

## Actuator Torque - Double-Acting (lbf.in)

Actuator Size	Torque in lbf.in Supply pressure (psig)												
	30	35	40	45	50	55	60	70	75	80	90	100	120
FD 12	44	51	59	66	74	81	89	104	112	119	134	149	179
FD 25	81	95	109	123	137	151	165	193	207	220	248	276	332
FD 40	153	179	205	231	257	283	309	361	387	413	466	518	622
FD 65	233	272	312	352	392	431	471	550	590	630	709	789	948
FD 100	344	403	461	520	579	638	696	814	873	931	1049	1166	1401
FD 150	551	645	739	833	927	1021	1115	1304	1398	1492	1680	1868	2244
FD 200	754	883	1011	1140	1269	1398	1527	1784	1913	2042	2299	2557	3072
FD 350	1310	1534	1758	1981	2205	2429	2653	3100	3324	3547	3995	4442	5337
FD 600	2226	2606	2987	3367	3747	4127	4508	5268	5648	6028	6789	7549	9070
FD 950	3374	3950	4527	5103	5679	6255	6832	7984	8560	9137	10289	11442	13747
FD 1600	5654	6620	7586	8552	9517	10483	11449	13380	14346	15312	17243	19175	23038
FD 2500	8762	10259	11755	13252	14748	16245	17741	20734	22231	23727	26720	29713	35699
FD 4000	14221	16650	19079	21508	23937	26365	28794	33652	36081	38510	43368	48225	57941

**Notes:**

1. Emerson recommends that the valve manufacturer supply the maximum required torque values (Including any adjustments or suggested safety factors for valve service conditions or application).
2. Additionally, the valve manufacturer must identify at which position(s) and direction(s) of rotation (Counterclockwise or Clockwise) these maximum requirements occur.
3. If in doubt, or you require any assistance with sizing actuators, do not hesitate to contact your nearest Emerson's Actuation Technologies representative.

**Figure 2. Double-acting torque diagram**

