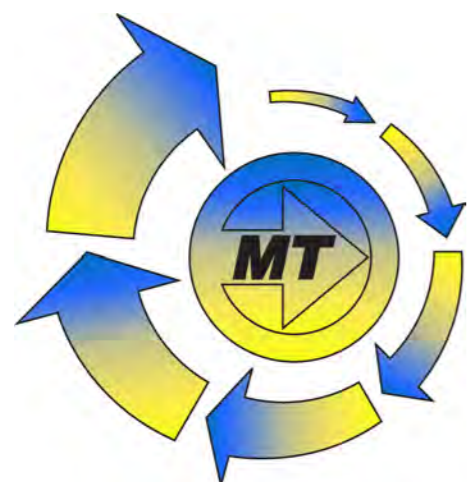


JTH

Cubic Screw Jack (Through Holes)

Contents

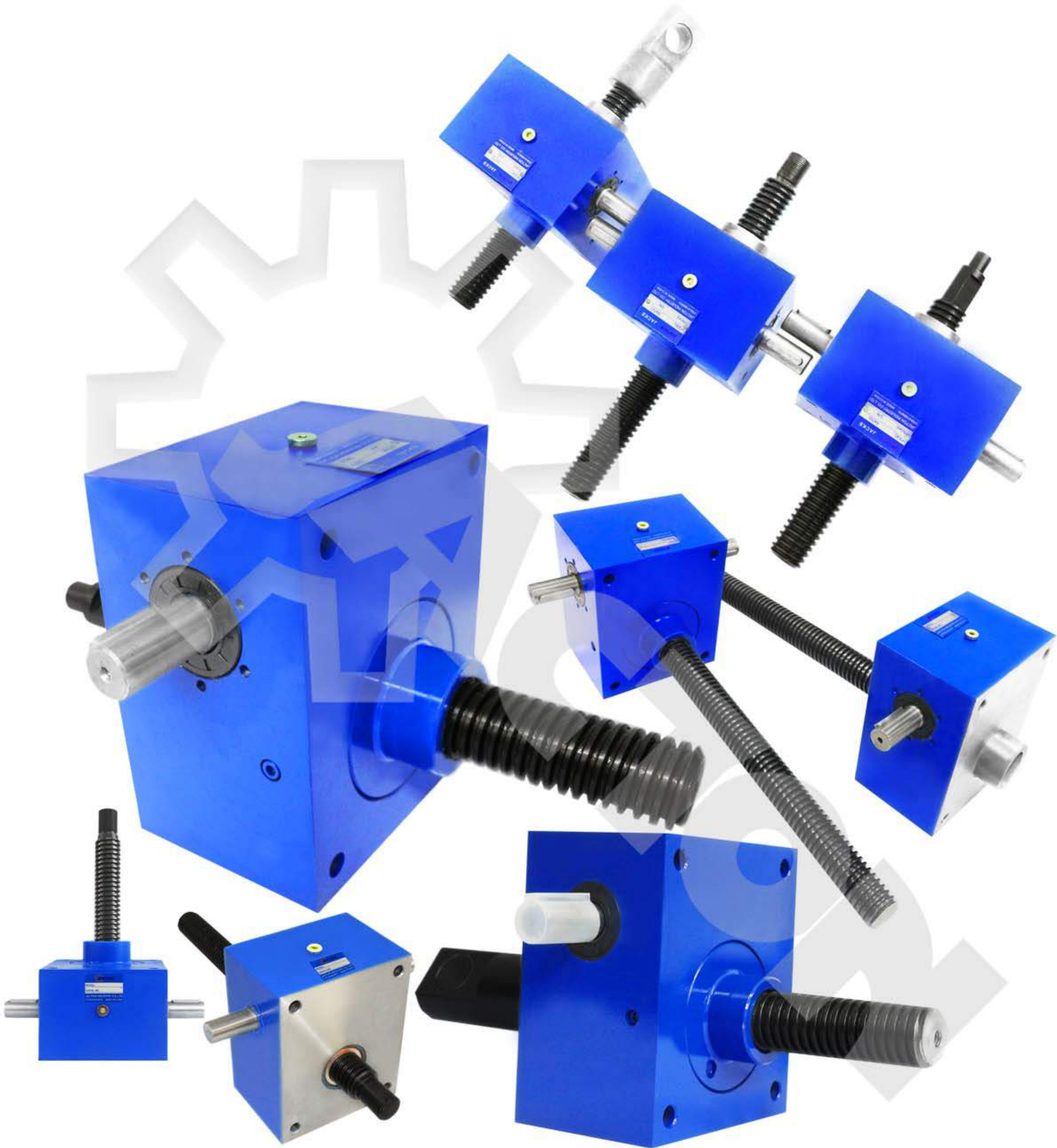
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2D/3D
CAD

JACTON[®]



Product Description

JACTON JTH Series Cubic Screw Jack with Through Holes featuring a compact and versatile cubic housing. They are high quality engineering products for precise lifting, lowering and pivoting of loads, and are, under normal operation, maintenance free. In the absence of vibration load, they have self locking and precisely position loads, will hold loads without backdriving, and no need any brake mechanism or locking system. Can be mounted in any attitude. Generally maintenance free.

● Features:

- * Self locking lifting screw, precise positioning, and uniform speed.
- * Available in 6 sizes from JTH10 to JTH200.
- * Static load capacity from 10 kN to 200 kN.
- * Lifting screw diameter from 22 mm to 70 mm.
- * Standard lifting screw maximum length 6000 mm, custom longer stroke.
- * Upright or Inverted mounting. Available in tension or compression loads.
- * Translating, Keyed for non-rotating, and Rotating designs.
- * Each Model has THREE gear ratios, they are High ratio, Medium ratio, Slow ratio.
- * Standard with 1-start lifting screw, custom 2-starts lifting screw which offers increased travel speed and require a brake or external locking device to hold position.
- * Custom-made lifting screw diameter and pitch, gear ratios, and worm shaft sizes.
- * Lifting Screw Ends: top plate, clevis end, plain end, threaded end, fork end, rod end.
- * Can be operated by manually operated or by electrical motor driven.
- * Can be applied either individually use or combined into a exactly synchronized lifting system, linked by connecting shafts, bevel gearboxes, motor adapters, limit switches, geared motor and couplings etc.

Product Description

* Custom-made double clevis screw jack, anti-backlash screw jack.

* Can be used as alternatives to hydraulic and pneumatic systems.

● **Materials:**

* Housing(Gearbox): Ductile Iron.

* Lifting Screw: Carbon steel #45. Custom stainless steel.

* Worm(Input Shaft): Hardened worm, carbon steel #45. Custom stainless steel.

* Worm Gear(Wheel): High strength bronze.

* Travelling Nut and Safety Nut: High strength bronze.

● **Accessories:**

* Motorized driven (AC or DC) by asynchronous motors (normal, YEJ brake, YVP variable frequency, B explosion proof, D multi-speed), stepper motors, servo motors with encoders and controllers. IEC motor flange or NEMA C-Face motor adapter for connect with motors. Frequency inverters.

* Manually operated by Aluminum handwheels, or Cast iron handwheels.

* Connection Devices: Couplings. Universal joints. Telescopic universal joints. Connecting shafts.

* Screw Protective Devices: Bellows boot. Telescopic spring covers. Protective tubes.

* Safety Devices: Limit switches. Proximity switches. Safety nuts. Anti-backlash nut. Overload safety couplings. Stop nuts. Position Encoders. Overload clutch. Brake motor. Linear braking elements. Wear detection/monitors. Linear guides and rails. Potentiometer. Pressure sensor.

* Others Accessories: Travel nuts. Position indicators. Trunnion adapter plates. Trunnion mounting brackets. Pillow blocks. Flange blocks. Rod end bearings.

