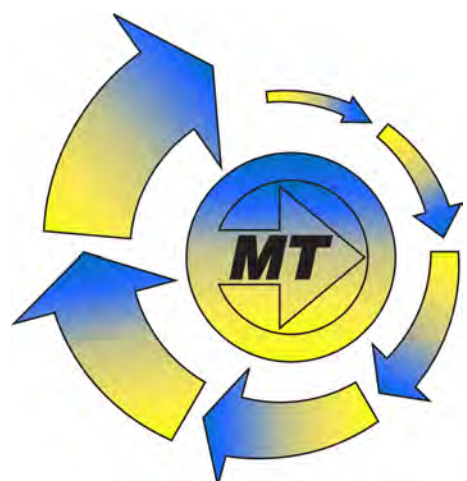


# JT

## Acme Screw Jack

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2D/3D  
CAD

JACTON<sup>®</sup>



## Product Description

**JACTON JT Series Acme Screw Jack:** Strong Acme threads make these screw jacks better than ball screw jacks for heavy loads, intermittent positioning applications. They offer a low-cost solution to a wide variety of industrial lifting, lowering, pushing, pulling and rolling linear motions. Due to the classic design, you don't need to attach any construction elements to the housing. In the absence of vibration load, they have self locking and precisely position loads, will hold loads without backdriving. Can be mounted in any attitude. Generally maintenance free.

### ● Features:

- \* Self locking ACME screw, precise positioning, and uniform speed.
- \* Available in 12 sizes from JT-0.5T to JT-100T.
- \* Static load capacity from 0.5 Ton to 100 Ton.
- \* Acme screw diameter from 20 mm to 100 mm.
- \* Standard acme 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 acme screw, custom 2-starts acme screw which offers increased travel speed and require a brake or external locking device to hold position.
- \* Custom-made acme screw diameter and pitch, gear ratios, and worm shaft sizes.
- \* Acme 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.
- \* Single unit use, or complete jacking system including gear motors, bevel gearboxes, connecting shafts and couplings for dual or multiple jack arrangements.

## Product Description

- \* Custom-made double clevis screw jack, anti-backlash screw jack.
- \* Can be used as alternatives to hydraulic and pneumatic systems.

### ● **Materials:**

- \* Acme 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.
- \* Housing(Gearbox): Ductile Iron

### ● **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.

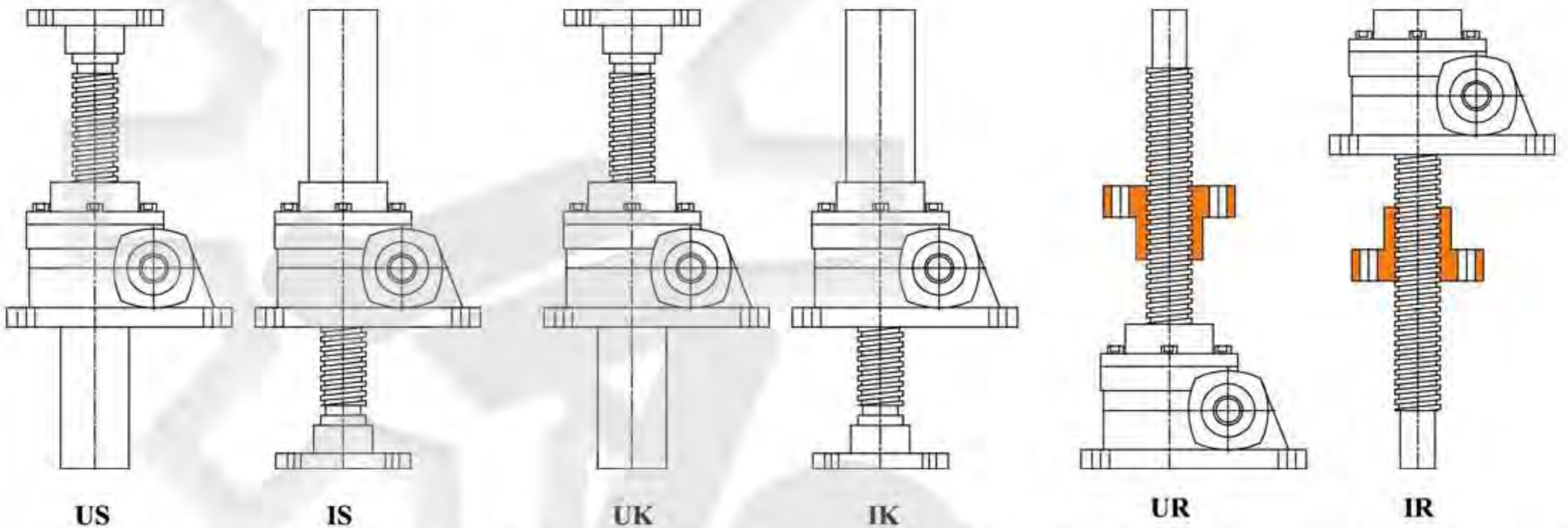
## Sample Part Number

Sample Parts Numbers: **JT-5T - US - 300 - H - I - C - PP**  
 (1) (2) (3) (4) (5) (6) (7)

### (1) Models & (4) Ratios

JT-0.5T (Tr20x5) H:1/5, M:1/10, L:1/20	JT-1T (Tr24x5) H:1/5, M:1/10, L:1/20	JT-2T (Tr26x5) H:1/5, M:1/10, L:1/20	JT-3T (Tr32x6) H:1/6, M:1/12, L:1/24	JT-5T (Tr38x6) H:1/6, M:1/12, L:1/24
JT-10T (Tr46x8) H:1/8, M:1/16, L:1/32	JT-15T (Tr52x8) H:1/8, M:1/16, L:1/32	JT-20T (Tr65x10) H:1/10, M:1/20, L:1/40	JT-30T (Tr75x12) H:1/12, M:1/18, L:1/36	JT-40T (Tr80x12) H:1/12, M:1/18, L:1/36
JT-50T (Tr90x14) H:1/7, M:1/14, L:1/28	JT-100T (Tr100x16) H:1/8, M:1/16, L:1/32	H: High Gear Ratio, M: Medium Gear Ratio, L: Slow Gear Ratio		

