

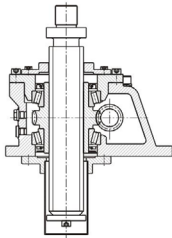
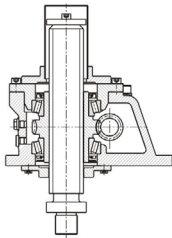
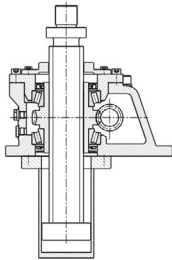
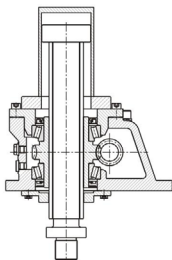
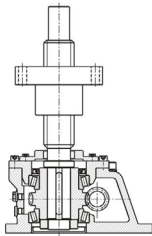
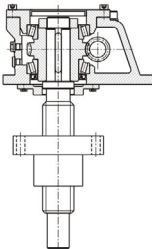
JWM 系列丝杆升降机 Series Screw Jack





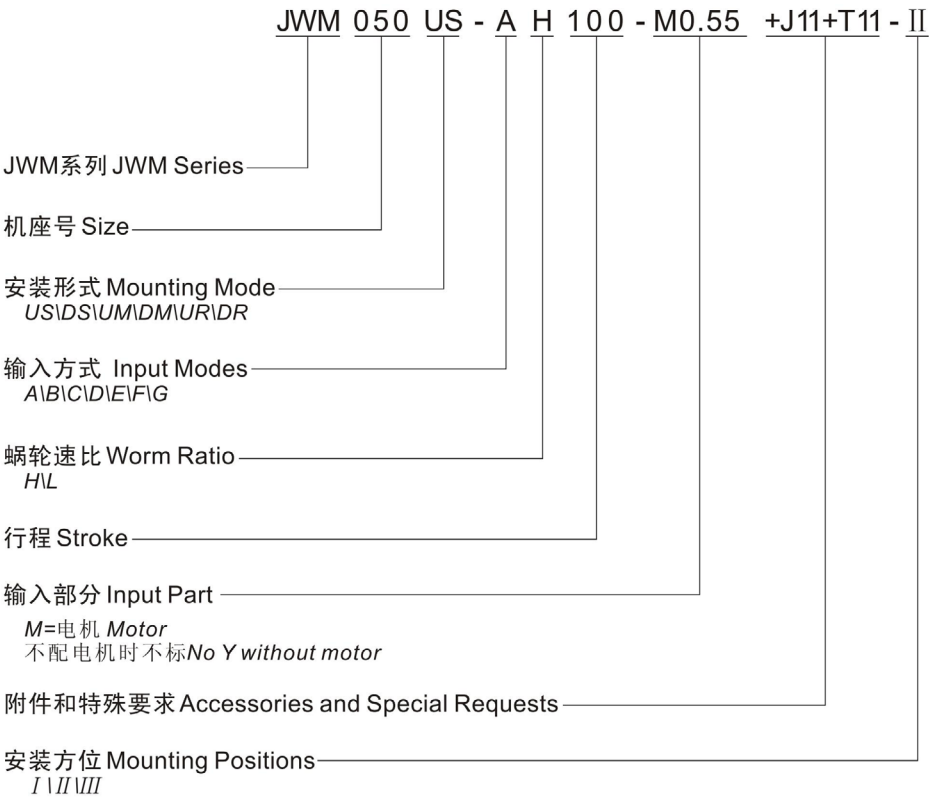
1 结构示意图:

1 Sectional Drawings:

结构形式 Structure Mode	输出形式 Output Mode	结构图 Structure Drawing		说 明 Explanation
基本结构 Plain mode	JWM..US			丝杆轴在升降时，会产生旋转力，所以必须做好防止旋转措施。 The screw may produce rotary force when lifting, so anti-rotation measures should be adopted.
	JWM..DS			
止旋结构 With Anti-rotation device	JWM..UM			止旋结构, 丝杆只上下移动并不产生旋转力。 With anti-rotation device, the screw travels up and down only and produces no rotary force.
	JWM..DM			
活动螺母结构 JW with Travelling nut	JWM..UR			活动螺母构造，丝杆轴旋转，活动螺母移动。丝杆轴顶端为圆柱形，所以在长行程时，在轴端采用支撑方式，可以得到很好的传动效果。 For travelling nut type, the screw rotates to drive the nut move. Due to its cylindric structure, supporting mode is often used at the screw end to ensure good transmission of long stroke. 注: 活动螺母构造形式供货时不配防尘罩, 如需请另咨询。 Note: Bellows are not supplied with the travelling nut type screw jack. Consult us if required.
	JWM..DR			

