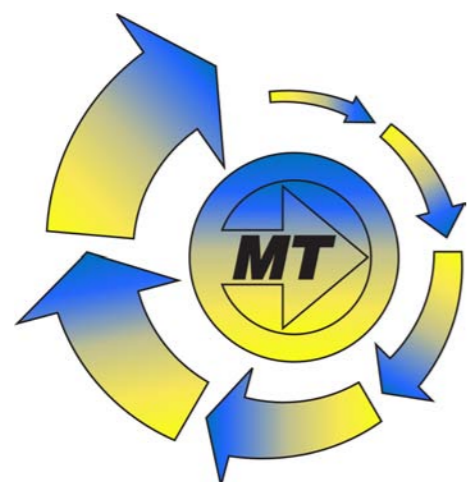


JTE

Electric Cylinder

Contents

Product Description	001
Sample Part Number	003
Specifications	004
Dimensions	005



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2D/3D
CAD

JACTON[®]



Product Description

JACTON JTE Series Electric Cylinder are basically worm gear screw jacks with travelling nut, but with lifting cylinder design. Available in ball screw and machine screw. The screw is fully enclosed by push rod which is guided in external protection tube, that is well suited for industrial environments where protection of the lifting screw mechanism and dependable operation are critical. As a better choice over hydraulic actuators or pneumatic cylinders with this clean alternative, simpler to install, control, low maintenance and a quieter solution. In the absence of vibration load, they have self locking and precisely position loads, will hold loads without backdriving.

● Features:

- * Available in machine screw and ball screw, precise positioning, and uniform speed.
- * Available in 4 sizes from JTE-2.5T to JTE-20T.
- * Available in Direct Motor Mounts and Parallel Motor Mounts with additional gearboxes.
- * Static load capacity from 2.5 ton to 20 ton. Custom 30 ton, 50 ton, 75 ton and 100 ton.
- * Machine screw diameter from 26 mm to 65 mm. Custom larger diameter screw.
- * There are no "standard" travel lengths. each electric cylinder jack is built to specification.
- * Each Model has TWO gear ratios, they are High ratio and Slow ratio.
- * Machine Screw Ends: Threaded End, Top Plate, Clevis End, Rod End, and Fork Head.
- * Can be operated by manually operated or by electrically driven.
- * Single unit use, or multi-spindle jacking systems including gear motors, bevel gearboxes, connecting shafts and couplings for dual or multiple jack arrangements.
- * Standard model Electric Cylinder Jacks are purchased without a motor or external gear reducer.

NOTE: Brake motors must be specified for all ballscrews Electric Cylinder Jacks. and for any machine screw Electric Cylinder Jacks with an efficiency ratio greater than or equal to 30%.

Product Description

● **Materials:**

- * Trapezoidal Screw: Carbon steel #45. Custom stainless steel.
- * Translating Tube(Push Rod): High strength steel. Custom stainless steel.
- * External Protection Tube: High strength steel. Custom stainless steel.
- * Worm(Input Shaft): Hardened worm, carbon steel #45. Custom stainless steel.
- * Worm Gear(Wheel): High strength bronze.
- * Travelling Nut: High strength bronze.
- * Housing(Gearbox): Ductile Iron. Custom stainless steel.

● **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.
- * 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.

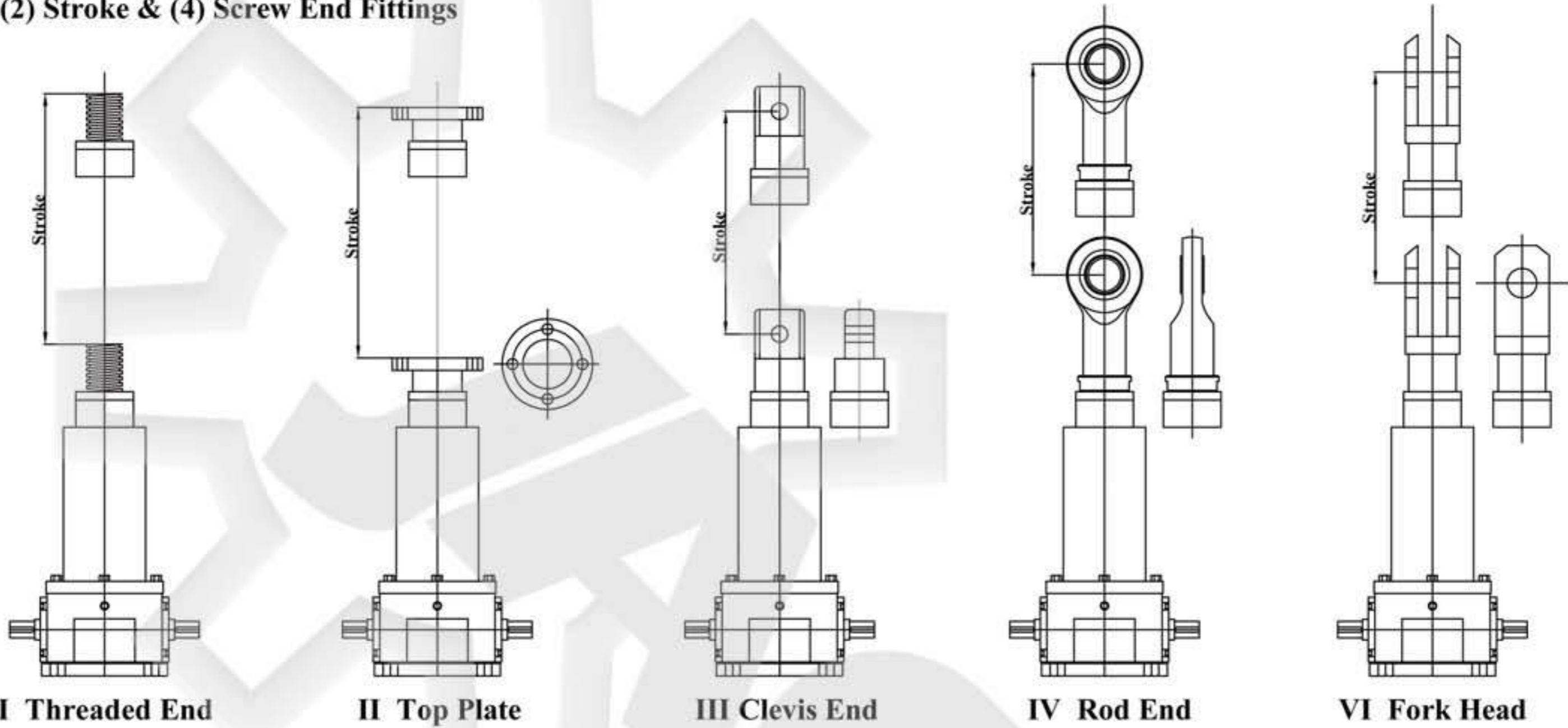
Sample Part Number

Sample Part Number: $\frac{\text{JTE-10T}}{(1)} - \frac{500}{(2)} - \frac{\text{H}}{(3)} - \frac{\text{IV}}{(4)} - \frac{\text{C}}{(5)} - \frac{\text{BB}}{(6)}$

