

Bettis G01-Extension Series

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

BETTIS™



Torque - Pneumatic Double-Acting Actuator

Actuator Model	Stroke Direction Start/Min./End		Operating Pressure, (psig)																	MinOP (psig)	Torque @ MinOP (lbf-in)	MOP (psig)	Torque @ MOP (lbf-in)
			40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200				
			Pressure Torque Output: Start/Min./End (lbf-in)																				
G01x05	Start	Outboard	2,884	3,689	4,495	5,301	6,107	6,914	7,720	8,527	9,334	10,141	10,949	11,756	12,564	13,372	14,180	14,989	15,797	40	2,884	200	15,797
	Min		1,610	2,034	2,459	2,884	3,308	3,733	4,158	4,583	5,008	5,433	5,858	6,283	6,708	7,133	7,559	7,984	8,409		1,610		8,409
	End		2,881	3,686	4,491	5,296	6,101	6,907	7,713	8,519	9,325	10,131	10,938	11,745	12,552	13,359	14,166	14,974	15,782		2,881		15,782
	Start	Inboard	2,751	3,523	4,295	5,068	5,841	6,614	7,388	8,161	8,935	9,709	10,483	11,257	12,032	12,807	13,581	14,357	15,132		2,751		15,132
	Min		1,540	1,947	2,355	2,762	3,169	3,577	3,984	4,391	4,799	5,207	5,614	6,022	6,430	6,838	7,245	7,653	8,061		1,540		8,061
	End		2,748	3,519	4,291	5,063	5,835	6,608	7,380	8,153	8,926	9,699	10,473	11,246	12,020	12,794	13,568	14,343	15,117		2,748		15,117
G01x07	Start	Outboard	5,951	7,552	9,154	10,756	12,358	13,961	15,564	17,167	18,770	20,374	21,978	23,582	25,186	26,791	28,396	Exceeds MOP		40	5,951	185	29,199
	Min		3,249	4,091	4,933	5,775	6,617	7,459	8,302	9,144	9,987	10,829	11,672	12,515	13,357	14,200	15,043				3,249		15,465
	End		5,945	7,545	9,145	10,745	12,346	13,947	15,548	17,150	18,752	20,354	21,956	23,559	25,161	26,765	28,368				5,945		29,170
	Start	Inboard	5,818	7,386	8,954	10,523	12,092	13,661	15,231	16,801	18,371	19,941	21,512	23,083	24,654	26,226	27,797				5,818		28,583
	Min		3,179	4,004	4,829	5,653	6,478	7,303	8,128	8,953	9,778	10,603	11,428	12,254	13,079	13,904	14,730				3,179		15,143
	End		5,812	7,379	8,945	10,513	12,080	13,648	15,216	16,784	18,353	19,922	21,491	23,060	24,630	26,200	27,770				5,812		28,555

