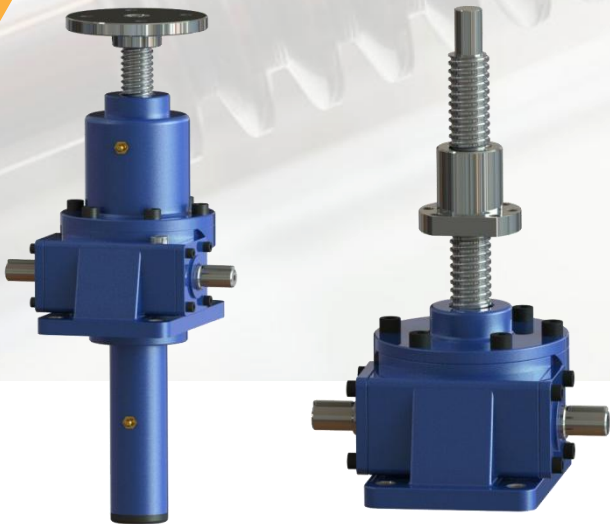




Professional Linear Motion Solutions Provider



SJB Ball Screw Jack

Selection
Guidance

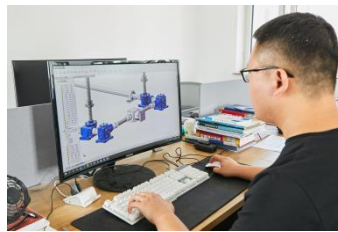


Company Profile

SIJIE is the leading developer and manufacturer of premium, high precision linear motion products in China. Established in 2008, we specialize in screw jack systems, bevel gearboxes and electro-mechanical actuation, lifting and positioning. Our engineers expertly develop bespoke solutions with both flexibility and innovation in mind, enabling us to provide products for the most challenging applications.

Our state-of-the-art factory, boasting 9500m² of floor space, is equipped with a series of advanced processing machines allowing our engineers to develop solutions for both small businesses and multinational organisations. SIJIE'S efficient, skilled team offer technical guidance and quality support, guaranteeing our customers' vision is always achieved.

Our mission is simple. To provide high-quality linear motion products, while consistently offering an unmatched customer service to always exceed customer expectations.



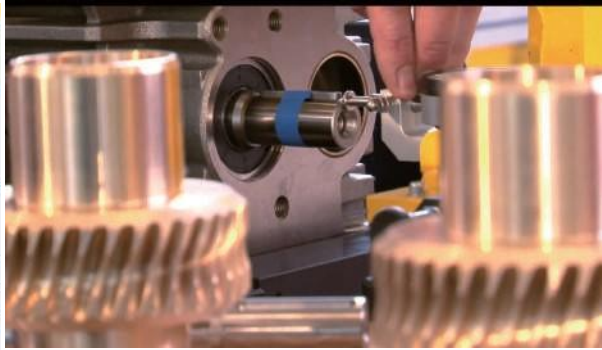
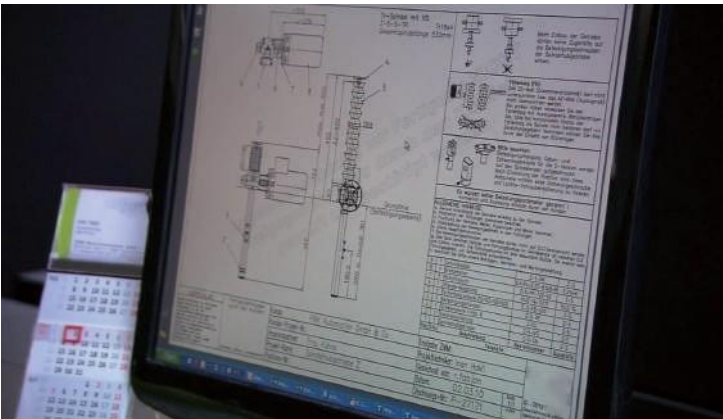
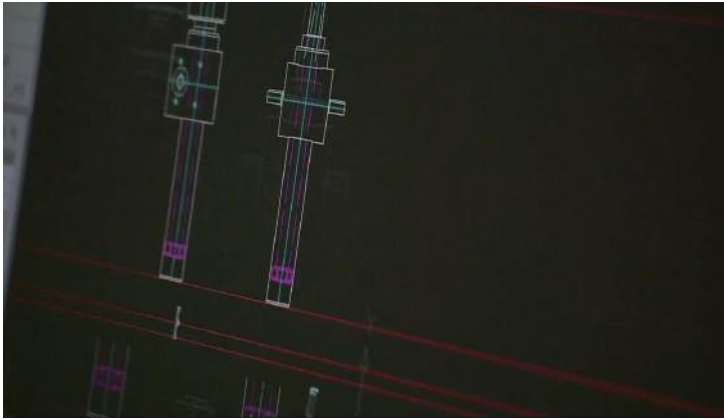
Creating the high-quality product

Focus on details

SIJIE designs worm gear screw jacks which provides rugged, reliable and high performance.

Our engineers expertly develop bespoke solutions with both flexibility and innovation in mind, enabling us to provide products for the most challenging applications.

SIJIE offers the perfect balance of service, cost, performance and quality.

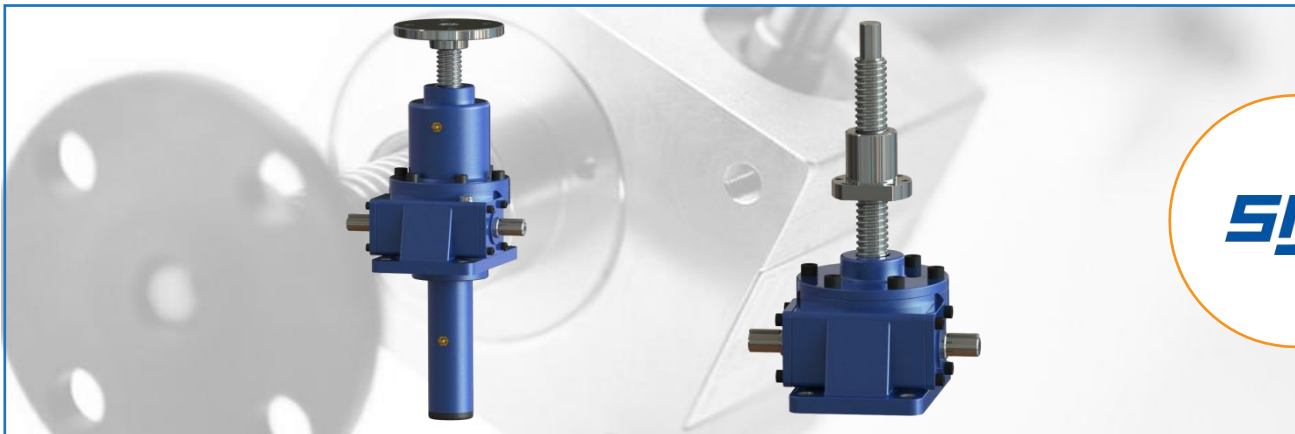


Product Introduction

Description

SIJIE ball screw jacks are suitable for high precision, high efficiency, high duty cycle, high performance, and high-frequency operation, the major components include a TBI ball screw and high precision worm gear.

SIJIE ball Screw Jacks can be used individually or as part of a larger mechanical system and require less power to drive the load.



Key Features

SJB ball screw jack has no self-lock feature and need to add the brake motor.

Alloy steel input shafts.

ZQA19-4 tin bronze worm gears.

Tapered roller bearing or ball thrust bearings offer rugged reliability.

Double input shafts standard.

Electric driven and manual operated both are available.

Protective tube and bellows are available.

Anti-backlash devices, safety nut, and Anti-rotation are available.

Customized ball screw jacks can be made to your specifications.

Application Range

SIJIE's SJB series ball screw jack provides rugged, reliable and high performance, offering tailored solutions to all our customers for many industrial applications.

Our screw jack are widely used for Defense Military, Food Industry, Transportation Industry, Industrial Automation, Energy Industry. We are happy to work with our customers to explore the application of screw jacks in more industries.



SJB Series Specifications

Model		SJB010	SJB025	SJB050	SJB100	SJB150
Maximum lifting force(KN)		7	12	39	56	73
Outer Diameter Of Screw (mm)		20	25	40	50	50
Root Diameter Of Screw (mm)		17.5	21.133	34.91	44.91	44.91
Screw lead (mm)		5	10	10	10	20
Gear Ratio	P	5	6	6	8	8
	M	20	24	24	24	24
Screw (Nut) travel per turn of worm shaft(mm)	P	1	1.66	1.67	1.25	2.5
	M	0.25	0.42	0.42	0.42	0.83
Efficiency (%)	P	40	40	40	40	40
	M	25	25	25	25	25
Maximum input power(KW)	P	0.54	1.3	2.2	3.6	4.0
	M	0.27	0.63	1.0	1.9	2.1
Max. Load, Required Input Torque (N.m)	P	2.8	9.0	21.5	39.1	77.0
	M	1.4	4.3	9.6	20.4	39.6
Max. Load, Permissible Input Speed(rpm)	P	1500	1400	1000	890	500
	M	1500	1400	1000	890	500
No-Load Torque (N.m)		0.29	0.62	1.37	1.96	2.65
Permissible Input Torque (N.m)		19.6	49.0	153.9	292.0	292.0
Max. Load, Lifting Screw Output Torque(N.m)		8.7	34.7	86.7	208.2	416.3

Model		SJB200	SJB300	SJB500	SJB750	SJB1000
Maximum lifting force(KN)		110	129	143	200	300
Outer Diameter Of Screw (mm)		63	80	100	125	160
Root Diameter Of Screw (mm)		57.91	72.466	87	110	142
Screw lead (mm)		10	20	25	25	32
Gear Ratio	P	8	10.67	10.67	10.67	12
	M	24	32	32	32	36
Screw (Nut) travel per turn of worm shaft(mm)	P	1.25	1.88	2.25	2.34	2.67
	M	0.42	0.63	0.75	0.78	0.89
Efficiency (%)	P	40	40	40	40	40
	M	25	25	25	25	25
Maximum input power(KW)	P	5.5	8.9	13.3	14.5	21.5
	M	2.8	4.1	6.5	7.5	9.5
Max. Load, Required Input Torque (N.m)	P	104.5	169.6	317.5	435	663
	M	54.2	98.5	177.9	242	365
Max. Load, Permissible Input Speed(rpm)	P	500	500	400	310	300
	M	500	400	350	295	240
No-Load Torque (N.m)		3.92	9.81	19.6	27	38
Permissible Input Torque (N.m)		292.0	735.0	1372.0	1764.0	2450.0
Max. Load, Lifting Screw Output Torque(N.m)		555.1	1040.9	2081.7	2514	4586

Remarks: Working environment temperature -10°C - +40°C, please contact us if you need -35°C - +70°C

