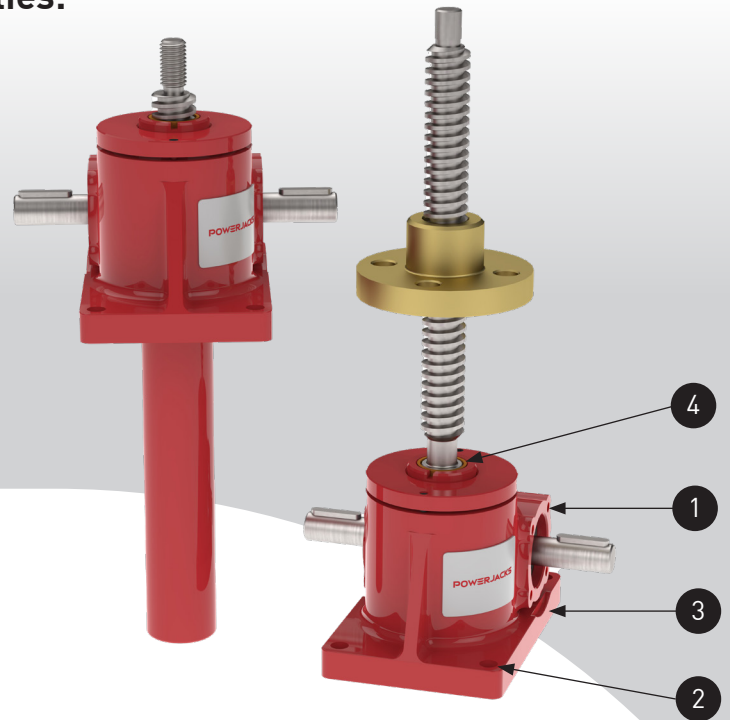


E-Series 10kN Machine Screw Jack

NEW Gearbox Option with More Capabilities:

1. Directly Mount & Integrate Drive Motors
2. Secure 4-Point Base Mounting
3. Gearbox Weight Minimised
4. Integrated Guide Bush for Lifting Screw as Standard

Our E-Series 10kN machine screw jack product design offering is extended with the introduction of a new gearbox housing for improved integration of accessories mounted directly to the screw jack and improved base mounting for the screw jack.



Design Features

Easily Integrate Motor Drives & Feedback Devices ----- Better Machine Design

Tapped hole accessory mounting points on each side of the housing at worm shaft. Allows for the direct mounting of drive motors to the screw jack housing via a motor adaptor. Similarly feedback devices, such as rotary cam limit switches and encoders, can be attached. Helps to minimise machine design envelope, number of components and build cost.

Strong 4 Bolt Mounting for Screw Jack Base ----- Improved Installation

4-point mounting for fixing the screw jack to a superstructure gives improved rigidity, alignment & fixing strength over 2-bolt alternatives.

High Strength to Weight Ratio ----- Reduced Handling Effort and Operation Costs

The weight of the screw jack has been minimised by making the housing from a high strength yet light weight aluminium alloy and by using sealed worm shaft bearings to remove the need for a cover flange at each worm shaft end. This low weight reduces handling effort at build, reduces weight & logistics costs for the final machine and for mobile applications reduces power (fuel) consumption.

Integrated Guide Bush ----- Accurate Operation

The gearbox as standard has an integrated self-lubricated guide bush for precision alignment of the lifting screw, which helps improve the operational accuracy of the final machine / installation.

