

Bettis GTD-Series

Pneumatic Double-Acting 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)		
			400	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1200					1250	1300
			Pressure Torque Output: Start/Min./End (lbf-in)																				
GTD01x03.5	Outboard	Start	14,568	18,632	20,661	22,688	24,714	26,738	28,760	30,781	32,800	34,818	36,834	38,848	40,861	42,872	46,891	48,898	Exceeds MOP	400	1,289	14,568	50,462
		Min	7,925	10,053	11,117	12,179	13,241	14,303	15,364	16,424	17,484	18,543	19,601	20,659	21,717	22,774	24,886	25,942				7,925	26,765
		End	14,553	18,613	20,640	22,666	24,690	26,712	28,732	30,751	32,768	34,783	36,797	38,810	40,821	42,830	46,844	48,850				14,553	50,413
	Inboard	Start	13,235	16,966	18,829	20,690	22,549	24,406	26,262	28,116	29,969	31,820	33,669	35,517	37,363	39,208	42,893	44,734				13,235	46,169
		Min	7,228	9,182	10,159	11,134	12,109	13,083	14,057	15,030	16,003	16,975	17,947	18,917	19,888	20,858	22,796	23,765				7,228	24,520
		End	13,222	16,949	18,810	20,669	22,527	24,382	26,236	28,089	29,939	31,788	33,636	35,482	37,326	39,169	42,851	44,690				13,222	46,123
GTD01x04.0	Outboard	Start	19,369	24,681	27,333	29,984	32,633	35,280	37,924	40,567	43,209	45,848	48,486	Exceeds MOP	400	987	19,369	50,436					
		Min	10,470	13,251	14,641	16,030	17,418	18,805	20,192	21,578	22,964	24,348	25,733				10,470	26,757					
		End	19,350	24,657	27,307	29,955	32,601	35,245	37,887	40,527	43,166	45,803	48,438				19,350	50,387					
	Inboard	Start	18,037	23,015	25,501	27,985	30,468	32,948	35,426	37,903	40,377	42,850	45,321				18,037	47,149					
		Min	9,774	12,381	13,683	14,985	16,286	17,586	18,886	20,185	21,483	22,781	24,078				9,774	25,037					
		End	18,019	22,993	25,476	27,958	30,438	32,915	35,391	37,865	40,337	42,808	45,276				18,019	47,102					
GTD2x04.0	Outboard	Start	23,330	29,759	32,970	36,178	39,383	42,586	45,787	48,986	52,182	55,376	58,567	61,757	64,944	68,130	74,494	Exceeds MOP	400	1,230	23,330	76,402	
		Min	12,632	15,998	17,680	19,361	21,041	22,720	24,398	26,075	27,752	29,428	31,103	32,777	34,451	36,123	39,467				12,632	40,469	
		End	23,312	29,735	32,943	36,149	39,352	42,552	45,751	48,946	52,140	55,331	58,521	61,708	64,892	68,075	74,435				23,312	76,341	
	Inboard	Start	20,809	26,608	29,503	32,396	35,286	38,174	41,060	43,943	46,824	49,703	52,580	55,454	58,326	61,197	66,931				20,809	68,650	
		Min	11,314	14,351	15,867	17,383	18,899	20,413	21,926	23,439	24,951	26,462	27,972	29,482	30,990	32,498	35,512				11,314	36,416	
		End	20,793	26,586	29,479	32,370	35,258	38,144	41,027	43,908	46,787	49,663	52,538	55,410	58,280	61,148	66,877				20,793	68,595	
GTD2x05.0	Outboard	Start	37,345	47,391	52,408	57,421	62,431	67,437	72,439	Exceeds MOP	400	787	37,345	76,138									
