



GLOBAL VALVE  
& CONTROLS



# TECHNICAL DATA

**EP-SERIES** | HEAVY DUTY ACTUATORS

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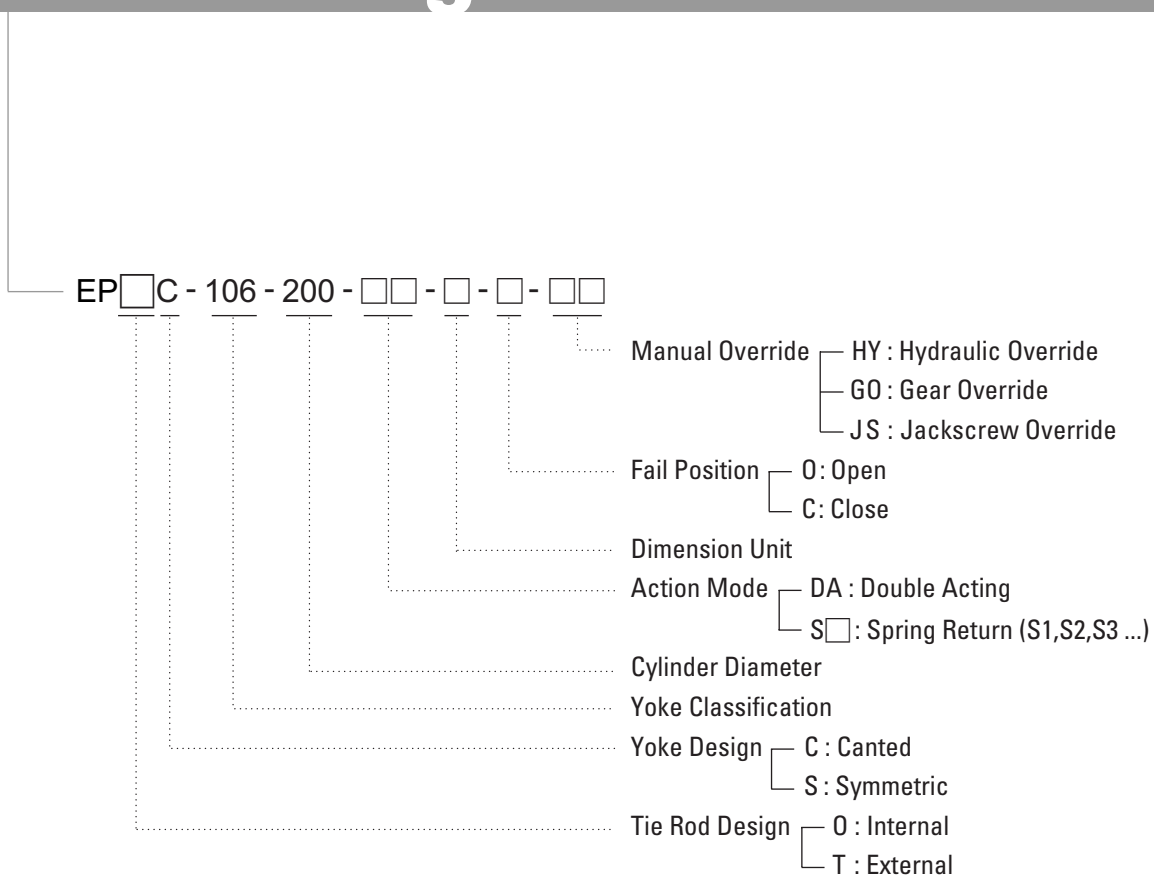
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# Model Designation



# Output Torques EP-Series Canted

## Double Acting Actuators

(Unit : inch.pounds)

Actuator Model	MOP* Torque	Position of stroke	Pneumatic Stroke Torque (in.lb.) at Operating Pressure (psig)									
			40	50	60	70	80	90	100	120	150	170
EP□C106-200-DA	51647	START	12152	15190	18228	21266	24304	27342	30380	36456	45571	51647
	17254	RUN	4060	5075	6090	7104	8119	9134	10149	12179	15224	17254
	24560	BREAK	5779	7224	8668	10113	11558	13002	14447	17336	21671	24560
EP□C106-240-DA	48123	START	17499	21874	26249	30623	34998	39373	43748			
	16076	RUN	5846	7307	8769	10230	11692	13153	14615			
	22884	BREAK	8322	10402	12482	14563	16643	18723	20804			
EP□C106-295-DA	52877	START	26439	33048	39658	46267	52877					
	17665	RUN	8832	11040	13249	15457	17665					
	25145	BREAK	12573	15716	18859	22002	25145					
EP□C106-340-DA	52680	START	35120	43900	52680							
	17599	RUN	11733	14666	17599							
	25051	BREAK	16701	20876	25051							
EP□C108-295-DA	121007	START	34573	43217	51860	60504	69147	77790	86434	103720		
	40425	RUN	11550	14438	17325	20213	23100	25988	28875	34650		
	57544	BREAK	16441	20551	24662	28772	32882	36992	41103	49323		
EP□C108-340-DA	126296	START	45926	57407	68889	80370	91852	103333	114814			
	42192	RUN	15343	19178	23014	26849	30685	34521	38356			
	60059	BREAK	21840	27299	32759	38219	43679	49139	54599			
EP□C108-385-DA	117774	START	58887	73609	88331	103052	117774					
	39345	RUN	19673	24591	29509	34427	39345					
	56006	BREAK	28003	35004	42005	49006	56006					
EP□C108-435-DA	112763	START	75176	93970	112763							
	37671	RUN	25114	31393	37671							
	53623	BREAK	35749	44686	53623							
EP□C110-340-DA	202614	START	54030	67538	81045	94553	108061	121568	135076	162091	202614	
	67688	RUN	18050	22563	27075	31588	36100	40613	45125	54150	67688	
	96351	BREAK	25694	32117	38540	44964	51387	57811	64234	77081	96351	
EP□C110-385-DA	190517	START	69279	86599	103918	121238	138558	155878	173197			
	63646	RUN	23144	28930	34716	40502	46288	52074	57860			
	90598	BREAK	32945	41181	49417	57654	65890	74126	82362			
EP□C110-435-DA	198994	START	88442	110552	132663	154773	176884	198994				
	66478	RUN	29546	36932	44319	51705	59092	66478				
	94630	BREAK	42058	52572	63086	73601	84115	94630				
EP□C110-485-DA	192398	START	109942	137427	164913	192398						
	64275	RUN	36729	45911	55093	64275						
	91493	BREAK	52282	65352	78423	91493						
EP□C110-535-DA	200668	START	133779	167224	200668							
	67038	RUN	44692	55865	67038							
	95426	BREAK	63617	79521	95426							
EP□C130-435-DA	402411	START	114975	143718	172462	201205	229949	258693	287436	344924		
	134434	RUN	38410	48012	57615	67217	76820	86422	96024	115229		
	191362	BREAK	54675	68344	82012	95681	109350	123019	136687	164025		
EP□C130-485-DA	393042	START	142924	178656	214387	250118	285849	321580	357311			
	131304	RUN	47747	59684	71621	83557	95494	107431	119368			
	186907	BREAK	67966	84958	101949	118941	135932	152924	169916			
EP□C130-535-DA	391303	START	173912	217391	260869	304347	347825	391303				
	130723	RUN	58099	72624	87149	101674	116199	130723				
	186080	BREAK	82702	103378	124053	144729	165404	186080				
EP□C130-585-DA	415877	START	207939	259923	311908	363892	415877					
	138933	RUN	69466	86833	104200	121566	138933					
	197766	BREAK	98883	123604	148324	173045	197766					
EP□C130-635-DA	367504	START	245003	306253	367504							
	122773	RUN	81848	102311	122773							
	174763	BREAK	116508	145635	174763							
EP□C160-485-DA	659651	START	175907	219884	263861	307837	351814	395791	439768	527721	659651	
	220371	RUN	58766	73457	88148	102840	117531	132223	146914	176297	220371	
	313690	BREAK	83651	104563	125476	146389	167301	188214	209127	250952	313690	
EP□C160-535-DA	642138	START	214046	267558	321069	374581	428092	481604	535115	642138		
	214520	RUN	71507	89383	107260	125137	143014	160890	178767	214520		
	305362	BREAK	101787	127234	152681	178128	203575	229022	254468	305362		

M.O.P\* - Maximum Operating Pressure.  
(The pressure required for the maximum operating torques of the actuator)

Data is subject to change or modify without prior notice.

# Output Torques EP-Series Canted

## Double Acting Actuators

(Unit : inch.pounds)

Actuator Model	MOP* Torque	Position of stroke	Pneumatic Stroke Torque (in.lb.) at Operating Pressure (psig)									
			40	50	60	70	80	90	100	120	150	170
EP□C160-585-DA	639811	START	255924	319905	383886	447867	511849	575830	639811			
	213743	RUN	85497	106871	128246	149620	170994	192369	213743			
	304255	BREAK	121702	152128	182553	212979	243404	273830	304255			
EP□C160-635-DA	603083	START	301542	376927	452312	527698	603083					
	201473	RUN	100737	125921	151105	176289	201473					
	286790	BREAK	143395	179244	215092	250941	286790					
EP□C160-685-DA	614071	START	350898	438622	526347	614071						
	205144	RUN	117225	146531	175838	205144						
	292015	BREAK	166866	208582	250299	292015						
EP□C160-735-DA	605990	START	403994	504992	605990							
	202444	RUN	134963	168704	202444							
	288172	BREAK	192115	240144	288172							
EP□C200-585-DA	1119669	START	319905	399882	479858	559834	639811	719787	799763	959716		
	374050	RUN	106871	133589	160307	187025	213743	240461	267178	320614		
	532447	BREAK	152128	190159	228191	266223	304255	342287	380319	456383		
EP□C200-635-DA	1130781	START	376927	471159	565390	659622	753854	848086	942317	1130781		
	377762	RUN	125921	157401	188881	220361	251841	283322	314802	377762		
	537731	BREAK	179244	224055	268865	313676	358487	403298	448109	537731		
EP□C200-685-DA	1096556	START	438623	548278	657934	767589	877245	986901	1096556			
	366329	RUN	146531	183164	219797	256430	293063	329696	366329			
	521456	BREAK	208582	260728	312873	365019	417165	469310	521456			
EP□C200-735-DA	1136232	START	504992	631240	757488	883736	1009984	1136232				
	379583	RUN	168704	210880	253055	295231	337407	379583				
	540323	BREAK	240144	300179	360215	420251	480287	540323				
EP□C200-785-DA	1152071	START	576035	720044	864053	1008062	1152071					
	384874	RUN	192437	240547	288656	336765	384874					
	547855	BREAK	273927	342409	410891	479373	547855					
EP□C200-835-DA	1140567	START	651753	814691	977629	1140567						
	381031	RUN	217732	272165	326598	381031						
	542384	BREAK	309934	387417	464901	542384						
EP□C200-885-DA	1098215	START	732144	915180	1098215							
	366883	RUN	244589	305736	366883							
	522245	BREAK	348163	435204	522245							
EP□C270-685-DA	2516596	START	592140	740175	888210	1036246	1184281	1332316	1480351	1776421	2220526	2516596
	840724	RUN	197817	247272	296726	346181	395635	445089	494544	593452	741816	840724
	1196741	BREAK	281586	351983	422379	492776	563172	633569	703965	844758	1055948	1196741
EP□C270-735-DA	2386087	START	681739	852174	1022609	1193043	1363478	1533913	1704348	2045217		
	797125	RUN	227750	284687	341625	398562	455500	512437	569375	683250		
	1134678	BREAK	324194	405242	486291	567339	648388	729436	810485	972582		
EP□C270-785-DA	2527355	START	777648	972059	1166471	1360883	1555295	1749707	1944119	2332943		
	844318	RUN	259790	324738	389685	454633	519580	584528	649476	779371		
	1201857	BREAK	369802	462253	554703	647154	739604	832055	924505	1109406		
EP□C270-885-DA	2470985	START	988394	1235492	1482591	1729689	1976788	2223886	2470985			
	825487	RUN	330195	412743	495292	577841	660389	742938	825487			
	1175051	BREAK	470020	587525	705030	822536	940041	1057546	1175051			
EP□C270-935-DA	2482271	START	1103232	1379040	1654847	1930655	2206463	2482271				
	829257	RUN	368559	460698	552838	644978	737118	829257				
	1180418	BREAK	524630	655788	786945	918103	1049260	1180418				
EP□C270-985-DA	2448758	START	1224379	1530474	1836569	2142664	2448758					
	818062	RUN	409031	511288	613546	715804	818062					
	1164481	BREAK	582241	727801	873361	1018921	1164481					
EP□C270-1050-DA	2434782	START	1391304	1739130	2086956	2434782						
	813393	RUN	464796	580995	697194	813393						
	2315670	BREAK	661620	827025	992430	2315670						

M.O.P\* - Maximum Operating Pressure.  
(The pressure required for the maximum operating torques of the actuator)

# Output Torques EP-Series Canted

## Spring Return Actuators

(Unit : inch.pounds)

Actuator Model	Position of stroke	Spring Torque	Position of stroke	Pneumatic Stroke Torque (in.lb.) at Operating Pressure (psig)									
				40	50	60	70	80	90	100	120	150	
EP□C106-200-S1	END	6210	START	5883	8890	11898	14906						
	RUN	2767	RUN	1137	2030	2924	3817						
	BREAK	4301	BREAK	1389	2747	4105	5463						
EP□C106-200-S2	END	9592	START			8550	11558	14565	17573	20581			
	RUN	4274	RUN			1597	2491	3384	4277	5170			
	BREAK	6643	BREAK			1904	3262	4620	5978	7336			
EP□C106-240-S2	END	9587	START	7833	12164	16495	20826						
	RUN	4272	RUN	1385	2671	3957	5243						
	BREAK	6640	BREAK	1581	3536	5492	7447						
EP□C106-200-S3	END	14552	START					9655	12663	15670	21686	30709	
	RUN	6484	RUN					1439	2332	3225	5011	7691	
	BREAK	10078	BREAK					1391	2749	4107	6823	10897	
EP□C106-240-S3	END	14544	START			11587	15918	20249	24580	28911			
	RUN	6481	RUN			2013	3299	4585	5872	7158			
	BREAK	10073	BREAK			2264	4220	6176	8131	10087			
EP□C106-295-S3	END	14537	START	11782	18326	24870	31413						
	RUN	6478	RUN	2072	4015	5958	7901						
	BREAK	10068	BREAK	2354	5309	8263	11218						
EP□C106-240-S4	END	18529	START					16305	20636	24967	33629	46622	
	RUN	8257	RUN					3023	4309	5595	8167	12026	
	BREAK	12833	BREAK					3582	5537	7493	11404	17271	
EP□C106-295-S4	END	18519	START			20927	27471	34014	40558	47101			
	RUN	8253	RUN			4396	6340	8283	10226	12169			
	BREAK	12826	BREAK			5671	8625	11580	14534	17489			
EP□C106-340-S4	END	18510	START	16444	25136	33828	42520						
	RUN	8248	RUN	3066	5647	8228	10809						
	BREAK	12820	BREAK	3648	7573	11497	15422						
EP□C108-295-S1	END	19133	START	15286	23843	32400	40957						
	RUN	8609	RUN	2588	5129	7670	10211						
	BREAK	13070	BREAK	3169	7033	10896	14760						
EP□C108-295-S2	END	25297	START			26298	34855	43412	51968				
	RUN	11382	RUN			5230	7771	10312	12853				
	BREAK	17280	BREAK			6938	10802	14666	18529				
EP□C108-340-S2	END	25284	START	20435	31802	43168	54535	65902					
	RUN	11377	RUN	3490	6865	10241	13616	16991					
	BREAK	17272	BREAK	4294	9426	14558	19691	24823					
EP□C108-295-S3	END	32965	START					35820	44377	52934	70048		
	RUN	14833	RUN					7275	9816	12357	17439		
	BREAK	22518	BREAK					9742	13606	17469	25197		
EP□C108-340-S3	END	32948	START			35581	46948	58314	69681				
	RUN	14825	RUN			7206	10581	13957	17332				
	BREAK	22507	BREAK			9637	14769	19902	25034				
EP□C108-385-S3	END	32932	START	25696	40270	54845	69419						
	RUN	14818	RUN	4272	8600	12928	17256						
	BREAK	22496	BREAK	5177	11758	18338	24919						
EP□C108-340-S4	END	41230	START					50116	61482	72849	95582	129682	
	RUN	18551	RUN					10678	14053	17428	24179	34305	
	BREAK	28164	BREAK					14584	19716	24848	35113	50510	
EP□C108-385-S4	END	41209	START			46650	61225	75799	90374	104948			
	RUN	18542	RUN			9651	13979	18307	22634	26962			
	BREAK	28150	BREAK			13023	19604	26185	32765	39346			
EP□C108-435-S4	END	41189	START	33647	52253	70859	89465						
	RUN	18533	RUN	5791	11316	16842	22367						
	BREAK	28136	BREAK	7156	15557	23958	32359						
EP□C108-385-S5	END	51216	START				51318	65892	80467	95042			
	RUN	23045	RUN				10016	14344	18672	23000			
	BREAK	34986	BREAK				13178	19759	26340	32921			
EP□C108-435-S5	END	51191	START			60957	79563	98169	116775				
	RUN	23033	RUN			12881	18406	23931	29457				
	BREAK	34969	BREAK			17536	25937	34338	42739				

Output Torques

# Output Torques EP-Series Canted

## Spring Return Actuators

(Unit : inch.pounds)