Available in 4 Standard Screw Configurations



Upright
Translating
Screw



Inverted
Translating
Screw

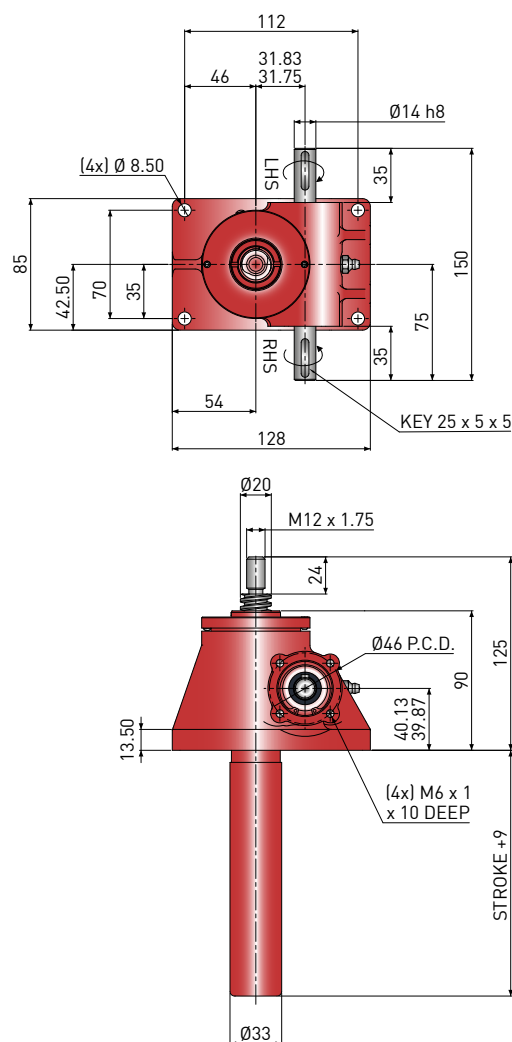


Upright
Rotating
Screw

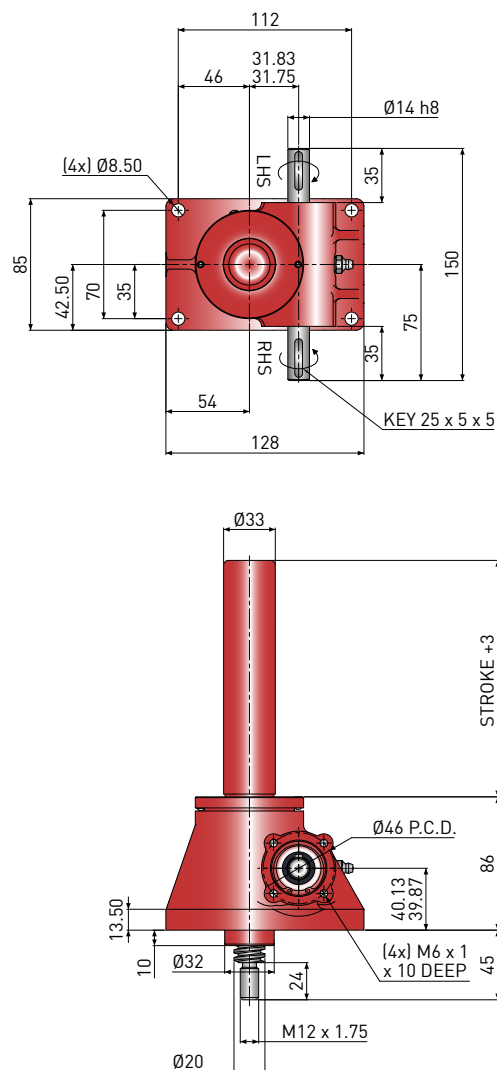


Inverted
Rotating
Screw

Upright EMT0010-T00



Inverted EMT0010-H00



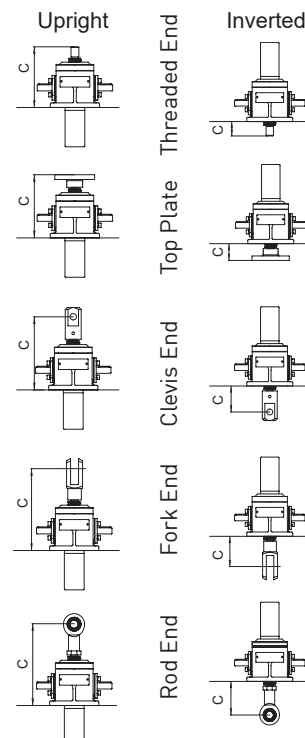
Performance

Model		EMT0010 EMR0010	
Capacity	kN	10	
Lifting Screw	Diameter (mm)	20	
	Lead	Option	1 2
		mm	5 10
Gear Ratio Option 1	Gear Ratio	5:1	
	Static Efficiency	0.233	0.339
	Dynamic Efficiency	0.306	0.424
Gear Ratio Option 2	Gear Ratio	20:1	
	Static Efficiency	0.130	0.192
	Dynamic Efficiency	0.194	0.268
Max. Input power (kW)	Gear Ratio Option 1	0.375	
	Gear Ratio Option 2	0.19	
Start up torque at full load (Nm)	Gear Ratio Option 1	6.8	9.4
	Gear Ratio Option 2	3	4.2