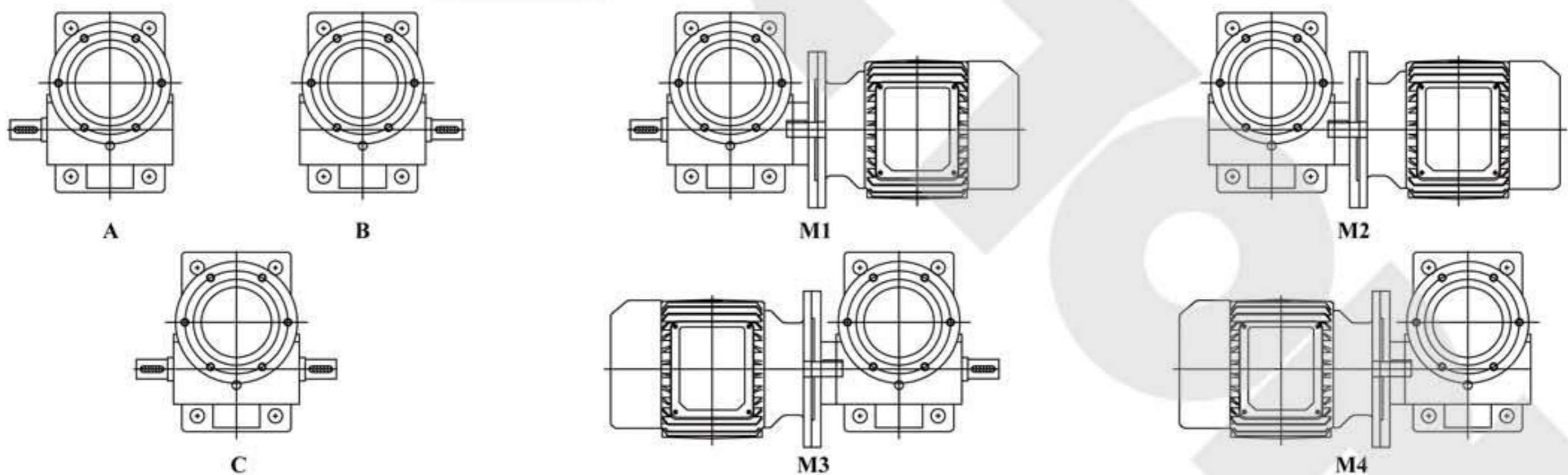
(1) Models & (3) Ratios

JTE -2.5T H: 6:1, L: 24:1	JTE -5T H: 6:1, L: 24:1	JTE -10T H: 8:1, L: 24:1	JTE -20T H: 8:1, L: 24:1	H: High Ratio L: Slow Ratio
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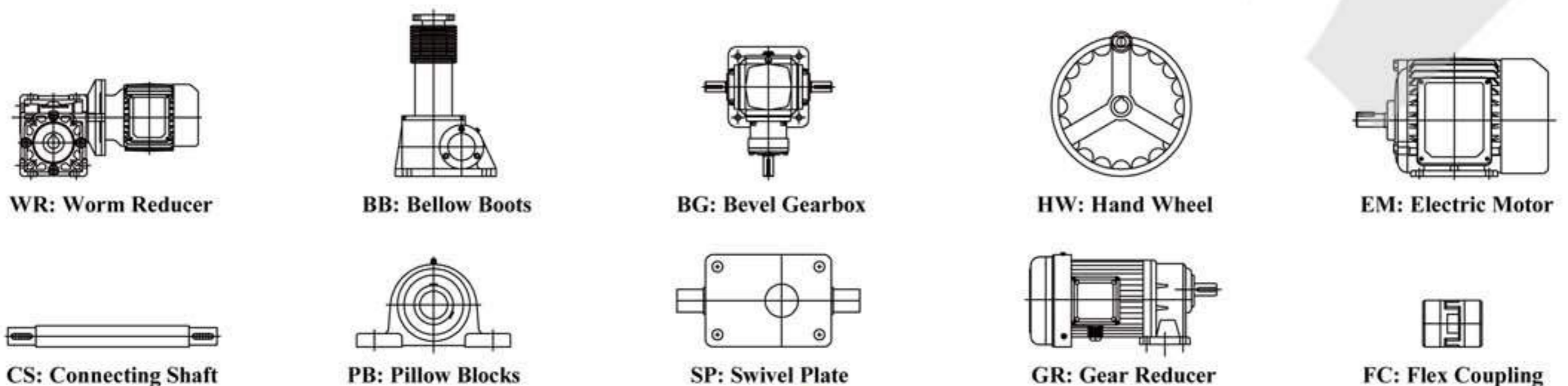
(2) Stroke & (4) Screw End Fittings