Product selection mark

Ordering information

Model	Jack Configuration	Gear ratios	Stroke	Screw Configuration	Shafts Input Types	Accessories
SJB010	US: Upright translating screw	P: High speed	Customized	T: Top Plate	A: left side input.	P: Protective Tube
SJB025	IS: Inverted translating screw	H: Low speed		H: Clevis End	B: right side input.	R: Bellows boot
SJB050	UK: Upright keyed screw			R: Plain End	C: double shaft input.	Y: Hand Wheel
SJB100	IK: Inverted keyed screw			S: Thread End	M1: left side motor flange	M: Electric Motor
SJB150	UR: Upright rotating screw			U: Forked Head	M2: right side motor flange	MB: Mounting base
SJB200	IR: Inverted rotating screw			SH: Spherical Hinge	M3: left side motor flange, right side shaft	MBK: Mounting brackets
SJB300					M4: right side motor flange, left side shaft	PB: Pillow block bearing
SJB500						SN: Safety nut
SJB750						LS: Limit switch
SJB1000						TS: Travel Switch

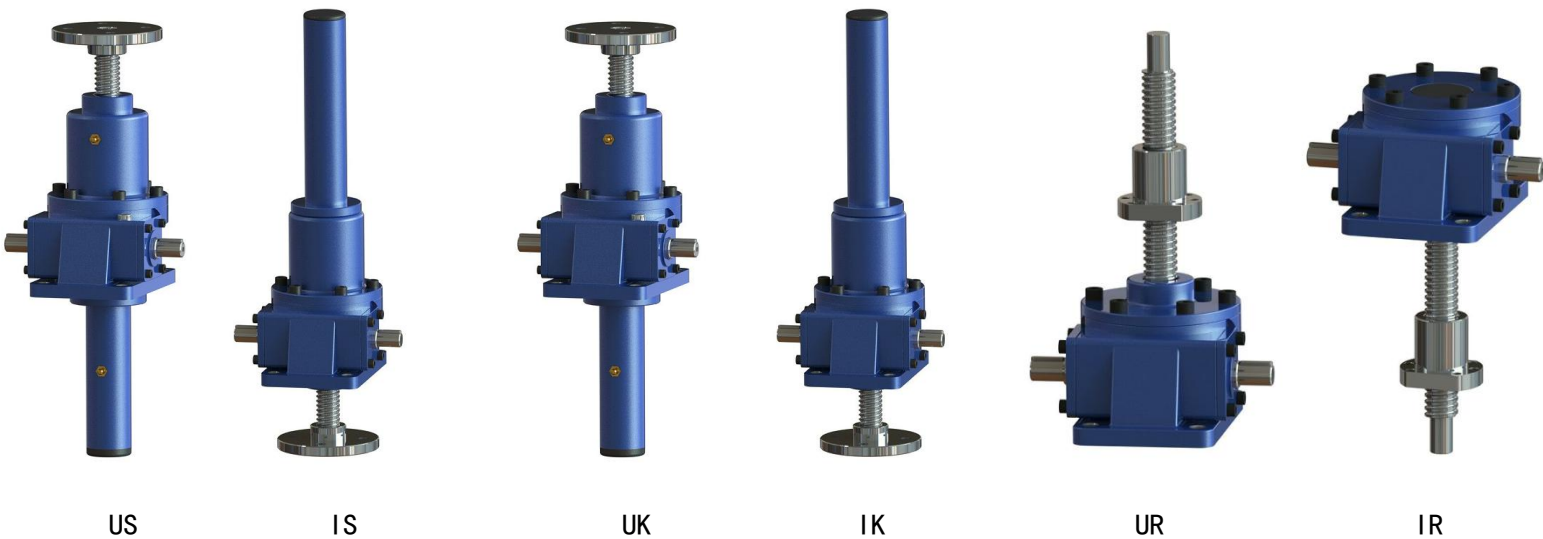
Jack Configuration

US: Upright translating screw UK: Upright keyed screw UR: Upright rotating screw







IS: Inverted translating screw IK: Inverted keyed screw IR: Inverted rotating screw

Note: US, IS (Screw rotation, do axial motion) UK, IK (Screw anti-rotation, do axial motion)

UR, IR (Screw fixed rotation, traveling nut do axial motion)



Screw Top End Configuration

					
T: Top Plate	H: Clevis End	R: Plain End	S: Thread End	U: Forked Head	SH: Spherical Hinge

Worm Shafts Input Types

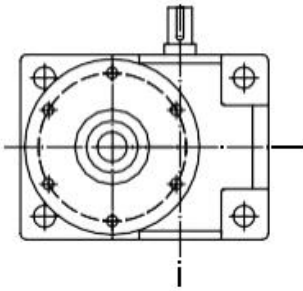
A: left side worm shaft input. B: right side worm shaft input. C: double worm shaft input.

M1: left side motor flange direct input.

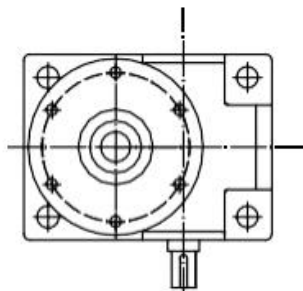
M2: right side motor flange direct input.

M3: left side motor flange direct input, right side worm shaft input.

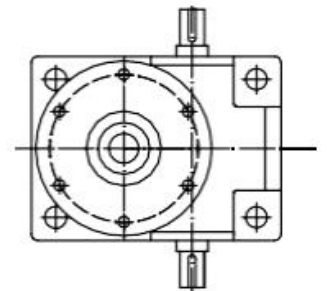
M4: right side motor flange direct input, left side worm shaft input.



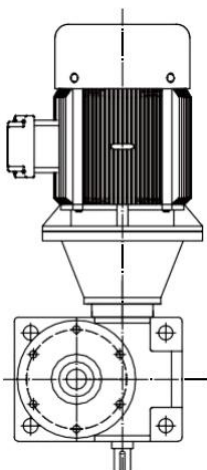
A



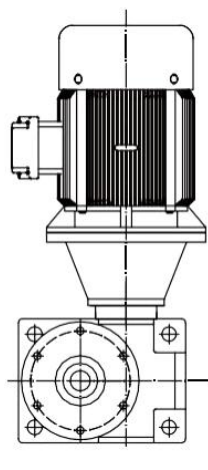
B



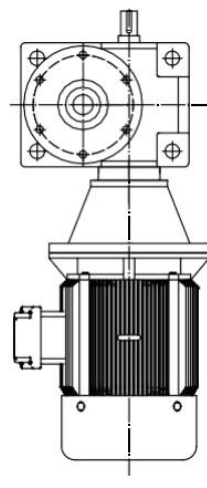
C



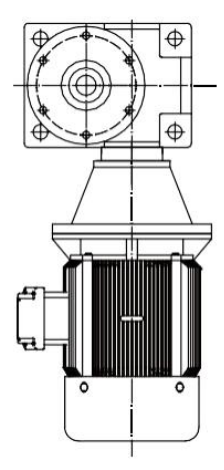
M1



M2



M3



M4

Screw Jack System Accessories:

We can provide the accessories you need to compliment your screw jack system and to ensure the efficient operation, extended life and safety of your system.

P: Protective Tube Standard

R: Dust Cover(Bellows boot)

Y: Hand Wheel

M: Electric Motor

Other accessories, please check below picture.



Protective Tube



Bellows boot



Hand wheel



Electric Motor



Gear reducer



Mounting base



Mounting brackets



Pillow block bearing



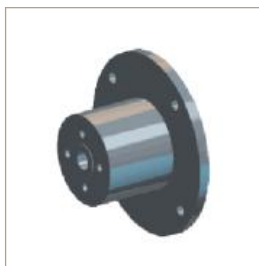
Safety nut



Couplings



Bevel Gearbox



Motor flange



Flange blocks



Servo Motor



Inverter



Connecting Shaft



Limit switch



Travel Switch

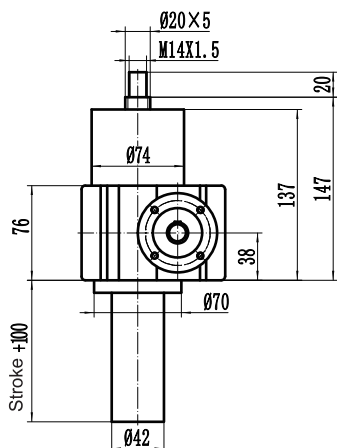


Mounting plate

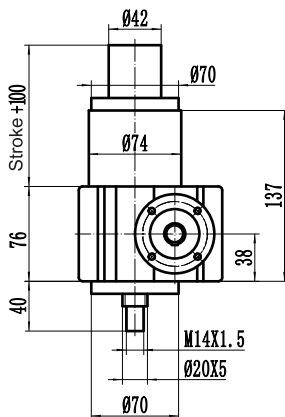


Encoder

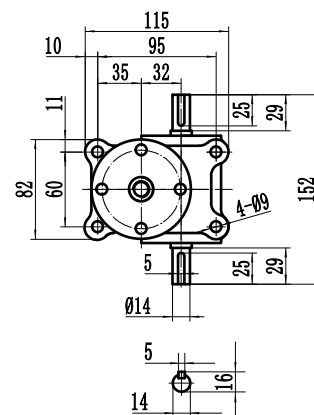
US: Upright translating screw



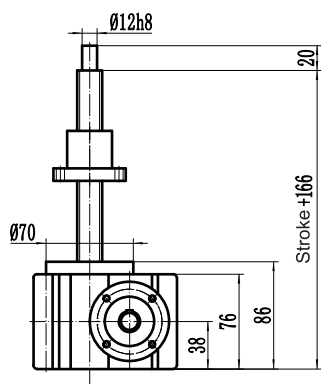
IS: Inverted translating Screw



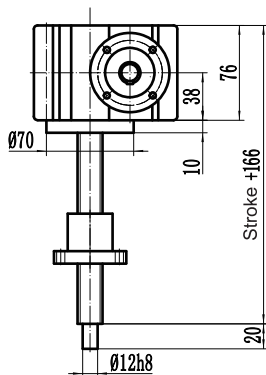
Mounting View



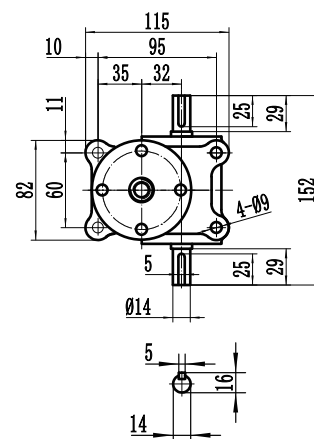
UR: Upright Rotating Screw



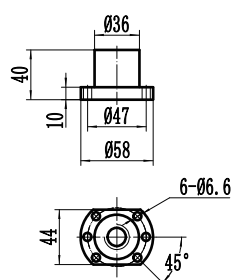
IR: Inverted Rotating Screw



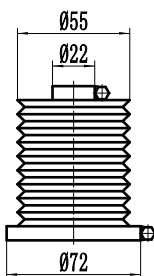
Mounting View



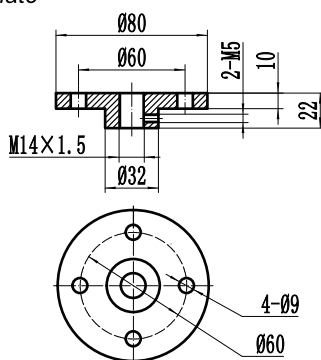
Copper Nut



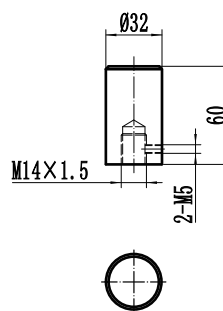
Dust Cover(Bellows)



