

Technical Tables

*Torque is in (lb-in)

T-1001N		
Size	Torque	Bracket
1/4	40	FABRICATED
3/8	40	FABRICATED
1/2	40	FABRICATED
3/4	60	FABRICATED
1	70	FABRICATED
1-1/4	110	FABRICATED
1-1/2	170	FABRICATED
2	250	FABRICATED

T/S-SS-1000-4B		
Size	Torque	Bracket
1/4	60	FABRICATED
3/8	60	FABRICATED
1/2	80	FABRICATED
3/4	150	FABRICATED
1	250	FABRICATED
1-1/4	320	FABRICATED
1-1/2	400	FABRICATED
2	480	FABRICATED
2-1/2	600	FABRICATED
3	850	FABRICATED

Class 150 Flange		
Size	Torque	Bracket
1/2	48	FABRICATED
3/4	90	FABRICATED
1	148	FABRICATED
1-1/2	270	FABRICATED
2	395	FABRICATED
2-1/2	609	FABRICATED
3	913	FABRICATED
4	1443	FABRICATED
5	2687	FABRICATED
6	4870	FABRICATED
8	8522	FABRICATED

T/S-2002N-DUE		
Size	Torque	Bracket
1/4	35	FABRICATED
3/8	35	FABRICATED
1/2	65	FABRICATED
3/4	100	FABRICATED
1	120	FABRICATED
1-1/4	210	FABRICATED
1-1/2	300	FABRICATED
2	400	FABRICATED

T/S-2001N-4B		
Size	Torque	Bracket
1/2	85	FABRICATED
3/4	150	FABRICATED
1	180	FABRICATED
1-1/4	210	FABRICATED
1-1/2	320	FABRICATED
2	440	FABRICATED

T/S-600-4B		
Size	Torque	Bracket
1/2	22	FABRICATED
1	55	FABRICATED
1-1/4	95	FABRICATED
1-1/2	120	FABRICATED
2	340	FABRICATED

Class 300 Flange		
Size	Torque	Bracket
2	1068	FABRICATED
3	1752	FABRICATED
4	3216	FABRICATED
6	6900	FABRICATED
8	16620	FABRICATED
10	23040	FABRICATED

T-2000N-SS		
Size	Torque	Bracket
1/4	35	FABRICATED
3/8	35	FABRICATED
1/2	65	FABRICATED
3/4	100	FABRICATED
1	120	FABRICATED
1-1/4	210	FABRICATED
1-1/2	300	FABRICATED
2	400	FABRICATED

*Torque is in (lb-in)

A750L/T			
Size	Torque	ISO	SQ
1/4"	54	F03	0.35
3/8"	54	F03	0.35
1/2"	54	F03	0.35
3/4"	54	F03	0.35
1"	151	F05	0.43
1-1/4"	151	F05	0.43
1-1/2"	151	F05	0.43
2"	275	F07	0.55
2-1/2"	381	F07	0.55
3"	381	F07	0.55

A850L/T			
Size	Torque	ISO	SQ
1/4"	105	F03/F04	0.35
3/8"	105	F03/F04	0.35
1/2"	138	F03/F04	0.35
3/4"	184	F04/F05	0.43
1"	323	F04/F05	0.43
1-1/4"	461	F05/F07	0.55
1-1/2"	633	F05/F07	0.55
2"	1037	F07/F10	0.67

A9000TD			
Size	Torque	ISO	SQ
1/2"	65	F03/04	0.35
3/4"	155	F03/04	0.35
1"	198	F04/05	0.43
1-1/2"	398	F05/07	0.55
2"	449	F05/07	0.55
2-1/2"	783	F07/10	0.67
3"	930	F07/10	0.67
4"	1799	F10	0.87

A2020D			
Size	Torque	ISO	SQ
1/2"	117	F03/04	0.35
3/4"	138	F03/04	0.35
1"	159	F04/05	0.43
1-1/4"	200	F04/05	0.43
1-1/2"	283	F05/07	0.55
2"	563	F05/07	0.55
2-1/2"	903	F07/10	0.67
3"	1018	F07/10	0.67
4"	1252	F10	0.87

A1000			
Size	Torque	ISO	SQ
1/2"	40	F03/04	0.35
3/4"	60	F03/04	0.35
1"	70	F04/05	0.43
1-1/4"	110	F04/05	0.43
1-1/2"	170	F05/07	0.55
2"	250	F05/07	0.55
2-1/2"	650	F07/10	0.67
3"	850	F07/10	0.67
4"	950	F10/12	0.87

T100				
Size	Torque	Bracket Used	ISO	SQ
1/4	23	A1B-A1C11	F03/05	.43
3/8	23	A1B-A1C11	F03/05	.43
1/2	35	A1B-A1C11	F03/05	.43
3/4	62	A2B-A2C11	F03/04/05	.43
1	89	A3B-A3C11	F05	.43
1-1/4	132	A3B-A3C11	F05	.43
1-1/2	177	A4B-A4C14	F05/07	.55
2	222	A4B-A4C14	F05/07	.55
2-1/2	354		FABRICATED	
3	442		FABRICATED	
4	620		FABRICATED	

