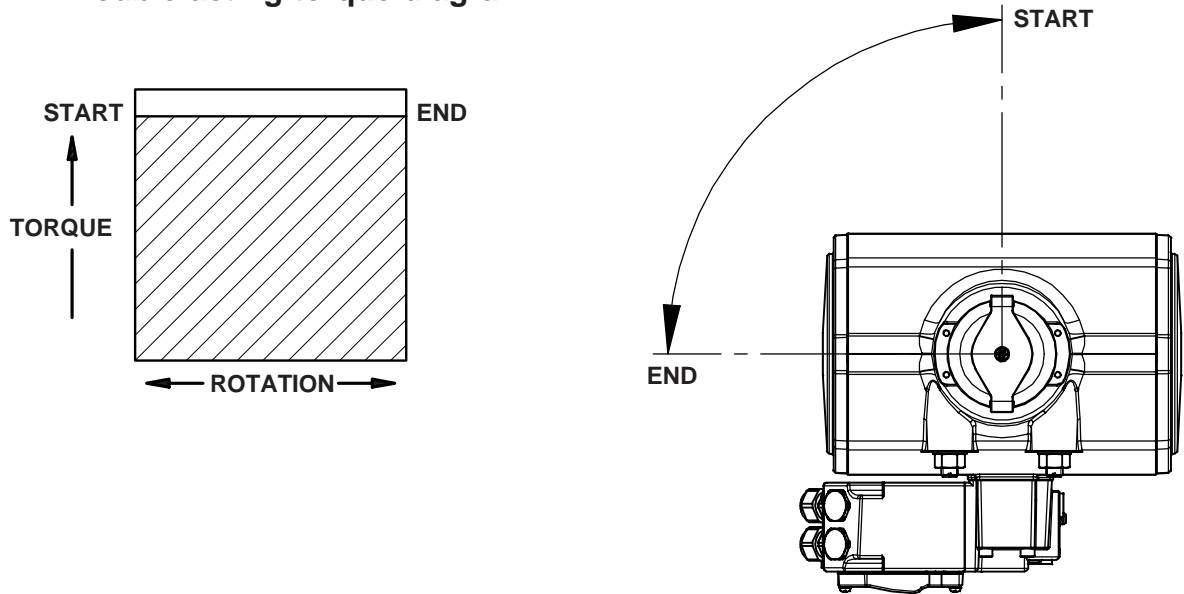


Double acting actuator torque (Nm. & In.lb.)

Double acting torque diagram



Actuator type	Torque in Nm										
	Supply Pressure (bar g)										
	2	3	3.5	4	4.5	5	5.5	6	6.5	7	8
QD 40	17	25	29	34	38	42	47	51	55	59	68
QD 100	38	57	66	76	86	95	105	115	124	134	153
QD 200	82	124	146	167	188	209	230	251	272	293	335
QD 350	143	216	253	290	326	363	400	436	473	510	583
QD 600	243	368	430	492	554	617	679	741	804	866	991
QD 950	363	549	642	735	828	921	1014	1107	1200	1293	1479
QD 1600	600	907	1061	1214	1368	1522	1676	1829	1983	2137	2444

Note:

1. When sizing, add a minimum of 20% safety factor to the valve torque.
2. When emergency shut down or infrequently used valves are being sized, additional safety factors may be required due to potential increases in the valve torques.

Actuator type	Torque in In.lb.										
	Actuator Supply pressure (psi)										
	30	45	50	60	65	70	75	80	90	100	120
QD 40	153	231	257	309	335	361	387	413	465	518	622
QD 100	344	520	579	696	755	814	873	931	1049	1166	1401
QD 200	754	1140	1269	1526	1655	1784	1913	2041	2299	2556	3071
QD 350	1310	1981	2205	2652	2876	3100	3323	3547	3994	4442	5337
QD 600	2226	3366	3747	4507	4887	5267	5647	6028	6788	7548	9069
QD 950	3323	5025	5593	6727	7295	7862	8430	8997	10132	11267	13537
QD 1600	5493	8307	9245	11121	12059	12998	13936	14874	16750	18626	22379

3. If in doubt, or you require any assistance with sizing actuators, do not hesitate to contact your nearest Emerson's Valve Automation Division representative.