YYSWL涡轮螺杆升降机

YYSWL Worm-Bolt Lifter

蜗轮丝杆升降机/WORM–BOLT LIFTER

YYSWL升降机，本升降机是由蜗轮副和梯形丝杆组合来完成物件的提升和下降，本机具有结构紧凑，体小轻便、灵活、可靠、寿命长、安装方便。在静止时还可自锁。

Comsists of worm unit and echeion boft for firing up or moving down,Compecf in structure,light and portable,flexible,refiable,long in service life,easy to installation,and self–iocking while stopping.

技术参数/TECHNICAL DATA

型号/Model	SWL1.0	SWL2.5	SWL5	SWL10	SWL15	SWL20	SWL25	SWL35	SWL50	SWL75	SWL100
最大起升力（kN） Max lifting Force	10	25	50	100	150	200	250	350	500	750	1000
丝杆螺纹尺寸 Bolt Thread Size	Tr22×5	Tr30×8	Tr42×8	Tr58×12		Tr65×12	Tr90×16	Tr110×16	Tr120×16	Tr130×18	Tr150×24
最大拉力（kN） Max Tansion	10	25	50	100	150	200	250	350	500	750	1000

YYSWL	2.5	M	1	A	500	Z	I

YYSWL 升降机系列 Screw jack

2.5 机座号 Type

M 传动比 Ratio

P	普通速比 Normal R
M	慢速比 Normal slow R

1 结构型式 Mouting position

1	丝杆轴向移动 Noscrew mantel travel directlon
2	螺母轴向移动 Screw mantel travel directlon

A 装配基本形式 Stand shaft form

A_1	丝杆不转动只向上移动 Noserew mandtel upward
B_1	丝杆不转动只向下移动 Noserew mamdter downward
A_2	丝杆转动螺母移动底座在下面 Screw mandtel upward
B_2	丝杆转动螺母移动底座在上面 Screw mandtel foundation downward

500 行程 Travel(mm)

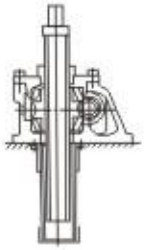
Z

Z	防护罩型 With Protective pipe
F	防旋转型 Anti-rotating type

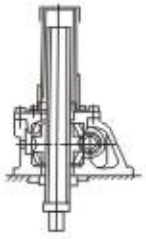
I 丝杆顶端联接方式 Coupling

I	平口式 Flat axle head model
II	顶板式 Roll model
III	牙口式 Bolt model
IV	栓孔式 Keyhore model

1型结构型式
mouting position1

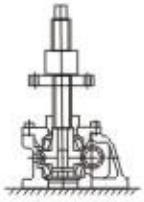


1A



1B

2 型结构型式
mouting position2



2A

2B

升 降 机 主 要 性 能 参 数 表
Fluctuating been advantaged table

型 号 Model		YYSWL1	YYSWL25	YYSWL5	YYSWL10	YYSWL15	YYSWL20	YYSWL25	YYSWL35	YYSWL50	YYSWL75	YYSWL100
最大起升力KN Liftmax		10	25	50	100	150	200	250	350	500	750	1000
丝杆螺纹尺寸 Pitch of screws		Tr22x5	Tr30x8	T42x8	T58x12	T58x12	T65x12	T90x16	T110x16	T120x16	T130x18	T150x24
丝杆底径d3 Outer diamter of screw d3		16.5	21	33	45	45	52	72	92	102	110	124
丝杆螺矩L1 Pitch of screw L1		5	8	8	12	12	12	16	16	16	18	24
最大拉力 KN Lift load		10	25	50	100	150	200	250	350	500	750	1000
蜗轮副传动比 Worm wheel Ratio i	P	3/11	1/8	1/6.4	1/8.3	1/8.3	1/8	3/31	3/32	3/32	3/38	3/46
	M	1/22	1/25	1/25	1/24	1/24	1/24	1/27	1/29	1/38	1/33	1/40
蜗杆每转行程 Worm Travel	P	1.36	1	1.25	1.44	1.44	1.50	1.55	1.5	1.5	1.421	1.565
	M	0.227	0.32	0.32	0.5	0.5	0.5	0.59	0.55	0.474	0.485	0.5
满载时蜗杆扭矩N.m Wormtorgue	P	6.2	18	39.5	119	179	240	366	464	856	1380.5	2040.9
	M	2.9	8.86	19.8	60	90	122	217	253	453.3	761.3	1278.3
效率% Efficiency	P	21	22	23	20.5	20.5	19.5	16	18	15	13	13
	M	12	11	11.5	13	13	12.8	9	11	10	8	8
空载扭矩 To(N·m) No-load trque To(N·m)		0.29	0.02	1.4	2.0	2.6	3.9	6.8	12.3	19.6	29.4	39.2
不加行程的重量kg Not in cluding Travel weight		5.5	7.7	18	27	33	42	75	92.2	248	370	748
功率kW Power		P=Txn/9550[T:扭矩(N.m) n:转速(r/min)] P=Txn/9550[T:torque(N.m) n:speed(r/min)]										
润滑剂 Lubrication		合成钙纳基润滑脂 ZGN-1或 ZGN-2 (-20℃~100℃) Calciam gease ZGN-1或 ZGN-2 (-20℃~100℃)										
最大行程 Travelmax		300	400	770	1000	800	980	1500	1500	2000	2000	2000

拉力负荷行程可加大

注意事项:

1）选择升降机时不论静载、动载、冲击载荷均不得超过其允许承受的最大载荷，根据安全系数、使用行程、校对丝杆的稳定性选择具有充分容量的升降机；

2）一定要注意丝杆轴转速与承受的载荷进行搭配，对于升降机的容许最大载荷、容许外加负载、容许丝杆轴的旋转速等项目进行校验，如果超过产品的数据将会造成升降机设备整体的重大损伤；

3）升降机在工作时其减速部表面温度应控制在—15℃~80℃的范围以内，确保活动螺母表面温度也在上述范围以内；

4）输入轴容许转速为1500r/min，输入轴不得超过此转速；

5）YYSWL不可连续运转:
单台升降机的负荷时间率（%ED）以30分为单位计算，YYSWL（梯形丝杆类型）的负荷时间内不得超过20%ED。

负荷时间率%ED=

$$\frac{\text{1动作周期的工作时间}}{\text{1动作周期的工作时间+1动作周期的停歇时间}} \times 100\%$$

6）对于在同一轴线上联接数台升降机时，请务必对输入轴强度进行校核，使每台升降机所承担的扭矩都应在其容许输入轴扭矩以内；

7）驱动源的起动扭矩应确保在使用扭矩的200%以上；

8）在零摄氏度以下工作时因受润滑油粘性变化的影响使得整机效率下降，所以必须选有充足的驱动源；

9）SLSWL型理论上具有自锁功能，但工作在振动冲击较大的场合时会导致自锁功能失灵，因此须外加一制动装置或选择带有制动的驱动源。

10）升降机使用的环境如下：

Note:

1) Select a Jack with sufficient capacity according to safety factor,service joumey and stability.And stationary load, dynamic load and shock load must be lower than permissible maximum load.

2) Please note that rotation speed of screw must matchload, permissible maximum load,permissible maximum outer load,and permissible rotation speed of screw must be verified.If these figures exceed that of Products,jacks will be damaged greatly.

3) The surface temperature will be limited in−15° ~80° when jack working to ensure the temperature of traveling nuts in−15° ~80° .

4) Maximum input speed is 1500r/min.

5) YYSWL suitable for continous operation:
Jack Duty(%ED)
YYSWL duty(%ED) cannot exceed20%ED.

Duty %ED=

$$\frac{\text{jack operating time(lift\&lower cycle)}}{\text{Elapsed cycle time}} \times 100\%$$

6) When several Jacks are connected on the same axial line,the loaded torque with each Jack must be verifiedand limited within permissible input torque.

7) Starting torque must be 200% of service torque.

8) At below0° ambient temperature.changed adhesion of lubrication will lower Jack's efficiency so that sufficient drive is necessary.

9) SLSWL has self−lock function,but an Extra braking device or drive source with braking device is necessary to be equipped because selt−lock will be of mal−function when Jack is loaded a heavy shock.

10) Jack's operating conditions:

使用场所	Working Location	室内无雨水侵入的场所	Indoor location without rainwater
周围空气	Ambient Air	灰尘为一般工厂状态	Normal
环境温度	Ambient Temperature	—15℃-10℃	
相对湿度	Relative Humidity	85%以下	Less than 85%

11）当升降机工作在多灰尘的场所中时请务必选择防尘罩伸缩套附件来保护丝杆，在室外使用时请务必考虑使用罩壳等装置，使机器不直接受到风吹雨打；

12）在升降机工作时，不得进行人为的强行停机，否则将使升降机受到严重破损；

11) When working in dusty space,Jack must be equipped with elastic dust−hook on screw;in open air,shield must be equipped to prevent exposure to wind and rain.

12) When working,Jack cannot be forced to stop,or it will be damaged seriously.

选型方法：

升降机型号的确定：
计算总机的当量载荷Ws（N）
Ws=最大载荷Wmax× 使用系数f1（N）
被驱动设备系数（f1）表：

How to select type:

Determine Jack's type:
Calculate total equivalent load Ws（N）:
Ws=Wmax×f1
Service factor for driven machine（f1）:

载荷性质 Load character	使用举例 Example	被驱动设备系数 Factor for driven machine (f1)
无冲击载荷，负荷惯性小 shockless load & small inertia load	开关、阀门传送带切换装置 Switch,valve transmission belt swithing device	1.0~1.3
轻微冲击载荷，负荷惯性中等 moderate shock & moderate inertia	各种移动装置；升降用各种升降机 All kinds of moving devices,all kinds of elevators	1.3~1.5
大冲击振动载荷，负荷惯性大 heavy shock & large inertia	用台车搬运东西；保持压延滚轮的位置 Carrying something by trolley; tokeep the position of idling gear	1.5~3.0

计算单台升降机的当量载荷W

$$W=\frac{WS}{\text{联动台数}\times\text{联动系数}fd}$$

Calculate equivalent load of single Jack,

$$W=\frac{WS}{Number\times Linkage\ factor\ (fd)}$$

联动系数 Linkage factor(fd):

联动台数 Number of linkage jack	1	2	3	4	5~8
联动系数 Linkage factor	1	0.95	0.9	0.85	0.8

确定升降机型号：

充分考虑载重，速度，行程，效率，驱动源后暂时选定型号
根据使用行程、环境条件、输出顶端的联接方式，确定升降机的整体型号。

Temporarily determine Jack type:
Temporarily determine Jack type after taking full consideration of load,speed,journey,efficiency and drive source.
Determine JW type according to service journey, ambient conditions,connection mode of end-fittings.