Actuator Model	Position of stroke	Spring Torque	Position of stroke	Pneumatic Stroke Torque (in.lb.) at Operating Pressure (psig)									
				40	50	60	70	80	90	100	120	150	
EP□C108-485-S5	END	51165	START	41863	64992	88121	111250						
	RUN	23022	RUN	7214	14082	20950	27818						
	BREAK	34951	BREAK	8919	19362	29806	40249						
EP□C110-385-S1	END	38245	START	30724	47870	65017	82163						
	RUN	17042	RUN	5370	10461	15553	20645						
	BREAK	26125	BREAK	6410	14153	21895	29637						
EP□C110-385-S2	END	48857	START			54510	71657	88804	105950	123097			
	RUN	21771	RUN			11391	16483	21575	26667	31758			
	BREAK	33375	BREAK			15080	22822	30564	38306	46048			
EP□C110-435-S2	END	48833	START	39213	61102	82992	104881	126770					
	RUN	21761	RUN	6851	13351	19851	26351	32852					
	BREAK	33358	BREAK	8178	18061	27945	37828	47712					
EP□C110-385-S3	END	61162	START				59476	76622	93769	110915	145208		
	RUN	27255	RUN				11658	16750	21841	26933	37117		
	BREAK	41780	BREAK				14921	22663	30405	38147	53631		
EP□C110-435-S3	END	61131	START			70816	92706	114595	136484	158374			
	RUN	27241	RUN			15029	21529	28029	34529	41029			
	BREAK	41759	BREAK			20048	29931	39815	49698	59582			
EP□C110-485-S3	END	61101	START	48353	75563	102774	129985						
	RUN	27227	RUN	8361	16441	24522	32602						
	BREAK	41738	BREAK	9911	22197	34483	46770						
EP□C110-435-S4	END	73883	START			58192	80081	101971	123860	145749			
	RUN	32923	RUN			10028	16528	23028	29528	36029			
	BREAK	50470	BREAK			11859	21743	31627	41510	51394			
EP□C110-485-S4	END	73846	START		62945	90156	117366	144577					
	RUN	32907	RUN		11443	19524	27604	35684					
	BREAK	50445	BREAK		14013	26299	38585	50872					
EP□C110-535-S4	END	73809	START	59370	92480	125590	158700						
	RUN	32890	RUN	10385	20217	30050	39882						
	BREAK	50420	BREAK	12406	27356	42306	57256						
EP□C110-485-S5	END	88299	START			75847	103058	130268	157479				
	RUN	39347	RUN			13856	21936	30016	38097				
	BREAK	60318	BREAK			17019	29305	41591	53877				
EP□C110-535-S5	END	88255	START		78178	111289	144399						
	RUN	39328	RUN		14553	24385	34217						
	BREAK	60288	BREAK		18080	33030	47980						
EP□C110-585-S5	END	88211	START	71024	110612	150201							
	RUN	39308	RUN	12432	24188	35944							
	BREAK	60258	BREAK	14858	32733	50608							
EP□C130-485-S1	END	78888	START	63396	98770	134144	169518						
	RUN	35154	RUN	11082	21586	32090	42595						
	BREAK	53889	BREAK	13233	29205	45177	61149						
EP□C130-485-S2	END	87720	START			125400	160774	196148	231522	266896			
	RUN	39090	RUN			28627	39131	49636	60140	70644			
	BREAK	59922	BREAK			39506	55478	71450	87422	103394			
EP□C130-535-S2	END	87676	START	85374	128418	171461	214504						
	RUN	39071	RUN	16745	29527	42309	55091						
	BREAK	59892	BREAK	21442	40877	60312	79747						
EP□C130-485-S3	END	114070	START			134687	170061	205435	240809				
	RUN	50833	RUN			28798	39302	49807	60311				
	BREAK	77922	BREAK			38558	54530	70502	86474				
EP□C130-535-S3	END	114013	START			145387	188430	231474	274517				
	RUN	50807	RUN			31981	44763	57544	70326				
	BREAK	77883	BREAK			43400	62835	82270	101705				
EP□C130-585-S3	END	113956	START	93042	144507	195972	247437						
	RUN	50782	RUN	16442	31725	47008	62290						
	BREAK	77844	BREAK	19777	43014	66252	89489						
EP□C130-535-S4	END	124344	START			178203	221246	264290	307333				
	RUN	55411	RUN			40711	53493	66275	79057				
	BREAK	84940	BREAK			56202	75637	95072	114507				

# Output Torques EP-Series Canted

## Spring Return Actuators

(Unit : inch.pounds)

Actuator Model	Position of stroke	Spring Torque	Position of stroke	Pneumatic Stroke Torque (in.lb.) at Operating Pressure (psig)								
				40	50	60	70	80	90	100	120	150
EP C130-585-S4	END	124282	START			185750	237214	288679	340144			
	RUN	55383	RUN			42959	58241	73524	88806			
	BREAK	84898	BREAK			59621	82859	106096	129334			
EP C130-635-S4	END	124220	START	119575	180213	240851	301489					
	RUN	55355	RUN	23314	41321	59327	77334					
	BREAK	84855	BREAK	29754	57134	84513	111893					
EP C130-585-S5	END	144620	START				217079	268544	320009	371474		
	RUN	64446	RUN				50265	65548	80831	96113		
	BREAK	98791	BREAK				69799	93037	116274	139512		
EP C130-635-S5	END	144548	START			220726	281364	342002	402641			
	RUN	64414	RUN			51355	69362	87369	105375			
	BREAK	98741	BREAK			71460	98839	126219	153598			
EP C130-685-S5	END	144476	START	139223	209786	280349	350913					
	RUN	64382	RUN	27160	48114	69068	90022					
	BREAK	98692	BREAK	34673	66534	98395	130256					
EP C160-535-S1	END	125021	START	88135	141111	194087	247064					
	RUN	44102	RUN	24116	39848	55579	71311					
	BREAK	82353	BREAK	18269	42189	66109	90029					
EP C160-535-S2	END	148377	START			170965	223941	276918	329894			
	RUN	52341	RUN			48329	64060	79792	95523			
	BREAK	97737	BREAK			51647	75567	99487	123407			
EP C160-585-S2	END	148296	START	106552	169893	233235	296576					
	RUN	52312	RUN	29203	48012	66822	85631					
	BREAK	97684	BREAK	22577	51177	79777	108377					
EP C160-535-S3	END	174277	START			145324	198301	251277	304254	357230		
	RUN	61477	RUN			40289	56021	71752	87484	103215		
	BREAK	114798	BREAK			35611	59531	83451	107371	131291		
EP C160-585-S3	END	174181	START			207608	270950	334291	397632			
	RUN	61443	RUN			58786	77595	96405	115214			
	BREAK	114734	BREAK			63750	92350	120950	149550			
EP C160-635-S3	END	174085	START	126182	200813	275445	350076					
	RUN	61410	RUN	34608	56770	78932	101094					
	BREAK	114671	BREAK	27000	60698	94396	128094					
EP C160-585-S4	END	203902	START			178185	241526	304867	368209	431550		
	RUN	71927	RUN			49560	68369	87179	105988	124798		
	BREAK	134312	BREAK			45347	73947	102547	131147	159747		
EP C160-635-S4	END	203790	START			246038	320669	395301	469932			
	RUN	71888	RUN			69711	91873	114035	136197			
	BREAK	134238	BREAK			76003	109701	143399	177097			
EP C160-685-S4	END	203678	START	145748	232596	319443	406290					
	RUN	71848	RUN	39932	65721	91511	117300					
	BREAK	134164	BREAK	30740	69953	109167	148380					
EP C160-635-S5	END	234795	START			215342	289974	364605	439237	513868		
	RUN	82825	RUN			60086	82248	104410	126572	148734		
	BREAK	154661	BREAK			56805	90503	124201	157899	191596		
EP C160-685-S5	END	234666	START		201917	288764	375612	462459	549306			
	RUN	82780	RUN		56102	81891	107681	133470	159260			
	BREAK	154576	BREAK		50766	89979	129193	168406	207620			
EP C160-735-S5	END	234537	START	167762	267750	367739	467727					
	RUN	82734	RUN	45961	75653	105345	135037					
	BREAK	154491	BREAK	35366	80513	125660	170807					
EP C160-685-S6	END	267483	START			256275	343122	429969	516817	603664		
	RUN	94356	RUN			71704	97493	123283	149072	174862		
	BREAK	176194	BREAK			69659	108872	148086	187299	226513		
EP C160-735-S6	END	267336	START		235279	335267	435256	535244	635233			
	RUN	94304	RUN		65471	95163	124855	154547	184239			
	BREAK	176097	BREAK		60204	105351	150498	195645	240792			
EP C160-785-S6	END	267189	START	191702	305757	419812	533867					
	RUN	94253	RUN	52534	86402	120271	154140					
	BREAK	176000	BREAK	40554	92052	143550	195049					

Output Torques



# Output Torques EP-Series Canted

## Spring Return Actuators

(Unit : inch.pounds)

Actuator Model	Position of stroke	Spring Torque	Position of stroke	Pneumatic Stroke Torque (in.lb.) at Operating Pressure (psig)								
				40	50	60	70	80	90	100	120	150
EP□C200-635-S1	END	196404	START	178717	272007	365296	458586					
	RUN	87523	RUN	33790	61492	89195	116897					
	BREAK	134165	BREAK	42374	84496	126619	168741					
EP□C200-635-S2	END	228699	START		240035	333324	426614	519903	613192			
	RUN	106120	RUN		45127	72830	100533	128235	155938			
	BREAK	156226	BREAK		63759	105881	148004	190126	232248			
EP□C200-685-S2	END	228571	START	207951	316510	425069	533628					
	RUN	106060	RUN	35615	67852	100089	132325					
	BREAK	156138	BREAK	49297	98314	147331	196348					
EP□C200-635-S3	END	266234	START				389454	482744	576033	669322		
	RUN	118642	RUN				89513	117216	144919	172621		
	BREAK	181866	BREAK				123902	166024	208146	250269		
EP□C200-685-S3	END	266085	START			387930	496489	605048	713607			
	RUN	118575	RUN			89075	121312	153549	185786			
	BREAK	181764	BREAK			123243	172260	221277	270293			
EP□C200-735-S3	END	265936	START	236665	361651	486636	611622					
	RUN	118509	RUN	44172	81286	118401	155516					
	BREAK	181662	BREAK	54972	111406	167840	224274					
EP□C200-685-S4	END	299692	START			354660	463219	571778	680337	788896		
	RUN	133551	RUN			75897	108134	140370	172607	204844		
	BREAK	204721	BREAK			101664	150680	199697	248714	297731		
EP□C200-735-S4	END	299524	START		328399	453384	578370	703355	828341			
	RUN	133476	RUN		68115	105230	142344	179459	216574			
	BREAK	204606	BREAK		89839	146273	202706	259140	315574			
EP□C200-785-S4	END	299356	START	273912	416481	559050	701619					
	RUN	133402	RUN	51951	94288	136624	178960					
	BREAK	204492	BREAK	65270	129643	194016	258389					
EP□C200-735-S5	END	339549	START			413759	538745	663730	788716			
	RUN	151313	RUN			89533	126648	163763	200878			
	BREAK	231948	BREAK			120571	177005	233439	289873			
EP□C200-785-S5	END	339359	START		376878	519447	662015	804584				
	RUN	151228	RUN		78600	120936	163272	205609				
	BREAK	231818	BREAK		103956	168329	232702	297075				
EP□C200-835-S5	END	339170	START	309457	470766	632075	793383					
	RUN	151144	RUN	58598	106499	154400	202301					
	BREAK	231688	BREAK	73551	146386	219220	292054					
EP□C200-785-S6	END	381373	START			477853	620422	762990	905559	1048128		
	RUN	169951	RUN			104460	146797	189133	231469	273805		
	BREAK	260518	BREAK			141351	205724	270097	334470	398843		
EP□C200-835-S6	END	381160	START			590504	751813	913122	1074431			
	RUN	169856	RUN			137934	185835	233736	281637			
	BREAK	260372	BREAK			192257	265092	337926	410761			
EP□C200-885-S6	END	380946	START	347685	528891	710096	891302					
	RUN	169761	RUN	65849	119658	173468	227277					
	BREAK	260226	BREAK	82661	164479	246297	328116					
EP□C200-785-S7	END	472763	START				529946	672515	815084	957652		
	RUN	219368	RUN				103309	145645	187982	230318		
	BREAK	322946	BREAK				147041	211414	275787	340160		
EP□C200-835-S7	END	472498	START			500080	661388	822697	984006	1145315		
	RUN	219245	RUN			94471	142372	190273	238174	286075		
	BREAK	322765	BREAK			133607	206442	279276	352111	424945		
EP□C200-885-S7	END	472233	START		438517	619722	800928	982133	1163339			
	RUN	219123	RUN		76219	130029	183838	237648	291458			
	BREAK	322585	BREAK		105862	187680	269499	351317	433135			
EP□C200-985-S7	END	471969	START	430629	655098	879568	1104037					
	RUN	219000	RUN	73907	140564	207221	273878					
	BREAK	322404	BREAK	102352	203705	305058	406411					

# Output Torques EP-Series Canted

## Spring Return Actuators

(Unit : inch.pounds)

Actuator Model	Position of stroke	Spring Torque	Position of stroke	Pneumatic Stroke Torque (in.lb.) at Operating Pressure (psig)									
				40	50	60	70	80	90	100	120	150	
EP C270-785-S1	END	426336	START	347798	540266	732734	925202						
	RUN	194750	RUN	57235	114389	171543	228697						
	BREAK	301359	BREAK	64337	151240	238144	325047						
EP C270-785-S2	END	541612	START		426143	618611	811079	1003546	1196014				
	RUN	247408	RUN		68050	125204	182358	239512	296666				
	BREAK	382842	BREAK		74646	161549	248453	335356	422260				
EP C270-885-S2	END	541309	START	442614	687242	931869	1176497						
	RUN	247269	RUN	72974	145617	218260	290903						
	BREAK	382628	BREAK	82149	192604	303058	413513						
EP C270-785-S3	END	605594	START			555269	747736	940204	1132672	1325140			
	RUN	276640	RUN			99480	156634	213787	270941	328095			
	BREAK	428077	BREAK			119029	205932	292836	379739	466643			
EP C270-885-S3	END	605261	START		623929	868556	1113184	1357811	1602439				
	RUN	276485	RUN		119907	192550	265193	337835	410478				
	BREAK	427837	BREAK		150107	260561	371016	481471	591926				
EP C270-935-S3	END	604928	START	493320	766370	1039420	1312470						
	RUN	276331	RUN	81161	162244	243327	324409						
	BREAK	427598	BREAK	91210	214498	337787	461075						
EP C270-785-S4	END	670780	START				683202	875670	1068137	1260605	1645541		
	RUN	306883	RUN				130020	187174	244327	301481	415789		
	BREAK	474876	BREAK				161941	248845	335748	422652	596459		
EP C270-885-S4	END	670760	START			803712	1048340	1292967	1537595	1782222			
	RUN	306712	RUN			165951	238594	311236	383879	456522			
	BREAK	474610	BREAK			216595	327050	437505	547960	658415			
EP C270-935-S4	END	670723	START		701233	974283	1247333	1520383	1793432				
	RUN	306540	RUN		135660	216742	297825	378908	459991				
	BREAK	474344	BREAK		170557	293845	417133	540421	663709				
EP C270-985-S4	END	670685	START	548157	851191	1154225	1457259						
	RUN	306368	RUN	90343	180330	270317	360303						
	BREAK	474079	BREAK	101672	238499	375325	512152						
EP C270-785-S5	END	905931	START					642870	835338	1027806	1412741	1990145	
	RUN	414685	RUN					92308	149462	206616	320924	492385	
	BREAK	641689	BREAK					92040	178944	265847	439654	700365	
EP C270-885-S5	END	905904	START				815547	1060175	1304802	1549430	2038685		
	RUN	414453	RUN				143781	216424	289067	361710	506995		
	BREAK	641330	BREAK				170333	280788	391243	501697	722607		
EP C270-935-S5	END	905877	START			741481	1014531	1287581	1560631	1833680	2379780		
	RUN	414221	RUN			121983	203066	284149	365232	446315	608481		
	BREAK	640971	BREAK			137216	260504	383792	507080	630368	876944		
EP C270-985-S5	END	905827	START		618401	921434	1224468	1527502	1830536				
	RUN	413989	RUN		85624	175610	265597	355584	445571				
	BREAK	640612	BREAK		81957	218784	355610	492437	629263				
EP C270-1050-S5	END	905775	START	480673	825021	1169369	1513717	1858065					
	RUN	413757	RUN	44914	147169	249424	351679	453934					
	BREAK	640254	BREAK	20084	175565	331046	486526	642007					

Output Torques

# Output Torques EP-Series Symmetric

## Double Acting Actuators

(Unit : inch.pounds)

Actuator Model	MOP* Torque	Position of stroke	Pneumatic Stroke Torque (in.lb.) at Operating Pressure (psig)									
			40	50	60	70	80	90	100	120	150	170
EP □ S106-200-DA	31750	START	7471	9338	11206	13073	14941	16809	18676	22412	28015	31750
	17773	RUN	4182	5227	6273	7318	8364	9409	10455	12546	15682	17773
	31603	BREAK	7436	9295	11154	13013	14872	16731	18590	22308	27885	31603
EP □ S106-240-DA	29583	START	10758	13447	16136	18826	21515	24205	26894			
	16561	RUN	6022	7528	9033	10539	12044	13550	15055			
	29446	BREAK	10708	13385	16062	18739	21416	24093	26770			
EP □ S106-295-DA	32506	START	16253	20316	24380	28443	32506					
	18197	RUN	9098	11373	13648	15922	18197					
	32356	BREAK	16178	20222	24267	28311	32356					
EP □ S106-340-DA	32385	START	21590	26987	32385							
	18129	RUN	12086	15107	18129							
	32235	BREAK	21490	26862	32235							
EP □ S108-295-DA	74389	START	21254	26568	31881	37195	42508	47822	53135	63762		
	41643	RUN	11898	14872	17847	20821	23796	26770	29745	35694		
	74045	BREAK	21156	26445	31734	37023	42311	47600	52889	63467		
EP □ S108-340-DA	77641	START	28233	35291	42350	49408	56466	63524	70583			
	43463	RUN	15805	19756	23707	27658	31609	35560	39512			
	77281	BREAK	28102	35128	42153	49179	56205	63230	70256			
EP □ S108-385-DA	72402	START	36201	45251	54302	63352	72402					
	40530	RUN	20265	25331	30398	35464	40530					
	72067	BREAK	36033	45042	54050	63058	72067					
EP □ S108-435-DA	69322	START	46214	57768	69322							
	38806	RUN	25871	32338	38806							
	69001	BREAK	46001	57501	69001							
EP □ S110-340-DA	124557	START	33215	41519	49823	58127	66431	74734	83038	99646	124557	
	69726	RUN	18594	23242	27891	32539	37187	41836	46484	55781	69726	
	123981	BREAK	33062	41327	49592	57858	66123	74388	82654	99185	123981	
EP □ S110-385-DA	117121	START	42589	53237	63884	74532	85179	95826	106474			
	65563	RUN	23841	29802	35762	41722	47683	53643	59603			
	116579	BREAK	42392	52990	63588	74186	84785	95383	105981			
EP □ S110-435-DA	122332	START	54370	67962	81555	95147	108740	122332				
	68481	RUN	30436	38045	45654	53263	60872	68481				
	121766	BREAK	54118	67648	81177	94707	108236	121766				
EP □ S110-485-DA	118277	START	67587	84484	101381	118277						
	66211	RUN	37835	47293	56752	66211						
	117730	BREAK	67274	84093	100911	117730						
EP □ S110-535-DA	123361	START	82241	102801	123361							
	69057	RUN	46038	57547	69057							
	122790	BREAK	81860	102325	122790							
EP □ S130-435-DA	247383	START	70681	88351	106021	123692	141362	159032	176702	212043		
	138483	RUN	39567	49458	59350	69242	79133	89025	98917	118700		
	246238	BREAK	70354	87942	105531	123119	140707	158296	175884	211061		
EP □ S130-485-DA	241624	START	87863	109829	131795	153761	175726	197692	219658			
	135259	RUN	49185	61482	73778	86074	98370	110667	122963			
	240505	BREAK	87456	109321	131185	153049	174913	196777	218641			
EP □ S130-535-DA	240555	START	106913	133642	160370	187098	213826	240555				
	134661	RUN	59849	74812	89774	104736	119698	134661				
	239441	BREAK	106418	133023	159627	186232	212836	239441				
EP □ S130-585-DA	255662	START	127831	159788	191746	223704	255662					
	143118	RUN	71559	89448	107338	125228	143118					
	254478	BREAK	127239	159049	190858	222668	254478					
EP □ S130-635-DA	225924	START	150616	188270	225924							
	126471	RUN	84314	105392	126471							
	224878	BREAK	149919	187398	224878							
EP □ S160-485-DA	405523	START	108139	135174	162209	189244	216279	243314	270348	324418	405523	
	227009	RUN	60536	75670	90803	105937	121071	136205	151339	181607	227009	
	403645	BREAK	107639	134548	161458	188368	215277	242187	269097	322916	403645	
EP □ S160-535-DA	394756	START	131585	164482	197378	230275	263171	296067	328964	394756		
	220982	RUN	73661	92076	110491	128906	147321	165736	184152	220982		
	392929	BREAK	130976	163720	196464	229209	261953	294697	327441	392929		