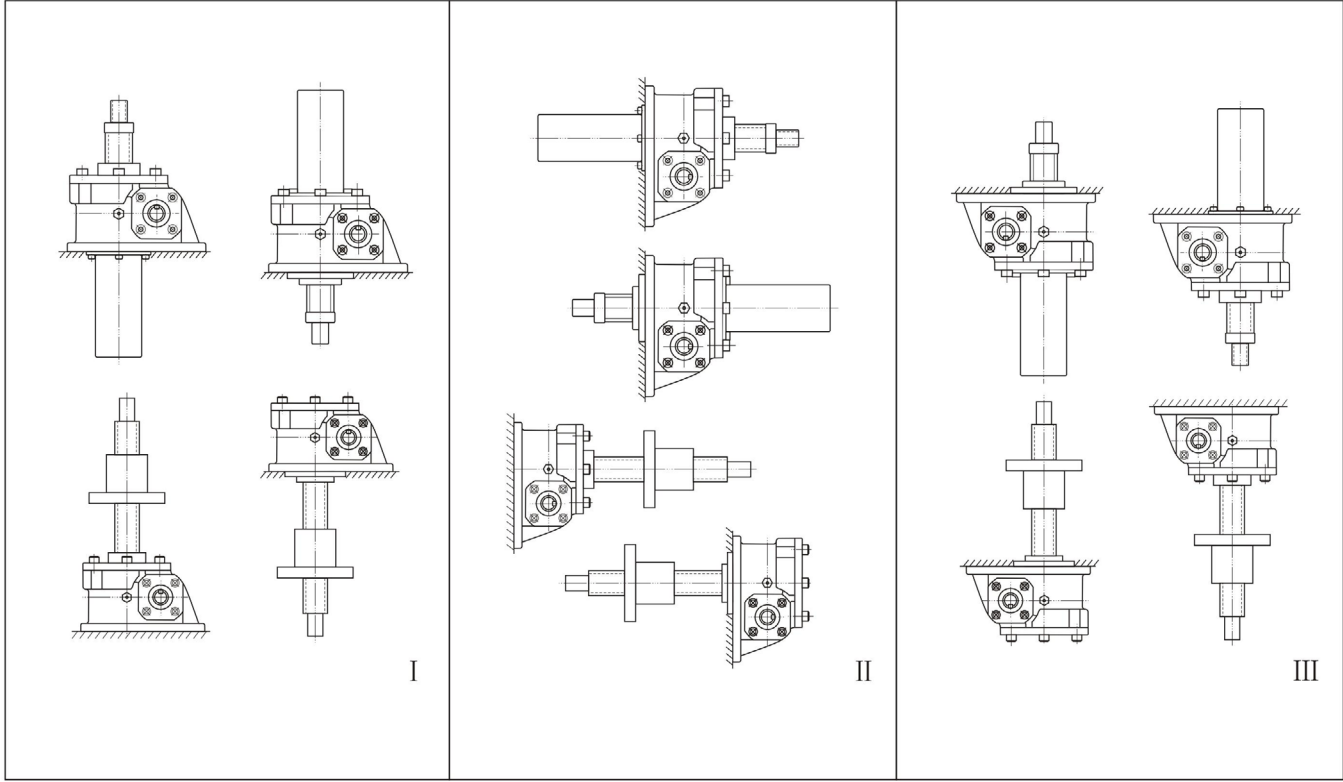
2 型号表示方法:

2 Type Designation:



3 安装方位:

3 Mounting Positions:



注: 采用III型安装方位时, 底脚安装螺栓的性能等级须为10.9级以上。

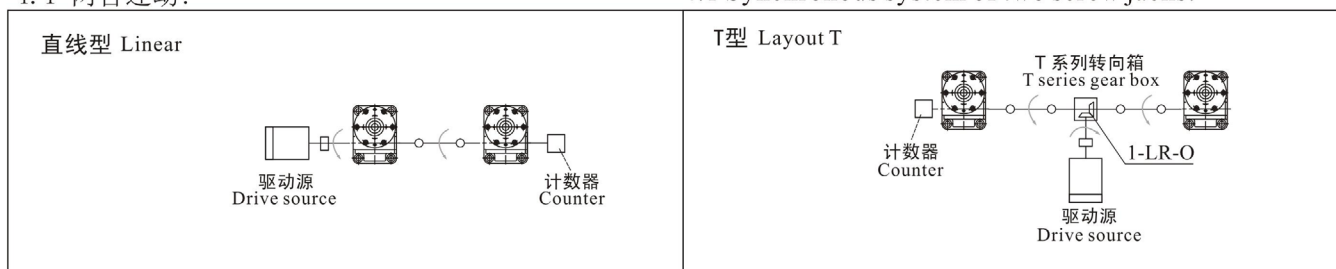
Note: In mounting position III, the class of the foundation bolts should be greater than 10.9.

4 应用示例：

4.1 两台连动：

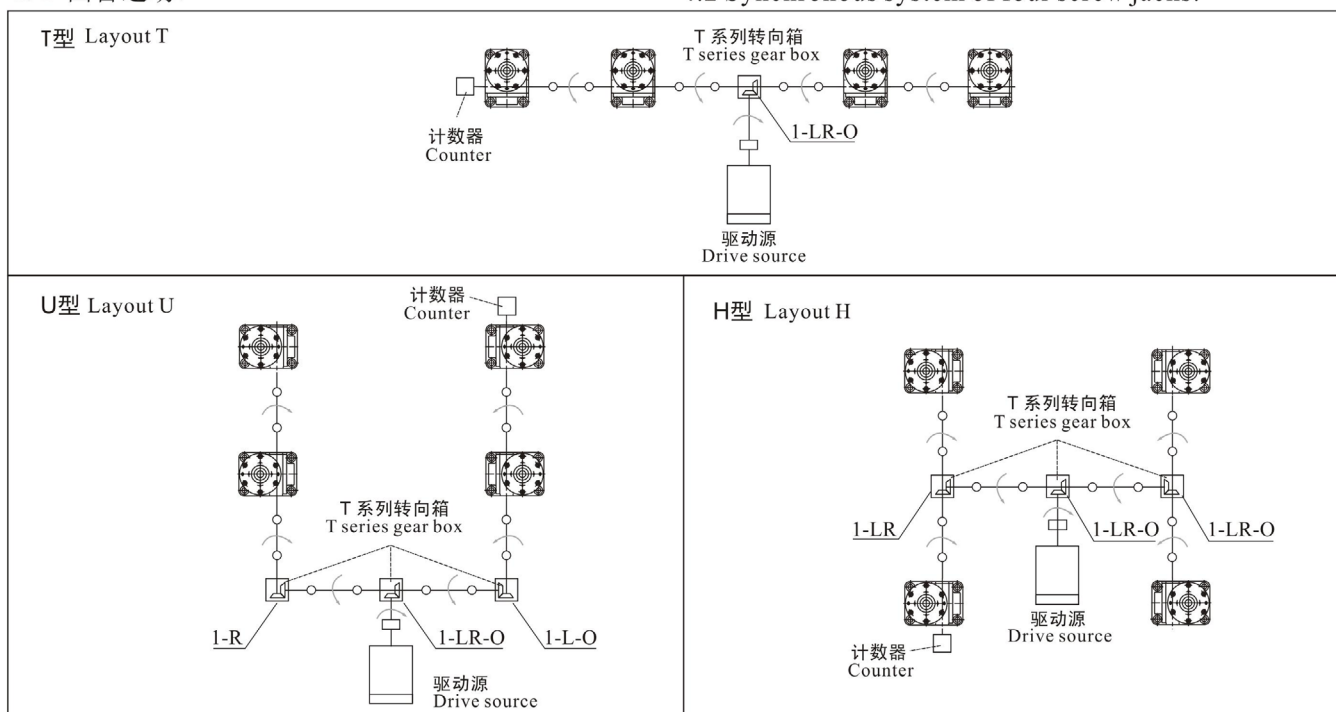
4 Application example:

4.1 Synchronous system of two screw jacks:



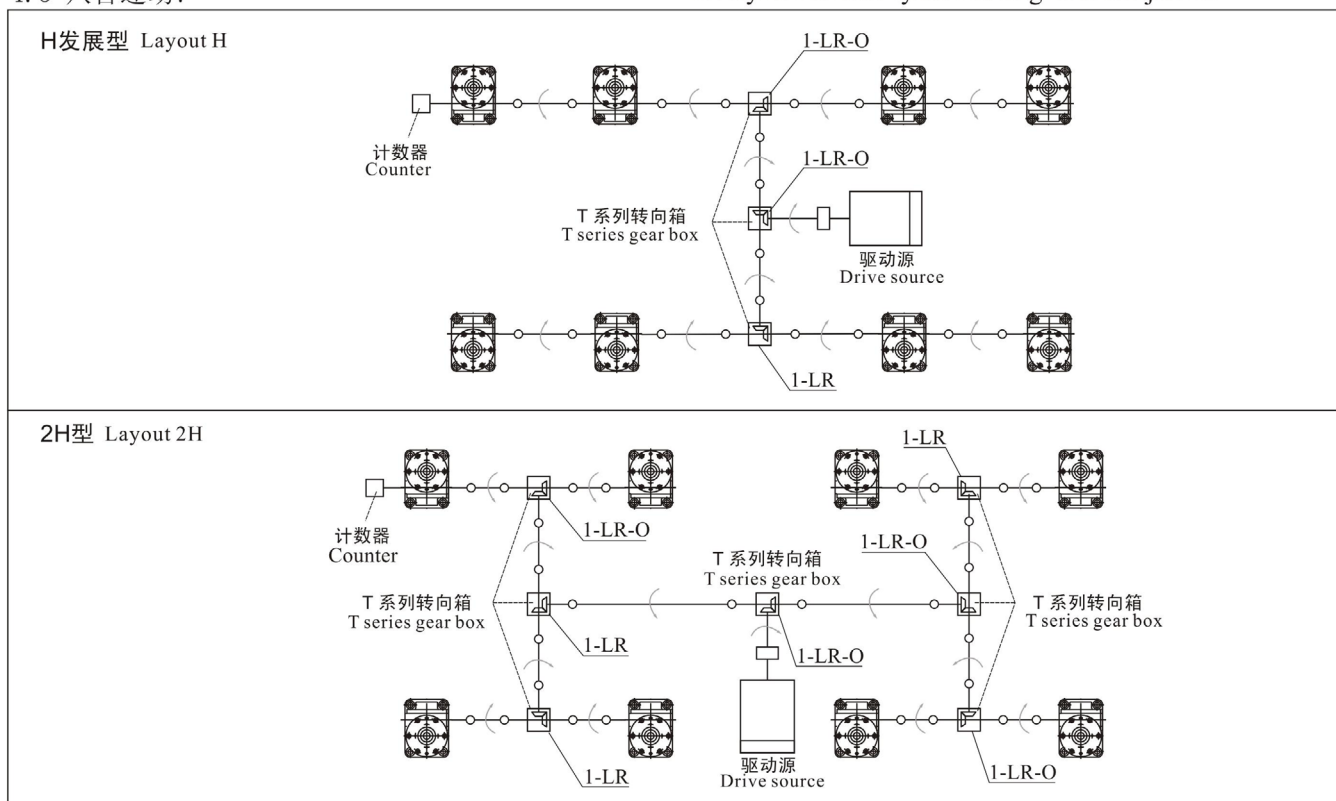
4.2 四台连动：

4.2 Synchronous system of four screw jacks:



4.3 八台连动：

4.3 Synchronous system of eight screw jacks:





5 选型方法:

5.1 升降机型号的确定:

(1) 计算总机的当量载荷 W_s (N)

$$W_s = \text{最大载荷 } W_{\max} \times \text{使用系数 } f_1 (N)$$

被驱动设备系数 (f_1) 表:

载荷性质 Load Characteristic	使用举例 Example	被驱动设备系数 Factor for driven machine (f_1)
无冲击载荷, 负荷惯性小 Uniform load, small inertia	开关、阀门传送带切换装置 Shifting device for switches, valves and conveyors	$1.0 < f_1 \leq 1.3$
轻微冲击载荷, 负荷惯性中等 Moderate shock load, medium inertia	各种移动装置, 升降用各种升降机 Moving devices and elevators	$1.3 < f_1 \leq 1.5$
大冲击振动载荷, 负荷惯性大 Heavy shock load, large inertia	用台车搬运东西; 保持压延滚轮的位置 Heavy trolleys and railway lifts	$1.5 < f_1 \leq 3.0$