Specifications

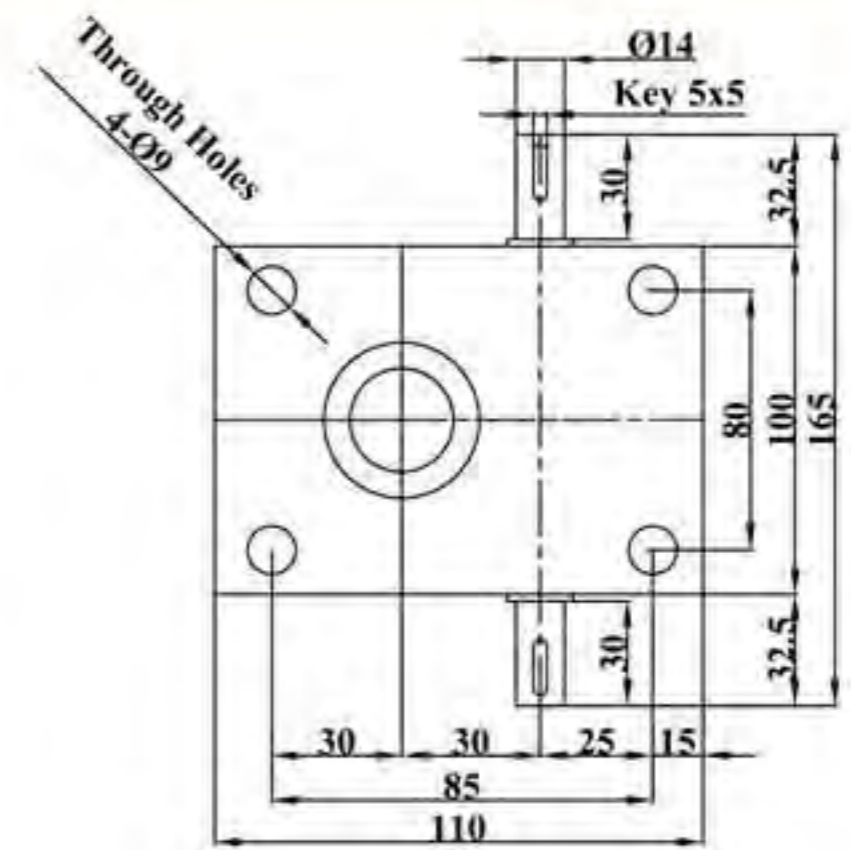
Remarks:

- 1) H: high ratio, M: medium ratio, L: slow ratio
- 2) Max. allowable power is under the conditions that ambient temperature 20 degree C, duty cycle 20%h and input speed 1500rpm
- 3) Overall efficiency is under grease lubrication.
- 4) Self-locking under static conditions.

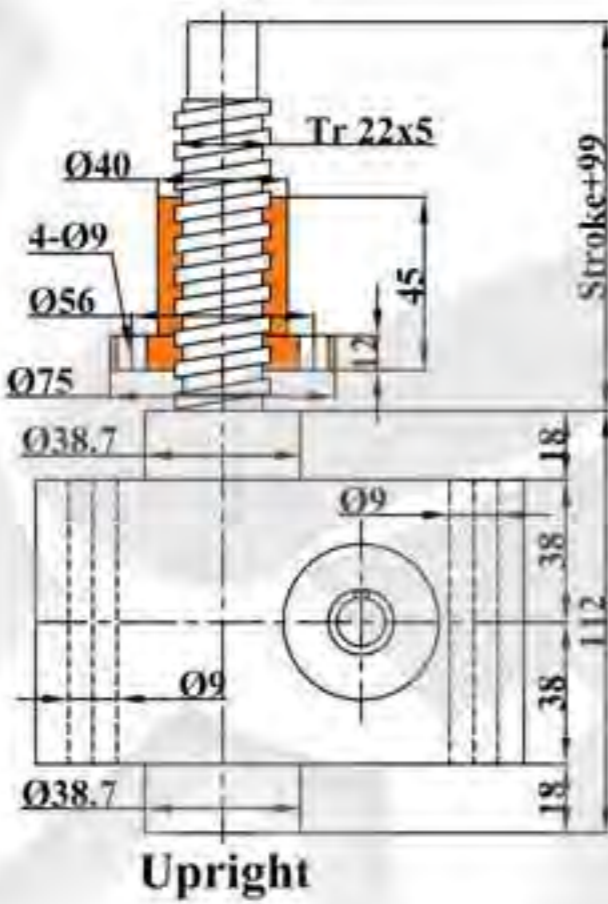
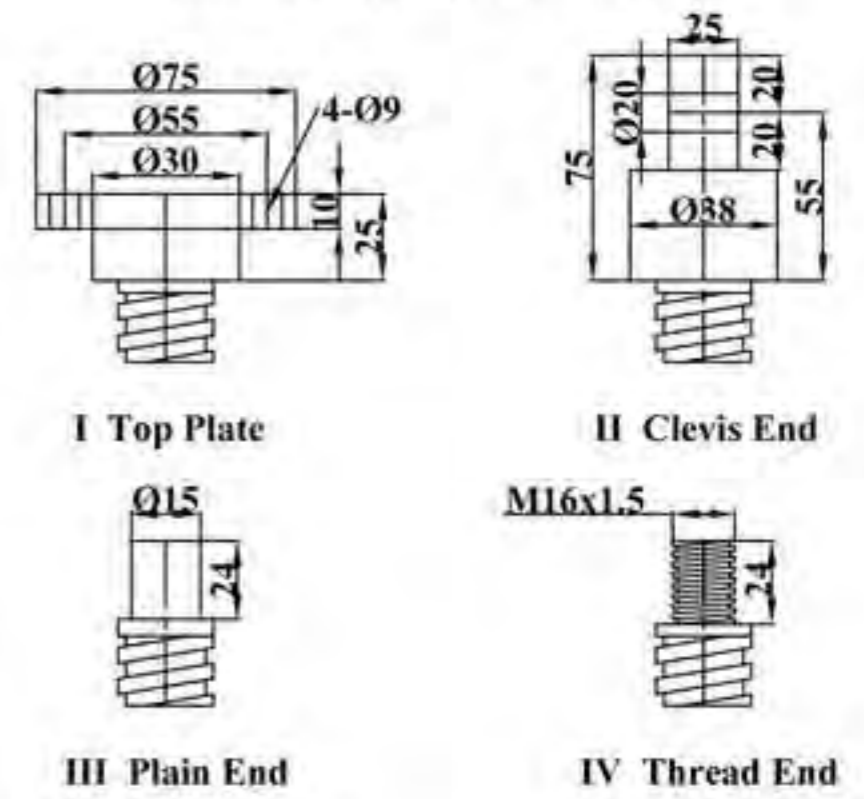
Model	JTH10	JTH25	JTH50	JTH100	JTH150	JTH200
Load Capacity (kN), (push - pull)	10	25	50	100	150	200
Lift screw sizes (mm)	Tr22 x 5	Tr30 x 6	Tr40 x 7	Tr55 x 9	Tr60 x 12	Tr70 x 12
Max. permissible operating power (kW)	H 0.5	1.1	2.2	2.3	2.8	3.8
M 0.2	0.2	0.6	1.5	1.6	2.5	
L 0.15	0.15	0.5	1.1	1.1	2.1	3
Gear ratio (H)	H 5:1	6:1	7:1	7:1	8:1	7:1
M 16:1	16:1	18:1	14:1	14:1	24:1	
L 24:1	24:1	24:1	28:1	28:1	32:1	28:1
Lift screw travel (mm), per turn of input shaft	H 1	1	1	1.28	1.5	1.71
M 0.31	0.31	0.33	0.5	0.64	0.5	
L 0.21	0.21	0.25	0.25	0.32	0.375	0.43
Total Efficiency %	H 28	27	25	19	19	19
M 25	25	24	20	16	16	
L 21	21	19	18	14	14	14
Starting torque (Nm) on input shaft at max. load	H 9	20	44	113	174	325
M 3.5	3.5	8.3	25	68	83	
L 2.5	2.5	7.6	18	46	69	125
Reactive torque (Nm) on lift screw required at max. load	20	65	165	460	800	1200