		Min	20,049	25,309	27,937	30,563	33,188	35,812	38,435				20,049	40,374									
		End	37,315	47,353	52,366	57,375	62,381	67,383	72,381				37,315	76,077									
	Inboard	Start	34,828	44,245	48,947	53,646	58,341	63,032	67,720				34,828	71,186									
		Min	18,733	23,664	26,127	28,589	31,050	33,509	35,967				18,733	37,785									
		End	34,800	44,209	48,908	53,603	58,294	62,982	67,665				34,800	71,129									
GTD3x05.0	Outboard	Start	45,261	57,474	63,573	69,666	75,755	81,838	87,916	93,990	100,059	106,123	112,183	118,238	124,289	130,336	Exceeds MOP	400	1,132	45,261	134,203		
		Min	24,327	30,722	33,916	37,109	40,300	43,489	46,677	49,863	53,047	56,230	59,411	62,590	65,768	68,945				24,327	70,977		
		End	45,241	57,448	63,544	69,634	75,720	81,801	87,876	93,947	100,013	106,075	112,132	118,184	124,232	130,276				45,241	134,142		
	Inboard	Start	40,846	51,955	57,501	63,043	68,579	74,111	79,637	85,159	90,676	96,188	101,696	107,199	112,698	118,193				40,846	121,707		
		Min	22,018	27,836	30,742	33,646	36,549	39,449	42,348	45,246	48,141	51,035	53,928	56,819	59,708	62,596				22,018	64,443		
		End	40,827	51,931	57,475	63,014	68,548	74,077	79,601	85,120	90,634	96,144	101,649	107,150	112,646	118,139				40,827	121,651		
GTD3x06.0	Outboard	Start	66,262	83,863	92,654	101,439	110,219	118,992	127,760	Exceeds MOP	400	786	66,262	134,070									
		Min	35,409	44,622	49,226	53,827	58,426	63,024	67,619				35,409	70,926									
		End	66,231	83,824	92,612	101,393	110,168	118,938	127,702				66,231	134,009									
	Inboard	Start	61,846	78,343	86,582	94,816	103,043	111,265	119,481				61,846	125,393									
		Min	33,100	41,737	46,051	50,364	54,675	58,984	63,290				33,100	66,390									
		End	61,818	78,307	86,543	94,773	102,996	111,214	119,426				61,818	125,336									
GTD4x06.0	Outboard	Start	80,178	101,566	112,247	122,920	133,585	144,241	154,890	165,531	176,164	186,789	197,408	208,019	218,623	229,220	250,393	260,970	Exceeds MOP	400	1,295	80,178	270,484
		Min	42,918	54,115	59,710	65,301	70,890	76,475	82,058	87,639	93,216	98,791	104,364	109,934	115,501	121,066	132,189	137,747				42,918	142,747
		End	80,121	101,493	112,167	122,832	133,489	144,138	154,779	165,412	176,038	186,656	197,266	207,870	218,466	229,056	250,214	260,783				80,121	270,290
	Inboard	Start	70,636	89,638	99,126	108,606	118,078	127,541	136,997	146,445	155,886	165,318	174,744	184,162	193,573	202,977	221,765	231,149				70,636	239,589
		Min	37,928	47,879	52,849	57,817	62,782	67,744	72,703	77,660	82,614	87,565	92,514	97,460	102,404	107,346	117,221	122,156				37,928	126,595
		End	70,585	89,574	99,055	108,528	117,993	127,450	136,899	146,340	155,774	165,200	174,619	184,030	193,435	202,832	221,606	230,984				70,585	239,418

