

Data sheet

Sheet No.: CPI 1.01 RevB

Date: August 2010

CBA-Series

Torque Ratings – (Pneumatic)

All Published Torques are Guaranteed Minimum Values.

Double-Acting Actuators CBA-Series

Actuator Model	See Bettis' Definitions	Operating Pressure (PSIG)							
		40	50	60	70	80	90	100	120
		Pressure Torque Output Start/Min./End (lb-in)							
CBA 315	Start/End	678	848	1017	1187	1356	1526	1695	2034
	Minimum	404	505	606	707	808	910	1011	1213
CBA 420	Start/End	1536	1921	2305	2689	3073	3457	3841	4609
	Minimum	871	1089	1307	1525	1743	1961	2179	2614
CBA 520	Start/End	2133	2666	3200	3733				
	Minimum	1302	1628	1954	2279				
CBA 525	Start/End	2944	3680	4416	5152	5888	6624	7361	8833
	Minimum	1720	2150	2580	3009	3439	3869	4299	5159
CBA725	Start/End	5757	7197	8636	10075	11515			
	Minimum	3434	4292	5151	6009	6868			

Spring-Return Actuators CBA-Series

Actuator Model	Spring Torque Start/Min./End (lb-in)		Operating Pressure (PSIG)								
			40	50	60	70	80	90	100	120	150
			Pressure Torque Output Start/Min./End (lb-in)								
CBA315 SR40	Start	350	375	531	688	844	1000	1157	1313	1626	2095
	Min.	151	158	247	336	424	512	600	688	864	1128
	End	202	216	377	538	698	859	1020	1181	1502	1985
CBA315 SR60	Start	598		438	608	778	948	1117	1287	1627	2136
	Min.	238		153	249	343	436	530	623	808	1085
	End	305		172	342	512	681	851	1021	1360	1870
CBA315 SR80	Start	757				698	884	1069	1254	1625	2181
	Min.	306				237	328	418	509	689	958
	End	402				312	498	683	869	1239	1795
CBA315 SR100	Start	1069						876	1053	1406	1935
	Min.	405						331	428	621	906
	End	494						421	600	957	1493
Actuator Model	Spring Torque Start/Min./End (lb-in)		Pressure Torque Output Start/Min./End (lb-in)								
			40	50	60	70	80	90	100	120	150
			Operating Pressure (PSIG)								

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Data sheet

Sheet No.: CPI 1.02 RevB

Date: August 2010

CBA-Series

Torque Ratings – (Pneumatic)

All Published Torques are Guaranteed Minimum Values.

Spring-Return Actuators

CBA-Series (cont.)

Actuator Model	SpringTorque Start/Min./End (lb-in)		Operating Pressure (PSIG)								
			40	50	60	70	80	90	100	120	150
			Pressure Torque Output Start/Min./End (lb-in)								
CBA415 SR40	Start	682	692	981	1271	1560	1850	2139	2429		
	Min.	284	285	451	614	778	941	1105	1268		
	End	365	387	701	1014	1328	1641	1955	2269		
CBA415 SR60	Start	1076		701	979	1256	1533	1811	2088		
	Min.	431		264	435	603	770	934	1099		
	End	577		294	600	905	1211	1516	1822		
CBA415 SR80	Start	1345				1077	1362	1648	1933		
	Min.	576				428	602	772	942		
	End	711				510	811	1113	1414		
CBA415 SR100	Start	1659						1701	2007		
	Min.	673						542	719		
	End	756						564	861		
CBA420 SR40	Start	591	844	1173	1501	1829	2157	2485	2813	3470	4454
	Min.	301	317	500	680	859	1037	1215	1393	1748	2282
	End	479	391	709	1028	1346	1665	1983	2302	2939	3894
CBA420 SR60	Start	1320			1333	1685	2037	2390	2742	3446	4503
	Min.	481			480	670	860	1048	1235	1607	2166
	End	691			562	871	1179	1488	1797	2415	3341
CBA420 SR80	Start	1661				1468	1825	2182	2539	3253	4325
	Min.	655				481	690	891	1088	1480	2068
	End	901				502	844	1187	1529	2215	3243
CBA420 SR100	Start	2230						1958	2320	3044	4130
	Min.	836						643	857	1264	1859
	End	1119						674	1021	1716	2758
CBA520 SR40	Start	1004	1311	1805	2300	2794	3289	3783	4278		
	Min.	445	503	782	1056	1326	1596	1867	2137		
	End	562	677	1255	1834	2412	2990	3568	4146		
CBA520 SR60	Start	1719		1385	1895	2405	2914	3424	3934		
	Min.	747		484	794	1095	1390	1685	1980		
	End	966		509	1087	1665	2243	2821	3399		
CBA520 SR80	Start	2575				2133	2658	3183	3708	4757	
	Min.	1019				790	1111	1424	1734	2347	
	End	1243				893	1494	2095	2696	3898	
CBA520 SR100	Start	3880						2535	3067	4132	
	Min.	1361						855	1171	1773	
	End	1715						913	1491	2647	
Actuator Model	SpringTorque Start/Min./End (lb-in)		Pressure Torque Output Start/Min./End (lb-in)								
			40	50	60	70	80	90	100	120	150
			Operating Pressure (PSIG)								



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Sheet No.: CPI 1.03 RevB

Date: August 2010

CBA-Series

Torque Ratings – (Pneumatic)

All Published Torques are Guaranteed Minimum Values.

Spring-Return Actuators

CBA-Series (cont.)

Actuator Model	SpringTorque Start/Min./End (lb-in)		Operating Pressure (PSIG)								
			40	50	60	70	80	90	100	120	150
			Pressure Torque Output Start/Min./End (lb-in)								
CBA525 SR40	Start	1652	1619	2310	3001	3692	4383	5074	5765	7147	
	Min.	608	638	993	1345	1698	2050	2402	2752	3452	
	End	949	946	1637	2328	3019	3710	4401	5092	6474	
CBA525 SR60	Start	2527		1849	2549	3250	3950	4651	5351	6752	8854
	Min.	983		632	1035	1425	1814	2198	2582	3348	4499
	End	1372		694	1404	2114	2824	3534	4244	5665	7795
CBA525 SR80	Start	3038				2732	3432	4133	4833	6234	8336
	Min.	1293				966	1363	1750	2138	2900	4042
	End	1680				1130	1859	2589	3318	4777	6965
CBA525 SR100	Start	4620						3673	4392	5832	7991
	Min.	1676						1369	1777	2581	3770
	End	2234						1696	2454	3970	6245
CBA725 SR40	Start	3148	3354	4780	6206	7632	9058	10484	11910		
	Min.	1283	1306	2048	2788	3520	4252	4984	5716		
	End	1641	1948	3488	5028	6568	8108	9648	11189		
CBA725 SR60	Start	5249		3467	4817	6167	7517	8867	10217		
	Min.	2106		1234	2080	2897	3709	4511	5313		
	End	2762		1284	2824	4364	5904	7444	8984		
CBA725 SR80	Start	7370				5064	6395	7726	9057	11719	
	Min.	2830				2018	2872	3706	4541	6189	
	End	3330				2326	3885	5444	7003	10122	
CBA725 SR100	Start	9482						7374	8781	11595	
	Min.	3260						2478	3279	4828	
	End	4269						2748	4250	7254	
Actuator Model	SpringTorque Start/Min./End (lb-in)		Pressure Torque Output Start/Min./End (lb-in)								
			40	50	60	70	80	90	100	120	150
			Operating Pressure (PSIG)								



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