



Professional Linear Motion Solutions Provider



SJC Series Worm Gear Screw Jack

Selection
Guidance

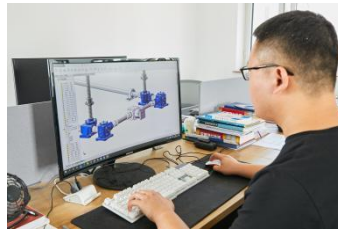


Company Profile

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.



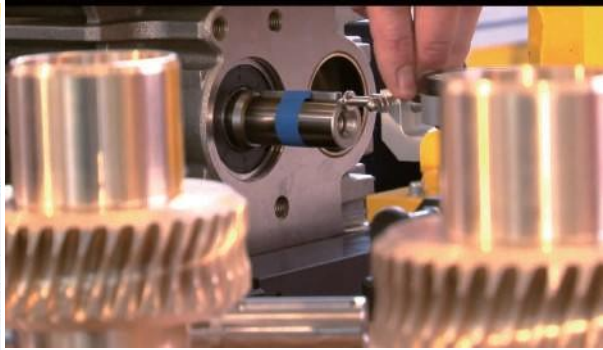
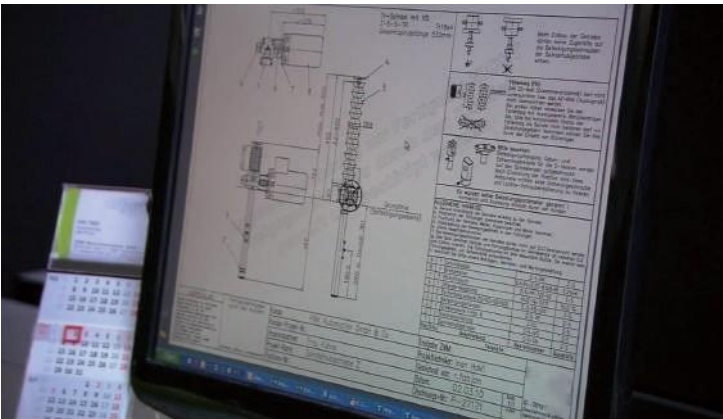
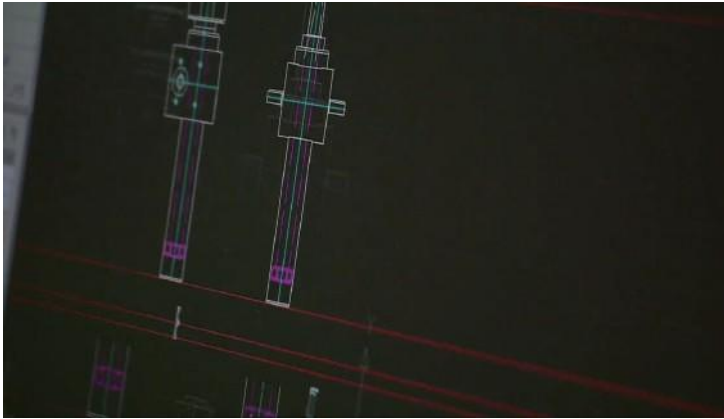
Creating the high-quality product

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.

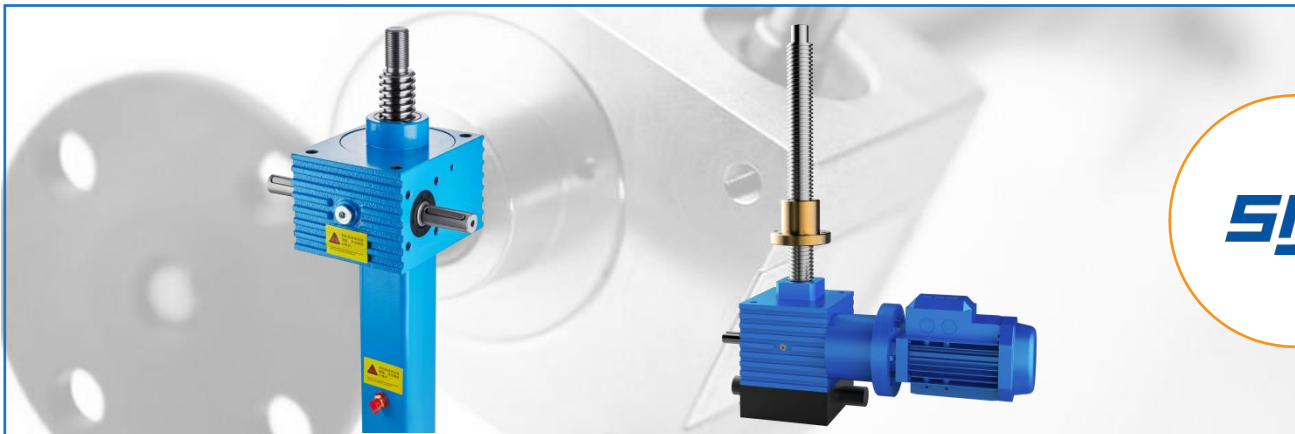
SIJIE offers the perfect balance of service, cost, performance and quality.



Product Introduction

Description

SIJIE SJC series worm gear screw jacks provide precise positioning, safely self-locking, high performance, and load capacity up to 100 tons. Single jack or multiple jacks system arrangements are available. Standard configurations include translating screw, rotating screw, keyed screw in upright or inverted mounting orientation.



Key Features

- Suitable for low speed, low-frequency and large load operation.
- The unique square groove shell increases the heat dissipation capacity and extended grease life.
- Ductile iron improved the strength and performance of the jack housing.
- Major components include trapezoidal screw and high precision worm gear.
- Alloy steel input shafts. Double input shafts standard.
- ZCuSn10Pb1 tin bronze worm gears.
- Tapered roller bearing or ball thrust bearings offer rugged reliability.
- 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 worm gear screw jacks can be made to your specifications.

Application Range

SIJIE's SJC series worm gear 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.



SJC Series Specifications

Model		SJC2.5	SJC5	SJC10	SJC20	SJC50	SJC80
Maximum lifting force(KN)		25	5	10	20	50	80
Screw diameter and lead(mm)		Tr14×4	Tr18×4	Tr20×4	Tr30× 6	Tr40×7	Tr50×8
Gear Ratio	P	4:1	4:1	4:1	4:1	7:1	8:1
	M	16:1	16:1	16:1	16:1	28:1	32:1
Screw travel per turn of worm shaft(mm)	P	1	0.25	0.25	0.25	0.25	1
	M	0.25	0.24	0.25	0.19	0.18	0.25
Startup efficiency (%)	P	24	24	25	19	18	17
	M	16	16	16	12	11	10
Operating efficiency at 1500r/min	P	34	34	35	33	32	31
	M	25	25	25	24	23	22
Maximum input power(KW)	P	0.25	0.30	0.57	1.14	2.2	2.5
	M	0.12	0.15	0.27	0.55	1.1	1.5
Starting torque at full load (N.m)	P	3.2	4.2	8	18	48.5	75
	M	1.5	1.5	3.1	6.7	20	30
No-load torque(N.m)	P	0.068	0.11	0.29	0.40	0.84	1.85
	M	0.05	0.09	0.18	0.29	0.59	1.12
Jack Housing Materials		Aluminum	Aluminum/Nodular iron		Nodular iron		
Weight without stroke (kg)		1.2	3.2	5	8.5	21.5	36
Weight of screw (kg), per 100mm stroke		0.2	0.36	0.50	0.75	1.52	2.44

Model		SJC100	SJC200	SJC300	SJC450	SJC700	SJC000
Maximum lifting force(KN)		100	200	300	450	700	1000
Screw diameter and lead(mm)		Tr60×9	Tr80×12	Tr100×16	Tr120×16	Tr140×20	Tr160 ×20
Gear Ratio	P	8:1	8.75:1	10.25:1	10.75:1	13.33:1	13.33:1
	M	32:1	35:1	41:1	43:1	40:1	40:1
Screw travel per turn of worm shaft(mm)	P	1.125	1.371	1.56	1.49	1.5	1.5
	M	0.281	0.343	0.39	0.37	0.5	0.5
Startup efficiency (%)	P	18	17	18	16	16	15
	M	11	11	12	10	11	10
Operating efficiency at 1500r/min	P	33	33	33	30	31	29
	M	23	22	23	20	21	19
Maximum input power(KW)	P	3	4	7	11.5	18.5	22
	M	2.2	3.5	5.5	5.5	7.5	9.5
Starting torque at full load (N.m)	P	100	265	460	675	1050	1620
	M	41	106	180	275	510	820
No-load torque(N.m)	P	2.1	2.8	3.8	5.5	8.5	11
	M	1.4	2.1	3.1	4.5	5.5	7.5
Jack Housing Materials		Nodular iron					
Weight without stroke (kg)		58	75	110	200	400	800
Weight of screw (kg), per 100mm stroke		3.02	4.5	6.8	9.0	12.5	16.5