(5) Input Shafts Types & Motor Flange Types



(6) Accessories



Specifications

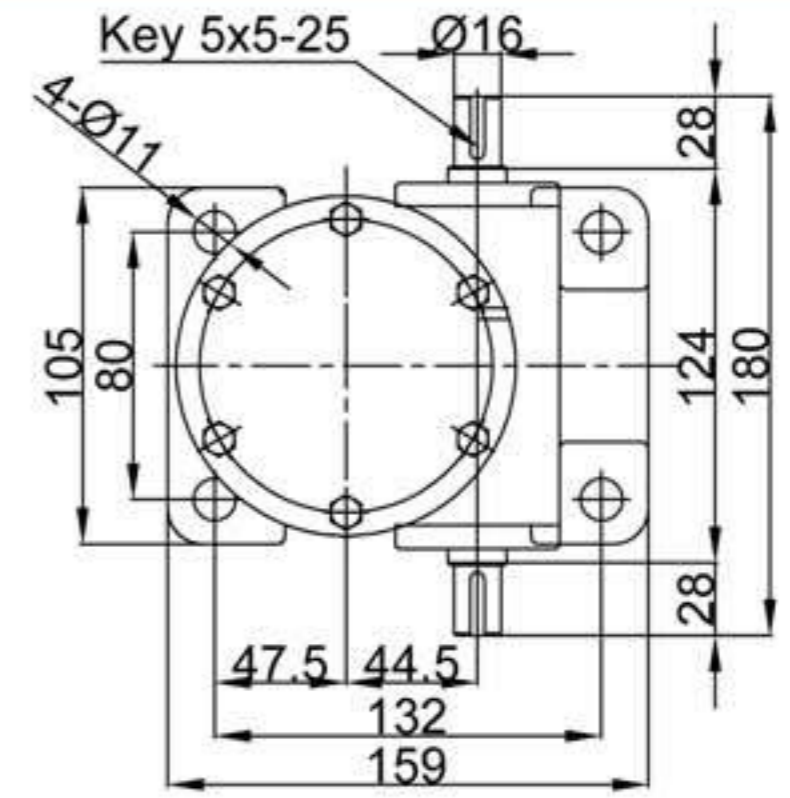
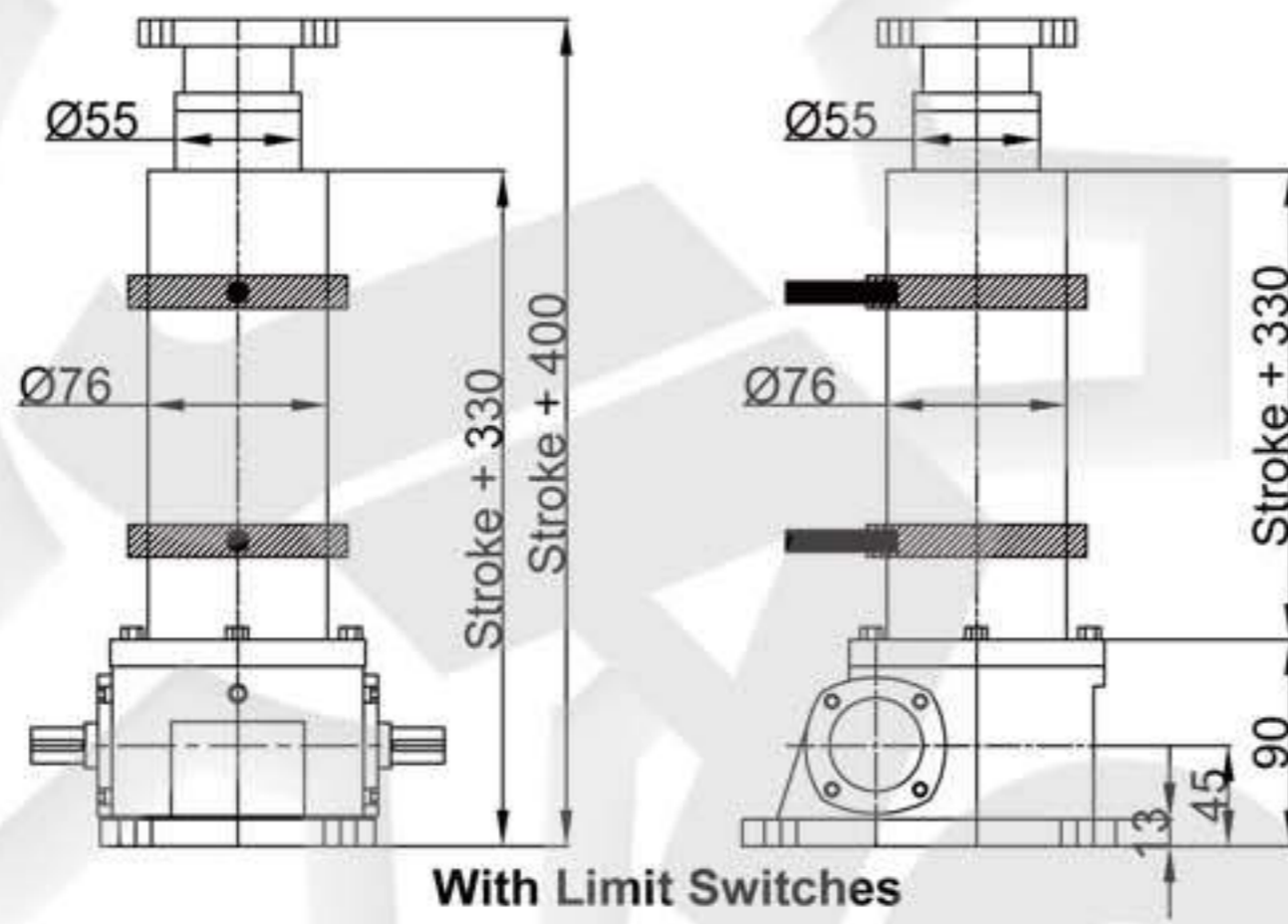
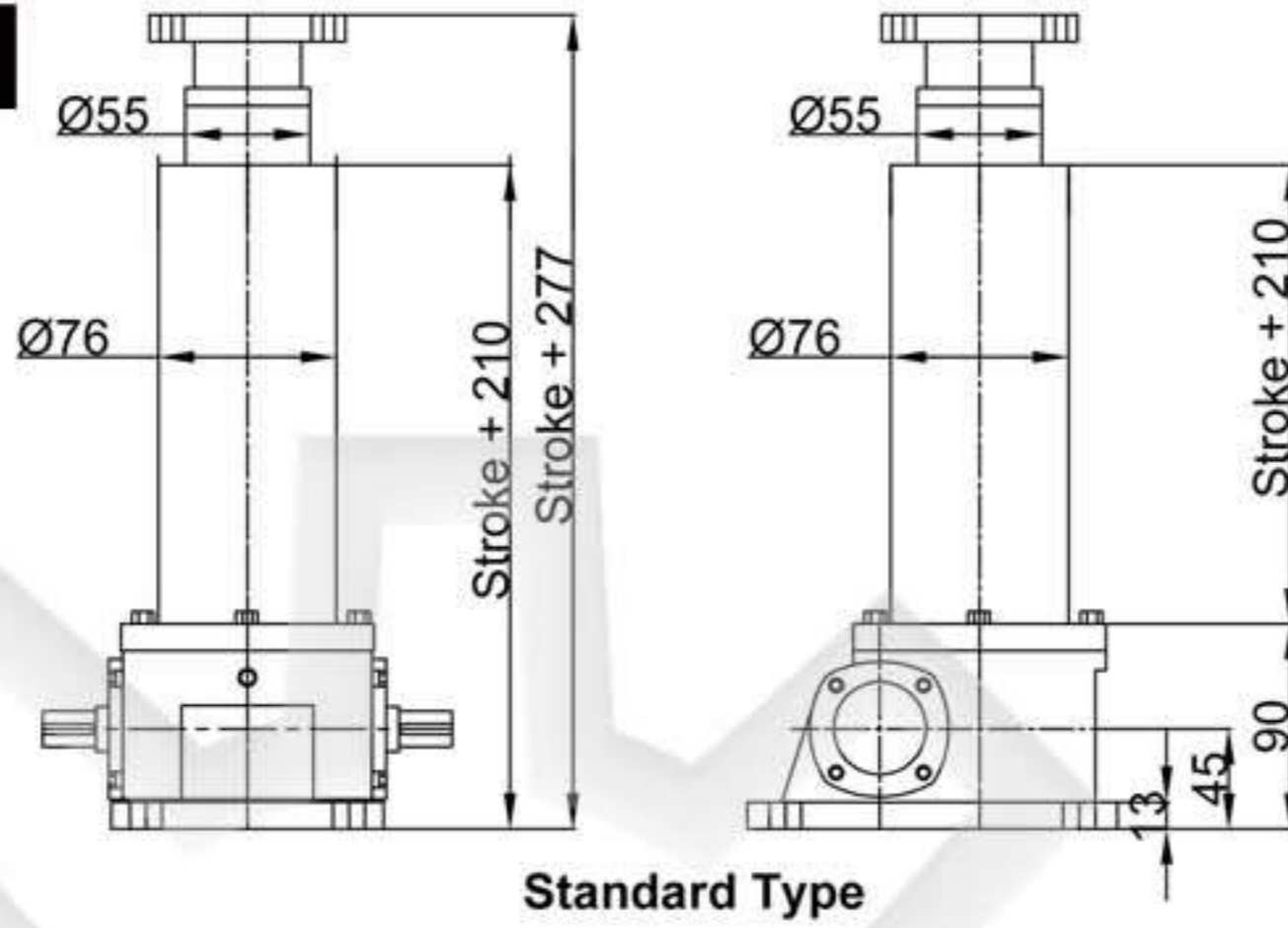
Remarks:

- 1) H: high 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.

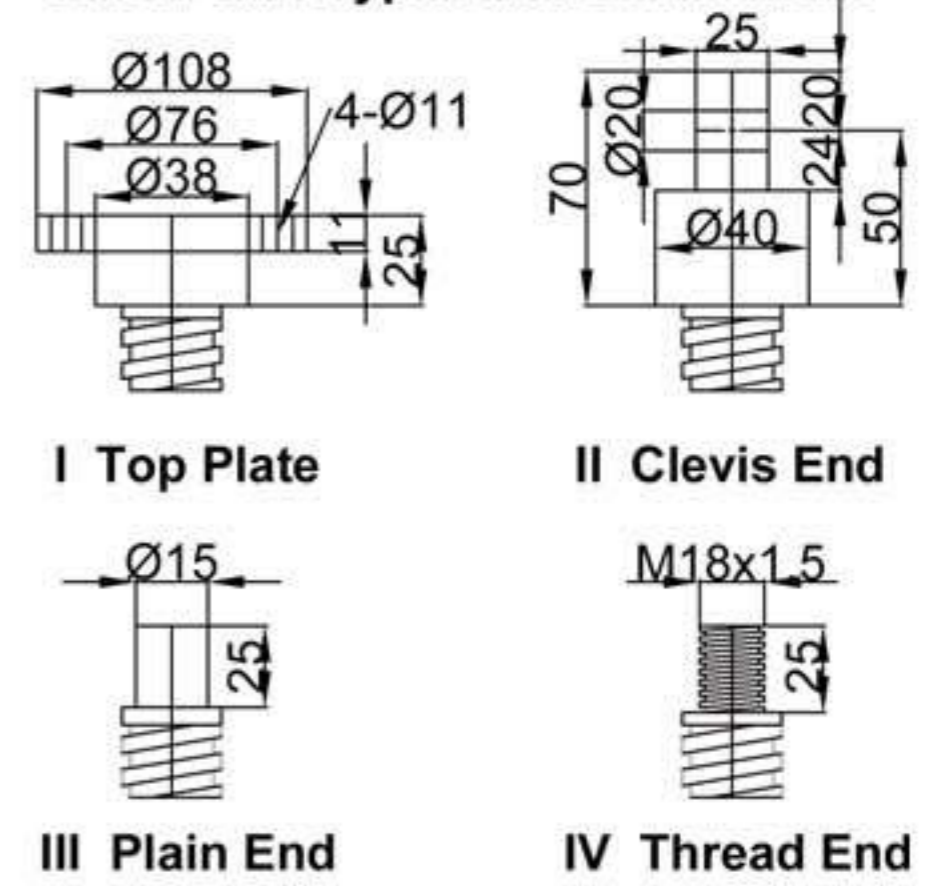
Model		JTE-2.5T	JTE-5T	JTE-10T	JTE-20T
Max. Load Capacity (Ton)		2.5	5	10	20
Lift screw sizes (mm)		Tr26 x 5	Tr40 x 8	Tr50 x 10	Tr65 x 12
Root Dia. of screw (mm)		19.7	30.5	38.4	51.3
Gear ratio	H	6:1	6:1	8:1	8:1
Lift screw travel (mm), per turn of input shaft	H	0.83	1.33	1.25	1.5
Efficiency %	H	21	22	22	20
Gear ratio	L	24:1	24:1	24:1	24:1
Lift screw travel (mm), per turn of input shaft	L	0.21	0.33	0.42	0.5
Efficiency %	L	12	14	15	13
Max. allowable power (kw)	H	1	2	2.8	5
	L	0.46	0.63	1.4	3.2
No-load torque (Nm)		0.62	1.4	2	3.9
Permissible torque of input shaft (Nm)		49	153.9	292	292
Required torque of input shaft at max. load (Nm)	H	16.1	48.7	90.7	238.1
	L	7.4	20	45.3	124
Permissible max. speed (RPM) of input shaft at max. load	H	600	400	300	200
	L	600	300	300	250
Lift screw rotational torque (Nm) at max. load		65.1	201.5	503.6	1287.7

