

Bettis GC01-Extension Series

Extension Pneumatic Double-Acting & Spring-Return Actuator Torque Chart Metric

BETTIS™



Torque - Pneumatic Double-Acting Actuator

Actuator Model	Stroke Direction Start/Min./End		Operating Pressure, (barg)																MinOP (barg)	Torque @ MinOP (Nm)	MOP (barg)	Torque @ MOP (Nm)	
			3	3.5	4	5	5.5	6	7	7.5	8.5	9	10	10.5	11	12	12.5	13					13.5
Pressure Torque Output: Start/Min./End (Nm)																							
GC01x05	Start	Outboard	304	360	416	528	584	640	753	809	921	977	1,090	1,146	1,202	1,314	1,371	1,427	1,483	2.8	281	13.8	1,517
	Min		196	230	264	333	367	402	470	505	573	607	676	710	745	813	848	882	916		182		937
	End		438	519	600	761	842	923	1,085	1,166	1,328	1,409	1,571	1,652	1,733	1,895	1,976	2,057	2,138		406		2,187
	Start	Inboard	418	495	573	728	806	883	1,038	1,116	1,271	1,349	1,504	1,582	1,659	1,815	1,893	1,970	2,048		387		2,095
	Min		188	221	254	320	352	385	451	484	550	583	649	682	715	781	814	847	880		175		900
	End		289	343	397	504	558	611	719	773	880	934	1,041	1,095	1,149	1,257	1,310	1,364	1,418		268		1,450
GC01x07	Start	Outboard	625	736	848	1,071	1,182	1,294	1,517	1,628	1,852	1,963	2,186	2,298	2,410	2,633	2,745	Exceeds MOP	580	12.8	2,812		
	Min		395	463	531	667	735	803	939	1,007	1,143	1,211	1,347	1,415	1,483	1,619	1,687		367		1,728		
	End		901	1,062	1,222	1,544	1,705	1,865	2,187	2,348	2,669	2,830	3,152	3,313	3,474	3,796	3,957		837		4,054		
	Start	Inboard	881	1,038	1,196	1,510	1,668	1,825	2,140	2,297	2,612	2,770	3,085	3,243	3,400	3,716	3,873		818		3,968		
	Min		387	454	520	654	721	787	921	987	1,121	1,188	1,321	1,388	1,455	1,588	1,655		360		1,695		
	End		610	719	828	1,046	1,155	1,264	1,482	1,591	1,809	1,918	2,136	2,245	2,354	2,573	2,682		566		2,747		