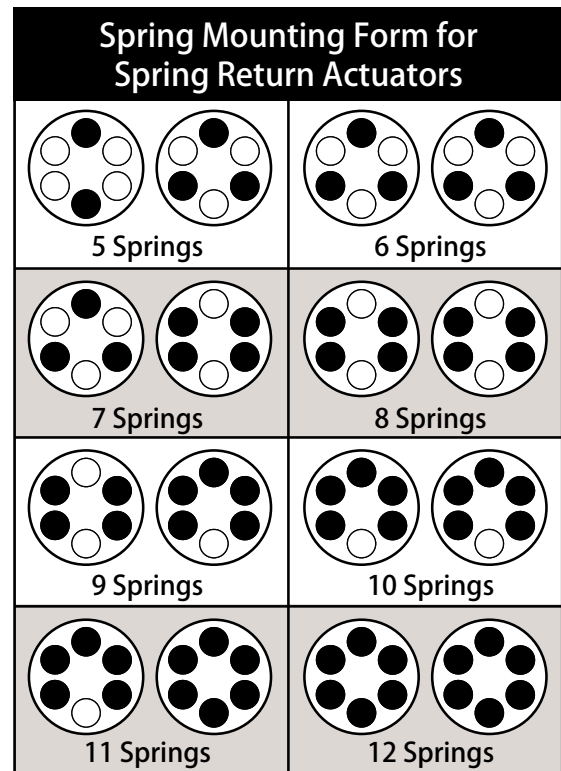
Technical Tables

Alpha Series Torques				
Double Acting Supply Pressure -PSI				
Model	40	60	80	100
50	90	135	180	225
60	183	274	365	457
70	284	426	567	709
80	416	625	833	1041
90	585	878	1170	1483
100	785	1177	1589	1961
120	1351	2026	2702	3377
140	1695	2542	3389	4236
160	2767	4150	5533	6917
190	4552	6827	9103	11379
200	5719	8579	11438	14298
240	1132	15197	20263	25329
270	12709	19064	25418	31773
300	17832	26747	35663	44579
350	27282	40923	54563	68204

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AE Series			
	Torque	ISO	SQ
AE-180	180	F03/05	.43
AE-450	450	F05/07	.55
AE-700	700	F05/07	.67
AE-880	880	F07	.67
AE-1400	1400	F07/10	.87
AE-2100	2125	F07/10	.87
AE-3100	3098	F10/12	1.06
AE-4400	4425	F10/12	1.06
AE-7000	7080	F12/14	1.42
AE-9000	9735	F12/14	1.54

Alpha Series Torques				
Model	SQ	ISO	Air Start	Spring End
Max 11 Springs Per Actuator Figured Below				
50	0.43	F03/05	109	71
60	0.55	F05/07	221	144
70	0.55	F05/07	344	223
80	0.67	F05/07	505	328
90	0.67	F05/07	709	461
100	0.87	F07/10	951	618
120	0.87	F07/10	1638	1064
140	1.06	F10/12	2054	1335
160	1.06	F10/12	3354	2179
190	1.42	F14	5518	3585
200	1.42	F14	6934	4504
240	1.81	F16	12284	7979
270	1.81	F16	15409	10009
300	1.81	F16	21620	14043
350	1.81	F16	21724	23523



Butterfly Valves Max Break Torque								
Size	SQ	ISO	EPDM & BUNA		PTFE		VITON	
			WET	DRY	WET	DRY	WET	DRY
2"	0.35	F05	176	283	353	565	198	318
2-1/2"	0.35	F05	201	381	401	763	226	429
3"	0.35	F05	269	511	537	1022	302	575
4"	0.43	F07	464	850	928	1699	522	956
6"	0.55	F07	1196	2033	2392	4066	1345	2287
8"	0.67	F10	2238	3850	4476	7700	2518	4331
10"	0.86	F10	3768	6407	7537	12813	4239	7207
12"	0.87	F10	5721	9326	11443	18652	6437	10492
14"	0.87	F10	6638	10302	13276	20605	7468	11590
16"	1.06	F14	8985	13882	17971	27763	10108	15617
18"	1.06	F14	12012	18910	24024	37810	13514	21270
20"	1.26	F14	15199	24513	30397	49026	17098	27577
24"	1.42	F16	24439	39414	48877	78828	27494	44341

Butterfly Valve CVs										
Flow in GPM @ 1PSI P @ Various Disc Angles										
Size	10°	20°	30°	40°	50°	60°	70°	80°	Full 90° Open	
2"	0.1	5	12	24	45	64	90	125	135	
2.5"	0.2	8	20	37	65	98	144	204	220	
3"	0.3	12	22	39	70	116	183	275	302	
4"	0.5	17	36	78	139	230	364	546	600	
5"	0.8	29	61	133	237	392	620	930	1022	
6"	2	45	95	205	366	605	958	1437	1579	
8"	3	89	188	408	727	1202	1903	2854	3136	
10"	4	151	320	694	1237	2047	3240	4859	5340	
12"	5	234	495	1072	1911	3162	5005	7505	8250	
14"	6	338	715	1549	2761	4568	7230	10844	11917	
16"	8	464	983	2130	3797	6282	9942	14913	1638	
18"	11	615	1302	2822	5028	8320	13168	19752	21705	
20"	14	791	1674	3628	6465	10698	16931	25396	27908	
24"	22	1222	2587	5605	9989	16528	26157	39236	43116	