Dimensions

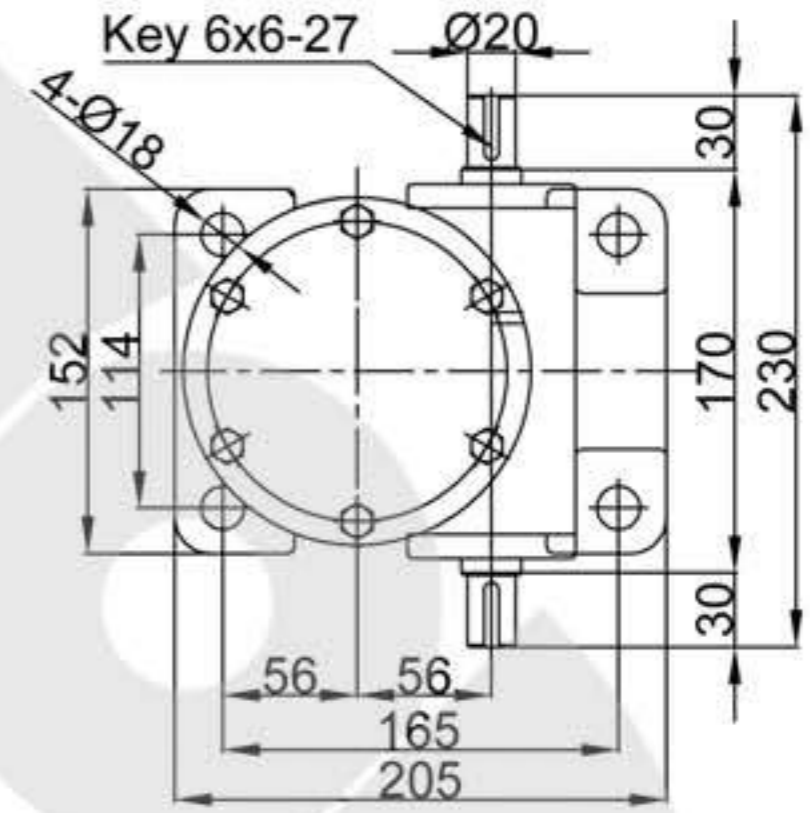
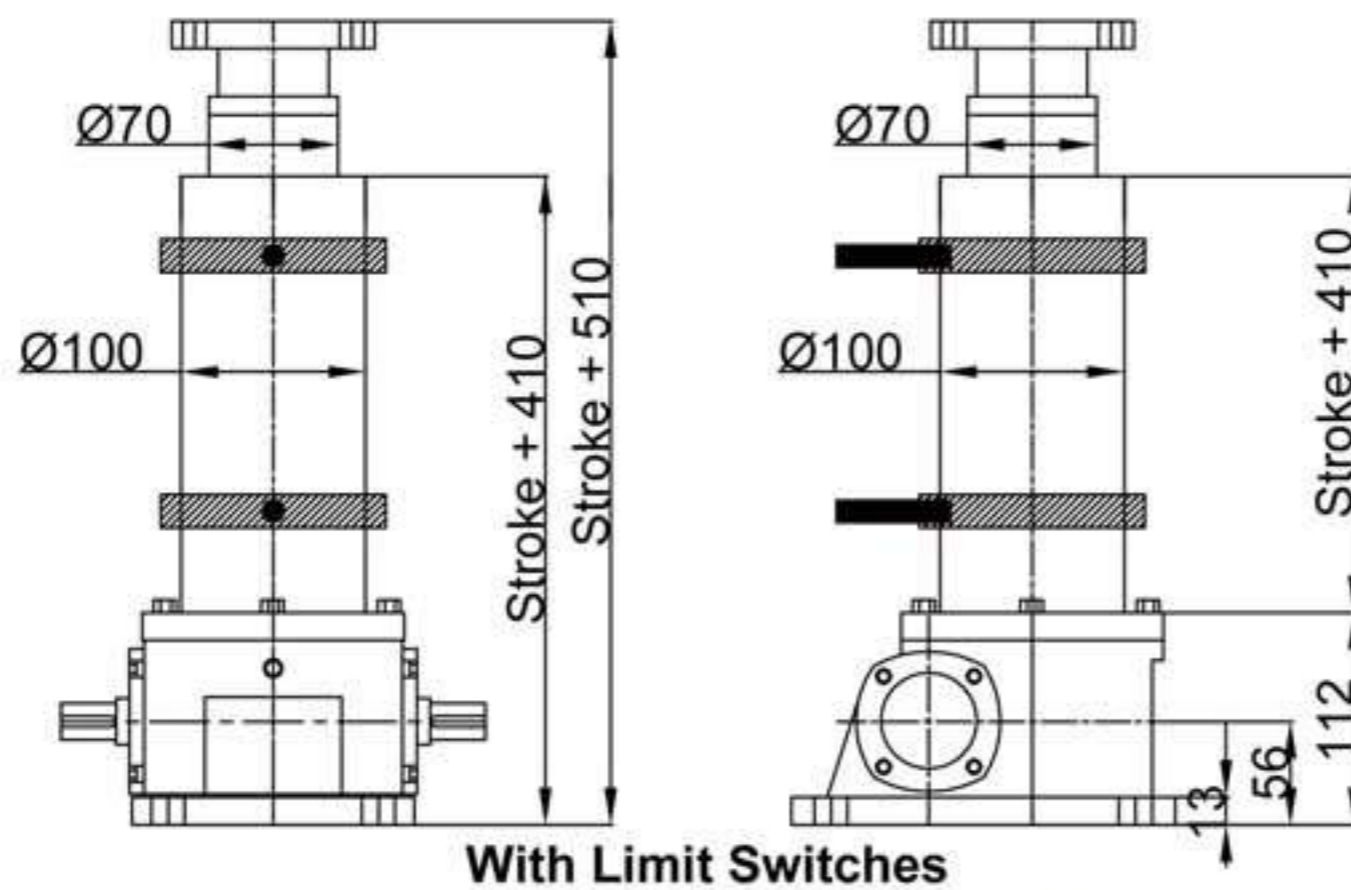
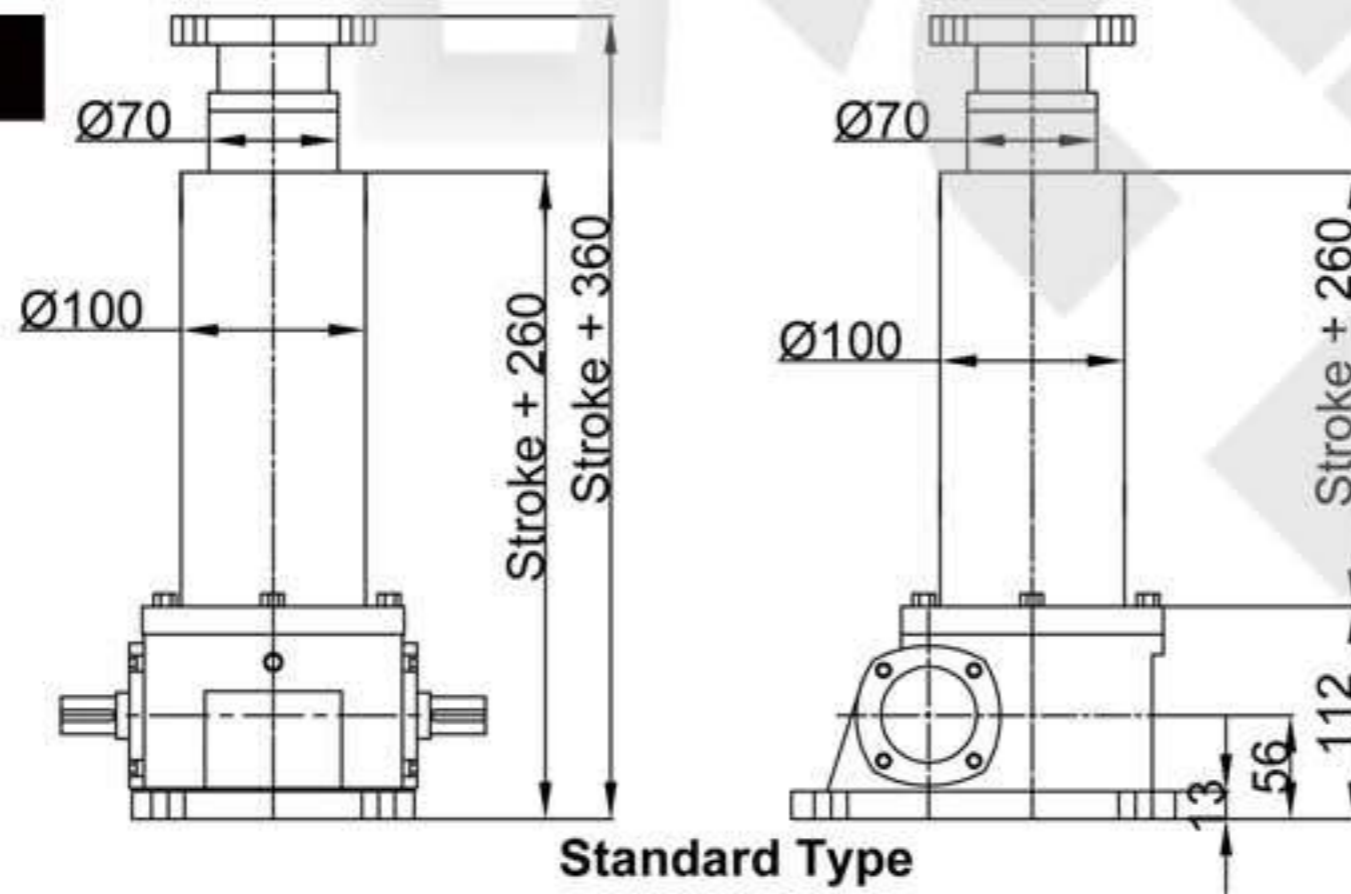
JTE-2.5T