Dimensions

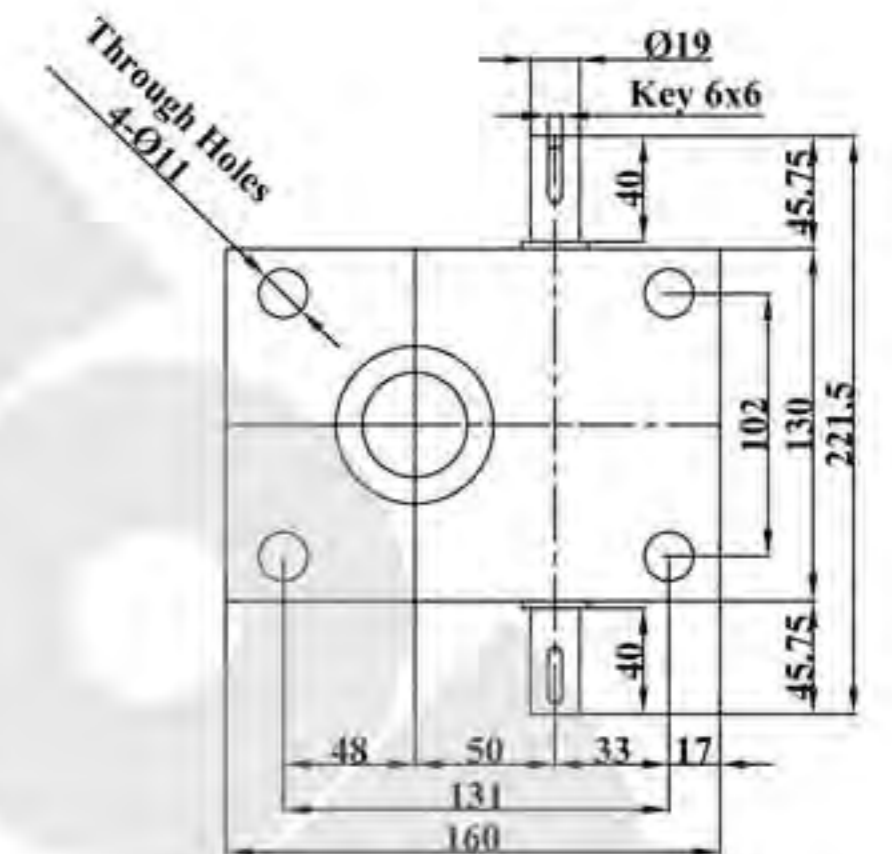
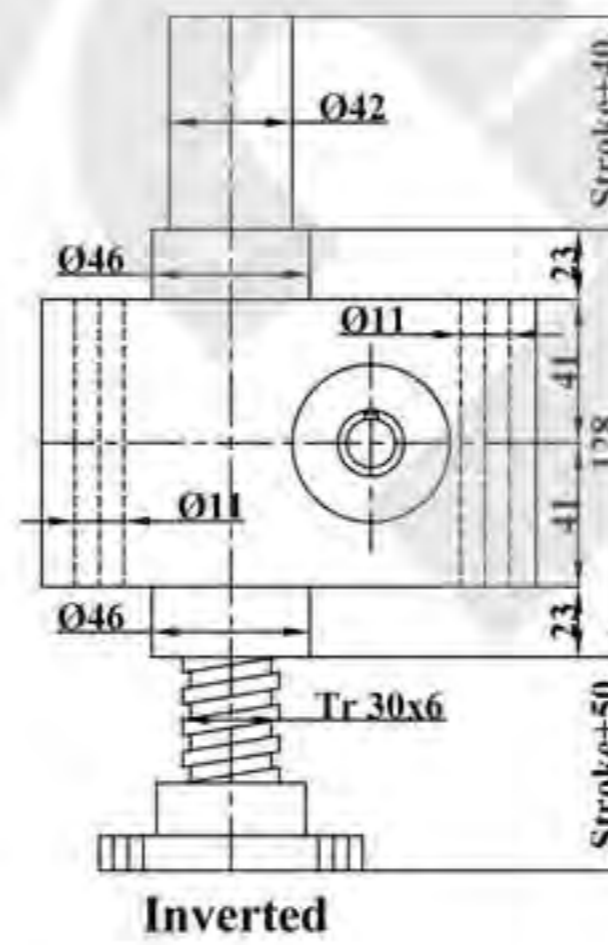
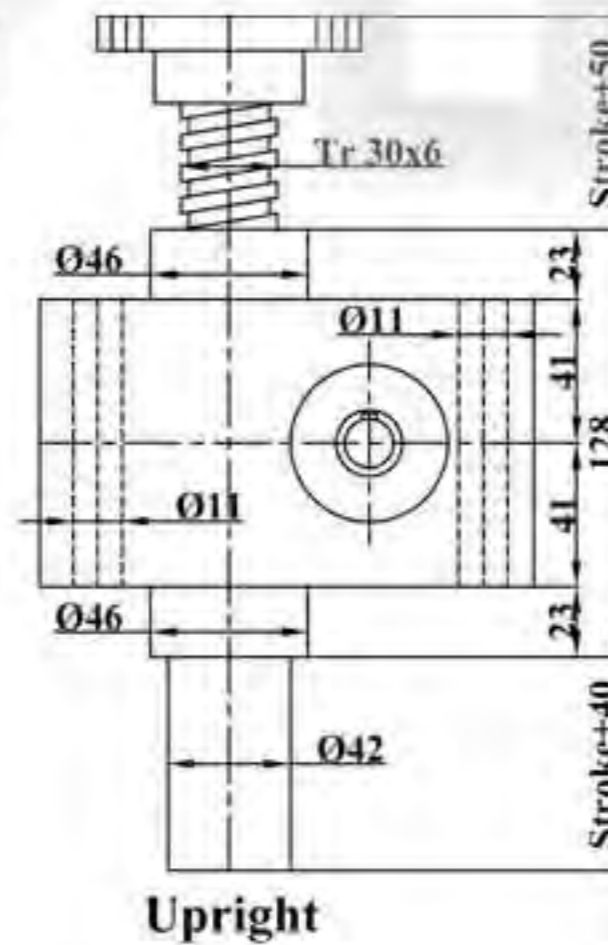
JTH10



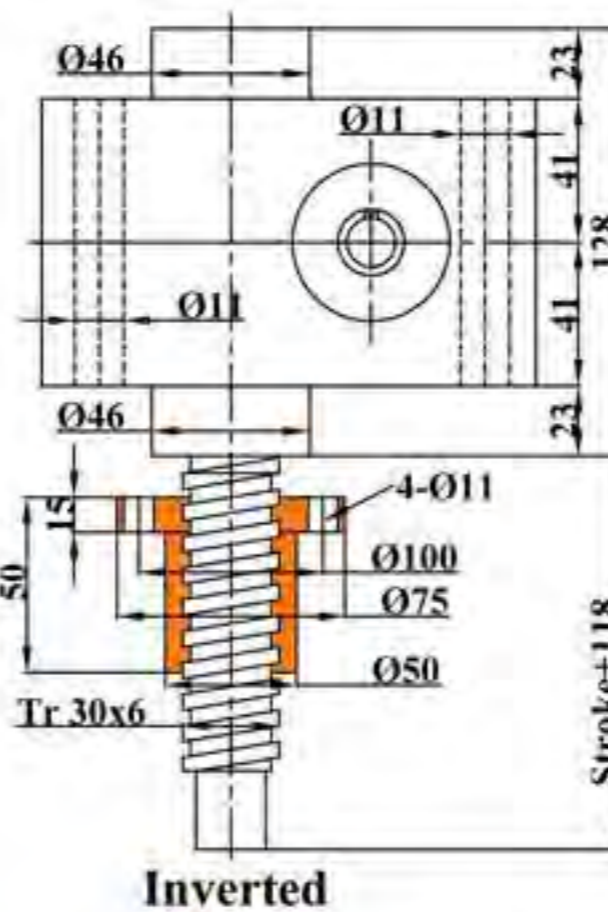
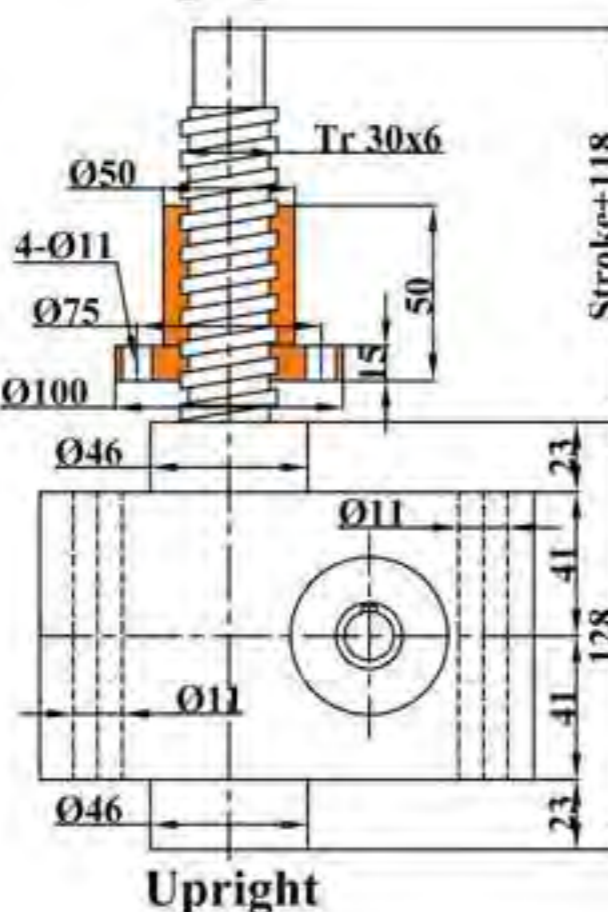
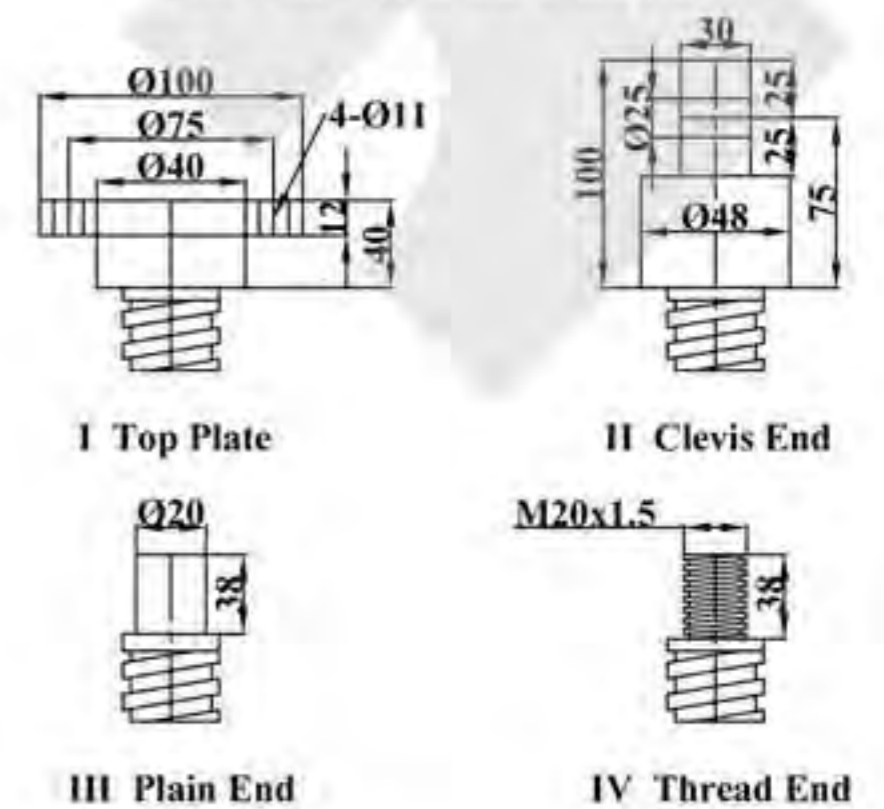
Screw End Types and Dimensions