(2) 计算单台升降机的当量载荷 W ,

$$W = \frac{W_s}{\text{连动台数} \times \text{连动系数 } f_d}$$

连动系数 (f_d):

连动台数 Number of jacks in arrangement	1	2	3	4	5 ~ 8
连动系数 Arrangement factor	1	0.95	0.9	0.85	0.8

(3) 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

(4) 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。

5 Type Selection:

5.1 Determination of screw jack type

(1) Calculation of total equivalent load W_s (N)

$$W_s = W_{\max} \cdot f_1 (N)$$

Driven Machine Factor (f_1):(2) Calculation of equivalent load of single jack W (N)

$$W = \frac{W_s}{\text{Arrangement factor} \cdot \text{Number of jacks in arrangement } f_d}$$

Arrangement factor (f_d):

(3) Initial selection of jack type

Make an initial selection of jack type by fully considering load, speed, travel, efficiency and drive source.

(4) Make final determination of screw jack type in view of stroke, ambient environment and top end fittings.

5.2 输入功率校核:

负载所需输入功率与许容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。

负载所需输入功率计算:

所需输入轴转速 Input speed required	$n_1 (r/min)$	$n_1 = \frac{V}{L_1} \times i$
所需输入轴扭矩 Input torque required	$T_1 (N \cdot m)$	$T_1 = \frac{W \times L_1}{2\pi \times i \times \eta} + T_0$
所需输入功率 Input power required	$P_1 (kW)$	$P_1 = \frac{T_1 \times n_1}{9550}$

V: 升降机丝杆轴(活动螺母)升降速度 m/min L_1 : 丝杆螺距 (m)
 i: 减速比 W : 单台升降机当量载荷 (N) π : 圆周率
 η : 升降机的综合效率 T_0 : 空载扭矩 (N·m)
 (L_1 、 i 、 η 、 T_0 参照基本参数表)

V: lifting speed of the screw (or traveling nut) m/min
 L_1 : pitch of screw (m) i : ratio W : equivalent load of single screw jack
 π : pi η : overall efficiency T_0 : no-load torque (N·m)
 (See L_1 , i , η and T_0 in the table of basic parameters.)

5.3 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。

升降机丝杆临界稳定载荷通过以下公式计算:

$P_{CR} = f_m \times \left(\frac{d^2}{L_a} \right)^2$	确保 ensure	$P_{CR} > W \times SF (SF=4)$
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P_{CR} : 临界载荷 (N)
 d : 丝杆底径 mm (参照基本参数表)
 f_m : 支撑系数
 L_a : 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 $SF=4$)

5.3 Verification of the screw stability

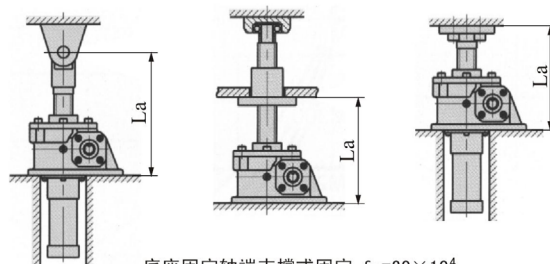
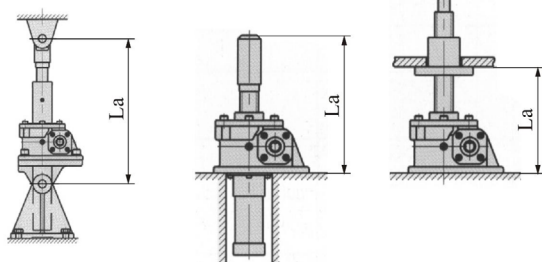
Verify the screw stability when the axial compression load exists. If the load is greater than the critical load, increase the sizes before calculation.

The critical load is calculated with the following formula:

P_{cr} : critical load
 d : screw root diameter mm (see the table of technical data)
 f_m : support factor
 L_a : distance between action points, mm
 W : equivalent load of single jack (N)
 SF : safety factor (generally $SF=4$)