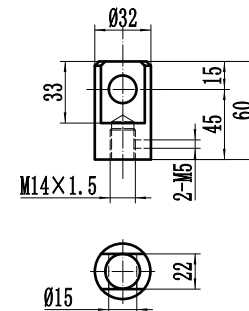
Top Plate



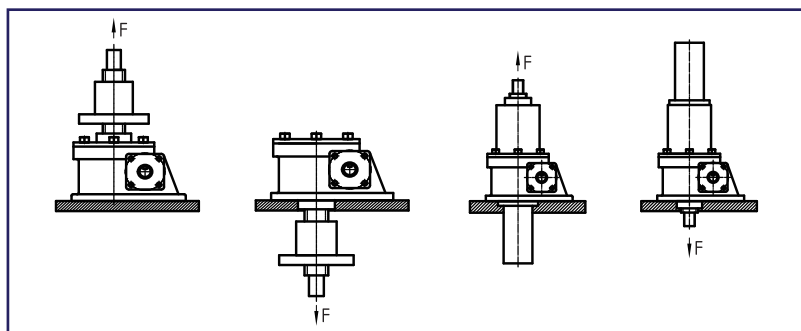
Plain End



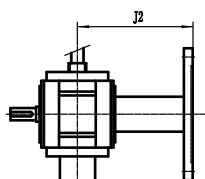
Clevis End



Installation diagram

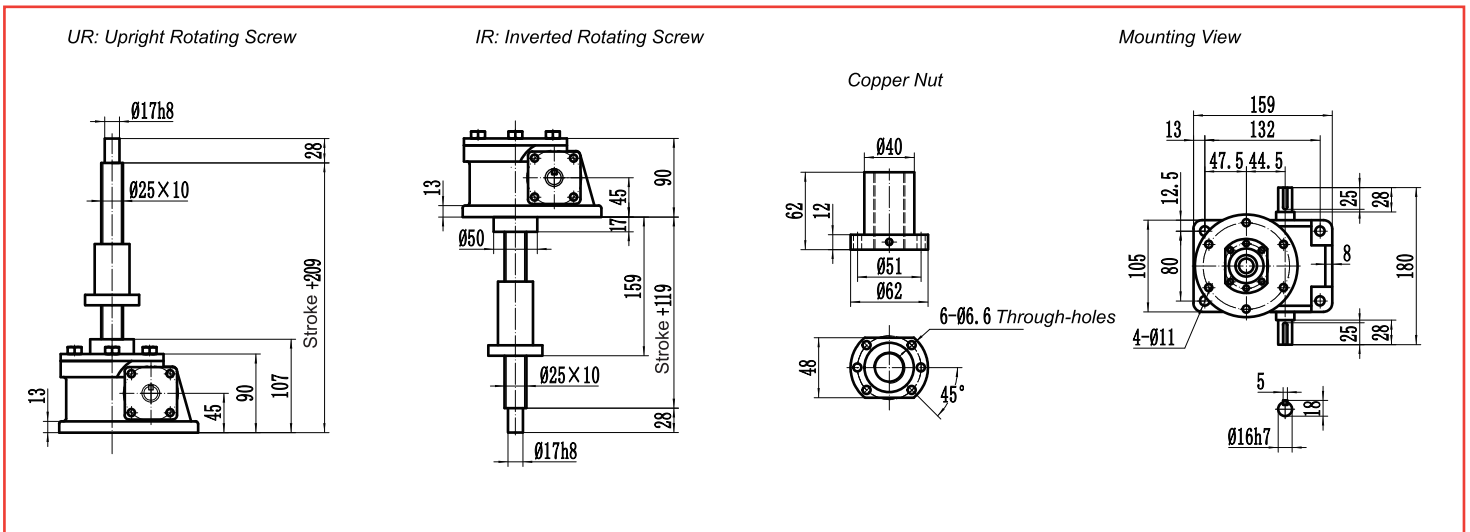
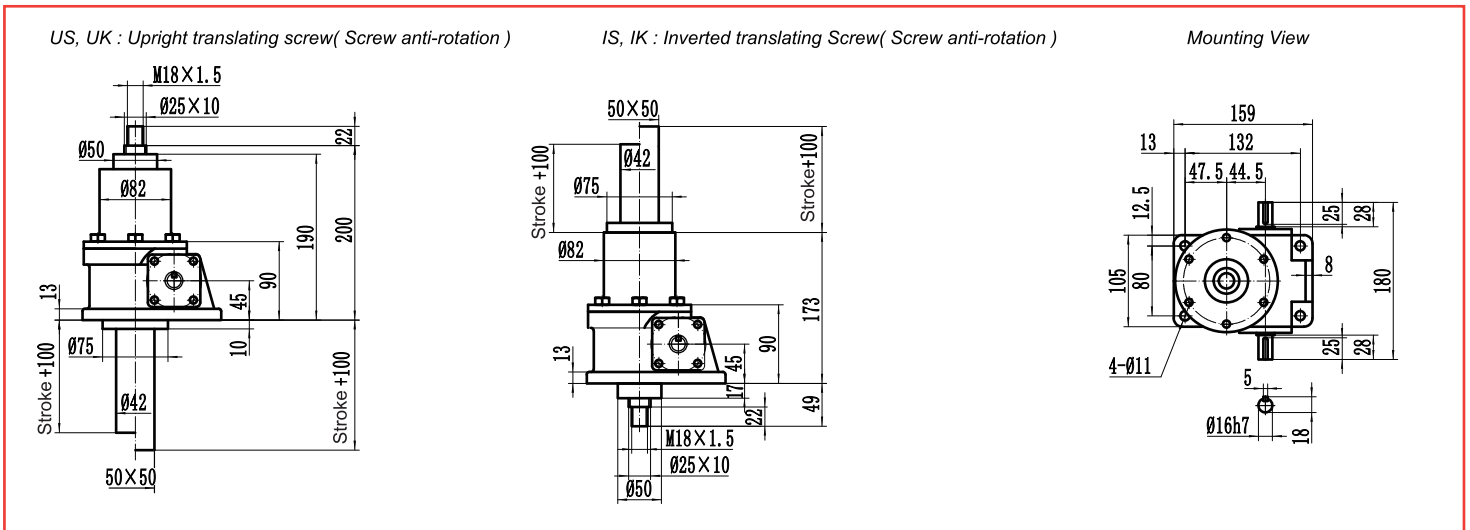


Flange Input
Can be customized

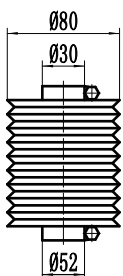


Motor base number	J2
63B5	104
71B5	111
80B5	121

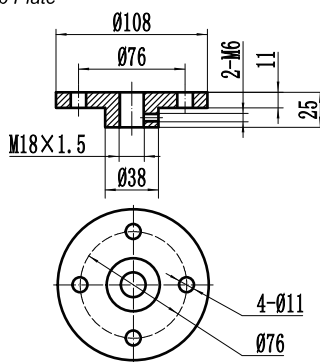
SJB-025 Ball Screw Jack



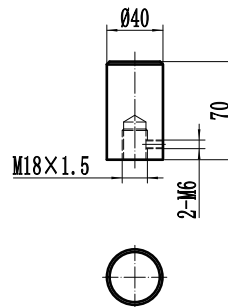
Dust Cover(Bellows)