JTH25



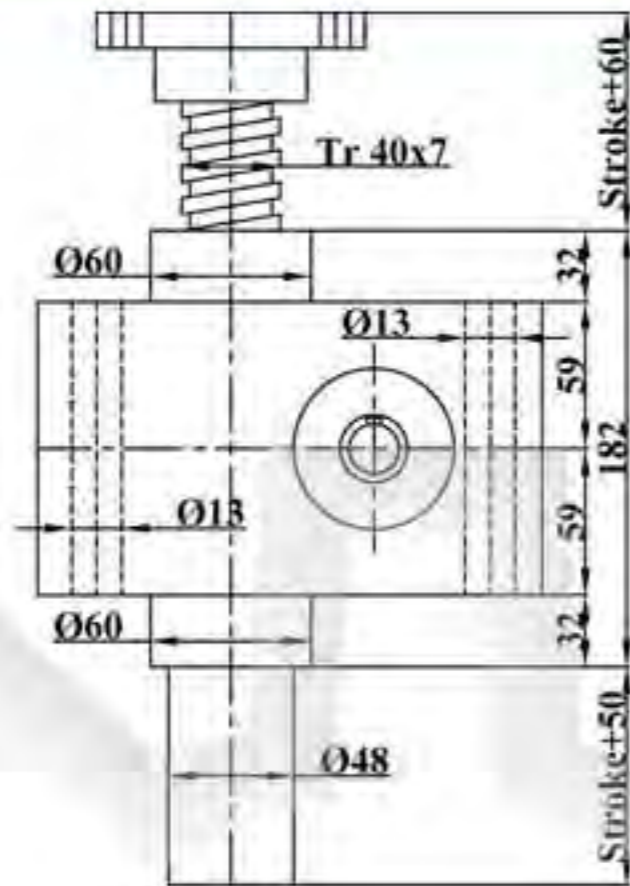
Screw End Types and Dimensions



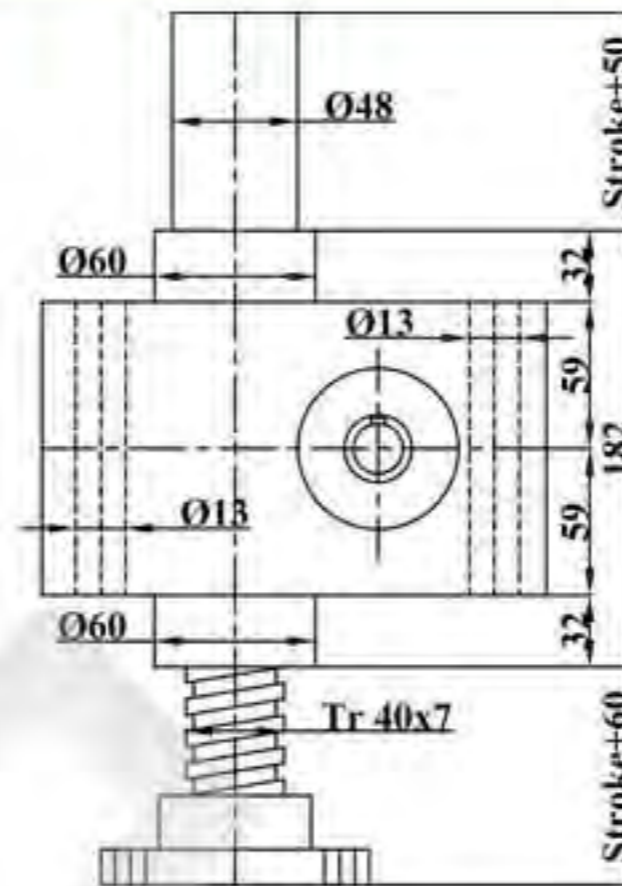
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Dimensions