丝杆轴稳定性校核时， L_a (L_a 值计算根据各型号尺寸) 与 f_m (支撑系数) 选取如下：

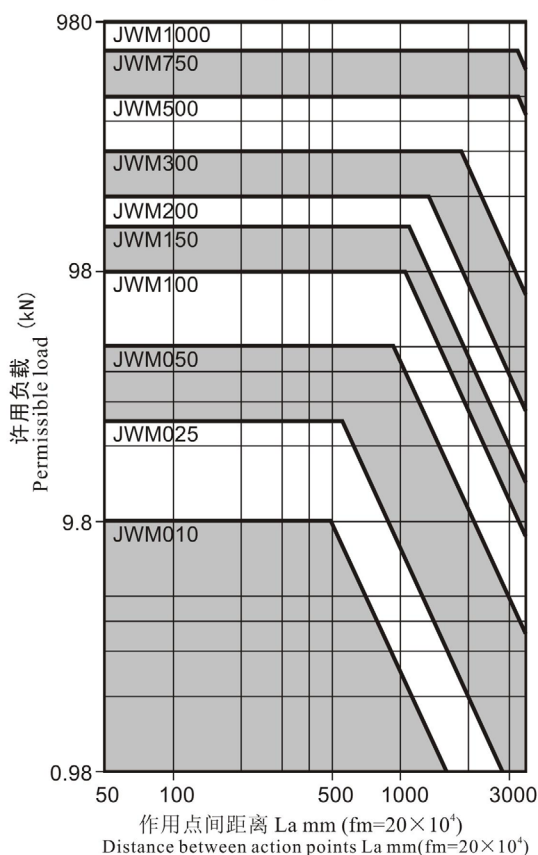
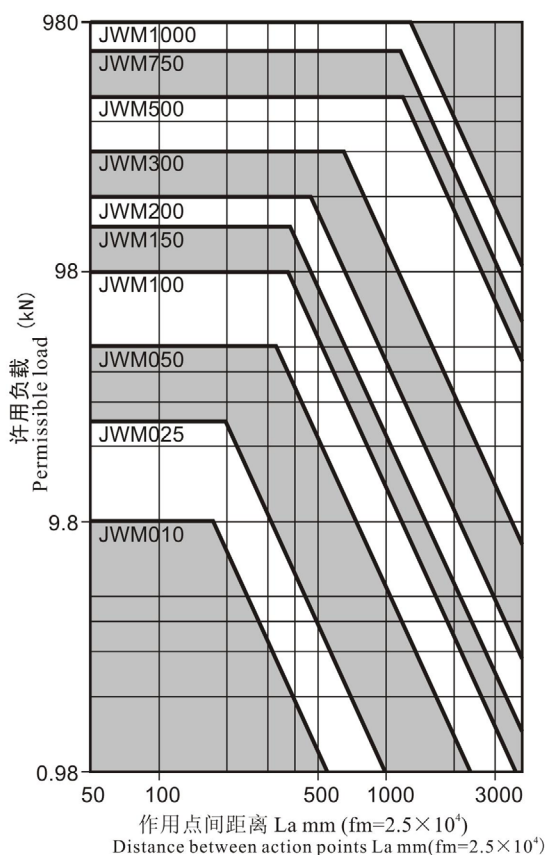
For verification of the screw stability, choose L_a (based on the sizes) and f_m (support factor) as follows



两端支撑 $f_m=10 \times 10^4$
Both ends for support, $f_m=10 \times 10^4$

底座固定轴端自由 $f_m=2.5 \times 10^4$
Foot-mounted with movable shaft end, $f_m=2.5 \times 10^4$

底座固定轴端支撑或固定 $f_m=20 \times 10^4$
Foot-mounted with supporting or fixed shaft end, $f_m=20 \times 10^4$



5.4 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速以下，若超出临界转速，请提高型号再计算。

5.4 Verification of critical speed:

If select travelling nut type, the rotary speed of the screw must be lower than the critical speed; if vice versa, increase the size before calculation.

$$n_c = \frac{96 \times f_n \times d \times 10^6}{L_b^2}$$

$$n_s = \frac{n_1}{i}$$

n_c : 临界转速 r/min

n_s : 丝杆转速 r/min

d : 丝杆底径 mm (参照基本参数表)

n_1 : 输入速度 r/min

f_n : 长度系数

i : 减速比

L_b : 支撑间距离 mm

n_c : critical speed r/min n_s : screw speed

d : screw root diameter mm (see the table of basic parameters)

n_1 : input speed r/min

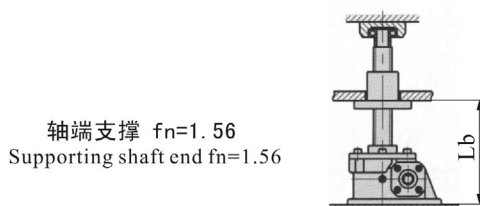
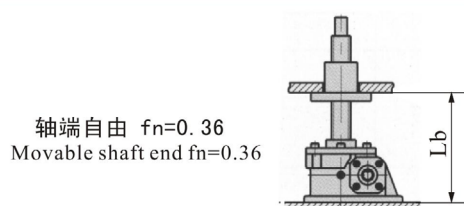
f_n : length factor i : ratio

