

Xpac STROKING TIME

THE STROKE OR ROTATION RATE specifies the maximum speed of operation for a particular actuator and power module combination.

In most installations, these speeds may be reduced by a factor of four without reducing the rated output.

LINEAR

L	Stroke Rate (seconds per inch stroke)								
	Thrust lb (N)	Power Module							
		B	C/¼D	½D/2C	D	2D	½D,P9 ²	D,P40 ²	SF ¹
	2 000 (8 896 N)	6	2	1	0.5	NA	NA	NA	.5
	4 000 (17 790 N)	12	4	2	1	.5	NA	NA	1
	5 000 (22 240 N)	15	5	2.5	1.25	.6	.25	NA	1.25
	10 000 (44 480 N)	30	10	5	2.5	1.25	.5	CF	2.5
	15 000 (66 725 N)	NA	15	7.5	3.75	1.8	.75	CF	3.75
	20 000 (88 965 N)	NA	20	10	5	2.5	1	.25	5
	40 000 (177 928 N)	NA	NA	20	10	5	2	.5	10
	60 000 (266 893 N)	NA	NA	NA	15	7.5	3	.75	15
	80 000 (355 858 N)	NA	NA	NA	20	10	4	1	20
	120 000 (533 760 N)	NA	NA	NA	NA	15	6	1.5	30

ROTARY & DRIVE

R & D	Rotation Rate (seconds per 90 degree rotation)								
	Torque lb-in (N·m)	Power Module							
		B	C/¼D	½D/2C	D	2D	½D,P9 ²	D,P40 ²	SF ¹
	600 (68 N·m)	3.25	1.1	NA	NA	NA	NA	NA	<.5
	1 200 (136 N·m)	6.5	2.2	1.1	0.55	NA	NA	NA	.75
	2 500 (282 N·m)	13	4.5	2.25	1.1	.55	NA	NA	1.25
	5 000 (565 N·m)	26	9	4.5	2.25	1.1	NA	NA	2.5
	10 000 (1 130 N·m)	50	17	8.5	4	2	1	NA	5
	20 000 (2 260 N·m)	100	34	17	8	4	2	NA	10
	50 000 (5 650 N·m)	NA	85	43	22	11	4.5	1	20
	100 000 (11 300 N·m)	NA	NA	85	43	22	8.5	2	40
	200 000 (22 597 N·m)	NA	NA	NA	85	43	17	4	80
	400 000 (45 194 N·m)	NA	NA	NA	170	85	34	8	160

¹ SF - Spring Failure. Estimated time is for the standard solenoid and spring. The actual time may vary based upon spring force and temperature. Faster times are available.

² ½D,P9 and D,P40. Booster pumps provide high speed operation, while maintaining our fine positioning capability. Quoted times are 98% of full travel.

Estimated times are calculated at 100% speed setting and 70°F (21°C).

Motor acceleration is neglected. For calculated stroke times of less than one second, response time will increase slightly.

Mpac STROKING TIME

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LINEAR

ML

Thrust lb (N)	Stroke Rate (seconds per inch stroke)			
	B	Power Module		
		C ²	2C ²	SF ¹
2 000 (8 896 N)	4.5	NA	NA	.5
4 000 (17 790 N)	9	3	NA	1
10 000 (44 480 N)	22	7.5	4	2.5
20 000 (88 965 N)	NA	15	7.5	5

ROTARY & DRIVE

MR
&
MD

Torque lb·in (N·m)	Rotation Rate (seconds per 90 degree rotation)			
	B	Power Module		
		C ²	2C ²	SF ¹
600 (68 N·m)	2.5	NA	NA	<.5
1 200 (136 N·m)	5	NA	NA	.75
2 500 (282 N·m)	10	NA	NA	1.25
5 000 (565 N·m)	20	6.5	NA	2.5
10 000 (1 130 N·m)	40	13	6.5	5
20 000 (2 260 N·m)	80	26	13	10
50 000 (5 650 N·m)	NA	60	30	20
100 000 (11 300 N·m)	NA	120	60	40
200 000 (22 597 N·m)	NA	240	120	80
400 000 (45 194 N·m)	NA	480	240	160

¹ SF - Spring Failure. Estimated time is for the standard solenoid and spring. The actual times may vary based upon spring force and temperature. Faster times are available.

² The C size power modules have a start up delay. Please add 1 second to the total stroke time.

Estimated times are calculated at 70°F (21°C).