M.O.P\* - Maximum Operating Pressure.  
(The pressure required for the maximum operating torques of the actuator)

# Output Torques EP-Series Symmetric

## Double Acting Actuators

(Unit : inch.pounds)

Actuator Model	MOP* Torque	Position of stroke	Pneumatic Stroke Torque (in.lb.) at Operating Pressure (psig)										
			40	50	60	70	80	90	100	120	150	170	
EP S160-585-DA	393326	START	157330	196663	235995	275328	314660	353993	393326				
	220181	RUN	88072	110090	132108	154127	176145	198163	220181				
	391505	BREAK	156602	195752	234903	274053	313204	352354	391505				
EP S160-635-DA	370747	START	185374	231717	278060	324404	370747						
	207542	RUN	103771	129714	155656	181599	207542						
	369031	BREAK	184515	230644	276773	322902	369031						
EP S160-685-DA	377502	START	215716	269644	323573	377502							
	211323	RUN	120756	150945	181134	211323							
	375755	BREAK	214717	268396	322075	375755							
EP S160-735-DA	372534	START	248356	310445	372534								
	208542	RUN	139028	173785	208542								
	370810	BREAK	247206	309008	370810								
EP S200-585-DA	688320	START	196663	245828	294994	344160	393326	442491	491657	589988			
	385316	RUN	110090	137613	165136	192658	220181	247703	275226	330271			
	685133	BREAK	195752	244690	293628	342567	391505	440443	489381	587257			
EP S200-635-DA	695151	START	231717	289646	347575	405505	463434	521363	579292	695151			
	389141	RUN	129714	162142	194570	226999	259427	291855	324284	389141			
	691933	BREAK	230644	288305	345966	403627	461288	518949	576611	691933			
EP S200-685-DA	674111	START	269644	337056	404467	471878	539289	606700	674111				
	377363	RUN	150945	188681	226418	264154	301890	339626	377363				
	670990	BREAK	268396	335495	402594	469693	536792	603891	670990				
EP S200-735-DA	698502	START	310445	388057	465668	543279	620891	698502					
	391016	RUN	173785	217231	260678	304124	347570	391016					
	695268	BREAK	309008	386260	463512	540764	618016	695268					
EP S200-785-DA	708239	START	354119	442649	531179	619709	708239						
	396467	RUN	198234	247792	297350	346909	396467						
	704960	BREAK	352480	440600	528720	616840	704960						
EP S200-835-DA	701167	START	400667	500834	601000	701167							
	392508	RUN	224290	280363	336436	392508							
	697921	BREAK	398812	498515	598218	697921							
EP S200-885-DA	675131	START	450088	562609	675131								
	377934	RUN	251956	314945	377934								
	672006	BREAK	448004	560005	672006								
EP S270-685-DA	1547085	START	364020	455025	546030	637035	728040	819045	910050	1092060	1365075	1547085	
	866047	RUN	203776	254720	305664	356608	407552	458496	509440	611328	764159	866047	
	1539923	BREAK	362335	452918	543502	634086	724670	815253	905837	1087004	1358755	1539923	
EP S270-735-DA	1466854	START	419101	523876	628652	733427	838202	942978	1047753	1257303			
	821134	RUN	234610	293262	351915	410567	469220	527872	586525	703830			
	1460063	BREAK	417161	521451	625741	730032	834322	938612	1042902	1251483			
EP S270-785-DA	1553699	START	478061	597577	717092	836607	956122	1075638	1195153	1434184			
	869750	RUN	267615	334519	401423	468327	535231	602134	669038	802846			
	1546506	BREAK	475848	594810	713772	832734	951696	1070658	1189620	1427544			
EP S270-885-DA	1519045	START	607618	759523	911427	1063332	1215236	1367141	1519045				
	850351	RUN	340140	425175	510210	595246	680281	765316	850351				
	1512013	BREAK	604805	756006	907208	1058409	1209610	1360811	1512013				
EP S270-935-DA	1525984	START	678215	847769	1017323	1186876	1356430	1525984					
	854235	RUN	379660	474575	569490	664405	759320	854235					
	1518919	BREAK	675075	843844	1012613	1181381	1350150	1518919					
EP S270-985-DA	1505382	START	752691	940864	1129036	1317209	1505382						
	842702	RUN	421351	526689	632026	737364	842702						
	1498412	BREAK	749206	936508	1123809	1311111	1498412						
EP S270-1050-DA	1496790	START	855308	1069136	1282963	1496790							
	837892	RUN	478796	598494	718193	837892							
	1489860	BREAK	851349	1064186	1277023	1489860							

M.O.P\* - Maximum Operating Pressure.  
(The pressure required for the maximum operating torques of the actuator)

# Output Torques EP-Series Symmetric

## Spring Return Actuators

(Unit : inch.pounds)

Actuator Model	Position of stroke	Spring Torque	Position of stroke	Pneumatic Stroke Torque (in.lb.) at Operating Pressure (psig)									
				40	50	60	70	80	90	100	120	150	
EP □ S106-200-S1	END	3679	START	3753	5602	7451	9300						
	RUN	2540	RUN	1395	2284	3172.8	4061						
	BREAK	5303	BREAK	1749	3274	4797.9	6322						
EP □ S106-200-S2	END	5292	START			5854	7703	9552	11401	13250			
	RUN	3654	RUN			2226	3115	4004	4892	5781			
	BREAK	7628	BREAK			2892	4416	5940	7465	8989			
EP □ S106-240-S2	END	5290	START	5413	8076	10738	13401						
	RUN	3652	RUN	2014	3294	4574	5854						
	BREAK	7624	BREAK	2529	4724	6919	9114						
EP □ S106-200-S3	END	8000	START						8720	10569	14267	19814	
	RUN	5524	RUN						3303	4192	5969	8635	
	BREAK	11530	BREAK						4265	5789	8838	13411	
EP □ S106-240-S3	END	7996	START			8059	10721	13384	16046	18709			
	RUN	5521	RUN			2985	4265	5545	6825	8104			
	BREAK	11525	BREAK			3720	5916	8111	10306	12501			
EP □ S106-295-S3	END	7992	START	8178	12201	16224	20246						
	RUN	5518	RUN	3043	4977	6910	8844						
	BREAK	11519	BREAK	3820	7137	10453	13770						
EP □ S106-240-S4	END	10632	START						13437	16100	21425	29412	
	RUN	7340	RUN						5278	6558	9117	12956	
	BREAK	15323	BREAK						7191	9386	13777	20362	
EP □ S106-295-S4	END	10626	START			13616	17639	21661	25684				
	RUN	7337	RUN			5364	7298	9231	11165				
	BREAK	15315	BREAK			7341	10657	13973	17290				
EP □ S106-340-S4	END	10621	START	10859	16203	21546	26890						
	RUN	7333	RUN	4040	6608	9177	11745						
	BREAK	15307	BREAK	5070	9475	13881	18286						
EP □ S108-295-S1	END	10525	START	10622	15882	21143	26403						
	RUN	7266	RUN	3937	6465	8993	11522						
	BREAK	15169	BREAK	4909	9246	13583	17920						
EP □ S108-295-S2	END	13893	START			17809	23069	28330	33590				
	RUN	9592	RUN			7017	9545	12074	14602				
	BREAK	20023	BREAK			9603	13940	18277	22614				
EP □ S108-340-S2	END	13886	START	14204	21192	28179	35167						
	RUN	9587	RUN	5285	8644	12002	15361						
	BREAK	20013	BREAK	6634	12395	18156	23917						
EP □ S108-295-S3	END	16897	START					25355	30615	35876	46396		
	RUN	11309	RUN					10614	13142	15670	20727		
	BREAK	24089	BREAK					14942	19279	23616	32290		
EP □ S108-340-S3	END	16889	START		18218	25206	32194	39181	46169				
	RUN	11303	RUN		7185	10543	13902	17260	20618				
	BREAK	24077	BREAK		9061	14822	20583	26344	32105				
EP □ S108-385-S3	END	16881	START	19127	28087	37047	46007						
	RUN	11298	RUN	7622	11929	16235	20541						
	BREAK	24065	BREAK	9814	17201	24587	31974						
EP □ S108-340-S4	END	22792	START					26349	33337	40324	47312		
	RUN	15736	RUN					10134	13492	16851	20209		
	BREAK	32849	BREAK					13390	19151	24912	30673		
EP □ S108-385-S4	END	22781	START			31205	40165	49125	58084				
	RUN	15728	RUN			12469	16775	21082	25388				
	BREAK	32833	BREAK			17398	24785	32172	39559				
EP □ S108-435-S4	END	22770	START	23210	34648	46086	57525						
	RUN	15721	RUN	8628	14125	19622	26302						
	BREAK	32817	BREAK	10811	20241	29671	39101						
EP □ S108-385-S5	END	28293	START				34708	43668	52628	61587			
	RUN	19534	RUN				13540	17847	22153	26459			
	BREAK	40777	BREAK				18271	25658	33044	40431			
EP □ S108-435-S5	END	28279	START		29194	40632	52070	63508					
	RUN	19524	RUN		10892	16389	21887	27384					
	BREAK	40757	BREAK		13730	23160	32590	42020					

# Output Torques EP-Series Symmetric

## Spring Return Actuators

(Unit : inch.pounds)

Actuator Model	Position of stroke	Spring Torque	Position of stroke	Pneumatic Stroke Torque (in.lb.) at Operating Pressure (psig)									
				40	50	60	70	80	90	100	120	150	
EP□S108-485-S5	END	28265	START	28892	43111	57330	71548						
	RUN	19514	RUN	10748	17582	24416	31250						
	BREAK	40736	BREAK	13486	25209	36931	48654						
EP□S110-385-S1	END	20957	START	21416	31957	42498	53039						
	RUN	14469	RUN	7967	13033	18099	23165						
	BREAK	30204	BREAK	9995	18685	27375	36066						
EP□S110-385-S2	END	26783	START			36731	47271	57812	68353				
	RUN	18491	RUN			14680	19747	24813	29879				
	BREAK	38600	BREAK			20490	29181	37871	46562				
EP□S110-435-S2	END	26769	START	27325	40781	54238	67694						
	RUN	18482	RUN	10161	16629	23096	29564						
	BREAK	38581	BREAK	12741	23835	34929	46023						
EP□S110-385-S3	END	33303	START				40816	51357	61898	72439			
	RUN	22993	RUN				15920	20986	26053	31119			
	BREAK	47997	BREAK				21475	30165	38856	47546			
EP□S110-435-S3	END	33286	START		34329	47786	61243	74699	88156				
	RUN	22981	RUN		12804	19272	25739	32207	38675				
	BREAK	47973	BREAK		16133	27227	38321	49416	60510				
EP□S110-485-S3	END	33270	START	33974	50702	67430	84158						
	RUN	22970	RUN	12635	20675	28715	36755						
	BREAK	47949	BREAK	15846	29638	43429	57220						
EP□S110-435-S4	END	40507	START			40637	54094	67550	81007				
	RUN	27967	RUN			15034	21502	27969	34437				
	BREAK	58381	BREAK			18693	29788	40882	51976				
EP□S110-485-S4	END	40487	START			60285	77013	93740	110468				
	RUN	27953	RUN			24479	32519	40559	48599				
	BREAK	58351	BREAK			34899	48690	62481	76273				
EP□S110-535-S4	END	40467	START	41356	61711	82066	102420						
	RUN	27939	RUN	15384	25167	34950	44733						
	BREAK	58322	BREAK	19301	36082	52864	69645						
EP□S110-485-S5	END	48452	START			52399	69127	85855	102583				
	RUN	33452	RUN			19805	27845	35885	43925				
	BREAK	69831	BREAK			25486	39277	53068	66860				
EP□S110-535-S5	END	48428	START		53830	74184	94539						
	RUN	33435	RUN		20495	30278	40061						
	BREAK	69796	BREAK		26674	43455	60237						
EP□S110-585-S5	END	48404	START	49429	73766	98103							
	RUN	33418	RUN	18383	30080	41777							
	BREAK	69761	BREAK	23054	43119	63184							
EP□S130-485-S1	END	43250	START	44167	65913	87659	109406						
	RUN	29860	RUN	16426	26878	37330	47782						
	BREAK	62334	BREAK	20601	38529	56458	74386						
EP□S130-485-S2	END	52620	START		56637	78383	100129	121875					
	RUN	36330	RUN		21379	31831	42283	52735					
	BREAK	75838	BREAK		27456	45384	63313	81241					
EP□S130-535-S2	END	52594	START	53776	80237	106698	133159						
	RUN	36311	RUN	20007	32725	45443	58161						
	BREAK	75800	BREAK	25107	46923	68738	90554						
EP□S130-485-S3	END	62983	START			68124	89870	111616	133363	155109			
	RUN	43484	RUN			25750	36202	46653	57105	67557			
	BREAK	90773	BREAK			33138	51066	68995	86923	104852			
EP□S130-535-S3	END	62951	START		68570	94496	120423	146349					
	RUN	43462	RUN		27587	40754	53921	67088					
	BREAK	90728	BREAK		34682	56498	78313	100129					
EP□S130-585-S3	END	62920	START	64262	95900	127538	159176						
	RUN	43441	RUN	23900	39107	54313	69519						
	BREAK	90682	BREAK	29976	56060	82144	108228						
EP□S130-535-S4	END	74200	START			85308	111769	138230	164691	191152			
	RUN	51228	RUN			32764	45482	58200	70918	83635			
	BREAK	106939	BREAK			43204	65020	86836	108651	130467			

Output Torques

# Output Torques EP-Series Symmetric

## Spring Return Actuators

(Unit : inch.pounds)

Actuator Model	Position of stroke	Spring Torque	Position of stroke	Pneumatic Stroke Torque (in.lb.) at Operating Pressure (psig)								
				40	50	60	70	80	90	100	120	150
EP <input type="checkbox"/> S130-585-S4	END	74163	START		84770	116408	148046	179684				
	RUN	51203	RUN		32509	47715	62921	78127				
	BREAK	106886	BREAK		42773	68857	94941	121025				
EP <input type="checkbox"/> S130-635-S4	END	74126	START	75726	113003	150281	187558					
	RUN	51177	RUN	28166	46083	63999	81916					
	BREAK	106833	BREAK	35331	66064	96797	127531					
EP <input type="checkbox"/> S130-585-S5	END	86304	START			104388	136026	167664	199302			
	RUN	59585	RUN			40590	55796	71002	86209			
	BREAK	124385	BREAK			54508	80592	106676	132760			
EP <input type="checkbox"/> S130-635-S5	END	86261	START		100989	138267	175544	212821				
	RUN	59556	RUN		38961	56878	74794	92711				
	BREAK	124323	BREAK		51722	82456	113189	143922				
EP <input type="checkbox"/> S130-685-S5	END	86218	START	88161	131540	174919	218298					
	RUN	59526	RUN	32800	53649	74499	95348					
	BREAK	124260	BREAK	41162	76925	112689	148453					
EP <input type="checkbox"/> S160-535-S1	END	64721	START	66196	98763	131330	163898					
	RUN	43713	RUN	25455	41108	56761	72414					
	BREAK	90397	BREAK	33275	60125	86975	113826					
EP <input type="checkbox"/> S160-535-S2	END	77481	START		86130	118698	151265	183833				
	RUN	52331	RUN		33783	49436	65089	80741				
	BREAK	108219	BREAK		45511	72361	99211	126061				
EP <input type="checkbox"/> S160-585-S2	END	77439	START	79092	118032	156971	195910					
	RUN	52303	RUN	30404	49120	67835	86550					
	BREAK	108160	BREAK	39723	71826	103929	136033					
EP <input type="checkbox"/> S160-535-S3	END	91397	START			104921	137488	170056	202623			
	RUN	61730	RUN			41447	57099	72752	88405			
	BREAK	127656	BREAK			56423	83273	110123	136974			
EP <input type="checkbox"/> S160-585-S3	END	91347	START		104262	143202	182141	221080	260019			
	RUN	61696	RUN		41135	59850	78566	97281	115997			
	BREAK	127586	BREAK		55897	88000	120103	152207	184310			
EP <input type="checkbox"/> S160-635-S3	END	91297	START	93136	139016	184896	230776					
	RUN	61662	RUN	35792	57843	79895	101946					
	BREAK	127515	BREAK	46740	84566	122391	160217					
EP <input type="checkbox"/> S160-585-S4	END	106320	START			128378	167317	206257	245196	284135		
	RUN	71809	RUN			51254	69970	88685	107400	126116		
	BREAK	148499	BREAK			70851	102955	135058	167161	199265		
EP <input type="checkbox"/> S160-635-S4	END	106262	START		124200	170080	215960	261840				
	RUN	71770	RUN		49252	71303	93355	115406				
	BREAK	148417	BREAK		67426	105252	143077	180903				
EP <input type="checkbox"/> S160-685-S4	END	106204	START	108417	161806	215196	268586					
	RUN	71730	RUN	41672	67333	92993	118654					
	BREAK	148336	BREAK	54433	98450	142467	186484					
EP <input type="checkbox"/> S160-635-S5	END	122294	START			154208	200088	245968	291848			
	RUN	82598	RUN			62099	84151	106202	128253			
	BREAK	170810	BREAK			86890	124715	162541	200367			
EP <input type="checkbox"/> S160-685-S5	END	122227	START		145943	199333	252722	306112				
	RUN	82553	RUN		58133	83794	109455	135115				
	BREAK	170716	BREAK		80098	124115	168132	212149				
EP <input type="checkbox"/> S160-735-S5	END	122160	START	124934	186402	247871	309339					
	RUN	82507	RUN	48043	77586	107130	136673					
	BREAK	170622	BREAK	62799	113476	164154	214831					
EP <input type="checkbox"/> S160-685-S6	END	139468	START			182264	235654	289044	342433			
	RUN	94197	RUN			73896	99557	125218	150878			
	BREAK	194796	BREAK			104369	148386	192403	236420			
EP <input type="checkbox"/> S160-735-S6	END	139391	START		169344	230812	292280	353748				
	RUN	94145	RUN		67694	97237	126781	156324				
	BREAK	194689	BREAK		93741	144419	195096	245773				
EP <input type="checkbox"/> S160-785-S6	END	139315	START	142541	212657	282772	352888					
	RUN	94094	RUN	54819	88519	122219	155918					
	BREAK	194582	BREAK	71669	129476	187283	245090					