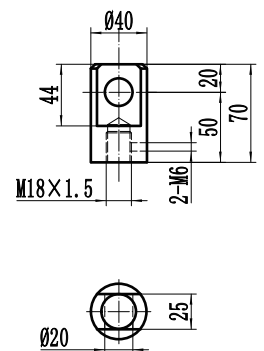
Top Plate



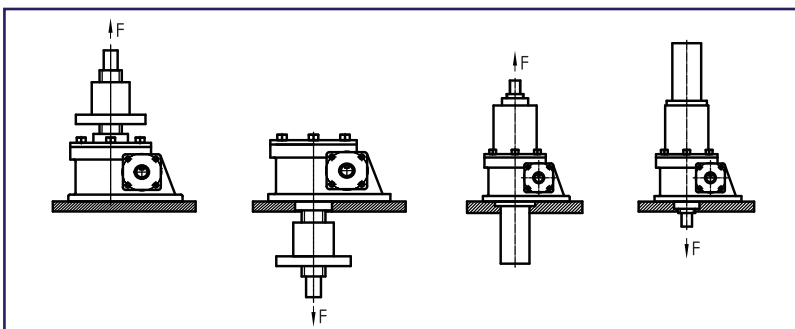
Plain End



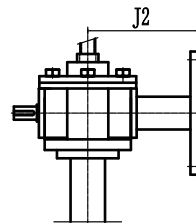
Clevis End



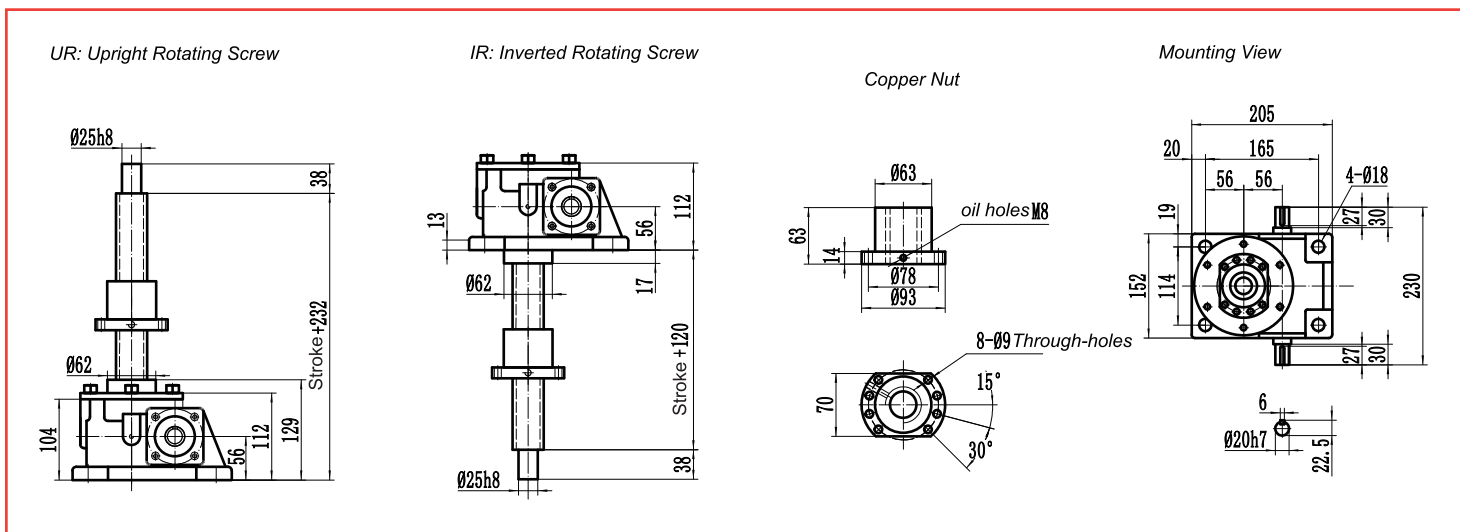
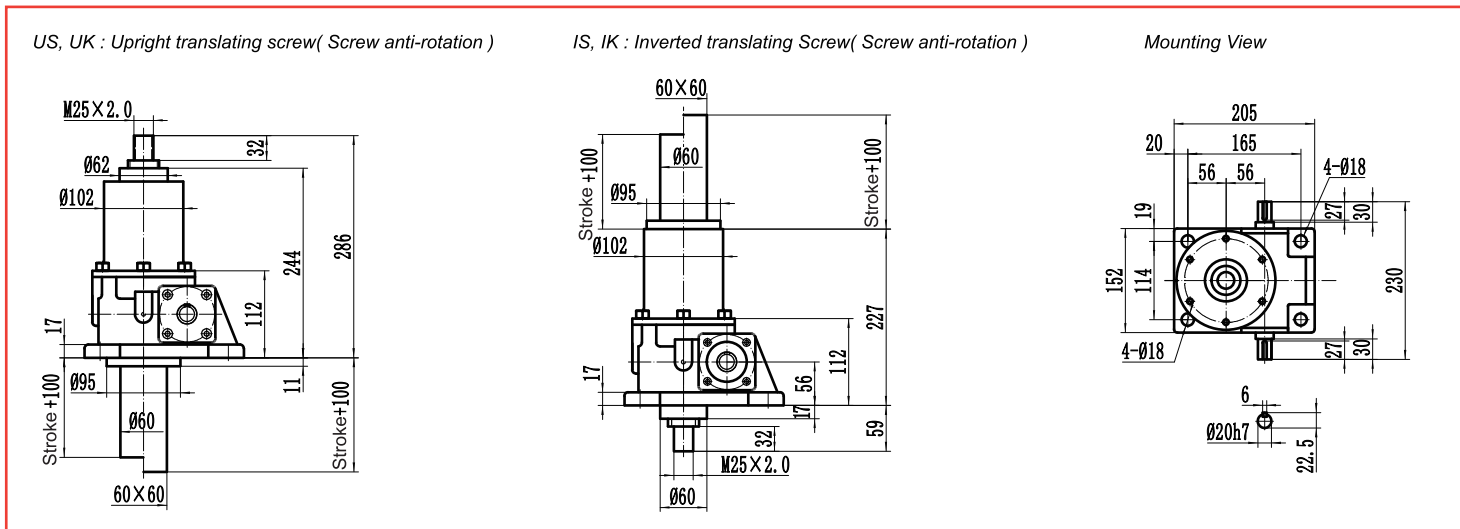
Installation diagram



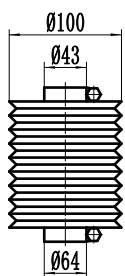
Flange Input
Can be customized



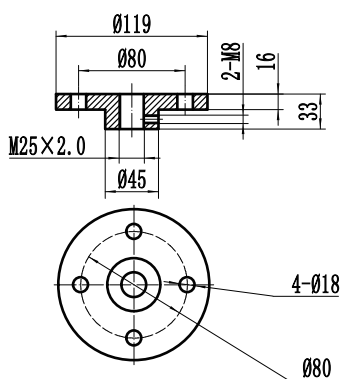
Motor base number	J2
71B5	125
80B5	135
90B5	145



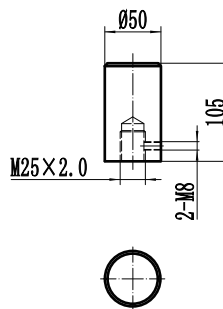
Dust Cover(Bellows)



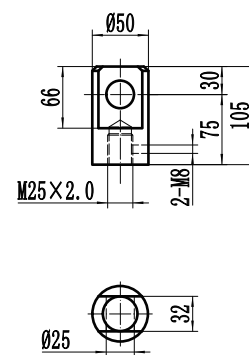
Top Plate



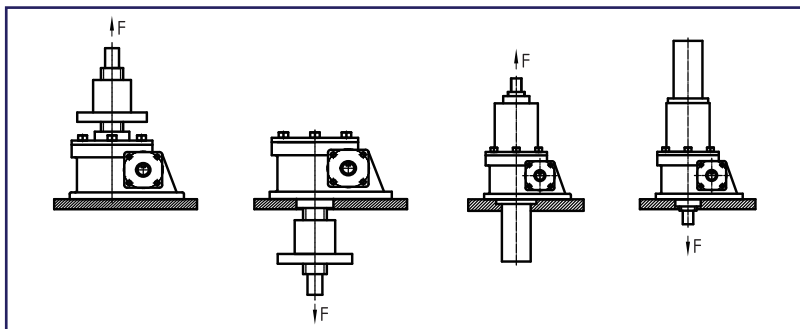
Plain End



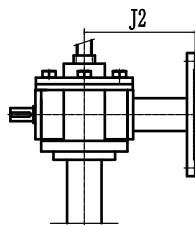
Clevis End



Installation diagram

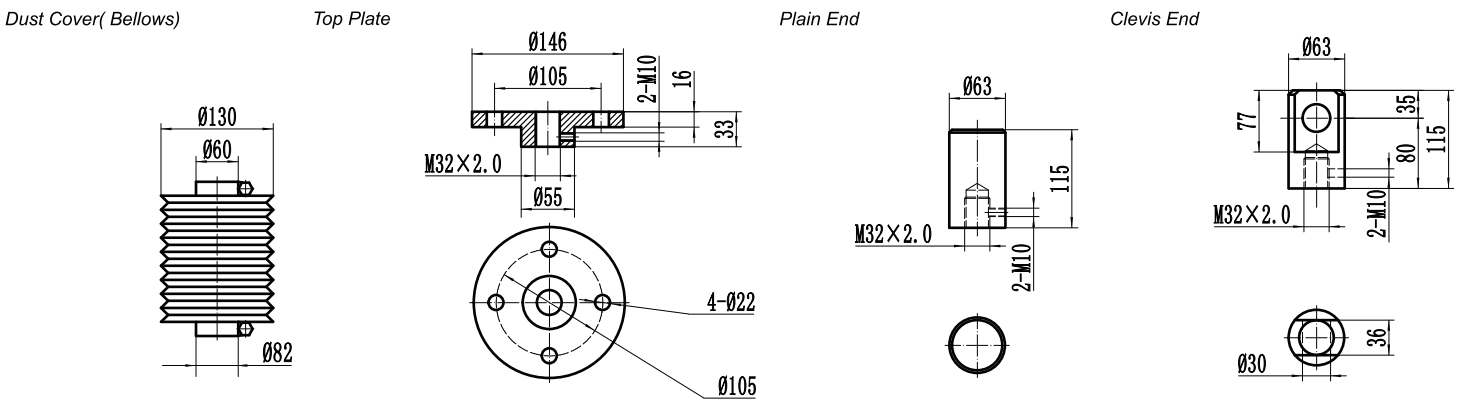
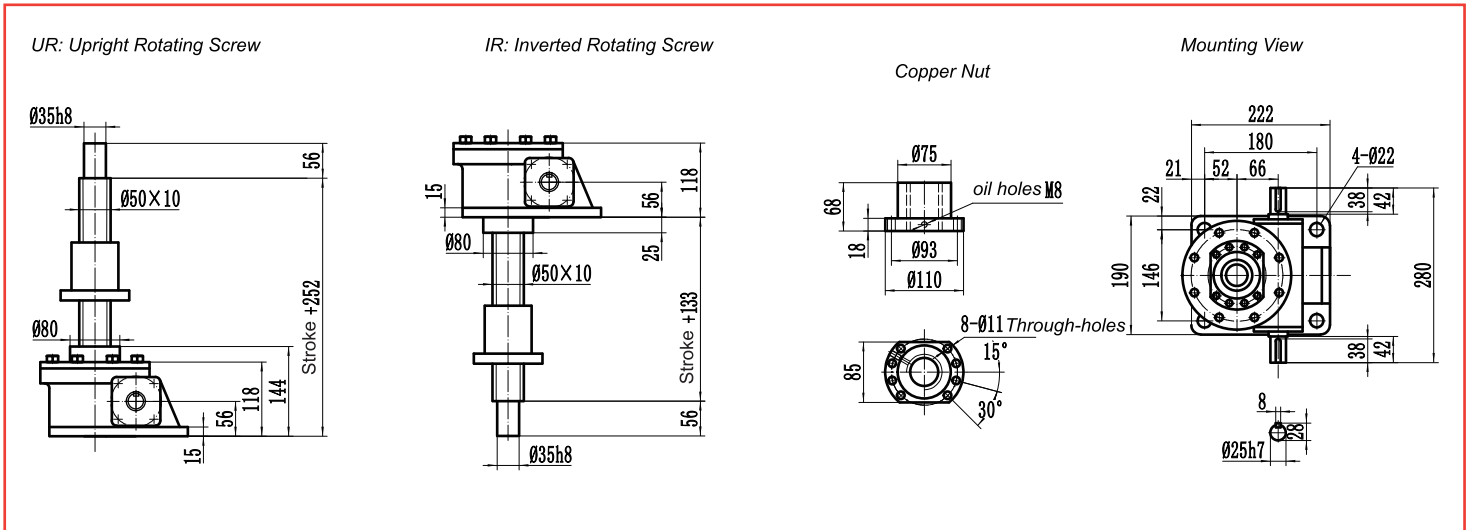
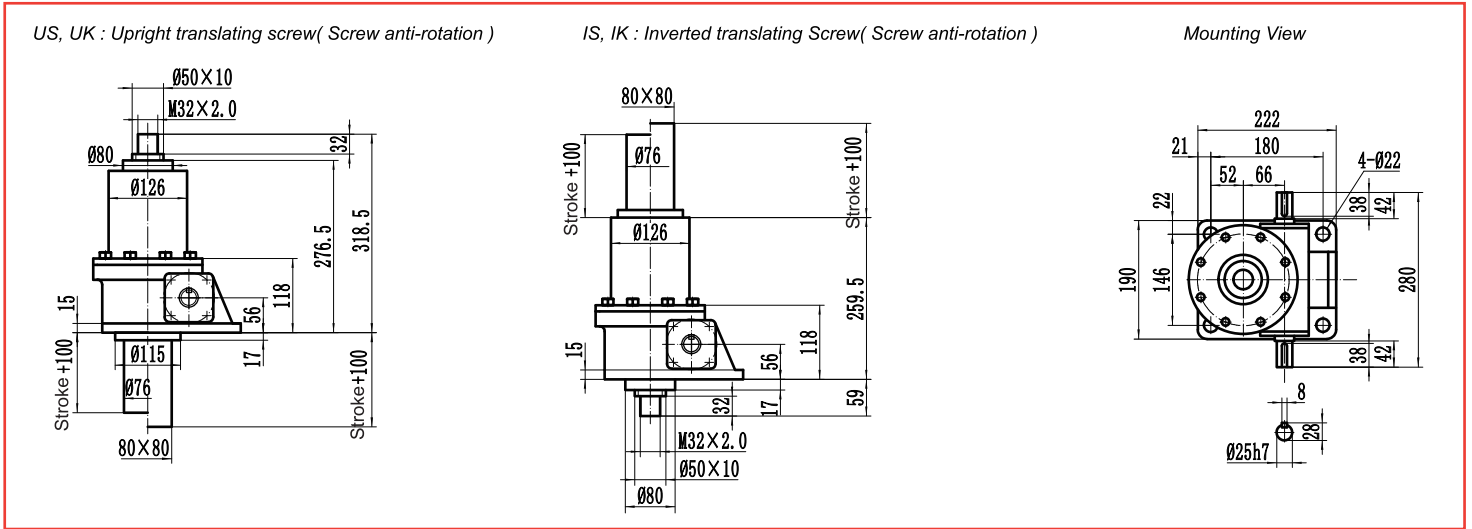