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



Product selection mark

Ordering information

Model	Jack Configuration	Gear ratios	Stroke	Screw Configuration	Shafts Input Types	Accessories
SJC2.5	US: Upright translating screw	P: High speed	Customized	T: Top Plate	A: left side input.	P: Protective Tube
SJC5				H: Clevis End		
SJC10	IS: Inverted translating screw	M: Low speed	R: Plain End	C: double shaft input.	Y: Hand Wheel	
SJC20	UK: Upright keyed screw		S: Thread End	M1: left side motor flange	M: Electric Motor	
SJC50	IK: Inverted keyed screw		U: Forked Head	M2: right side motor flange	MB: Mounting base	
SJC80	UR: Upright rotating screw		SH: Spherical Hinge	M3: left side motor flange, right side shaft	MBK: Mounting brackets	
SJC100	IR: Inverted rotating screw			M4: right side motor flange, left side shaft	PB: Pillow block bearing	
SJC150					SN: Safety nut	
SJC200					LS: Limit switch	
SJC250					TS: Travel Switch	
SJC350						
SJC500						
SJC700						
SJC1000						

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)



US



IS



UK



IK









UR



IR

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

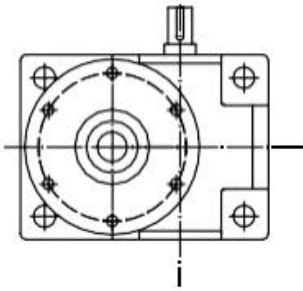
A: left side worm shaft input. B: right side worm shaft input. C: double worm shaft input.

M1: left side motor flange direct input.

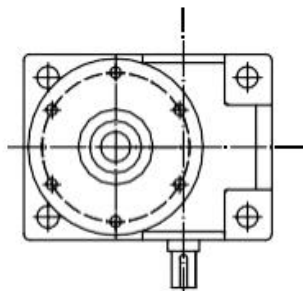
M2: right side motor flange direct input.

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

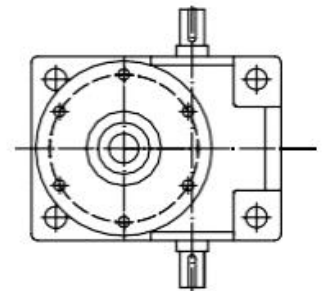
M4: right side motor flange direct input, left side worm shaft input.



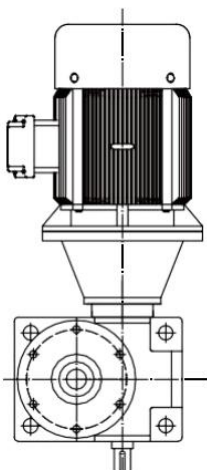
A



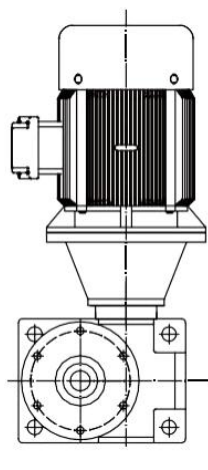
B



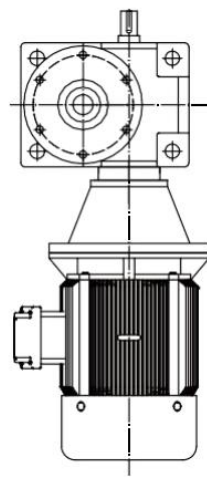
C



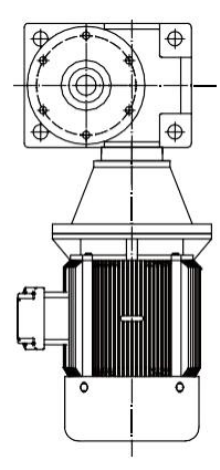
M1



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

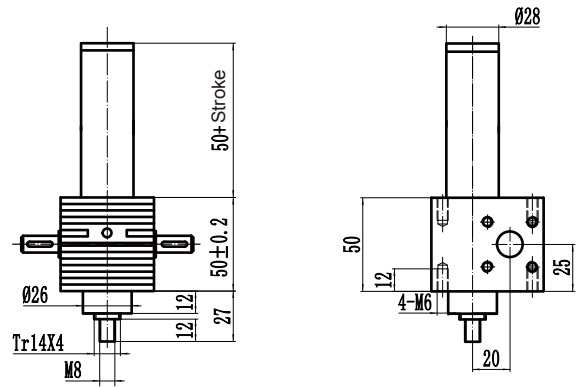
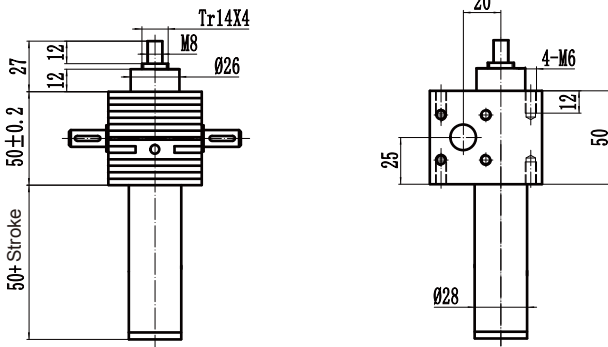


Encoder

SJC2.5 Worm Gear Screw Jack

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

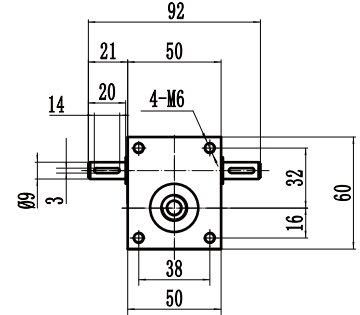
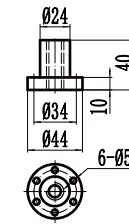
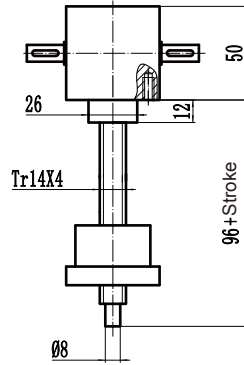
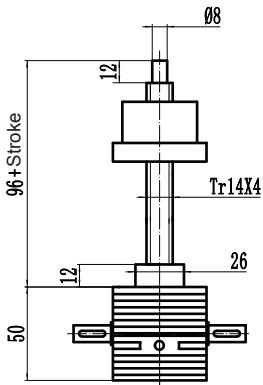
IS, IK : Inverted translating Screw(Screw anti-rotation)



