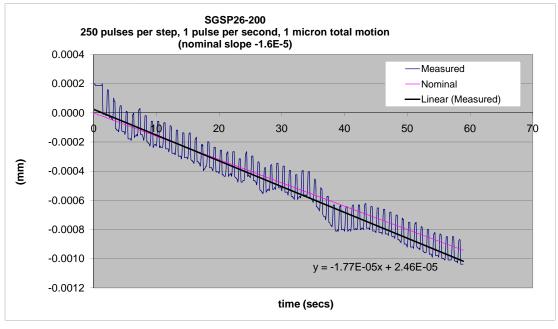
Minimum Incremental Motion¹

Microstepping options																							
			S			SGSP-20		CCCD 22	CCCD 46	CCCD CE		SGSP-YAW		CCCD 20	SGSP-26	ecen aa	CCCD 46	SCSD SE	CC CD 20	ecen ae	CC CD 33	CCCD 46	CCCD CE
			MS 304		SGSP-ACT	& TAMM SGSP-26 SGSP-33 SGSP-46 SGSP-65 mm per revolution				steps per degree			3G3P-20	3G3F-20	3637-33		imum rated			3638-33	3G3F-46	3G3F=03	
			204 38/		0.5	1	2	6	10	25		200		25	30	80	120	120	25	30	80	120	120
_	102	602	-202/204MS -302GS/304C -702											Max speed at 20k pps ³					Max speed at 500k pps (SHOT-202/204MS) ³				
5	ś <u></u> ∟		5.7.									Ι			(PAT-001 ² .	SHOT-102.	SHOT-602)	Max	speed at 50	0k pps (SH	OT-202/204	MS)°
Δ	SHO	SHOT	SHOT-2 SHOT-3 SHOT-7 HIT	pulses per step	microns per pulse					degrees per pulse	µradians per pulse	arc-sec per pulse	mm/sec				mm/sec						
Ŀ	•		•	1	1	2	4	12	20	50	5.00E-03	87.27	18	40	80	240	400	1000	1000	2000	6000	10000	25000
•	•	•	•	2	0.5	1	2	6	10	25	2.50E-03	43.63	9	20	40	120	200	500	500	1000	3000	5000	12500
			•	4	0.25	0.5	1	3	5	12.5	1.25E-03	21.82	4.5						250	500	1500	2500	6250
			•	5	0.2	0.4	0.8	2.4	4	10	1.00E-03	17.45	3.6						200	400	1200	2000	5000
			•	8	0.125	0.25	0.5	1.5	2.5	6.25	6.25E-04	10.91	2.25						125	250	750	1250	3125
			•	10	0.1	0.2	0.4	1.2	2	5	5.00E-04	8.73	1.8						100	200	600	1000	2500
			•	20	0.05	0.1	0.2	0.6	1	2.5	2.50E-04	4.36	0.9						50	100	300	500	1250
			•	25	0.04	0.08	0.16	0.48	0.8	2	2.00E-04	3.49	0.72						40	80	240	400	1000
			•	40	0.025	0.05	0.1	0.3	0.5	1.25	1.25E-04	2.18	0.45						25	50	150	250	625
			•	50	0.02	0.04	0.08	0.24	0.4	1	1.00E-04	1.75	0.36						20	40	120	200	500
			•	80	0.0125	0.025	0.05	0.15	0.25	0.625	6.25E-05	1.09	0.225						12.5	25	75	125	312.5
			•	100	0.01	0.02	0.04	0.12	0.2	0.5	5.00E-05	0.87	0.18						10	20	60	100	250
			•	125	0.008	0.016	0.032	0.096	0.16	0.4	4.00E-05	0.70	0.144						8	16	48	80	200
			•	200	0.005	0.01	0.02	0.06	0.1	0.25	2.50E-05	0.44	0.09						5	10	30	50	125
	Τ		•	250	0.004	0.008	0.016	0.048	0.08	0.2	2.00E-05	0.35	0.072						4	8	24	40	100

¹ Theoretical value based on nominal value of thread pitch. See example below for typical errors during small motions.

³ Theoretical maximum speed. Stages should not be run faster than maximum rated speeds.



² PAT-001 minimum speed is 100 pps and speed resolution is in increments of 100pps. All other controllers have 1pps minimum speed and resolution.