Flange Input
Can be customized

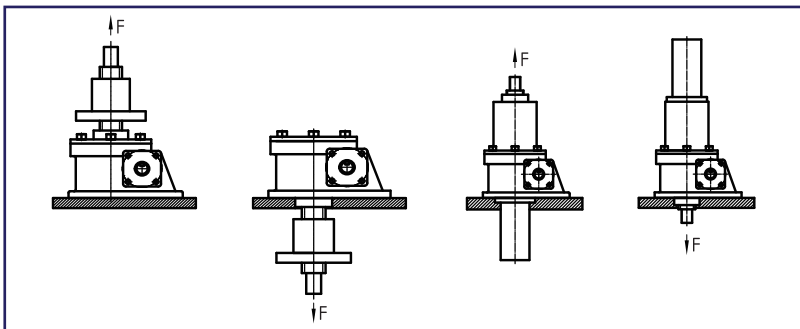


Motor base number	J2
80B5	160
90B5	170
100B5	180

SJB-100 Ball Screw Jack



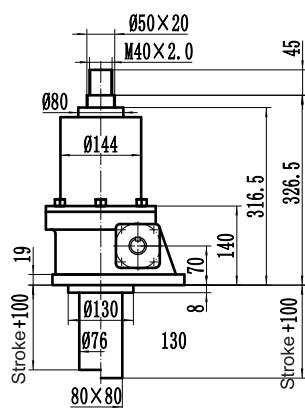
Installation diagram



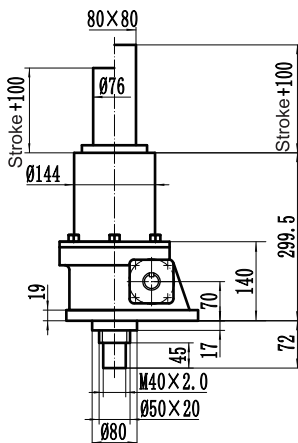
Flange Input
Can be customized

Motor base number	J2
80B5	185
90B5	195
100B5	205

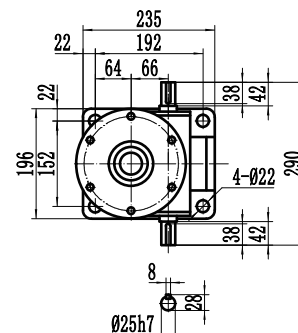
US, UK : Upright translating screw(Screw anti-rotation)



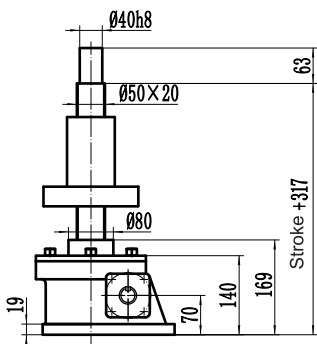
IS, IK : Inverted translating Screw(Screw anti-rotation)



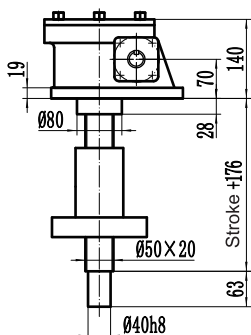
Mounting View



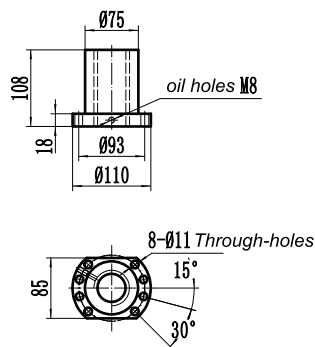
UR: Upright Rotating Screw



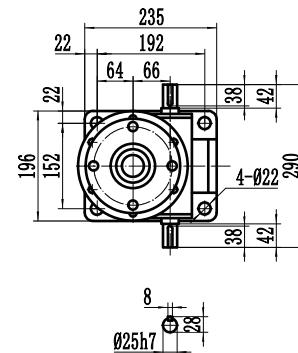
IR: Inverted Rotating Screw



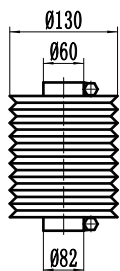
Copper Nut



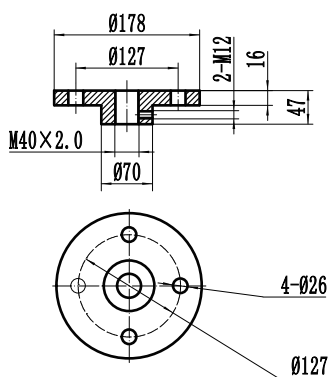
Mounting View



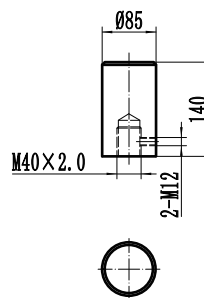
Dust Cover(Bellows)