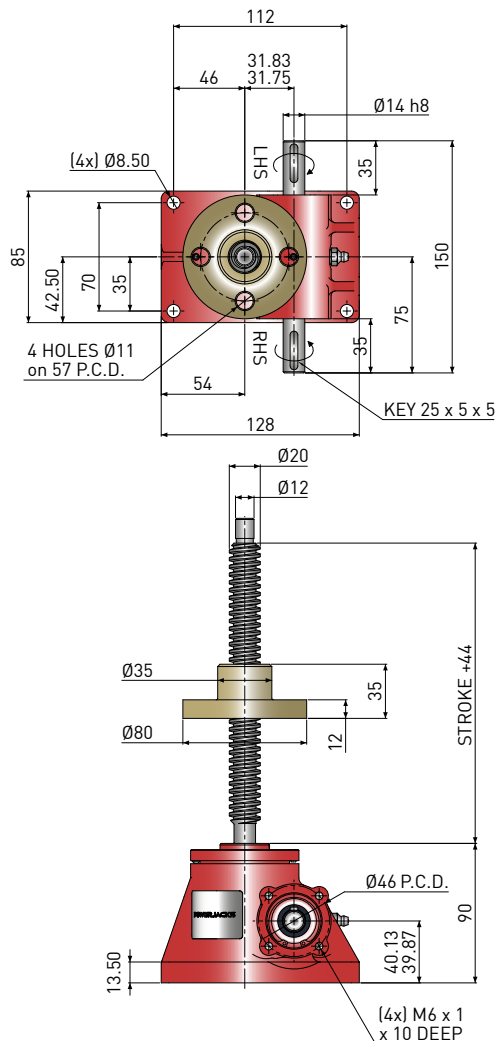
Model		EMT0010 EMR0010	
Capacity	kN	10	
Lifting Screw Lead (mm)		5	10
Turn of worm for travel of lifting screw	Gear Ratio 1	1 Turn	1mm 2mm
	Gear Ratio 2	4 Turn	1mm 2mm
Maximum Through Torque (Nm)		20	
Lifting Screw Restraining Torque (Nm)		22	30
Worm Shaft Maximum Radial Load (N)		325	
Maximum Input Speed (rpm)		1800	
Gear Case Material		Aluminium	
Weight (kg) - stroke = 150mm		EMT	2.36
		EMR	2.6
Weight (kg) - per extra 25mm stroke		EMT	0.11
		EMR	0.05

Note: All dimension in millimetres unless otherwise stated.
Designs subject to change without notice