输入功率校核：

负载所需输入功率与许容量最大输入功率相比较
如果超过请提高型号或降低丝杆轴转速再计算。

Verify input power
If required input power under load exceeds permissible maximum input power,please select larger type or lower the speed of screw rotation.

负载所需输入功率计算 Calculation of required input power under load:

所需输入轴转速 Required rotation speed of input shaft	N1（r/min）	$n1=\frac{V}{L1}\times i$
所需输入轴扭矩 Required torque of input shaft	T1（N·m）	$T1=\frac{W\times L1}{2\pi\times i\times\eta}+T0$
所需输入功率 Required input power	P1（kW）	$P1=\frac{T1\times n1}{9550}$

V:升降机丝杆轴(活动螺母)升降速度mm/min L1:丝杆螺距(mm)
i:减速比 W:单台升降机当量无荷（N） π :圆周率
η:升降机的综合效率 T0：空载扭矩（N.m）
(L1、i、η、TO参照性能参数表)

V:linear speed of screw mm/min L:Pitch of screw(m)
i:ratio W:equivalent load of single jack π:pi
η:Integrated efficiency TO:No-load torque(Nm)
(L1、i、η、TO refer to basic parameter table)

丝杆稳定性校核

当丝杆承受轴向压缩载荷时，请对其进行稳定性校验，如超过其临界载荷值请提高型号后再计算。

Verify the stability of screw:
Please verify the stability of screw under axial load,larger type should be used when load exceed the critical load,

升降机丝杆临界稳定载荷通过以下公式计算：

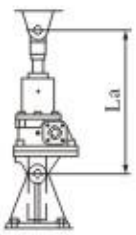
The formula to calculate the critical load as follows:

$$P_{CR}=fm\times\left(\frac{d_3^2}{La^2}\right) \quad \text{确保 ensure} \quad P_{CR}>W\times SF(SF=4)$$

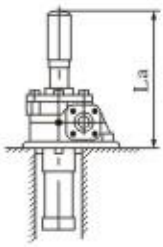
P_{CR}：临界载荷（N）
d_3：丝杆底径mm(参照性能惨数表)
fm：支撑系数
La：作用点间距离，mm
W：单台升降机当量载荷（N）
SF：安全系数（一般SF=4）

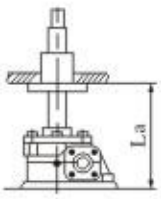
P_{CR}:Critical load(N)
d3:small diameter of screw end (mm)(refer to basic parameter table)'
fm:support factor
La:distance between load-supporting point and mounting point as drawing.
W:equivalent load of single Jack(N)
SF:safety factor (SF=as usual)

丝杆轴稳定性校验时，La（La值计算根据各型号尺寸）与fm（支撑系数）选取如下：



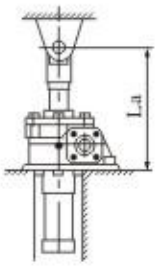
两端支撑fm=10 × 10⁴
support at both ends fm=10 × 10⁴

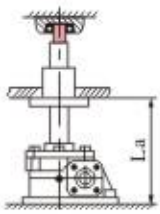


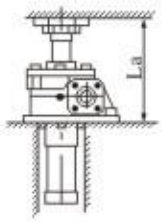


底座固定轴端自由 fm=2.5 × 10⁴
Foot-mounted & movable shaft end fm=2.5 × 10⁴

Verifying the stabilityof screw,the values of La and fm as follows:







底座固定轴端支撑或固定 fm=2.5 × 10⁴
Foot-mounted & shaft end supporting or fixed fm=2.5 × 10⁴

临界转速校核

如为活动螺母选型时，请务必将丝杆轴转速控制在临界转数以下，若超出临界转速，请提高型号再计算。

Verifying critical rotation speed:

Using traveling nut,the rotation speed of screw must be lower than critical speed,if no,please select larger type and calculate again.

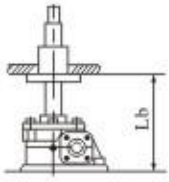
$$nc=\frac{96\times fn\times d_3\times 10^6}{Lb^2} \qquad ns=\frac{n1}{i}$$

nc:临界转速 r/min
d:丝杆底径 mm(参照性能参数表)
fn:长度系数
Lb:支撑间距离 mm

ns:丝杆转速r/min
n1:输入速度r/min
i:减速比

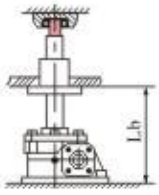
nc:Permissible rotation speed of screw
ns:Rotational speed of screw
d:Small diameter of screw(refer to basic parameter table)
n1:Rotational speed of input shaft
fn:Length factor
i:ratio
Lb:Distance between both supporting face

丝杆轴转速样难时，Lb（Lb值计算根据各型号尺寸）与fn（长度系数）选取如下：



轴端自由 fn=0.36
Movable shaft end fn=0.36

Verifying the rotation speed of screw,the values of Lb and fn as follows:



轴端支撑 fn=1.56
Shaft end supporting fn=1.56

请确保：nc>ns

计算举例：SLSWL200在输入转速为1200r/min，

轴端支撑下运转，根据外形尺寸与传动能力表查得：

d_3=72 Lb=1437

Ensure: nc>ns

Example for calculation:

Take SLSWL as example,n1=1200r/min,connecting mode of top-end :I,we can know d3=72,Lb=1437 referring to dimension and transmission capacity table.

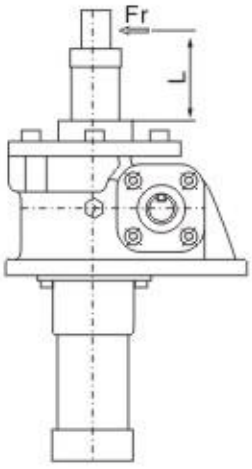
$$ns=\frac{n_1}{i}=\frac{1200}{8}=150r/min$$

$$nc=\frac{96\times fn\times d_3\times 10^6}{Lb^2}=\frac{96\times 1.56\times 72\times 10^6}{(1437)^2}=5222r/min$$

nc= 5222r/min>ns=150r/min……OK.

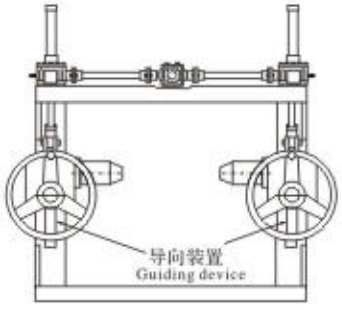
当有横向载荷时，请外加导向器。
YYSWL许用横向载荷 Permitted radial load Fr(N):

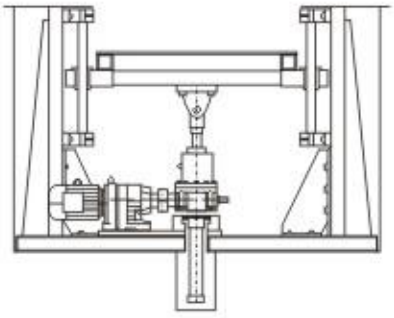
When there is radial load,please add guiding denice.



Fr(N) Type / L(mm)	010	025	050	100	150	200	300	500	750	1000
100	318	570	2500	4010	4610	8210	38200	85300	73500	186200
200	159	290	1250	2010	2300	4110	23000	50400	56800	145000
300	106	190	830	1340	1540	2740	15300	33600	46100	104700
400	76	140	620	1000	1150	2050	11400	25200	39300	78500
500	64	110	500	800	920	1640	9100	20200	33900	62800
600	53	100	420	670	770	1370	7600	16800	29900	62300
700	51	90	360	570	660	1170	6500	14400	26700	44800
800	48	90	310	500	580	1030	5700	12600	24100	39200
900	45	90	280	450	510	910	5000	11200	22000	34800
1000	42	90	250	400	460	820	4500	10100	20200	31300

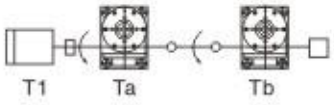
YYSWL超过许用横向载荷时，请外加导向装置，举例如下：
When operating radial load exceeds critical radial load,please add guiding device,for example:





当升降机传动配置为串联时（即同一轴线配置了两个或以上数量的升降机）如图须对各升降机输入轴端进行强度校核；

Please verify input torque of each Jack when several Jack are connected on the same input axial line as the following:



Ta：为升降机a的所需输入扭矩
Tb：为升降机b的所需输入扭矩
电机必需的扭矩T1=Ta+Tb<升降机a的容许输入轴扭矩

Ta: Required torque of input shaft of jack a.
Tb:Required torque of input shaft of jack b.
Required torque of motor T1=Ta+Tb<
Promitted input torque of jack a.