### (2) Jack Design and Configuration

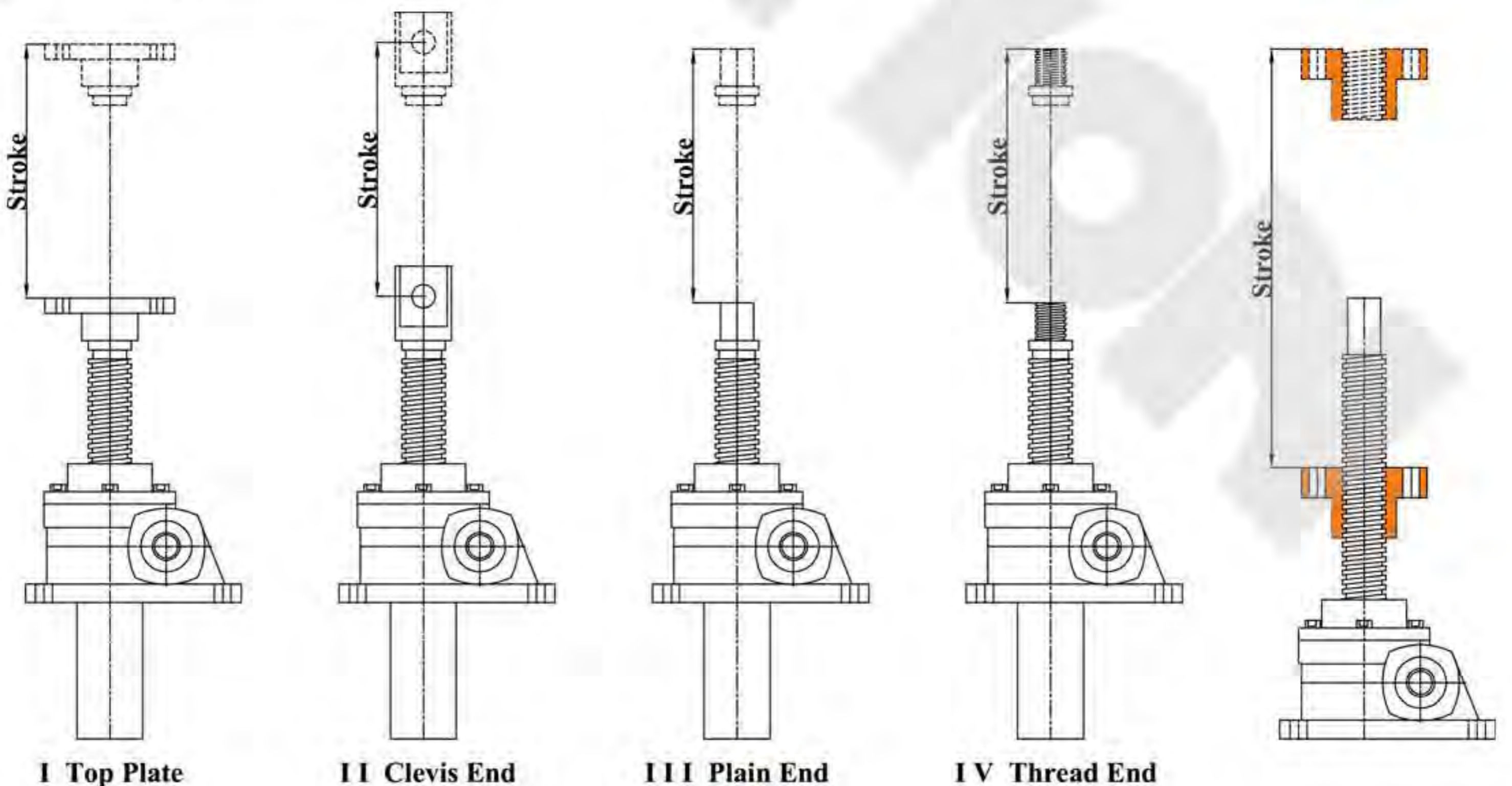


**US:** Upright Mounting, Translating Screw  
**IS:** Inverted Mounting, Translating Screw

**UK:** Upright Mounting, Keyed Screw for Non-Rotation  
**IK:** Inverted Mounting, Keyed Screw for Non-Rotation

**UR:** Upright Mounting, Rotating Screw for Travel Nut  
**IR:** Inverted Mounting, Rotating Screw for Travel Nut

### (3) Stroke & (5) Screw End Fittings



**I Top Plate**

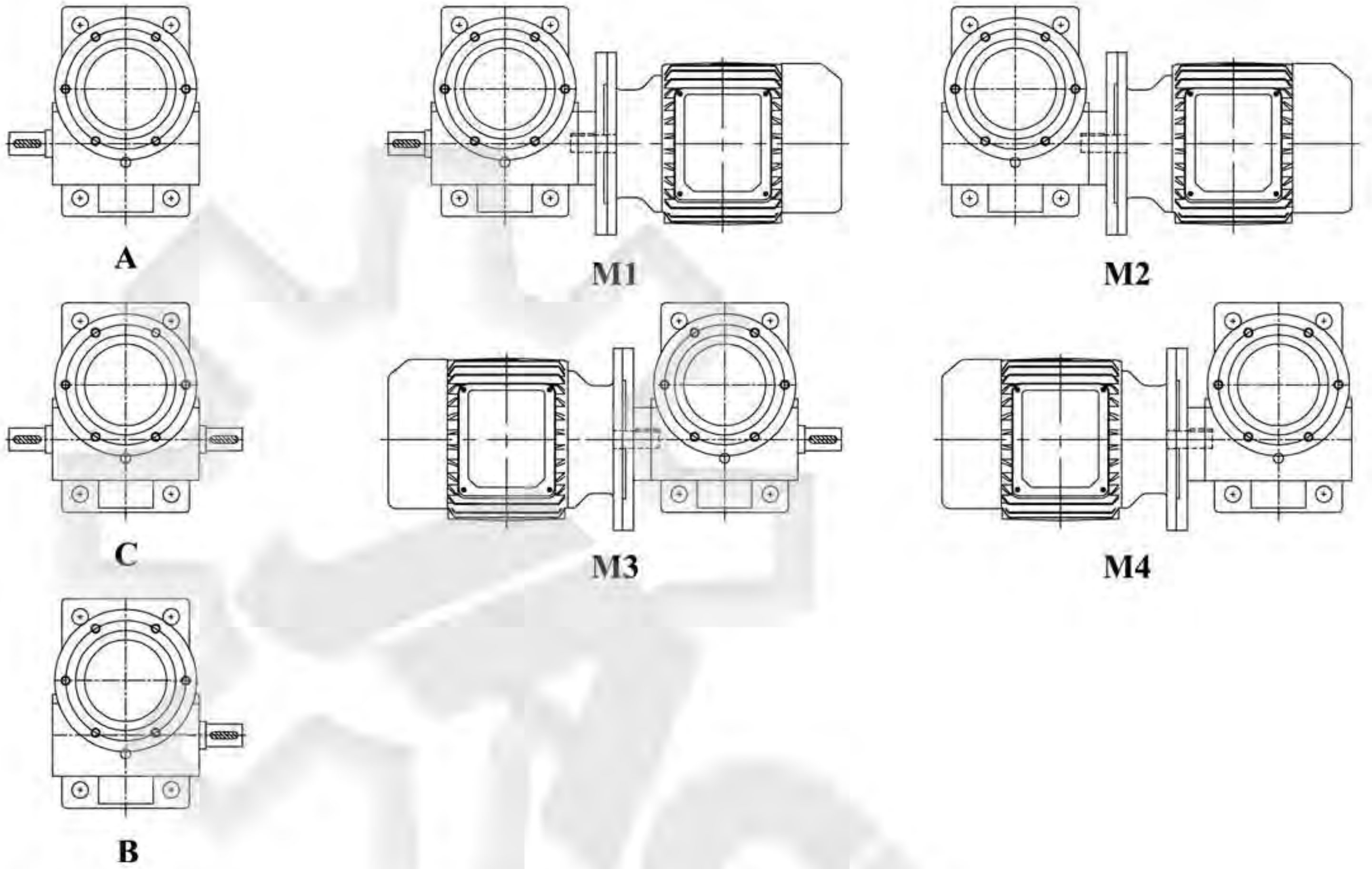
**II Clevis End**

**III Plain End**

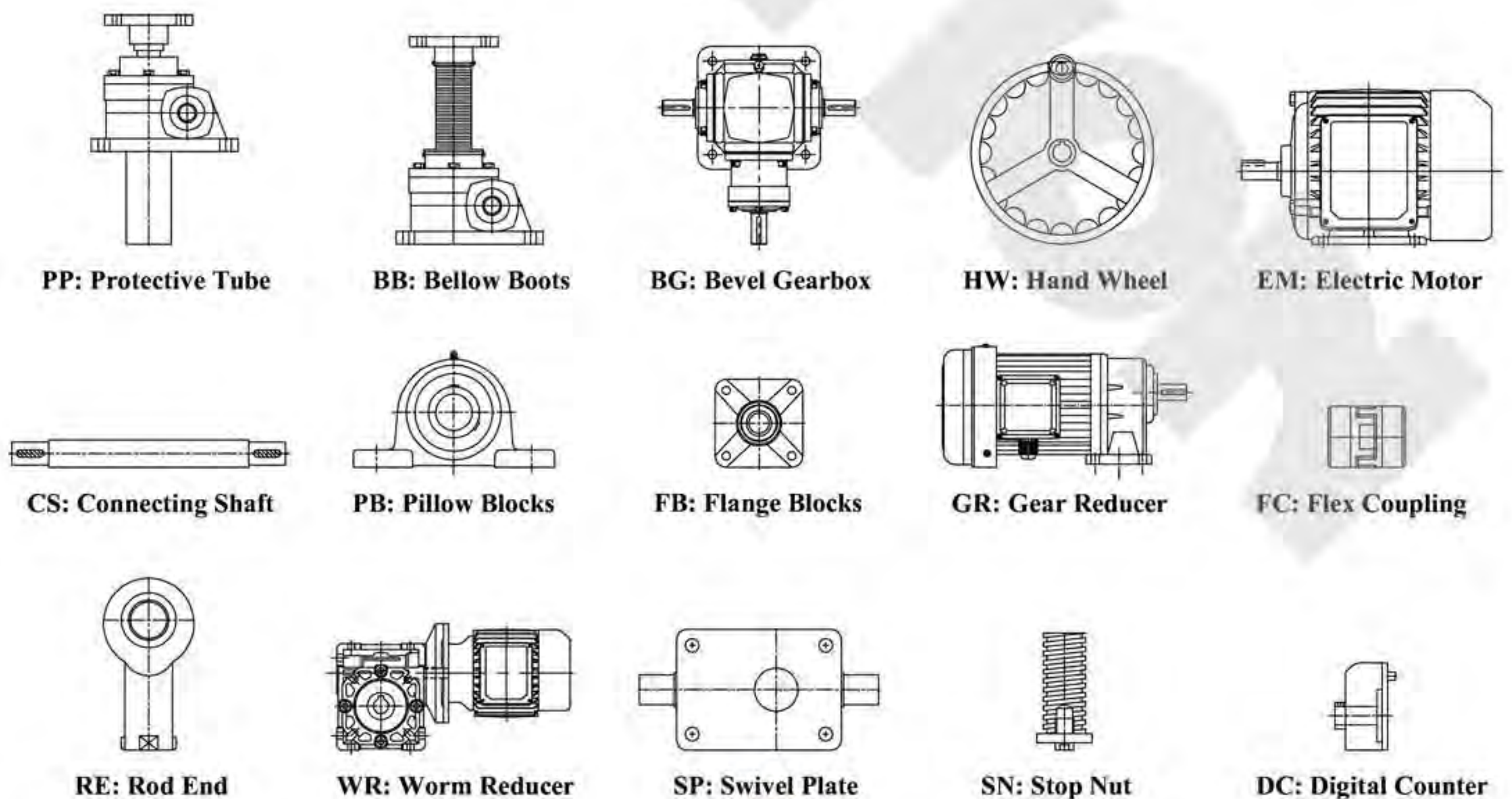
**IV Thread End**

**Sample Part Number**

**(6) Input Shafts Types & Motor Flange Types**

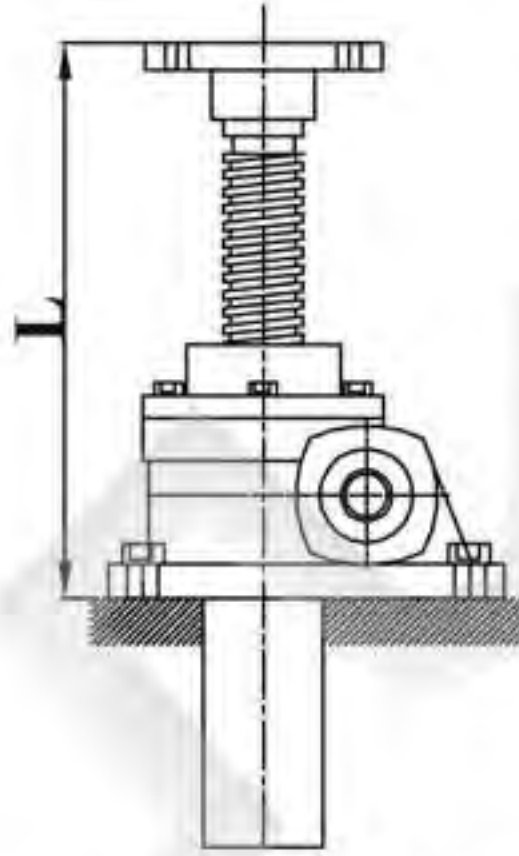


**(7) Accessories**

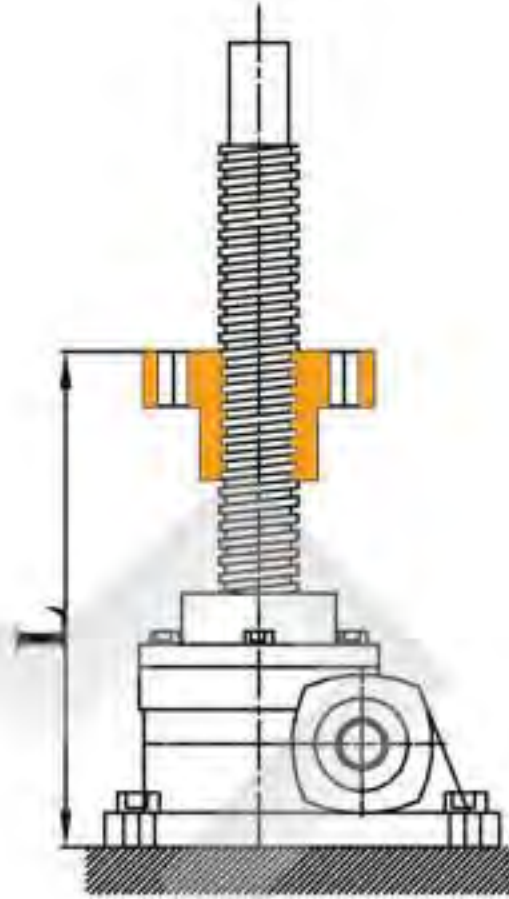


## Permissible Buckling Load

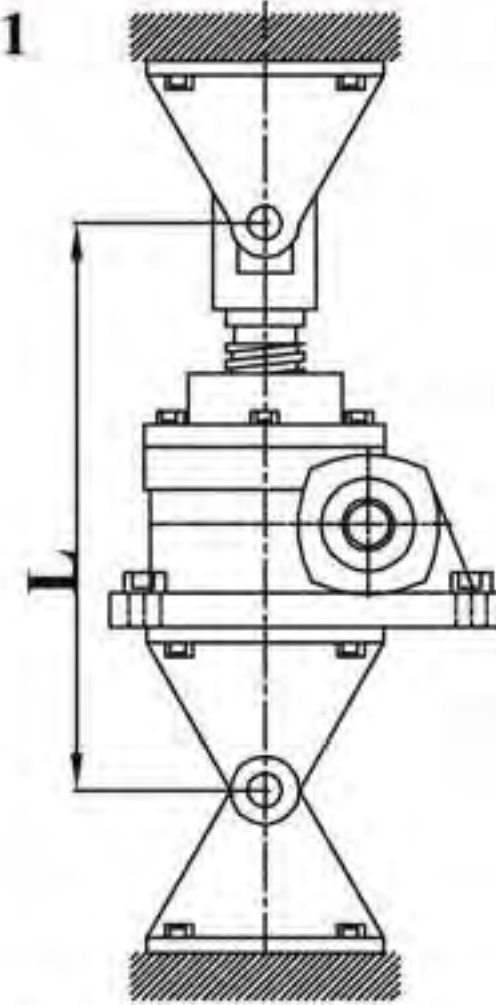
$N = 1/4$



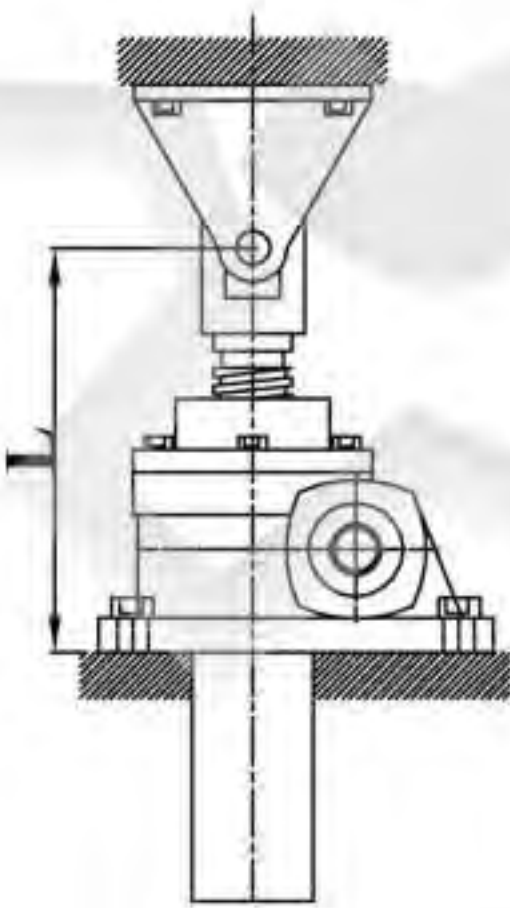
A: Jack Fixed, Rod End Free



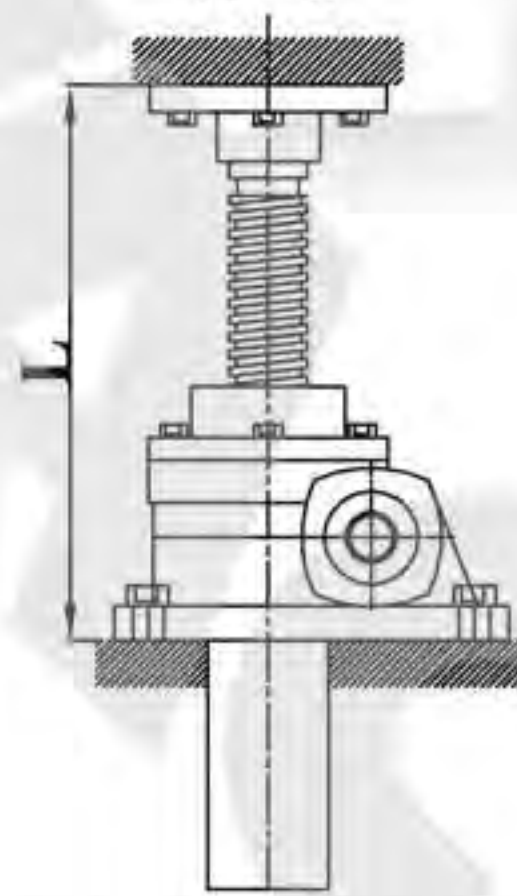
$N = 1$



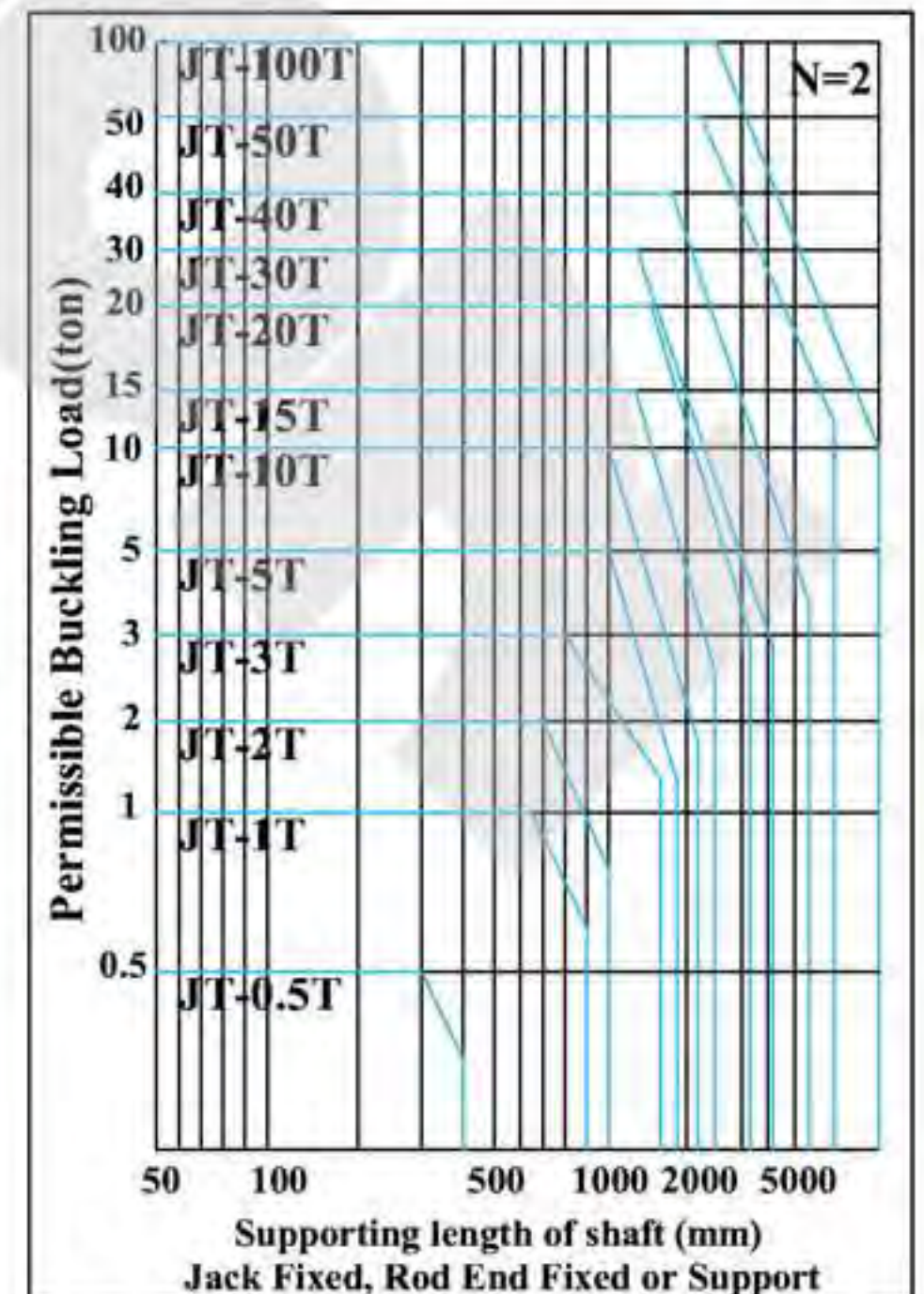
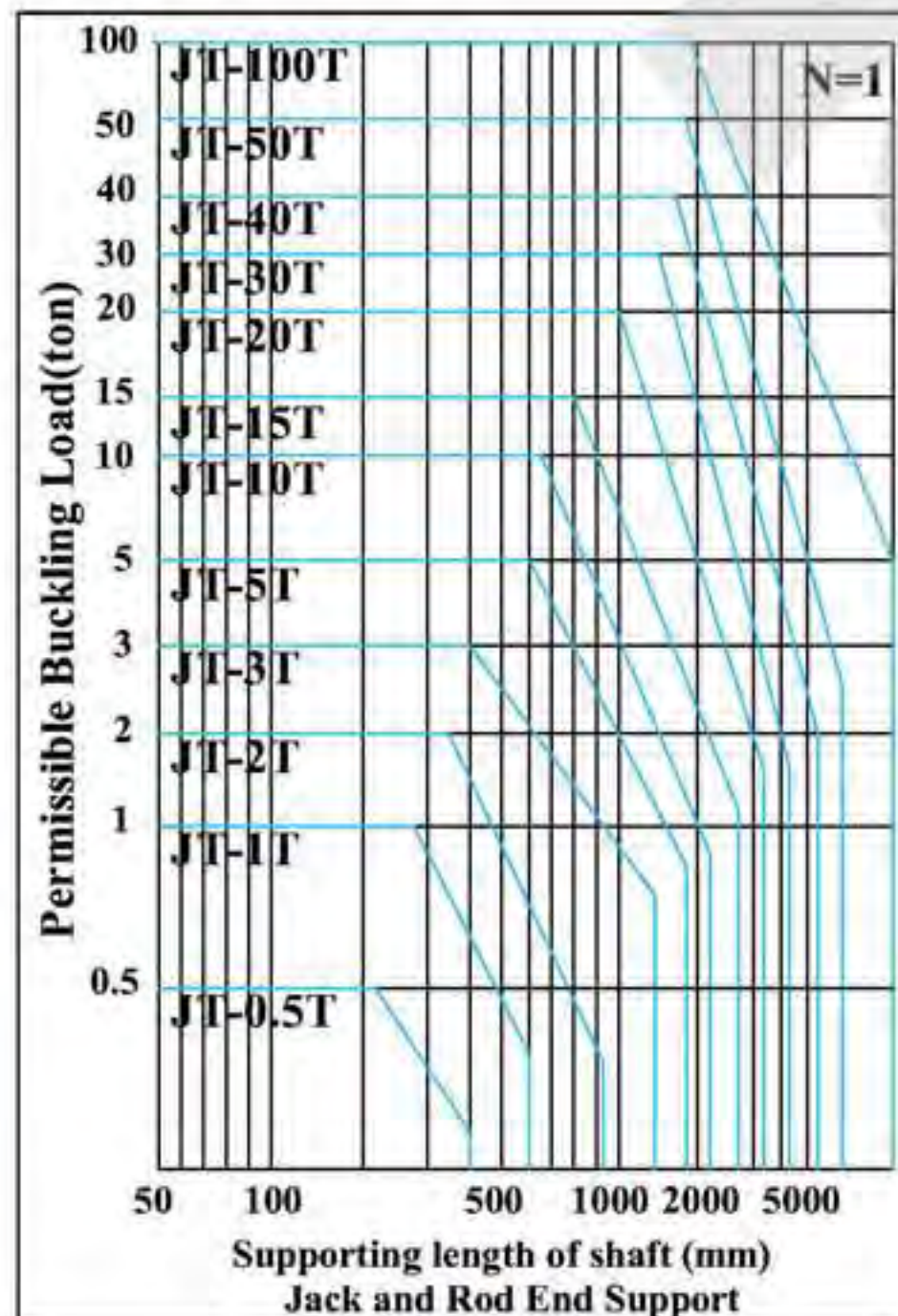
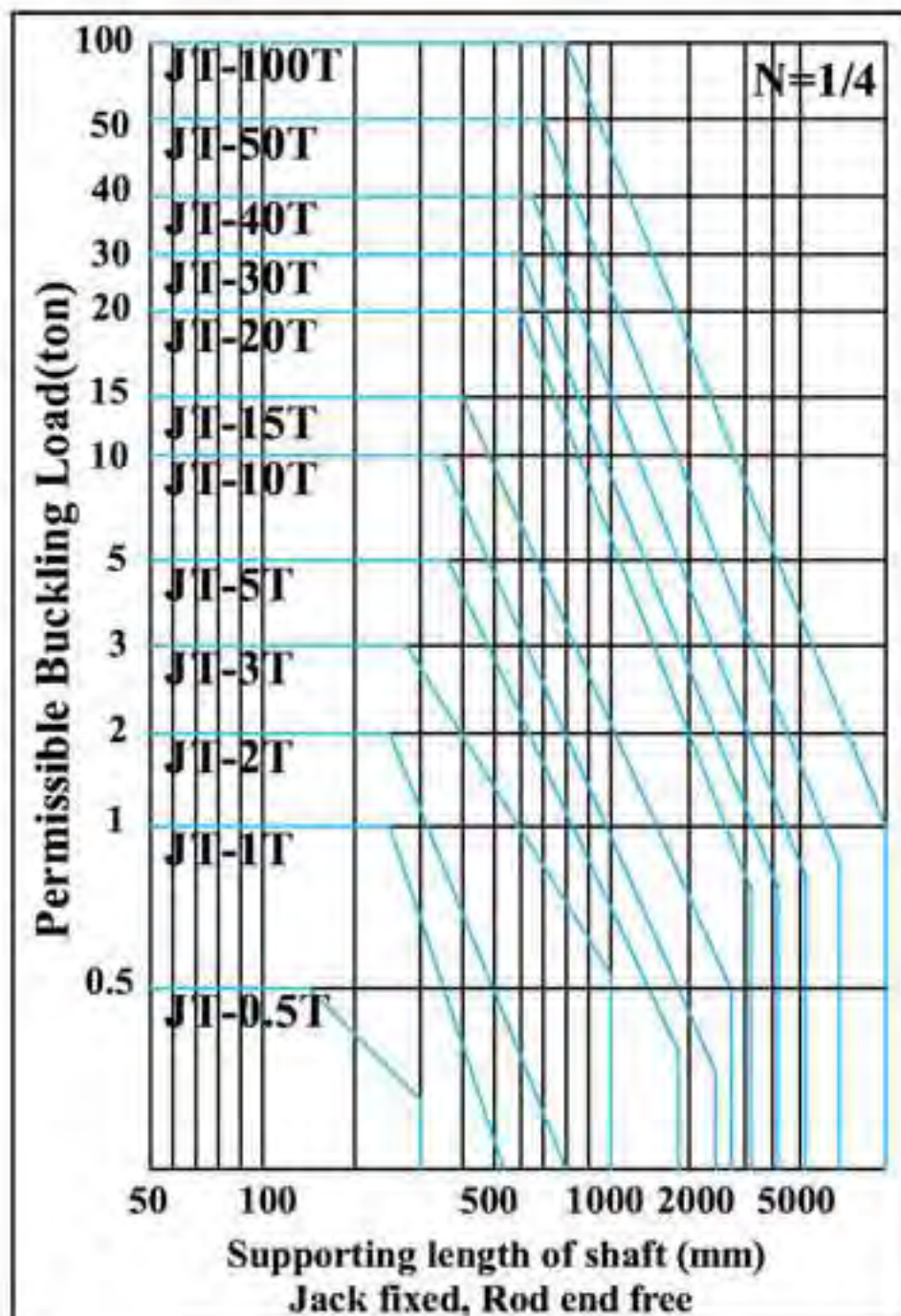
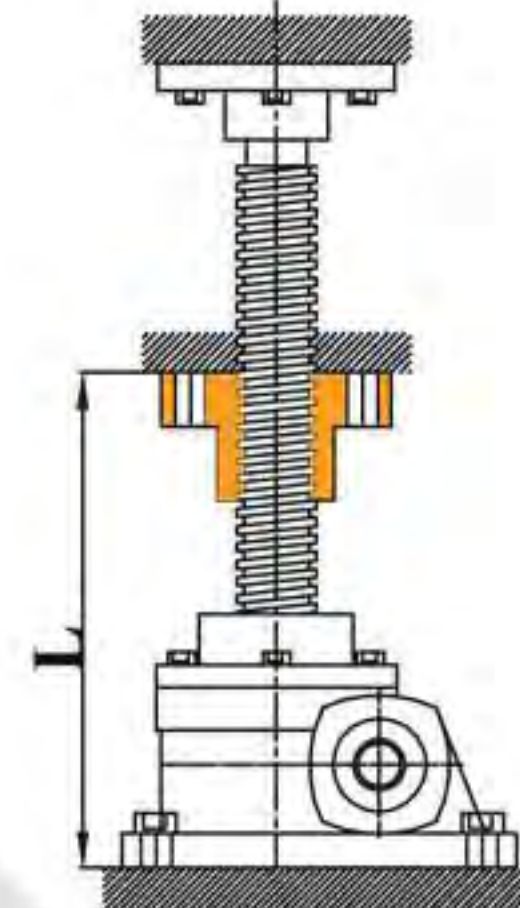
B: Jack and Rod End Support