# Output Torques EP-Series Symmetric

## Spring Return Actuators

(Unit : inch.pounds)

Actuator Model	Position of stroke	Spring Torque	Position of stroke	Pneumatic Stroke Torque (in.lb.) at Operating Pressure (psig)									
				40	50	60	70	80	90	100	120	150	
EP S200-635-S1	END	113777	START	116761	174111	231461	288811						
	RUN	73771	RUN	47551	75115	102679	130243						
	BREAK	158913	BREAK	58102	104808	151513	198219						
EP S200-635-S2	END	132408	START		155666	213016	270366	327716					
	RUN	89429	RUN		61806	89370	116934	144498					
	BREAK	184936	BREAK		83729	130435	177140	223846					
EP S200-685-S2	END	132334	START	135937	202674	269411	336148						
	RUN	89379	RUN	52331	84407	116483	148559						
	BREAK	184832	BREAK	67687	122037	176387	230737						
EP S200-635-S3	END	146485	START			199080	256430	313780	371130				
	RUN	98936	RUN			81289	108853	136417	163981				
	BREAK	201570	BREAK			116961	163667	210372	257078				
EP S200-685-S3	END	146403	START		188747	255484	322221	388958					
	RUN	98881	RUN		76330	108406	140482	172558					
	BREAK	201457	BREAK		108571	162921	217272	271622					
EP S200-735-S3	END	146321	START	162483	239319	316154	392989	469824					
	RUN	98826	RUN	63716	100645	137574	174504	211433					
	BREAK	201344	BREAK	87208	149782	212356	274930	337504					
EP S200-685-S4	END	172693	START			229456	296193	362930	429667				
	RUN	116638	RUN			93313	125389	157464	189540				
	BREAK	241203	BREAK			130727	185077	239428	293778				
EP S200-735-S4	END	172597	START		213305	290140	366976	443811					
	RUN	116573	RUN		85560	122489	159419	196348					
	BREAK	241068	BREAK		117606	180180	242754	305328					
EP S200-785-S4	END	172500	START	179803	267448	355092	442737						
	RUN	116507	RUN	69467	111592	153717	195841						
	BREAK	240933	BREAK	90353	161730	233108	304485						
EP S200-735-S5	END	190255	START			272658	349494	426329	503164				
	RUN	128499	RUN			112352	149281	186210	223140				
	BREAK	265732	BREAK			160202	222776	285350	347924				
EP S200-785-S5	END	190149	START		249975	337620	425264	512909	600554				
	RUN	128427	RUN		101460	143584	185709	227834	269958				
	BREAK	265583	BREAK		141764	213141	284518	355895	427272				
EP S200-835-S5	END	190043	START	208518	307683	406848	506013	605178					
	RUN	128356	RUN	81545	129206	176868	224530	272192					
	BREAK	265434	BREAK	108036	188795	269555	350314	431073					
EP S200-785-S6	END	220741	START			307334	394978	482623	570267				
	RUN	149089	RUN			126022	168146	210271	252396				
	BREAK	308311	BREAK			178531	249908	321285	392663				
EP S200-835-S6	END	220617	START		277414	376579	475744	574909					
	RUN	149006	RUN		111654	159315	206977	254639					
	BREAK	308139	BREAK		154205	234964	315723	396483					
EP S200-885-S6	END	220494	START	227298	338694	450091	561488						
	RUN	148923	RUN	87578	141119	194659	248200						
	BREAK	307966	BREAK	113430	204151	294872	385593						
EP S200-785-S7	END	269458	START			259104	346748	434393	522037				
	RUN	181993	RUN			98053	140178	182303	224427				
	BREAK	376355	BREAK			123415	194793	266170	337547				
EP S200-835-S7	END	269308	START		229211	328376	427541	526706					
	RUN	181891	RUN		83701	131363	179024	226686					
	BREAK	376145	BREAK		99120	179879	260639	341398					
EP S200-885-S7	END	269157	START		290518	401915	513311	624708					
	RUN	181790	RUN		113182	166722	220263	273804					
	BREAK	375934	BREAK		149097	239818	330539	421259					
EP S200-985-S7	END	269006	START	285657	423651	561644	699637						
	RUN	181688	RUN	110860	177184	243508	309832						
	BREAK	375724	BREAK	145187	257568	369949	482330						

Output Torques



# Output Torques EP-Series Symmetric

## Spring Return Actuators

(Unit : inch.pounds)

Actuator Model	Position of stroke	Spring Torque	Position of stroke	Pneumatic Stroke Torque (in.lb.) at Operating Pressure (psig)								
				40	50	60	70	80	90	100	120	150
EP <input type="checkbox"/> S270-785-S1	END	229975	START	243125	360250	477375	594500					
	RUN	179464	RUN	74928	131797	188665	245533					
	BREAK	340771	BREAK	109412	205772	302131	398490					
EP <input type="checkbox"/> S270-785-S2	END	287981	START		303404	420529	537654	654779				
	RUN	179565	RUN		131711	188579	245448	302316				
	BREAK	340962	BREAK		205617	301976	398335	494695				
EP <input type="checkbox"/> S270-885-S2	END	287819	START	313403	462269	611136	760002					
	RUN	179464	RUN	136575	208855	281134	353414					
	BREAK	340771	BREAK	213868	336341	458814	581287					
EP <input type="checkbox"/> S270-785-S3	END	318909	START			390219	507344	624469	741594			
	RUN	248865	RUN			129674	186542	243410	300279			
	BREAK	472552	BREAK			195388	291748	388107	484466			
EP <input type="checkbox"/> S270-885-S3	END	318730	START		431976	580843	729709	878576				
	RUN	248726	RUN		149982	222262	294541	366821				
	BREAK	472287	BREAK		229813	352286	474759	597232				
EP <input type="checkbox"/> S270-935-S3	END	318552	START	352470	518632	684795	850958					
	RUN	248587	RUN	111412	192090	272768	353445					
	BREAK	472023	BREAK	164472	301175	437878	574581					
EP <input type="checkbox"/> S270-785-S4	END	350258	START				471759	587688	703618	819548		
	RUN	270657	RUN				168019	224887	281755	338624		
	BREAK	513931	BREAK				258231	354590	450949	547308		
EP <input type="checkbox"/> S270-885-S4	END	350251	START			544341	691688	839036	986383			
	RUN	270506	RUN			203749	276029	348308	420588			
	BREAK	513643	BREAK			318787	441260	563733	686206			
EP <input type="checkbox"/> S270-935-S4	END	350055	START		482783	647250	811717	976184				
	RUN	270354	RUN		173587	254265	334943	415621				
	BREAK	513356	BREAK		267696	404398	541101	677804				
EP <input type="checkbox"/> S270-985-S4	END	349859	START	390747	573275	755802	938330					
	RUN	270203	RUN	128476	218013	307550	397087					
	BREAK	513068	BREAK	191272	342986	494700	646414					
EP <input type="checkbox"/> S270-785-S5	END	447353	START					493506	609436	725366	957226	
	RUN	375072	RUN					136135	193003	249871	363608	
	BREAK	657411	BREAK					238371	334730	431089	623807	
EP <input type="checkbox"/> S270-885-S5	END	447344	START				597508	744855	892203	1039550		
	RUN	374862	RUN				187326	259606	331886	404165		
	BREAK	657043	BREAK				325106	447579	570052	692525		
EP <input type="checkbox"/> S270-935-S5	END	447335	START			552888	717355	881822	1046289			
	RUN	374652	RUN			165612	246290	326968	407645			
	BREAK	656676	BREAK			288309	425012	561714	698417			
EP <input type="checkbox"/> S270-985-S5	END	447309	START		478748	661275	843803	1026330				
	RUN	374442	RUN		129409	218946	308483	398021				
	BREAK	656308	BREAK		226962	378676	530390	682104				
EP <input type="checkbox"/> S270-1050-S5	END	447283	START	395785	603197	810609	1018022					
	RUN	374233	RUN	88878	190622	292366	394110					
	BREAK	655941	BREAK	158280	330679	503077	675475					

# Performance Data EP-Series Canted

## Double Acting Actuators

Model	Volume (Cu.in.)		MAWP* (psig)	MOP* (psig)
	Open	Close		
EP C106-200-DA	348	391	170	170
EP C106-240-DA	500	561	170	110
EP C106-295-DA	757	848	170	80
EP C106-340-DA	1001	1123	170	60
EP C108-295-DA	982	1111	170	140
EP C108-340-DA	1306	1477	170	110
EP C108-385-DA	1678	1892	170	80
EP C108-435-DA	2142	2410	170	60
EP C110-340-DA	1532	1739	170	150
EP C110-385-DA	1965	2233	170	110
EP C110-435-DA	2514	2850	170	90
EP C110-485-DA	3112	3539	170	70
EP C110-535-DA	3783	4333	170	60
EP C130-435-DA	3295	3661	170	140
EP C130-485-DA	4089	4577	170	110
EP C130-535-DA	4943	5553	170	90
EP C130-585-DA	5919	6652	170	80
EP C130-635-DA	6957	7811	170	60
EP C160-485-DA	5004	5614	170	150
EP C160-535-DA	6102	6835	170	120
EP C160-585-DA	7262	8116	170	100
EP C160-635-DA	8543	9581	170	80
EP C160-685-DA	9947	11167	170	70
EP C160-735-DA	11472	12815	170	60
EP C200-585-DA	9093	10069	170	140
EP C200-635-DA	10679	11839	170	120
EP C200-685-DA	12449	13791	170	100
EP C200-735-DA	14341	15927	170	90
EP C200-785-DA	16354	18124	170	80
EP C200-835-DA	18490	20504	170	70
EP C200-885-DA	20748	23067	170	60
EP C270-685-DA	16721	18307	170	170
EP C270-735-DA	19222	21114	170	140
EP C270-785-DA	21969	24043	170	130
EP C270-885-DA	27888	30573	170	100
EP C270-935-DA	31122	34173	170	90
EP C270-985-DA	34539	37896	170	80
EP C270-1050-DA	39238	43083	170	70

M.A.W.P\* - Maximum Allowable Working Pressure.  
(The pressure applicable to a fully stroked actuator against the mechanicals)

M.O.P\* - Maximum Operating Pressure.  
(The pressure required for the maximum operating torques of the actuator)

# Performance Data EP-Series Canted

## Spring Return Actuators

Model	Spring Side Number	Volume (Cu.in.)		MAWP* (psig)	MOP* (psig)
		Open	Close		
EP□C106-200	S1	348	391	170	170
	S2			170	170
	S3			170	170
EP□C106-240	S2	500	561	170	150
	S3			170	150
	S4			170	150
EP□C106-295	S3	757	848	170	100
	S4			170	100
EP□C106-340	S4	1001	1123	170	70
EP□C108-295	S1	982	1111	170	170
	S2			170	170
	S3			170	170
EP□C108-340	S2	1306	1477	170	150
	S3			170	150
	S4			170	150
EP□C108-385	S3	1678	1892	170	110
	S4			170	110
	S5			170	110
EP□C108-435	S4	2142	2410	170	90
	S5			170	90
EP□C108-485	S5	2661	2996	170	70
EP□C110-385	S1	1965	2233	170	140
	S2			170	140
	S3			170	140
EP□C110-435	S2	2514	2850	170	110
	S3			170	110
	S4			170	110
EP□C110-485	S3	3112	3539	170	90
	S4			170	90
	S5			170	90
EP□C110-535	S4	3783	4333	170	70
	S5			170	70
EP□C110-585	S5	4516	5126	170	60
EP□C130-485	S1	4089	4577	170	160
	S2			170	160
	S3			170	160
EP□C130-535	S2	4943	5553	170	130
	S3			170	130
	S4			170	130
EP□C130-585	S3	5919	6652	170	110
	S4			170	110
	S5			170	110
EP□C130-635	S4	6957	7811	170	90
	S5			170	90
EP□C130-685	S5	8116	9093	170	80

M.A.W.P\* - Maximum Allowable Working Pressure.  
(The pressure applicable to a fully stroked actuator against the mechanicals)

M.O.P\* - Maximum Operating Pressure.  
(The pressure required for the maximum operating torques of the actuator)

# Performance Data EP-Series Canted

## Spring Return Actuators

Model	Spring Side Number	Volume (ℓ)		MAWP* (bar)	MOP* (bar)
		Open	Close		
EP□C160-535	S1	6102	6835	170	170
	S2			170	170
	S3			170	170
EP□C160-585	S2	7262	8116	170	150
	S3			170	150
	S4			170	150
EP□C160-635	S3	8543	9581	170	130
	S4			170	130
	S5			170	130
EP□C160-685	S4	9947	11167	170	100
	S5			170	100
	S6			170	100
EP□C160-735	S5	11472	12815	170	90
	S6			170	90
EP□C160-785	S6	13059	14646	170	80
EP□C200-635	S1	10679	11839	170	170
	S2			170	170
	S3			170	170
EP□C200-685	S2	12449	13791	170	150
	S3			170	150
	S4			170	150
EP□C200-735	S3	14341	15927	170	130
	S4			170	130
	S5			170	130
EP□C200-785	S4	16354	18124	170	110
	S5			170	110
	S6			170	110
	S7			170	110
EP□C200-835	S5	18490	20504	170	100
	S6			170	100
	S7			170	100
EP□C200-885	S6	20748	23067	170	90
	S7			170	90
EP□C200-985	S7	25691	28559	170	70
EP□C270-785	S1	21969	24043	170	170
	S2			170	170
	S3			170	170
	S4			170	170
	S5			170	170
EP□C270-885	S2	27888	30573	170	140
	S3			170	140
	S4			170	140
	S5			170	140
EP□C270-935	S3	31122	34173	170	130
	S4			170	130
	S5			170	130
EP□C270-985	S4	34539	37896	170	110
	S5			170	110
EP□C270-1050	S5	39238	43083	170	90

M.A.W.P\* - Maximum Allowable Working Pressure.  
(The pressure applicable to a fully stroked actuator against the mechanicals)

M.O.P\* - Maximum Operating Pressure.  
(The pressure required for the maximum operating torques of the actuator)

# Performance Data EP-Series Symmetric

## Double Acting Actuators

Model	Volume (Cu.in.)		MAWP* (psig)	MOP* (psig)
	Open	Close		
EP□S106-200-DA	293	336	170	170
EP□S106-240-DA	421	482	170	110
EP□S106-295-DA	635	732	170	80
EP□S106-340-DA	842	970	170	60
EP□S108-295-DA	830	958	170	140
EP□S108-340-DA	1105	1269	170	110
EP□S108-385-DA	1416	1629	170	80
EP□S108-435-DA	1806	2081	170	60
EP□S110-340-DA	1306	1507	170	150
EP□S110-385-DA	1678	1934	170	110
EP□S110-435-DA	2142	2465	170	90
EP□S110-485-DA	2685	3051	170	70
EP□S110-535-DA	3234	3722	170	60
EP□S130-435-DA	2807	3173	170	140
EP□S130-485-DA	3478	3967	170	110
EP□S130-535-DA	4211	4821	170	90
EP□S130-585-DA	5004	5797	170	80
EP□S130-635-DA	5919	6774	170	60
EP□S160-485-DA	4211	4821	170	150
EP□S160-535-DA	5126	5858	170	120
EP□S160-585-DA	6163	7018	170	100
EP□S160-635-DA	7201	8238	170	80
EP□S160-685-DA	8421	9581	170	70
EP□S160-735-DA	9703	11045	170	60
EP□S200-585-DA	7689	8665	170	140
EP□S200-635-DA	9032	10252	170	120
EP□S200-685-DA	10496	11900	170	100
EP□S200-735-DA	12144	13669	170	90
EP□S200-785-DA	13852	15622	170	80
EP□S200-835-DA	15622	17697	170	70
EP□S200-885-DA	17575	19833	170	60
EP□S270-685-DA	14035	15683	170	170
EP□S270-735-DA	16171	18063	170	140
EP□S270-785-DA	18429	20565	170	130
EP□S270-885-DA	23433	26179	170	100
EP□S270-935-DA	26118	29230	170	90
EP□S270-985-DA	28986	32404	170	80
EP□S270-1050-DA	32953	36858	170	70

M.A.W.P\* - Maximum Allowable Working Pressure.  
(The pressure applicable to a fully stroked actuator against the mechanicals)

M.O.P\* - Maximum Operating Pressure.  
(The pressure required for the maximum operating torques of the actuator)