升降机选择举例：

例题：4台联动机，结构如下图所示的4台联动模式，工厂内保持常温，有少许灰尘，有横向负荷在升降机侧面设置了导向器，安装状态采用底座固定，轴端采用一固定一支撑，电源为三相380V/50HZ，使用频率为2次/小时×8小时

1、最大轴向载荷：88.2KN/4台

2、升降速度：10mm/s（600mm/min）

3、使用行程：260mm

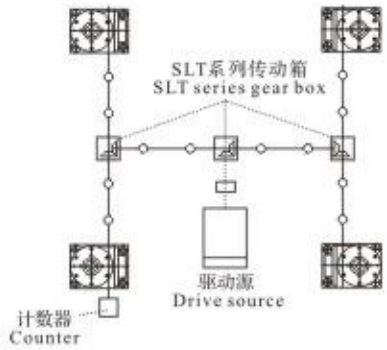
Jack selection example:

Exatnple: Four Jacks,linked as the following drawing, normal temperature,thin dust,radial load,with guiding devices on one side,foot-mounted, fixed the screw top-end,380v/50Hz,service frequency:2tines/hour,service time:8hours.

1.Maximum axial load;88.2KN/4 Jacks

2.Linear speed:10mm/s(600mm/min)

3.Service journey:260mm



升降机型号确定：

1>.计算总机当量载荷Ws（取被驱动设备系数为1.3）

Ws=Wnax·f1=88200×1.3=114660N

2》.计算单台当量载荷W

Determine Jack type:

1>Calculate total equivalent load Ws

(Factor for driven machine is 1.3)

Ws=Wmax·f1=88200×1。3=114660N

2>Calculate equivalent load of single jack:

$$W=\frac{114660}{4\times0.85}=33724N$$

3>.暂定型号：

考虑速度、效率、驱动源、载重后暂定选择YYSWL10（参照性能参数表）

3> Temporarily determine type,

Temporarily determine YYSWL10 according to speed, efficiency,drive and Load(refer to basic parameter table)

4>.行程校核：

使用行程为260mm，充分考虑余量后选定行程为300mm（参照YYSWL10尺寸表）

4> Verify journey:

Service jourmey is 260mm,determine journey should be 300after considering surplus.

(Please refer to dimension sheet of SLSWL10).

5>.输入功率校核：

（1）所需输入功率计算：

5> Check input power:

(1)Calculate required input power:

① $n1=\frac{V}{L1}\times i=\frac{0.60}{0.012}\times8.3=415r/min$

② $T1=\frac{W\times L1}{2\pi\times i\times\eta}+T0=\frac{33724\times0.012}{2\times3.14\times8.3\times0.205}+1.34=39.2Nm$

③ $P1=\frac{T1\times n1}{9550}=\frac{39.2\times415}{9550}=1.7kW$

（2）参照性能参数表，P1max=2.2kW>P……OK

Pmax=119×(1500/8.3)/9550=2.2kW

(2) Refer to basic parameter table,Pmax=2.2kW>P1……OK

Pmax=119×(1500/8.3)/9550=2.2kW

6>.丝杆稳定性校核：

因为施加压缩载荷，根据传动能力表及外尺寸图得出：

6> Verify the stability of screw

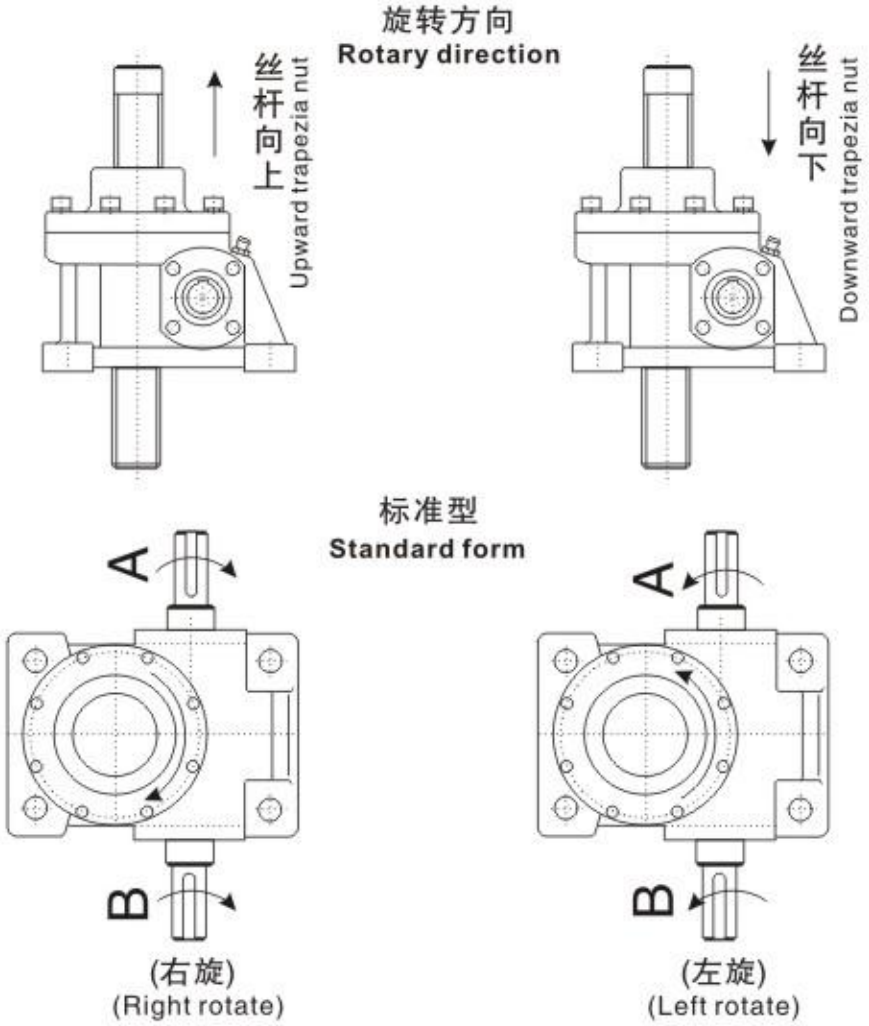
For under axal load,refer to transmission table and dimension for the following figures:

$d_3=45$ $La=604+33=637$ $fm=20\times10^4$ $SF=4$

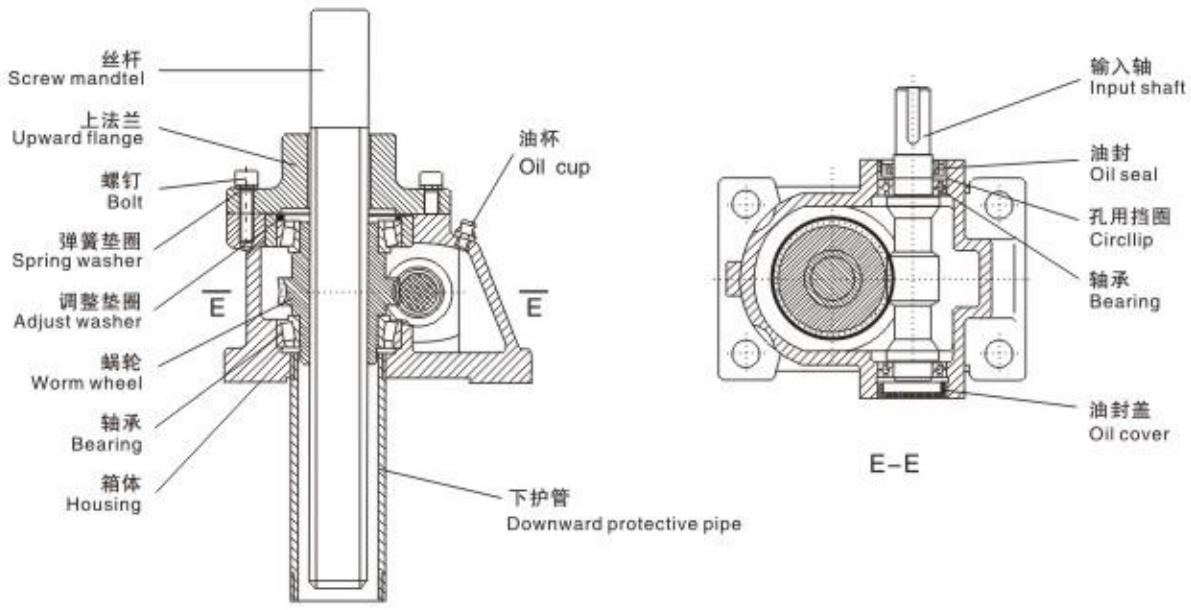
$$P_{CR}=fm\times\left(\frac{d_3^2}{La}\right)^2=20\times10^4\times\left(\frac{45^2}{637}\right)^2=2021162N$$

$$P_F=\frac{P_{CR}}{SF}=\frac{2021162}{4}=505290>W=33724 \quad \cdots\cdots OK$$

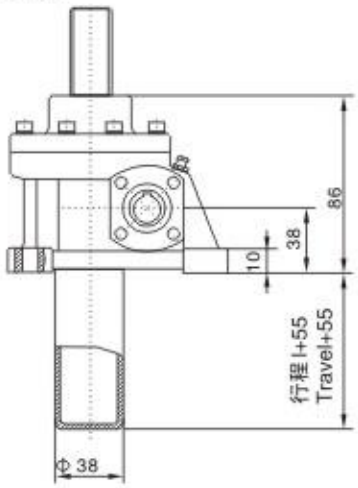
输入转向与丝杆上下运动关系如下：
The relation of input shaft veer and screw mandrel fluctuant movement as f ollows:



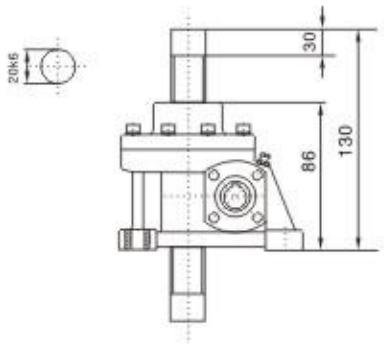
YYSWL系列蜗杆升降机结构示意图
YYSWLS tructural representation of SJ series worm screw elevators