$N = 2$



C: Jack Fixed, Rod End Fixed or Support



## Specifications

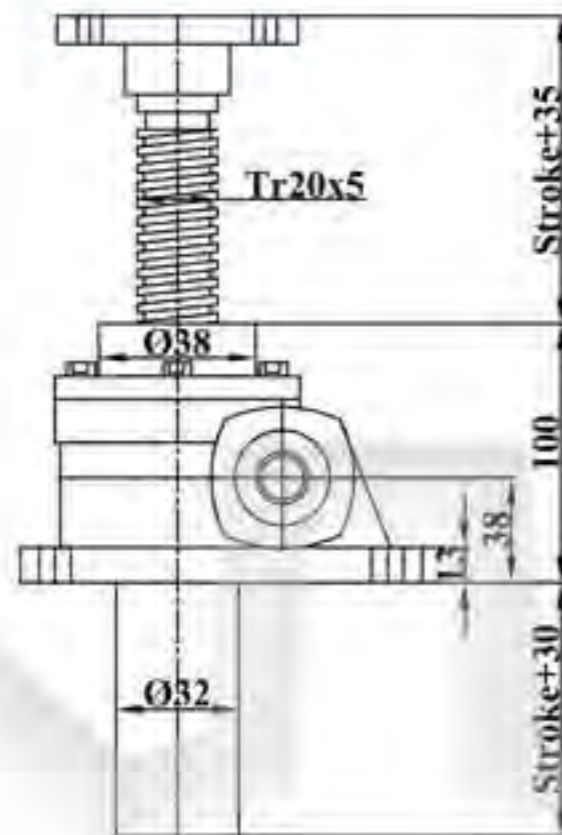
Screw Diam. x Pitch (MM)	Worm Gear Ratio	Stroke for One Input Turn (MM)	Input 1800RPM			Input 1500RPM			Input 1200RPM			Input 900RPM			Input 600RPM			Input 300RPM		
			Power (kW)	Load (Ton)	Speed (M/Min)	Power (kW)	Load (Ton)	Speed (M/Min)	Power (kW)	Load (Ton)	Speed (M/Min)	Power (kW)	Load (Ton)	Speed (M/Min)	Power (kW)	Load (Ton)	Speed (M/Min)	Power (kW)	Load (Ton)	Speed (M/Min)
JT-0.5T Tr20x5	H=1/5	1	0.15	0.10	1.80	0.15	0.12	1.50	0.15	0.16	1.20	0.14	0.18	0.90	0.10	0.20	0.60	0.06	0.25	0.30
	M=1/10	0.5	0.08	0.10	0.90	0.14	0.16	0.75	0.10	0.19	0.60	0.08	0.20	0.45	0.06	0.23	0.30	0.04	0.28	0.15
	L=1/20	0.25	0.05	0.12	0.45	0.07	0.18	0.38	0.07	0.21	0.30	0.06	0.25	0.23	0.04	0.25	0.15	0.02	0.30	0.08
JT-1T Tr24x5	H=1/5	1	0.38	0.25	1.80	0.38	0.30	1.50	0.38	0.36	1.20	0.30	0.40	0.90	0.23	0.50	0.60	0.14	0.55	0.30
	M=1/10	0.5	0.15	0.25	0.90	0.19	0.30	0.75	0.23	0.45	0.60	0.19	0.50	0.45	0.15	0.55	0.30	0.08	0.60	0.15
	L=1/20	0.25	0.15	0.30	0.45	0.12	0.36	0.38	0.14	0.50	0.30	0.11	0.55	0.23	0.08	0.60	0.15	0.04	0.60	0.08
JT-2T Tr26x5	H=1/5	1	0.69	0.50	1.80	0.64	0.55	1.50	0.65	0.70	1.20	0.63	0.90	0.90	0.46	1.00	0.60	0.37	1.00	0.30
	M=1/10	0.5	0.37	0.50	0.90	0.37	0.55	0.75	0.37	0.70	0.60	0.37	0.95	0.45	0.37	1.00	0.30	0.19	1.35	0.15
	L=1/20	0.25	0.37	0.60	0.45	0.37	0.70	0.38	0.37	0.90	0.30	0.37	1.20	0.23	0.19	1.35	0.15	0.19	1.35	0.08
JT-3T Tr32x6	H=1/6	1	0.98	0.70	1.80	0.93	0.80	1.50	0.88	0.95	1.20	0.91	1.30	0.90	0.84	1.80	0.60	0.42	1.80	0.30
	M=1/12	0.5	0.66	0.95	0.90	0.64	1.10	0.75	0.61	1.30	0.60	0.57	1.65	0.45	0.46	2.00	0.30	0.37	2.00	0.15
	L=1/24	0.25	0.37	0.95	0.45	0.37	1.10	0.38	0.37	1.30	0.30	0.37	1.65	0.23	0.37	2.00	0.15	0.19	2.00	0.08
JT-5T Tr38x6	H=1/6	1	1.39	0.90	1.80	1.28	1.00	1.50	1.24	1.20	1.20	1.16	1.50	0.90	0.87	1.70	0.60	0.54	2.10	0.30
	M=1/12	0.5	1.10	1.35	0.90	1.01	1.50	0.75	0.98	1.80	0.60	0.87	2.15	0.45	0.58	2.15	0.30	0.37	2.50	0.15
	L=1/24	0.25	0.78	1.80	0.45	0.72	2.00	0.38	0.69	2.40	0.30	0.55	2.55	0.23	0.42	2.90	0.15	0.37	2.85	0.08
JT-10T Tr46x8	H=1/8	1	2.12	1.30	1.80	1.97	1.45	1.50	1.85	1.70	1.20	1.72	2.10	0.90	1.66	3.05	0.60	1.31	4.80	0.30
	M=1/16	0.5	1.12	1.30	0.90	1.04	1.45	0.75	0.98	1.70	0.60	0.95	2.20	0.45	0.87	3.05	0.30	0.69	4.80	0.15
	L=1/32	0.25	0.80	1.75	0.45	0.75	1.95	0.38	0.69	2.25	0.30	0.64	2.80	0.23	0.63	4.10	0.15	0.48	6.40	0.08
JT-15T Tr52x8	H=1/8	1	2.00	1.30	1.80	1.86	1.45	1.50	1.75	1.70	1.20	1.62	2.10	0.90	1.57	3.05	0.60	1.24	4.80	0.30
	M=1/16	0.5	1.06	1.30	0.90	0.98	1.45	0.75	0.93	1.70	0.60	0.89	2.20	0.45	0.83	3.05	0.30	0.65	4.80	0.15
	L=1/32	0.25	0.75	1.75	0.45	0.70	1.95	0.38	0.65	2.25	0.30	0.61	2.80	0.23	0.59	4.10	0.15	0.46	6.40	0.08
JT-20T Tr65x10	H=1/10	1	2.66	1.40	1.80	2.42	1.85	1.50	2.25	1.95	1.20	2.12	2.45	0.90	1.93	3.35	0.60	1.41	4.90	0.30
	M=1/20	0.5	1.42	1.60	0.90	1.47	1.85	0.75	1.37	2.25	0.60	1.28	2.80	0.45	1.18	3.85	0.30	0.86	5.60	0.15
	L=1/40	0.25	1.14	2.40	0.45	1.17	2.80	0.38	1.09	3.35	0.30	1.07	4.40	0.23	0.93	5.75	0.15	0.69	8.40	0.08
JT-30T Tr75x12	H=1/12	1	3.62	1.85	1.80	3.51	2.15	1.50	3.39	2.60	1.20	3.18	3.25	0.90	2.94	4.50	0.60	2.09	6.40	0.30
	M=1/18	0.67	2.65	1.90	1.20	2.68	2.30	1.00	2.57	2.75	0.80	2.45	3.50	0.60	2.19	4.70	0.40	1.56	6.70	0.20
	L=1/36	0.33	1.66	2.20	0.60	1.63	2.60	0.50	1.60	3.20	0.40	1.47	3.90	0.30	1.36	5.40	0.20	1.20	9.60	0.10
JT-40T Tr80x12	H=1/12	1	4.15	1.98	1.80	4.02	2.30	1.50	3.81	2.73	1.20	3.80	3.63	0.90	3.48	4.98	0.60	2.48	7.05	0.30
	M=1/18	0.67	3.20	2.13	1.20	3.20	2.55	1.00	3.04	3.03	0.80	3.03	4.03	0.60	2.74	5.45	0.40	1.94	7.73	0.20
	L=1/36	0.33	2.14	2.63	0.60	2.07	3.05	0.50	1.98	3.65	0.40	1.99	4.88	0.30	1.80	6.60	0.20	1.40	10.30	0.10
JT-50T Tr90x14	H=1/7	2	9.53	2.10	3.60	9.23	2.45	3.00	9.08	2.85	2.40	8.63	4.00	1.80	8.25	5.45	1.20	5.87	7.75	0.60
	M=1/14	1	5.79	2.35	1.80	5.75	2.80	1.50	5.57	3.30	1.20	5.42	4.55	0.90	5.09	6.20	0.60	3.59	8.75	0.30
	L=1/28	0.5	4.10	3.05	0.90	3.92	3.50	0.75	3.91	4.10	0.60	3.68	5.85	0.45	3.50	7.80	0.30	2.46	11.00	0.15
JT-100T Tr 100x16	H=1/8	2	16.35	3.50	3.60	16.13	4.00	3.00	15.90	5.40	2.40	15.15	7.10	1.80	14.93	9.85	1.20	9.75	12.95	0.60
	M=1/16	1	11.78	4.30	1.80	11.63	5.40	1.50	10.58	7.20	1.20	11.03	9.45	0.90	9.68	11.80	0.60	7.13	17.35	0.30
	L=1/32	0.5	8.70	5.50	0.90	9.60	6.80	0.75	7.40	10.00	0.60	7.58	14.30	0.45	7.06	15.75	0.30	5.84	26.05	0.15



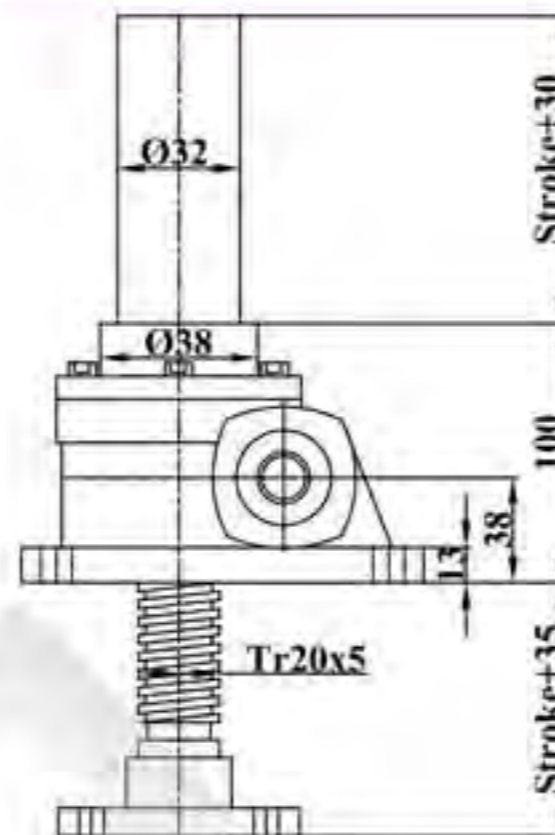


## Dimensions

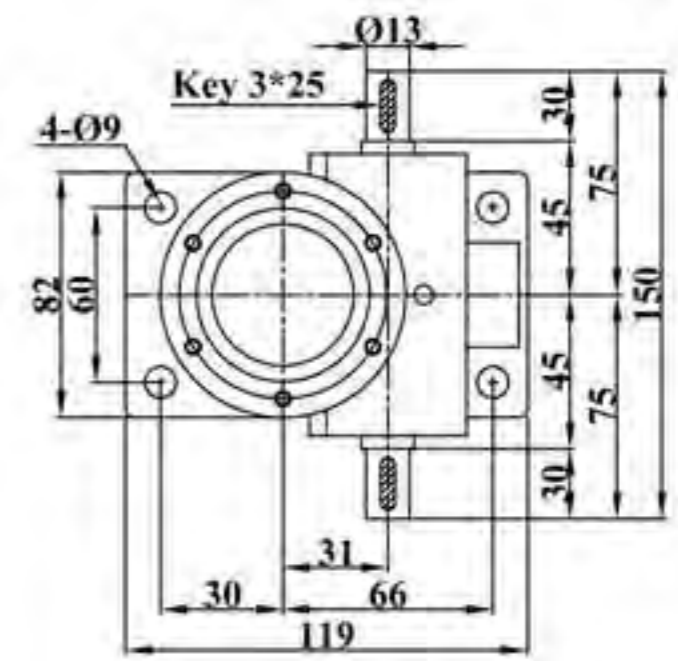
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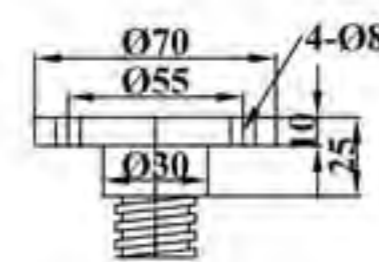
Upright



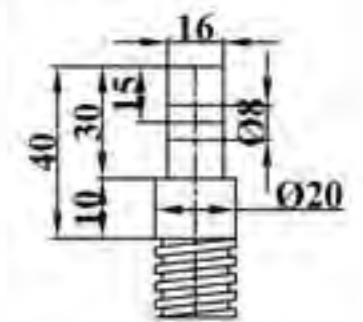
Inverted



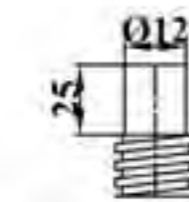
Screw Ends and Dimensions



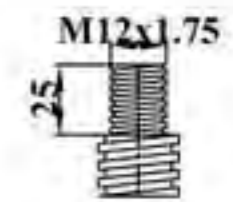
I Top Plate



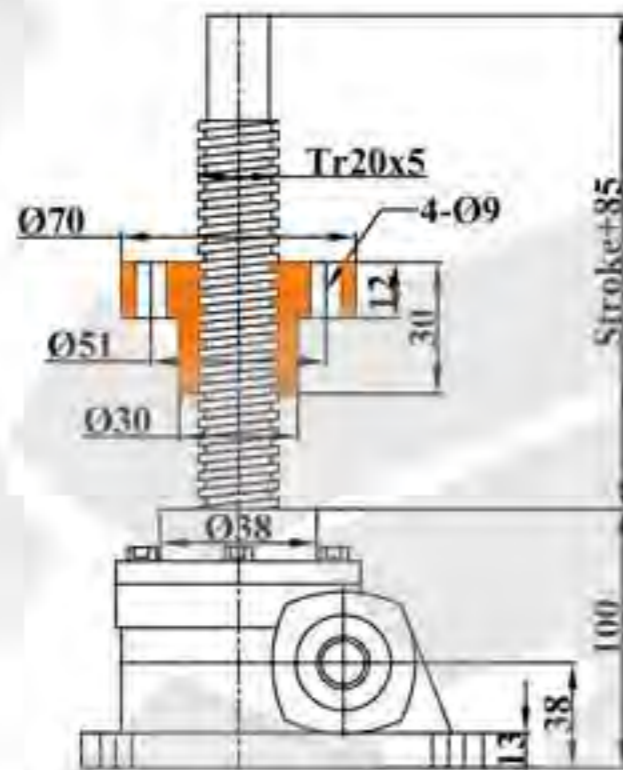
II Clevis End



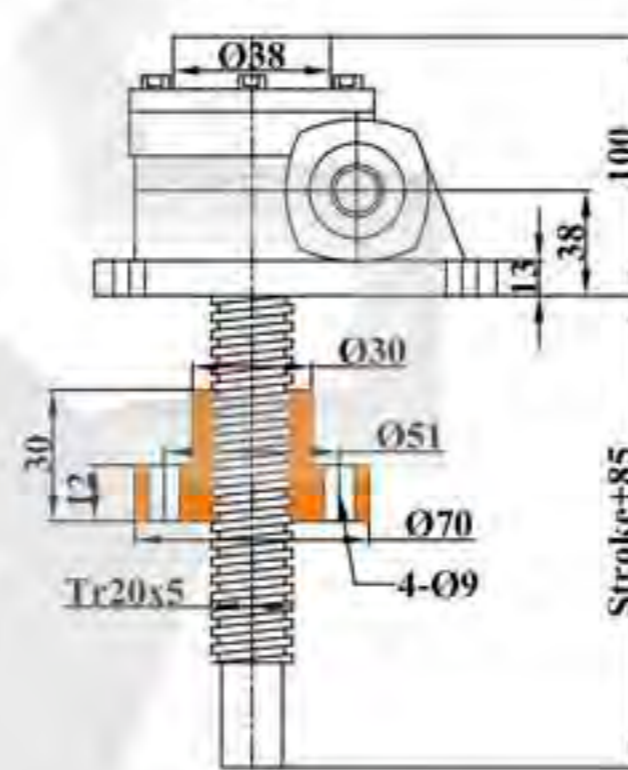
III Plain End



IV Thread End

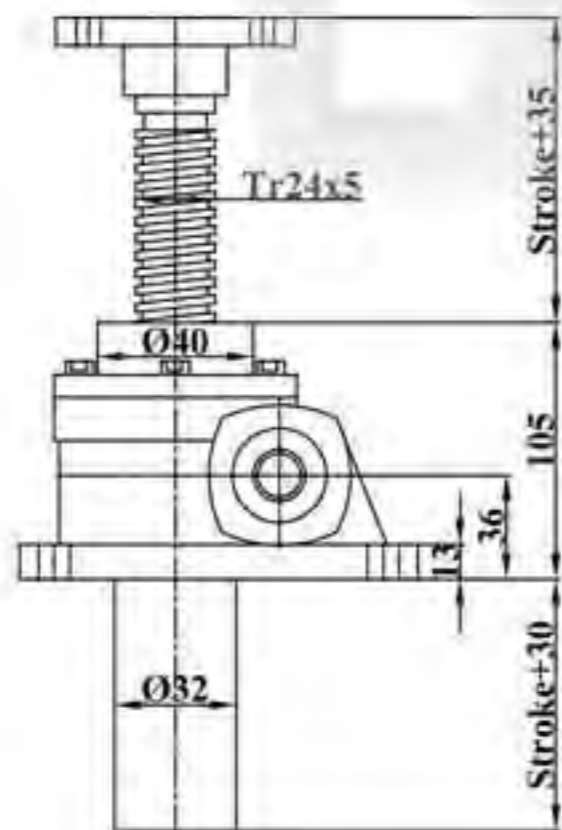


Upright

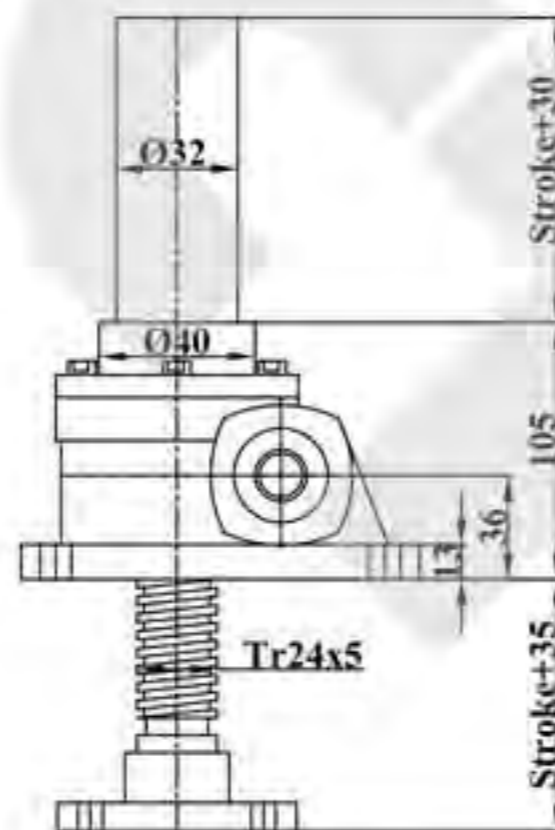


Inverted

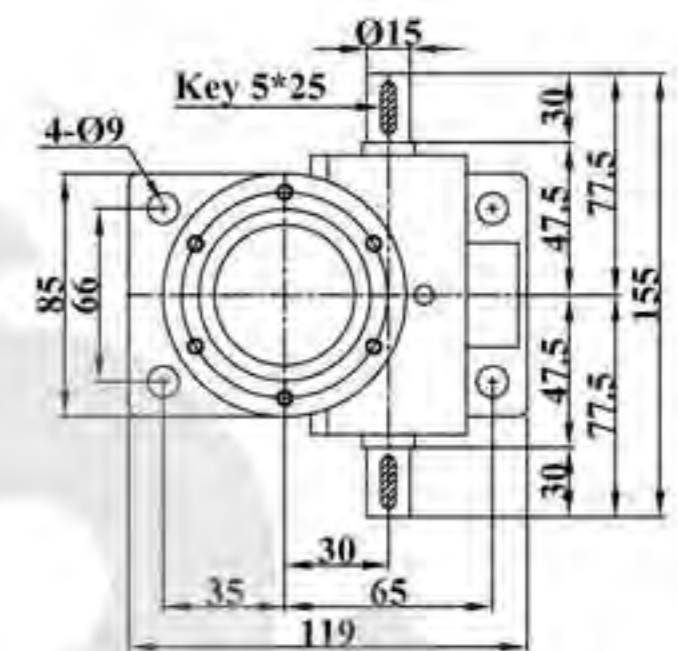
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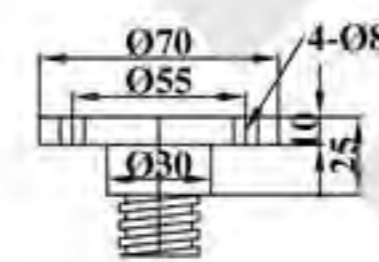
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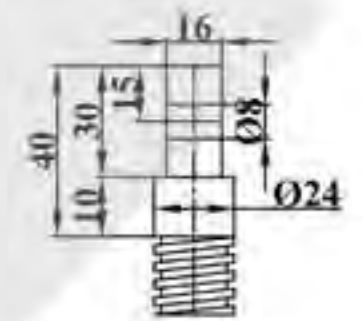
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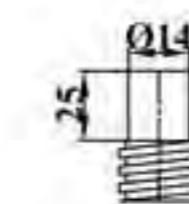
Screw Ends and Dimensions