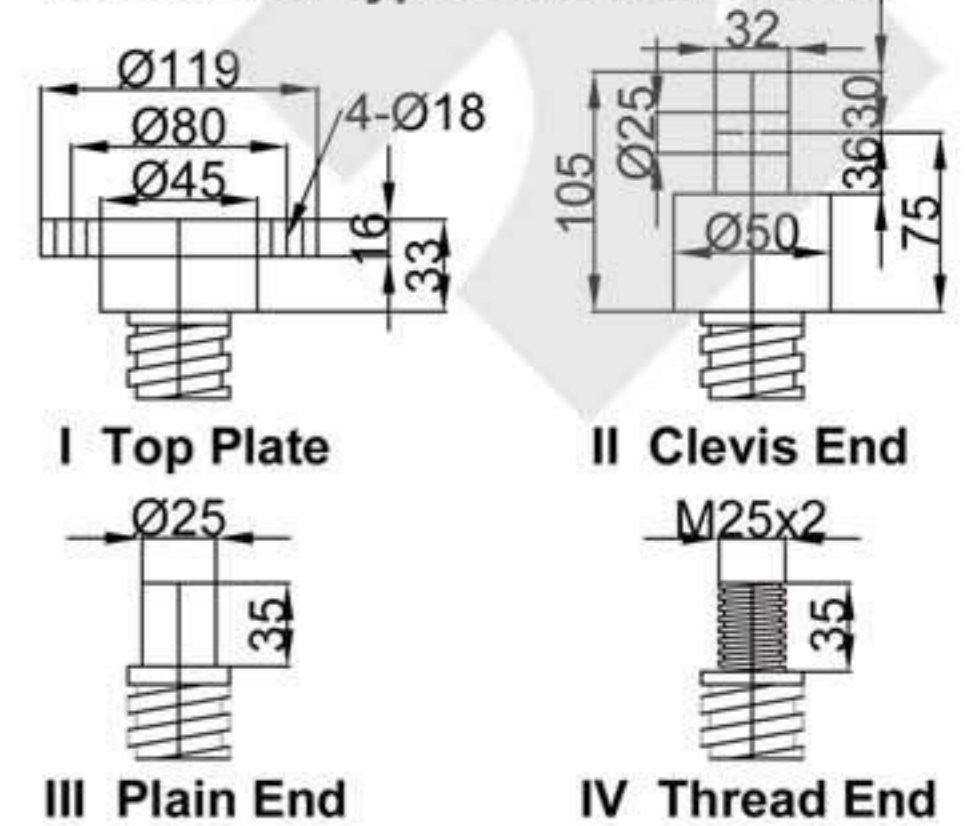
Screw End Types and Dimensions



JTE-5T

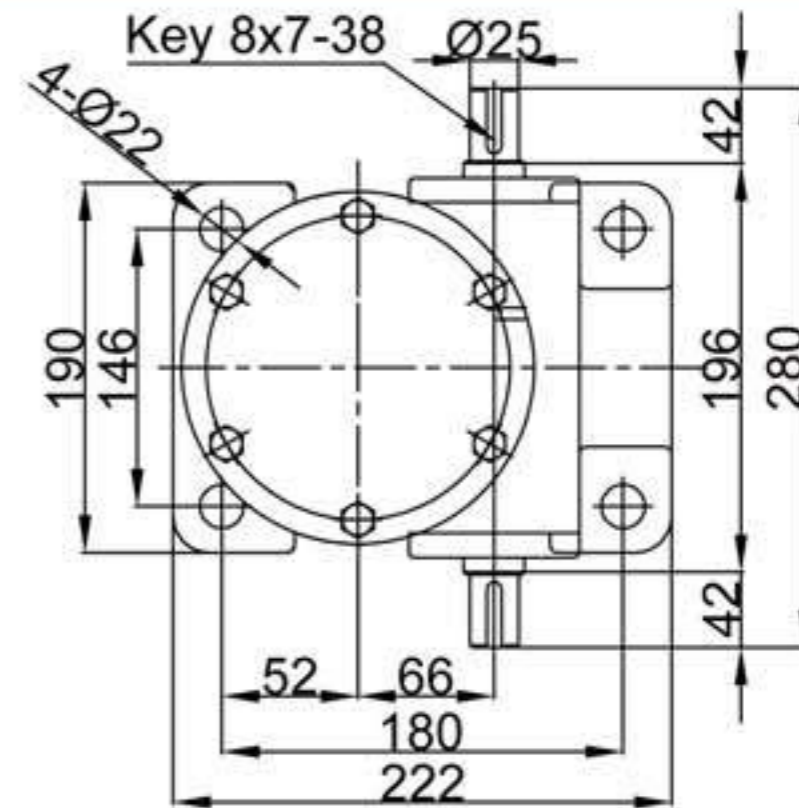
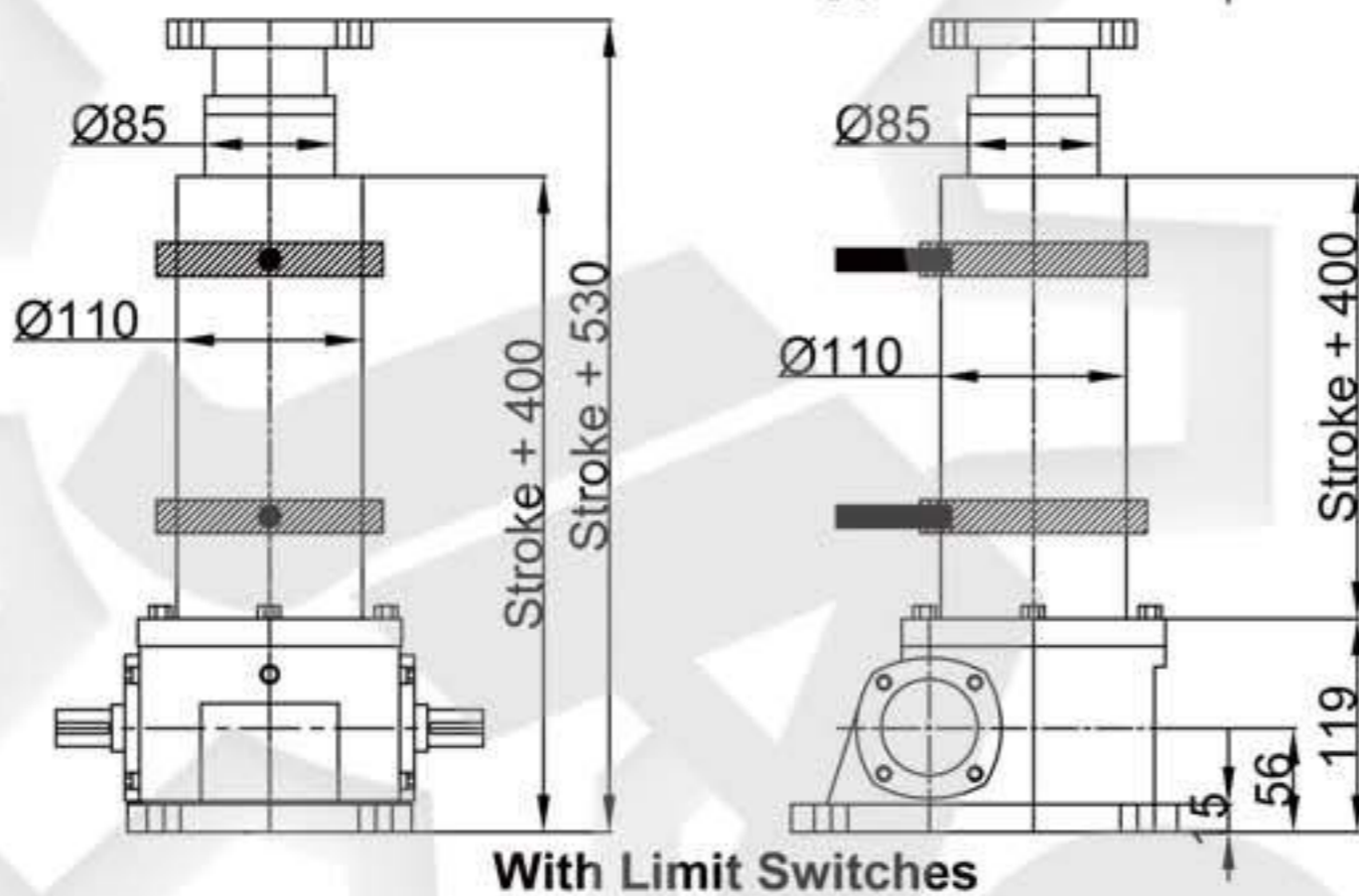
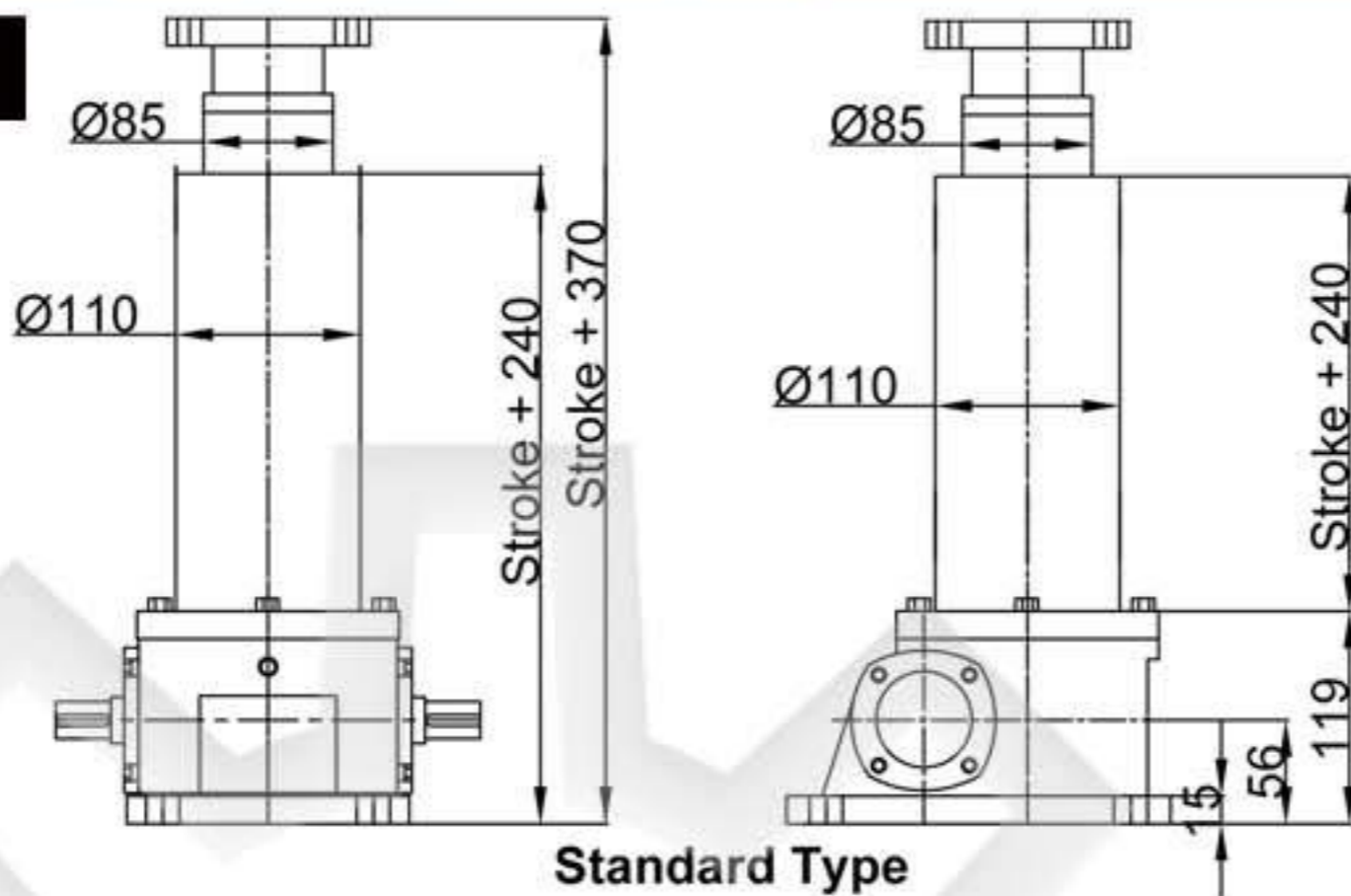


