



JACK SIZES					JACK SELECTION								
MODEL	Capacity (kN)	Lifting Screw Dia. (mm)	Screw Lead (mm)	Root Dia. (mm)	Gear Ratio	Raise for One Turn of Worm (mm)	Maximum Input Torque (N·m)	Maximum Allowable Input (kW)	Max. Worm Speed at Rated Load (rpm)	Maximum Load at 1425 RPM (kN)	Torque to Raise 1 kN (N·m)	No Load Torque (N·m)	Page Ref
EM05-MSJ	5	16	4	10.9	5:1	0.80	2.25	0.27	1130	4.0	0.45	0.11	359
					20:1	0.20	0.94	0.13	1130	4.6	0.19	0.11	359
EM1-MSJ	10	20	4	14.9	5:1	0.80	5.19	0.36	665	4.7	0.52	0.34	360
					20:1	0.20	2.44	0.19	730	5.1	0.24	0.34	360
EM2.5-MSJ	25	26	6	17.8	6:1	1.0	14.9	1.51	975	17.0	0.59	0.56	361
					12:1	0.5	8.7	1.13	1235	21.7	0.35	0.56	361
					24:1	0.25	6.3	0.38	575	10.1	0.25	0.56	361
EM5-MSJ	50	40	7	30.9	6:1	1.17	40.3	1.87	445	15.6	0.81	1.13	362
					24:1	0.29	16.0	0.51	300	10.7	0.32	1.13	362
EM10-MSJ	100	55	12	40.0	8:1	1.50	97.2	3.65	360	25.2	0.97	2.26	363
					24:1	1.50	215	5.60	250	14.8	0.50	2.26	363
EM20-MSJ	200	65	12	50.0	8:1	1.50	215	5.60	250	35.0	1.08	4.52	364
					24:1	0.50	108	1.9	165	23.0	0.54	4.52	364

**NOTES:**

- 1) The recommended maximum speed is 1800 RPM providing the recommended horsepower and temperature are not exceeded.
- 2) Input torque is shown as torque to lift one kN of load. Starting Torque is 100% greater than torque shown. For loads less than 25% of rated loads add tare drag torque.
- 3) Maximum allowable power ratings are based on a 25% duty cycle. For operation at higher duty cycles or repeated use over any segment of the total travel, temperature must be monitored and remain less than 95°C.
- 4) Overload capacity of the Trapezoidal Screw Jack is as follows: 10% for dynamic loads, 30% for static loads.
- 5) Trapezoidal Screw Jacks having gear ratios between 20:1 and 32:1, are self-locking and will hold loads without backdriving in the absence of vibrations. All other ratios may require a brake to prevent backdriving.
- 6) All units are suitable for intermittent operation providing that the housing temperature including ambient is not lower than -30°C. or higher than +95°C. Factory supplied grease in standard units will operate in this range. For higher or lower operating temperature ranges consult Nook Industries.

- 7) Accessories such as boots, limit switches, top plates and clevises are available.
- 8) Catalog dimensions are representative only and are subject to change without notice. For construction, use only certified prints.
- 9) Units are not to be used as personnel support or movement.
- 10) End-of-travel stops are not provided.

$$\text{kW per jack} = \frac{\text{Torque to raise one kN(N·m)} \times \text{Number of kN to be raised} \times \text{RPM}}{9,549}$$

Starting torque is 100% greater than torque shown.

\* No load torque need only be added if operating under 25% rated load.