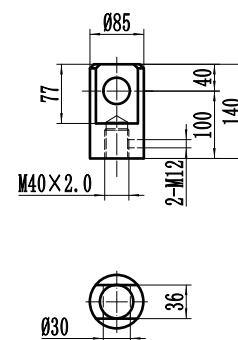
Top Plate



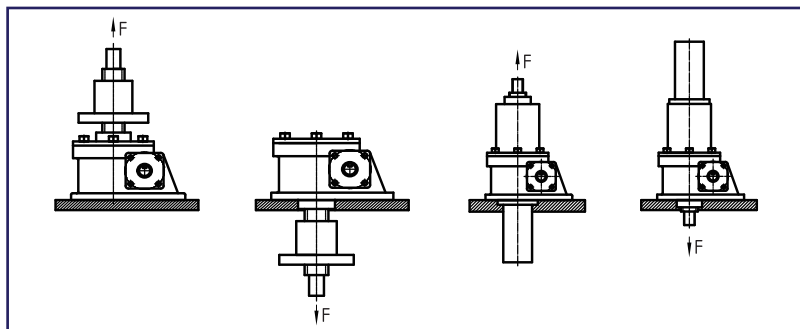
Plain End



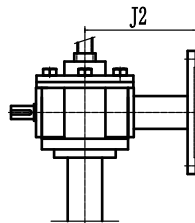
Clevis End



Installation diagram

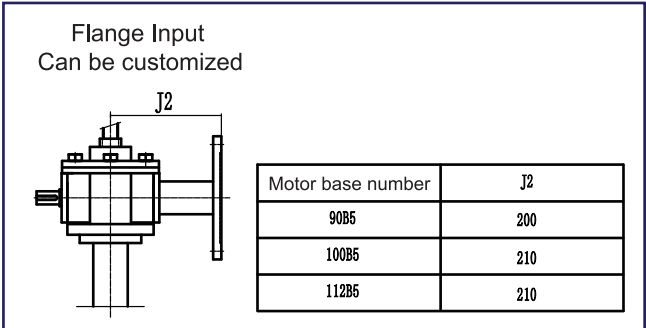
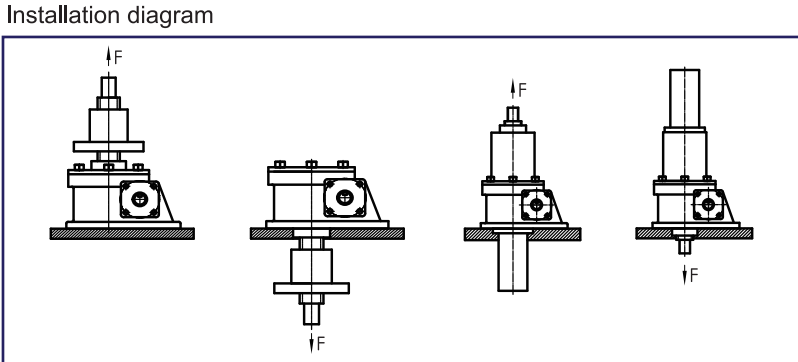
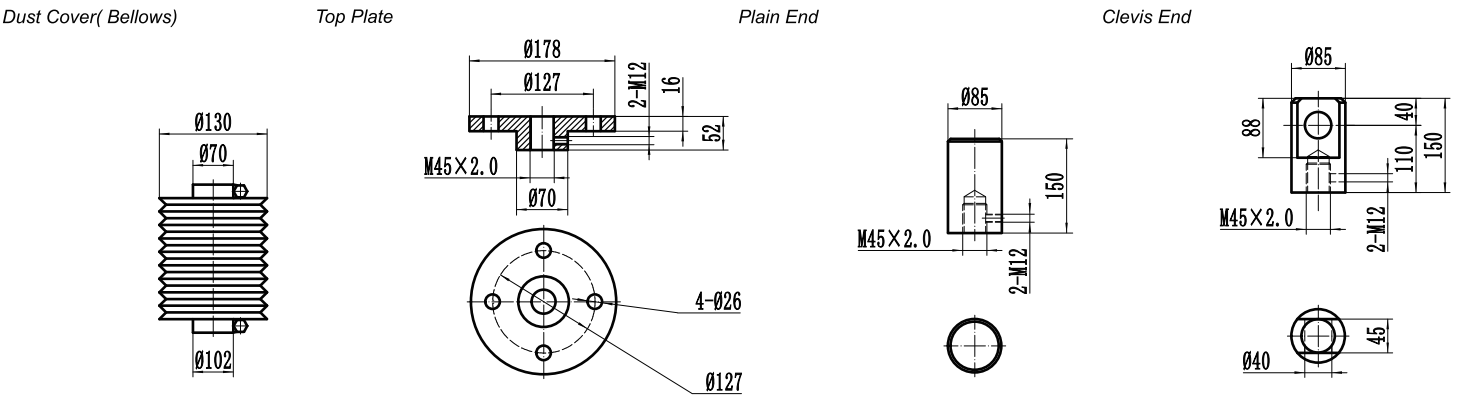
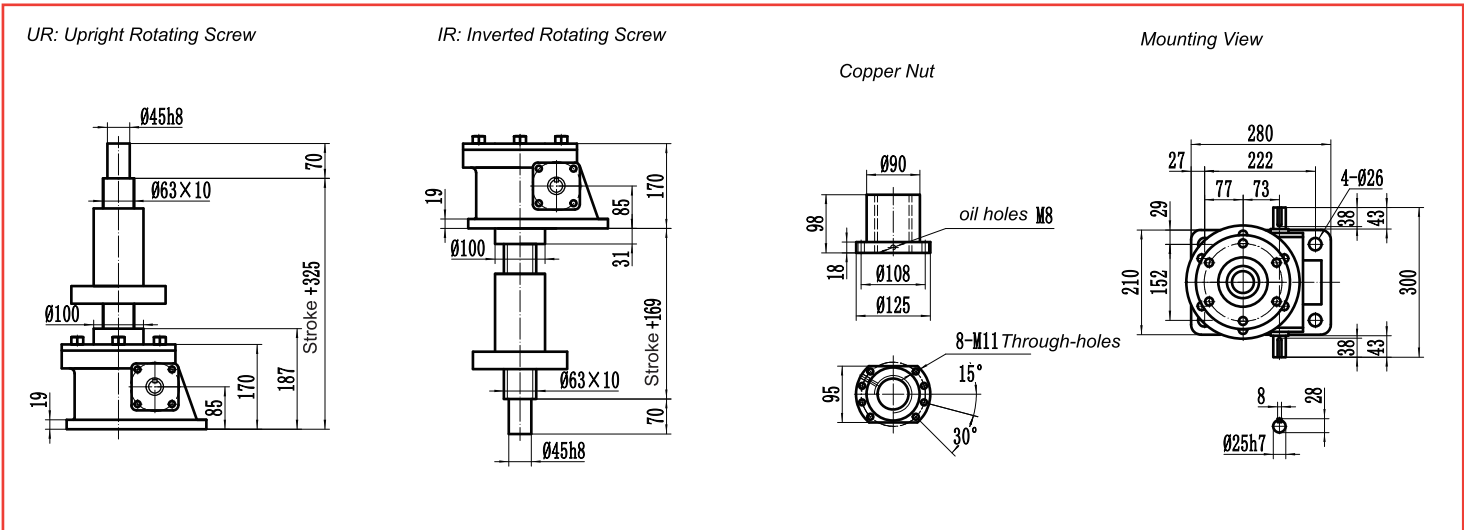
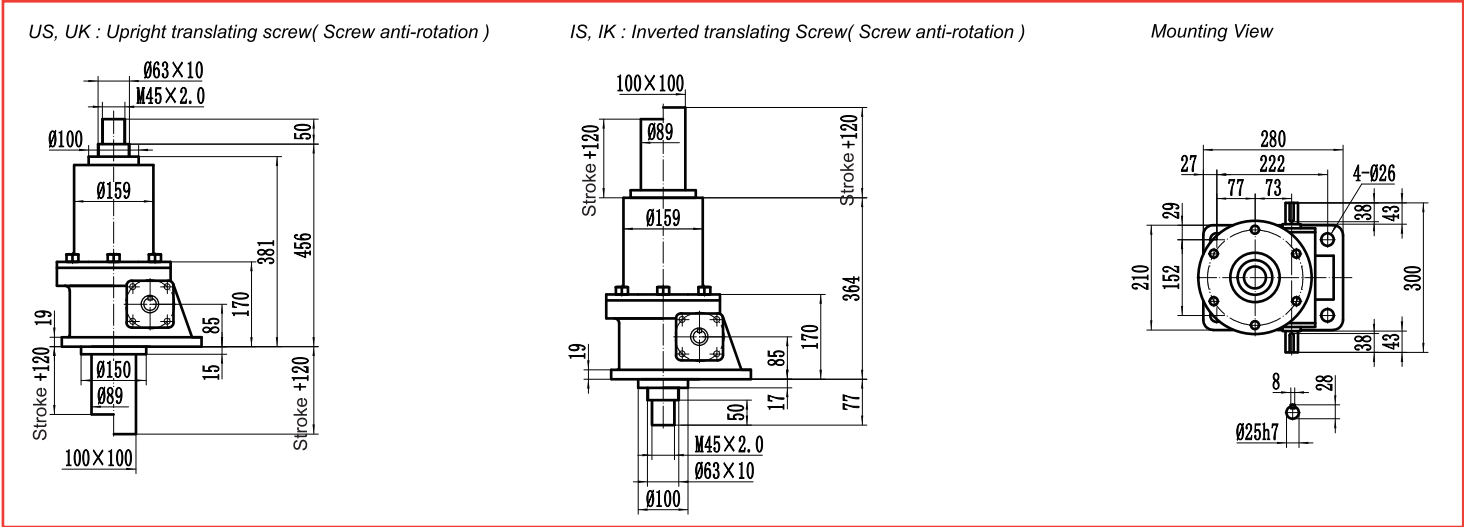


Flange Input
Can be customized



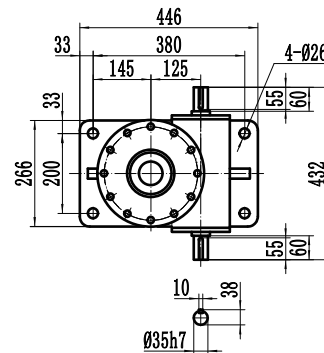
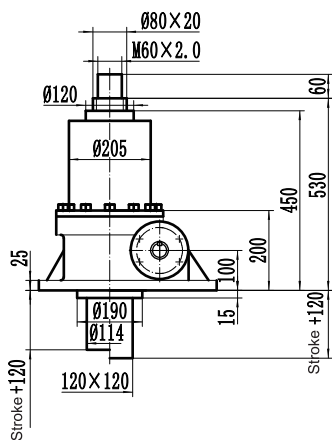
Motor base number	J2
80B5	195
90B5	205
100B5	215

SJB-200 Ball Screw Jack



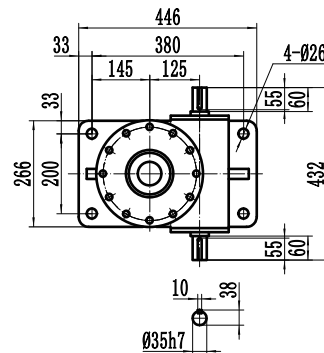
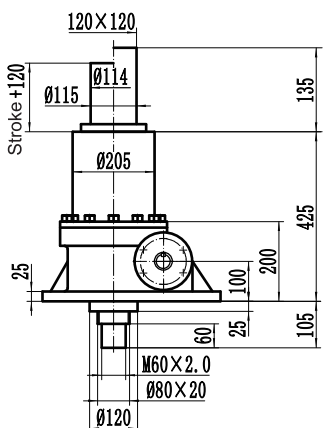
US, UK : Upright translating screw(Screw anti-rotation)

Mounting View



IS, IK : Inverted translating Screw(Screw anti-rotation)

Mounting View

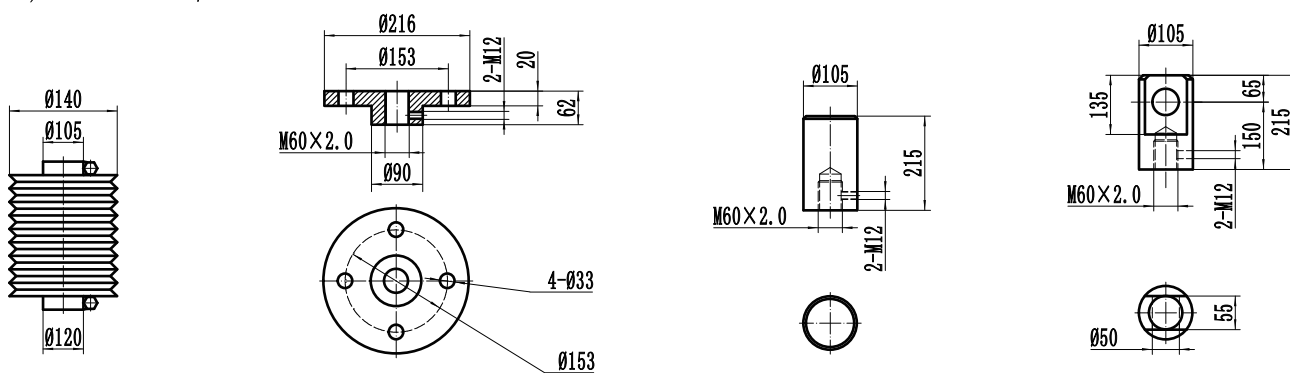


Dust Cover(Bellows)