# Performance Data EP-Series Symmetric

## Spring Return Actuators

Model	Spring Side Number	Volume (Cu.in.)		MAWP* (psig)	MOP* (psig)
		Open	Close		
EP□S106-200	S1	293	336	170	170
	S2			170	170
	S3			170	170
EP□S106-240	S2	421	482	170	150
	S3			170	150
	S4			170	150
EP□S106-295	S3	635	732	170	100
	S4			170	100
EP□S106-340	S4	842	970	170	70
EP□S108-295	S1	830	958	170	170
	S2			170	170
	S3			170	170
EP□S108-340	S2	1105	1269	170	150
	S3			170	150
	S4			170	150
EP□S108-385	S3	1416	1629	170	110
	S4			170	110
	S5			170	110
EP□S108-435	S4	1806	2081	170	90
	S5			170	90
EP□S108-485	S5	2252	2587	170	70
EP□S110-385	S1	1678	1934	170	140
	S2			170	140
	S3			170	140
EP□S110-435	S2	2142	2465	170	110
	S3			170	110
	S4			170	110
EP□S110-485	S3	2685	3051	170	90
	S4			170	90
	S5			170	90
EP□S110-535	S4	3234	3722	170	70
	S5			170	70
EP□S110-585	S5	3844	4455	170	60
EP□S130-485	S1	3478	3967	170	160
	S2			170	160
	S3			170	160
EP□S130-535	S2	4211	4821	170	130
	S3			170	130
	S4			170	130
EP□S130-585	S3	5004	5797	170	110
	S4			170	110
	S5			170	110
EP□S130-635	S4	5919	6774	170	90
	S5			170	90
EP□S130-685	S5	6896	7933	170	80

M.A.W.P\* - Maximum Allowable Working Pressure.  
(The pressure applicable to a fully stroked actuator against the mechanicals)

M.O.P\* - Maximum Operating Pressure.  
(The pressure required for the maximum operating torques of the actuator)

# Performance Data EP-Series Symmetric

## Spring Return Actuators

Model	Spring Side Number	Volume (ℓ)		MAWP* (bar)	MOP* (bar)
		Open	Close		
EP □ S160-535	S1	5126	5858	170	170
	S2			170	170
	S3			170	170
EP □ S160-585	S2	6163	7018	170	150
	S3			170	150
	S4			170	150
EP □ S160-635	S3	7201	8238	170	130
	S4			170	130
	S5			170	130
EP □ S160-685	S4	8421	9581	170	100
	S5			170	100
	S6			170	100
EP □ S160-735	S5	9703	11045	170	90
	S6			170	90
EP □ S160-785	S6	11045	12632	170	80
EP □ S200-635	S1	9032	10252	170	170
	S2			170	170
	S3			170	170
EP □ S200-685	S2	10496	11900	170	150
	S3			170	150
	S4			170	150
EP □ S200-735	S3	12144	13669	170	130
	S4			170	130
	S5			170	130
EP □ S200-785	S4	13852	15622	170	110
	S5			170	110
	S6			170	110
	S7			170	110
EP □ S200-835	S5	15622	17697	170	100
	S6			170	100
	S7			170	100
EP □ S200-885	S6	17575	19833	170	90
	S7			170	90
EP □ S200-985	S7	21785	24593	170	70
EP □ S270-785	S1	18429	20565	170	170
	S2			170	170
	S3			170	170
	S4			170	170
	S5			170	170
EP □ S270-885	S2	23433	26179	170	140
	S3			170	140
	S4			170	140
	S5			170	140
EP □ S270-935	S3	26118	29230	170	130
	S4			170	130
	S5			170	130
EP □ S270-985	S4	28986	32404	170	110
	S5			170	110
EP □ S270-1050	S5	32953	36858	170	90

M.A.W.P\* - Maximum Allowable Working Pressure.  
(The pressure applicable to a fully stroked actuator against the mechanicals)

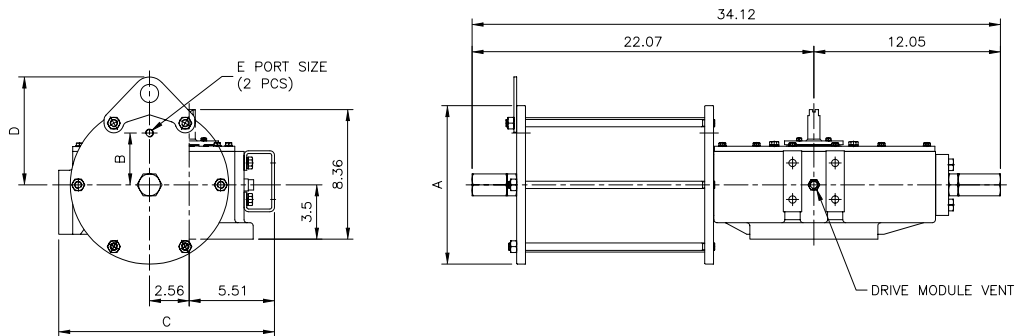
M.O.P\* - Maximum Operating Pressure.  
(The pressure required for the maximum operating torques of the actuator)

# Dimensions EP-Series Canted

(Unit : inches)

## EPTC106-XXX-DA (CW Model Shown)

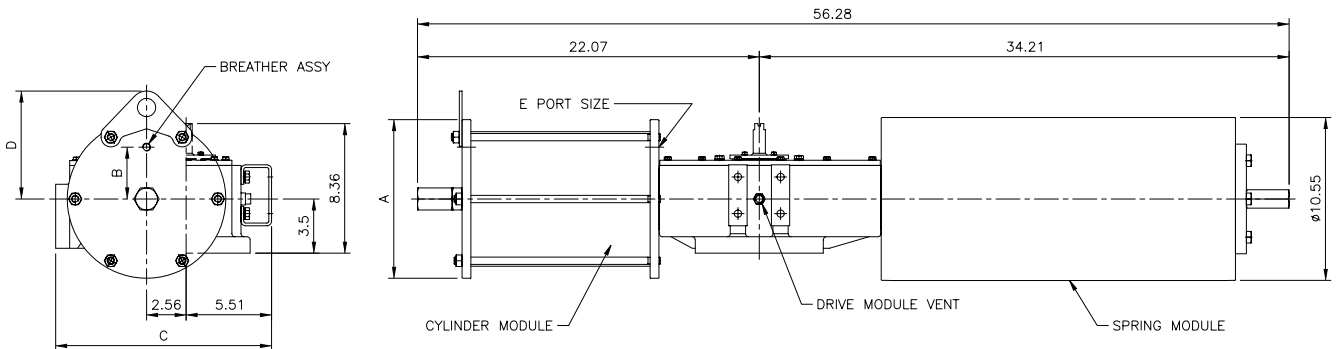
Double Acting Actuators



MODEL	A	B	C	D	E
EPTC106-200-DA	10.24	3.35	13.94	6.97	1/4 NPT
EPTC106-240-DA	12.28	4.09	14.21	7.99	3/8 NPT
EPTC106-295-DA	14.33	4.96	15.24	9.02	3/8 NPT
EPTC106-340-DA	15.83	5.71	15.98	9.76	3/8 NPT

## EPTC106-XXX-SR (CW Model Shown)

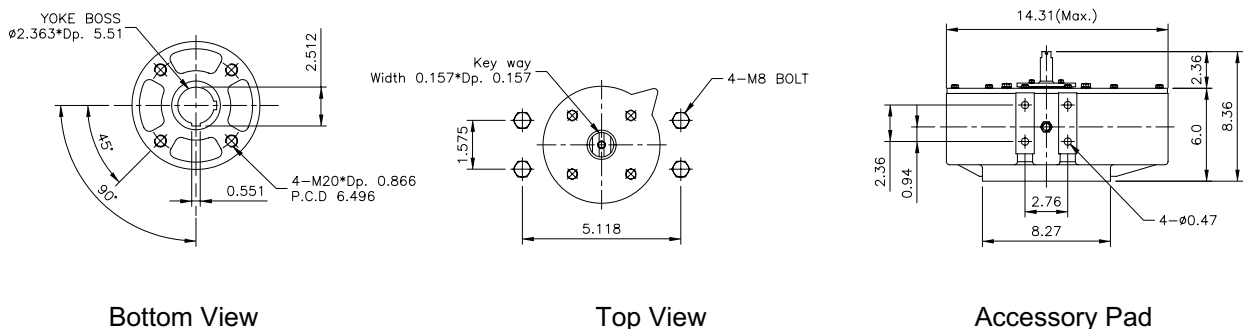
Spring Return Actuators



MODEL	A	B	C	D	E
EPTC106-200-SR	10.24	3.35	13.94	6.97	1/4 NPT
EPTC106-240-SR	12.28	4.09	14.21	7.99	3/8 NPT
EPTC106-295-SR	14.33	4.96	15.24	9.02	3/8 NPT
EPTC106-340-SR	15.83	5.71	15.98	9.76	3/8 NPT

Dimensions

## Valve / Accessory Mounting Details



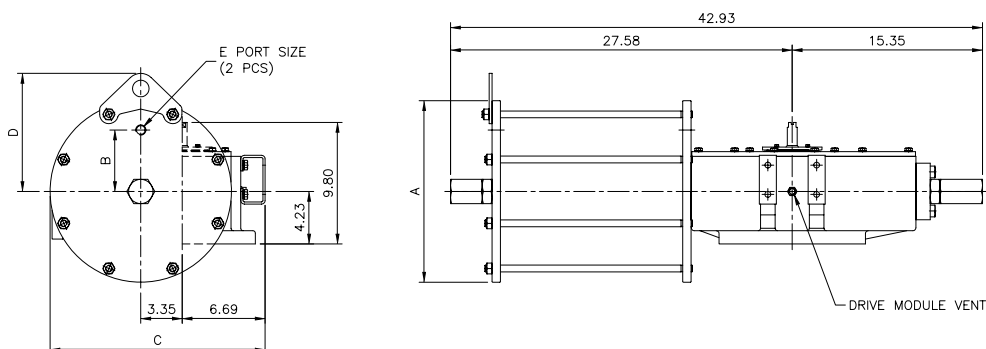


# Dimensions EP-Series Canted

(Unit : inches)

## EPTC108-XXX-DA (CW Model Shown)

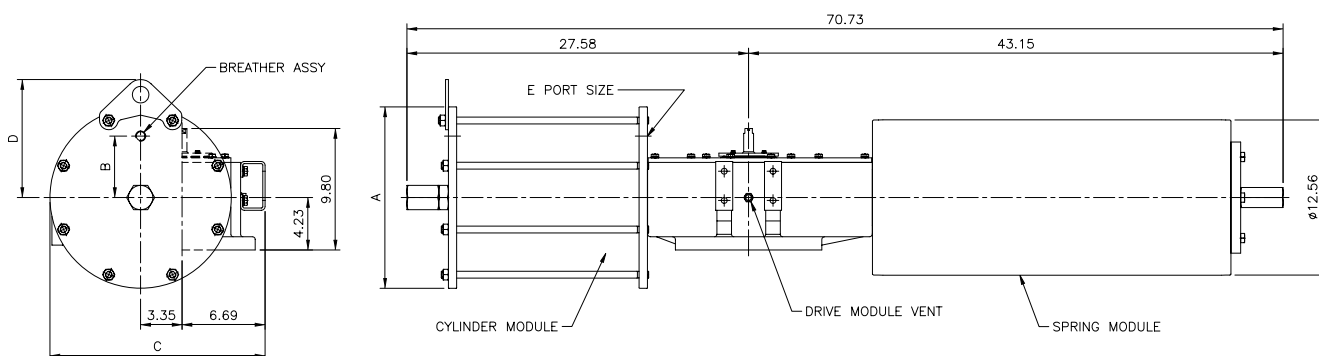
Double Acting Actuators



MODEL	A	B	C	D	E
EPTC108-295-DA	14.64	4.96	17.36	9.49	1/2 NPT
EPTC108-340-DA	16.10	5.71	18.11	10.28	1/2 NPT
EPTC108-385-DA	18.11	6.50	19.09	11.26	1/2 NPT
EPTC108-435-DA	20.12	7.28	20.12	12.28	1/2 NPT

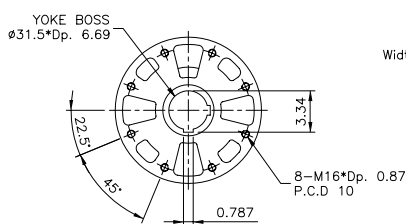
## EPTC108-XXX-SR (CW Model Shown)

Spring Return Actuators

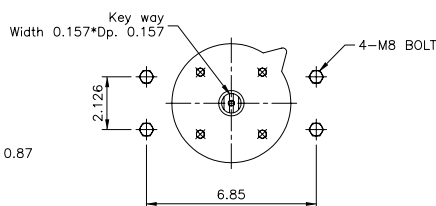


MODEL	A	B	C	D	E
EPTC108-295-SR	14.64	4.96	17.36	9.49	1/2 NPT
EPTC108-340-SR	16.10	5.71	18.11	10.28	1/2 NPT
EPTC108-385-SR	18.11	6.50	19.09	11.26	1/2 NPT
EPTC108-435-SR	20.12	7.28	20.12	12.28	1/2 NPT
EPTC108-485-SR	22.13	8.27	22.10	13.27	1/2 NPT

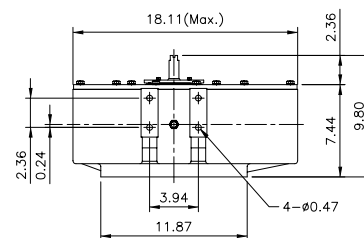
## Valve / Accessory Mounting Details



Bottom View



Top View



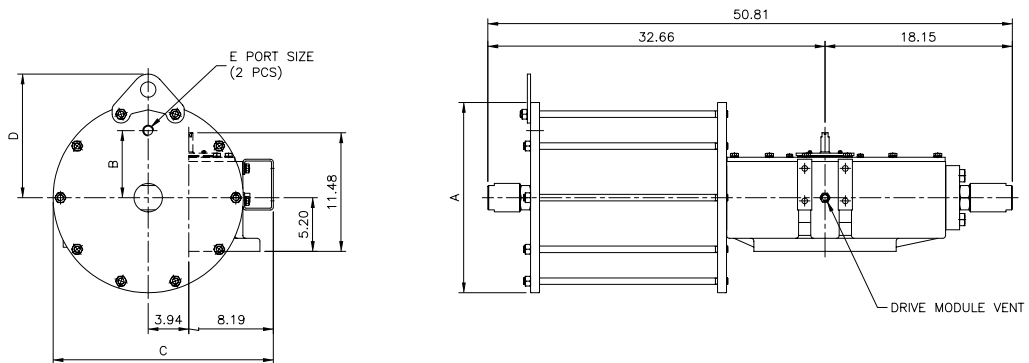
Accessory Pad

# Dimensions EP-Series Canted

(Unit : inches)

## EPTC110-XXX-DA (CW Model Shown)

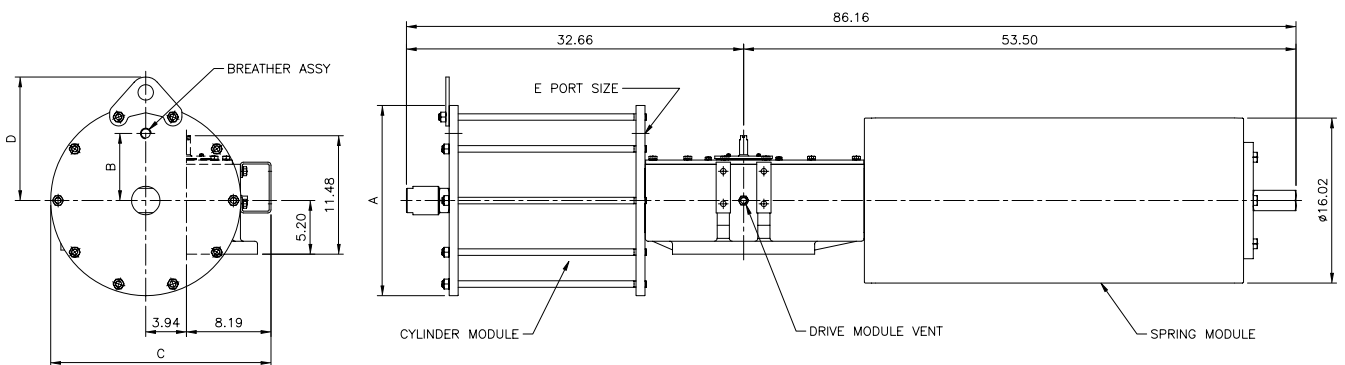
Double Acting Actuators



MODEL	A	B	C	D	E
EPTC110-340-DA	16.42	5.71	20.35	10.98	3/4 NPT
EPTC110-385-DA	18.43	6.50	21.34	11.97	3/4 NPT
EPTC110-435-DA	20.47	7.28	22.36	12.99	3/4 NPT
EPTC110-485-DA	22.44	8.27	23.35	13.98	3/4 NPT
EPTC110-535-DA	24.45	9.25	24.37	15.00	3/4 NPT

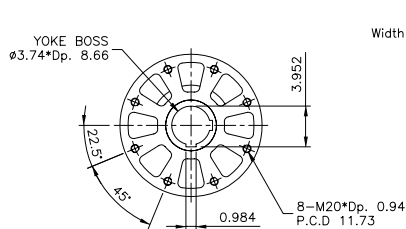
## EPTC110-XXX-SR (CW Model Shown)

Spring Return Actuators

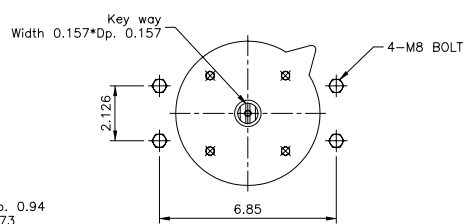


MODEL	A	B	C	D	E
EPTC110-385-SR	18.43	6.50	21.34	11.97	3/4 NPT
EPTC110-435-SR	20.47	7.28	22.36	12.99	3/4 NPT
EPTC110-485-SR	22.44	8.27	23.35	13.98	3/4 NPT
EPTC110-535-SR	24.45	9.25	24.37	15.00	3/4 NPT
EPTC110-585-SR	26.46	9.84	25.35	15.98	3/4 NPT