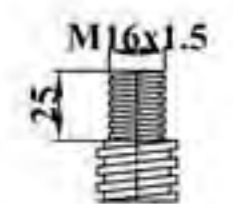
I Top Plate



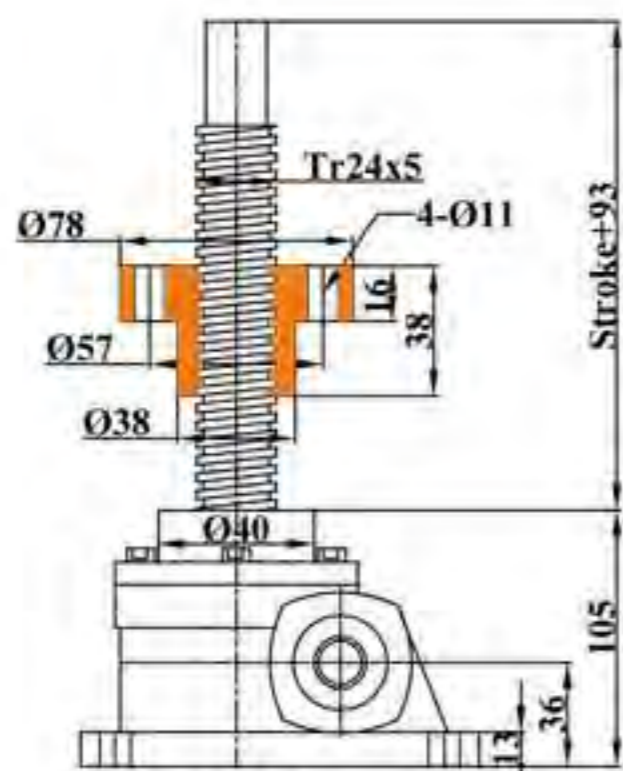
II Clevis End



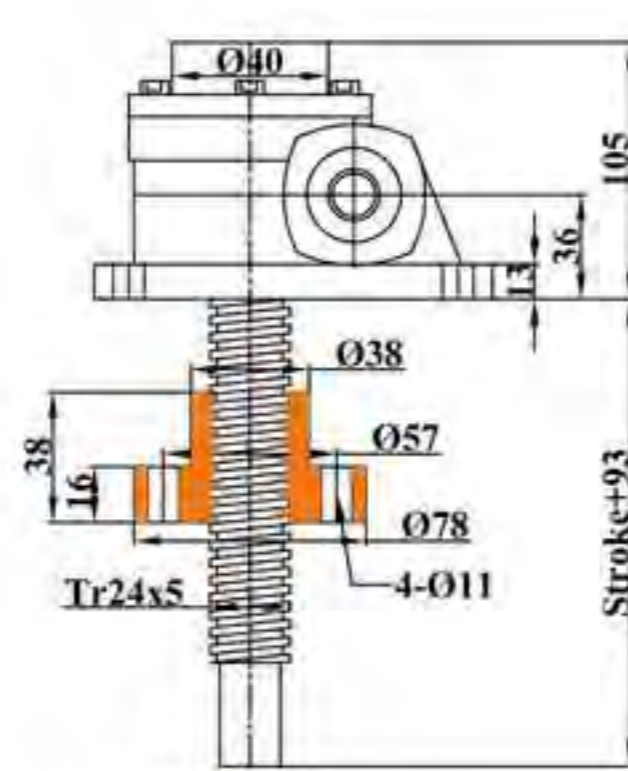
III Plain End



IV Thread End



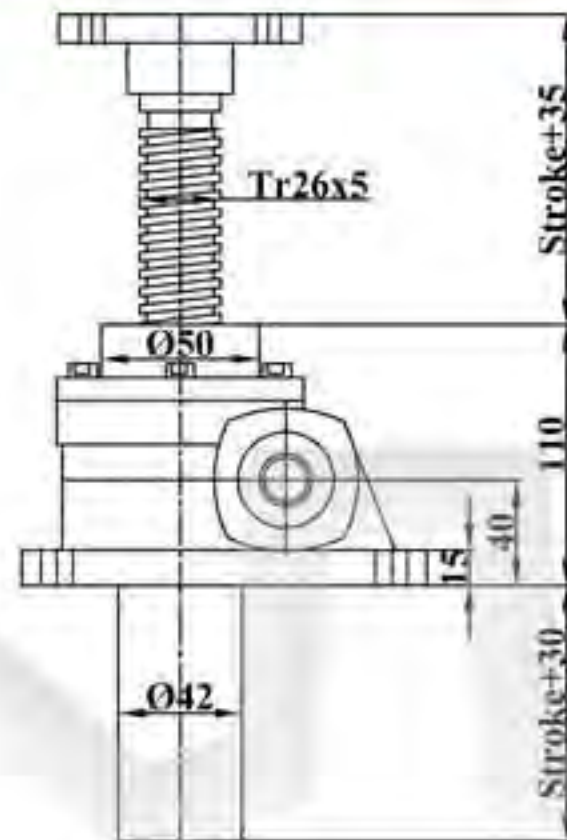
Upright



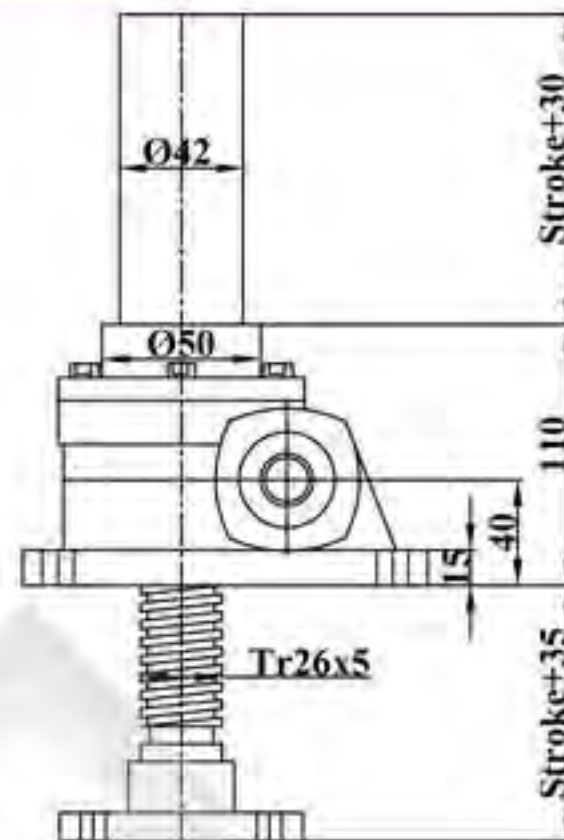
Inverted

**Dimensions**

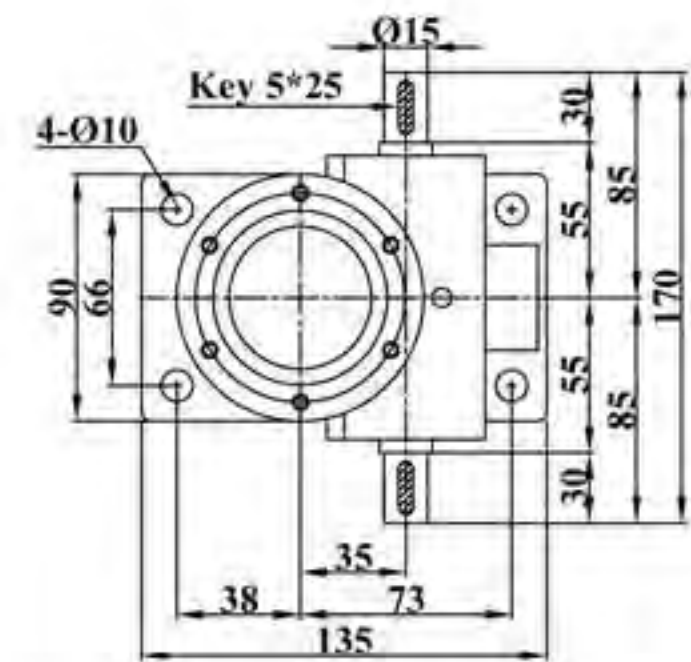
**JT-2T**



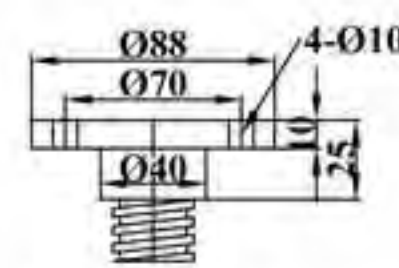
Upright



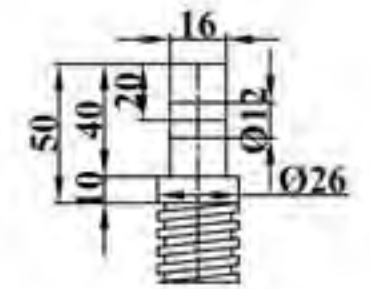
Inverted



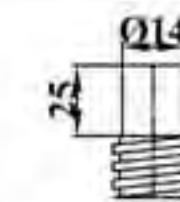
Screw Ends and Dimensions



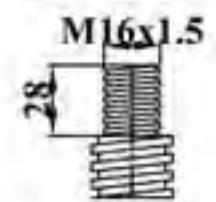
I Top Plate



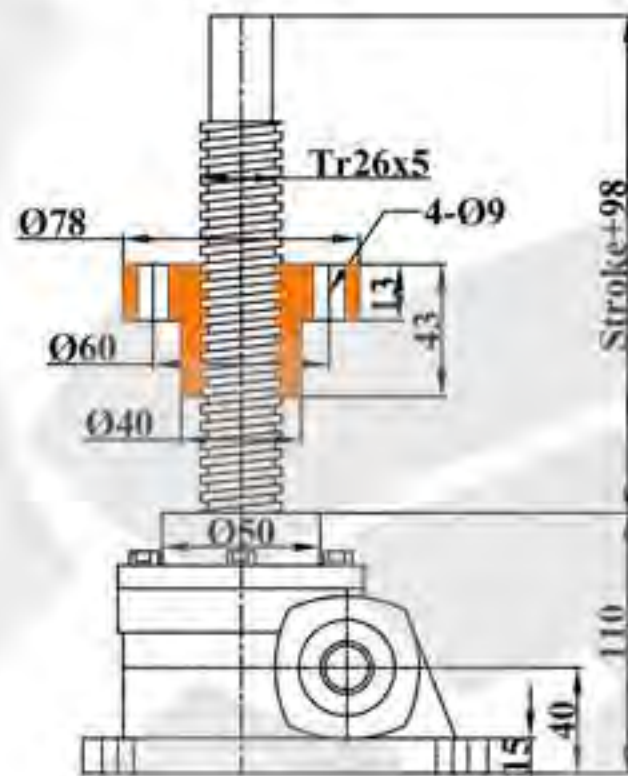
II Clevis End



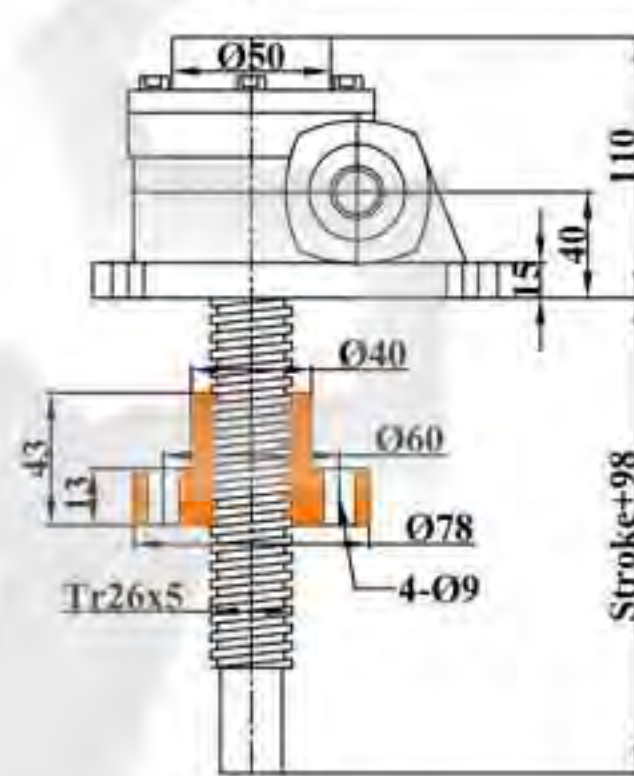
III Plain End



IV Thread End

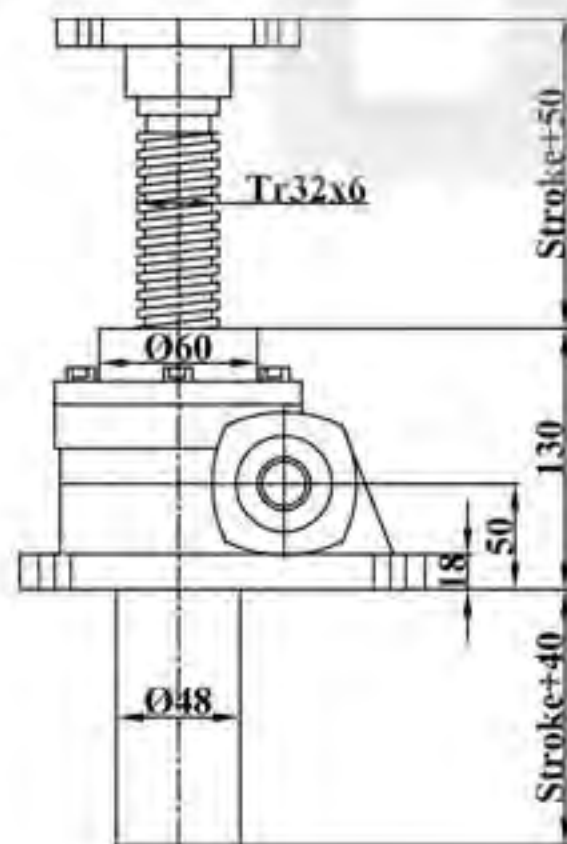


Upright

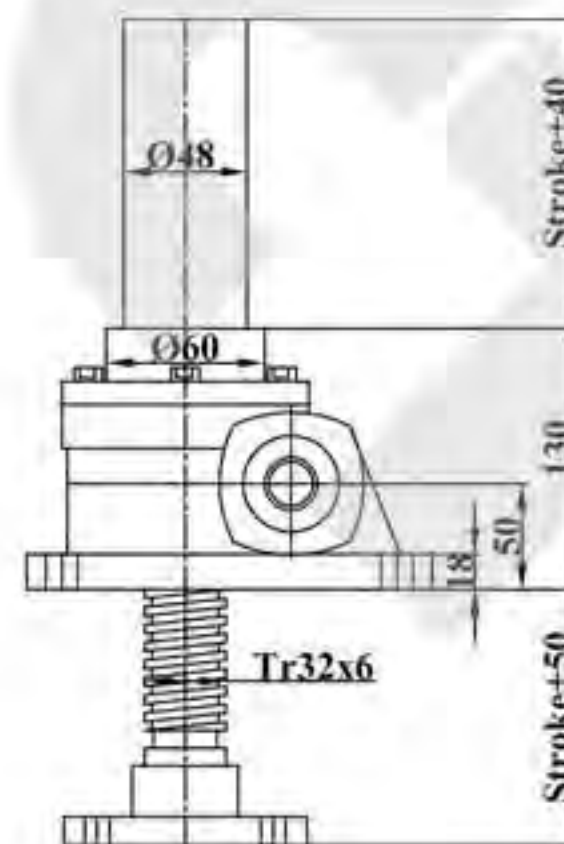


Inverted

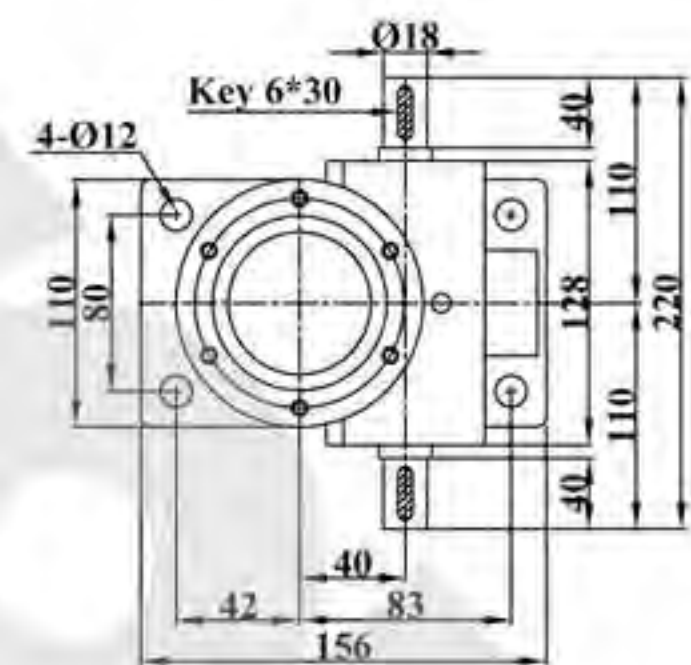
**JT-3T**



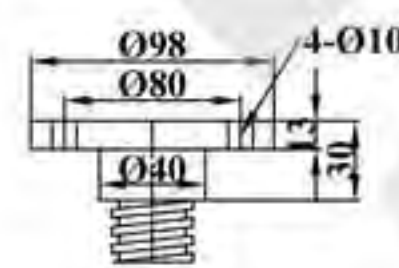
Upright



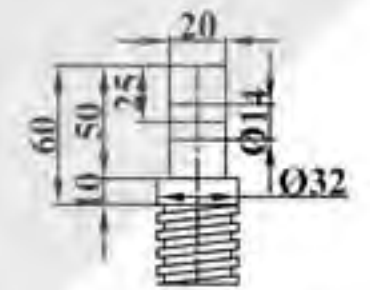
Inverted



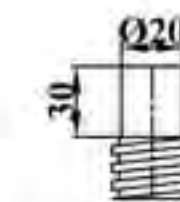
Screw Ends and Dimensions



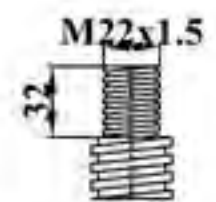
I Top Plate



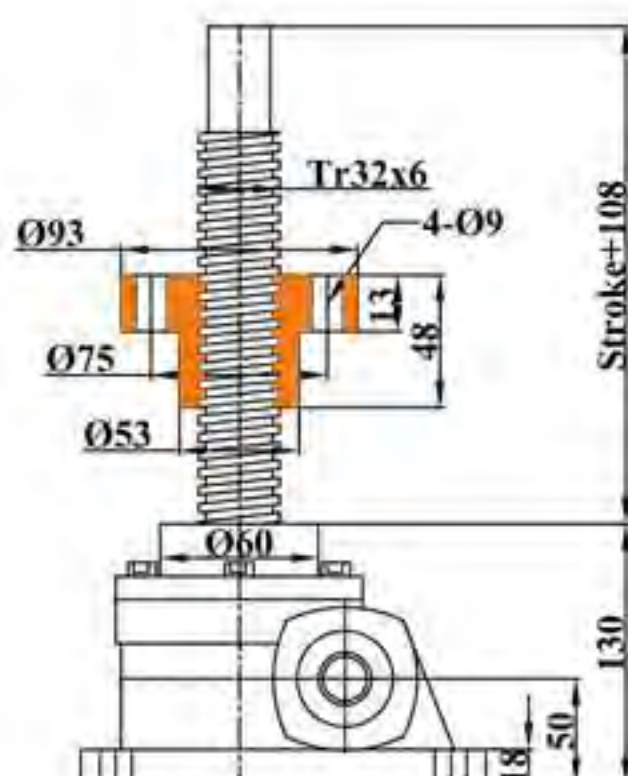
II Clevis End



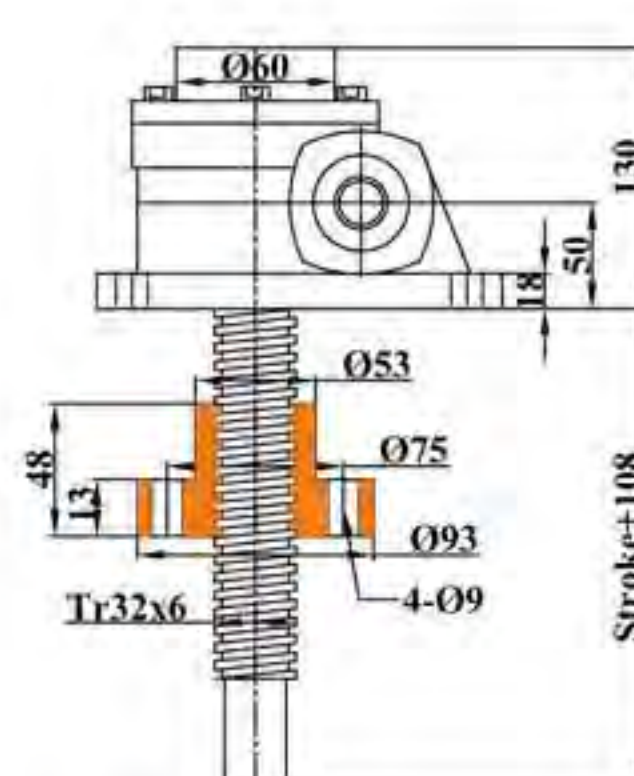
III Plain End



IV Thread End



Upright



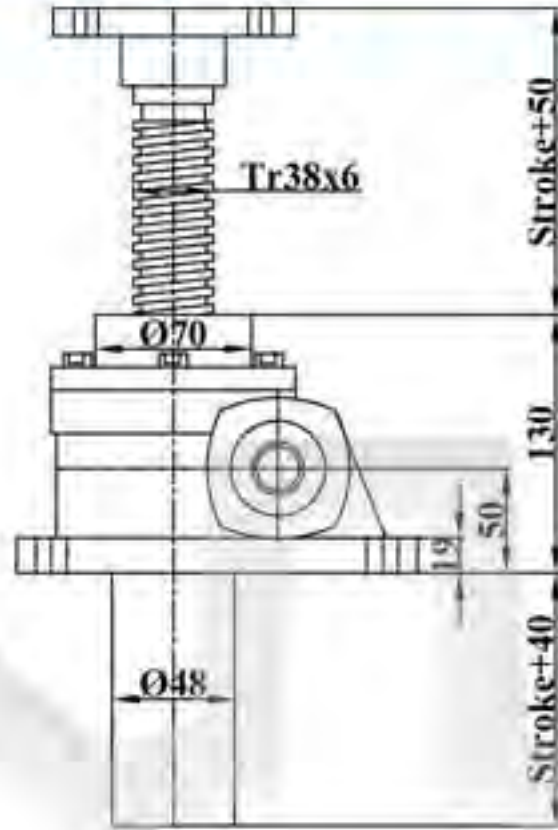
Inverted



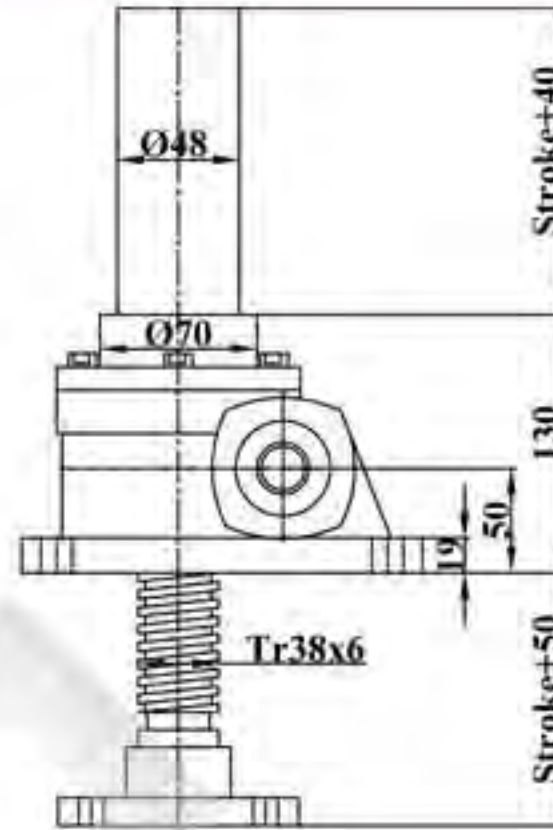
\*. Dimensions are subject to change without notice