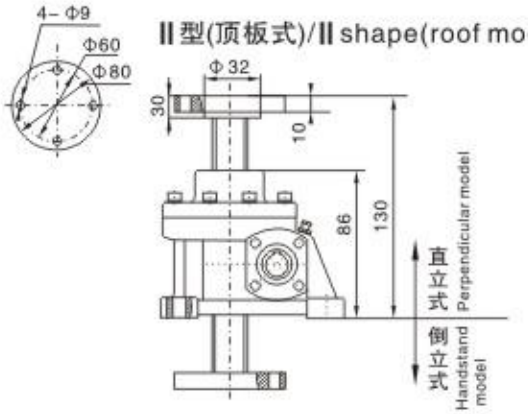
YYSWL1.0



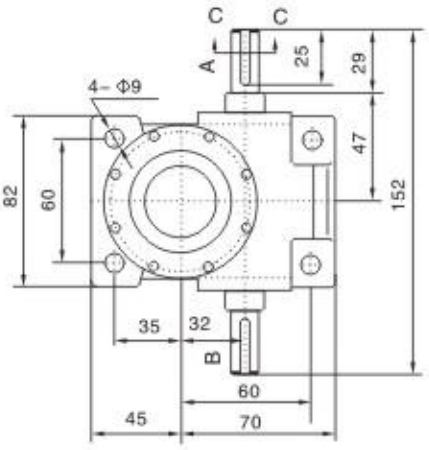
Ⅰ型(平口式)/ Ⅰ shape(flat axle head model)



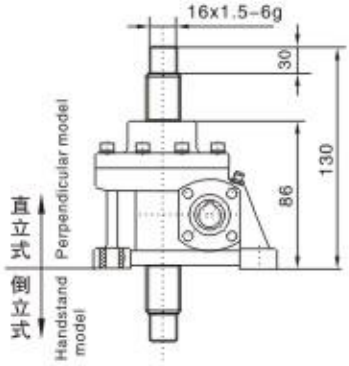
Ⅱ型(顶板式)/Ⅱ shape(roof model)



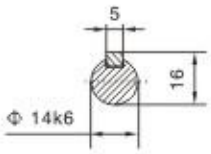
双输入/Double input shaft



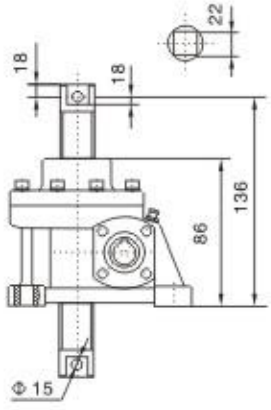
Ⅲ型(牙口式)/Ⅲshape(bolt model)

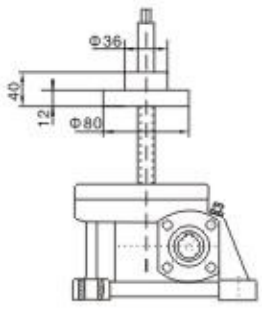


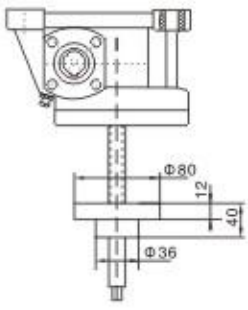
C-C



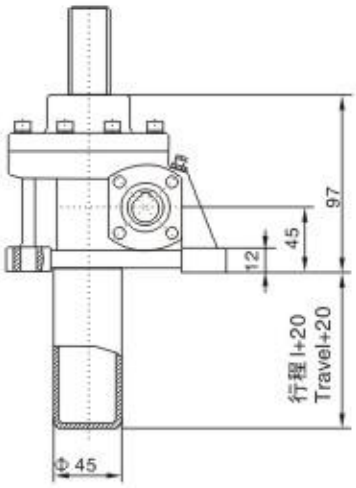
Ⅳ型(栓孔式)/Ⅳshape(keyhole model)



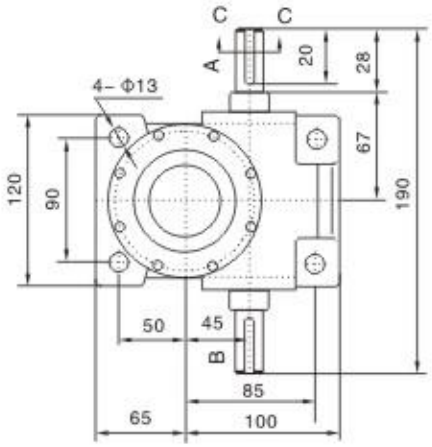




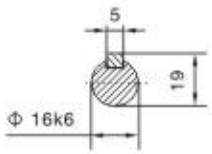
YYSWL2.5

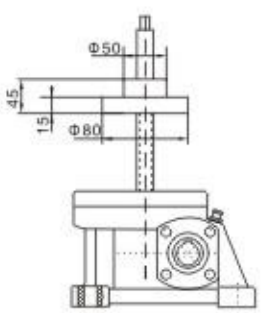


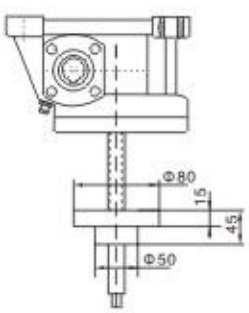
双输入/Double input shaft



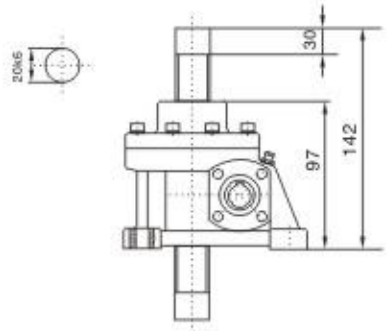
C-C



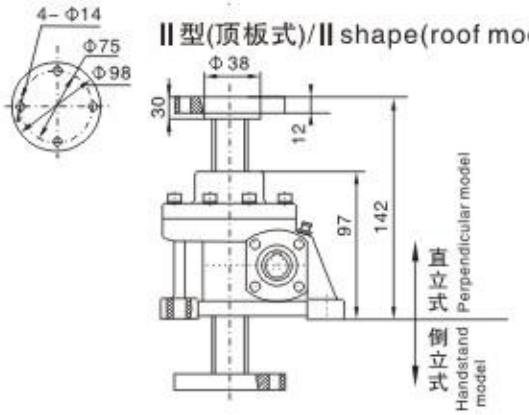




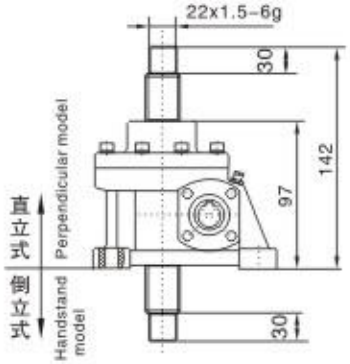
Ⅰ型(平口式)/ Ⅰshape(flat axle head model)



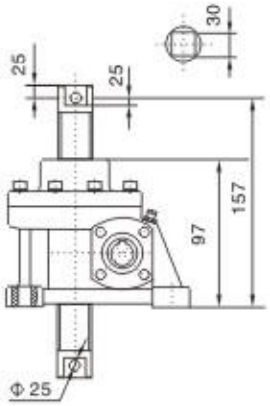
Ⅱ型(顶板式)/Ⅱ shape(roof model)



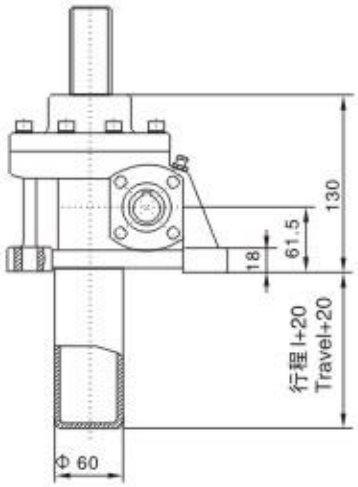
Ⅲ型(牙口式)/Ⅲshape(bolt model)



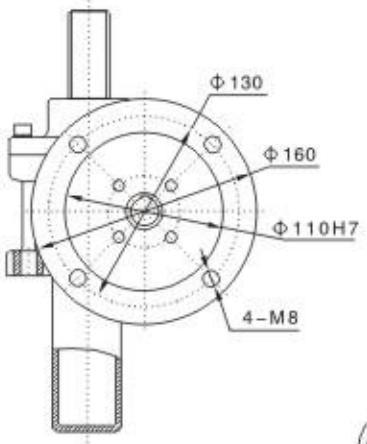
Ⅳ型(栓孔式)/Ⅳshape(keyhole model)



