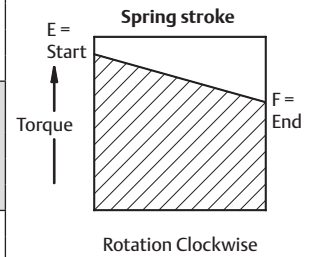
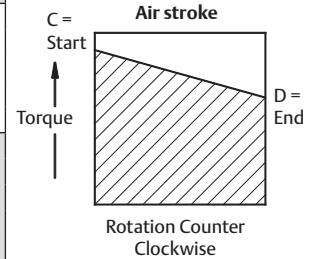


FieldQ Actuator Torque

Spring Return Actuators - lbf.in

Spring set nr.	Actuator Size	Air Torque (lbf.in)												Spring Torque (lbf.in)	
		Supply pressure (psig)													
		40		60		80		90		100		120		E	F
QS 40	2	133	82	243	193	354	303	409	358	464	414	575	524	117	73
	3	-	-	201	125	312	236	367	291	422	346	533	457	176	110
	4	-	-	159	58	270	169	325	224	380	279	491	390	234	146
	5	-	-	-	-	227	101	283	156	338	212	448	322	293	183
	6	-	-	-	-	-	-	241	89	296	144	406	255	351	220
QS 65	2	196	117	364	285	533	454	617	538	701	622	870	790	186	117
	3	-	-	297	178	466	347	550	431	634	515	802	683	279	176
	4	-	-	230	71	398	240	482	324	567	408	735	576	372	234
	5	-	-	-	-	331	133	415	217	499	301	668	470	465	292
	6	-	-	-	-	-	-	348	110	432	194	601	363	558	351
QS 100	2	303	192	552	441	801	690	926	814	1050	939	1299	1188	258	161
	3	211	44	460	293	709	541	833	666	957	790	1206	1039	387	242
	4	-	-	367	144	616	393	740	518	865	642	1114	891	516	323
	5	-	-	-	-	523	245	648	369	772	494	1021	743	646	403
	6	-	-	-	-	430	96	555	221	679	345	928	594	775	484
QS 150	2	485	297	884	696	1283	1094	1482	1294	1681	1493	2080	1892	423	259
	3	-	-	735	453	1134	852	1333	1051	1533	1250	1931	1649	634	388
	4	-	-	587	210	985	609	1185	808	1384	1007	1783	1406	845	517
	5	-	-	-	-	837	366	1036	565	1235	764	1634	1163	1056	647
	6	-	-	-	-	-	-	887	322	1087	522	1485	920	1268	776
QS 200	2	656	406	1201	952	1747	1497	2020	1770	2293	2043	2838	2589	579	362
	3	-	-	994	619	1539	1165	1812	1438	2085	1710	2631	2256	868	542
	4	-	-	786	287	1332	832	1604	1105	1877	1378	2423	1923	1158	723
	5	-	-	-	-	1124	500	1396	772	1669	1045	2215	1591	1447	904
	6	-	-	-	-	-	-	1189	440	1462	713	2007	1258	1736	1085
QS 350	2	1105	684	2053	1632	3001	2580	3475	3054	3949	3528	4897	4476	1025	658
	3	-	-	1675	1043	2623	1991	3097	2465	3571	2939	4519	3887	1537	987
	4	-	-	1297	454	2245	1402	2719	1877	3193	2351	4141	3299	2049	1317
	5	-	-	-	-	1866	814	2340	1288	2814	1762	3762	2710	2561	1646
	6	-	-	-	-	-	-	1962	699	2436	1173	3384	2121	3074	1975
QS 600	2	1920	1183	3531	2794	5142	4405	5947	5211	6753	6016	8364	7628	1723	1082
	3	-	-	2909	1804	4520	3415	5325	4221	6131	5026	7742	6637	2585	1624
	4	-	-	2287	814	3898	2425	4703	3230	5509	4036	7120	5647	3446	2165
	5	-	-	-	-	3276	1434	4081	2240	4887	3046	6498	4657	4308	2706
	6	-	-	-	-	-	-	3459	1250	4265	2055	5876	3666	5169	3247
QS 950	2	2898	1777	5303	4182	7708	6587	8910	7789	10113	8992	12518	11396	2563	1587
	3	-	-	4391	2709	6796	5114	7998	6316	9201	7519	11606	9924	3844	2381
	4	-	-	3479	1236	5883	3641	7086	4844	8288	6046	10693	8451	5125	3175
	5	-	-	-	-	4971	2168	6174	3371	7376	4573	9781	6978	6407	3968
	6	-	-	-	-	-	-	5262	1898	6464	3100	8869	5505	7688	4762
QS 1600	2	4765	2988	8741	6964	12716	10939	14704	12927	16692	14915	20668	18890	4193	2646
	3	-	-	7220	4554	11195	8530	13183	10517	15171	12505	19147	16481	6289	3970
	4	-	-	5699	2144	9675	6120	11662	8108	13650	10096	17626	14071	8385	5293
	5	-	-	-	-	8154	3711	10141	5698	12129	7686	16105	11662	10481	6616
	6	-	-	-	-	-	-	8621	3289	10608	5277	14584	9252	12578	7939

Spring return torque diagrams



Note:

- 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).
Additionally, the valve manufacturer must identify at which position(s) and direction(s) of rotation (Counter Clock Wise or Clock Wise) these maximum requirements occur.
- If in doubt, or you require any assistance with sizing actuators, do not hesitate to contact your nearest Emerson's Actuation Technologies representative.