UR : Upright Rotating Screw

IR : Inverted Rotating Screw

Mounting View

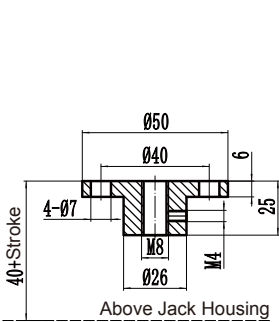


Top Plate

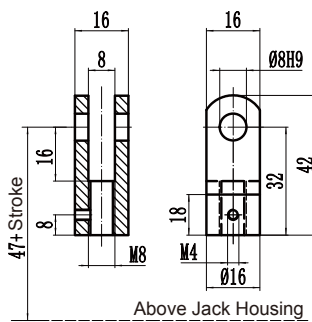
Forked Head

Clevis End

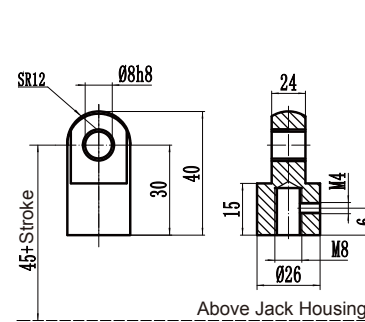
Spherical Hinge



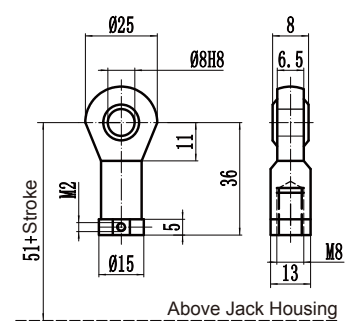
Above Jack Housing



Above Jack Housing

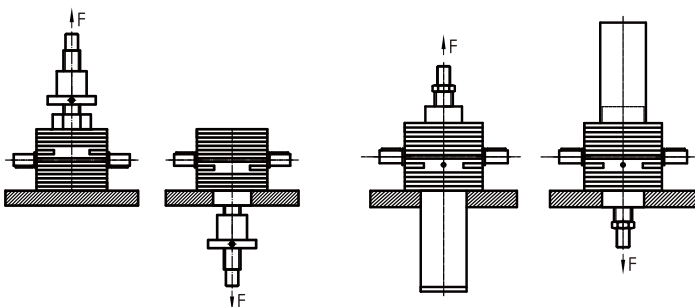


Above Jack Housing

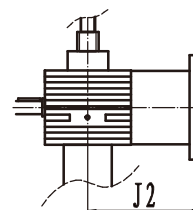


Above Jack Housing

Installation diagram



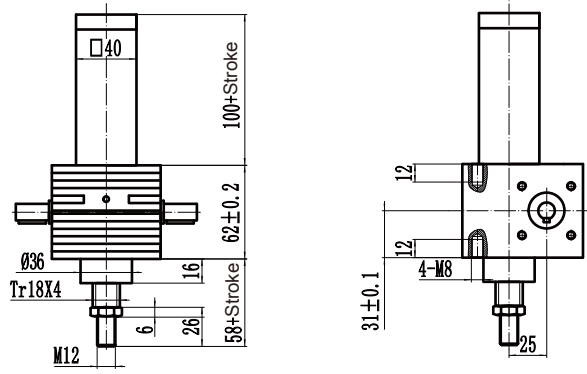
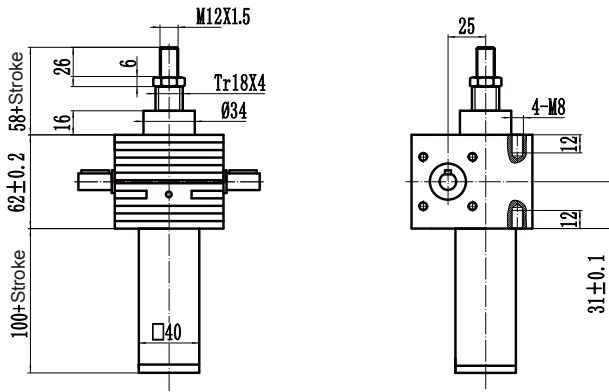
Flange Input
Can be customized



Motor base number	J2
63B14	75
71B14	82

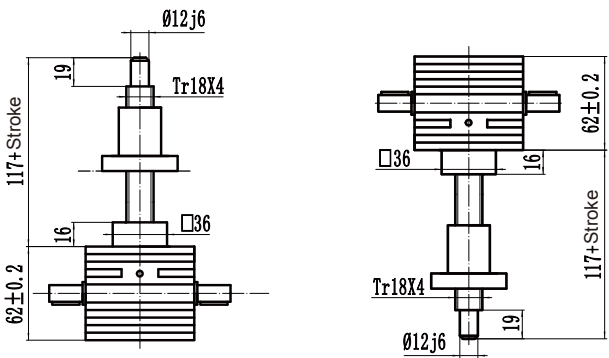
US, UK : Upright translating screw(Screw anti-rotation)

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

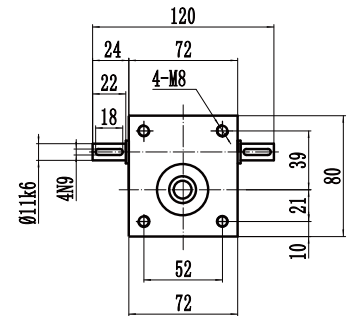


UR: Upright Rotating Screw

IR: Inverted Rotating Screw



Mounting View

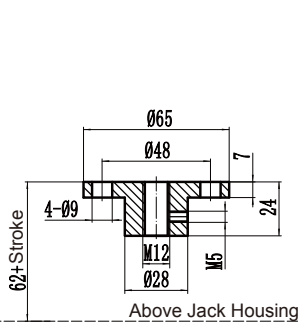


Top Plate

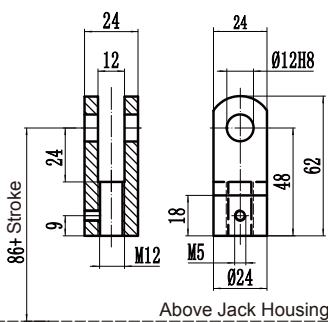
Forked Head

Clevis End

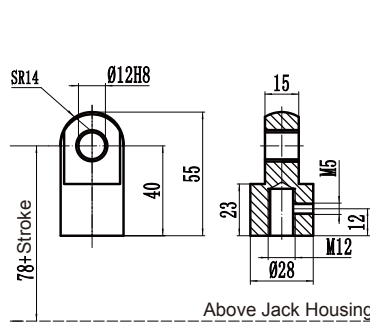
Spherical Hinge



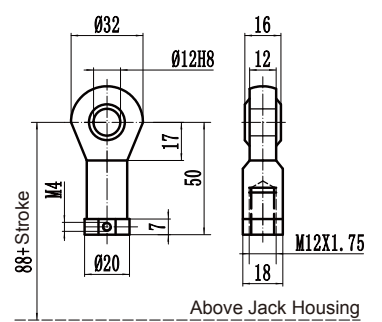
Above Jack Housing



Above Jack Housing

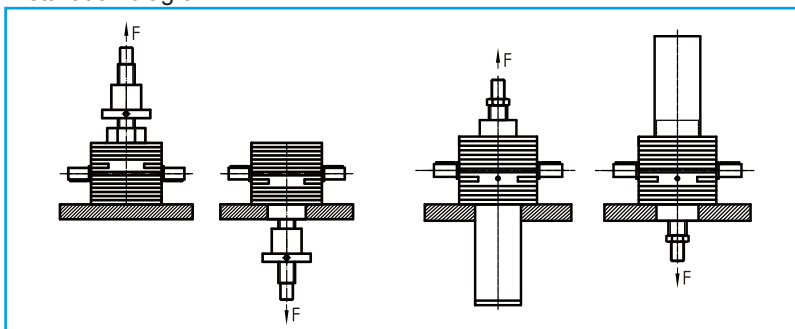


Above Jack Housing

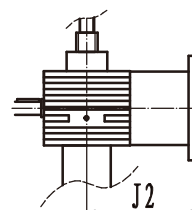


Above Jack Housing

Installation diagram



Flange Input
Can be customized

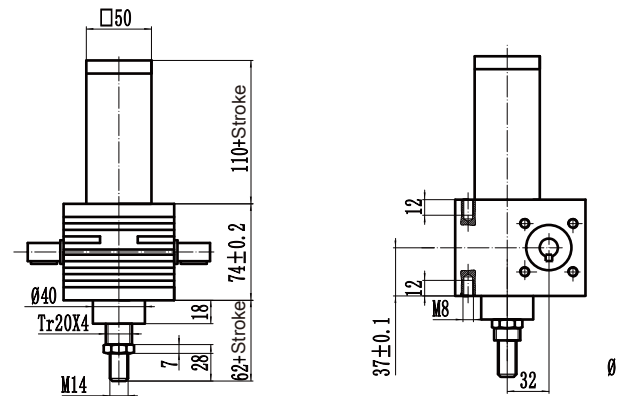
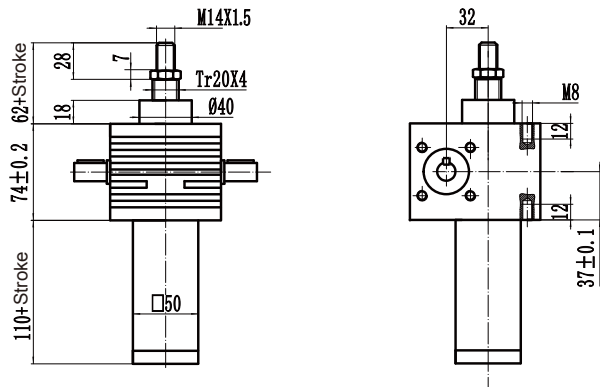


Motor base number	J2
63B14	90
71B14	97

SJC10 Worm Gear Screw Jack

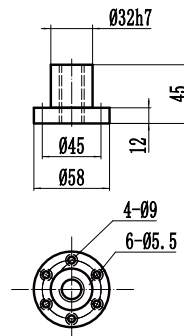
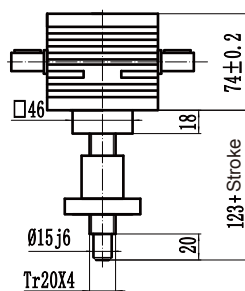
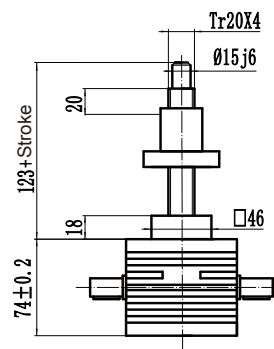
US, UK : Upright translating screw(Screw anti-rotation)