Screw End Types and Dimensions

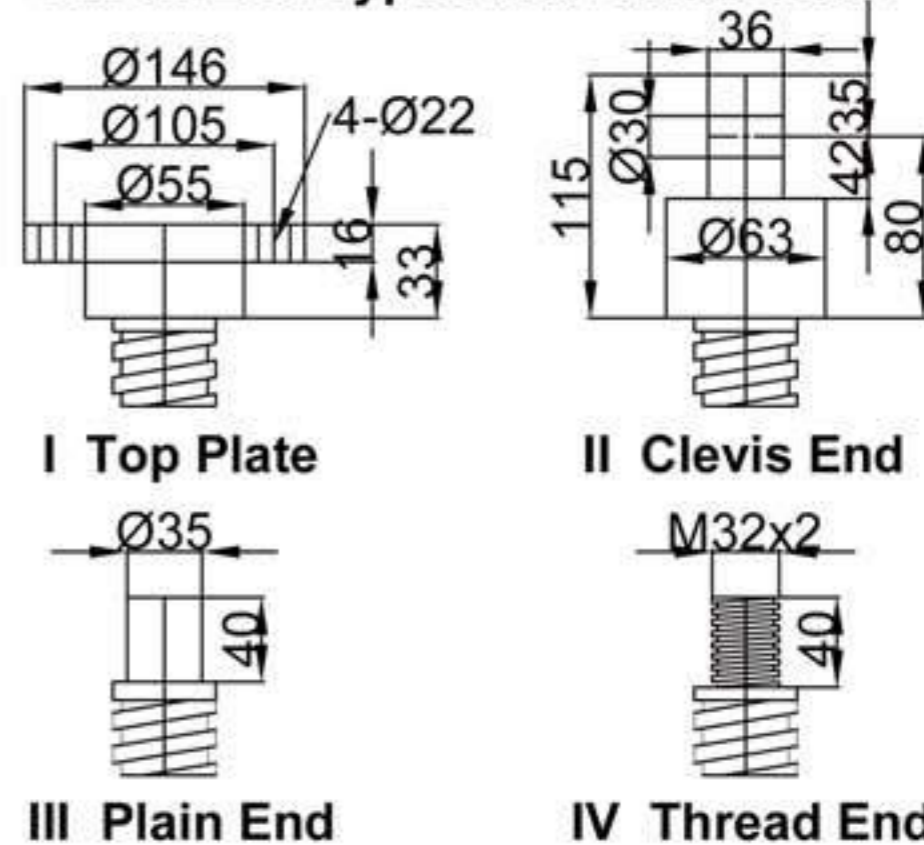


Dimensions

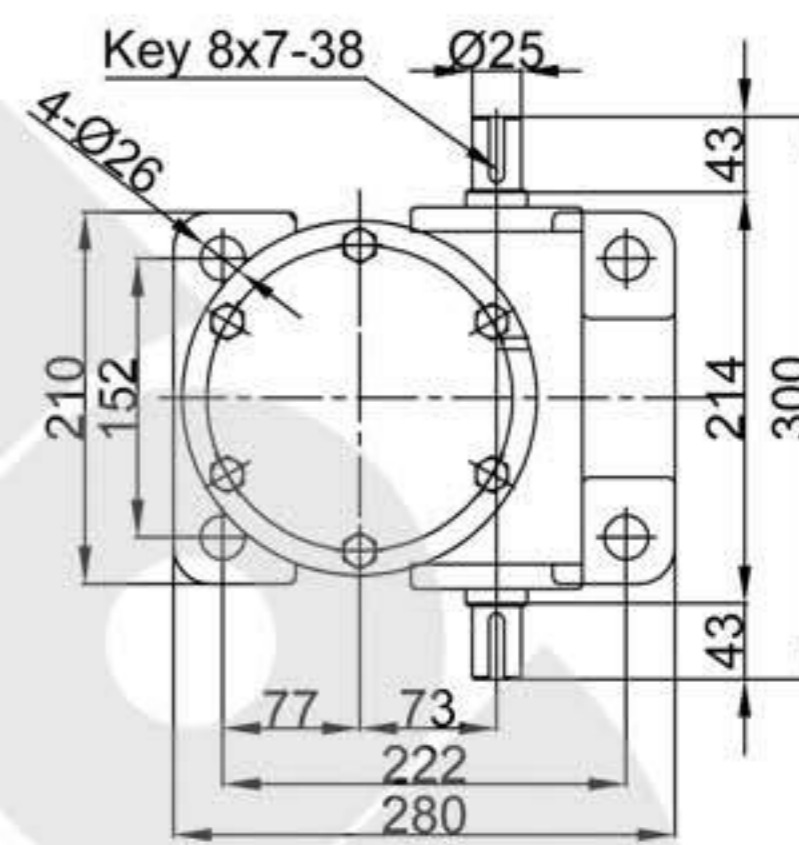
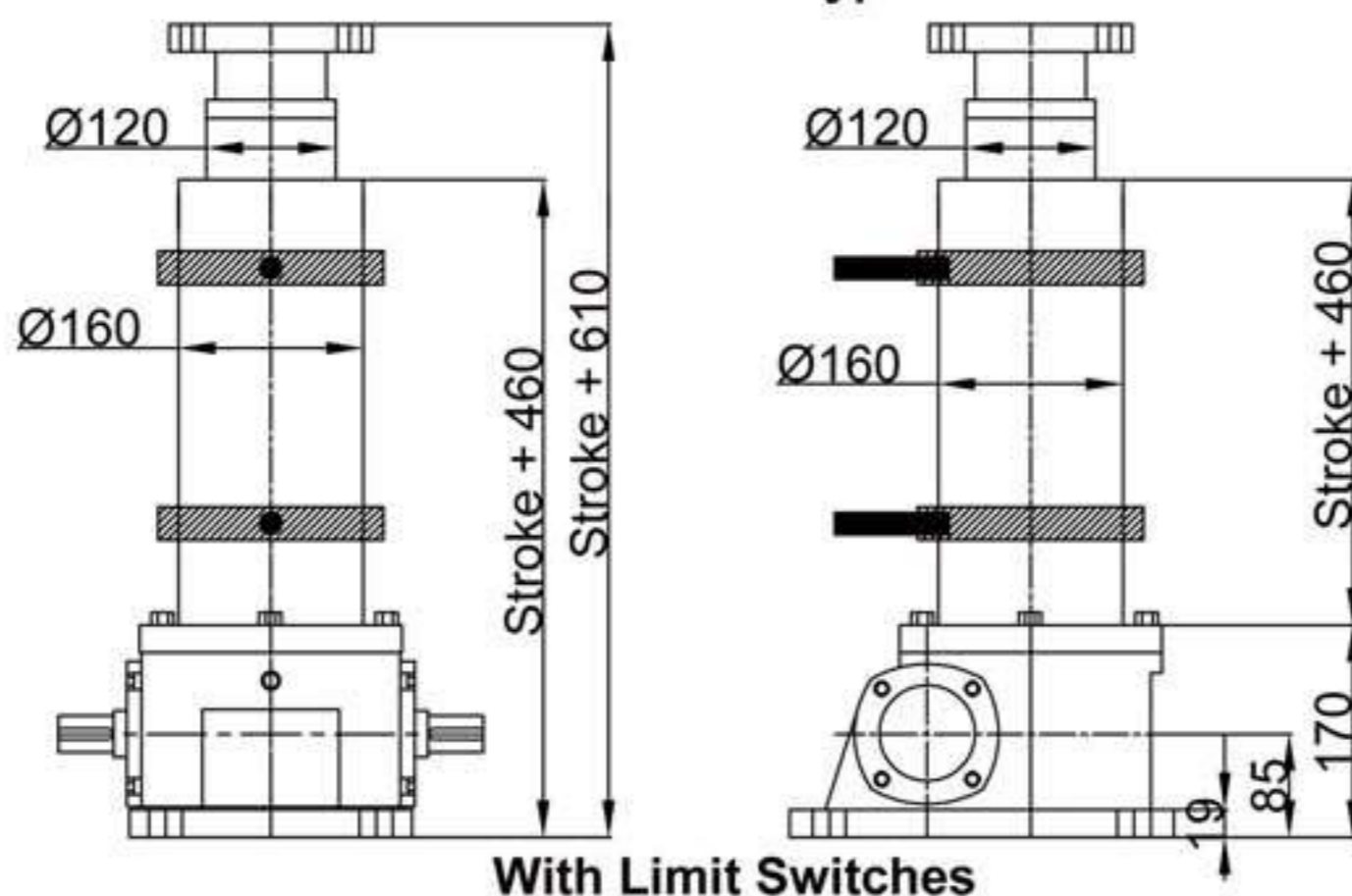
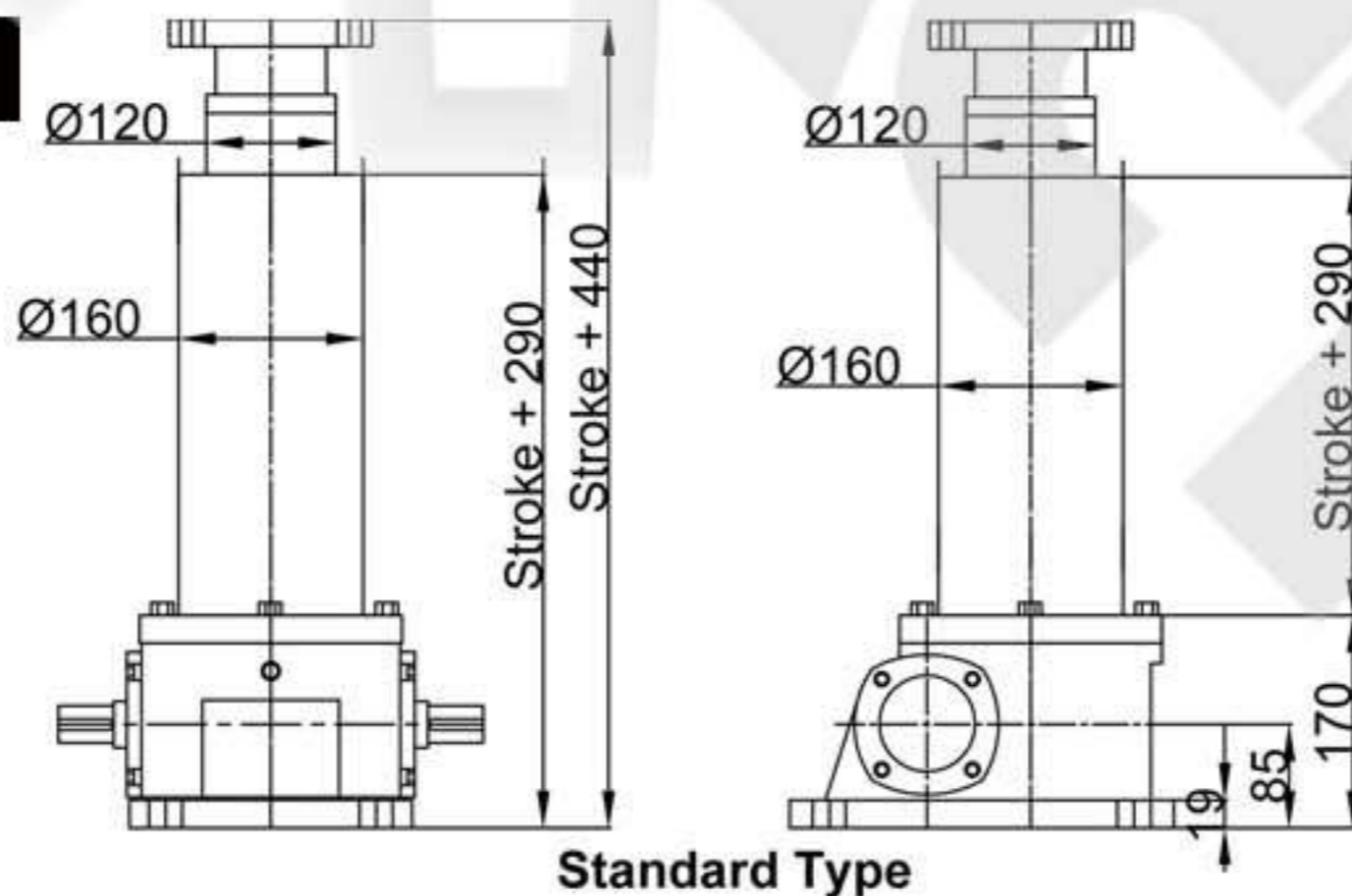
