

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)	BackDrive Holding Torque (N·m)	Page Ref
EM05-BSJ	5	15.7	5	12.9	5:1	1.00	1.21	0.21	1625	5.0	0.24	0.11	1.0	321
					20:1	0.25	0.51	0.09	1625	5.0	0.10	0.11	0.5	321
EM1-BSJ	10	20.0	5	17.5	5:1	1.00	2.41	0.38	1500	10.0	0.24	0.34	2.0	322
					20:1	0.25	1.14	0.19	1585	10.0	0.11	0.34	1.0	322
EM2.5-BSJ	25	25.0	5	22.5	6:1	0.83	5.05	1.08	2035	25.0	0.20	0.56	4.5	323
					12:1	0.42	3.05	0.65	2035	25.0	0.12	0.56	2.5	323
					24:1	0.21	2.13	0.38	1695	25.0	0.09	0.56	2.0	323
EM5-BSJ	50	40	10	34.8	6:1	1.67	19.3	2.28	1125	39.4	0.39	1.13	16.0	324
					24:1	0.42	7.7	0.56	695	24.4	0.15	1.13	6.5	324
EM10-BSJ	100	50	10	45.2	8:1	1.25	31.9	3.75	1125	78.9	0.32	2.26	26.0	325
					24:1	0.42	16.2	1.12	665	46.6	0.38	2.26	13.5	325
EM20-BSJ	200	63	12	57	8:1	1.50	75.2	5.6	710	99.8	0.38	4.52	61.0	326
					24:1	0.50	37.7	1.9	470	66.1	0.19	4.52	31.0	326

NOTES:

- 1) The recommended maximum speed is 3000 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 horsepower ratings are based on a 35% 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 Metric ball Screw Jack is as follows: 0% for dynamic loads, 20% for static loads.
- 5) All Ball Screw Jacks can backdrive and require some means of holding the load, such as a brake on the motor. The product specification pages show holding torque values. Holding torque represents the amount of input torque required to restrain the load and does not indicate recommended brake size to bring dynamic load to stop.
- 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.

Δ Starting torque is 100% greater than torque shown.

$$\text{kWr per jack} = \frac{\text{Torque to raise one kN(N-m)} \times \text{Number of kN to be raised} \times \text{RPM}}{9549}$$

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