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

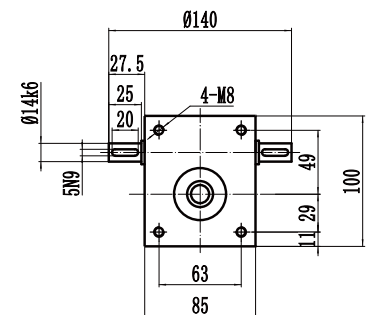


UR: Upright Rotating Screw

IR: Inverted Rotating Screw



Mounting View

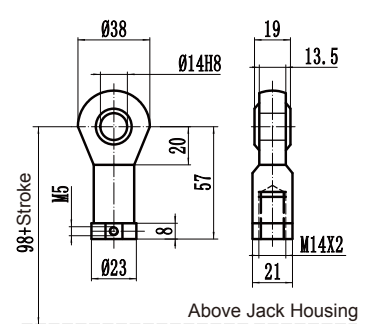
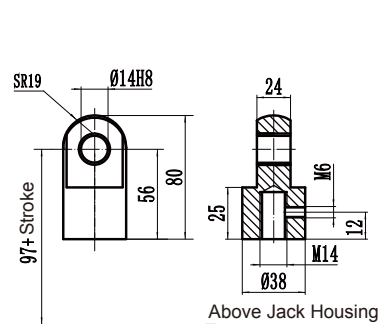
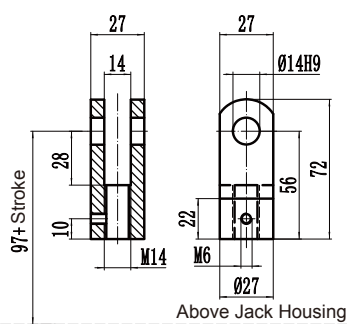
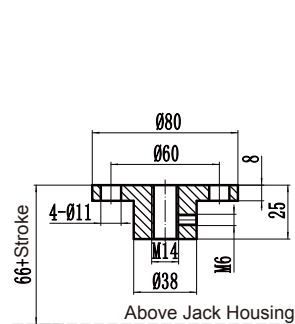


Top Plate

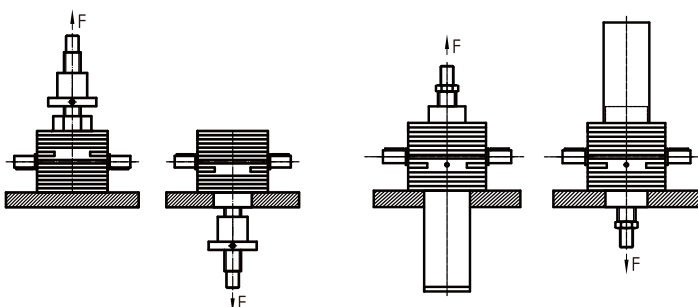
Forked Head

Clevis End

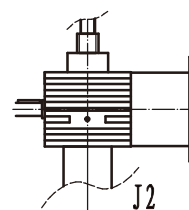
Spherical Hinge



Installation diagram



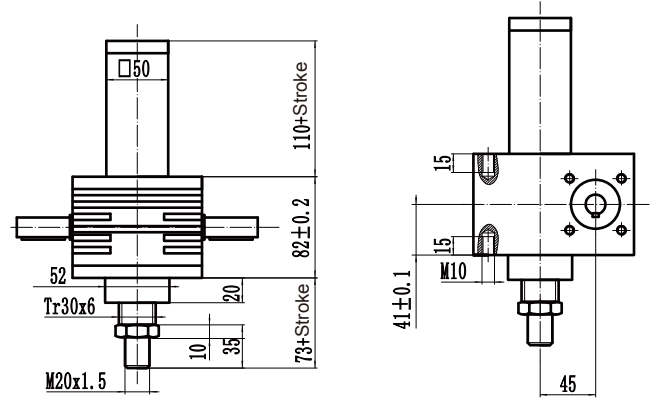
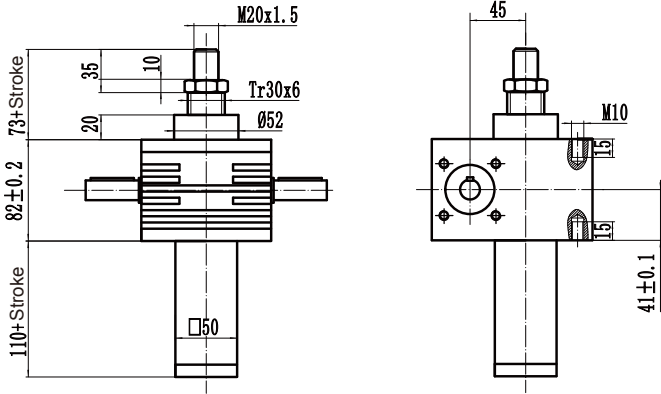
Flange Input
Can be customized



Motor base number	J2
63B14	100
71B14	107
80B14	117

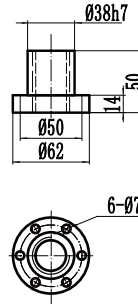
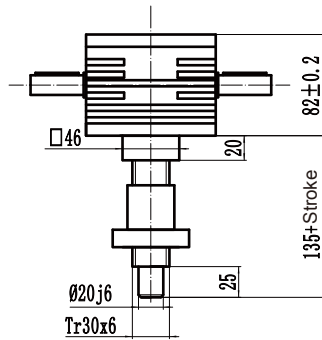
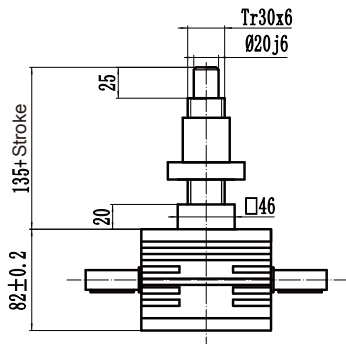
US, UK : Upright translating screw(Screw anti-rotation)

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

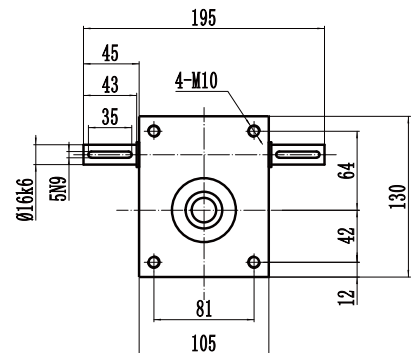


UR: Upright Rotating Screw

IR: Inverted Rotating Screw



Mounting View

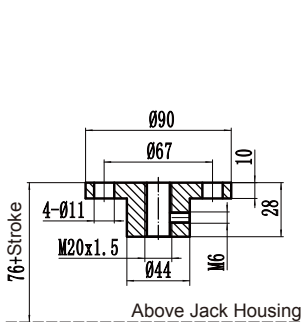


Top Plate

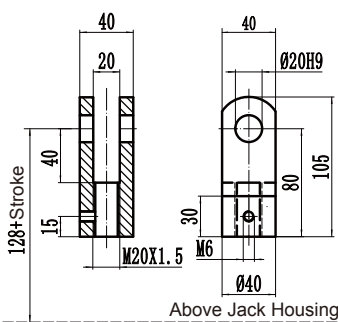
Forked Head

Clevis End

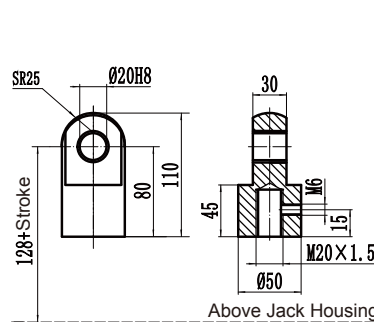
Spherical Hinge



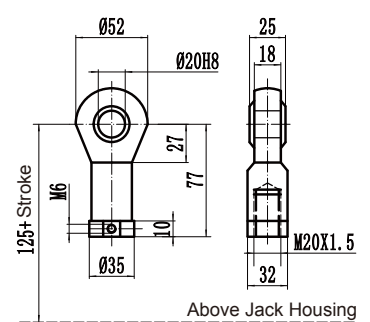
Above Jack Housing



Above Jack Housing

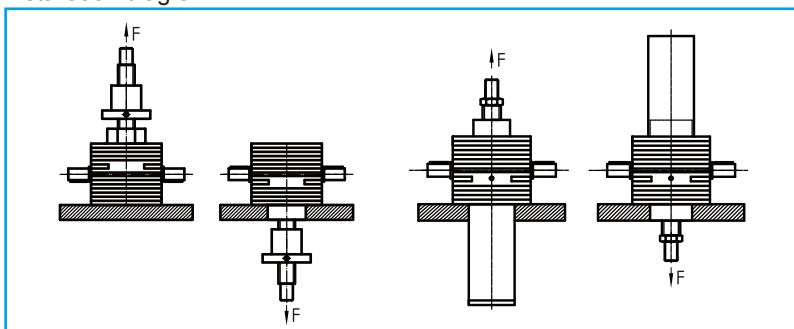


Above Jack Housing

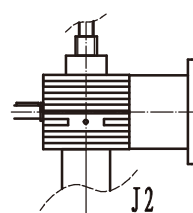


Above Jack Housing

Installation diagram



Flange Input
Can be customized

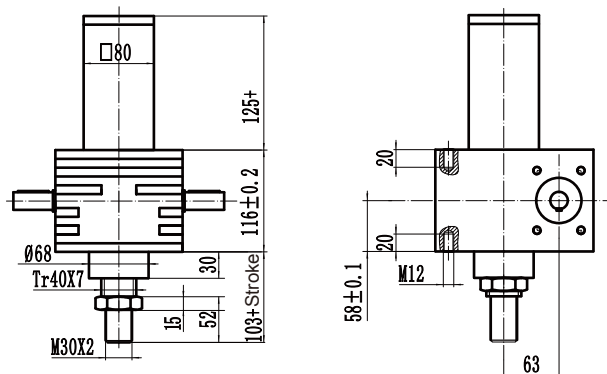
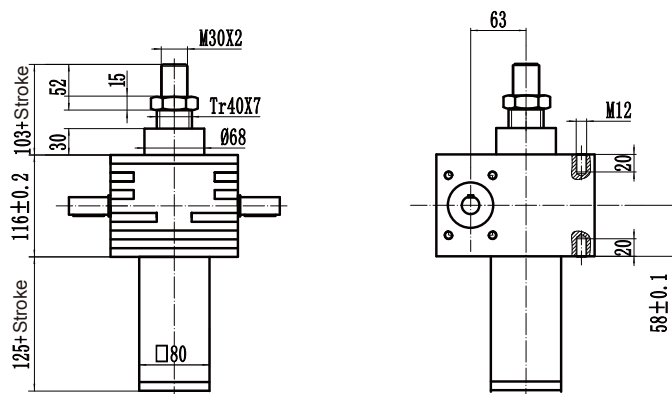