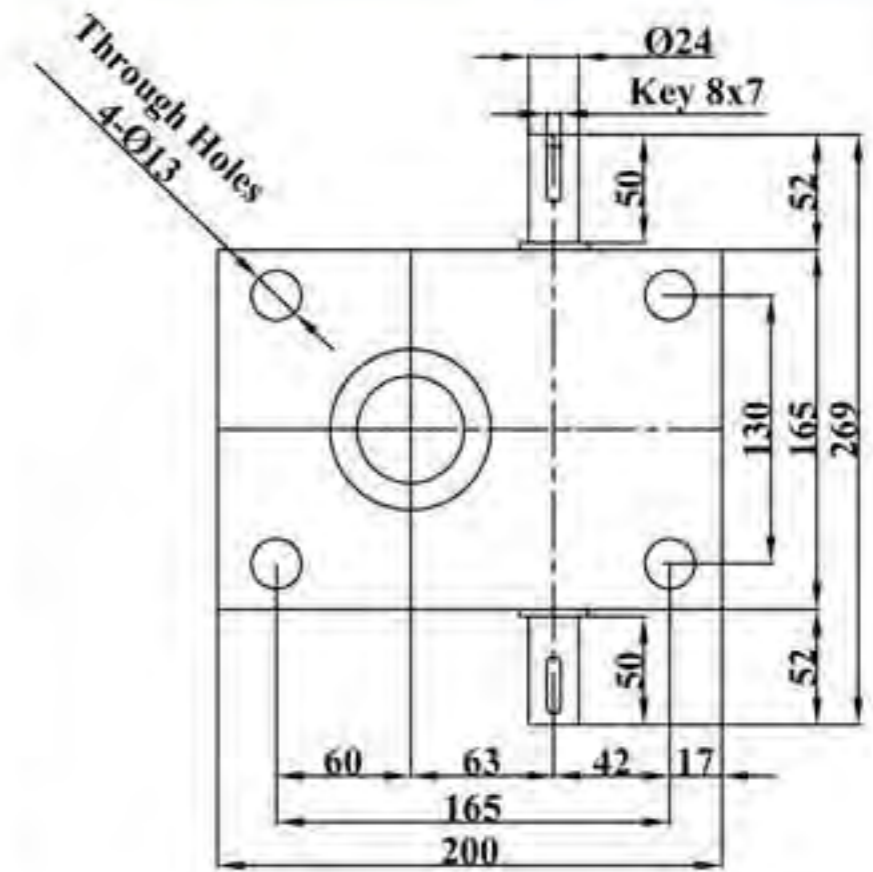
JTH50



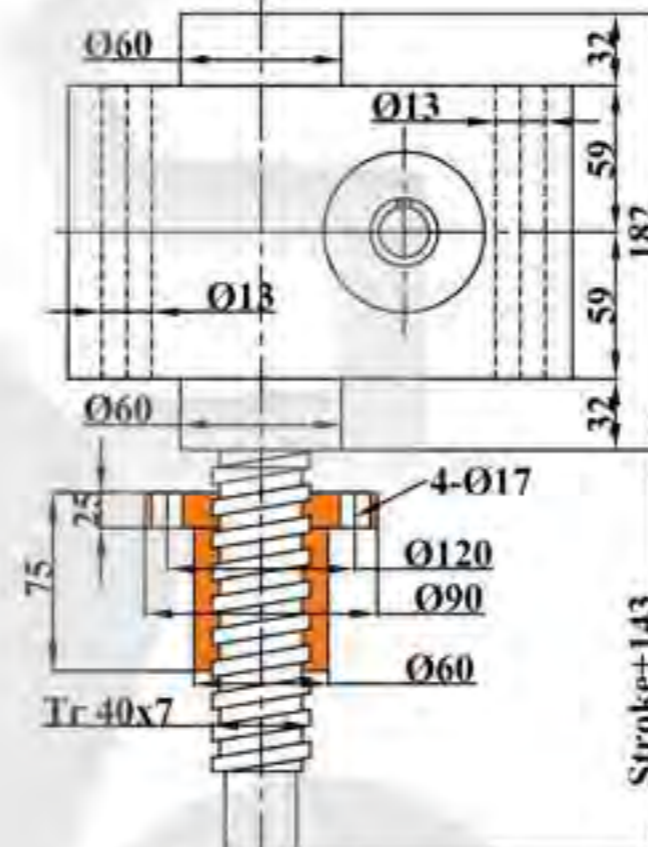
Upright



Inverted

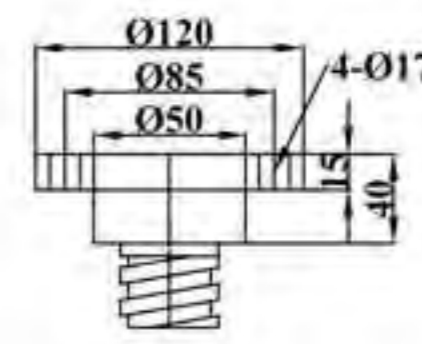


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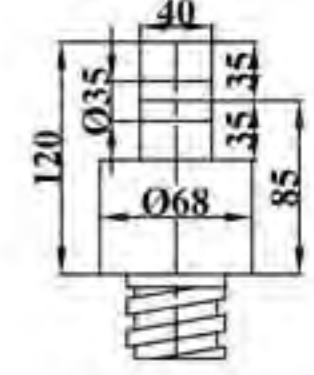


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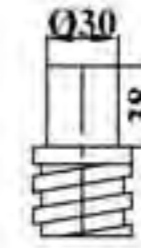
Screw End Types and Dimensions



