

# Bettis G01-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)																							
G01x05	Start	Outboard	358	424	490	622	688	754	886	952	1,085	1,151	1,283	1,349	1,415	1,548	1,614	1,680	1,746	2.8	331	13.8	1,786
	Min		199	234	268	338	373	407	477	512	582	616	686	721	756	825	860	895	930		185		951
	End		357	423	489	621	687	753	885	951	1,083	1,150	1,282	1,348	1,414	1,546	1,612	1,679	1,745		331		1,784
	Start	Inboard	341	405	468	595	658	721	848	911	1,038	1,102	1,228	1,292	1,355	1,482	1,546	1,609	1,673		316		1,711
	Min		190	224	257	324	357	390	457	491	557	591	658	691	724	791	825	858	891		177		912
	End		341	404	468	594	657	721	847	910	1,037	1,101	1,227	1,291	1,354	1,481	1,544	1,608	1,671		316		1,709
G01x07	Start	Outboard	736	867	998	1,261	1,392	1,523	1,786	1,917	2,180	2,312	2,574	2,706	2,837	3,100	3,232	Exceeds MOP	683	12.8	3,311		
	Min		400	469	538	676	745	814	953	1,022	1,160	1,229	1,367	1,436	1,505	1,643	1,712		373		1,753		
	End		735	866	997	1,260	1,391	1,522	1,784	1,916	2,178	2,309	2,572	2,703	2,835	3,097	3,229		683		3,308		
	Start	Inboard	720	848	977	1,234	1,362	1,491	1,748	1,877	2,134	2,263	2,520	2,649	2,777	3,035	3,164		668		3,241		
	Min		392	459	527	662	730	797	933	1,000	1,135	1,203	1,338	1,406	1,473	1,609	1,676		365		1,717		
	End		719	847	976	1,232	1,361	1,489	1,746	1,875	2,132	2,260	2,517	2,646	2,775	3,032	3,161		667		3,238		