## Dimensions

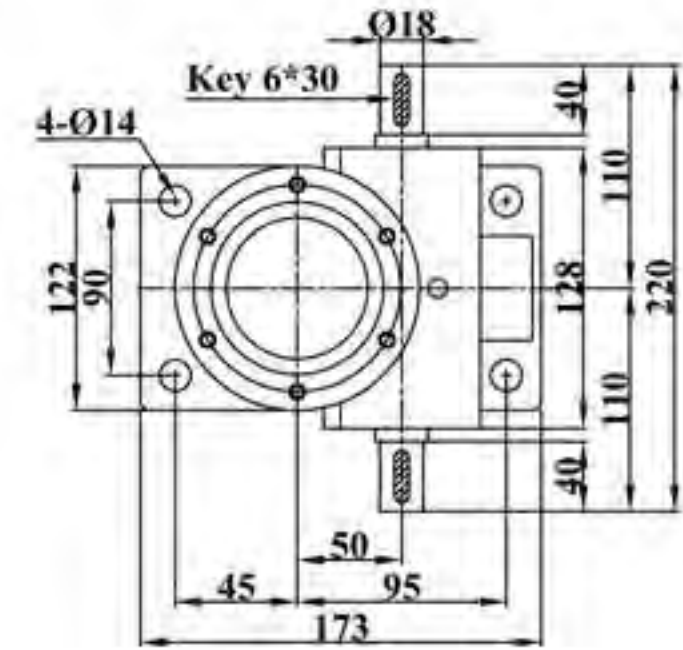
### JT-5T



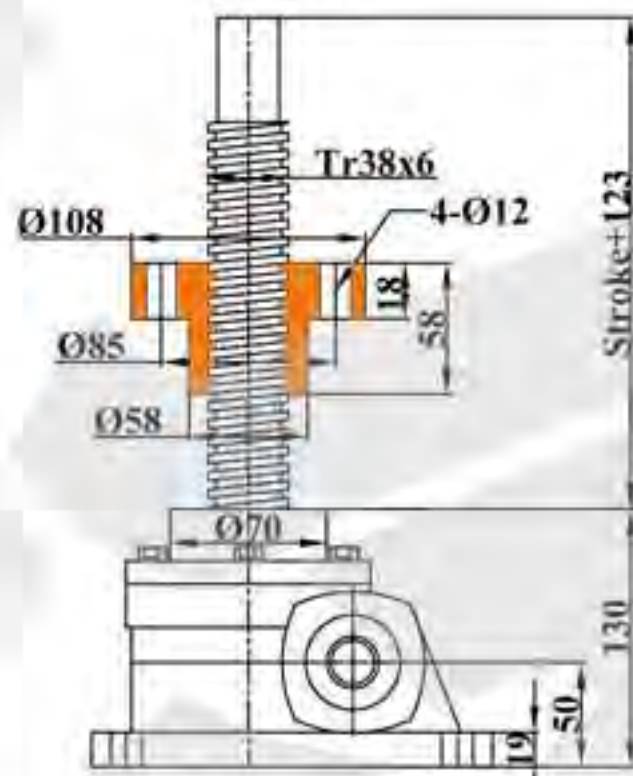
Upright



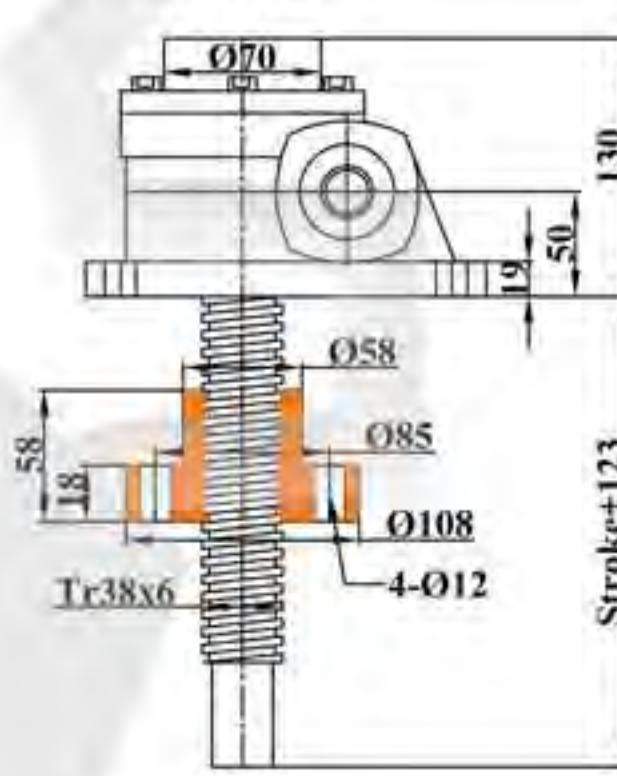
Inverted



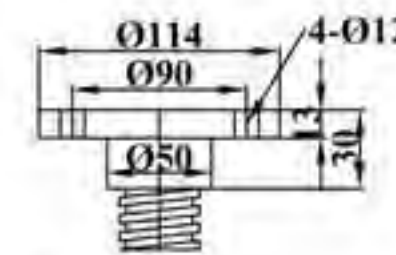
Screw Ends and Dimensions



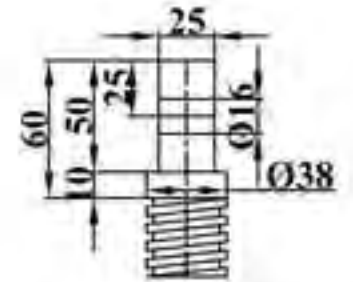
Upright



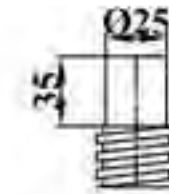
Inverted



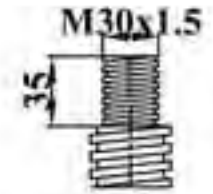
I Top Plate



II Clevis End

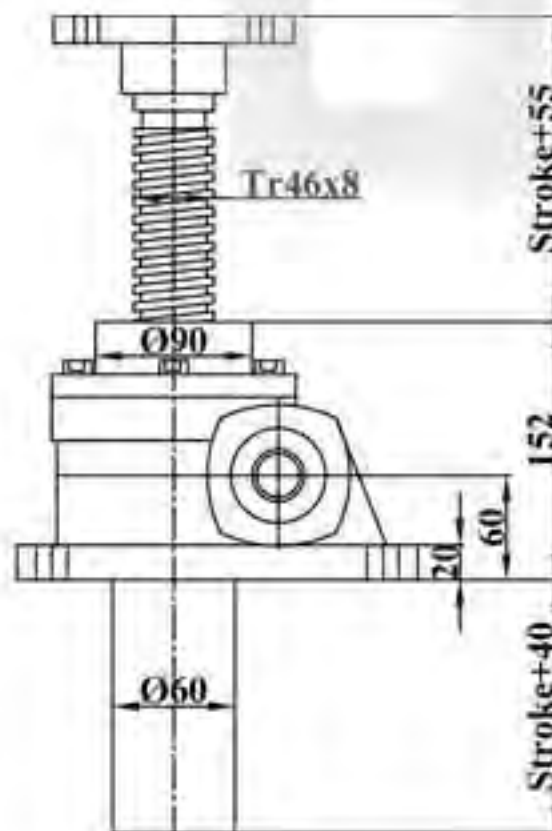


III Plain End

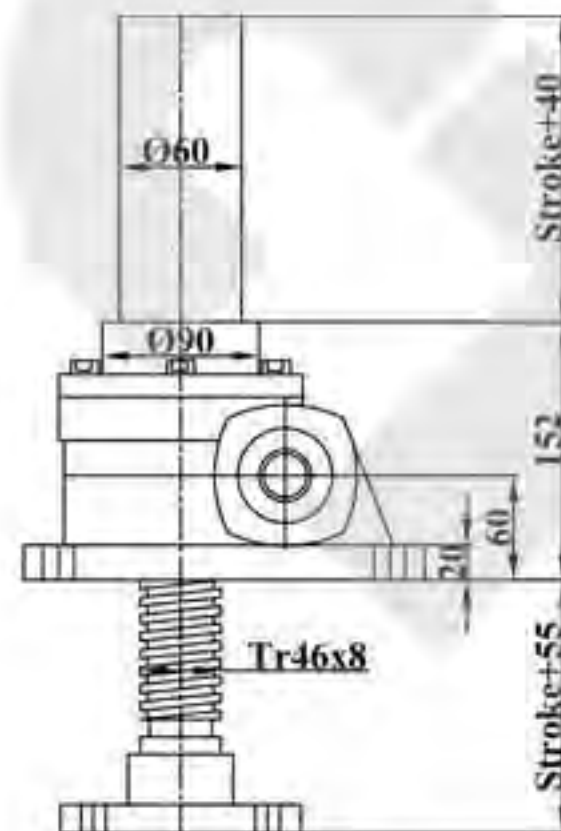


IV Thread End

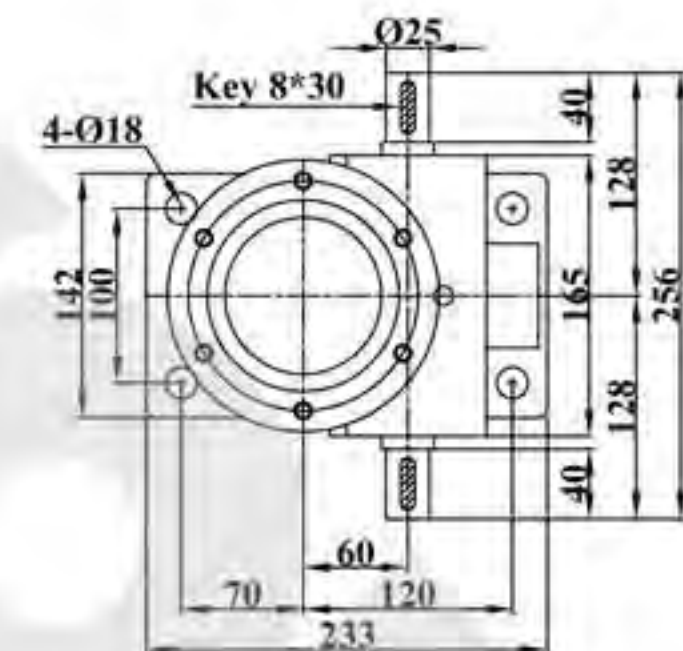
### JT-10T



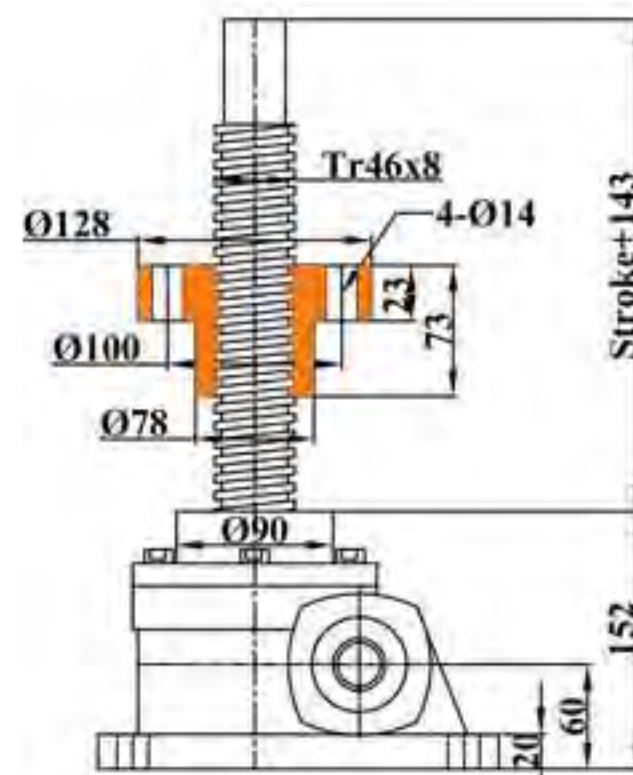
Upright



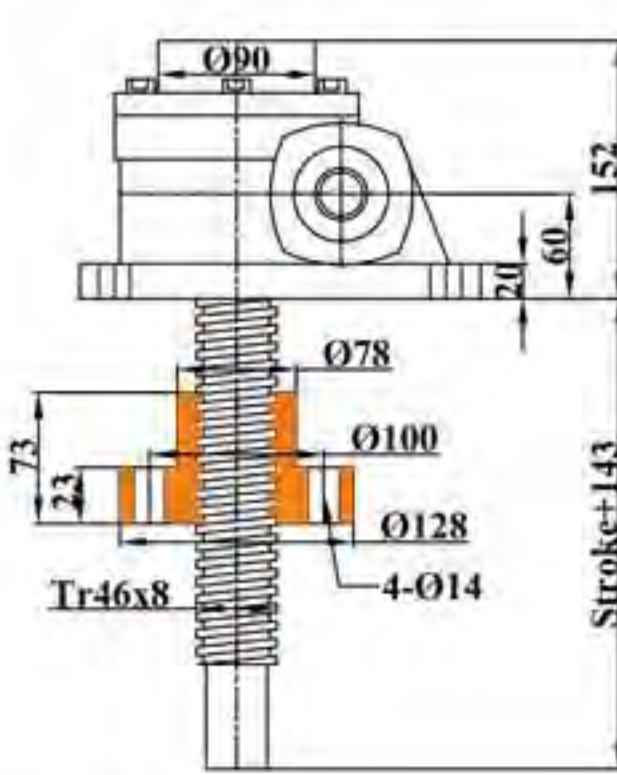
Inverted



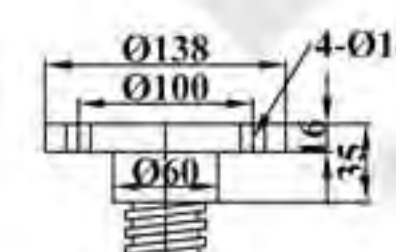
Screw Ends and Dimensions



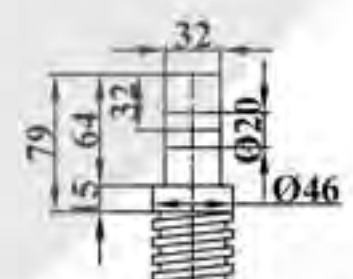
Upright



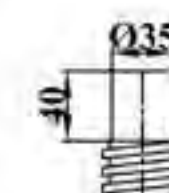
Inverted



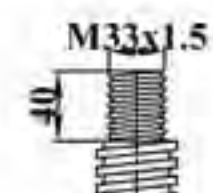
I Top Plate



II Clevis End



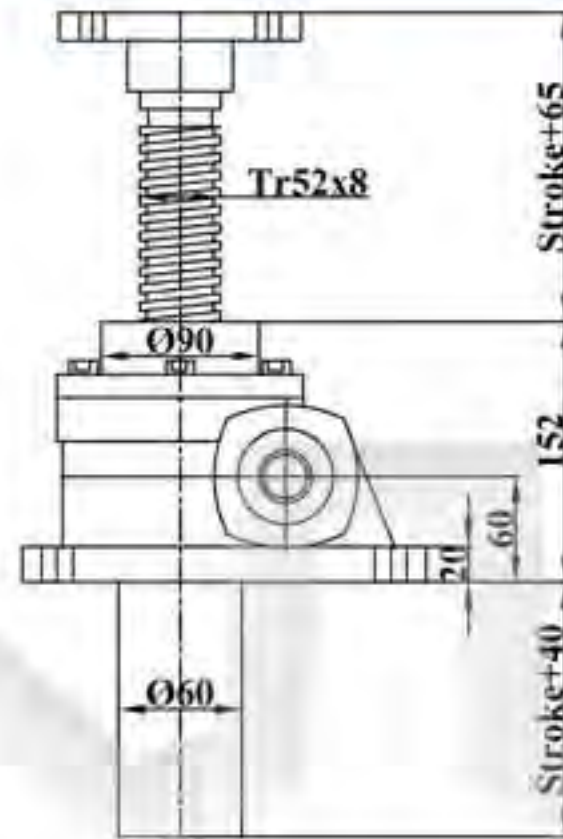
III Plain End



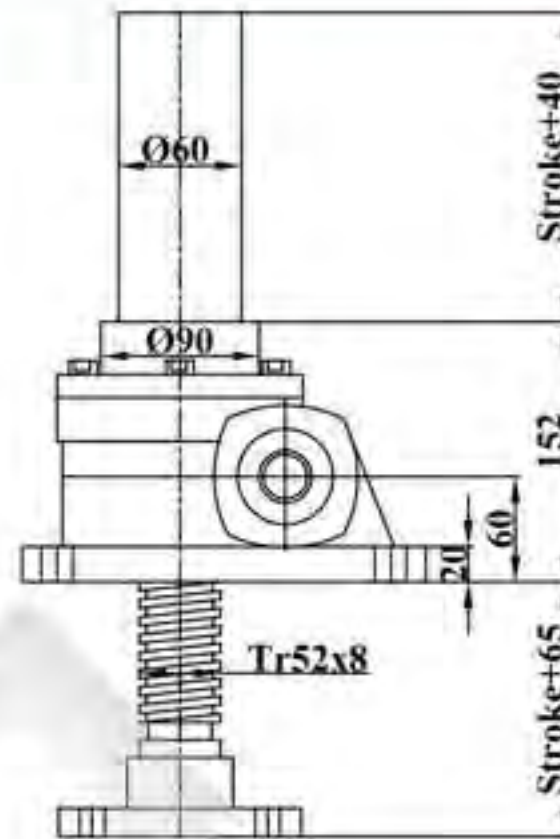
IV Thread End

**Dimensions**

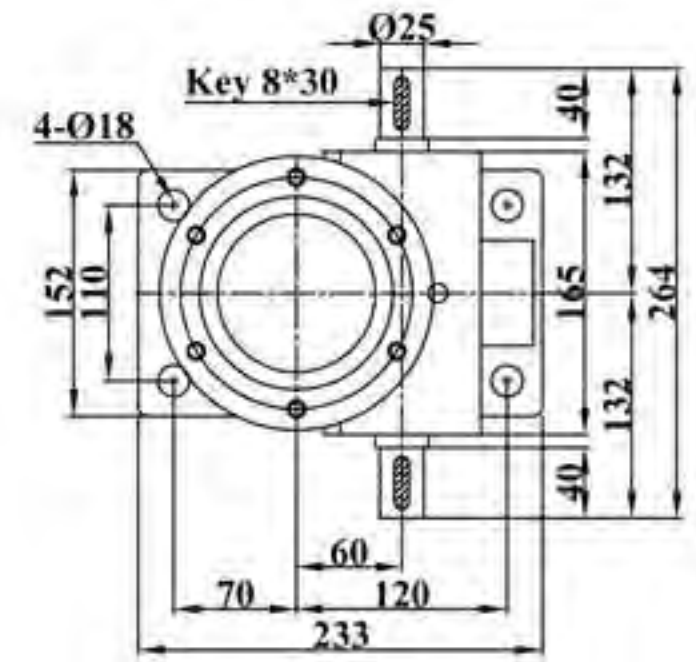