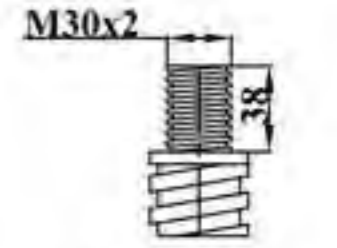
I Top Plate



II Clevis End

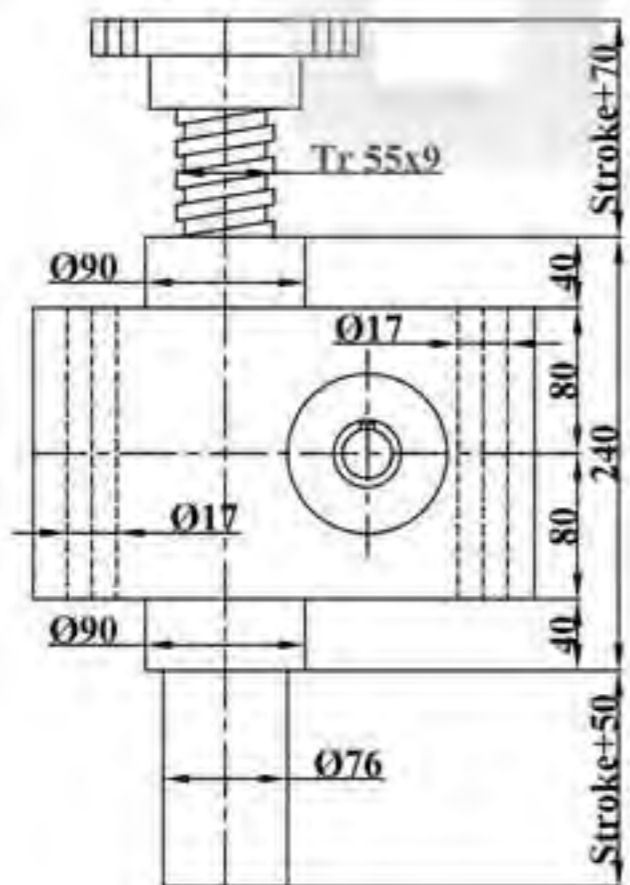


III Plain End

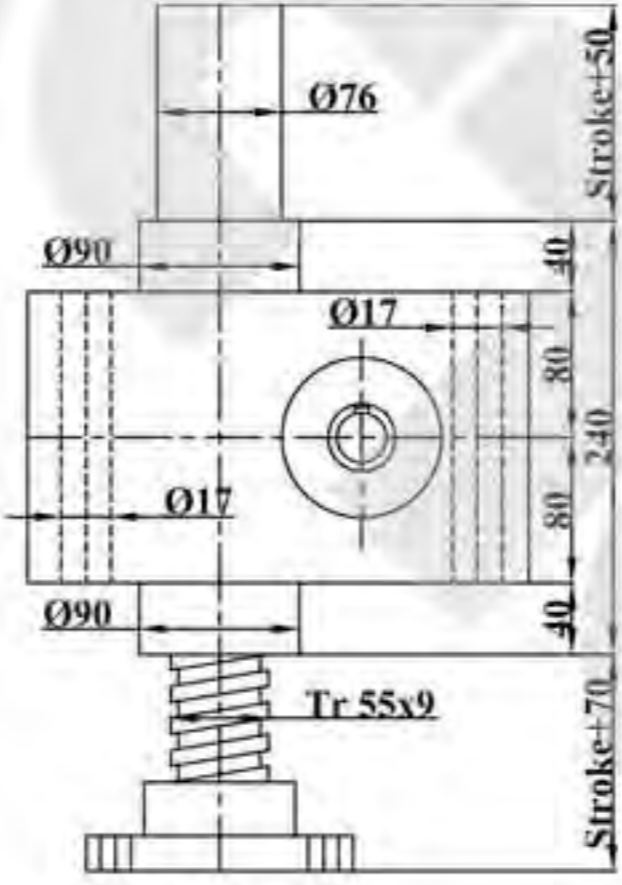


IV Thread End

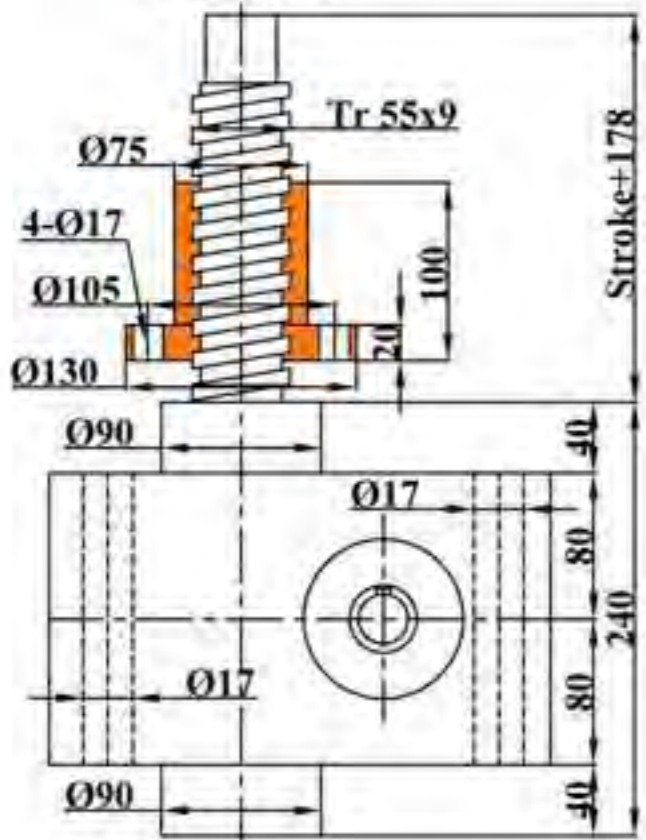
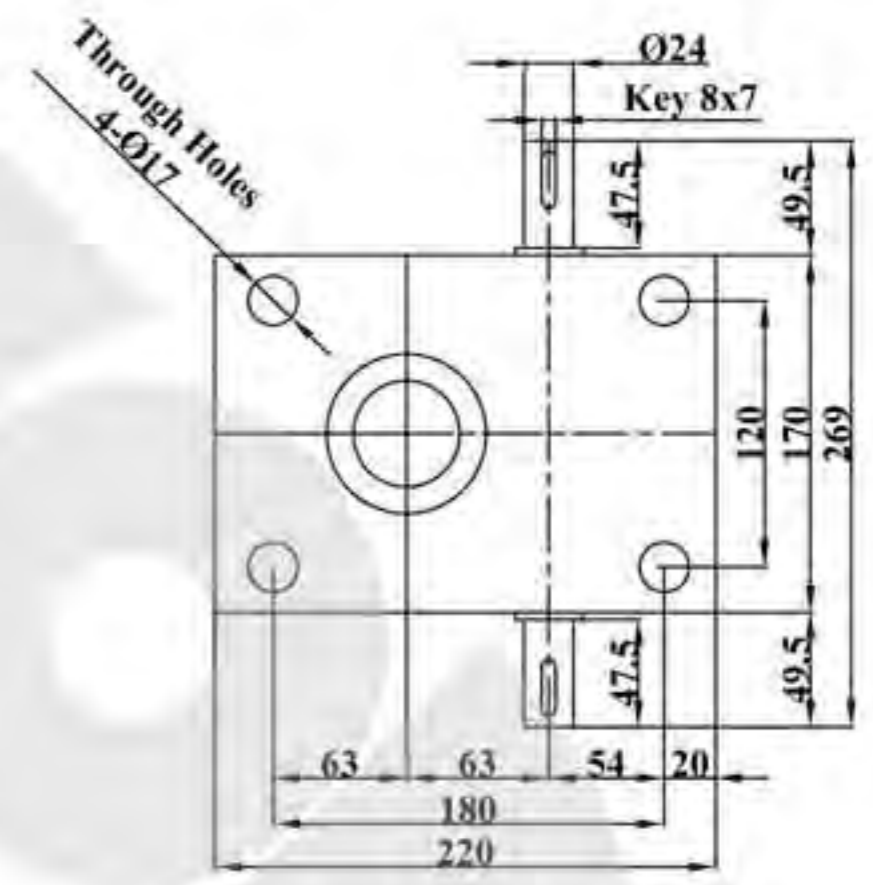
JTH100



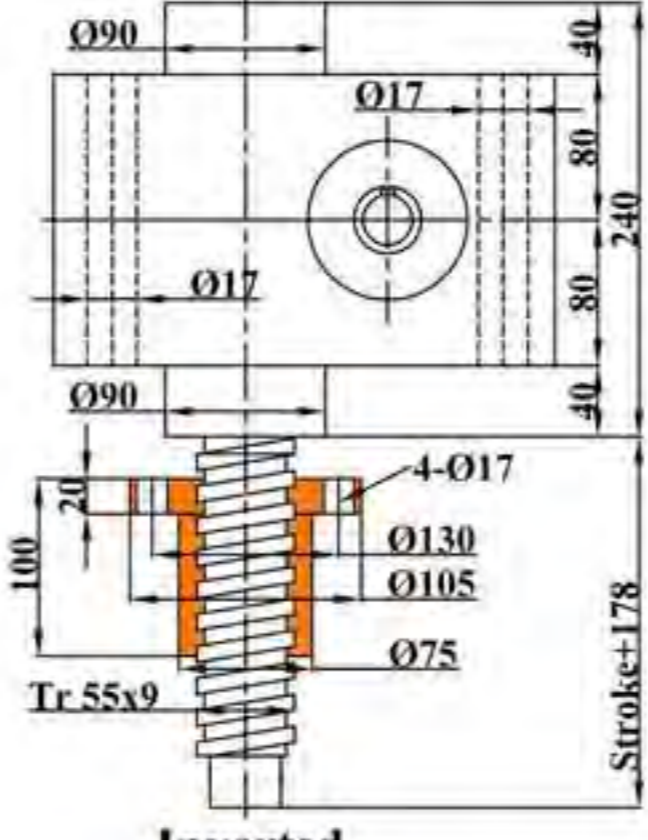
Upright



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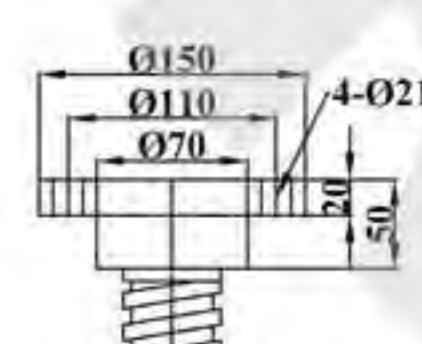


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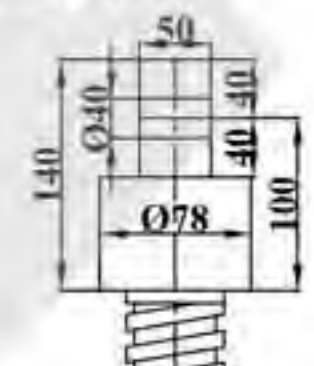


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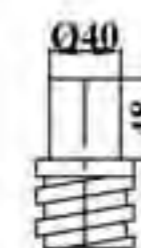
Screw End Types and Dimensions



