seat: MRTFE and PTFE, Metal Seat: 316 Stainless steel, Fire safe seat: MTTFE & 316 Stainless steel.

Example...

12" valve at 285 psi = 6,040 lbf.in

6,040 + 10% for dry service = 6,040 + 604 = 6,644 lbf-in

6,644 + 10% for modulating service = 6,644 + 664 = 7,308 lbf-in

Elite Series 400