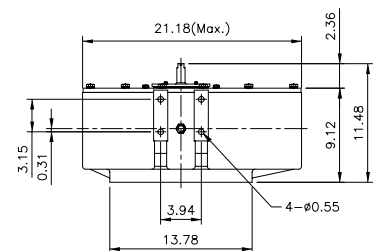
## Valve / Accessory Mounting Details



Bottom View



Top View



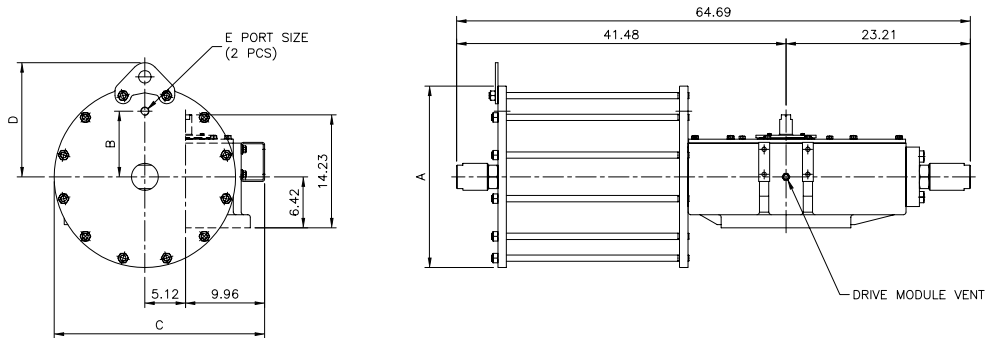
Accessory Pad

# Dimensions EP-Series Canted

(Unit : inches)

## EPTC130-XXX-DA (CW Model Shown)

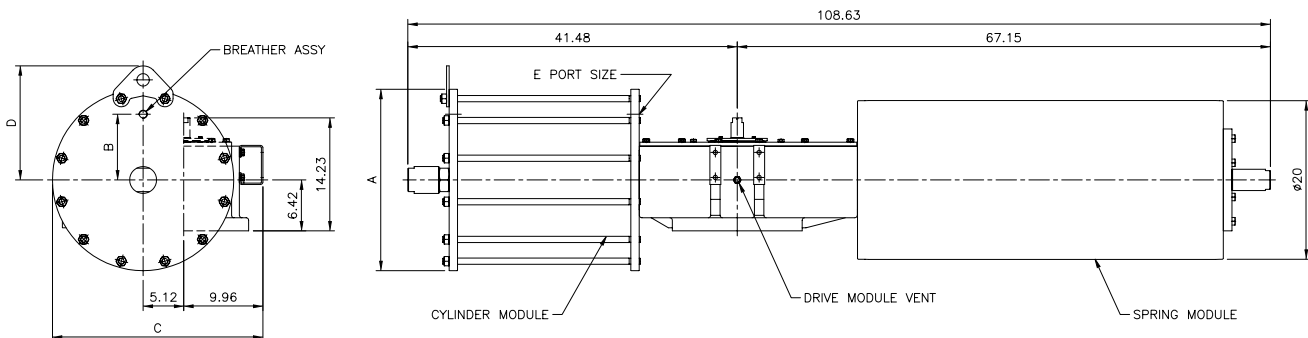
Double Acting Actuators



MODEL	A	B	C	D	E
EPTC130-435-DA	20.87	7.28	25.51	13.39	3/4 NPT
EPTC130-485-DA	22.83	8.27	26.50	14.37	3/4 NPT
EPTC130-535-DA	24.84	9.25	27.52	15.39	3/4 NPT
EPTC130-585-DA	26.85	9.84	28.50	16.38	3/4 NPT
EPTC130-635-DA	28.90	10.83	29.53	17.40	3/4 NPT

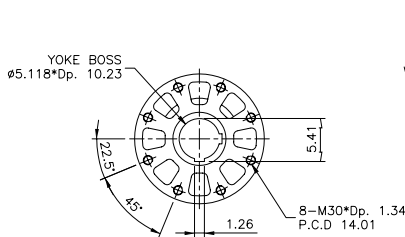
## EPTC130-XXX-SR (CW Model Shown)

Spring Return Actuators

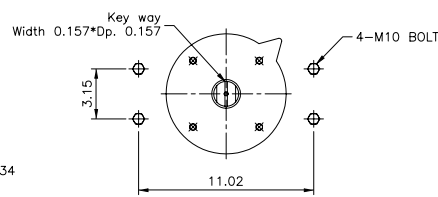


MODEL	A	B	C	D	E
EPTC130-485-SR	22.83	8.27	26.50	14.37	3/4 NPT
EPTC130-535-SR	24.84	9.25	27.52	15.39	3/4 NPT
EPTC130-585-SR	26.85	9.84	28.50	16.38	3/4 NPT
EPTC130-635-SR	28.90	10.83	29.53	17.40	3/4 NPT
EPTC130-685-SR	30.87	11.81	30.51	18.39	3/4 NPT

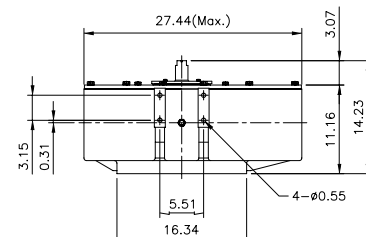
## Valve / Accessory Mounting Details



Bottom View



Top View



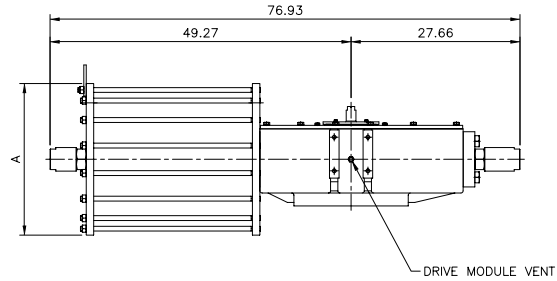
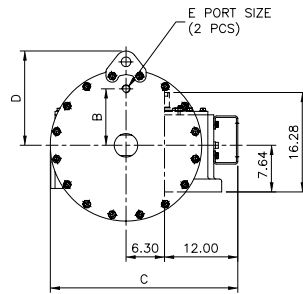
Accessory Pad

# Dimensions EP-Series Canted

(Unit : inches)

## EPTC160-XXX-DA (CW Model Shown)

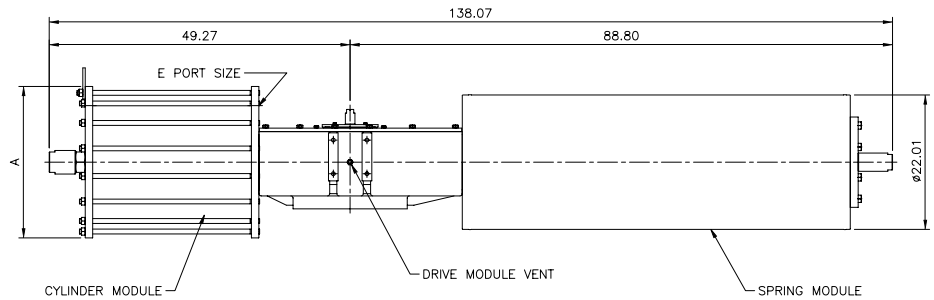
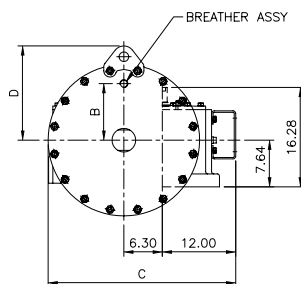
Double Acting Actuators



MODEL	A	B	C	D	E
EPTC160-485-DA	22.83	8.27	30.63	14.45	1 NPT
EPTC160-535-DA	24.80	9.25	30.71	15.43	1 NPT
EPTC160-585-DA	26.93	9.84	31.77	16.50	1 NPT
EPTC160-635-DA	28.94	10.83	32.80	17.52	1 NPT
EPTC160-685-DA	30.94	11.81	33.78	18.50	1 NPT
EPTC160-735-DA	32.91	12.80	34.76	19.49	1 NPT

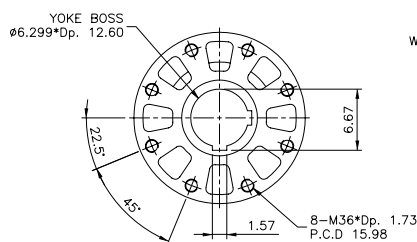
## EPTC160-XXX-SR (CW Model Shown)

Spring Return Actuators

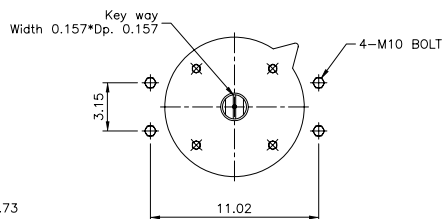


MODEL	A	B	C	D	E
EPTC160-535-SR	24.80	9.25	30.71	15.43	1 NPT
EPTC160-585-SR	26.93	9.84	31.77	16.50	1 NPT
EPTC160-635-SR	28.94	10.83	32.80	17.52	1 NPT
EPTC160-685-SR	30.94	11.81	33.78	18.50	1 NPT
EPTC160-735-SR	32.91	12.80	34.76	19.49	1 NPT
EPTC160-785-SR	34.92	13.78	35.79	20.51	1 NPT

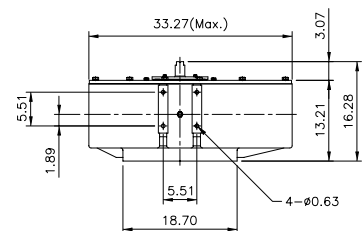
## Valve / Accessory Mounting Details



Bottom View



Top View



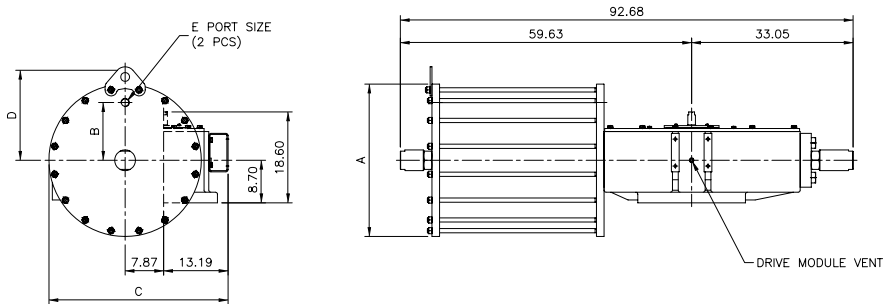
Accessory Pad

# Dimensions EP-Series Canted

(Unit : inches)

## EPTC200-XXX-DA (CW Model Shown)

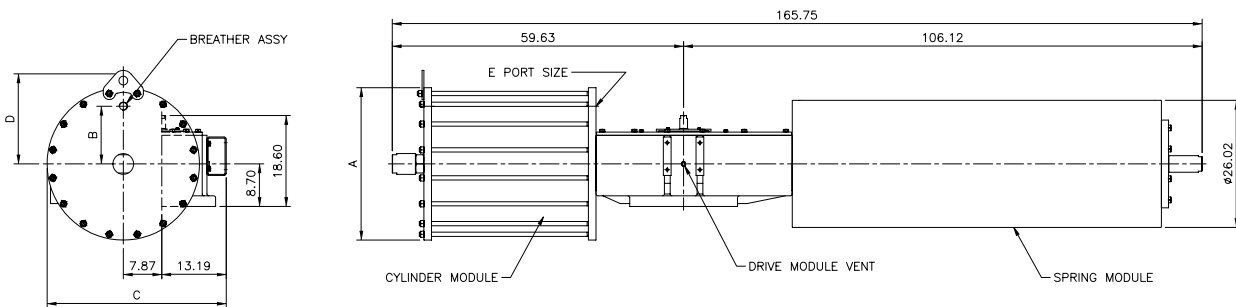
Double Acting Actuators



MODEL	A	B	C	D	E
EPTC200-585-DA	27.16	9.84	35.94	17.13	1 1/4 NPT
EPTC200-635-DA	29.17	10.83	35.94	18.15	1 1/4 NPT
EPTC200-685-DA	31.18	11.81	36.65	19.13	1 1/4 NPT
EPTC200-735-DA	33.19	12.80	37.68	20.16	1 1/4 NPT
EPTC200-785-DA	35.20	13.78	38.66	21.14	1 1/4 NPT
EPTC200-835-DA	37.20	14.76	39.68	22.16	1 1/4 NPT
EPTC200-885-DA	39.21	15.75	40.67	23.15	1 1/4 NPT

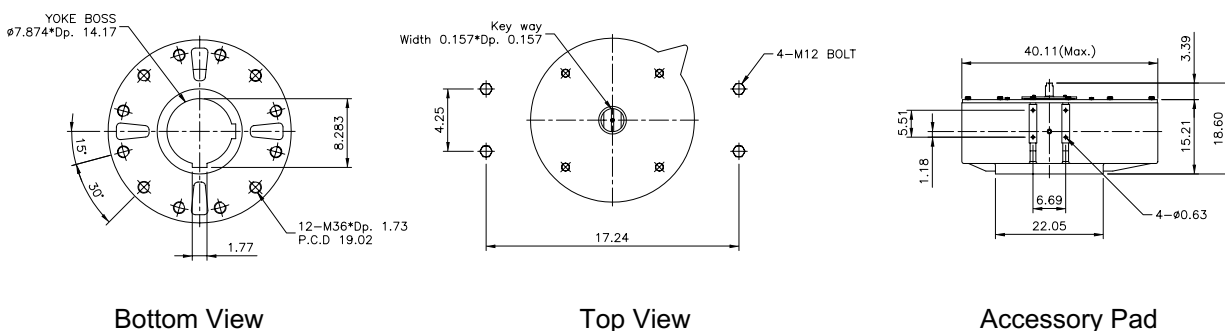
## EPTC200-XXX-SR (CW Model Shown)

Spring Return Actuators



MODEL	A	B	C	D	E
EPTC200-635-SR	29.17	10.83	35.94	18.15	1 1/4 NPT
EPTC200-685-SR	31.18	11.81	36.65	19.13	1 1/4 NPT
EPTC200-735-SR	33.19	12.80	37.68	20.16	1 1/4 NPT
EPTC200-785-SR	35.20	13.78	38.66	21.14	1 1/4 NPT
EPTC200-835-SR	37.20	14.76	39.68	22.16	1 1/4 NPT
EPTC200-885-SR	39.21	15.75	40.67	23.15	1 1/4 NPT
EPTC200-985-SR	43.38	17.52	42.75	25.24	1 1/4 NPT

## Valve / Accessory Mounting Details

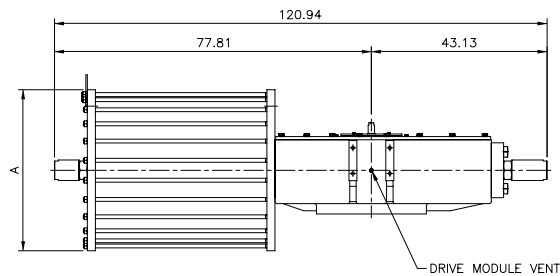
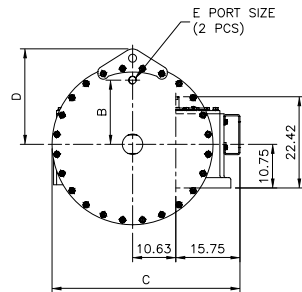


# Dimensions EP-Series Canted

(Unit : inches)

## EPTC270-XXX-DA (CW Model Shown)

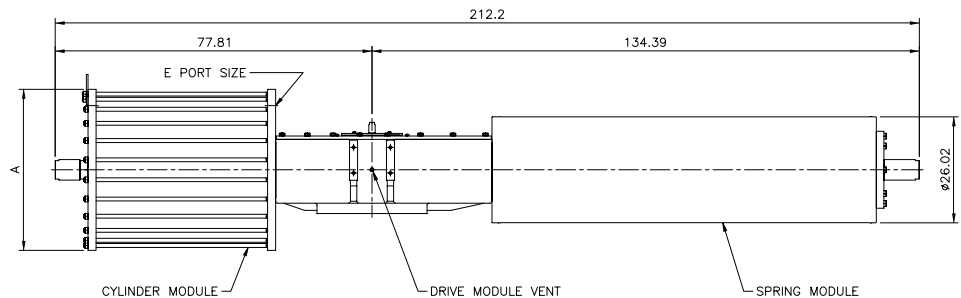
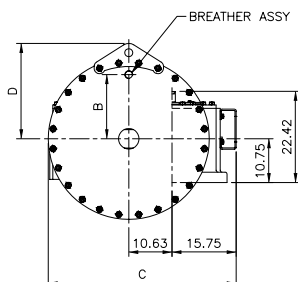
Double Acting Actuators



MODEL	A	B	C	D	E
EPTC270-685-DA	31.50	11.81	45.79	19.41	1 1/2 NPT
EPTC270-735-DA	33.50	12.80	45.79	20.43	1 1/2 NPT
EPTC270-785-DA	35.51	13.78	45.79	21.42	1 1/2 NPT
EPTC270-885-DA	39.53	15.75	46.14	23.43	1 1/2 NPT
EPTC270-935-DA	41.57	16.54	47.16	24.45	1 1/2 NPT
EPTC270-985-DA	43.70	17.52	48.23	25.51	1 1/2 NPT
EPTC270-1050-DA	46.50	18.50	49.65	26.93	1 1/2 NPT

## EPTC270-XXX-SR (CW Model Shown)

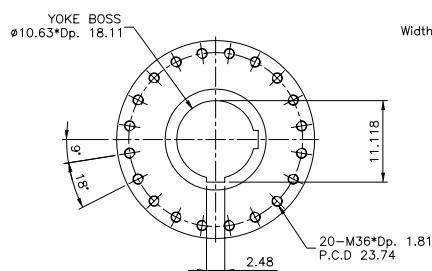
Spring Return Actuators



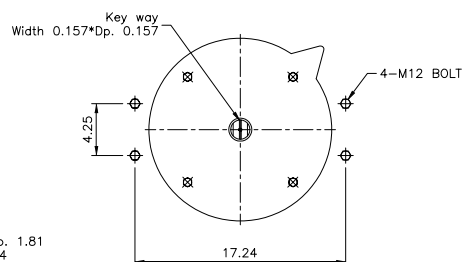
MODEL	A	B	C	D	E
EPTC270-785-SR	35.51	13.78	45.79	21.42	1 1/2 NPT
EPTC270-885-SR	39.53	15.75	46.14	23.43	1 1/2 NPT
EPTC270-935-SR	41.57	16.54	47.16	24.45	1 1/2 NPT
EPTC270-985-SR	43.70	17.52	48.23	25.51	1 1/2 NPT
EPTC270-1050-SR	46.50	18.50	49.65	26.93	1 1/2 NPT