JTE-10T



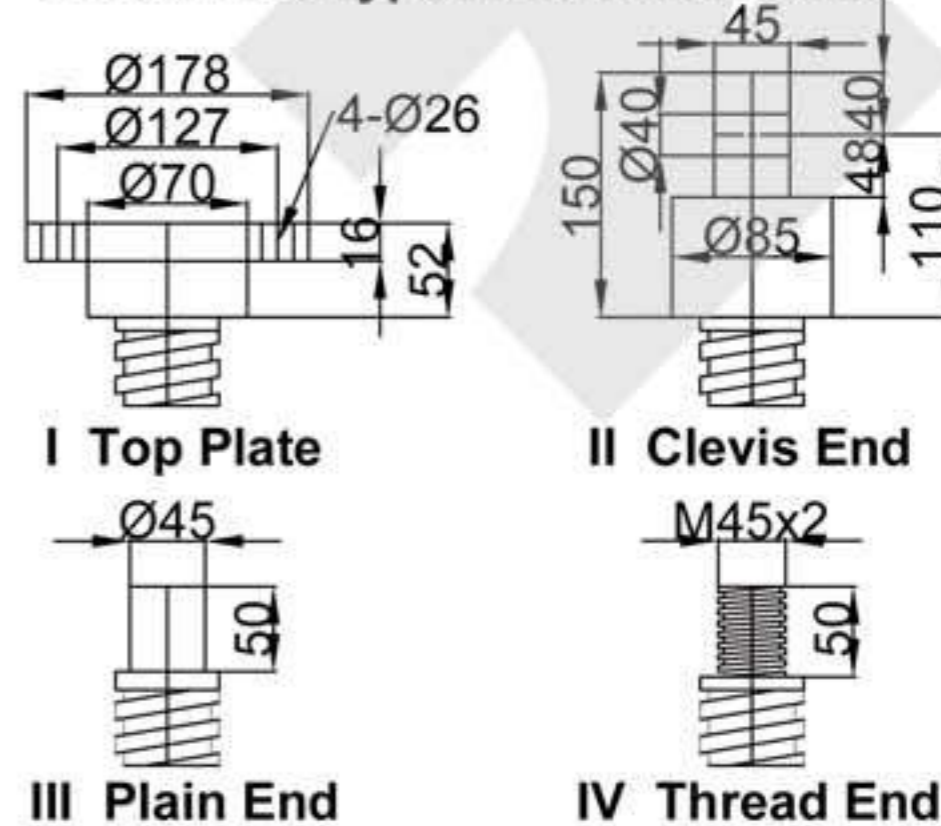
Screw End Types and Dimensions



JTE-20T



Screw End Types and Dimensions



*. Dimensions are subject to change without notice