

# Machine Screw Jacks Selection Guide

## 1. Screw Jacks Series (Classic Type, Cubic Type)



\* Classic Type Video: <https://www.youtube.com/watch?v=xufGOAqCy88>

\* Cubic Type Video: <https://www.youtube.com/watch?v=Ljk6f0BSQhl>

## 2. Type of Drive (Manual, Electric)



\* Manual Screw Jack Video: <https://www.youtube.com/watch?v=PfqF1qOXIzM>

\* Electric Screw Jack Video: <https://www.youtube.com/watch?v=21OCqaCMbk8>

If Electric drive, electrical power available: \_\_ Voltage. \_\_ Phase. \_\_ Hz.

Expected lifting speed \_\_ mm/min. (25.4mm = 1inch, 305mm = 1ft) (**Very Important**)

### 3. Axial Load Capacity on Lifting Screw (**Very Important**)

**Unit Conversion:** 1kN = 100kg, 1pound(lb)=0.454kg, 1ton=1000kg.

1.1. Max. Dynamic Loads: \_\_\_ kg per jack? (must include safety factor).

1.2. Static Loads: \_\_\_ kg per jack? (must include safety factor).

1.3. Type of load: Compression, Tension, or Both?

**Dynamic Loads:** A dynamic load is the force that will be applied to the screw jack transmission devices while they are IN MOTION.

**Static Loads:** A static load is the force that will be applied to the screw jack transmission devices while they are NOT IN MOTION.

**Important Note:** Above loads is guided loads. If unguided load, **Must consult us.**

**Important Note:** When use, if have Vibration, Shock load, or Side load, **Must consult us.**

### 4. Environment


2.1. Placement: Indoor, or Outdoor?

2.2. Ambient temperature:

Normal(-15°C to + 85°C), High Temp. \_\_\_ °C, or Low Temp. \_\_\_ °C?

2.3. Environment: Corrosive, Oil, Dust, Dirt, Sand, Water, Wash Down, or Chemicals?

### 5. Configuration and Designs

			
<b>US</b> Upright Translating	<b>IS</b> Upright Translating	<b>UR</b> Upright Rotating	<b>IR</b> Inverted Rotating

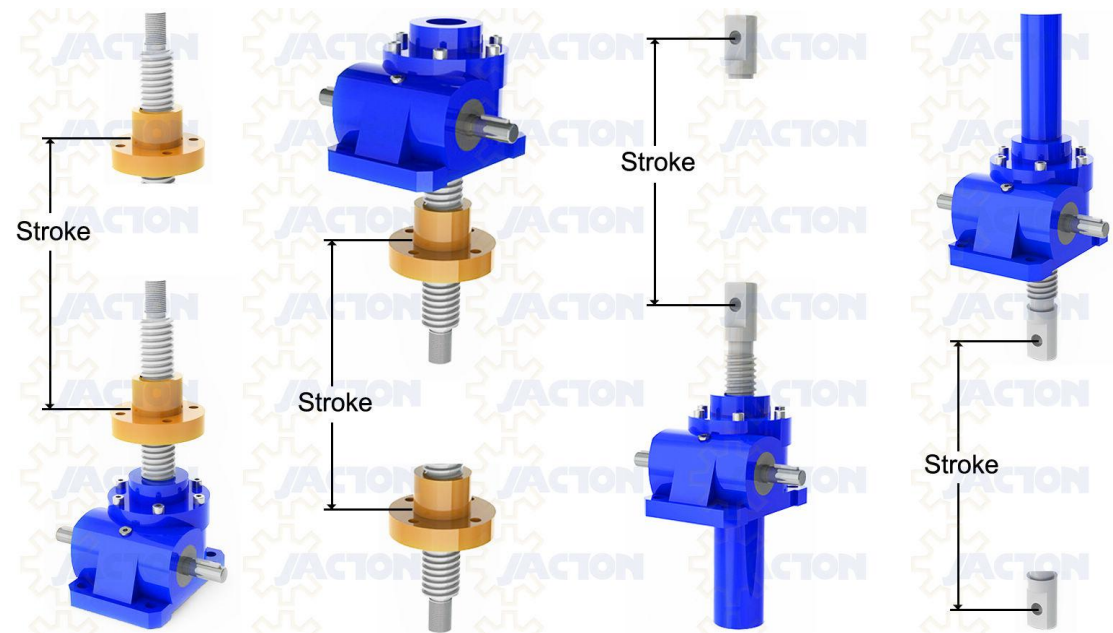
**Important Note:** The lifting screw of a translating screw design jack must be attached to the load (guided) which prevents the lifting screw from rotating. Add linear guides, rails or rolls are recommended.

**Important Note:** If your application involves a load which is unattached, unguided or the load is free to rotate and not translate, then a keyed screw design jack are required to prevent lifting screw rotation (not recommended). **Must consult us.**

**UK** - Upright Keyed Screw Design. **IK** - Inverted Keyed Screw Design.

## 6. Stroke (mm) (**Very Important**)

There are no standard travel length, and all screw jacks travel length are built with customers required.