Dimensions

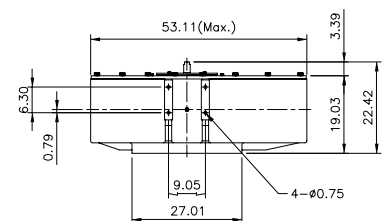
## Valve / Accessory Mounting Details



Bottom View



Top View



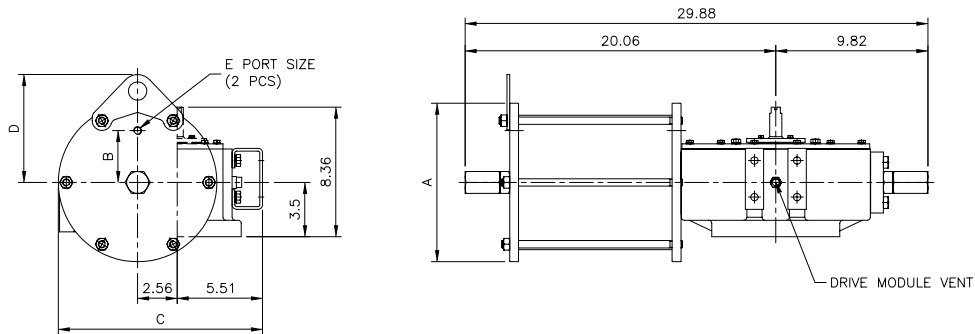
Accessory Pad

# Dimensions EP-Series Symmetric

(Unit : inches)

## EPTS106-XXX-DA (CW Model Shown)

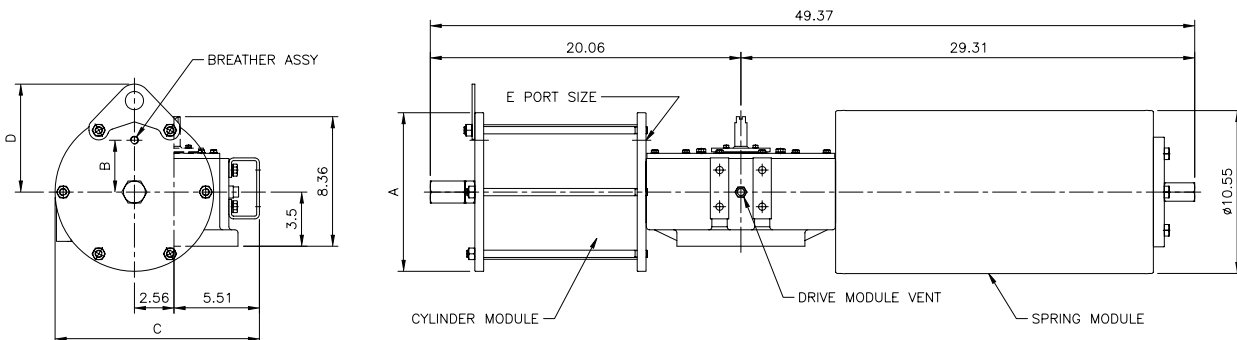
Double Acting Actuators



MODEL	A	B	C	D	E
<b>EPTS106-200-DA</b>	<b>10.24</b>	<b>3.35</b>	<b>13.19</b>	<b>6.97</b>	<b>1/4 NPT</b>
<b>EPTS106-240-DA</b>	<b>12.28</b>	<b>4.09</b>	<b>14.21</b>	<b>7.99</b>	<b>3/8 NPT</b>
<b>EPTS106-295-DA</b>	<b>14.33</b>	<b>4.96</b>	<b>15.24</b>	<b>9.02</b>	<b>3/8 NPT</b>
<b>EPTS106-340-DA</b>	<b>15.83</b>	<b>5.71</b>	<b>15.98</b>	<b>9.76</b>	<b>3/8 NPT</b>

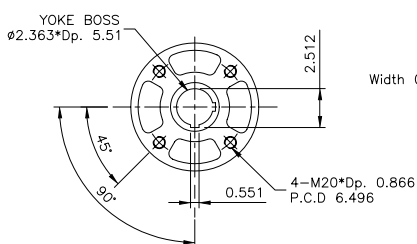
## EPTS106-XXX-SR (CW Model Shown)

Spring Return Actuators

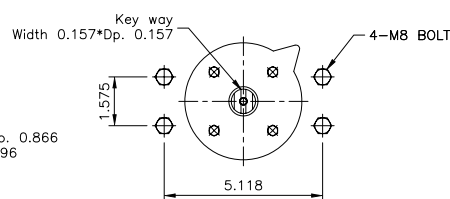


MODEL	A	B	C	D	E
<b>EPTS106-200-SR</b>	<b>10.24</b>	<b>3.35</b>	<b>13.19</b>	<b>6.97</b>	<b>1/4 NPT</b>
<b>EPTS106-240-SR</b>	<b>12.28</b>	<b>4.09</b>	<b>14.21</b>	<b>7.99</b>	<b>3/8 NPT</b>
<b>EPTS106-295-SR</b>	<b>14.33</b>	<b>4.96</b>	<b>15.24</b>	<b>9.02</b>	<b>3/8 NPT</b>
<b>EPTS106-340-SR</b>	<b>15.83</b>	<b>5.71</b>	<b>15.98</b>	<b>9.76</b>	<b>3/8 NPT</b>

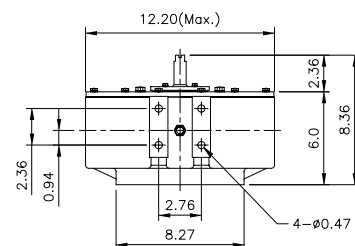
## Valve / Accessory Mounting Details



Bottom View



Top View



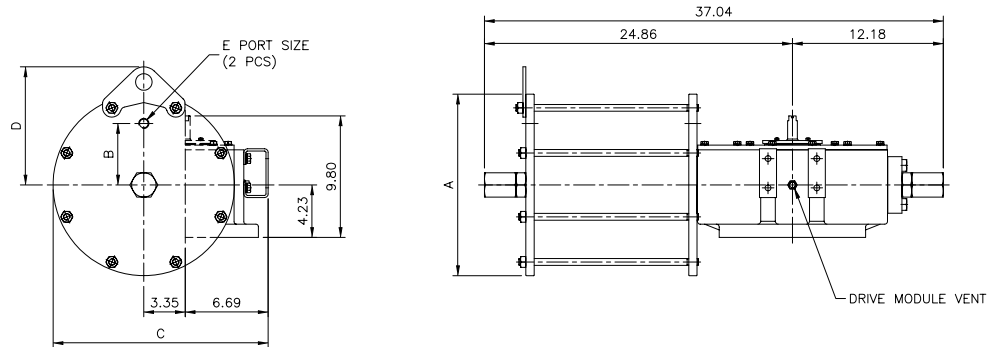
Accessory Pad

# Dimensions EP-Series Symmetric

(Unit : inches)

## EPTS108-XXX-DA (CW Model Shown)

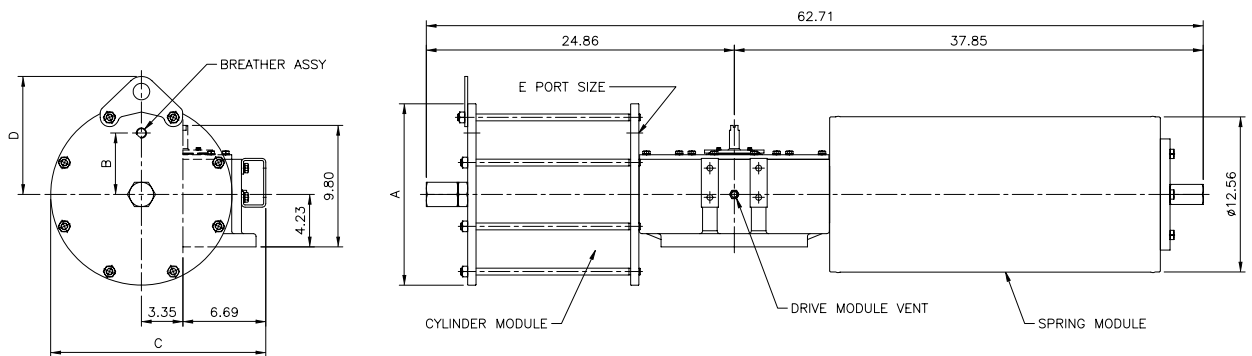
Double Acting Actuators



MODEL	A	B	C	D	E
EPTS108-295-DA	14.64	4.96	17.36	9.49	1/2 NPT
EPTS108-340-DA	16.10	5.71	18.11	10.28	1/2 NPT
EPTS108-385-DA	18.11	6.50	19.09	11.26	1/2 NPT
EPTS108-435-DA	20.12	7.28	20.12	12.28	1/2 NPT

## EPTS108-XXX-SR (CW Model Shown)

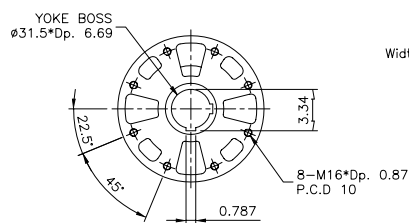
Spring Return Actuators



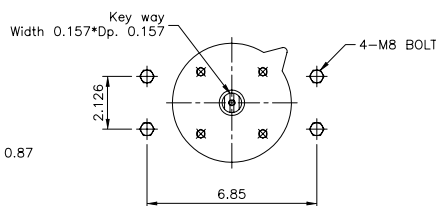
MODEL	A	B	C	D	E
EPTS108-295-SR	14.64	4.96	17.36	9.49	1/2 NPT
EPTS108-340-SR	16.10	5.71	18.11	10.28	1/2 NPT
EPTS108-385-SR	18.11	6.50	19.09	11.26	1/2 NPT
EPTS108-435-SR	20.12	7.28	20.12	12.28	1/2 NPT
EPTS108-485-SR	22.13	8.27	22.10	13.27	1/2 NPT

Dimensions

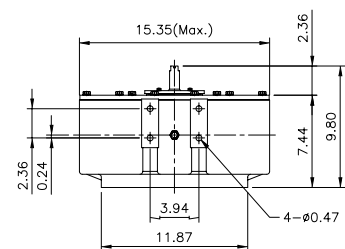
## Valve / Accessory Mounting Details



Bottom View



Top View



Accessory Pad

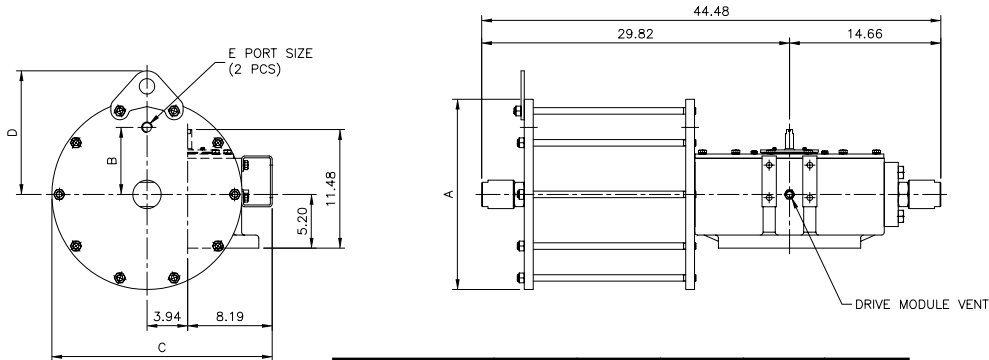


# Dimensions EP-Series Symmetric

(Unit : inches)

## EPTS110-XXX-DA (CW Model Shown)

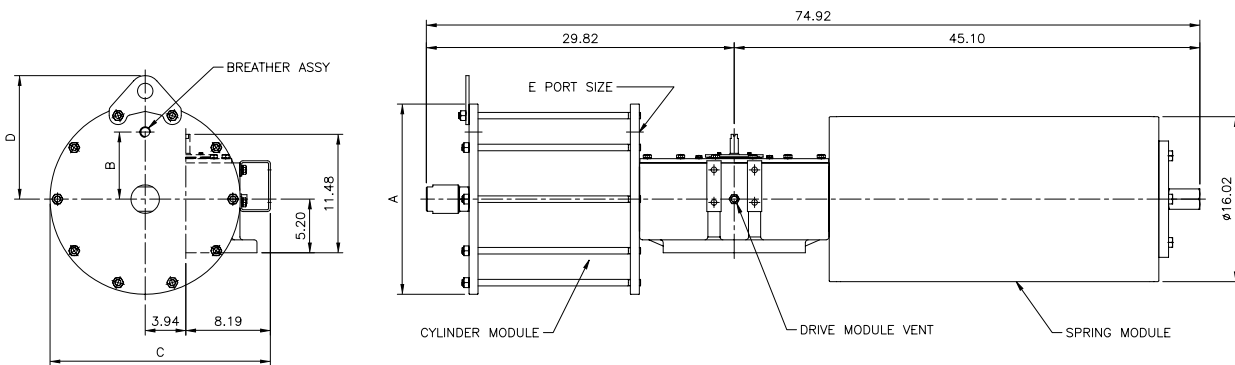
Double Acting Actuators



MODEL	A	B	C	D	E
EPTS110-340-DA	16.42	5.71	20.35	10.98	3/4 NPT
EPTS110-385-DA	18.43	6.50	21.34	11.97	3/4 NPT
EPTS110-435-DA	20.47	7.28	22.36	12.99	3/4 NPT
EPTS110-485-DA	22.44	8.27	23.35	13.98	3/4 NPT
EPTS110-535-DA	24.45	9.25	24.37	15.00	3/4 NPT

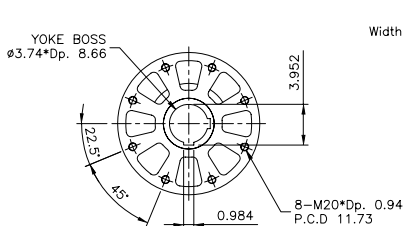
## EPTS110-XXX-SR (CW Model Shown)

Spring Return Actuators

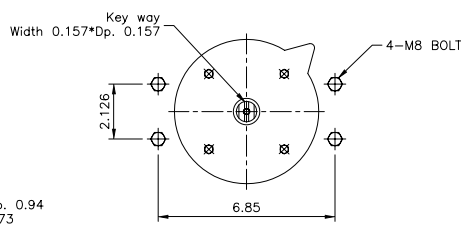


MODEL	A	B	C	D	E
EPTS110-385-SR	18.43	6.50	21.34	11.97	3/4 NPT
EPTS110-435-SR	20.47	7.28	22.36	12.99	3/4 NPT
EPTS110-485-SR	22.44	8.27	23.35	13.98	3/4 NPT
EPTS110-535-SR	24.45	9.25	24.37	15.00	3/4 NPT
EPTS110-585-SR	26.46	9.84	25.35	15.98	3/4 NPT

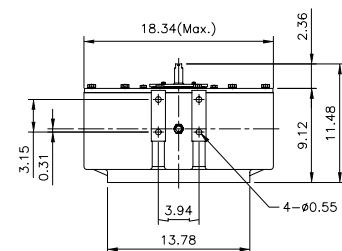
## Valve / Accessory Mounting Details



Bottom View



Top View



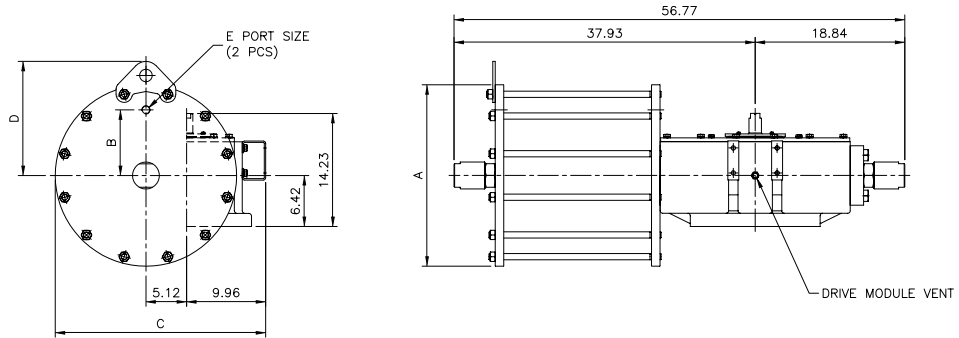
Accessory Pad

# Dimensions EP-Series Symmetric

(Unit : inches)

## EPTS130-XXX-DA (CW Model Shown)

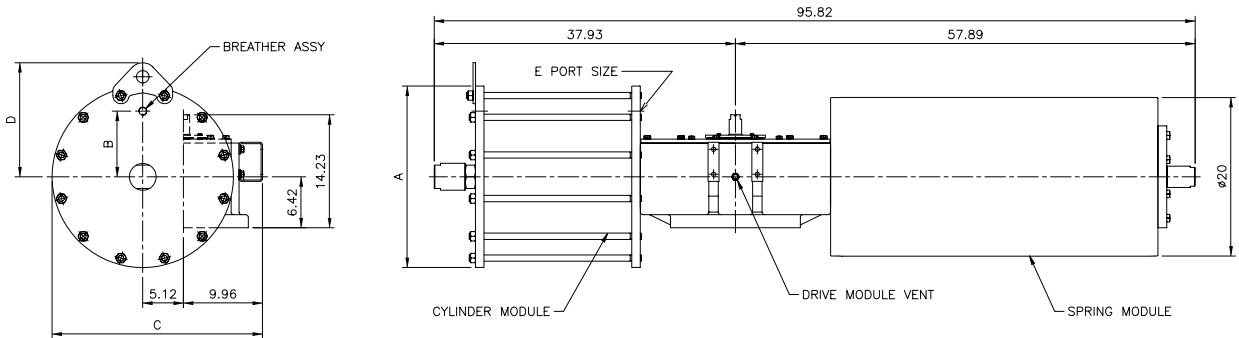
Double Acting Actuators



MODEL	A	B	C	D	E
EPTS130-435-DA	20.87	7.28	25.51	13.39	3/4 NPT
EPTS130-485-DA	22.83	8.27	26.50	14.37	3/4 NPT
EPTS130-535-DA	24.84	9.25	27.52	15.39	3/4 NPT
EPTS130-585-DA	26.85	9.84	28.50	16.38	3/4 NPT
EPTS130-635-DA	28.90	10.83	29.53	17.40	3/4 NPT

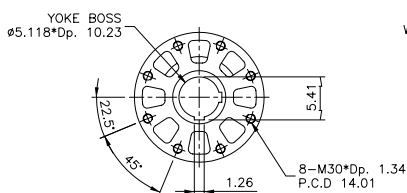
## EPTS130-XXX-SR (CW Model Shown)