Note: All Published Torques are Guaranteed Minimum Values. Units are Metric

Torque - Pneumatic Spring-Return Actuator

Actuator Model	Spring Torque Start/Min./End (Nm)	Operating Pressure, (barg)														MinOP (barg)	Torque @ MinOP (Nm)	MOP (barg)	Torque @ MOP (Nm)																	
		3	3.5	4	5	5.5	6	7	7.5	8.5	9	10	10.5	11	12					12.5	13	13.5														
Pressure Torque Output: Start/Min./End (Nm)																																				
GC01x07-SR1	Start	1,750																Please consult factory	1,536	1,689	Exceeds MOP	11.4	1,353	12.8	1,780											
	Min.	973															541		606	462			645													
	End	2,004																	704	810			577		874											
GC01x07-SR2	Start	1,465																Please consult factory	1,167	1,320	1,472	1,778	1,931	Exceeds MOP	1,075	12.8	2,022									
	Min.	834															426		492	557	687	751	387		790											
	End	1,762																	566	672	777	989	1,095		503		1,158									
GC01x07-SR3	Start	1,278																Please consult factory	931	1,084	1,389	1,542	1,695	2,000	2,153	Exceeds MOP	901	12.8	2,245							
	Min.	729															337		403	533	598	663	792	857	324		896									
	End	1,540																	436	541	753	859	964	1,176	1,282		415		1,345							
GC01x07-SR4	Start	1,085																Please consult factory	826	1,131	1,284	1,589	1,742	1,894	2,200	2,353	Exceeds MOP	734	12.8	2,444						
	Min.	628															312		442	506	636	701	766	895	960	273		999								
	End	1,340																	416	628	733	945	1,050	1,156	1,368	1,474		353		1,537						
GC01x07-SR5	Start	1,017																Please consult factory	1,043	1,195	1,501	1,653	1,959	2,111	2,264	2,570	2,723	Exceeds MOP	982	12.8	2,814					
	Min.	531															332		398	530	595	725	790	855	985	1,050	305		1,089							
	End	970																	378	484	695	801	1,012	1,118	1,224	1,435	1,541		336		1,605					
GC01x08-SR5	Start	1,009																Please consult factory	1,080	1,278	1,676	1,874	2,272	2,471	2,868	3,067	3,266	3,663	3,862	4,061	Exceeds MOP	961	13.2	4,141		
	Min.	528															350		436	607	691	861	945	1,114	1,198	1,283	1,451	1,536	1,620	298		1,654				
	End	959																	404	541	816	954	1,229	1,367	1,642	1,780	1,917	2,193	2,330	2,468		321		2,523		
GC01x09-SR5	Start	1,004																Please consult factory	1,421	1,675	1,928	2,435	2,689	3,196	3,449	3,957	4,210	4,464	4,971	5,225	5,479	5,733	Exceeds MOP	965	13.8	5,885
	Min.	526															499		607	715	931	1,039	1,254	1,362	1,576	1,684	1,791	2,006	2,114	2,221	2,329	301		2,393		
	End	951																	640	816	991	1,342	1,518	1,869	2,045	2,396	2,571	2,747	3,098	3,274	3,450	3,626		325		3,731
GC01x10-SR5	Start	997																Please consult factory	1,232	1,569	2,241	2,578	2,914	3,587	3,924	4,597	4,934	5,607	5,944	6,280	Exceeds MOP	963	11.4	6,550		
	Min.	524															419		563	850	993	1,136	1,421	1,564	1,849	1,991	2,276	2,419	2,561	302		2,675				
	End	941																	509	742	1,208	1,441	1,674	2,140	2,373	2,839	3,072	3,538	3,772	4,005		323		4,191		
GC01x12-SR5	Start	986																Please consult factory	1,759	2,241	2,724	3,689	4,172	4,655	5,621	6,104	Exceeds MOP	890	8.0	6,587						
	Min.	521															647		852	1,057	1,466	1,671	1,875	2,284	2,488	2,72		272		272	272	272	2,693			
	End	925																	874	1,208	1,542	2,211	2,545	2,879	3,548	3,883		4,217		4,217	4,217	4,217	4,217			
GC01x14-SR5	Start	978																Please consult factory	2,373	2,960	3,547	4,722	5,309	5,897	Exceeds MOP	964	6.3	6,249								
	Min.	518															911		1,160	1,409	1,906	2,155	2,403	308		2,552										
	End	913																	1,299	1,706	2,112	2,926	3,332	3,739		324		3,983								