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

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)				
			400	500	550	600	650	700	750	800	850	900	950	1000	1050	1100					1200	1250	1300	
GTD4x07.0	Start	Outboard	Pressure Torque Output: Start/Min./End (lbf-in)														400	Exceeds MOP	951	270,549				
			110,485	139,618	154,170	168,712	183,245	197,769	212,285	226,791	241,289	255,779	270,260											
			58,888	74,137	81,756	89,372	96,985	104,595	112,201	119,805	127,405	135,003	142,598											
	End	Inboard	110,406	139,518	154,059	168,591	183,114	197,628	212,133	226,629	241,116	255,595	270,066											
			100,940	127,685	141,044	154,393	167,733	181,064	194,386	207,700	221,004	234,301	247,589											
			53,897	67,898	74,894	81,886	88,875	95,861	102,843	109,823	116,800	123,773	130,744											
GTD4x08.0	Start	Outboard	145,400	183,428	202,421	221,399	240,364	259,314																
			77,295	97,204	107,151	117,093	127,030	136,962																
			145,296	183,297	202,276	221,241	240,192	259,129																
	End	Inboard	135,857	171,500	189,300	207,085	224,857	242,615																
			72,306	90,967	100,291	109,609	118,922	128,231																
			135,760	171,377	189,164	206,937	224,696	242,441																
GTD5x08.0	Start	Outboard	187,739	236,899	261,450	285,982	310,496	334,992	359,470	383,931	408,374	432,801	457,210	481,604	505,982	530,343	579,021	603,338						
			99,872	125,616	138,478	151,333	164,182	177,025	189,861	202,691	215,515	228,334	241,146	253,953	266,755	279,551	305,126	317,907						
			187,678	236,822	261,365	285,889	310,395	334,883	359,353	383,805	408,241	432,659	457,061	481,447	505,816	530,170	578,832	603,141						
	End	Inboard	172,123	217,379	239,978	262,558	285,120	307,664	330,190	352,698	375,190	397,664	420,122	442,563	464,989	487,399	532,173	554,538						
			91,705	115,407	127,248	139,083	150,911	162,732	174,548	186,357	198,161	209,958	221,750	233,536	245,316	257,091	280,625	292,385						
			172,067	217,308	239,899	262,472	285,027	307,563	330,082	352,583	375,067	397,534	419,985	442,419	464,837	487,240	531,999	554,356						
GTD5x09.0	Start	Outboard	239,228	301,477	332,570	363,642	394,694	425,725	456,737	487,729	518,702	549,657	580,593	611,511										
			126,966	159,559	175,844	192,122	208,393	224,657	240,915	257,165	273,409	289,646	305,877	322,101										
			239,150	301,379	332,461	363,523	394,565	425,586	456,588	487,570	518,533	549,477	580,403	611,312										
	End	Inboard	223,612	281,957	311,098	340,218	369,317	398,397	427,456	456,497	485,518	514,520	543,505	572,471										
			118,799	149,350	164,615	179,872	195,122	210,365	225,601	240,831	256,054	271,270	286,480	301,684										
			223,539	281,865	310,996	340,107	369,197	398,266	427,317	456,347	485,359	514,352	543,327	572,284										
GTD5x10.0	Start	Outboard	296,888	373,769	412,174	450,557	488,917	527,256	565,573	603,868														
			157,287	197,536	217,648	237,752	257,849	277,937	298,019	318,093														
			296,791	373,647	412,040	450,410	488,758	527,084	565,388	603,671	Exceeds MOP													
	End	Inboard	281,272	354,248	390,702	427,133	463,541	499,927	536,292	572,636														
			149,120	187,327	206,418	225,502	244,577	263,645	282,706	301,759														
			281,180	354,133	390,574	426,993	463,390	499,764	536,117	572,448														
GTD7x10.0	Start	Outboard	364,129	458,561	505,733	552,876	599,991	647,078	694,137	741,170	788,176	835,156	882,111	929,041	975,946	1,022,827	1,116,519	1,163,330	1,210,120					
			193,114	242,578	267,295	292,002	316,699	341,386	366,064	390,732	415,391	440,041	464,682	489,314	513,938	538,553	587,760	612,351	636,934					
			364,038	458,446	505,606	552,737	599,840	646,915	693,963	740,983	787,978	834,946	881,889	928,807	975,700	1,022,569	1,116,238	1,163,037	1,209,815					
	End	Inboard	335,471	422,738	466,327	509,888	553,420	596,925	640,402	683,852	727,276	770,674	814,046	857,394	900,717	944,015	1,030,542	1,073,772	1,116,979					
			178,118	223,834	246,676	269,508	292,331	315,143	337,947	360,740	383,525	406,300	429,067	451,825	474,574	497,315	542,772	565,489	588,198					
			335,386	422,631	466,210	509,760	553,281	596,775	640,241	683,680	727,093	770,480	813,842	857,178	900,490	943,778	1,030,283	1,073,502	1,116,698					
GTD7x12.0	Start	Outboard	528,134	664,101	732,018	799,893	867,725	935,516	1,003,266	1,070,976	1,138,647	1,206,279												
			279,405	350,628	386,217	421,791	457,349	492,894	528,424	563,941	599,443	634,932												
			528,001	663,933	731,834	799,691	867,507	935,280	1,003,013	1,070,706	1,138,360	1,205,975												
	End	Inboard	499,480	628,283	692,619	756,912	821,162	885,372	949,540	1,013,668	1,077,757	1,141,807												
			264,412	331,887	365,601	399,301	432,985	466,656	500,312	533,954	567,582	601,197												
			499,355	628,125	692,445	756,721	820,956	885,149	949,301	1,013,413	1,077,486	1,141,520												

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