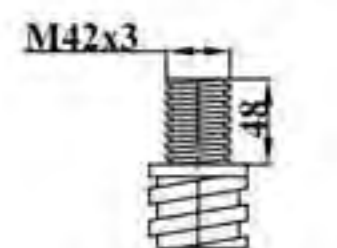
I Top Plate



II Clevis End



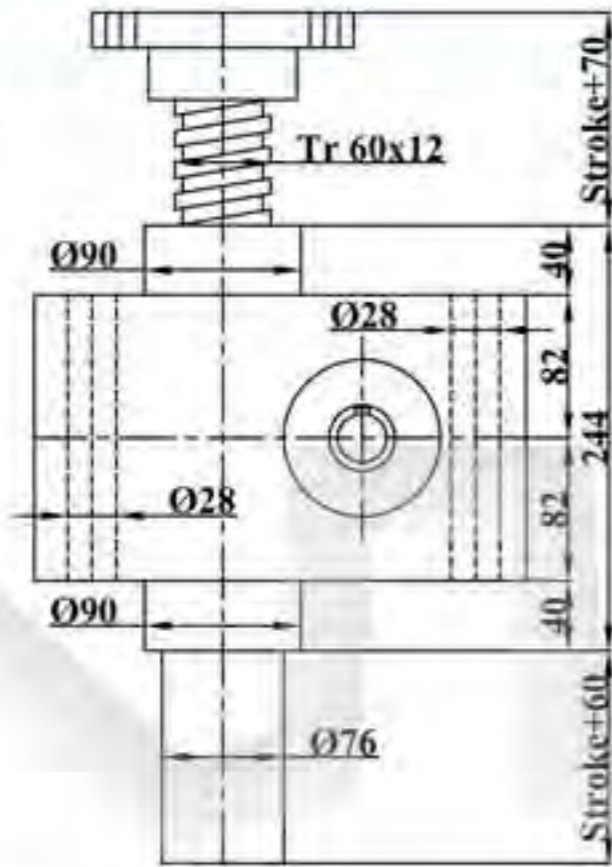
III Plain End



IV Thread End

Dimensions

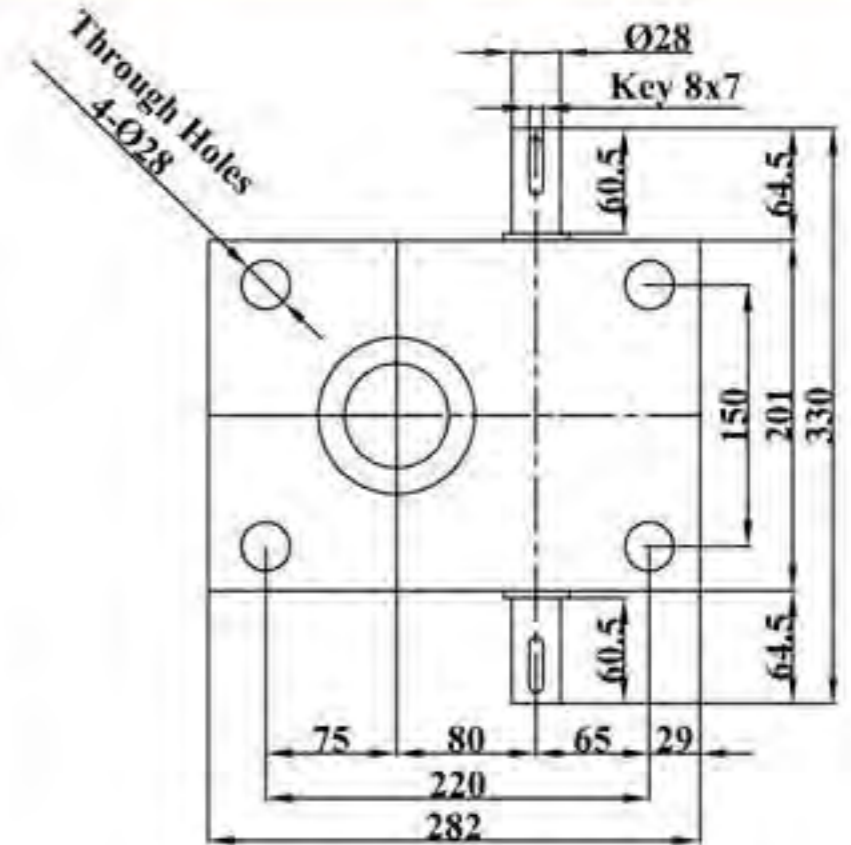
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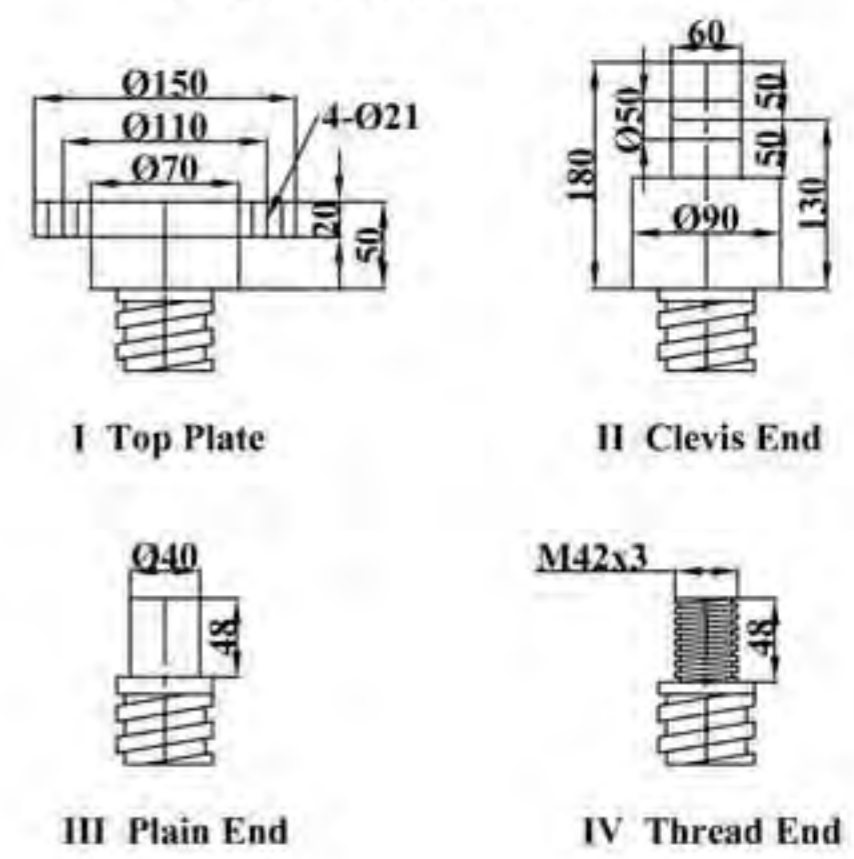
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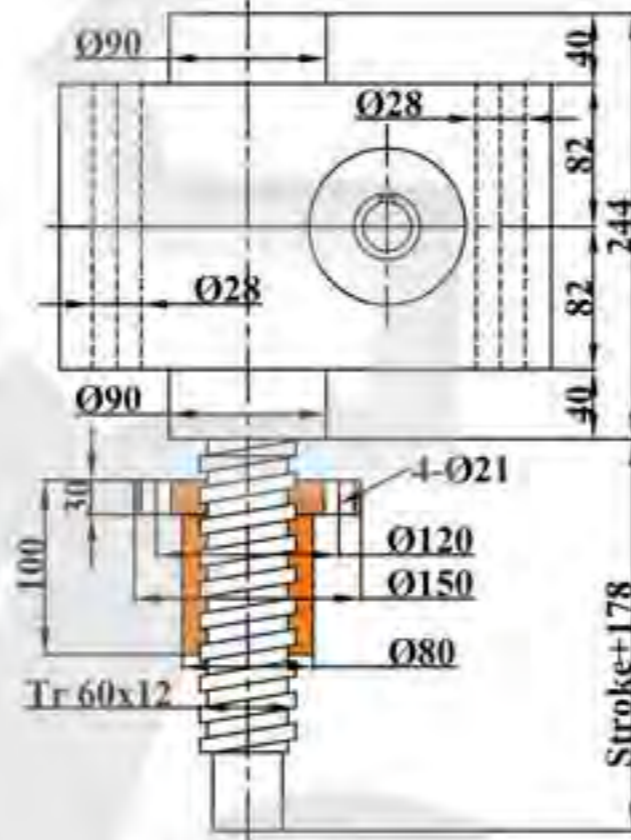
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Screw End Types and Dimensions

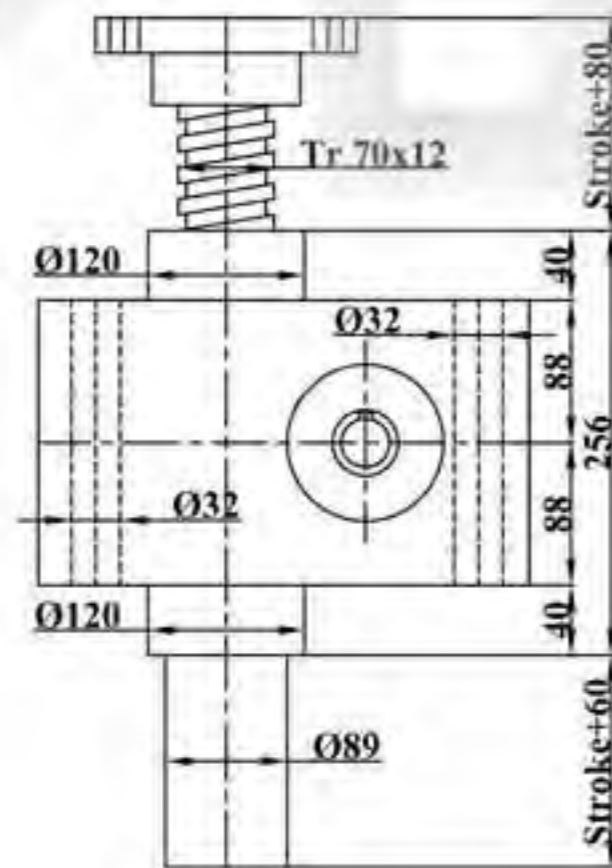


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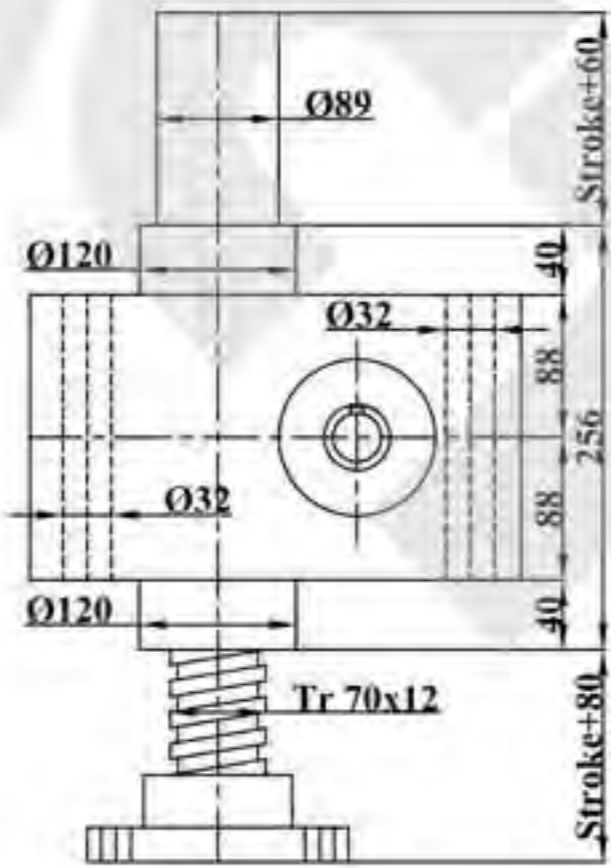