Note: All Published Torques are Guaranteed Minimum Values. Units are Metric

Torque - Pneumatic Spring-Return Actuator

Actuator Model	Spring Torque Start/Min./End (Nm)	Operating Pressure, (barg)																MinOP (barg)	Torque @ MinOP (Nm)	MOP (barg)	Torque @ MOP (Nm)								
		3	3.5	4	5	5.5	6	7	7.5	8.5	9	10	10.5	11	12	12.5	13					13.5							
		Pressure Torque Output: Start/Min./End (Nm)																											
GC01x05-SR6	Start	753																	Please consult factory	772	847	998	1,073	1,149	1,224	10.1	712	13.8	1,269
	Min.	392																247		279	345	377	409	442	220		461		
	End	716																		278	331	435	487	539	591		237		623
GC01x07-SR6	Start	742			Please consult factory	703	855	1,008	1,313	1,466	1,771	1,924	2,229	2,382	2,534	2,840	2,993	Exceeds MOP	5.0	703	12.8	3,084							
	Min.	389				218	285	351	481	546	676	741	871	936	1,001	1,130	1,195			218		1,234							
	End	700				230	336	442	653	759	970	1,076	1,287	1,393	1,499	1,710	1,816			230		1,880							
GC01x08-SR6	Start	734		Please consult factory	754	1,152	1,350	1,549	1,946	2,145	2,542	2,741	3,138	3,337	3,536	3,934	4,132	4,331	Exceeds MOP	3.9	715	13.2	4,411						
	Min.	386			243	414	499	584	753	837	1,006	1,090	1,259	1,343	1,427	1,596	1,680	1,764			226		1,798						
	End	689			266	541	679	816	1,091	1,229	1,504	1,642	1,917	2,054	2,192	2,467	2,605	2,743			239		2,798						
GC01x09-SR6	Start	729	678	931	1,185	1,692	1,945	2,198	2,705	2,959	3,466	3,720	4,227	4,480	4,734	5,242	5,495	5,749	6,003	3.0	678	13.8	6,155						
	Min.	385	211	321	430	646	754	861	1,076	1,184	1,399	1,506	1,721	1,828	1,936	2,151	2,258	2,366	2,473		211		2,537						
	End	680	213	389	564	915	1,091	1,266	1,617	1,793	2,144	2,319	2,670	2,846	3,022	3,373	3,549	3,725	3,900		213		4,006						
GC01x10-SR6	Start	722	1,166	1,502	1,839	2,512	2,848	3,184	3,857	4,194	4,867	5,204	5,877	6,214	6,551	Exceeds MOP	2.3	695	11.4	6,820									
	Min.	383	424	567	710	995	1,138	1,281	1,566	1,708	1,993	2,136	2,421	2,563	2,705			220		2,819									
	End	670	551	784	1,017	1,483	1,716	1,949	2,415	2,648	3,114	3,347	3,813	4,046	4,279			225		4,466									
GC01x05-SR7	Start	557			Please consult factory														7.6	535	13.8	1,469							
	Min.	290				225	257	322	354	387	451	483	515	547	678	735	787	165		566									
	End	516				265	317	422	474	526	630	682	735	787	172	818													
GC01x07-SR7	Start	547		Please consult factory	597	902	1,055	1,207	1,513	1,665	1,970	2,123	2,428	2,581	2,734	3,039	3,192	Exceeds MOP	3.8	536	12.8	3,284							
	Min.	287			195	327	392	457	587	651	781	846	975	1,040	1,105	1,235	1,299			168		1,338							
	End	501			215	426	531	637	848	954	1,165	1,271	1,483	1,588	1,694	1,906	2,011			172		2,075							
GC01x08-SR7	Start	539	557	755	954	1,351	1,550	1,748	2,145	2,344	2,742	2,940	3,338	3,537	3,735	4,133	4,332	4,531	Exceeds MOP	2.9	517	13.2	4,610						
	Min.	284	180	266	351	520	605	689	857	942	1,110	1,194	1,363	1,447	1,531	1,700	1,784	1,868			159		1,902						
	End	489	187	324	462	737	874	1,012	1,287	1,424	1,699	1,837	2,112	2,250	2,387	2,663	2,801	2,938			159		2,993						
GC01x09-SR7	Start	533	878	1,131	1,384	1,891	2,144	2,398	2,905	3,158	3,665	3,919	4,426	4,680	4,934	5,441	5,695	5,949	6,202	2.3	523	13.8	6,355						
	Min.	282	320	428	536	751	858	966	1,181	1,288	1,503	1,610	1,825	1,932	2,040	2,255	2,362	2,469	2,577		163		2,641						
	End	481	409	584	760	1,110	1,286	1,461	1,812	1,988	2,339	2,515	2,866	3,041	3,217	3,568	3,744	3,920	4,096		163		4,201						
GC01x10-SR7	Start	526	1,366	1,702	2,038	2,711	3,047	3,384	4,057	4,393	5,067	5,403	6,077	6,413	6,750	Exceeds MOP	1.7	491	11.4	7,020									
	Min.	280	529	672	815	1,100	1,242	1,385	1,670	1,812	2,097	2,239	2,524	2,667	2,809			141		2,923									
	End	471	747	980	1,212	1,678	1,911	2,144	2,610	2,843	3,309	3,542	4,009	4,242	4,475			141		4,661									