Motor base number	J2
7B14	135
80B14	145
90B14	155

SJC50 Worm Gear Screw Jack

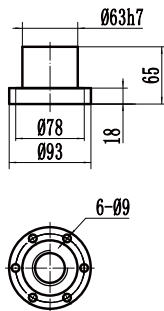
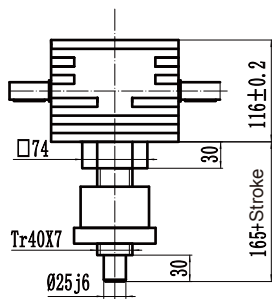
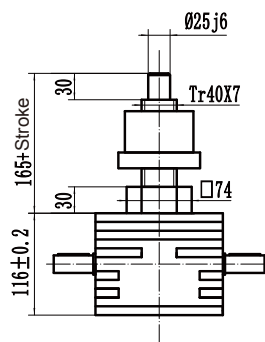
US, UK : Upright translating screw(Screw anti-rotation)

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

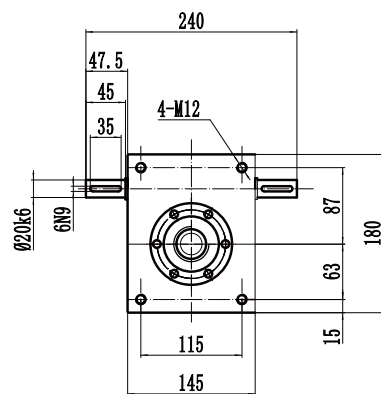


UR: Upright Rotating Screw

IR: Inverted Rotating Screw



Mounting View

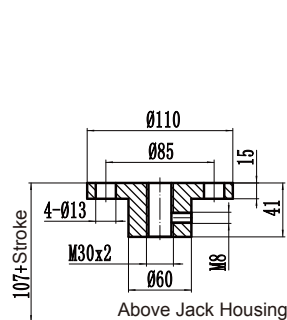


Top Plate

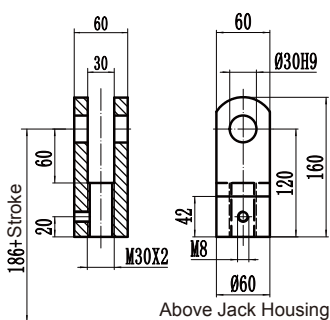
Forked Head

Clevis End

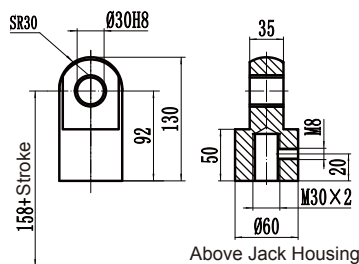
Spherical Hinge



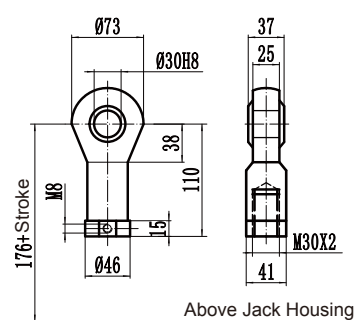
Above Jack Housing



Above Jack Housing

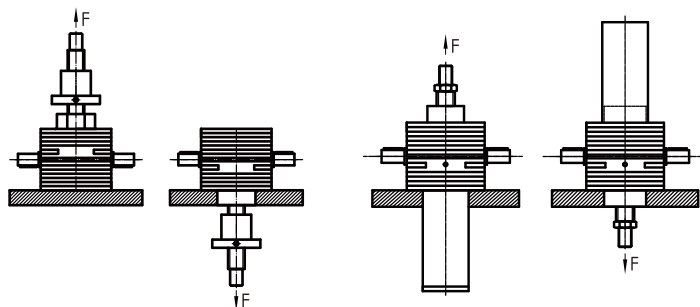


Above Jack Housing

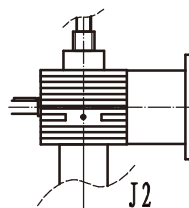


Above Jack Housing

Installation diagram



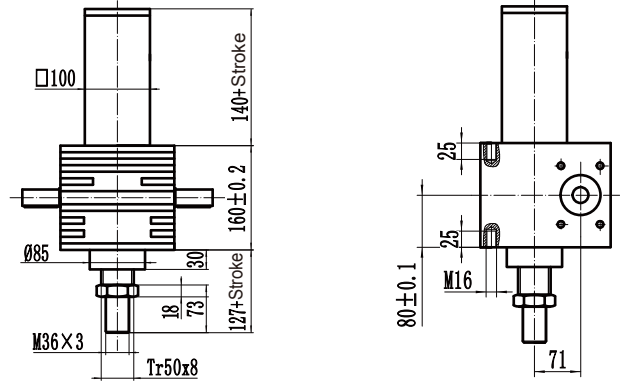
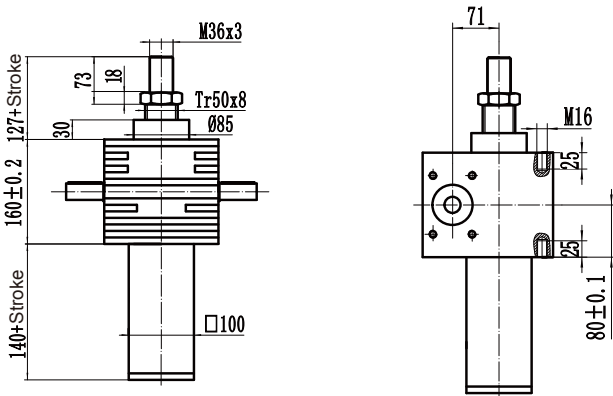
Flange Input
Can be customized



Motor base number	J2
80B14	167
90B14	177
100B14	187

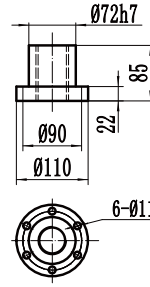
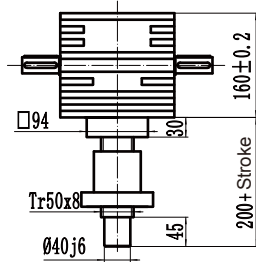
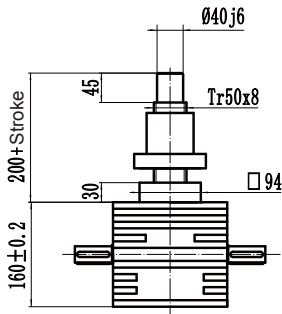
US, UK : Upright translating screw(Screw anti-rotation)

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

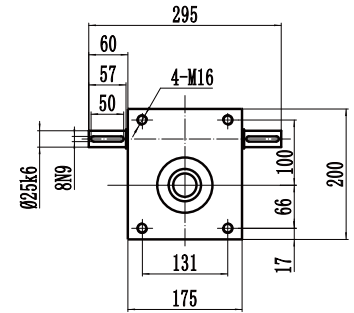


UR: Upright Rotating Screw

IR: Inverted Rotating Screw



Mounting View

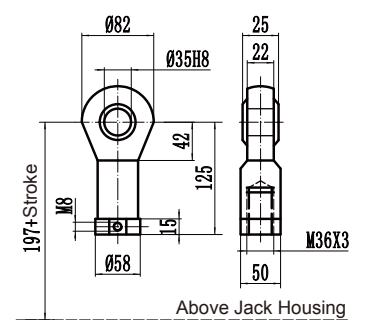
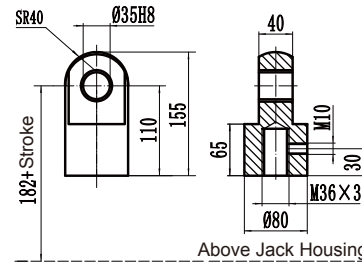
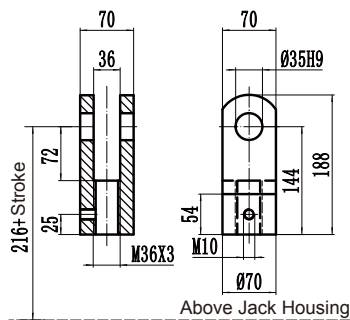
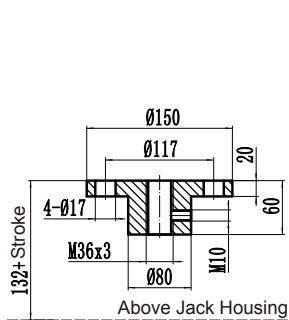