**JT-15T**



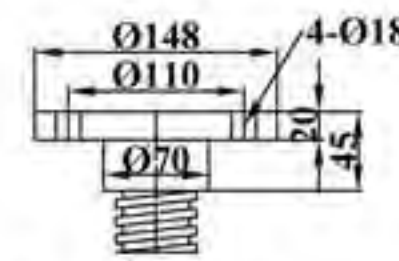
**Upright**



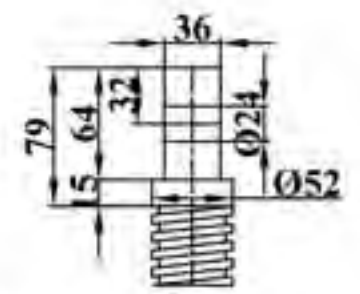
**Inverted**



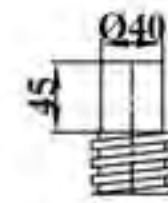
**Screw Ends and Dimensions**



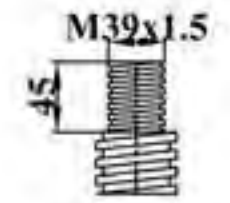
**I Top Plate**



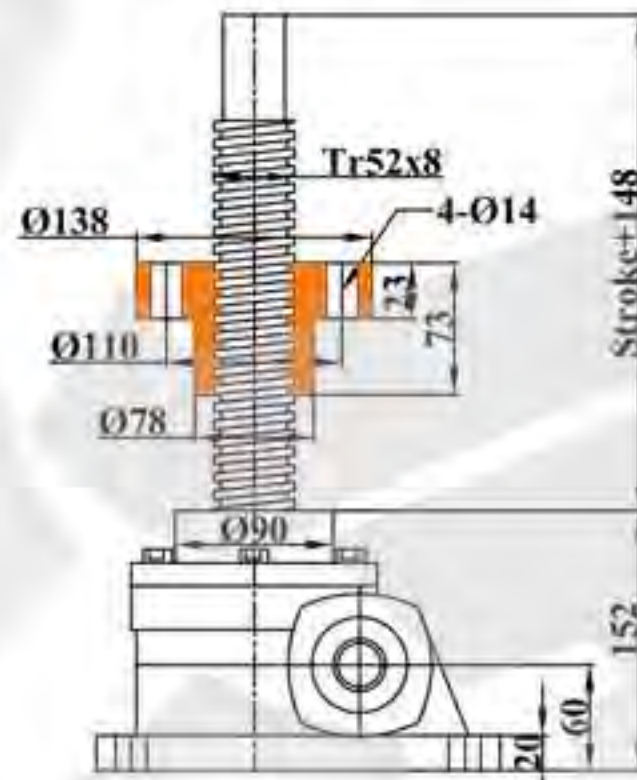
**II Clevis End**



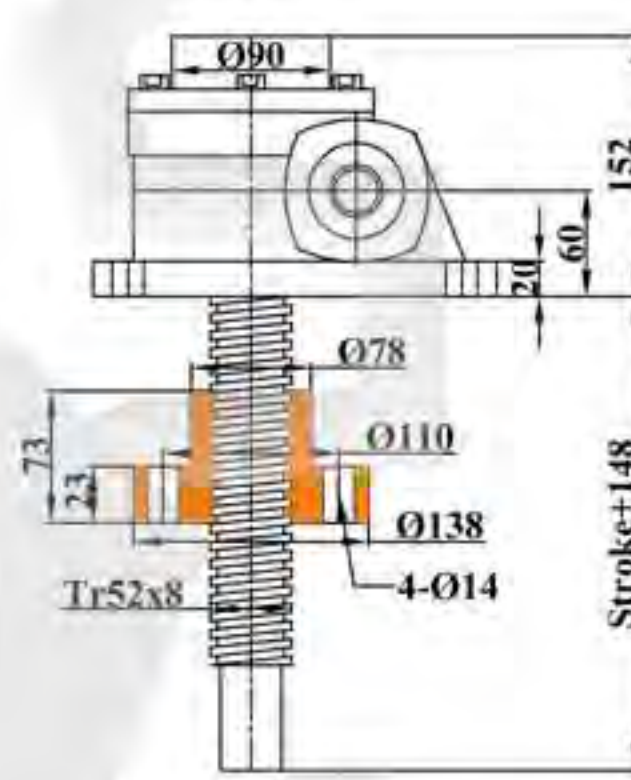
**III Plain End**



**IV Thread End**

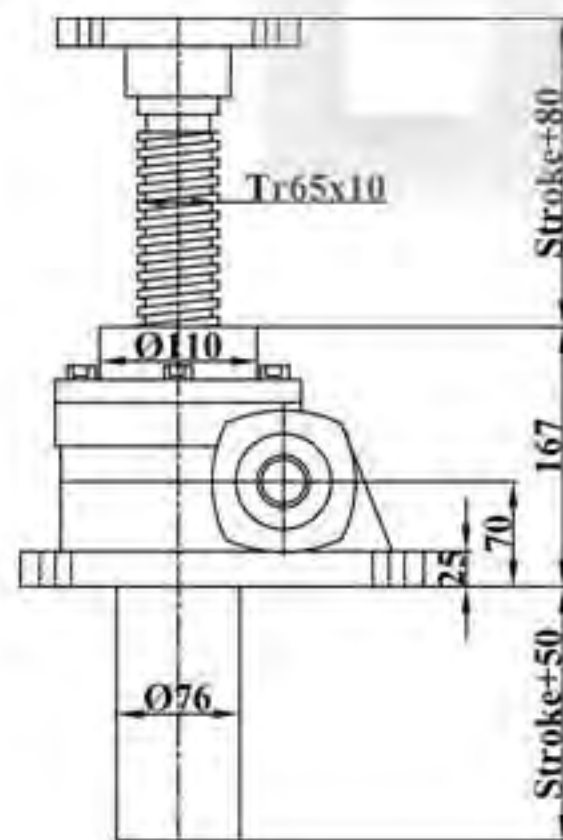


**Upright**

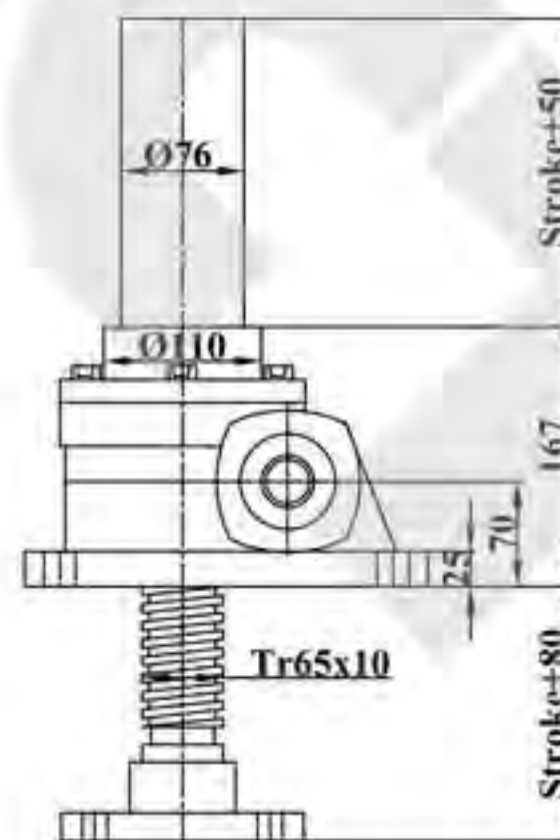


**Inverted**

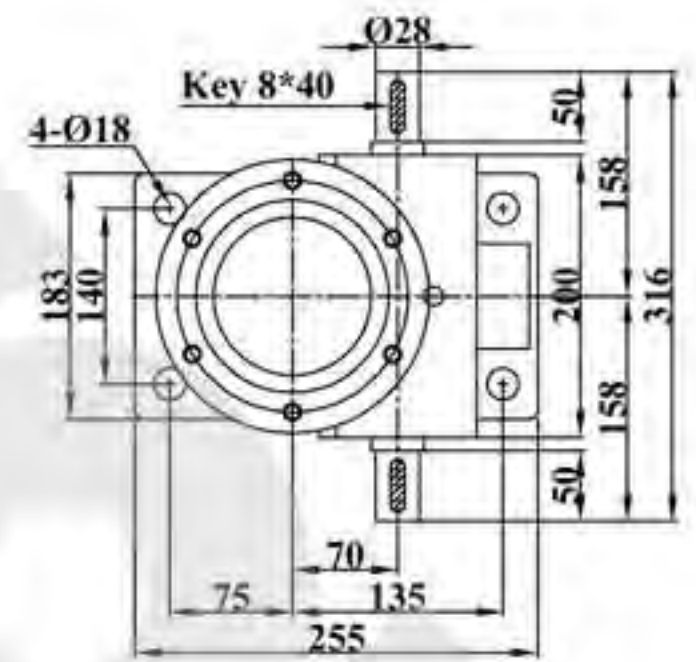
**JT-20T**



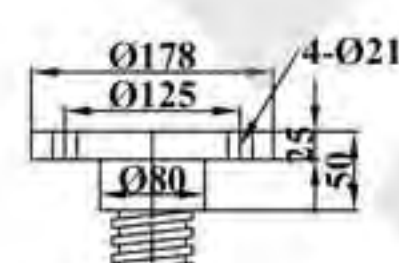
**Upright**



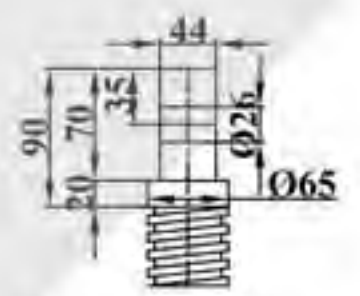
**Inverted**



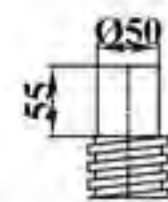
**Screw Ends and Dimensions**



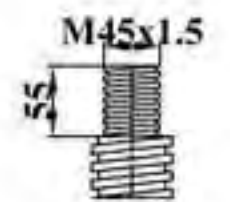
**I Top Plate**



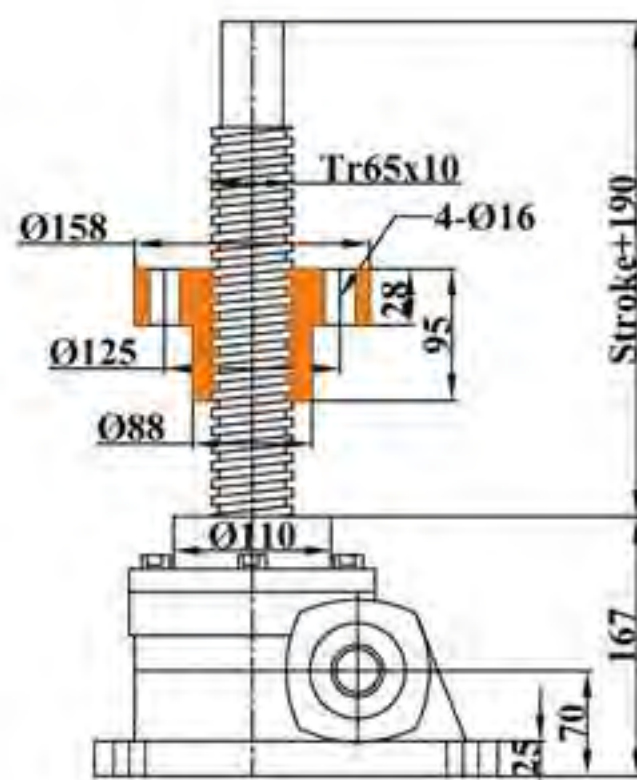
**II Clevis End**



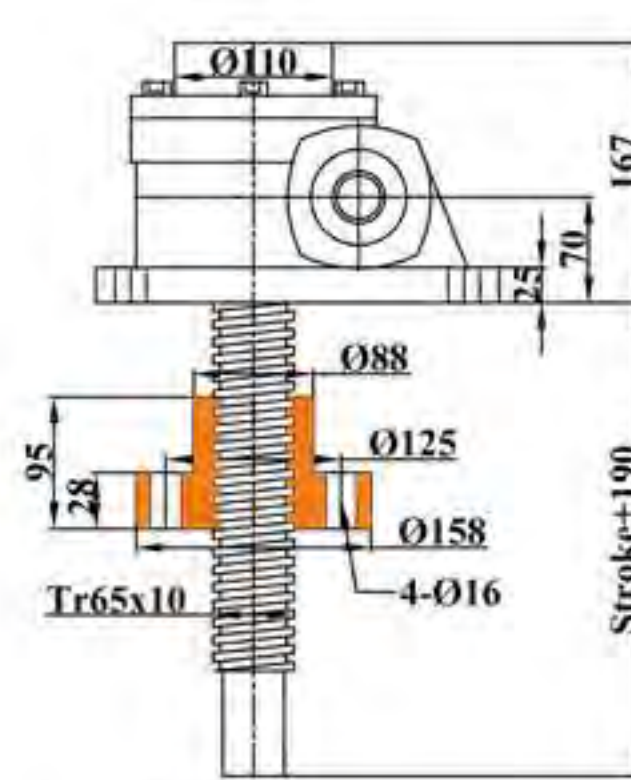
**III Plain End**



**IV Thread End**



**Upright**



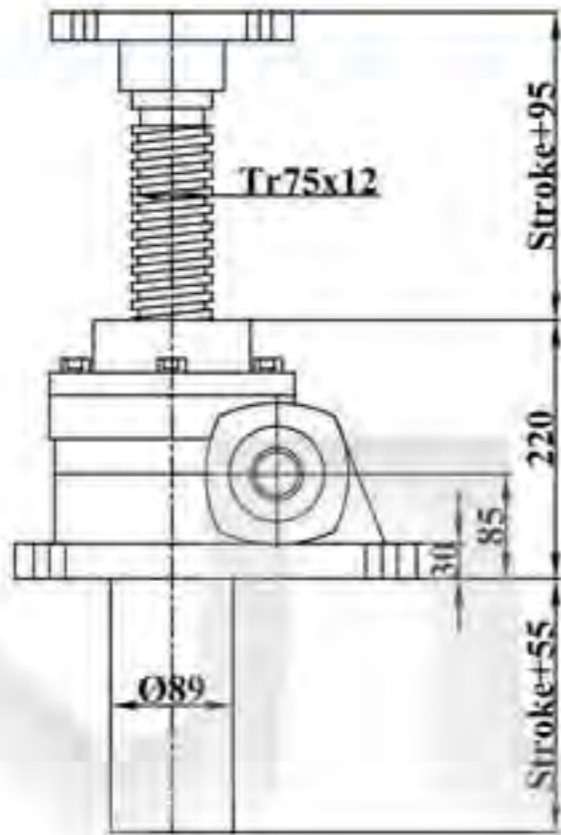
**Inverted**



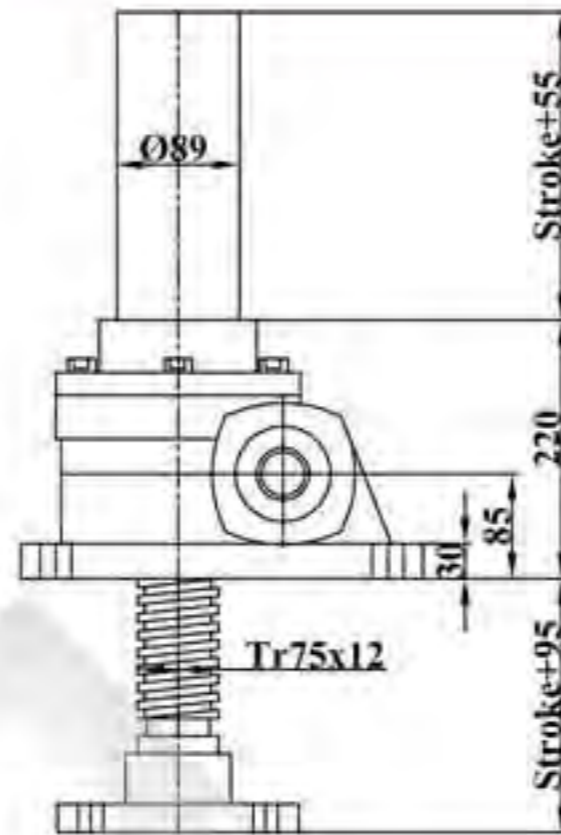
\*. Dimensions are subject to change without notice