Note: All Published Torques are Guaranteed Minimum Values. Units are Metric

Torque - Pneumatic Spring-Return Actuator

Actuator Model	Spring Torque Start/Min./End (Nm)	Operating Pressure, (barg)																MinOP (barg)	Torque @ MinOP (Nm)	MOP (barg)	Torque @ MOP (Nm)				
		3	3.5	4	5	5.5	6	7	7.5	8.5	9	10	10.5	11	12	12.5	13					13.5			
GC01x05-SR8	Start	410					Please consult factory	441	592	667	817	893	1,043	1,118	1,194	1,344	1,420	1,495	1,570	5.7	396	13.8	1,616		
	Min.	213						143	208	240	305	337	401	433	465	529	561	593	625		121		645		
	End	369						152	257	309	413	465	569	621	673	778	830	882	934		121		965		
GC01x07-SR8	Start	399	439	592	744	1,049	1,202	1,354	1,659	1,812	2,117	2,270	2,575	2,728	2,881	3,186	3,339	Exceeds MOP	2.8	378	12.8	3,431			
	Min.	210	144	210	276	406	470	535	665	730	859	924	1,053	1,118	1,183	1,312	1,377			109		1,416			
	End	354	151	257	362	573	679	784	996	1,101	1,313	1,418	1,630	1,736	1,841	2,053	2,159			109		2,222			
GC01x08-SR8	Start	391	704	902	1,101	1,498	1,696	1,895	2,292	2,491	2,888	3,087	3,485	3,683	3,882	4,280	4,479	4,678	Exceeds MOP	2.1	347	13.2	4,757		
	Min.	208	261	345	430	598	683	767	935	1,020	1,188	1,272	1,441	1,525	1,609	1,777	1,862	1,946			87		1,980		
	End	342	334	472	609	884	1,021	1,159	1,434	1,572	1,847	1,984	2,260	2,397	2,535	2,810	2,948	3,086			87		3,141		
GC01x09-SR8	Start	385	1,024	1,278	1,531	2,038	2,291	2,545	3,052	3,305	3,812	4,066	4,573	4,827	5,080	5,588	5,842	6,095	6,349	1.7	366	13.8	6,502		
	Min.	206	399	506	614	829	936	1,043	1,258	1,366	1,580	1,688	1,902	2,010	2,117	2,332	2,440	2,547	2,654		100		2,719		
	End	334	556	732	907	1,258	1,433	1,609	1,960	2,135	2,486	2,662	3,013	3,189	3,364	3,716	3,892	4,067	4,243		100		4,349		
GC01x05-SR9	Start	297					Please consult factory	400	475	550	700	776	926	1,001	1,152	1,227	1,302	1,453	1,528	1,604	1,679	4.1	265	13.8	1,724
	Min.	156						139	171	204	268	300	364	396	460	492	524	588	620	652	684		67		703
	End	261						160	212	264	369	421	525	577	681	733	785	890	942	994	1,046		67		1,077
GC01x07-SR9	Start	287	548	700	853	1,158	1,310	1,463	1,768	1,921	2,226	2,379	2,684	2,837	2,989	3,295	3,448	Exceeds MOP	2.1	274	12.8	3,539			
	Min.	153	205	270	335	465	529	594	724	788	918	982	1,112	1,177	1,241	1,371	1,435			73		1,474			
	End	245	263	369	474	685	791	896	1,108	1,213	1,425	1,530	1,742	1,848	1,953	2,165	2,271			73		2,334			
GC01x08-SR9	Start	279	813	1,011	1,209	1,607	1,805	2,004	2,401	2,600	2,997	3,196	3,593	3,792	3,991	4,389	4,587	4,786	Exceeds MOP	1.6	257	13.2	4,866		
	Min.	150	320	404	489	657	741	826	994	1,078	1,246	1,331	1,499	1,583	1,667	1,836	1,920	2,004			61		2,038		
	End	234	446	584	721	996	1,133	1,271	1,546	1,684	1,959	2,096	2,372	2,509	2,647	2,922	3,060	3,198			61		3,253		

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