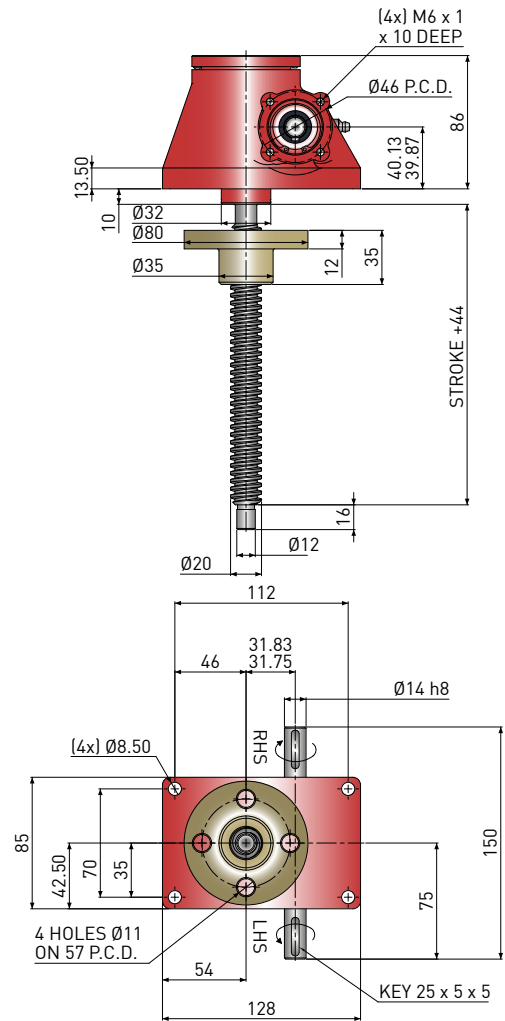
Closed Height



Upright EMR0010-T00



Inverted EMR0010-H00

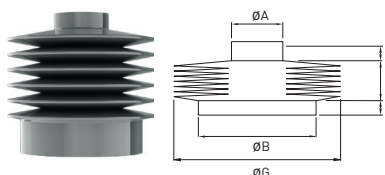


Closed Height & Bellows Boots

[illegible]

Model	A	B	D	E	G
EMT0010	30	70	15	15	110

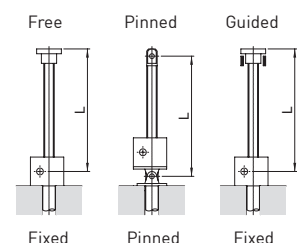
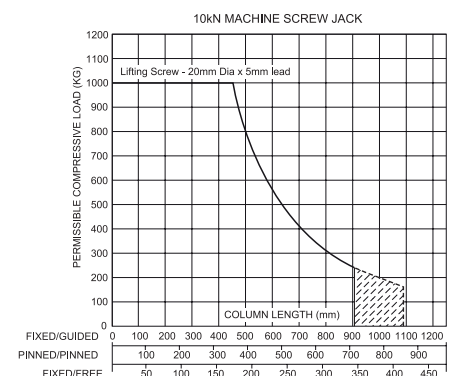
Stroke	1-150	151-300	301-600	601-900	901-1050
EMT0010	8	20	35	-	-



Note:

- 1 Inverted Screw Jacks - Bellows Boot Closed Height assumes screw jack mounted on a structure with thickness = 15mm
2 Inverted Screw Jacks - Recommended bellows boot mounting plate ØB x (E +5mm) thick.
3 Inverted Screw Jacks - Screw Jack mounting plate & bellows boot mounting plate are customers own supply
4 † Control tapes fitted (increase outer diameter by 20mm approximately).
5 For horizontal installations with than 450 mm of stroke, internal boot guides are recommended.
6 Customers with threaded end screw jacks must provide a fixing for the unattached bellows boot collar.
7 Bellows boots for Rotating Screw Jacks, other sizes, stroke and materials please consult Power Jacks.

Column Strength



Variants To Meet Application Requirements

There is a wide range of standard design variations within the range to provide the solution you need for your application.

Anti-Backlash



Where loads change from tension to compression. Reduce axial backlash between lifting screw and worm gear to a minimum.

Anti-Rotation



For loads which are free to rotate or where screw move through free space. Add anti-rotation (keyed) mechanism so screw moves linearly.

Safety Nut



Back-up safety nut incase threads on main lifting nut become worn or damaged.

Double Hub Nut



Centrally mounted flange on lifting nut for additional mounting options.

Second Guide



Increase lateral rigidity of lifting screw with a second guide integrated into the screw jack gearbox.

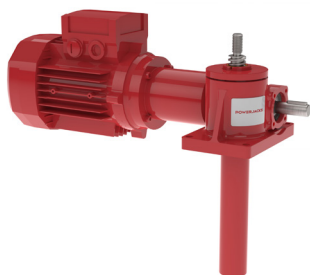
Double Clevis



Twin pivot points with the integrated clevis in cover pipe. Ideal for adding an electric motor.

Bolt-On Accessories

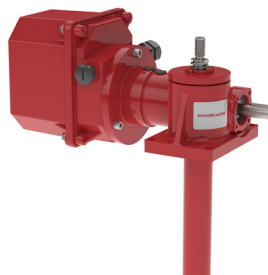
Customise your screw jack with a wide range of easy bolt-on accessories with matched adaptors and mounting kits.



Electric Motor



Trunnion Mounts



Rotary Limit Switch



Hand Wheel



Worm Shaft Cover



Stop Nut



Proximity Sensors



Brake

PJ-F-SJ-EM-0010-T2-EN-01