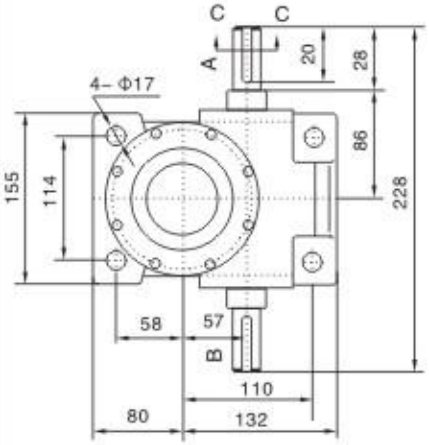
YYSWL5

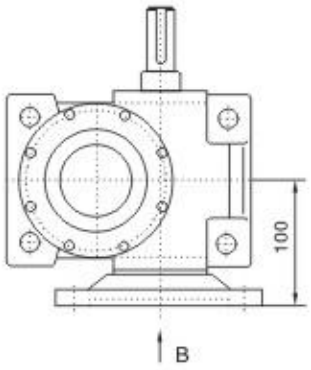


双输入
Double input shaft

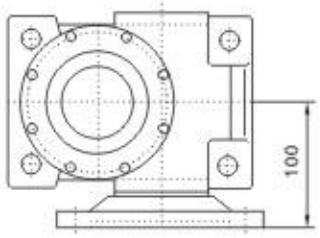


直联双输入
Direct double input shaft

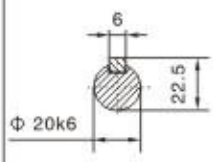




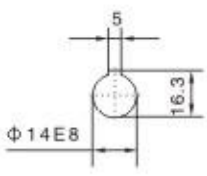
直联单输入
Direct single input shaft

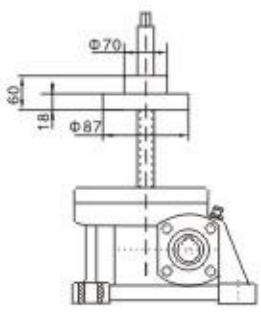


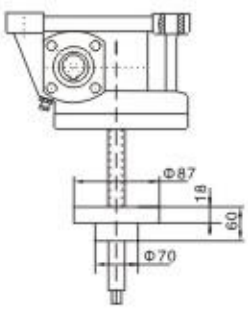
C-C



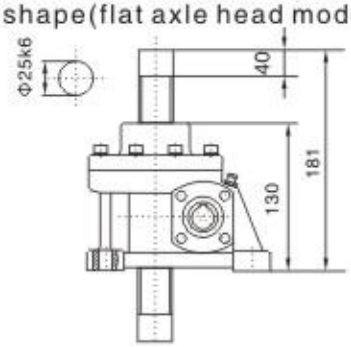
B 向



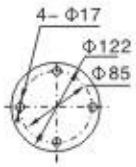


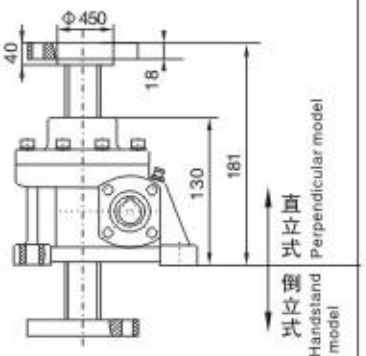


Ⅰ型(平口式)
Ⅰ shape(flat axle head model)

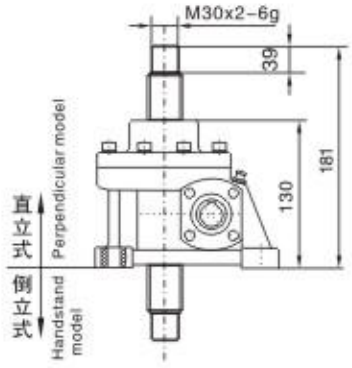


Ⅱ型(顶板式)
Ⅱ shape(roof model)

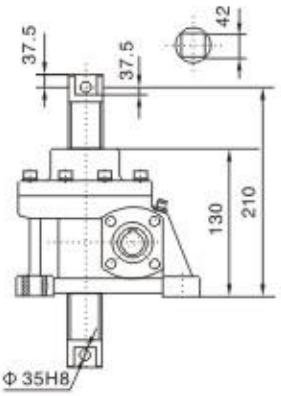




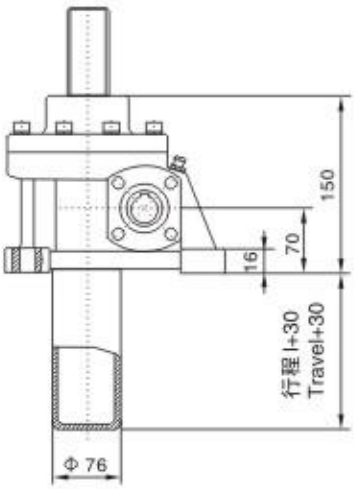
Ⅲ型(牙口式)
Ⅲ shape(bolt model)

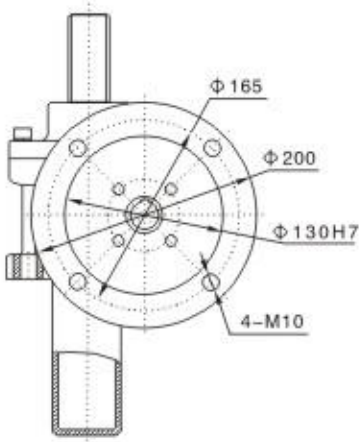


Ⅳ型(栓孔式)
Ⅳ shape(keyhole model)

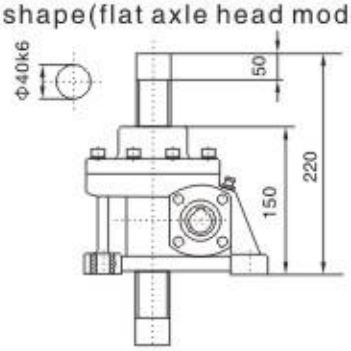


YYSWL10
YYSWL15

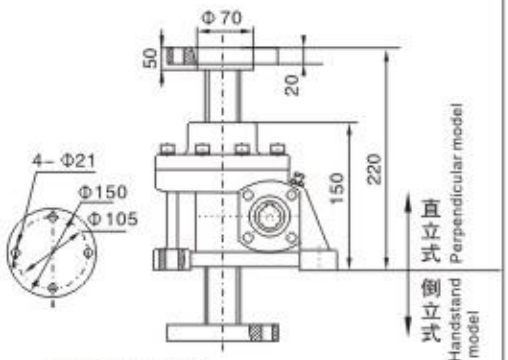




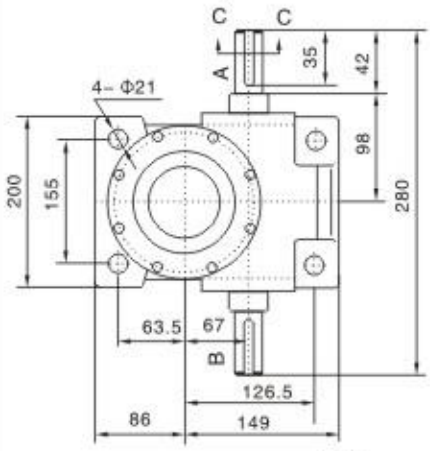
Ⅰ型(平口式)
Ⅰ shape(flat axle head model)



Ⅱ型(顶板式)
Ⅱ shape(roof model)

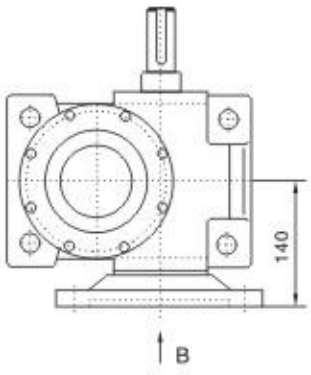


双输入
Double input shaft

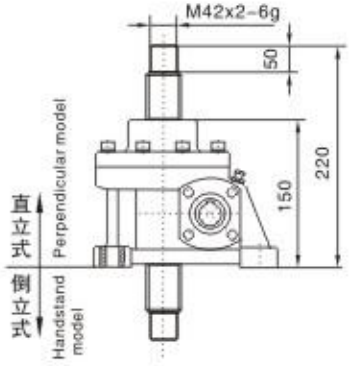


B 向

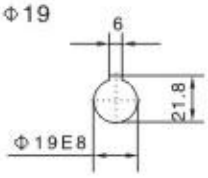
直联双输入
Direct double input shaft



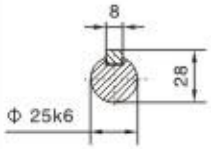
Ⅲ型(牙口式)
Ⅲ shape(bolt model)

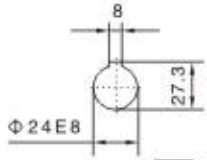


Φ19

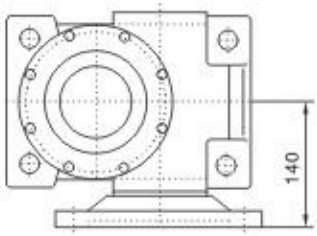


C-C

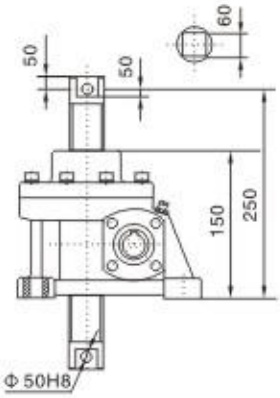


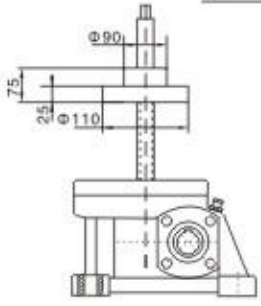


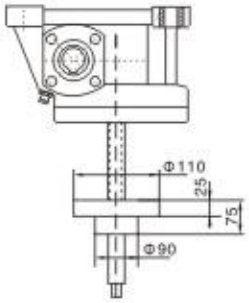
直联单输入
Direct single input shaft



Ⅳ型(栓孔式)
Ⅳ shape(keyhole model)







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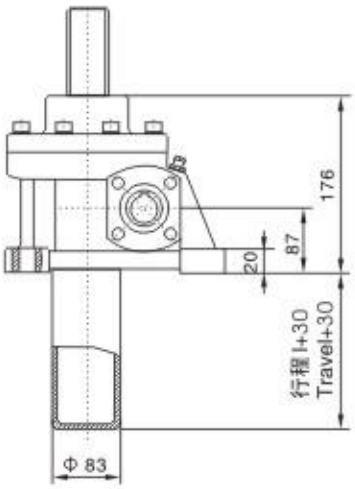
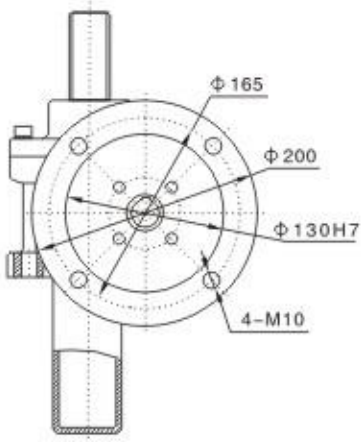
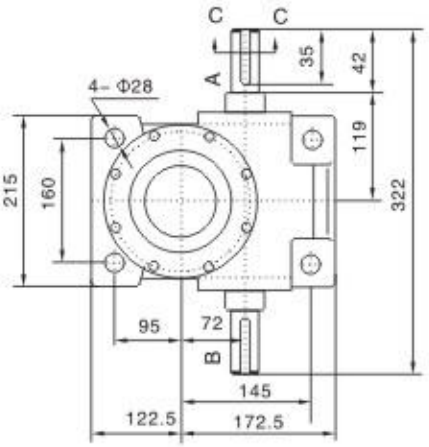
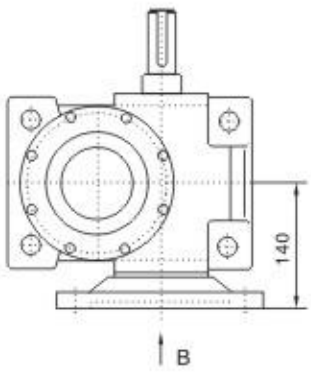