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

# Torque - Hydraulic 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)																																																		
G01x09-SR6	Start	860	551	758	965	1,379	1,586	1,793	2,207	2,414	2,828	3,036	3,450	3,657	3,864	4,279	4,486	4,693	4,901	3.0	551	13.8	5,025																													
	Min.	383	221	332	442	661	770	879	1,097	1,206	1,424	1,532	1,750	1,859	1,968	2,185	2,294	2,403	2,512					221	2,577																											
	End	558	250	456	663	1,076	1,283	1,490	1,904	2,111	2,524	2,731	3,145	3,352	3,559	3,973	4,180	4,388	4,595							250	4,719																									
G01x10-SR6	Start	852	950	1,225	1,499	2,049	2,324	2,598	3,148	3,423	3,973	4,248	4,798	5,073	5,348	Exceeds MOP				2.3	565	11.4	5,568																													
	Min.	381	436	581	726	1,015	1,160	1,304	1,593	1,737	2,026	2,170	2,459	2,603	2,747									230	2,863																											
	End	550	648	922	1,197	1,746	2,020	2,295	2,844	3,118	3,668	3,942	4,492	4,767	5,041											264	5,261																									
G01x05-SR7	Start	658																		7.6	435	13.8	1,198																													
	Min.	288																						233	266			332	364	397	462	495	527	560																		
	End	423																								311	373								495	557	618	741	803	864	926											
G01x07-SR7	Start	645		Please consult factory	486	735	860	984	1,233	1,358	1,607	1,732	1,982	2,106	2,231	2,481	2,605	Exceeds MOP				3.8	436																			12.8	2,680									
	Min.	285			203	336	402	468	600	665	797	862	993	1,059	1,125	1,256	1,321							176	1,361																											
	End	411			251	500	625	749	998	1,123	1,372	1,496	1,746	1,870	1,995	2,244	2,369									202	2,444																									
G01x08-SR7	Start	636	453	615	777	1,102	1,264	1,426	1,750	1,913	2,237	2,400	2,724	2,887	3,049	3,374	3,536	3,699	Exceeds MOP	2.9	421	13.2	3,764																													
	Min.	282	187	275	361	532	618	703	874	959	1,130	1,215	1,386	1,471	1,557	1,727	1,812	1,898						170	1,932																											
	End	401	219	381	543	867	1,029	1,191	1,515	1,677	2,001	2,163	2,488	2,650	2,812	3,137	3,299	3,461								186	3,526																									
G01x09-SR7	Start	629	715	922	1,129	1,543	1,750	1,957	2,371	2,578	2,992	3,199	3,613	3,821	4,028	4,442	4,650	4,857	5,064	2.3	425	13.8	5,189																													
	Min.	281	329	439	548	766	875	983	1,201	1,310	1,527	1,636	1,854	1,963	2,071	2,289	2,398	2,506	2,615					174	2,681																											
	End	394	480	687	894	1,307	1,514	1,721	2,134	2,341	2,755	2,962	3,376	3,583	3,790	4,204	4,411	4,618	4,825							191	4,950																									
G01x10-SR7	Start	621	1,113	1,388	1,663	2,212	2,487	2,762	3,312	3,587	4,136	4,411	4,961	5,236	5,512	Exceeds MOP				1.7	399	11.4	5,732																													
	Min.	278	541	686	830	1,119	1,264	1,408	1,697	1,841	2,129	2,274	2,562	2,706	2,851									162	2,966																											
	End	386	878	1,153	1,427	1,976	2,251	2,525	3,075	3,349	3,898	4,173	4,723	4,997	5,272											165	5,492																									
G01x05-SR8	Start	483																		Please consult factory	359	482	543					666	727	850	912	973	1,096	1,158	1,220	1,281	5.7	322	13.8	1,318												
	Min.	212																						149	215																248	313	345	410	443	475	540	573	605	638		
	End	303																								178	301																								362	485
G01x07-SR8	Start	471	357	482	606	855	980	1,105	1,354	1,478	1,728	1,852	2,102	2,227	2,351	2,601	2,726	Exceeds MOP				2.8	307					12.8	2,801																							
	Min.	209	150	217	283	415	481	546	678	743	874	940	1,071	1,137	1,202	1,333	1,399							123	1,438																											
	End	290	177	301	426	674	799	923	1,172	1,297	1,546	1,671	1,920	2,044	2,169	2,418	2,543									127	2,618																									
G01x08-SR8	Start	461	573	735	898	1,222	1,384	1,546	1,871	2,033	2,358	2,520	2,845	3,007	3,169	3,494	3,657	3,819	Exceeds MOP	2.1	282	13.2	3,884																													
	Min.	206	268	354	439	610	696	781	952	1,037	1,207	1,293	1,463	1,549	1,634	1,804	1,890	1,975						101	2,009																											
	End	281	393	555	717	1,041	1,203	1,365	1,689	1,851	2,175	2,337	2,662	2,824	2,986	3,311	3,473	3,635								101	3,700																									
G01x09-SR8	Start	455	835	1,042	1,249	1,663	1,870	2,077	2,491	2,698	3,112	3,319	3,734	3,941	4,148	4,563	4,770	4,977	5,185	1.7	297	13.8	5,309																													
	Min.	204	408	517	626	843	952	1,061	1,279	1,387	1,605	1,714	1,931	2,040	2,149	2,366	2,475	2,584	2,693					117	2,758																											
	End	274	654	861	1,068	1,481	1,688	1,895	2,308	2,515	2,929	3,136	3,550	3,757	3,964	4,378	4,585	4,792	4,999							117	5,124																									
G01x05-SR9	Start	351																		Please consult factory	325	387	448					571	632	755	817	940	1,001	1,063	1,186	1,247	1,309	1,370	4.3	239	13.8	1,407										
	Min.	155																						144	177																		209	274	307	372	404	469	502	534	599	631
	End	214																								188	249																									
G01x07-SR9	Start	338	446	571	695	945	1,069	1,194	1,443	1,568	1,817	1,942	2,191	2,316	2,441	2,690	2,815	Exceeds MOP				2.1	222					12.8	2,890																							
	Min.	151	211	277	342	474	539	605	736	802	933	998	1,129	1,195	1,260	1,391	1,457							85	1,496																											
	End	201	309	433	558	807	931	1,056	1,305	1,429	1,678	1,803	2,052	2,177	2,301	2,551	2,675									85	2,750																									
G01x08-SR9	Start	329	662	825	987	1,311	1,473	1,635	1,960	2,122	2,447	2,609	2,934	3,096	3,259	3,583	3,746	3,908	Exceeds MOP	1.6	209	13.2	3,973																													
	Min.	149	327	413	498	669	754	839	1,010	1,095	1,266	1,351	1,521	1,607	1,692	1,863	1,948	2,033						72	2,067																											
	End	192	525	687	849	1,173	1,335	1,497	1,821	1,983	2,307	2,470	2,794	2,956	3,118	3,443	3,605	3,768								72	3,833																									