L_b : distance between supports, mm

丝杆轴转速校核时， L_b (L_b 值计算根据各型号尺寸)

与 f_n (长度系数) 选取如下：

L_b (as per the sizes) and f_n (length factor) are as follows in verifying the rotary speed of screw.



请确保: $n_c > n_s$

Please make sure: $n_c > n_s$

计算举例：JWM200UR-AH1200- I 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=49.3 Lb=1437

Take JWM200UR-AH1200- I for example:
input speed 1200r/min, operating under supporting shaft end
In reference to its size and the transmission capacity, we get
d=49.3 Lb=1437

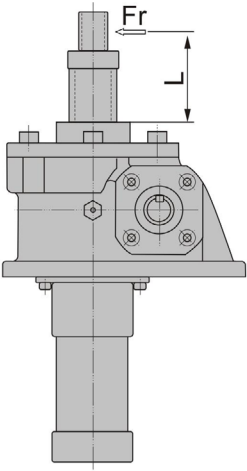
$$n_s = \frac{n_1}{i} = \frac{1200}{8} = 150 \text{r/min}$$

$$n_c = \frac{96 \times f_n \times d \times 10^6}{L_b^2} = \frac{96 \times 1.56 \times 49.3 \times 10^6}{(1437)^2} = 3575 \text{r/min}$$

$$n_c = 3575 \text{r/min} > n_s = 150 \text{r/min} \dots \dots \dots \text{ok.}$$

5. 5 当有横向载荷时, 请外加导向器。
JWM许用横向载荷(N):

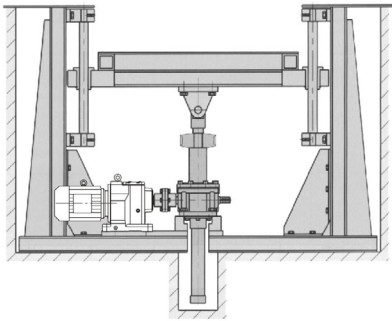
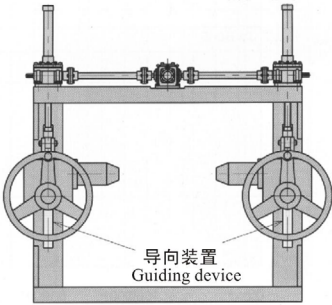
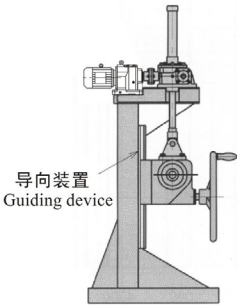
5.5 When there is radial load, please add guiding device.
Permissible radial force for JWM (N)



Fr(N) Size 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	79	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	52300
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

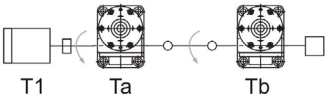
JWM超过许用横向载荷时, 请外加导向装置, 举例如下:

When there is an excess of permissible radial force in JWM, please add a guiding device. See the illustrations below:



5. 6 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;

5.6 When two or more screw jacks are arranged in the same axial line as below, verify the strength of the shaft end of each jack please.



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

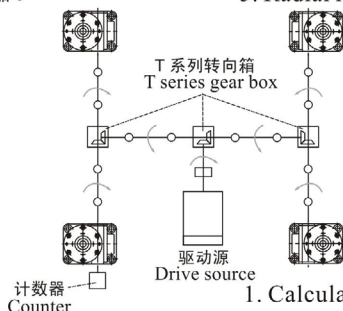
Ta: Input torque required for jack a.
Tb: Input torque required for jack b.
The torque required by the motor T1=Ta+Tb < permissible input torque of jack a



6 选型举例：

已知条件：

1. 升降平台轴向载荷：88KN，平台升降速度：200 mm/min，升降行程：260mm；
2. 普通电机：4极，转速 $n_1=1450\text{r/min}$ ；
3. 负荷性质：一般冲击，工作16小时/天，启动频率10次/小时；
4. 安装输出形式：4台连动押上，H型布置（见7/JW），采用底座固定轴端支撑，带J11、F11附件；
5. 有横向负载，在升降机侧面设置了导向器。