## 7. Screw End Conditions

Standard lifting screw ends include I (top plate), II (clevis end), III (plain end), IV (threaded end), VI (fork end), VII (rod end), and no screw end with full threads screw.

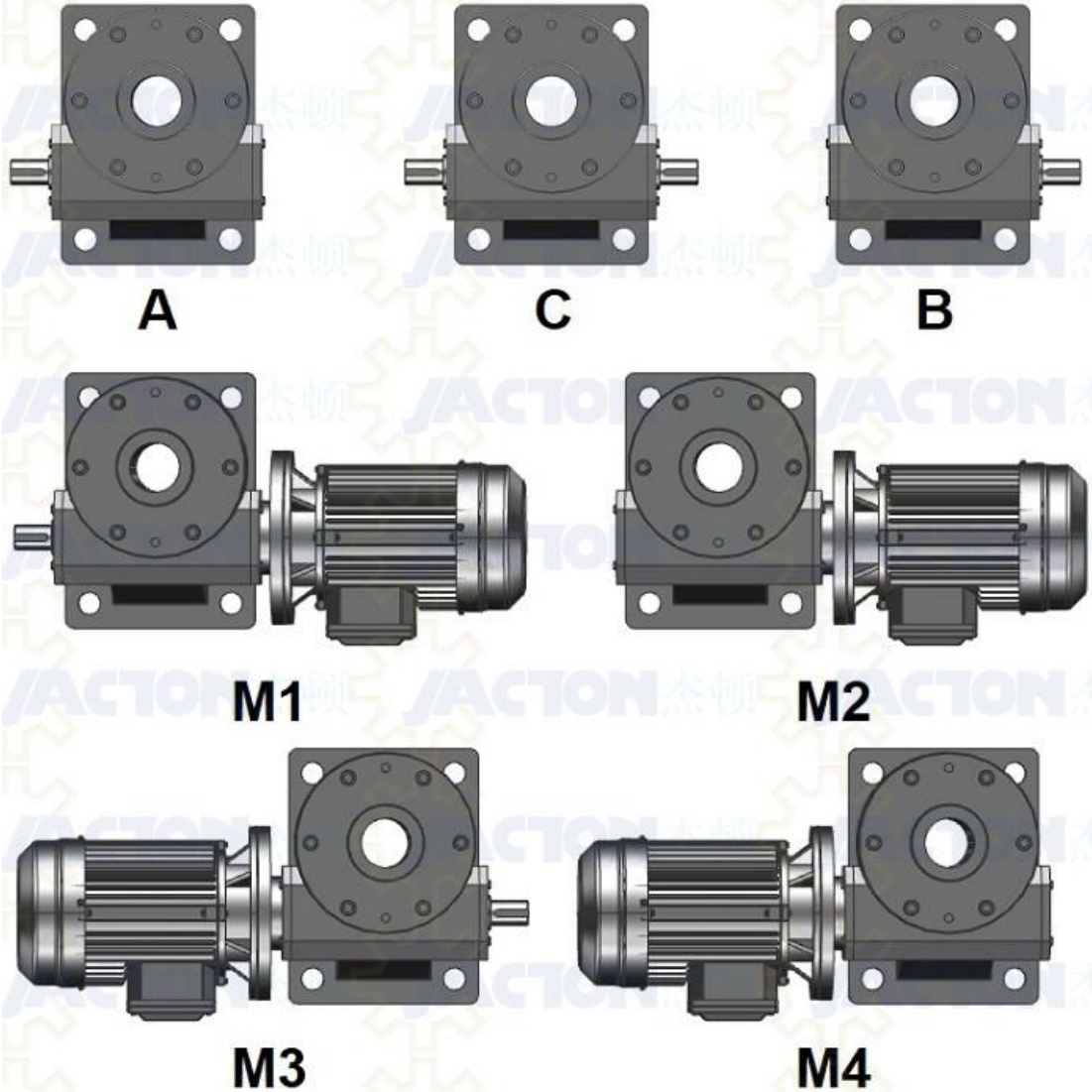


## 8. Worm (Input Shaft) Types

A: Left Shaft B: Right Shaft C: Double Shaft

## 9. Motor Flange Input Types (**Electric Drive**)

M1: Left Shaft & Right Motor Flange M2: Right Motor Flange  
M3: Right Shaft & Left Motor Flange M4: Left Motor Flange





## 10. Options and Accessories

PP(protection tube). BB(bellow boots). FC(flex coupling). UJ(universal joint).  
 TUJ(telescopic universal joint). CS(connecting shafts). HW(hand wheel). PB(pillow  
 blocks). FB(flange blocks). RE(rod end). TAP(trunnion adapter plate). MF(motor flange).  
 WGR(worm gear reducer). EM(electric motor). LS(limit switches). FI(frequency inverter).  
 PI(position indicator). SN(stop nut). SNU(safety nut). AB(anti-backlash device).  
 DC(double clevis mount).