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

# Torque - Hydraulic 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)																																			
G01x07-SR1	Start	2,064																Please consult factory	1,251	1,376	Exceeds MOP	11.4	1,101	12.8	1,451												
	Min.	977															558		624	478			663														
	End	1,639																	827	952			678		1,027												
G01x07-SR2	Start	1,727																Please consult factory	951	1,075	1,200	1,450	1,574	Exceeds MOP	9.7	876	12.8	1,649									
	Min.	839															438		504	570	702	768	399			807											
	End	1,440																	665	790	914	1,164	1,288			590		1,363									
G01x07-SR3	Start	1,506																Please consult factory	759	883	1,133	1,257	1,382	1,632	1,757	Exceeds MOP	8.4	734	12.8	1,832							
	Min.	734															347		413	545	611	677	808	874	334			913									
	End	1,259																	512	636	886	1,010	1,135	1,384	1,509			487		1,584							
G01x07-SR4	Start	1,279																Please consult factory	673	922	1,047	1,296	1,421	1,546	1,795	1,920	Exceeds MOP	7.2	598	12.8	1,995						
	Min.	633															320		452	517	649	714	780	911	977	280			1,016								
	End	1,095																	489	738	863	1,112	1,237	1,361	1,611	1,735			415		1,810						
G01x07-SR5	Start	1,201																Please consult factory	848	973	1,222	1,347	1,596	1,721	1,846	2,095	2,220	Exceeds MOP	6.8	798	12.8	2,295					
	Min.	528															346		413	546	612	744	810	876	1,007	1,073	318			1,112							
	End	795																	443	568	817	941	1,191	1,315	1,440	1,689	1,814			393		1,889					
G01x08-SR5	Start	1,191																Please consult factory	879	1,041	1,365	1,528	1,852	2,014	2,339	2,502	2,664	2,989	3,151	3,314	Exceeds MOP	5.2	781	13.2	3,379		
	Min.	526															364		451	624	710	881	967	1,138	1,223	1,308	1,479	1,565	1,650	311			1,684				
	End	786																	473	635	960	1,122	1,446	1,608	1,933	2,095	2,257	2,582	2,744	2,906			376		2,971		
G01x09-SR5	Start	1,185																Please consult factory	1,157	1,364	1,571	1,986	2,193	2,607	2,814	3,228	3,435	3,643	4,057	4,264	4,472	4,679	Exceeds MOP	4.1	785	13.8	4,803
	Min.	524															515		624	734	952	1,061	1,279	1,388	1,606	1,715	1,824	2,042	2,150	2,259	2,368	315			2,433		
	End	779																	752	959	1,166	1,579	1,786	2,200	2,407	2,821	3,028	3,235	3,649	3,856	4,063	4,270			380		4,394
G01x10-SR5	Start	1,176																Please consult factory	1,003	1,278	1,827	2,102	2,377	2,927	3,201	3,751	4,026	4,576	4,851	5,126	Exceeds MOP	3.1	783	11.4	5,346		
	Min.	522															434		580	870	1,015	1,160	1,449	1,593	1,882	2,026	2,315	2,459	2,604	315			2,719				
	End	771																	598	872	1,421	1,696	1,970	2,519	2,794	3,343	3,618	4,168	4,442	4,717			378		4,937		
G01x12-SR5	Start	1,164	1,433	1,827	2,221	3,010	3,404	3,799	4,588	4,982								Exceeds MOP													Exceeds MOP	2.1	723	8.0	5,377		
	Min.	519	665	873	1,080	1,495	1,702	1,909	2,323	2,530																									286	2,737	
	End	758	1,027	1,421	1,815	2,603	2,997	3,391	4,179	4,573																									318	4,967	
G01x14-SR5	Start	1,154	1,935	2,414	2,894	3,853	4,333	4,813										Exceeds MOP													Exceeds MOP	1.8	784	6.3	5,101		
	Min.	516	932	1,184	1,436	1,940	2,191	2,443																											321	2,594	
	End	748	1,529	2,008	2,487	3,445	3,925	4,404																											379	4,692	
G01x05-SR6	Start	889																Please consult factory	628	690	813	874	936	997						Exceeds MOP	10.1	579	13.8	1,034			
	Min.	390															257		290	356	389	422	454						230			474					
	End	587															326		388	511	572	633	695						277			732					
G01x07-SR6	Start	876																Please consult factory	571	696	821	1,070	1,195	1,444	1,569	1,818	1,943	2,068	2,317	2,442	Exceeds MOP	5.0	571	12.8	2,517		
	Min.	387															228		295	362	495	560	692	758	889	955	1,021	1,152	1,218	228			1,257				
	End	574															270		394	519	768	892	1,141	1,266	1,515	1,640	1,764	2,014	2,138	270			2,213				
G01x08-SR6	Start	867																Please consult factory	614	938	1,100	1,262	1,587	1,749	2,074	2,236	2,561	2,723	2,886	3,210	3,373	3,535	Exceeds MOP	3.9	581	13.2	3,600
	Min.	385															253		427	513	598	770	855	1,026	1,111	1,282	1,367	1,453	1,623	1,709	1,794	236			1,828		
	End	564															312		636	798	960	1,284	1,446	1,770	1,933	2,257	2,419	2,581	2,906	3,068	3,231	279			3,296		

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



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