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

Torque - Pneumatic

Spring-Return Actuator

Actuator Model	Spring Torque Start/Min./End (lbf-in)		Operating Pressure, (psig)																MinOP (psig)	Torque @ MinOP (lbf-in)	MOP (psig)	Torque @ MOP (lbf-in)		
			40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190					200	
			Pressure Torque Output: Start/Min./End (lbf-in)																					
G01x07-SR1	Start	18,264													Please consult factory	10,455	11,978	Exceeds MOP		166	9,845	185	12,739	
	Min.	8,650												4,607		5,416	4,282		5,820					
	End	14,507												6,706		8,228	6,097		8,989					
G01x07-SR2	Start	15,282										Please consult factory	7,647	9,169	10,692	12,215	13,738	Exceeds MOP		140	7,647	185	14,499	
	Min.	7,427											3,473	4,280	5,085	5,888	6,691		3,473		7,092			
	End	12,749											5,121	6,642	8,163	9,684	11,206		5,121		11,967			
G01x07-SR3	Start	13,329									Please consult factory	7,737	9,259	10,781	12,304	13,827	15,350	Exceeds MOP		122	6,519	185	16,111	
	Min.	6,498										3,617	4,421	5,224	6,027	6,828	7,630		2,971		8,031			
	End	11,139										5,552	7,072	8,593	10,114	11,636	13,157		4,335		13,918			
G01x07-SR4	Start	11,322							Please consult factory	6,141	7,662	9,184	10,706	12,228	13,751	15,274	16,797	Exceeds MOP		104	5,228	185	17,559	
	Min.	5,601									2,930	3,733	4,535	5,337	6,138	6,939	7,739		8,540		2,446		8,940	
	End	9,693									4,516	6,036	7,556	9,077	10,598	12,119	13,640		15,162		3,604		15,923	
G01x07-SR5	Start	10,627						Please consult factory	7,276	8,797	10,319	11,840	13,363	14,885	16,408	17,930	19,454	Exceeds MOP		98	6,972	185	20,215	
	Min.	4,676									2,932	3,752	4,564	5,373	6,179	6,983	7,787		8,590		9,393		2,767	9,794
	End	7,039									3,691	5,210	6,730	8,251	9,771	11,292	12,813		14,335		15,856		3,387	16,617
G01x08-SR5	Start	10,544			Please consult factory	7,821	9,801	11,781	13,762	15,742	17,723	19,705	21,687	23,669	25,651	27,634	29,617	Exceeds MOP		76	7,029	192	30,013	
	Min.	4,654				3,247	4,307	5,360	6,408	7,454	8,499	9,543	10,586	11,629	12,672	13,715	14,757		2,818		14,965			
	End	6,956				4,236	6,213	8,192	10,170	12,149	14,128	16,107	18,087	20,067	22,048	24,028	26,009		3,444		26,406			
G01x09-SR5	Start	10,485	Please consult factory	7,082	9,608	12,134	14,661	17,187	19,715	22,242	24,770	27,299	29,827	32,356	34,886	37,415	39,945	42,476	Exceeds MOP		59	6,830	200	42,476
	Min.	4,638			2,858	4,215	5,557	6,893	8,226	9,557	10,887	12,217	13,546	14,875	16,204	17,532	18,861	20,189		21,518		2,721		21,518
	End	6,896			3,497	6,020	8,544	11,068	13,592	16,117	18,642	21,168	23,694	26,220	28,746	31,273	33,800	36,328		38,856		3,245		38,856
G01x10-SR5	Start	10,413	Please consult factory	8,622	11,974	15,328	18,682	22,036	25,390	28,745	32,101	35,456	38,813	42,169	45,526	Exceeds MOP			Exceeds MOP		45	6,945	166	47,541
	Min.	4,619			3,702	5,485	7,257	9,024	10,789	12,552	14,316	16,078	17,840	19,602	21,364		23,126	2,798		24,184				
	End	6,824			5,035	8,385	11,735	15,085	18,436	21,787	25,139	28,491	31,843	35,196	38,550		41,903	3,360		43,916				
G01x12-SR5	Start	10,301	10,993	15,805	20,617	25,429	30,243	35,056	39,870	44,685	Exceeds MOP								Exceeds MOP		31	6,663	116	47,574
	Min.	4,589	4,988	7,530	10,063	12,592	15,120	17,647	20,173	22,700										2,670		24,216		
	End	6,712	7,404	12,211	17,018	21,826	26,635	31,443	36,253	41,063										3,078		43,949		
G01x14-SR5	Start	10,211	15,069	20,923	26,777	32,631	38,486	44,342	Exceeds MOP										Exceeds MOP		26	6,875	91	44,927
	Min.	4,566	7,164	10,245	13,321	16,394	19,467	22,540												2,809		22,847		
	End	6,623	11,476	17,324	23,172	29,021	34,870	40,720												3,291		41,305		
G01x05-SR6	Start	7,865										Please consult factory	5,387	6,137	6,888	7,639	8,390	9,141	Exceeds MOP		147	5,161	200	9,141
	Min.	3,456											2,180	2,586	2,989	3,390	3,790	4,189		2,057		4,189		
	End	5,191											2,715	3,465	4,215	4,965	5,716	6,466		2,490		6,466		
G01x07-SR6	Start	7,753			Please consult factory	6,196	7,716	9,237	10,759	12,280	13,802	15,324	16,846	18,369	19,892	21,415	Exceeds MOP		73	5,131	185	22,177		
	Min.	3,426				2,634	3,446	4,254	5,059	5,862	6,665	7,467	8,268	9,070	9,871	10,673		2,058		11,073				
	End	5,079				3,523	5,043	6,562	8,082	9,602	11,122	12,643	14,164	15,685	17,206	18,728		2,460		19,489				
G01x08-SR6	Start	7,670		Please consult factory	5,824	7,803	9,783	11,763	13,743	15,723	17,704	19,685	21,666	23,648	25,630	27,612	29,595	31,578	Exceeds MOP		56	5,033	192	31,975
	Min.	3,404			2,454	3,512	4,562	5,608	6,652	7,695	8,738	9,780	10,822	11,864	12,905	13,947	14,989	16,030		2,024		16,239		
	End	4,996			3,152	5,129	7,107	9,085	11,063	13,042	15,020	16,999	18,979	20,959	22,939	24,919	26,900	28,881		2,361		29,277		

