

Chart of Excitron X Integrated Stepper Motors and Controllers

Comparative torque values in this chart will assist you in finding the best motor size for your application. See [Excitron_X_Torque_Graphs.pdf](#) for torque curves. These Excitron Controllers are intelligent and have built-in power drivers and electrical noise filters, and are fully integrated and matched with the stepper motor. Stepper motors are in the first column, and their part numbers are the width and length in millimeters, example: **SM42-47M** is 42mm wide x 47mm long, M means 0.45 degree per half-step, otherwise the motor has .90 degree per half-step. Clicking on a motor will connect you with the product page for that motor. Serial interface is TTL ($\pm 3.3v$), USB-TTL and RS232-TTL are available.

Stepper Motors	NEMA size	Degree/halfstep	Torque			X Controller and motor	and with Gearhead
			in-oz	in-lb	Ncm		
SM20-30	8	0.90	2.4	.15	1.7	X20-30	
SM28-32	11	0.90	3.8	.24	2.7	X28-32	X28-32-5
SM28-45	11	0.90	9.2	.58	6.5	X28-45	X28-45-5
SM35-26	14	0.90	5.7	.36	4.0	X35-26	X35-26-5
SM35-36	14	0.90	9.2	.58	6.5	X35-36	X35-36-5
SM39-20	14	0.90	8.4	.53	5.9	X39-20	X39-20-5
SM39-44	14	0.90	21	1.3	15	X39-44	X39-44-5
SM42-33M	17	0.45	34	2.1	24	X42-33M	X42-33M-5
SM42-38M	17	0.45	52	3.3	37	X42-38M	X42-38M-5
SM42-47M	17	0.45	64	4.0	45	X42-47M	X42-47M-5
SM57-40M	23	0.45	77	4.8	54	X57-40M	X57-40M-5
SM57-66M	23	0.45	212	13.3	150	X57-66M	X57-66M-5
SM57-76M	23	0.45	270	16.9	191	X57-76M	X57-76M-5
SM60-45	23+	0.90	132	8.3	93	X60-45	X60-45-5
SM60-86	23+	0.90	370	23	261	X60-86	X60-86-5
SM86-65	34	0.90	490	31	346	X86-65	XG86-65-5.4
SM86-80	34	0.90	700	44	494	X86-80	XG86-80-5.4
SM86-118	34	0.90	1100	69	777	X86-118	XG86-118-5.4
SM86-156	34	0.90	1880	118	1327	X86-156	XG86-156-5.4
SM110-100	42	0.90	1570	98	1108	X110-100	XG110-100-5
SM110-150	42	0.90	3080	193	2174	X110-150	XG110-150-5
SM110-180	42	0.90	3750	234	2648	X110-180	XG110-180-5

Small Gear Motors	NEMA size	Degree/halfstep	Torque			X motor and Controller
			in-oz	in-lb	Ncm	
SGM24-19-64	--	2.8125	20	1.25	14	--
SGM25-25-30	--	3.75	25	1.56	18	X25-25-30
SGM30-20-85	--	3.75	24	1.50	17	--
SGM35-20-85	--	3.75	25	1.56	18	--
SGM35-30-30	--	3.75	24	1.50	17	--

Note: gear ratio is the 3rd set of digits, if applicable

Small 6mm, 7mm, and 10mm bipolar stepper motors are available, email for information.

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