双输入
Double input shaft

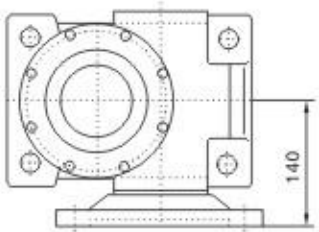


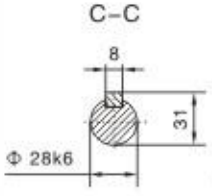
直联双输入
Direct double input shaft

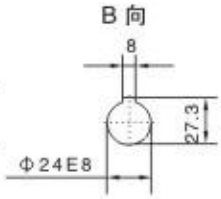


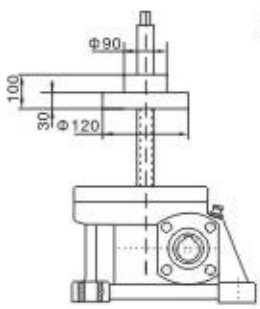


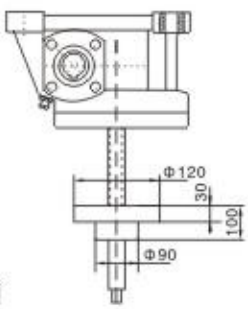
直联单输入
Direct single input shaft



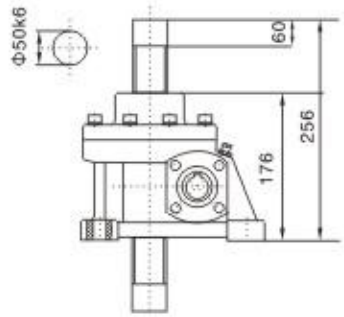




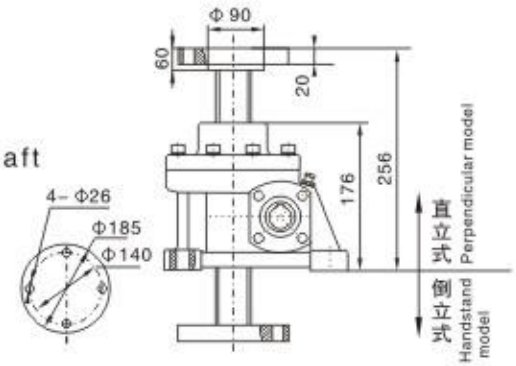




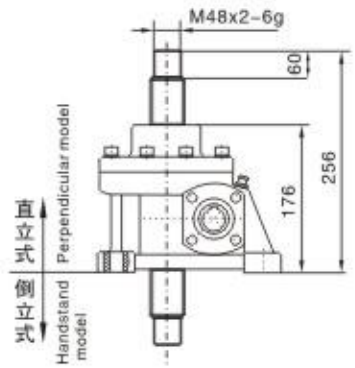
Ⅰ型(平口式)
Ⅰ shape(flat axle head model)



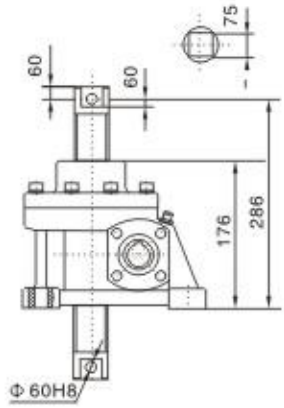
Ⅱ型(顶板式)
Ⅱ shape(roof model)



Ⅲ型(牙口式)
Ⅲ shape(bolt model)



Ⅳ型(栓孔式)
Ⅳ shape(keyhole model)



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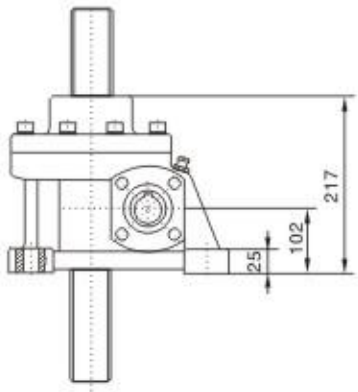
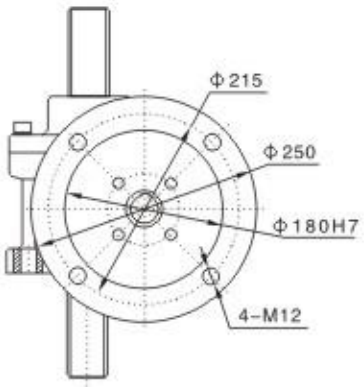
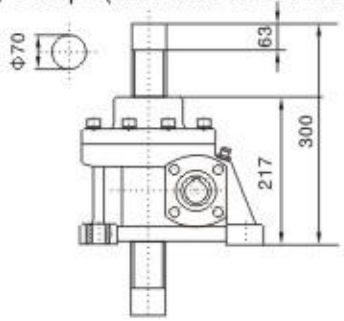
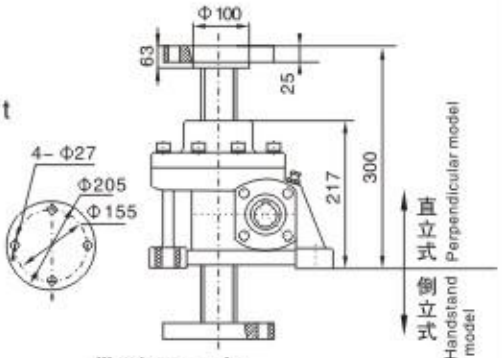




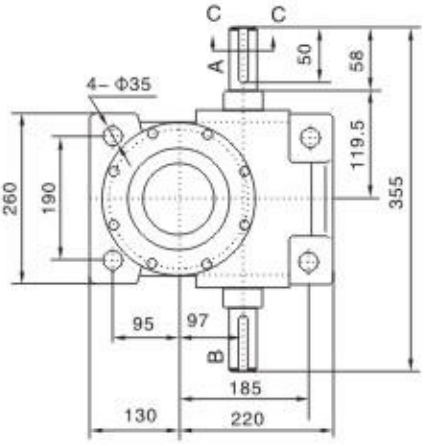
Ⅰ型(平口式)
Ⅰ shape(flat axle head model)



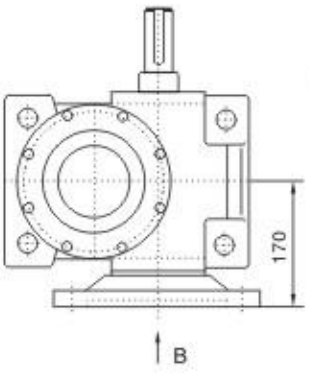
Ⅱ型(顶板式)
Ⅱ shape(roof model)



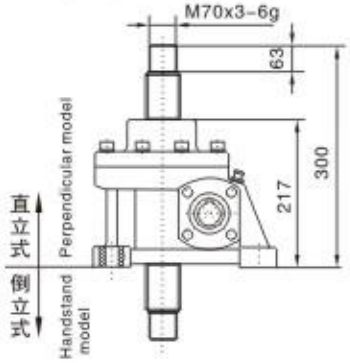
双输入
Double input shaft



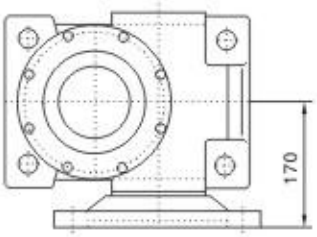
直联双输入
Direct double input shaft



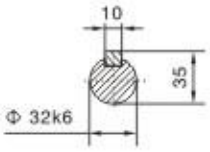
Ⅲ型(牙口式)
Ⅲ shape(bolt model)



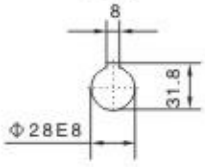
直联单输入
Direct single input shaft

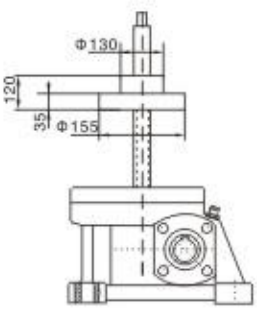


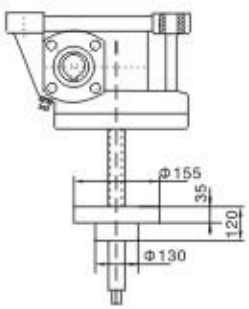
C-C



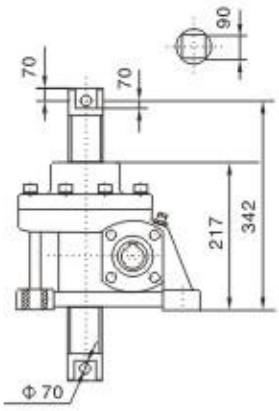
B 向



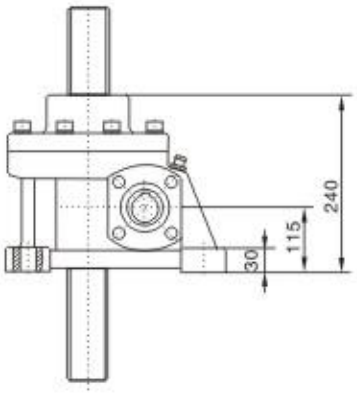


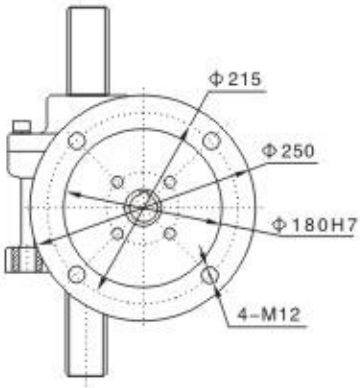


Ⅳ型(栓孔式)
Ⅳ shape(keyhole model)