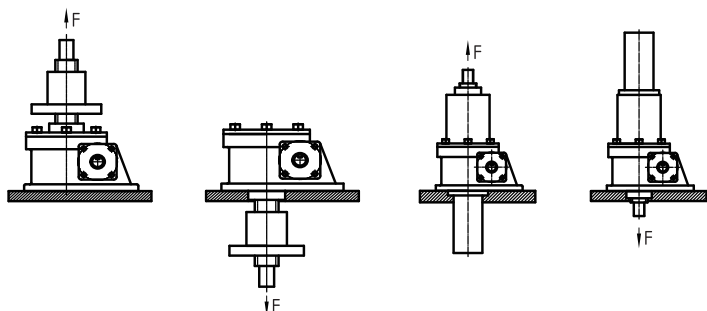
Top Plate

Plain End

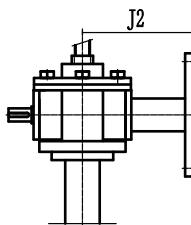
Clevis End



Installation diagram



Flange Input
Can be customized

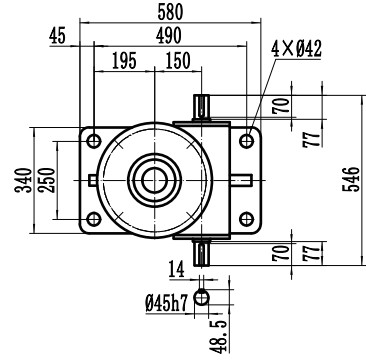
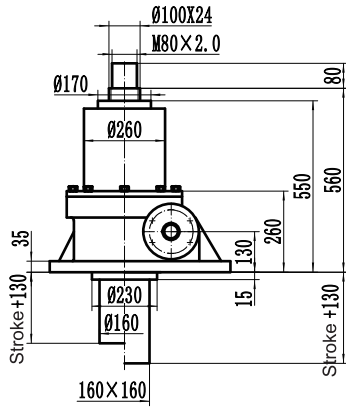


Motor base number	J2
90B5	276
100B5	286
112B5	286

SJB-500 Ball Screw Jack

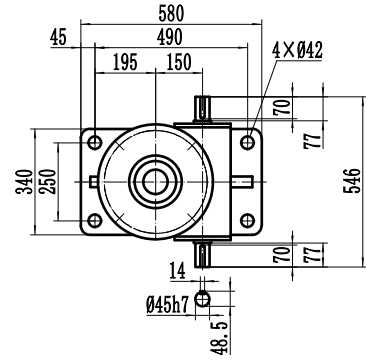
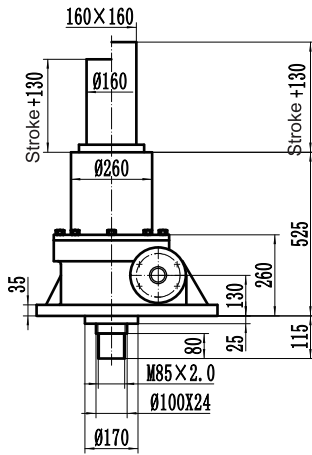
US, UK : Upright translating screw(Screw anti-rotation)

Mounting View



IS, IK : Inverted translating Screw(Screw anti-rotation)

Mounting View

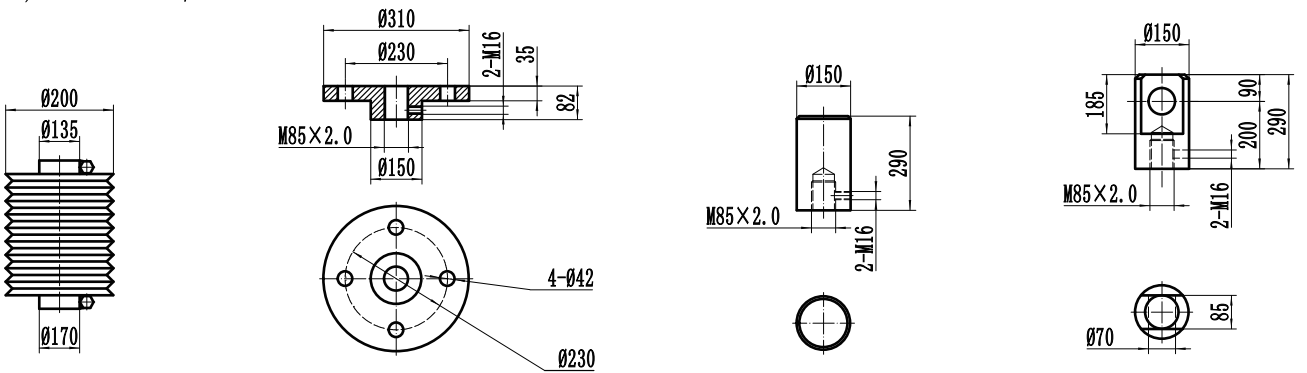


Dust Cover(Bellows)

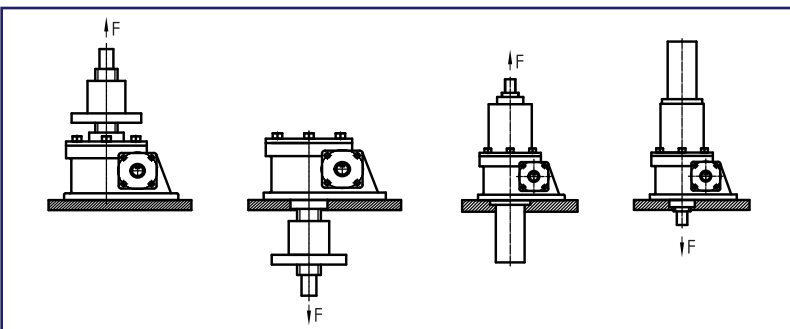
Top Plate

Plain End

Clevis End



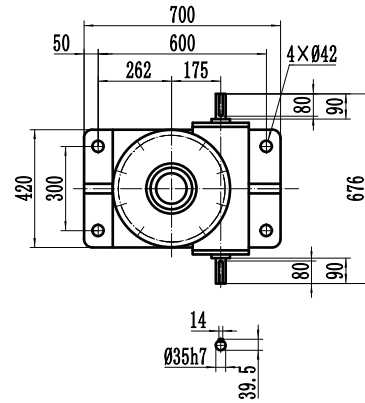
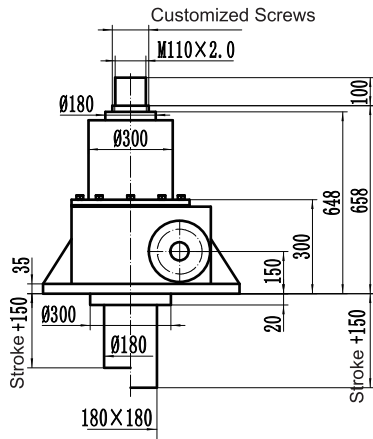
Installation diagram



SJB-750 Ball Screw Jack

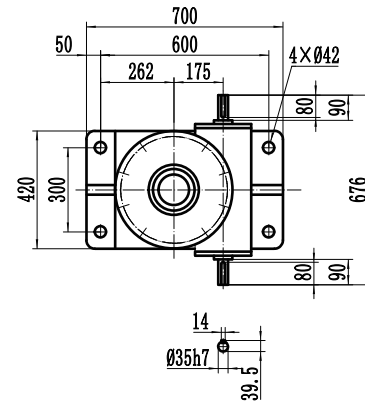
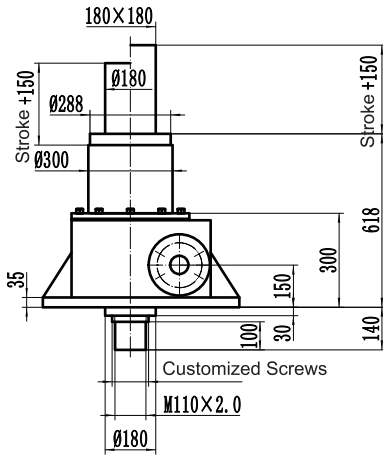
US, UK : Upright translating screw(Screw anti-rotation)

Mounting View



IS, IK : Inverted translating Screw(Screw anti-rotation)

Mounting View

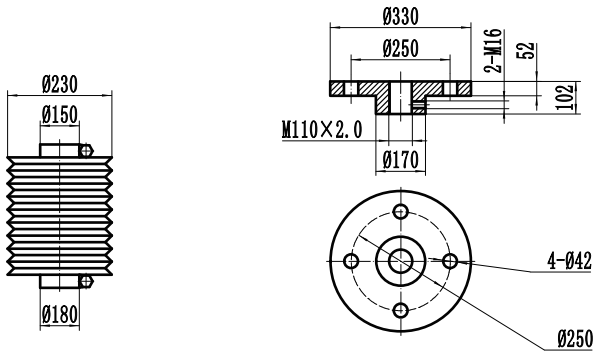


Dust Cover(Bellows)

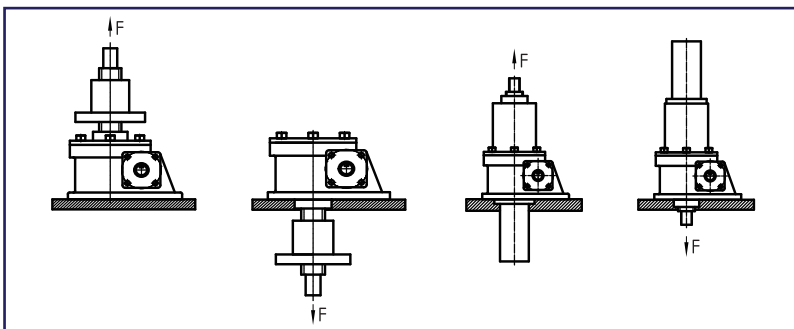
Top Plate

Plain End

Clevis End



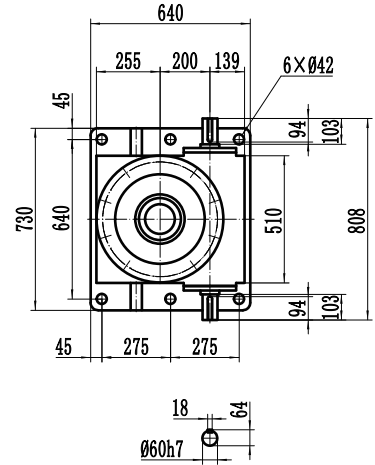
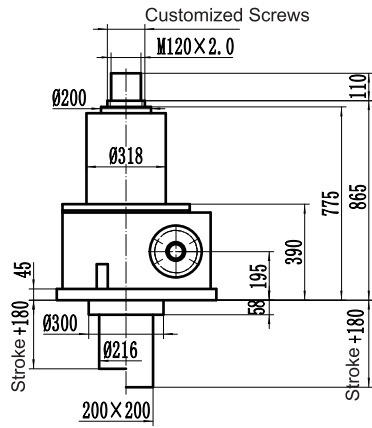
Installation diagram



SJB-1000 Ball Screw Jack

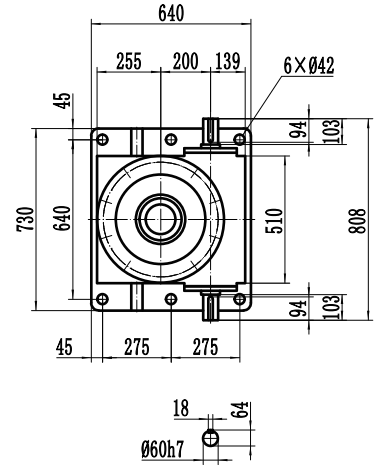
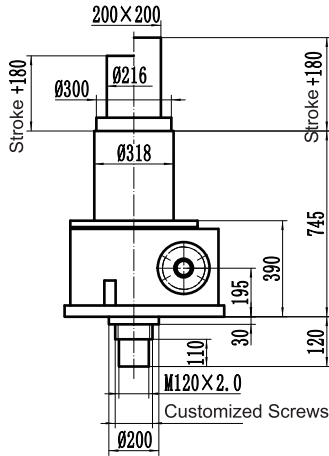
US, UK : Upright translating screw(Screw anti-rotation)