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

Torque - Pneumatic

Spring-Return Actuator

Actuator Model	Spring Torque Start/Min./End (lbf-in)		Operating Pressure, (psig)																	MinOP (psig)	Torque @ MinOP (lbf-in)	MOP (psig)	Torque @ MOP (lbf-in)
			40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200				
			Pressure Torque Output: Start/Min./End (lbf-in)																				
G01x09-SR6	Start	7,610	Please consult factory	6,518	9,044	11,569	14,096	16,622	19,149	21,676	24,204	26,732	29,260	31,789	34,318	36,847	39,377	41,907	44,437	44	5,003	200	44,437
	Min.	3,388		2,839	4,182	5,517	6,848	8,178	9,508	10,837	12,165	13,493	14,821	16,149	17,477	18,806	20,134	21,461	22,789		2,021		22,789
	End	4,937		3,846	6,369	8,892	11,416	13,940	16,464	18,989	21,514	24,039	26,565	29,091	31,618	34,145	36,672	39,199	41,727		2,332		41,727
G01x10-SR6	Start	7,538	7,230	10,583	13,936	17,289	20,643	23,997	27,352	30,707	34,062	37,418	40,774	44,131	47,488	Exceeds MOP				33	4,884	166	49,502
	Min.	3,369	3,234	5,009	6,777	8,541	10,304	12,066	13,828	15,590	17,351	19,113	20,874	22,635	24,396						1,972		25,453
	End	4,865	4,557	7,906	11,256	14,606	17,957	21,307	24,659	28,010	31,362	34,715	38,068	41,421	44,775						2,213		46,787
G01x05-SR7	Start	5,821							Please consult factory	3,834	4,583	5,333	6,084	6,834	7,585	8,335	9,086	9,838	10,589	110	3,834	200	10,589
	Min.	2,551								1,522	1,930	2,333	2,733	3,133	3,531	3,929	4,326	4,723	5,120		1,522		5,120
	End	3,745								1,759	2,508	3,258	4,007	4,757	5,507	6,257	7,007	7,757	8,508		1,759		8,508
G01x07-SR7	Start	5,709	Please consult factory		4,602	6,122	7,643	9,164	10,685	12,206	13,728	15,249	16,771	18,294	19,816	21,339	22,863	Exceeds MOP		55	3,842	185	23,624
	Min.	2,521			1,959	2,772	3,578	4,382	5,184	5,986	6,787	7,589	8,390	9,190	9,990	10,791	11,592				1,547		11,992
	End	3,633			2,527	4,046	5,565	7,084	8,604	10,124	11,644	13,164	14,684	16,205	17,726	19,248	20,770				1,768		21,530
G01x08-SR7	Start	5,626	Please consult factory	5,293	7,272	9,251	11,230	13,210	15,190	17,171	19,151	21,132	23,114	25,096	27,078	29,060	31,043	33,026	Exceeds MOP	42	3,710	192	33,422
	Min.	2,499		2,349	3,401	4,447	5,491	6,533	7,576	8,617	9,659	10,700	11,741	12,783	13,824	14,866	15,907	16,948			1,495		17,156
	End	3,550		3,217	5,194	7,171	9,149	11,127	13,105	15,083	17,062	19,041	21,021	23,000	24,980	26,961	28,942	30,923			1,636		31,319
G01x09-SR7	Start	5,567	5,441	7,966	10,491	13,017	15,543	18,070	20,596	23,124	25,651	28,179	30,707	33,236	35,765	38,295	40,824	43,354	45,885	33	3,673	200	45,885
	Min.	2,484	2,441	3,780	5,113	6,443	7,772	9,100	10,428	11,756	13,084	14,412	15,739	17,066	18,394	19,722	21,049	22,377	23,705		1,489		23,705
	End	3,491	3,365	5,887	8,410	10,934	13,457	15,981	18,506	21,030	23,555	26,081	28,607	31,133	33,659	36,186	38,714	41,241	43,769		1,599		43,769
G01x10-SR7	Start	5,494	8,678	12,030	15,383	18,737	22,091	25,445	28,799	32,154	35,510	38,865	42,222	45,578	48,935	Exceeds MOP				25	3,650	166	50,950
	Min.	2,464	4,171	5,937	7,700	9,462	11,224	12,985	14,747	16,507	18,268	20,029	21,790	23,551	25,312						1,493		26,369
