

Ordering Keys

MLS/MLN Ordering Key

1	2	3	4	5	6	7	8	9	10	11	12	13	14			
MLS	17	A	15	-	25	0250	P	06000	N	-	B2	00	-	RS	2	

<p>1. Series MLS = Rotating screw MLN = Rotating nut</p> <p>2. Motor size¹ 08 = NEMA 08 11 = NEMA 11 14 = NEMA 14 17 = NEMA 17 23 = NEMA 23</p> <p>3. Motor stack¹ A = Single B = Double</p> <p>4. Motor current rating (in 0.1 amps)¹ 05 = 0.5 amps 08 = 0.8 amps 10 = 1.0 amps 13 = 1.3 amps 15 = 1.5 amps 19 = 1.9 amps 30 = 3.0 amps 39 = 3.9 amps</p> <p>5. Screw diameter² 18 = 0.1875 in M04 = 4.0 mm 25 = 0.2500 in M06 = 6.0 mm 31 = 0.3125 in M08 = 8.0 mm 37 = 0.3750 in M10 = 10.0 mm 43 = 0.4375 in M12 = 12.0 mm 50 = 0.5000 in</p>	<p>6. Linear travel/rev² 0013 = 0.013 in 006 = 0.6 mm 0031 = 0.031 in 010 = 1.0 mm 0036 = 0.036 in 012 = 1.2 mm 0040 = 0.040 in 020 = 2.0 mm 0042 = 0.042 in 030 = 3.0 mm 0050 = 0.050 in 040 = 4.0 mm 0063 = 0.063 in 050 = 5.0 mm 0071 = 0.071 in 060 = 6.0 mm 0079 = 0.079 in 080 = 8.0 mm 0083 = 0.083 in 100 = 10.0 mm 0098 = 0.098 in 120 = 12.0 mm 0100 = 0.100 in 150 = 15.0 mm 0118 = 0.118 in 160 = 16.0 mm 0125 = 0.125 in 180 = 18.0 mm 0157 = 0.157 in 200 = 20.0 mm 0167 = 0.167 in 250 = 25.0 mm 0192 = 0.192 in 350 = 35.0 mm 0200 = 0.200 in 450 = 45.0 mm 0236 = 0.236 in 0250 = 0.250 in 0300 = 0.300 in 0333 = 0.333 in 0375 = 0.375 in 0400 = 0.400 in 0500 = 0.500 in 0750 = 0.750 in 0800 = 0.800 in 1000 = 1.000 in 1200 = 1.200 in 1500 = 1.500 in</p> <p>7. Precision grade S = Standard 0.010 in/ft (250 µm/300 mm) P = Precision 0.003 in/ft (125 µm/300 mm)</p> <p>8. Lead screw overall length³ 06000 = 6.000 in 15000 = 150.00 mm (when metric diameter is selected)</p> <p>9. Lead screw coating N = No coating on lead screw T = PTFE-coated lead screw</p>	<p>10. Front-end machining³ A0 = No machining Plain journal ends: B1 = Ø 2.50 mm h7 B2 = Ø 4.00 mm h7 B3 = Ø 5.00 mm h7 B4 = Ø 6.00 mm h7 Male threaded ends: C1 = #4-40 x 0.250 in C2 = #8-32 x 0.250 in C3 = #10-24 x 0.375 in C4 = 1/4-20 x 0.500 in C5 = M2.5x0.45 x 6.35 mm C6 = M4x0.7 x 6.35 mm C7 = M5x0.8 x 9.53 mm C8 = M6x1.0 x 12.70 mm Journal with snap ring groove: D1 = Ø 2.50 mm and ring groove D2 = Ø 4.00 mm and ring groove D3 = Ø 5.00 mm and ring groove D4 = Ø 6.00 mm and ring groove</p> <p>11. Rear-end machining³ MLN same options as front-end MLS is always 00</p> <p>12. Nut. MLN is always XX⁴ XX = No nut or MLN RS = Flange mount, acetal material (RSF Series nuts) AF = Flange mount, alternative anti-backlash (AFT Series nuts) BN = Threaded mount, bronze material (BN Series nuts) MT = Flange mount, alternative to RS nut (MTS Series nuts) RH = Flange mount, peek material (RSFH Series nuts) SB = Thread mount, alternative anti-backlash (SNAB Series nuts) SN = Threaded mount, acetal material (SN Series nuts) XF = Triangular flange, anti-backlash (XC Series nuts) XT = Threaded mount, anti-backlash (XC Series nuts)</p> <p>13. Nut size. MLN is always X⁴ X = No nut or MLN 1 = 0.1875 in and 4 mm dia screws 2 = 0.2500 in and 6 mm dia screws 3 = 0.3125 in, 0.3750 in, 8 and 10 mm screws 5 = 0.4375 in, 0.500 in and 12 mm screws</p> <p>14. Custom designation (blank) = Standard configuration 001-999 = Custom configuration</p>
<p>1. For available standard motors, see pages 17-28. 2. For compatible lead screws, see pages 12-13. 3. For compatible end-machining options, see page 15. 4. RS nut standard on MLS. For optional nut option compatibility, see pages 36-37.</p>		