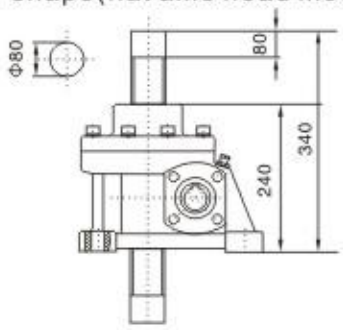


YYSWL35

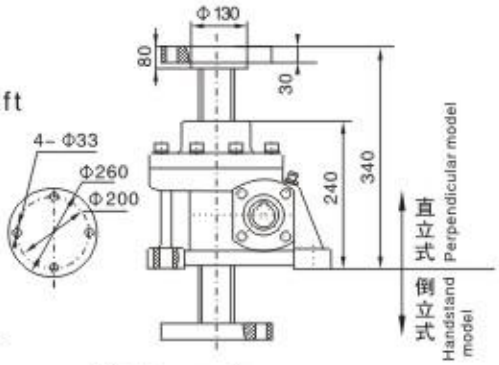




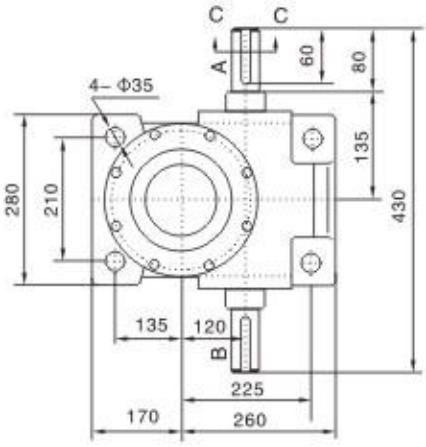
Ⅰ型(平口式)
Ⅰ shape(flat axle head model)



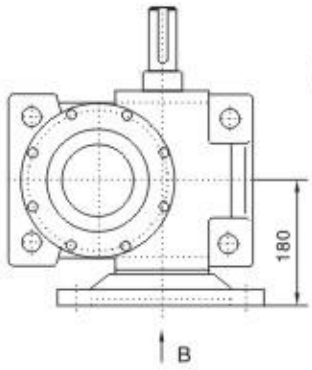
Ⅱ型(顶板式)
Ⅱ shape(roof model)



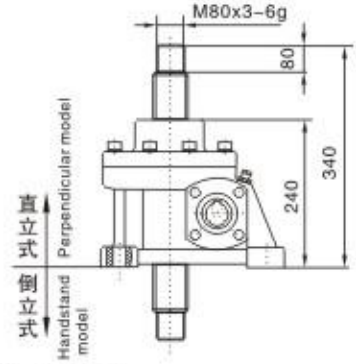
双输入
Double input shaft



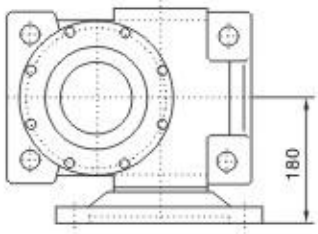
直联双输入
Direct double input shaft



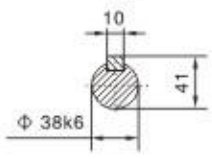
Ⅲ型(牙口式)
Ⅲ shape(bolt model)



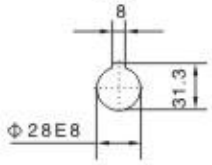
直联单输入
Direct single input shaft



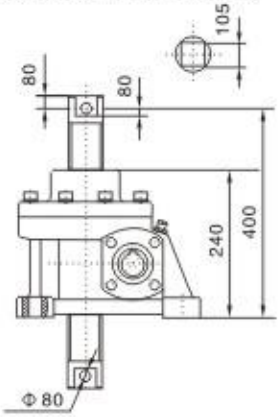
C-C

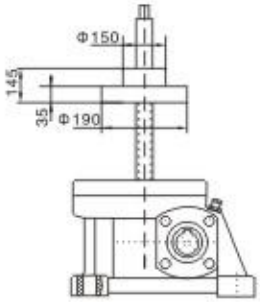


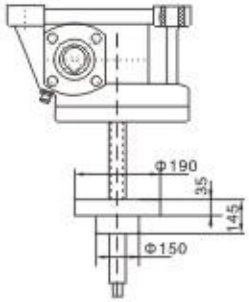
B 向



Ⅳ型(栓孔式)
Ⅳ shape(keyhole model)







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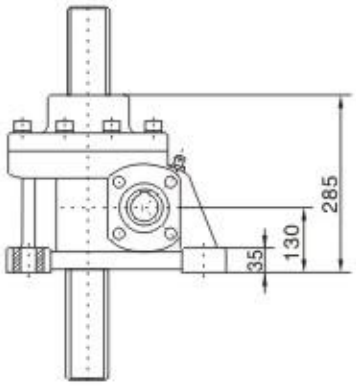
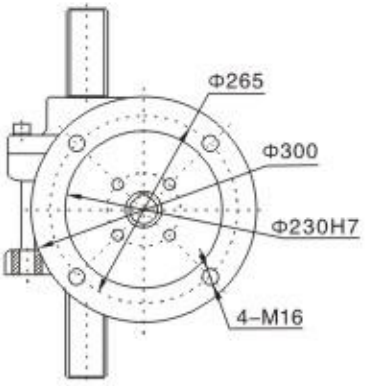
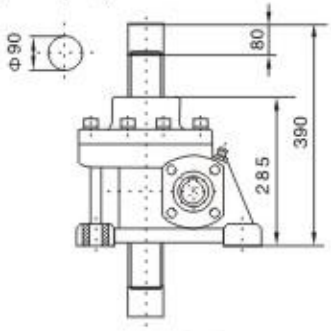
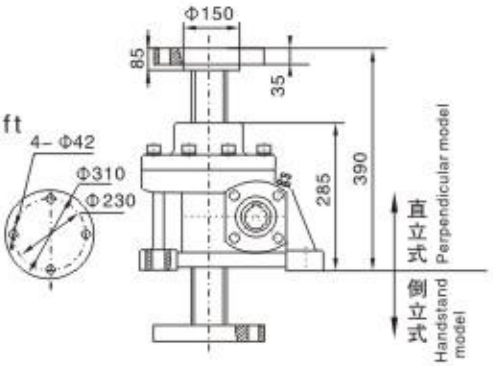




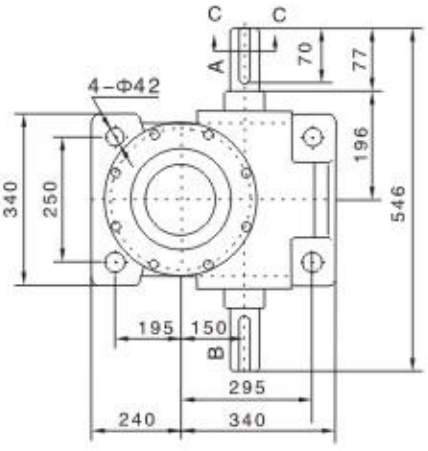
Ⅰ型(平口式)
Ⅰ shape(flat axle head model)



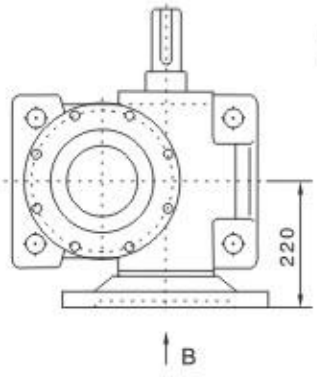
Ⅱ型(顶板式)
Ⅱ shape(roof model)



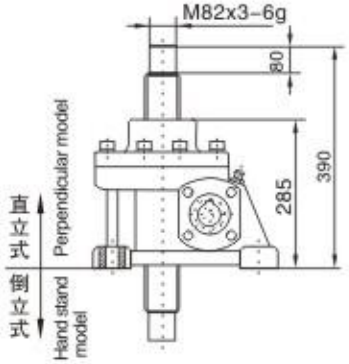
双输入
Double input shaft



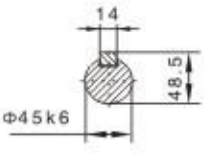
直联双 输入
Direct double input shaft



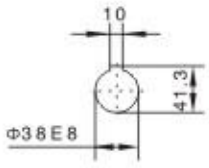
Ⅲ型(牙口式)
Ⅲ shape(bolt model)



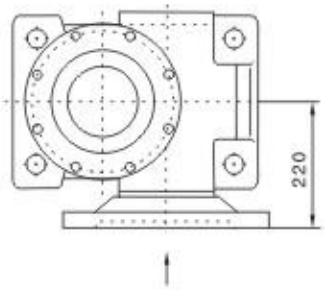
C-C



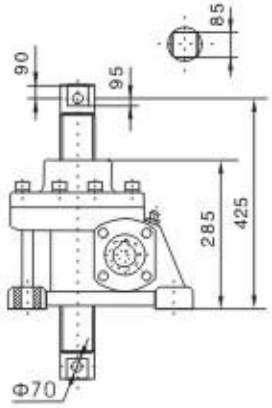
B 向



直联单 输入
Direct sinqle input shaft



Ⅳ型(栓孔式)
Ⅳ shape(keyhole model)