Spring Return Actuators

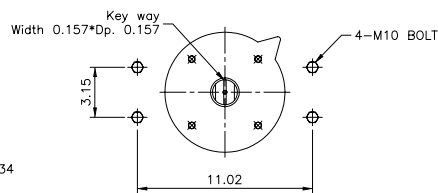


MODEL	A	B	C	D	E
EPTS130-485-SR	22.83	8.27	26.50	14.37	3/4 NPT
EPTS130-535-SR	24.84	9.25	27.52	15.39	3/4 NPT
EPTS130-585-SR	26.85	9.84	28.50	16.38	3/4 NPT
EPTS130-635-SR	28.90	10.83	29.53	17.40	3/4 NPT
EPTS130-685-SR	30.87	11.81	30.51	18.39	3/4 NPT

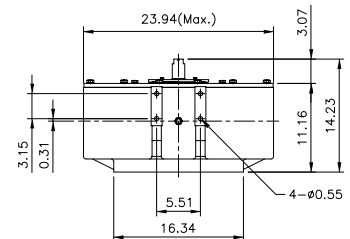
## Valve / Accessory Mounting Details



Bottom View



Top View



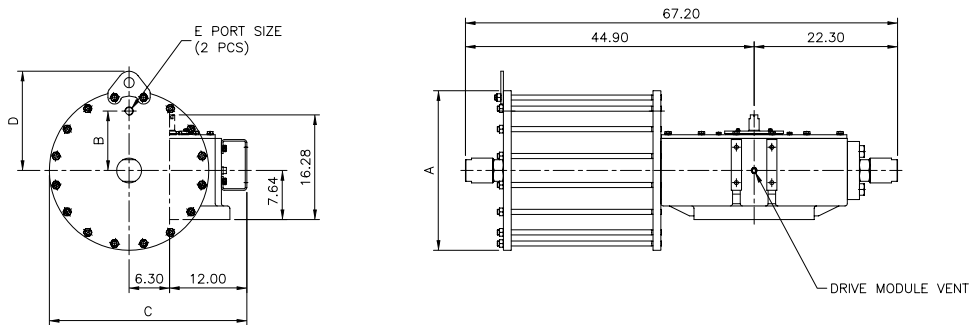
Accessory Pad

# Dimensions EP-Series Symmetric

(Unit : inches)

## EPTS160-XXX-DA (CW Model Shown)

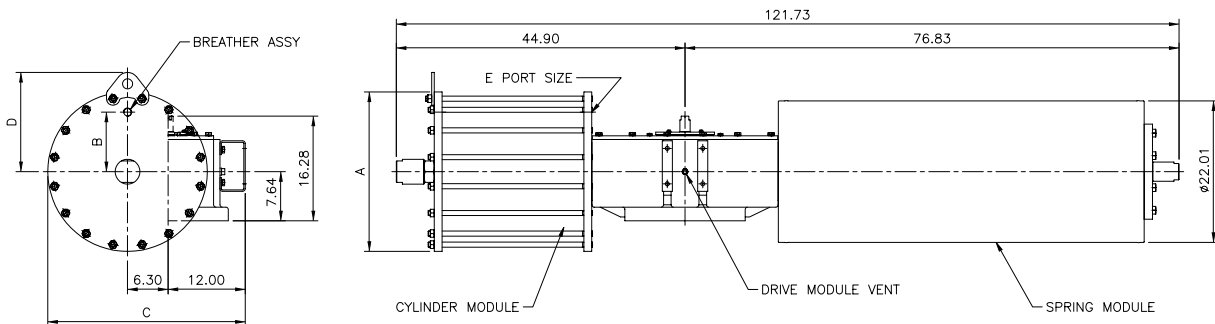
Double Acting Actuators



MODEL	A	B	C	D	E
EPTS160-485-DA	22.83	8.27	29.72	14.45	1 NPT
EPTS160-535-DA	24.80	9.25	30.71	15.43	1 NPT
EPTS160-585-DA	26.93	9.84	31.77	16.50	1 NPT
EPTS160-635-DA	28.94	10.83	32.80	17.52	1 NPT
EPTS160-685-DA	30.94	11.81	33.78	18.50	1 NPT
EPTS160-735-DA	32.91	12.80	34.76	19.49	1 NPT

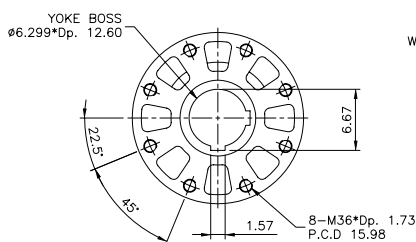
## EPTS160-XXX-SR (CW Model Shown)

Spring Return Actuators

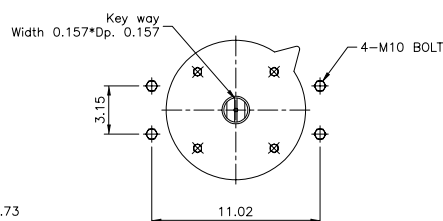


MODEL	A	B	C	D	E
EPTS160-535-SR	24.80	9.25	30.71	15.43	1 NPT
EPTS160-585-SR	26.93	9.84	31.77	16.50	1 NPT
EPTS160-635-SR	28.94	10.83	32.80	17.52	1 NPT
EPTS160-685-SR	30.94	11.81	33.78	18.50	1 NPT
EPTS160-735-SR	32.91	12.80	34.76	19.49	1 NPT
EPTS160-785-SR	34.92	13.78	35.79	20.51	1 NPT

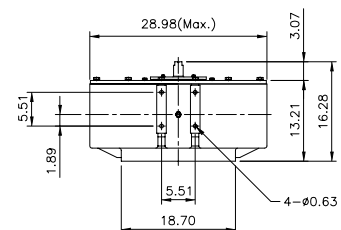
## Valve / Accessory Mounting Details



Bottom View



Top View



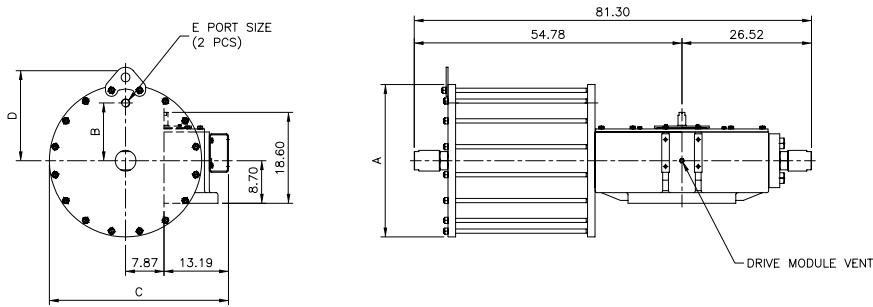
Accessory Pad

# Dimensions EP-Series Symmetric

(Unit : inches)

## EPTS200-XXX-DA (CW Model Shown)

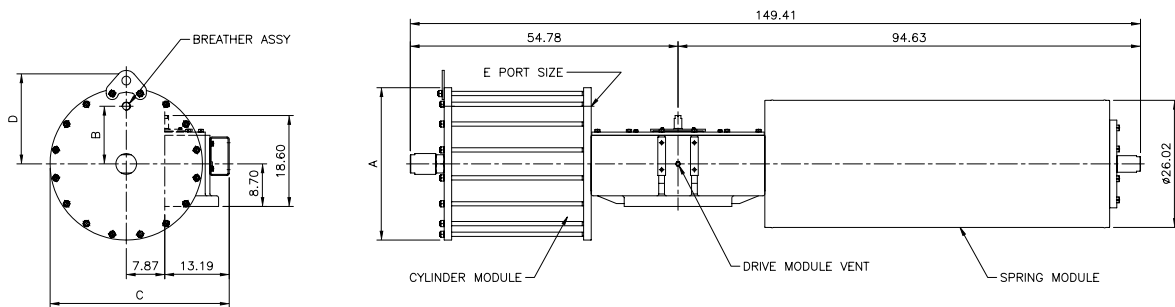
Double Acting Actuators



MODEL	A	B	C	D	E
EPTS200-585-DA	27.16	9.84	34.65	17.13	1 1/4 NPT
EPTS200-635-DA	29.17	10.83	35.67	18.15	1 1/4 NPT
EPTS200-685-DA	31.18	11.81	36.65	19.13	1 1/4 NPT
EPTS200-735-DA	33.19	12.80	37.68	20.16	1 1/4 NPT
EPTS200-785-DA	35.20	13.78	38.66	21.14	1 1/4 NPT
EPTS200-835-DA	37.20	14.76	39.68	22.16	1 1/4 NPT
EPTS200-885-DA	39.21	15.75	40.67	23.15	1 1/4 NPT

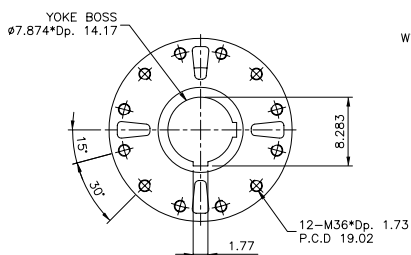
## EPTS200-XXX-SR (CW Model Shown)

Spring Return Actuators

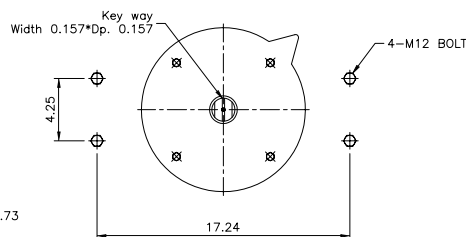


MODEL	A	B	C	D	E
EPTS200-635-SR	29.17	10.83	35.67	18.15	1 1/4 NPT
EPTS200-685-SR	31.18	11.81	36.65	19.13	1 1/4 NPT
EPTS200-735-SR	33.19	12.80	37.68	20.16	1 1/4 NPT
EPTS200-785-SR	35.20	13.78	38.66	21.14	1 1/4 NPT
EPTS200-835-SR	37.20	14.76	39.68	22.16	1 1/4 NPT
EPTS200-885-SR	39.21	15.75	40.67	23.15	1 1/4 NPT
EPTS200-985-SR	43.38	17.52	42.75	25.24	1 1/4 NPT

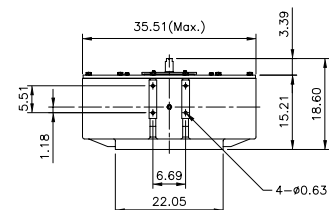
## Valve / Accessory Mounting Details



Bottom View



Top View



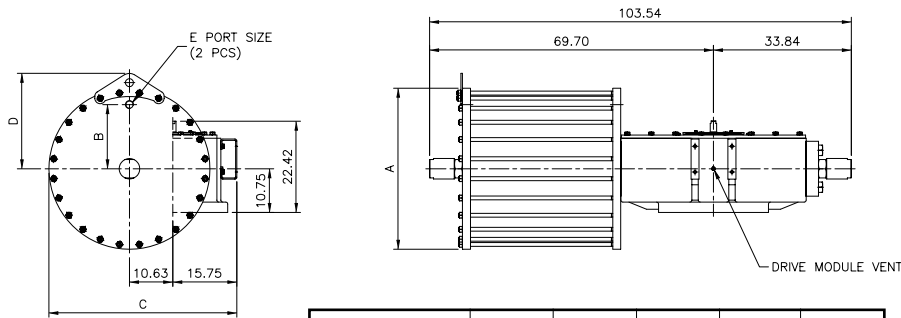
Accessory Pad

# Dimensions EP-Series Symmetric

(Unit : inches)

## EPTS270-XXX-DA (CW Model Shown)

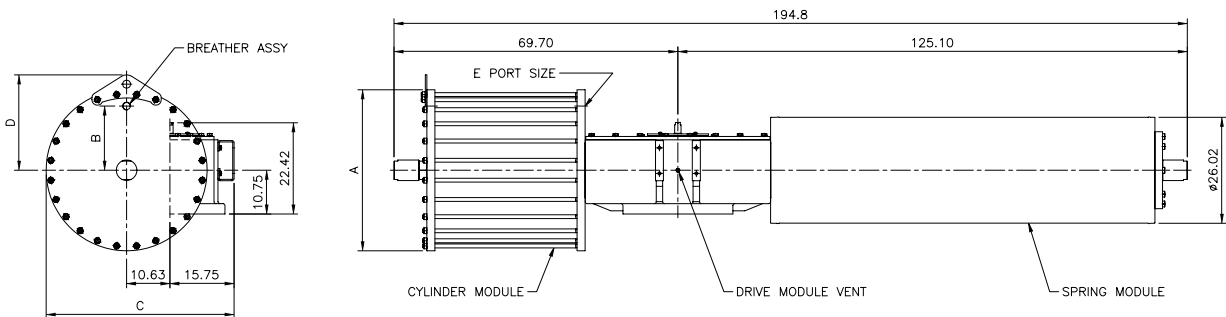
Double Acting Actuators



MODEL	A	B	C	D	E
EPTS270-685-DA	31.50	11.81	42.13	19.41	1 1/2 NPT
EPTS270-735-DA	33.50	12.80	43.15	20.43	1 1/2 NPT
EPTS270-785-DA	35.51	13.78	44.13	21.42	1 1/2 NPT
EPTS270-885-DA	39.53	15.75	46.14	23.43	1 1/2 NPT
EPTS270-935-DA	41.57	16.54	47.16	24.45	1 1/2 NPT
EPTS270-985-DA	43.70	17.52	48.23	25.51	1 1/2 NPT
EPTS270-1050-DA	46.50	18.50	49.65	26.93	1 1/2 NPT

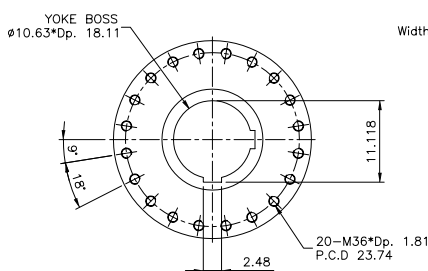
## EPTS270-XXX-SR (CW Model Shown)

Spring Return Actuators

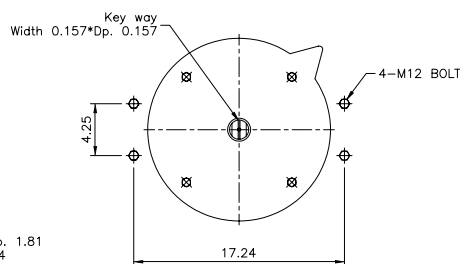


MODEL	A	B	C	D	E
EPTS270-785-SR	35.51	13.78	44.13	21.42	1 1/2 NPT
EPTS270-885-SR	39.53	15.75	46.14	23.43	1 1/2 NPT
EPTS270-935-SR	41.57	16.54	47.16	24.45	1 1/2 NPT
EPTS270-985-SR	43.70	17.52	48.23	25.51	1 1/2 NPT
EPTS270-1050-SR	46.50	18.50	49.65	26.93	1 1/2 NPT

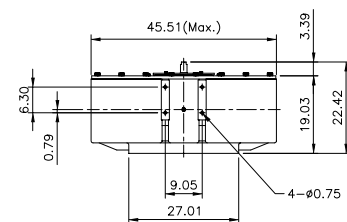
## Valve / Accessory Mounting Details



Bottom View



Top View



Accessory Pad

# Weights EP-Series Canted

(Unit : pounds)

Model	Drive Module	Power Module		Spring Module	
		Cylinder	Weight	Type	Weight
<b>EPTC106</b>	97	200	90	S1	126
		240	141	S2	139
		295	181	S3	148
		340	198	S4	157
<b>EPTC108</b>	185	295	225	S1	236
		340	243	S2	249
		385	320	S3	267
		435	388	S4	278
		485	465	S5	287
<b>EPTC110</b>	313	340	306	-	-
		385	397	S1	476
		435	481	S2	514
		485	573	S3	562
		535	672	S4	575
		585	780	S5	549
<b>EPTC130</b>	597	435	617	-	-
		485	728	S1	884
		535	842	S2	908
		585	983	S3	1019
		635	1127	S4	994
		685	1270	S5	959
<b>EPTC160</b>	1016	485	851	-	-
		535	1003	S1	1495
		585	1153	S2	1519
		635	1312	S3	1623
		685	1479	S4	1647
		735	1673	S5	1680
		785	1865	S6	1810
<b>EPTC200</b>	1784	585	1424	-	-
		635	1612	S1	2709
		685	1812	S2	2740
		735	2011	S3	2877
		785	2233	S4	3047
		835	2500	S5	2965
		885	2749	S6	3139
		985	3369	S7	3247
<b>EPTC270</b>	3732	685	2429	-	-
		735	2683	-	-
		785	2945	S1	3913
		885	3574	S2	4321
		935	3960	S3	4378
		985	4361	S4	4442
		1050	5029	S5	4830

Weights

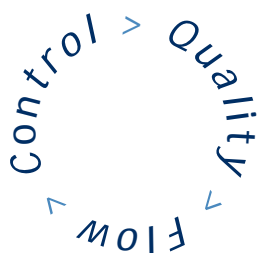
# Weights EP-Series Symmetric

(Unit : pounds)

Model	Drive Module	Power Module		Spring Module	
		Cylinder	Weight	Type	Weight
<b>EPTS106</b>	86	200	86	S1	126
		240	134	S2	130
		295	171	S3	139
		340	190	S4	152
<b>EPTS108</b>	156	295	212	S1	225
		340	231	S2	240
		385	302	S3	262
		435	370	S4	265
		485	443	S5	273
<b>EPTS110</b>	282	340	293	-	-
		385	379	S1	445
		435	461	S2	481
		485	547	S3	525
		535	646	S4	536
		585	743	S5	549
<b>EPTS130</b>	538	435	586	-	-
		485	692	S1	875
		535	805	S2	886
		585	941	S3	955
		635	1076	S4	919
		685	1217	S5	988
<b>EPTS160</b>	922	485	805	-	-
		535	948	S1	1468
		585	1093	S2	1488
		635	1243	S3	1585
		685	1407	S4	1601
		735	1598	S5	1616
		785	1781	S6	1759
<b>EPTS200</b>	1590	585	1347	-	-
		635	1528	S1	2784
		685	1720	S2	2934
		735	1922	S3	2873
		785	2134	S4	3014
		835	2366	S5	2950
		885	2630	S6	3100
		985	3223	S7	3217
<b>EPTS270</b>	3283	685	2284	-	-
		735	2529	-	-
		785	2784	S1	4039
		885	3389	S2	4151
		935	3757	S3	4398
		985	4134	S4	4303
		1050	4764	S5	4766



GLOBAL VALVE  
& CONTROLS



8535 Jackrabbit Rd, Suite I

Houston, Texas 77095

Office

1.866.965.8GVC (482)

281.463.1474

Fax

1.866.964.8536

281.463.7735

Cell

713-299-2221

[www.globalvalveandcontrols.com](http://www.globalvalveandcontrols.com)

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