

Excitron X Integrated Stepper Motors and Controllers Chart

This chart will help you to find the best motor size for your application. See [Excitron_X_Torque_Graphs.pdf](#) for torque curves. All Excitron Controllers are intelligent and have built-in power drivers and electrical noise filters, and are fully integrated and matched with the stepper motor. One manual for all.

Stepper motors and X Controllers part numbers are the width and length in millimeters. Example: X42-47M is 42mm wide x 47mm long, M means 0.45 degree per half-step. Motors without M has .90 degree per half-step. Clicking on a motor or controller will connect you with the product page for that motor. Documentation link has more details. Serial interface is TTL ($\pm 3.3v$), USB-TTL adapters are included with each X Controller.

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	in-lb
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
SM60-88	23+	0.90	370	23	261	X60-88	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 Controller and motor
			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. Other gear ratios exist.

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

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