Mounting View



IS, IK : Inverted translating Screw(Screw anti-rotation)

Mounting View

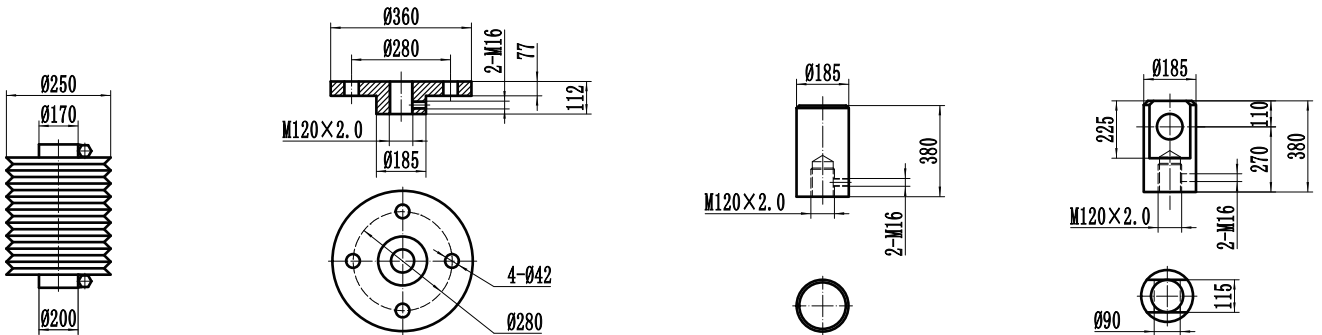


Dust Cover(Bellows)

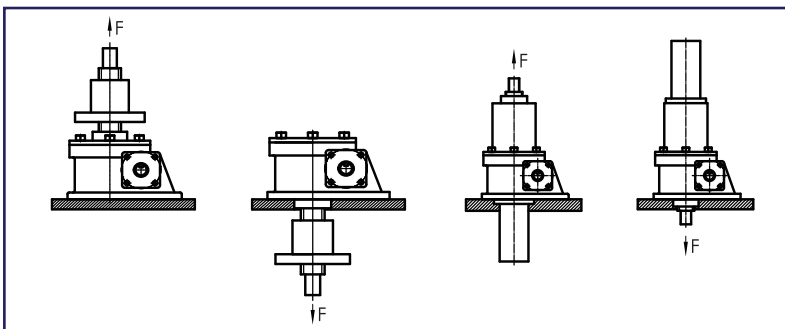
Top Plate

Plain End

Clevis End



Installation diagram



SJB Ball Screw Jack System

SJB ball screw jack system arrangements or configurations can be built in many formats with the use of bevel gearboxes, motors, reduction gearboxes, connecting shafts, couplings, plummer blocks and motion control devices.



"I" Type two jacks system

1 unit motor+ 2 units worm gear screw jacks
+ 4 units couplings+ 2 units connecting shafts



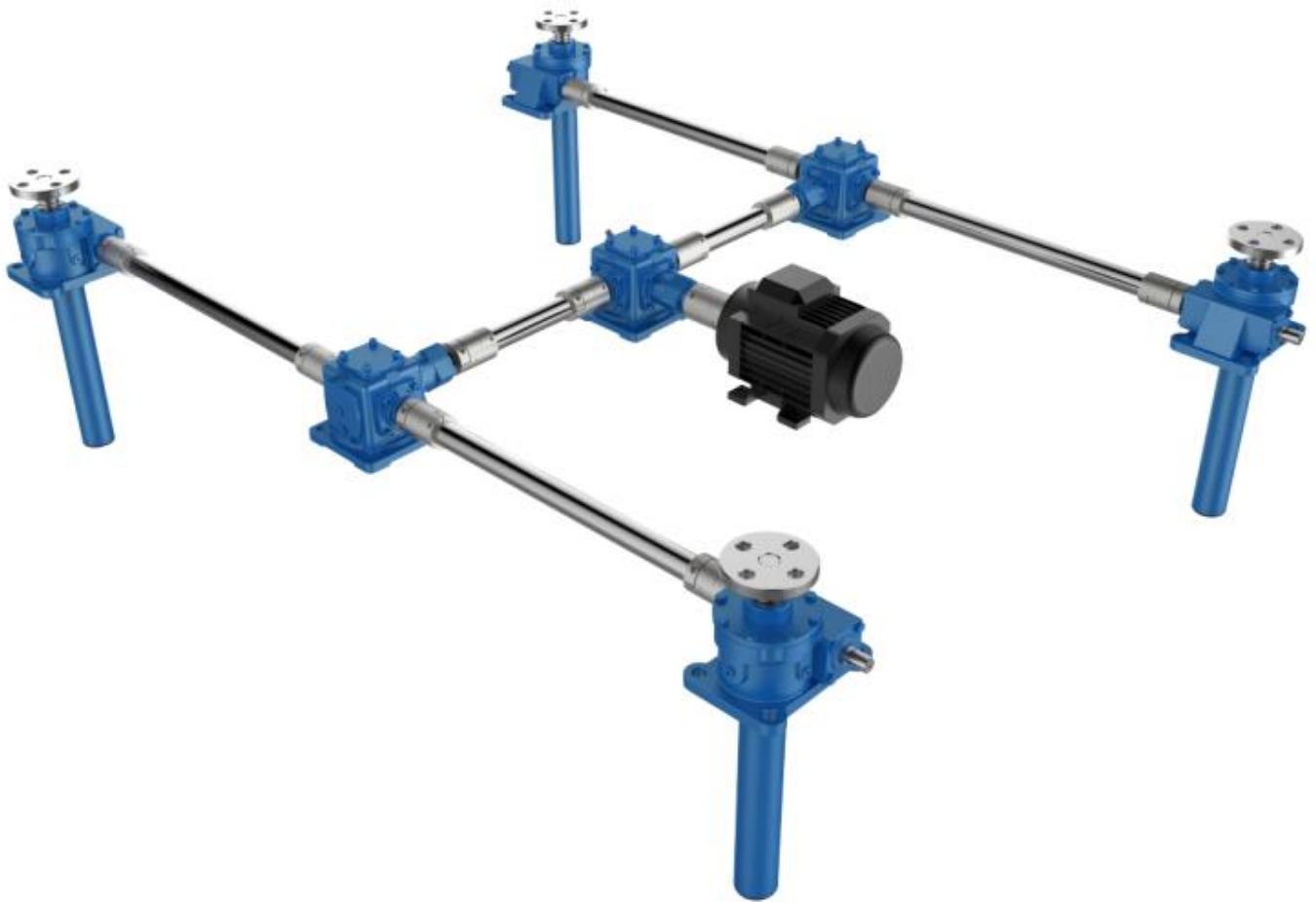
"T" Type two jacks system

1 unit motor+ 2 units worm gear screw jacks
+1 unit spiral bevel gearbox+ 4 units couplings
+ 2 units connecting shafts



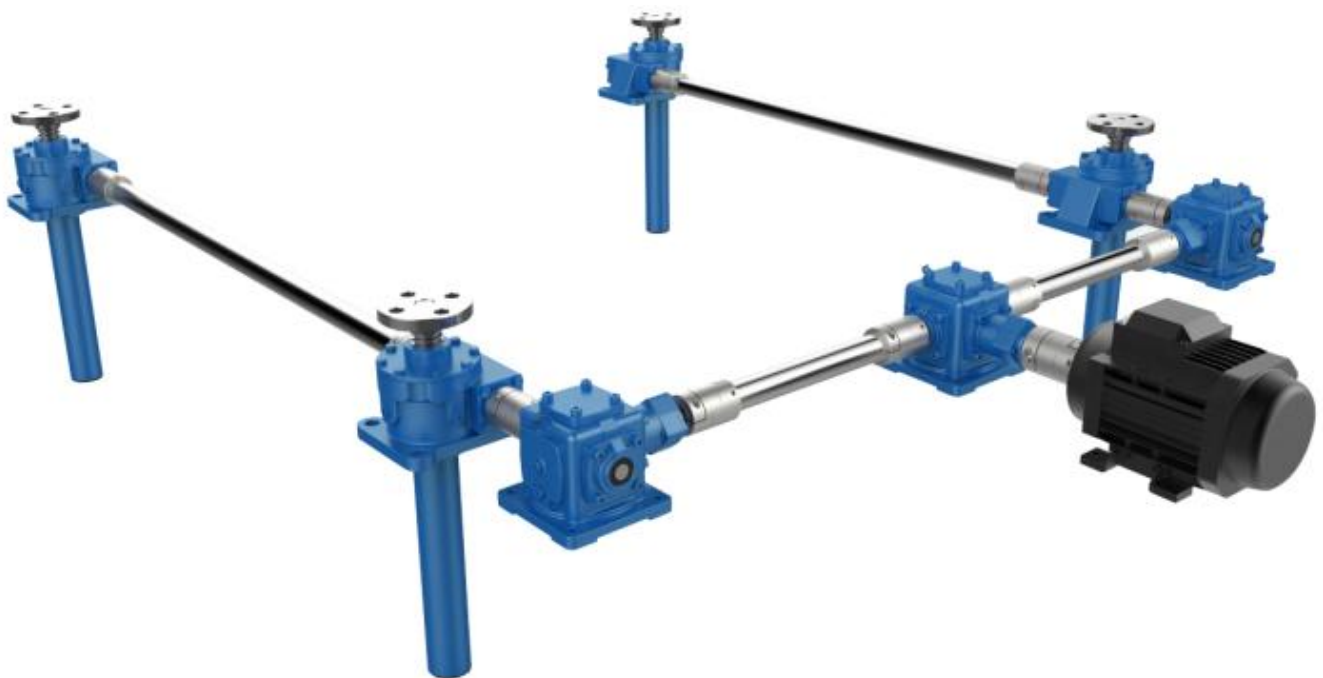
"I" Type two jacks system

1 unit motor+ 2 units worm gear screw jacks
+ 3 units couplings+ 1 units connecting shaft



"H" Type four jacks system

4 units worm gear screw jacks+ 3 units spiral bevel gearboxes+ 1 unit motor+ 6 units connecting shafts+13 units couplings



"U" Type four jacks system

4 units worm gear screw jacks+ 3 units spiral bevel gearboxes+ 1 unit motor+ 4 units connecting shafts+11 units couplings