## Dimensions

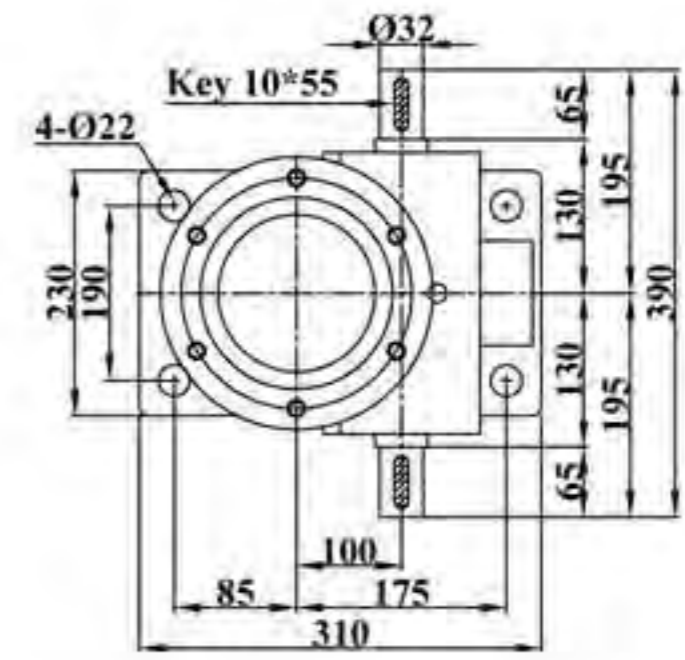
### JT-30T



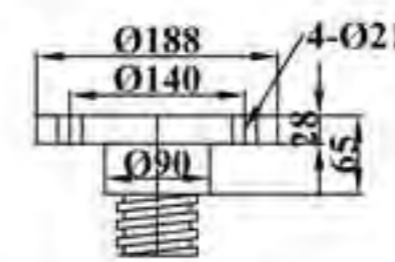
Upright



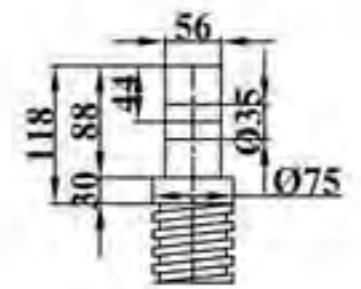
Inverted



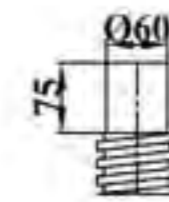
Screw Ends and Dimensions



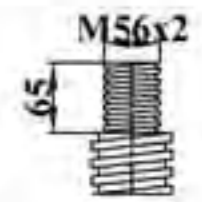
I Top Plate



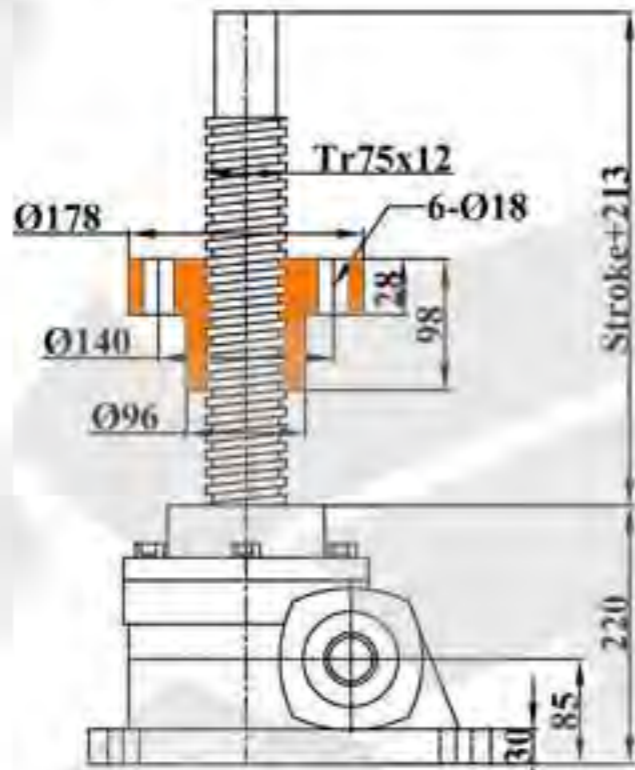
II Clevis End



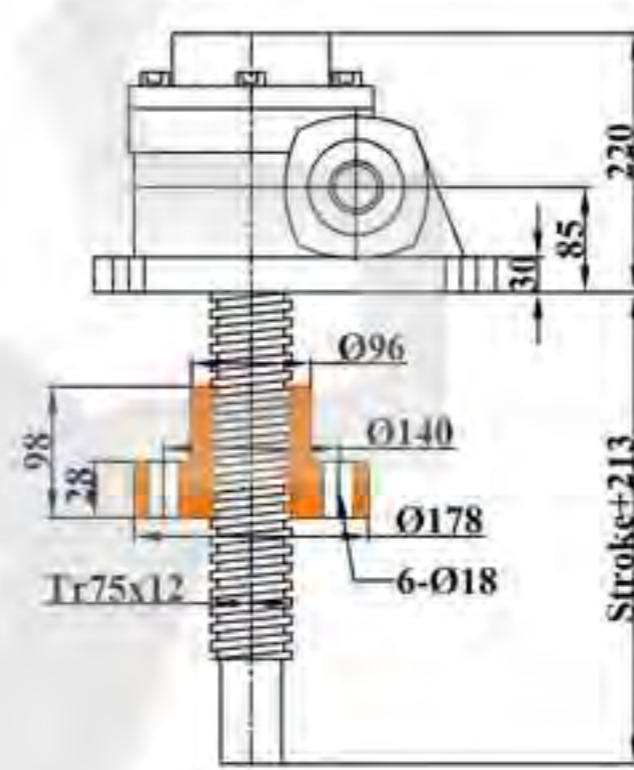
III Plain End



IV Thread End

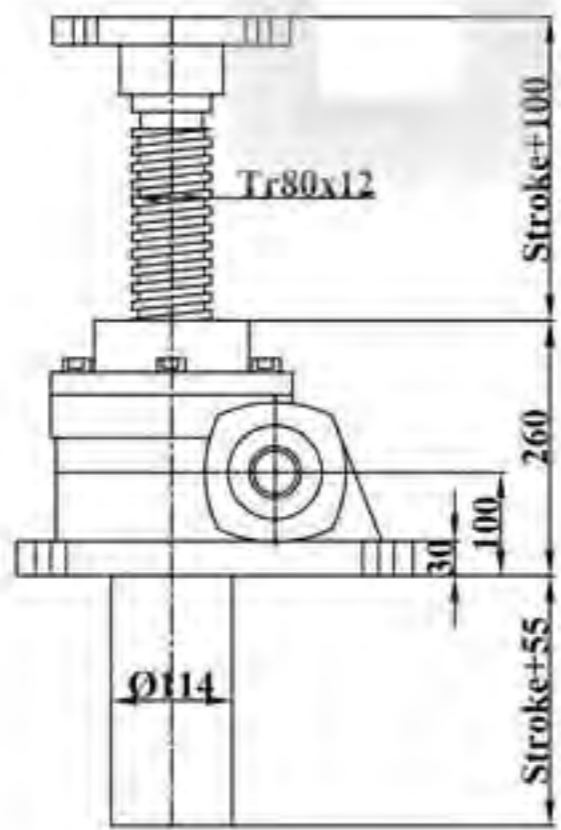


Upright

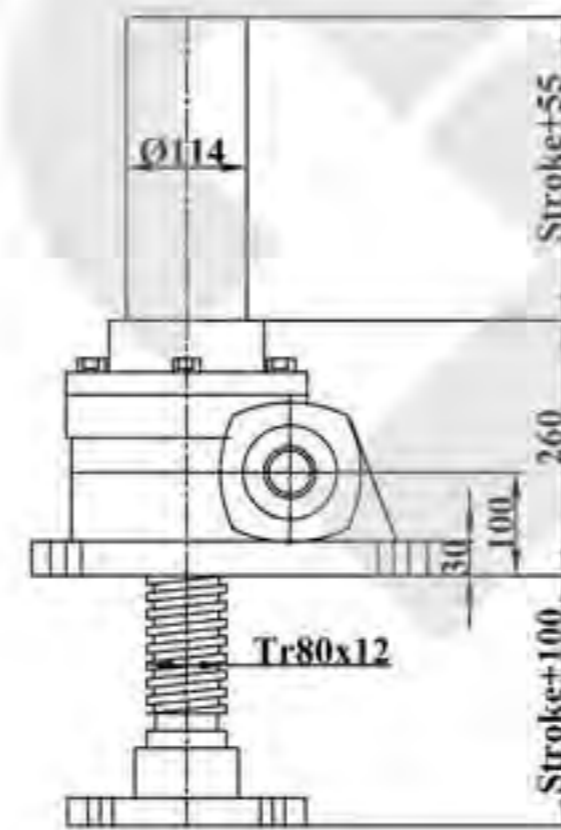


Inverted

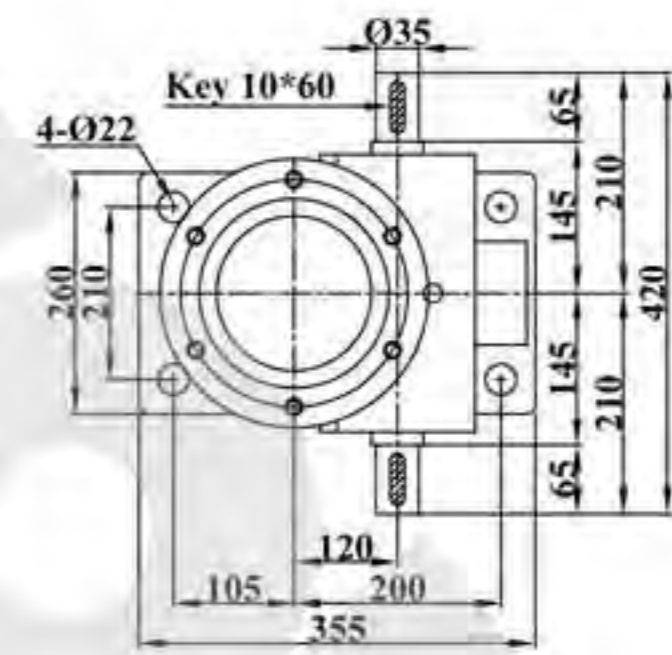
### JT-40T



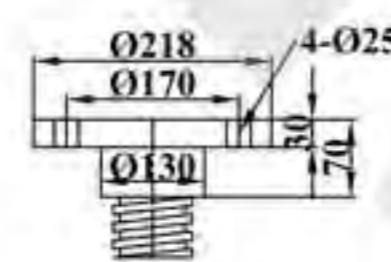
Upright



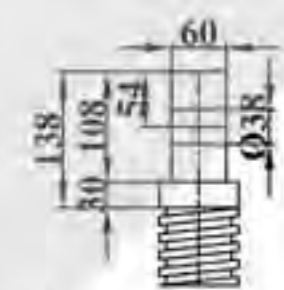
Inverted



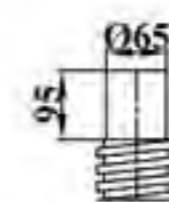
Screw Ends and Dimensions



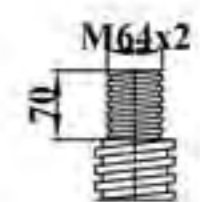
I Top Plate



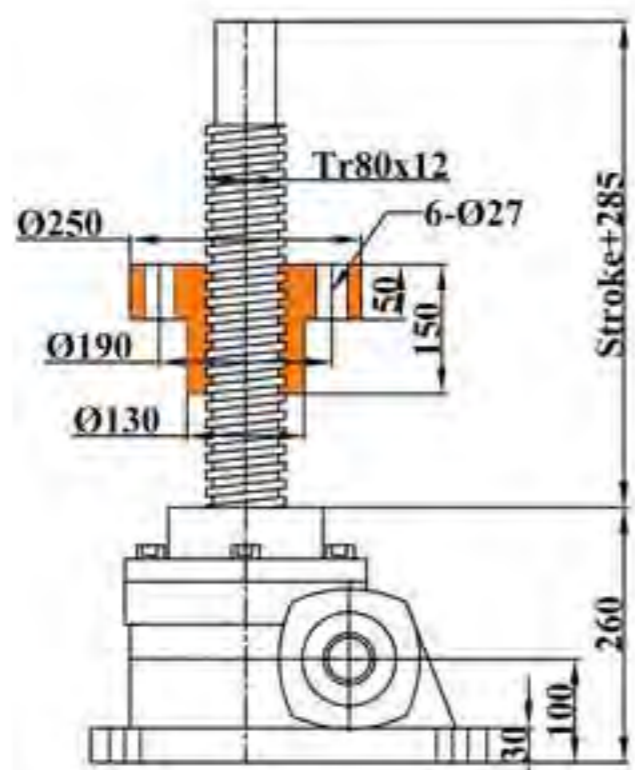
II Clevis End