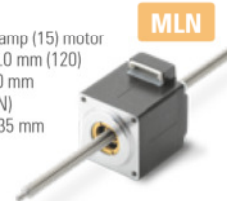
MLS Example:

MLS11A05-180100S04000T-A000-RS1
MLS = Rotating screw (S) configuration
11A05 = NEMA 11 (11), single stack (A), 0.51 amp (05) motor
180100S04000T = 0.1875 in (18) diameter x 0.100 in (0100) lead screw, standard grade accuracy (S) at 4.000 in overall length (04000) with PTFE screw coating (T)
A000 = No (A0) and MLS default N/A (00) end-machining on screw
RS1 = RSF1800 lead nut



MLN Example:

MLN17B15-M06120P15000N-A0C6-XXX
MLN = Rotating nut (N) configuration
17B15 = NEMA 17 (17), double stack (B), 1.50 amp (15) motor
M06120P15000N = 6 mm (M06) diameter x 12.0 mm (120) lead screw, precision grade accuracy (P) at 150 mm overall length (15000) with no screw coating (N)
A0C6 = No (A0) and M4x0.7 threaded end x 6.35 mm length (C6) end-machining on screw
XXX = no nut (required for MLN / rotating nut assemblies)



Please visit www.thomsonlinear.com/smla to access our stepper motor linear actuator selector and part number generator.

MLA Ordering Key

1	2	3	4	5	6	7	8	9	10
MLA	17	A	15	– 0250	P	0150	– C5	– S02	
1. Series MLA = Motorized lead screw actuator			5. Linear travel/rev (lead in 0.001 inch)² 0013 = 0.013 in 0192 = 0.192 in 0024 = 0.024 in 0197 = 0.197 in 0025 = 0.025 in 0200 = 0.200 in 0031 = 0.031 in 0236 = 0.236 in 0036 = 0.036 in 0250 = 0.250 in 0039 = 0.039 in 0300 = 0.300 in 0040 = 0.040 in 0333 = 0.333 in 0042 = 0.042 in 0375 = 0.375 in 0047 = 0.047 in 0394 = 0.394 in 0050 = 0.050 in 0400 = 0.400 in 0063 = 0.063 in 0472 = 0.472 in 0079 = 0.079 in 0500 = 0.500 in 0083 = 0.083 in 0750 = 0.750 in 0100 = 0.100 in 0787 = 0.787 in 0118 = 0.118 in 0800 = 0.800 in 0125 = 0.125 in 1000 = 1.000 in 0157 = 0.157 in 1200 = 1.200 in 0167 = 0.167 in 1378 = 1.378 in			8. End-mounting³ ML08: C1 = #4-40 x 0.236 in male E1 = #4-40 x 0.236 in female C4 = M3x0.5 x 5.99 mm male E4 = M3x0.5 x 5.99 mm female ML1x: C2 = #8-32 x 0.265 in male E2 = #8-32 x 0.265 in female C5 = M4x0.7 x 6.73 mm male E5 = M4x0.7 x 6.73 mm female ML23: C3 = 1/4-20 x 0.500 in male E3 = 1/4-20 x 0.500 in female C6 = M6x1.0 x 12.70 mm male E6 = M6x1.0 x 12.70 mm female			
2. Motor size¹ 08 = NEMA 08 11 = NEMA 11 14 = NEMA 14 17 = NEMA 17 23 = NEMA 23			6. Precision Grade S = Standard 0.010 in/ft (250 µm/300 mm) P = Precision 0.003 in/ft (125 µm/300 mm)			9. Nut S01 = For ML08 S02 = For ML1x S03 = For ML23			
3. Motor stack¹ A = Single B = Double			7. Stroke length (in 0.01 inch) 0150 = 1.50 in stroke length (always in inch) (max stroke length is 1.50 in for MLA08 and 2.50 in for MLA11, 14, 17 and 23 configurations)			10. Custom designation (blank) = Standard configuration 001-999 = Custom configuration			
4. Motor Current Rating (in 0.1 amps)¹ 05 = 0.5 amps 08 = 0.8 amps 10 = 1.0 amps 13 = 1.3 amps 15 = 1.5 amps 19 = 1.9 amps 30 = 3.0 amps 39 = 3.9 amps									
1. For available standard motors, see pages 17-28. 2. For compatible linear travel/rev, see pages 12-13. 3. For more details on mounting options, see page 16.									

MLA Example:

MLA14A08-0472S0175-E5-S02

MLA = Actuator (A) configuration

14A08 = NEMA 14 (14), single stack (A), 0.88 amp (08) motor

0472S0175 = 0.472 in lead (0472), standard grade accuracy (S) at 1.75 in stroke (0175)

E5 = Standard M4x0.7 female threaded end

S02 = Standard nut for size 11, 14, and 17 configurations

Please visit www.thomsonlinear.com/smla to access our stepper motor linear actuator selector and part number generator.