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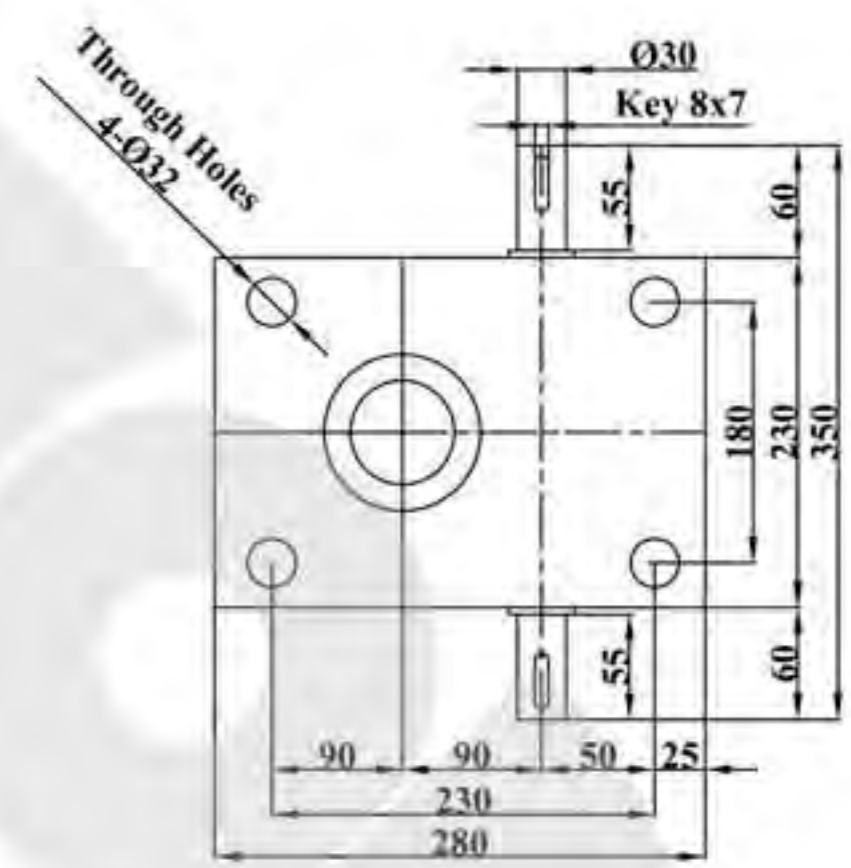
JTH200



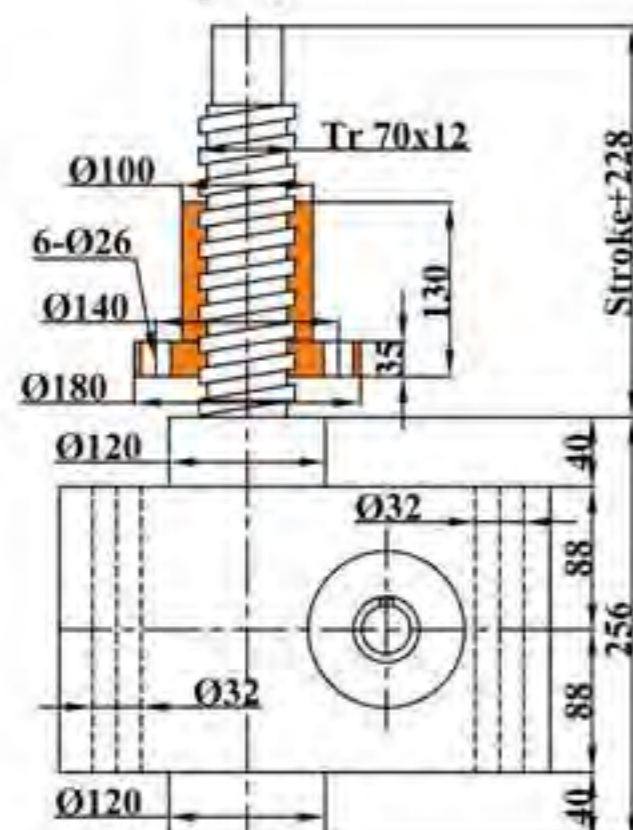
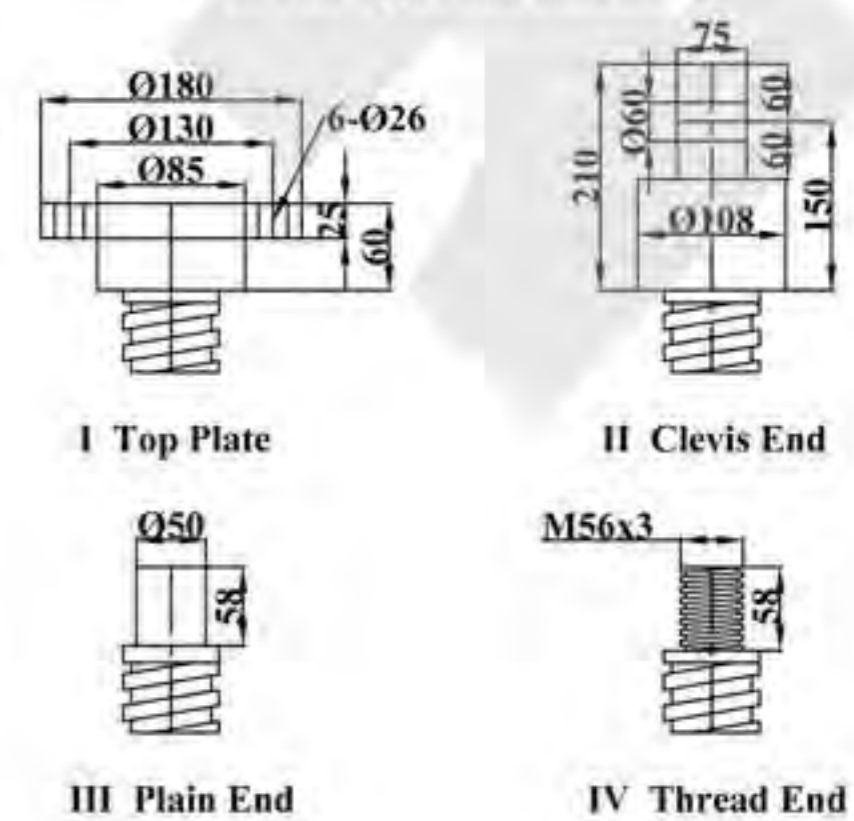
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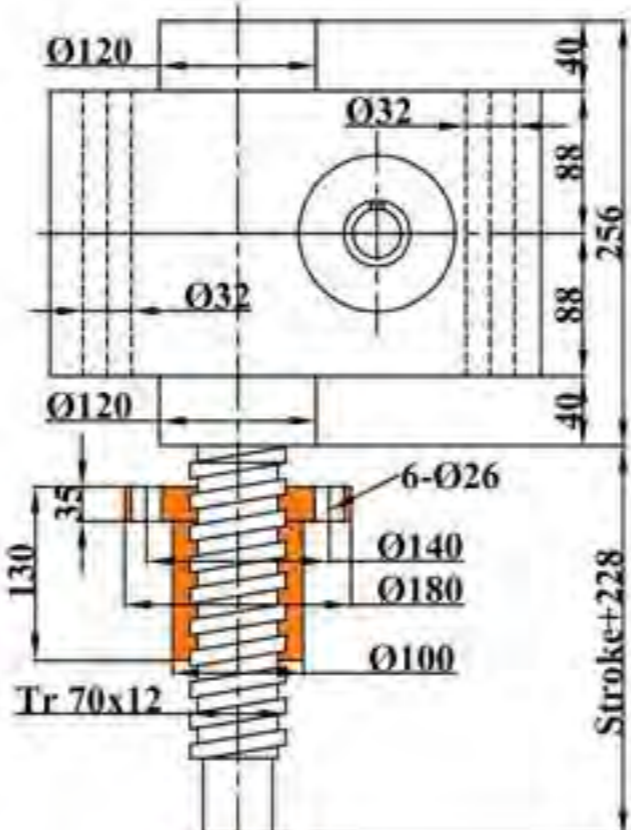
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Screw End Types and Dimensions



Upright



Inverted



*. Dimensions are subject to change without notice