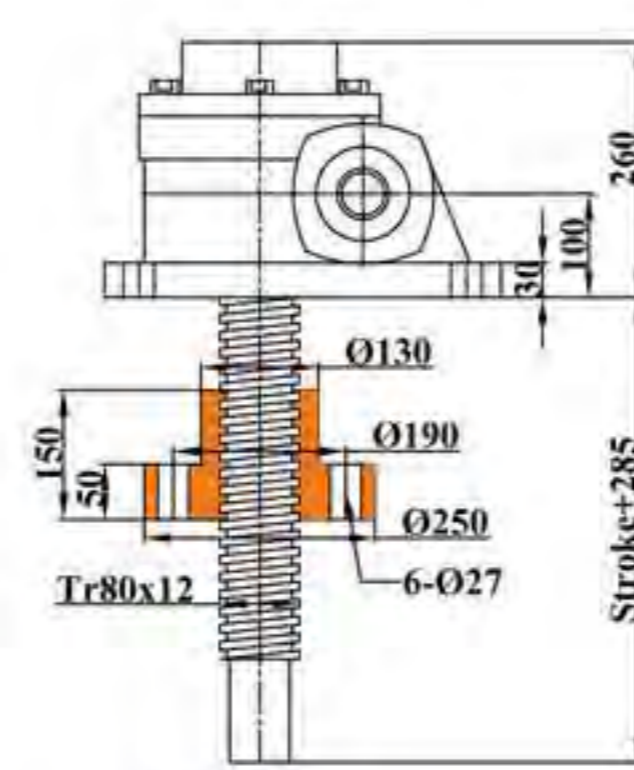
III Plain End



IV Thread End



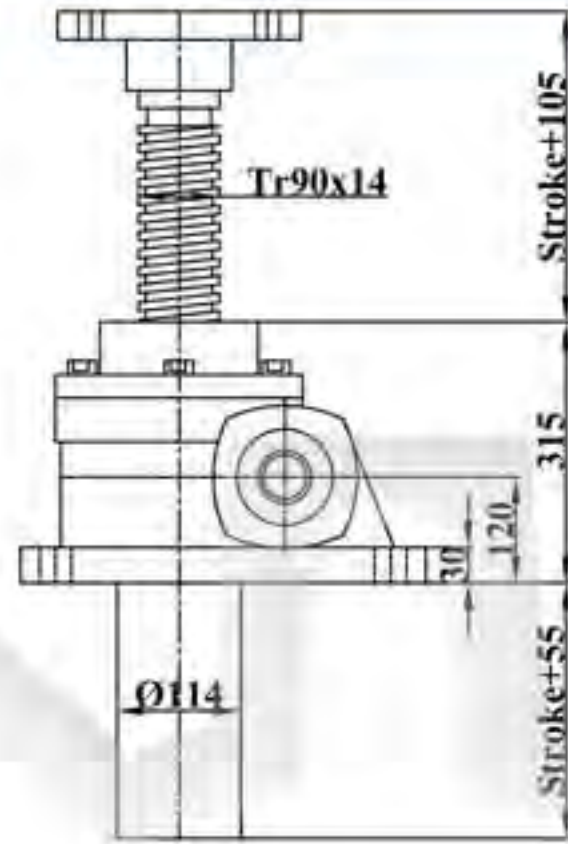
Upright



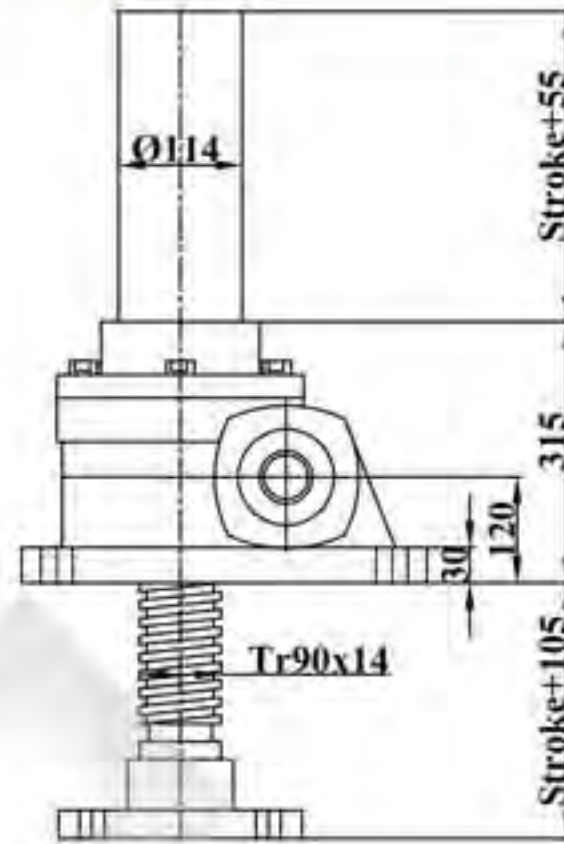
Inverted

**Dimensions**

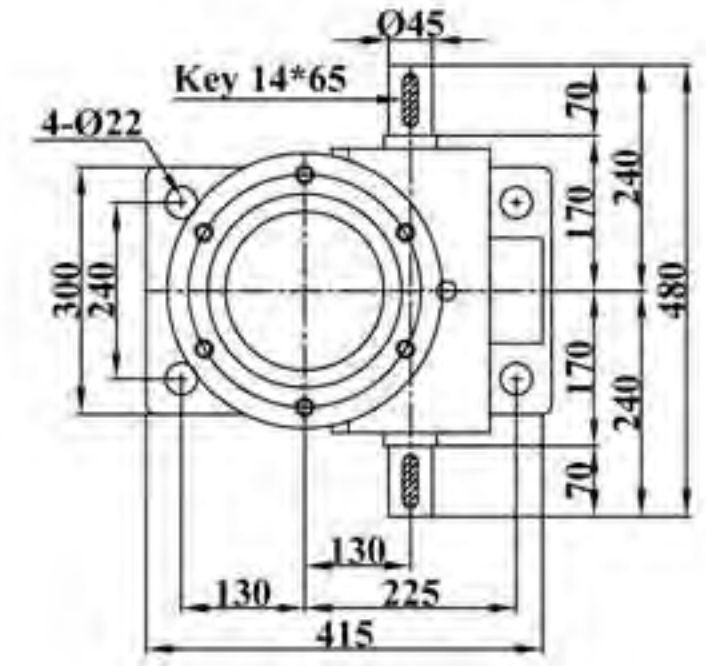
**JT-50T**



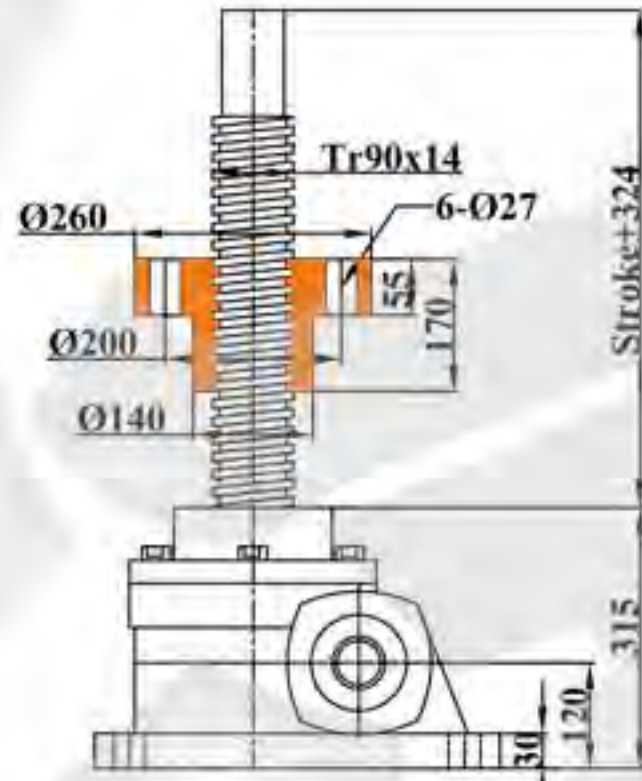
Upright



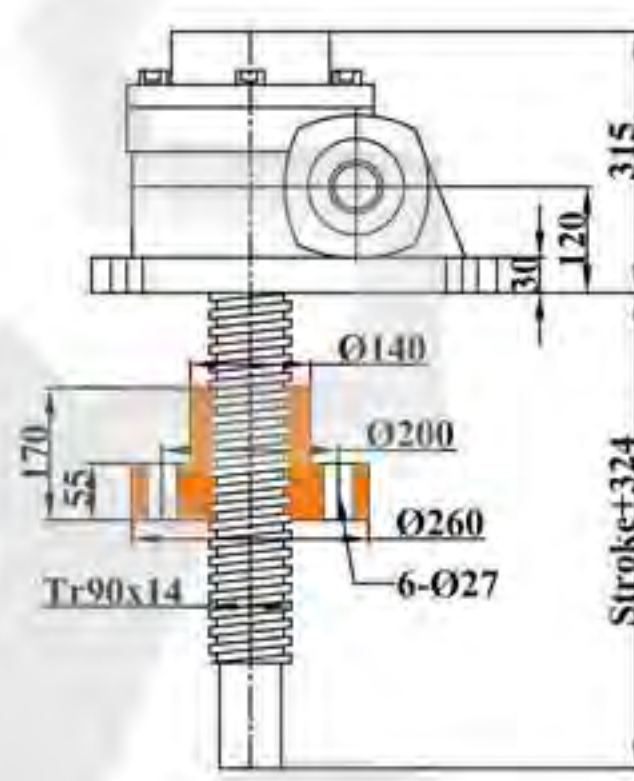
Inverted



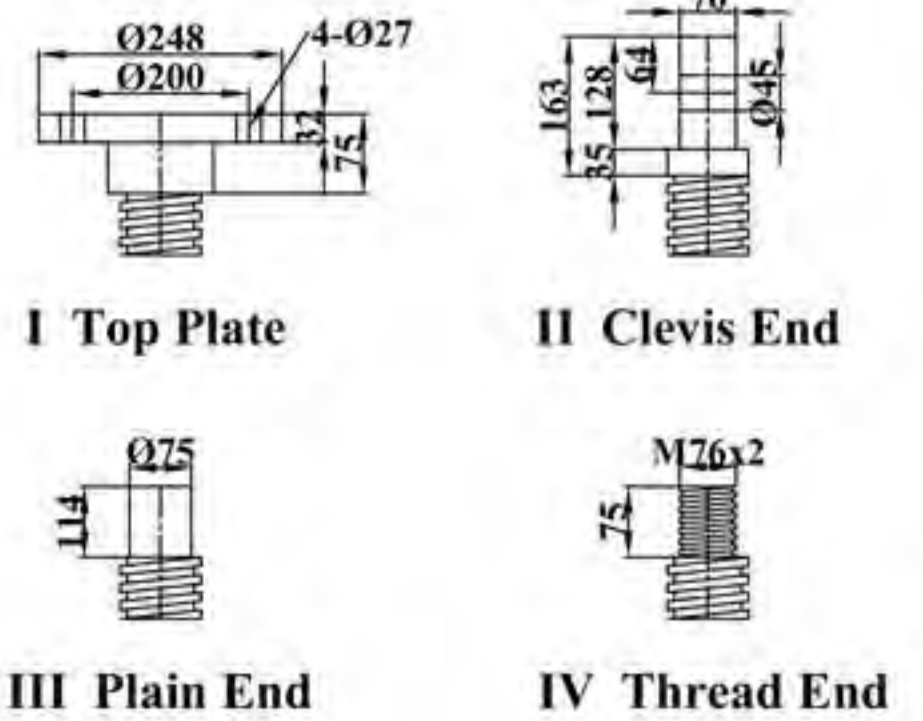
Screw Ends and Dimensions



Upright



Inverted



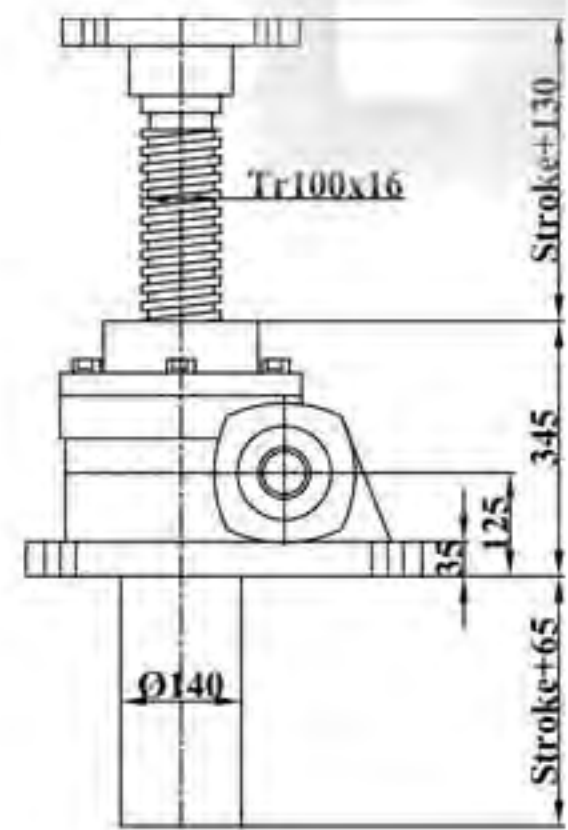
I Top Plate

II Clevis End

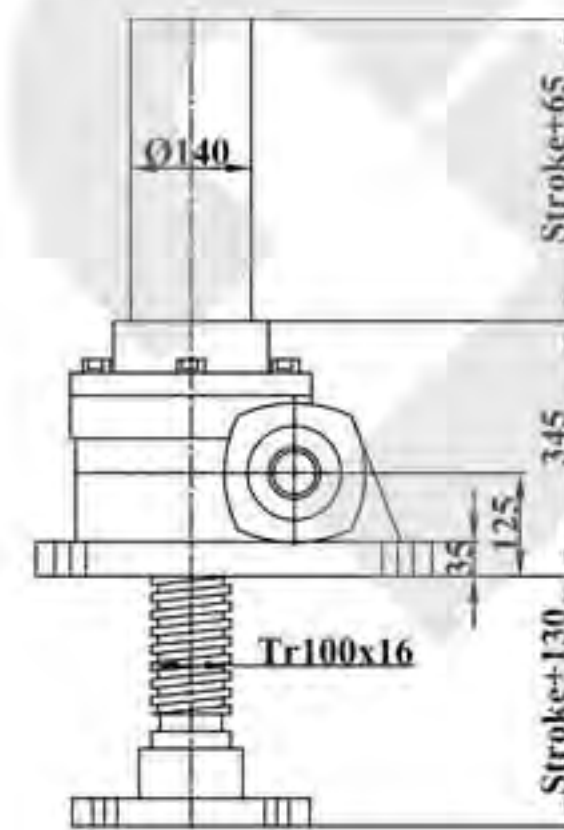
III Plain End

IV Thread End

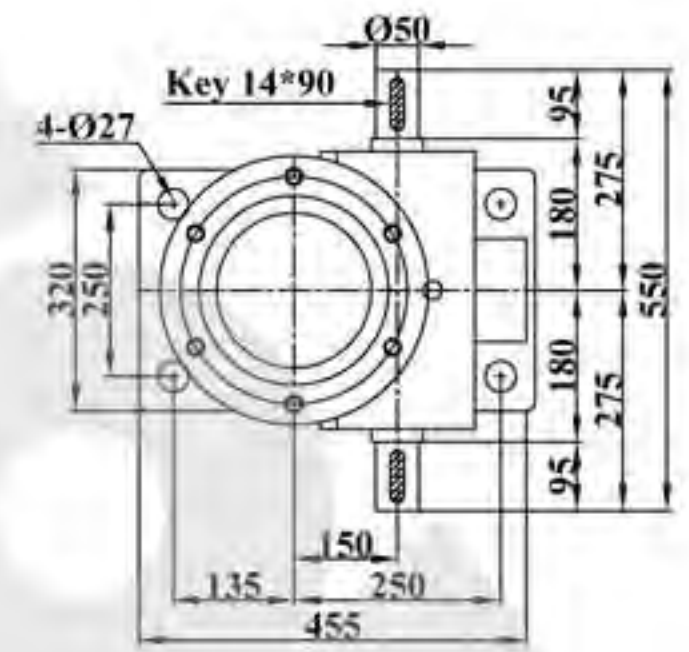
**JT-100T**



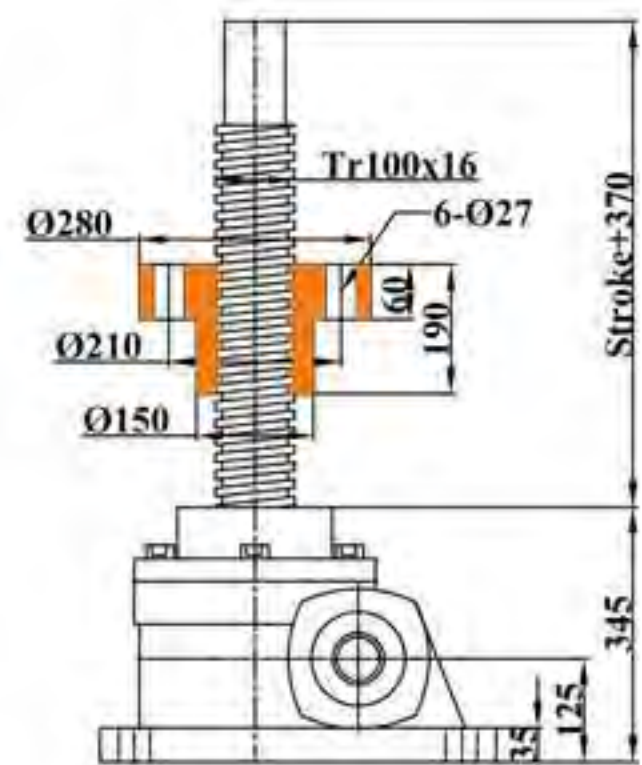
Upright



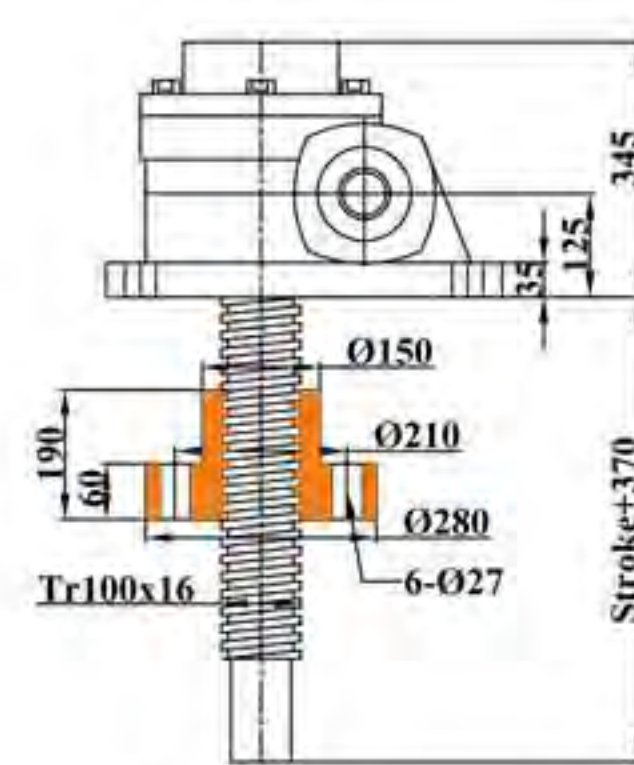
Inverted



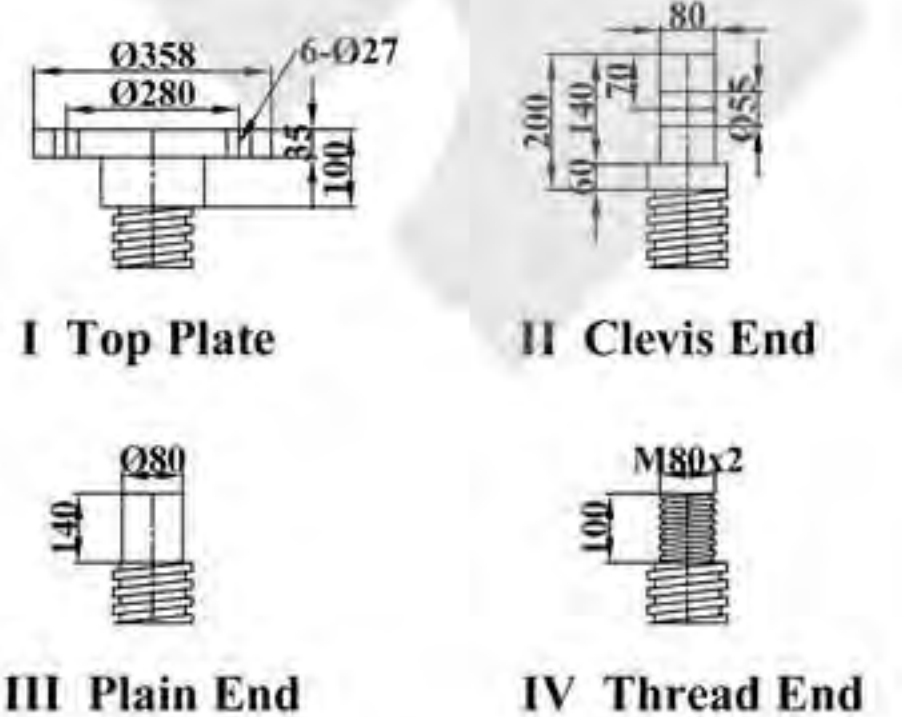
Screw Ends and Dimensions



Upright



Inverted



I Top Plate

II Clevis End

III Plain End

IV Thread End