	End	3,419	6,599	9,948	13,298	16,648	19,998	23,349	26,700	30,052	33,404	36,757	40,110	43,463	46,816						1,576		48,829
G01x05-SR8	Start	4,279					Please consult factory	3,400	4,149	4,899	5,648	6,398	7,149	7,899	8,650	9,400	10,151	10,903	11,654	83	2,875	200	11,654
	Min.	1,877						1,437	1,840	2,240	2,638	3,036	3,433	3,829	4,226	4,622	5,018	5,414	5,810		1,151		5,810
	End	2,681						1,802	2,551	3,300	4,049	4,798	5,548	6,297	7,047	7,797	8,547	9,298	10,049		1,278		10,049
G01x07-SR8	Start	4,167	Please consult factory	4,147	5,667	7,188	8,708	10,229	11,750	13,271	14,793	16,314	17,836	19,359	20,881	22,404	23,928	Exceeds MOP		41	2,780	185	24,689
	Min.	1,847		1,859	2,667	3,471	4,273	5,074	5,875	6,675	7,475	8,276	9,076	9,876	10,677	11,477	12,277				1,121		12,677
	End	2,569		2,549	4,068	5,587	7,106	8,625	10,144	11,664	13,184	14,704	16,225	17,746	19,267	20,788	22,310				1,183		23,071
G01x08-SR8	Start	4,084	4,379	6,358	8,337	10,316	12,295	14,275	16,255	18,236	20,216	22,197	24,179	26,161	28,143	30,125	32,108	34,091	Exceeds MOP	31	2,599	192	34,487
	Min.	1,825	2,003	3,052	4,096	5,139	6,181	7,222	8,263	9,304	10,345	11,386	12,427	13,468	14,509	15,550	16,591	17,632			1,002		17,840
	End	2,486	2,781	4,758	6,734	8,712	10,689	12,667	14,645	16,624	18,603	20,582	22,561	24,541	26,521	28,501	30,482	32,463			1,002		32,859
G01x09-SR8	Start	4,025	6,506	9,031	11,556	14,082	16,608	19,135	21,661	24,189	26,716	29,244	31,772	34,301	36,830	39,360	41,889	44,419	46,950	25	2,719	200	46,950
	Min.	1,809	3,143	4,474	5,803	7,131	8,459	9,786	11,114	12,441	13,768	15,096	16,423	17,750	19,078	20,405	21,733	23,061	24,389		1,122		24,389
	End	2,427	4,905	7,428	9,951	12,474	14,998	17,522	20,046	22,571	25,096	27,621	30,147	32,673	35,200	37,727	40,254	42,782	45,310		1,122		45,310
G01x05-SR9	Start	3,107			Please consult factory	2,691	3,440	4,189	4,938	5,688	6,438	7,188	7,938	8,689	9,439	10,190	10,941	11,692	12,444	62	2,092	200	12,444
	Min.	1,370				1,171	1,572	1,971	2,368	2,765	3,161	3,557	3,953	4,349	4,745	5,141	5,536	5,932	6,327		845		6,327
	End	1,892				1,476	2,225	2,973	3,722	4,471	5,220	5,969	6,718	7,468	8,218	8,968	9,718	10,469	11,219		878		11,219
G01x07-SR9	Start	2,995	3,417	4,937	6,457	7,977	9,498	11,018	12,539	14,061	15,582	17,104	18,626	20,148	21,671	23,194	24,717	Exceeds MOP		31	2,050	185	25,479
	Min.	1,340	1,582	2,388	3,190	3,991	4,792	5,592	6,392	7,192	7,992	8,792	9,592	10,392	11,192	11,992	12,792				836		13,192
	End	1,781	2,202	3,720	5,239	6,757	8,276	9,796	11,315	12,835	14,355	15,875	17,396	18,917	20,438	21,959	23,481				836		24,242
G01x08-SR9	Start	2,912	5,169	7,147	9,126	11,105	13,085	15,065	17,045	19,025	21,006	22,987	24,968	26,950	28,932	30,914	32,897	34,880	Exceeds MOP	23	1,806	192	35,277
	Min.	1,318	2,531	3,574	4,616	5,657	6,698	7,739	8,779	9,820	10,860	11,901	12,942	13,983	15,023	16,064	17,105	18,147			592		18,355
	End	1,697	3,952	5,928	7,905	9,882	11,860	13,838	15,816	17,795	19,773	21,752	23,732	25,712	27,692	29,672	31,653	33,634			592		34,030

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