Top Plate

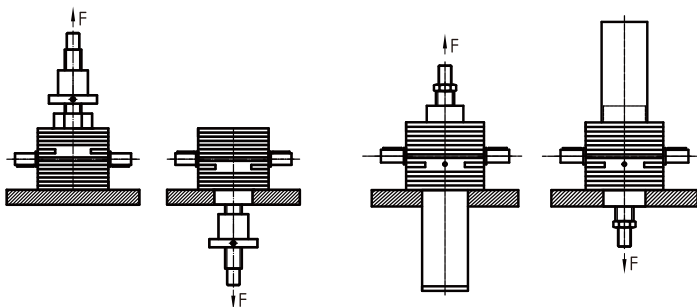
Forked Head

Clevis End

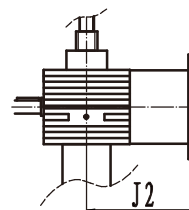
Spherical Hinge



Installation diagram



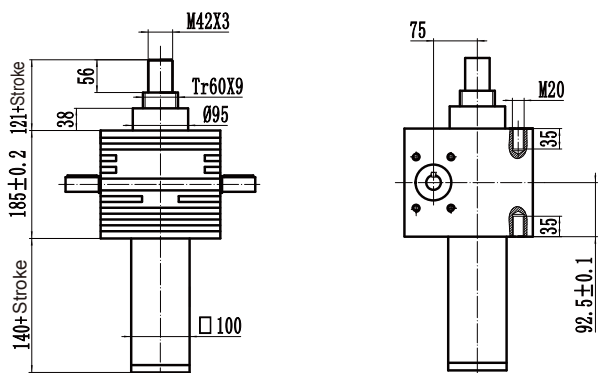
Flange Input
Can be customized



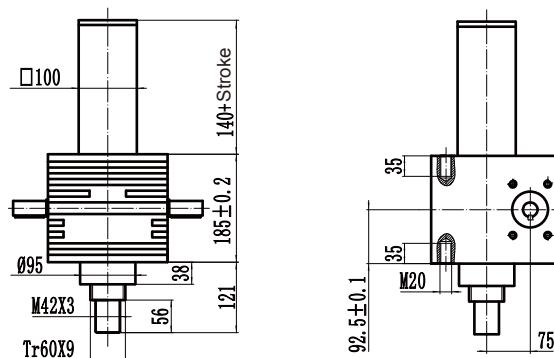
Motor base number	J2
80B14	195
90B14	205
100B5	215

SJC100 Worm Gear Screw Jack

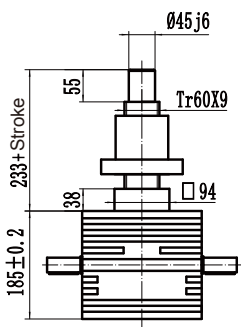
US, UK : Upright translating screw(Screw anti-rotation)



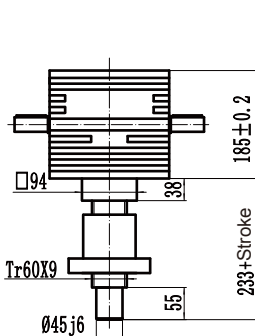
IS, IK : Inverted translating Screw(Screw anti-rotation)



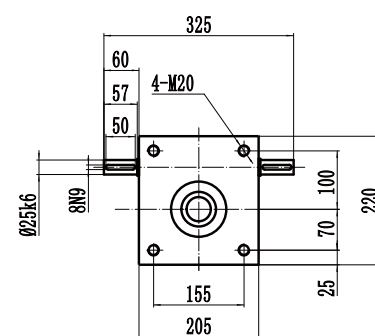
UR: Upright Rotating Screw



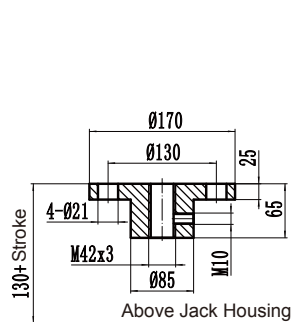
IR: Inverted Rotating Screw



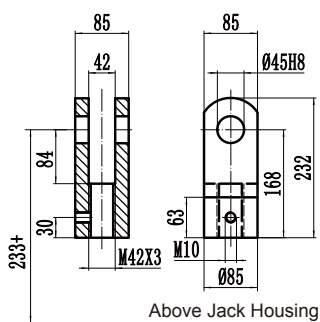
Mounting View



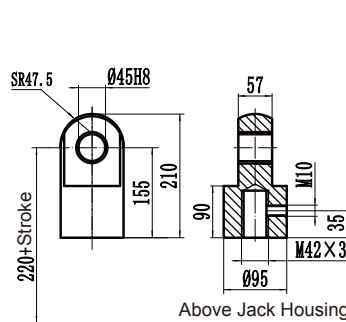
Top Plate



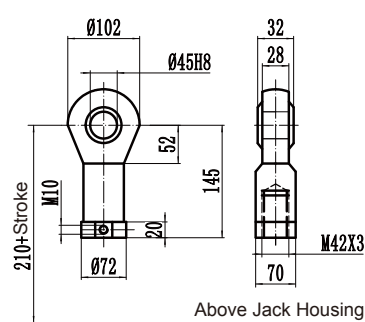
Forked Head



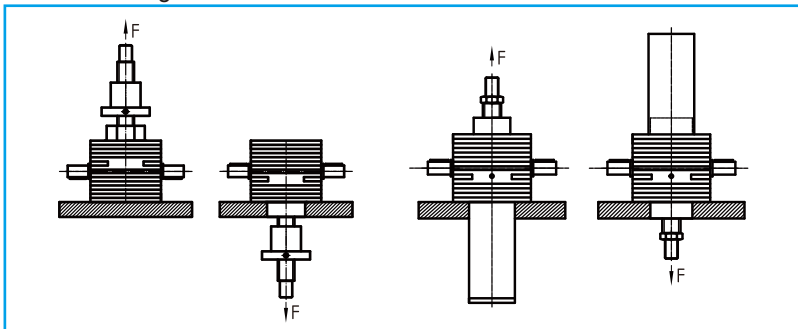
Clevis End



Spherical Hinge



Installation diagram

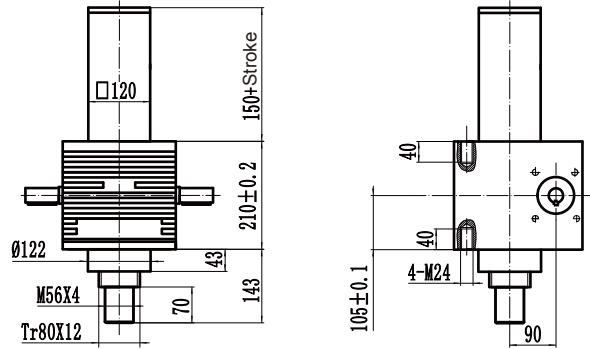
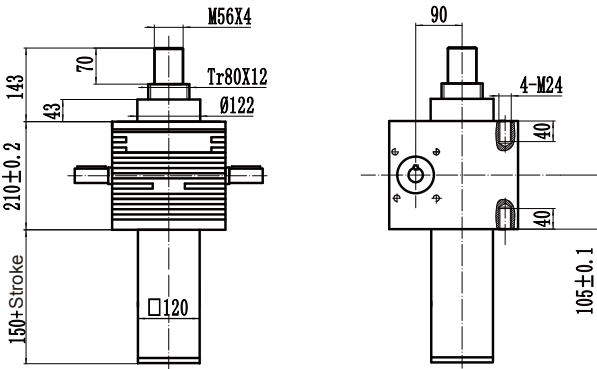


Flange Input
Can be customized

Motor base number	J2
90B14	218
100B14	228

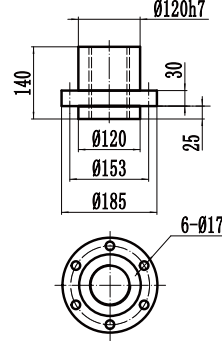
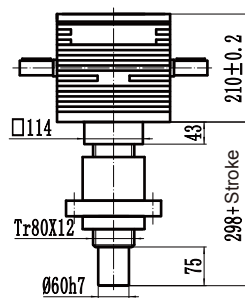
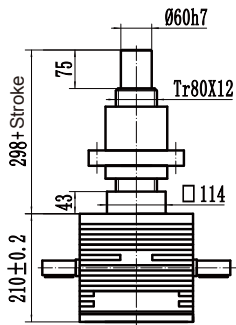
US, UK : Upright translating screw(Screw anti-rotation)