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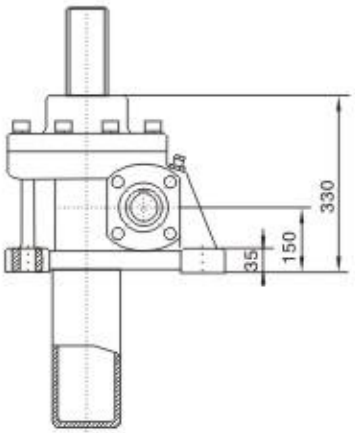
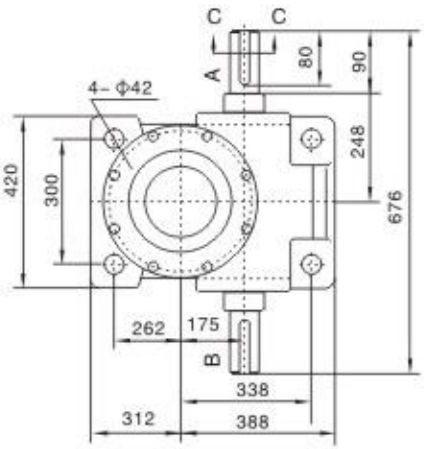
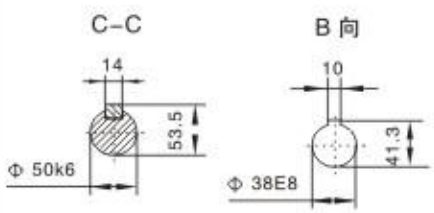
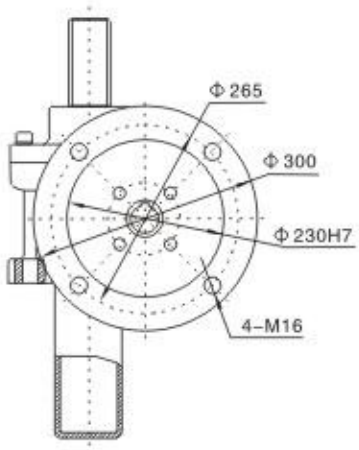


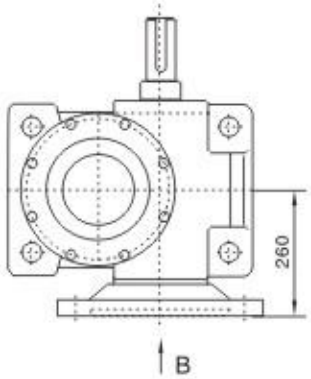
双输入
Double input shaft



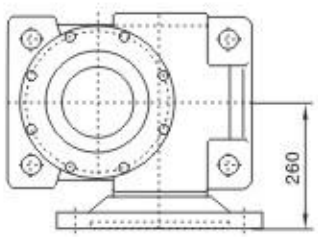




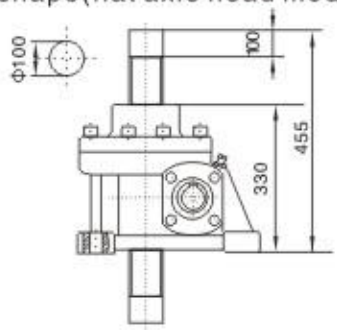
直联双输入
Direct double input shaft



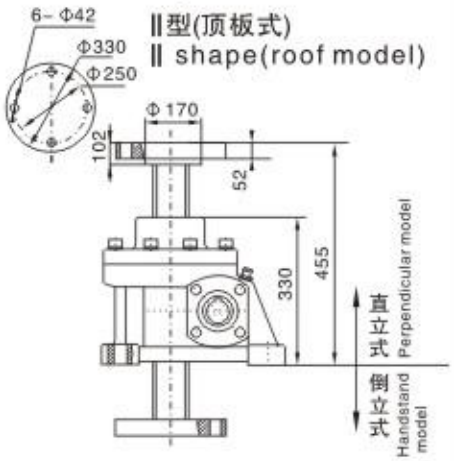
直联单输入
Direct single input shaft



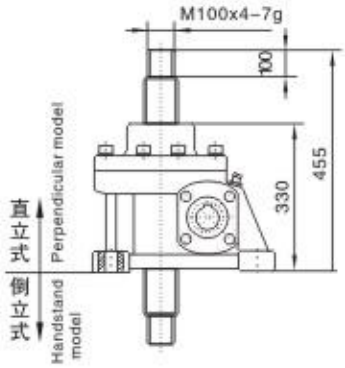
Ⅰ型(平口式)
Ⅰ shape(flat axle head model)



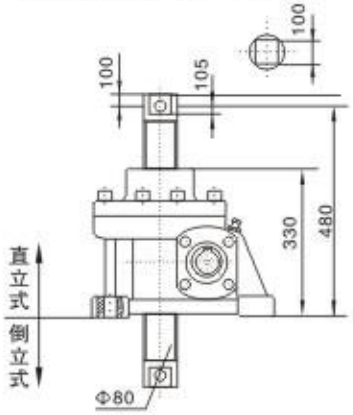
Ⅱ型(顶板式)
Ⅱ shape(roof model)



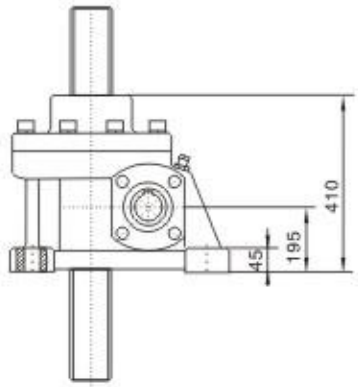
Ⅲ型(牙口式)
Ⅲ shape(bolt model)

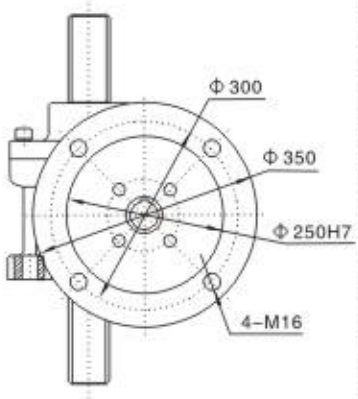


Ⅳ型(栓孔式)
Ⅳ shape(keyhole model)

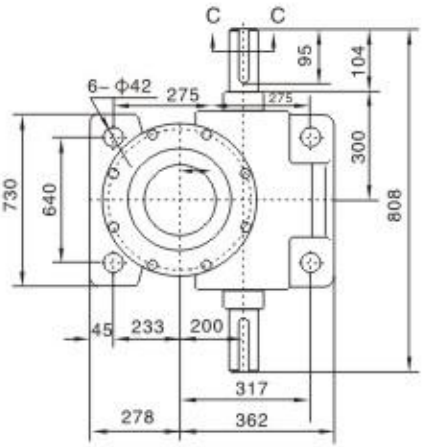


YYSWL100

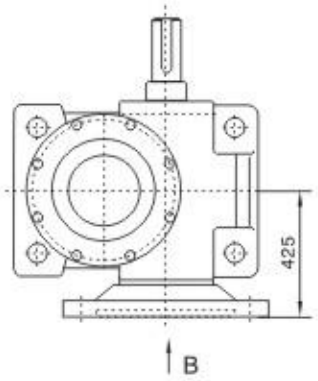




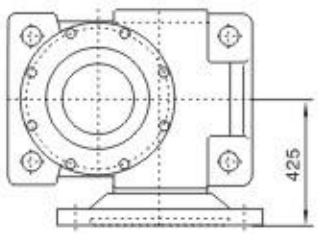
双输入
Double input shaft

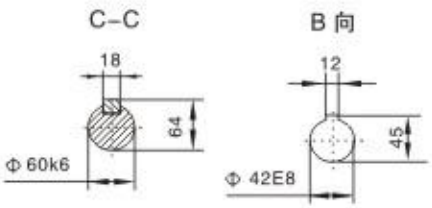


直联双输入
Direct double input shaft

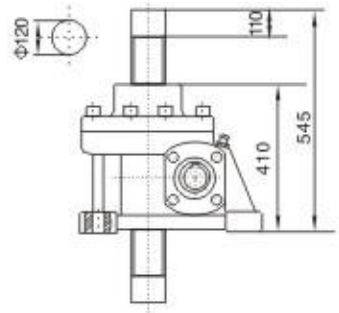


直联单输入
Direct single input shaft

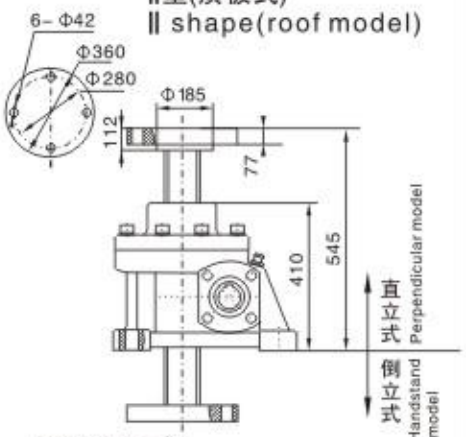




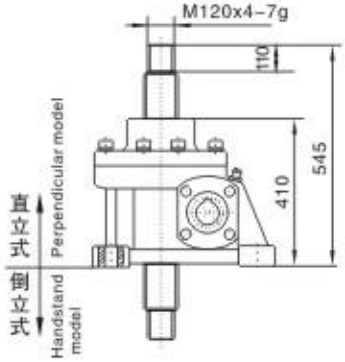
Ⅰ型(平口式)
Ⅰ shape(flat axle head model)



Ⅱ型(顶板式)
Ⅱ shape(roof model)



Ⅲ型(牙口式)
Ⅲ shape(bolt model)



Ⅳ型(栓孔式)
Ⅳ shape(keyhole model)