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

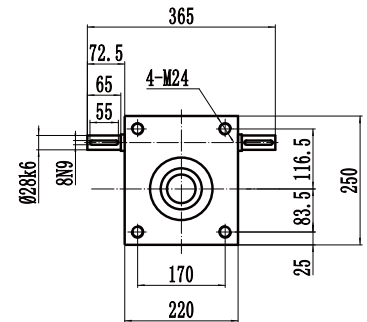


UR: Upright Rotating Screw

IR: Inverted Rotating Screw



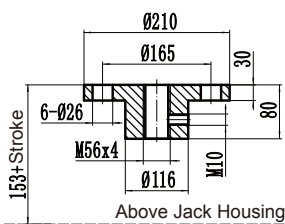
Mounting View



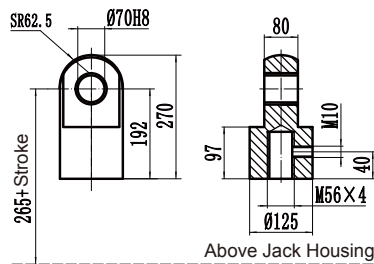
Top Plate

Clevis End

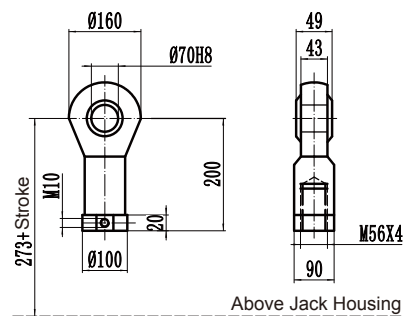
Spherical Hinge



Above Jack Housing

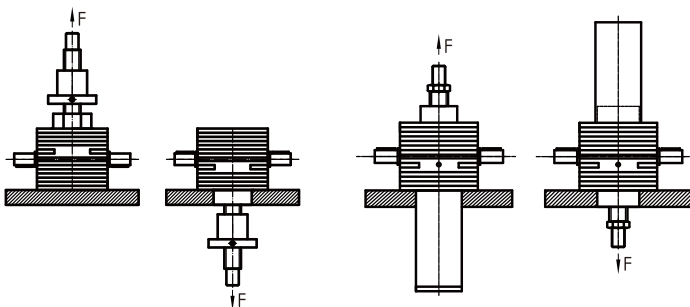


Above Jack Housing

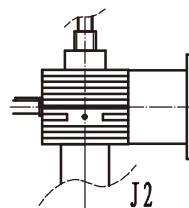


Above Jack Housing

Installation diagram



Flange Input
Can be customized

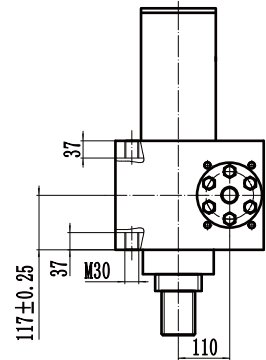
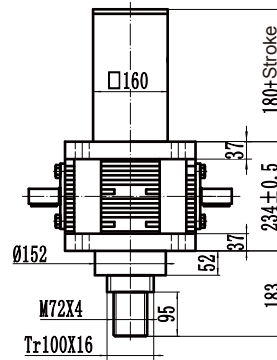
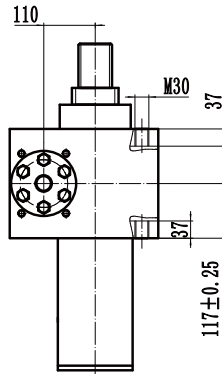
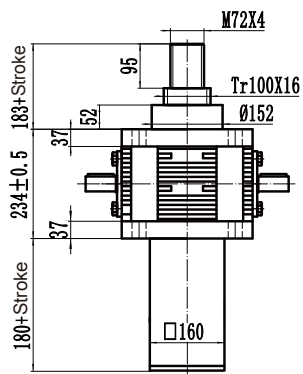


Motor base number	J2
90B5	240
100B5	250
112B5	250

SJC300 Worm Gear Screw Jack

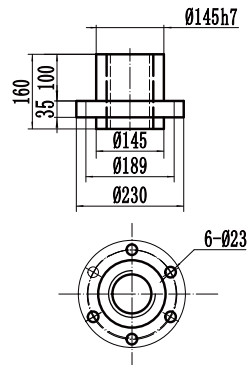
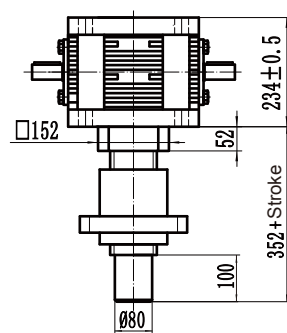
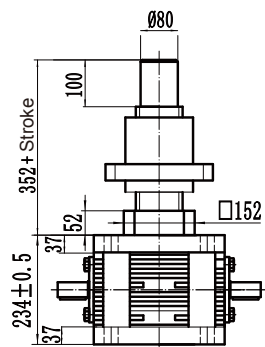
US, UK : Upright translating screw(Screw anti-rotation)

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

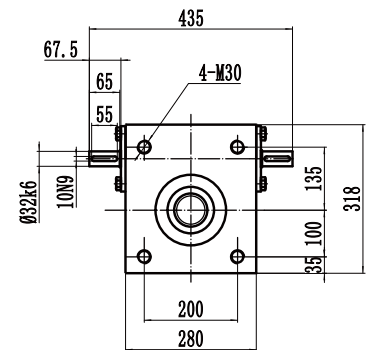


UR: Upright Rotating Screw

IR: Inverted Rotating Screw

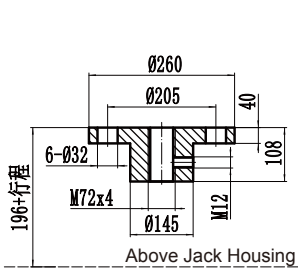


Mounting View

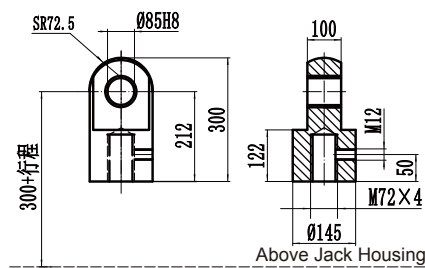


Top Plate

Clevis End

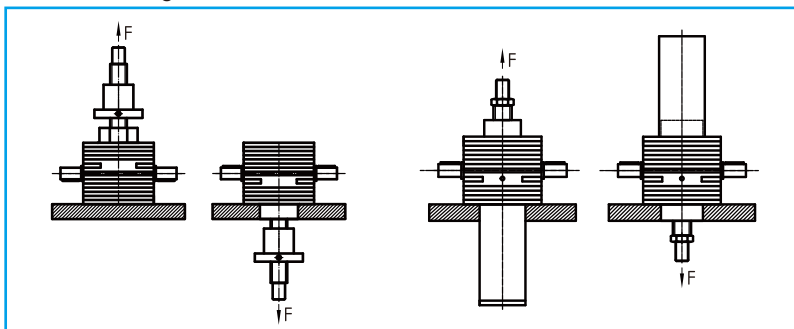


Above Jack Housing



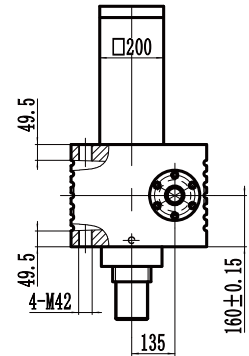
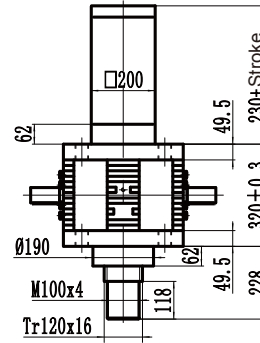
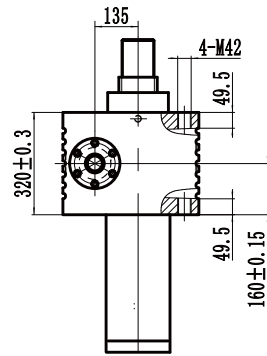
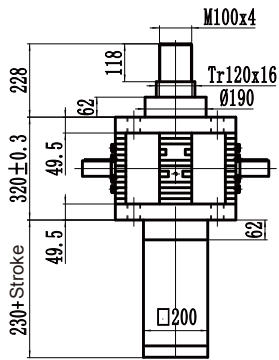
Above Jack Housing

Installation diagram



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

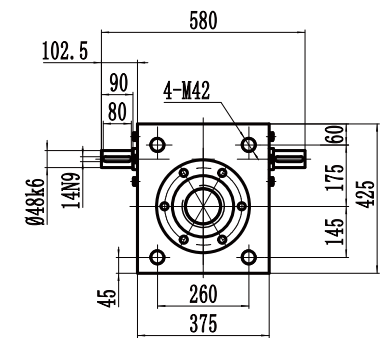
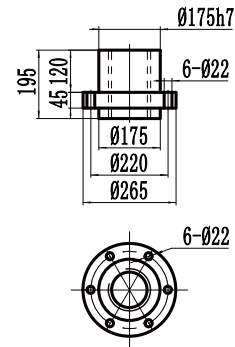
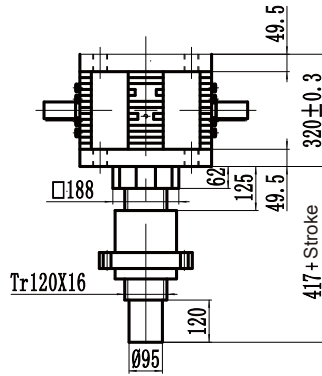
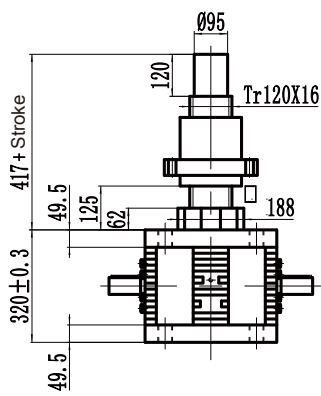
IS, IK : Inverted translating Screw(Screw anti-rotation)



UR: Upright Rotating Screw

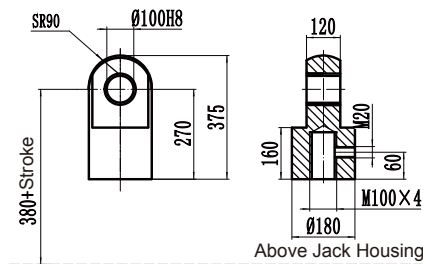
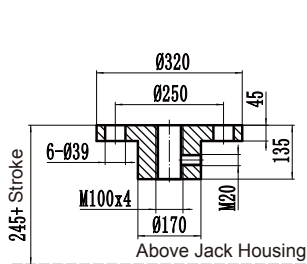
IR: Inverted Rotating Screw

Mounting View

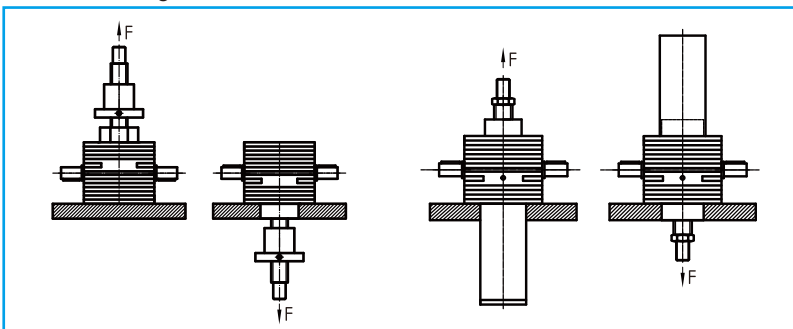


Top Plate

Clevis End

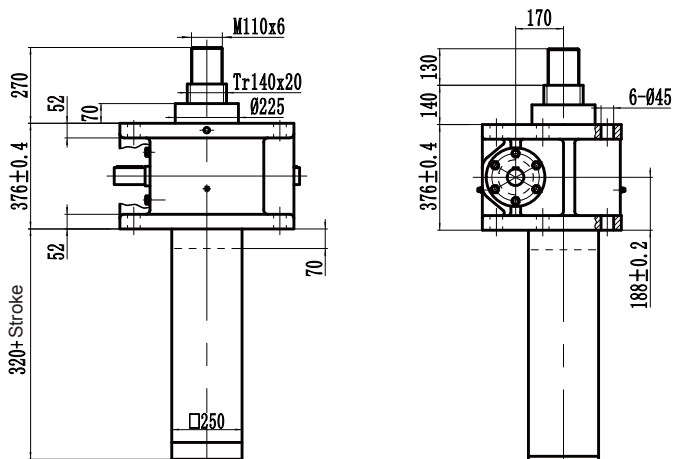


Installation diagram

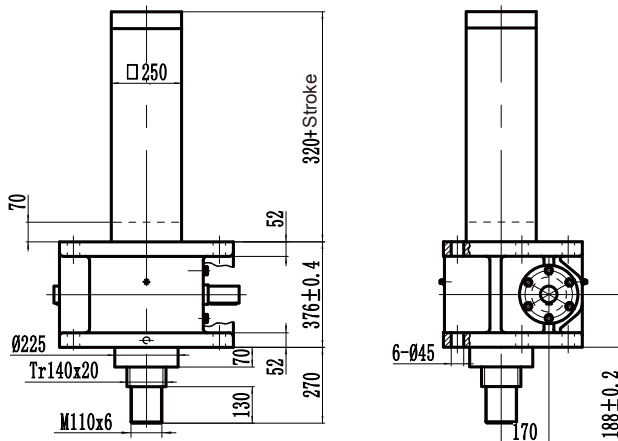


SJC700 Worm Gear Screw Jack

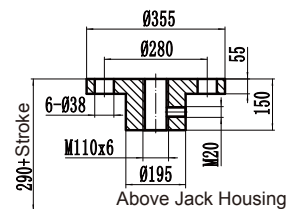
US, UK : Upright translating screw(Screw anti-rotation)



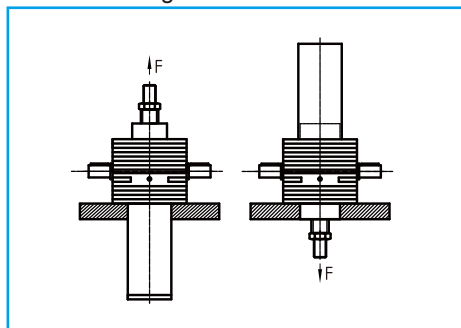
IS, IK : Inverted translating Screw(Screw anti-rotation)



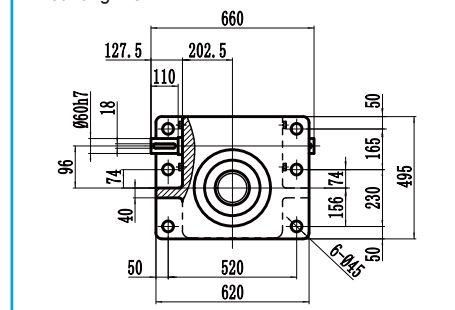
Top Plate



Installation diagram

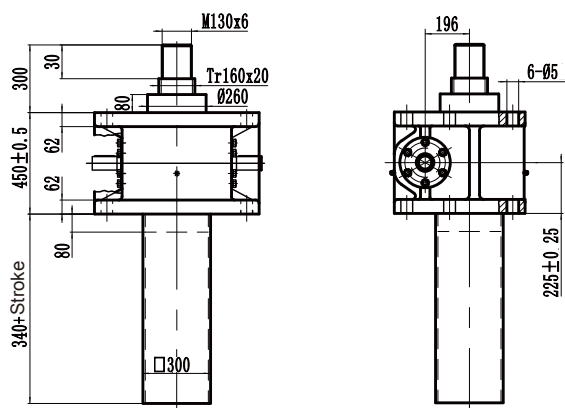


Mounting View

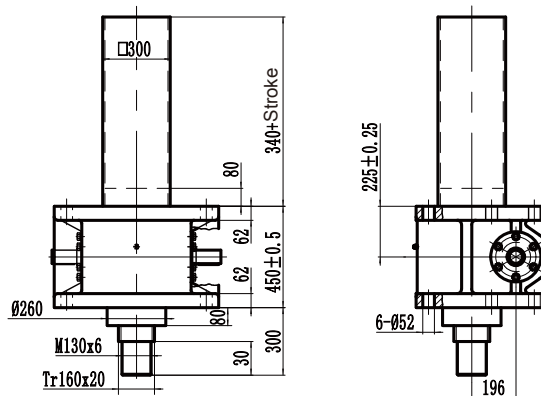


SJC1000 Worm Gear Screw Jack

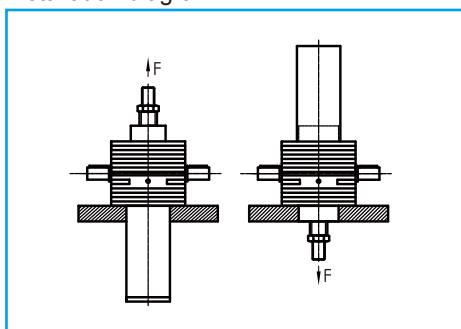
US, UK : Upright translating screw(Screw anti-rotation)



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



Installation diagram



Mounting View