选型步骤：

1. 计算总机当量载荷 W_s （取被驱动设备系数 $f_1=1.3$ ）

$$W_s = W_{\max} \cdot f_1 \\ = 88000 \times 1.3 = 114400\text{N}$$

2. 计算单台当量载荷 W （取连动系数 $f_d=0.85$ ）

$$W = \frac{114400}{4 \times 0.85} = 33647\text{N}$$

3. 暂定型号

考虑速度、效率、驱动源、载重以及行程的余量后暂定选择JWM050US-AH300-A-J11+F11(参考基本参数表、许用负载与作用点距离表及尺寸表，H/L速比不好确定可暂选H速比)

4. 单台输入功率校核

(1) 单台所需输入功率计算：

$$\textcircled{1} \quad n_1 = \frac{v_1}{L_1} \times i = \frac{0.2}{0.008} \times 6 = 150\text{r/min}$$

$$\textcircled{2} \quad T_1 = \frac{W \times L_1}{2\pi \times i \times \eta} + T_0 = \frac{33647 \times 0.008}{2 \times 3.14 \times 6 \times 0.22} + 1.4 = 33.9\text{N} \cdot \text{m}$$

$$\textcircled{3} \quad P_1 = \frac{T_1 \times N_1}{9550} = \frac{33.9 \times 150}{9550} = 0.53\text{kW}$$

(2) 参照基本参数表， $P_{\max}=2.0\text{kW} > P_1, \dots \dots \text{OK}$ 。

5. 丝杆稳定性校核

根据基本参数表及尺寸表得

$$d=30.5, L_a=522, f_m=20 \times 10^4, SF=4$$

$$P_{CR} = f_m \times \left(\frac{d^2}{L_a} \right)^2 = 20 \times 10^4 \times \left(\frac{30.5^2}{522} \right)^2 = 635168\text{N}$$

$$P_{CR} = 635168\text{N} > W \times SF = 33647 \times 4 = 134456\text{N} \quad \dots \dots \text{OK}。$$

6. 临界转速校核

此型号为非活动螺母式，且转速较低，可不必校核临界转速。

注：若以上校核未通过，需向上选稍大机座号的升降机；T系列转向箱选型请参考T系列样本。

7 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 $-15^\circ\text{C} \sim 80^\circ\text{C}$ 的范围以内，确保活动螺母的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。

6 Examples of Type Selection:

Known Criteria:

1. The axial load of the lifting platform: 88KN, lifting speed: 200mm/min, stroke: 260mm
2. Normal motor: 4 pole, speed $n_1=1450\text{r/min}$
3. Load characteristic: moderate, operating 16h/d, starts per hour: 10
4. Mounting mode: 4 jacks, Layout H(See P7/JW), foot-mounted with fixed shaft end, accessories J11 and F11
5. Radial load, guiding device on one side of the jack.

Selection steps:

1. Calculation of total equivalent load W_s (driven machine factor $f_1=1.3$) $W_s = W_{\max} \cdot f_1 = 88000 \times 1.3 = 114400\text{N}$

2. Calculation of equivalent load of single jack W (arrangement factor $f_d=0.85$) $W = 114400 / (4 \times 0.85) = 33647\text{N}$

3. Initial selection of jack type:

JWM050US-AH300-A-J11+F11 selected after considering speed, efficiency, drive source, load and stroke allowance (In reference to the table of technical data, permissible load and distance between action points. If H/L ratio is difficult to determine, use H ratio temporarily)

4. Verification of input power of single jack

(1) Input power required by single jack:

$$\textcircled{1} \quad n_1 = \frac{v_1}{L_1} \times i = \frac{0.2}{0.008} \times 6 = 150\text{r/min}$$

$$\textcircled{2} \quad T_1 = \frac{W \times L_1}{2\pi \times i \times \eta} + T_0 = \frac{33647 \times 0.008}{2 \times 3.14 \times 6 \times 0.22} + 1.4 = 33.9\text{N} \cdot \text{m}$$

$$\textcircled{3} \quad P_1 = \frac{T_1 \times N_1}{9550} = \frac{33.9 \times 150}{9550} = 0.53\text{kW}$$

(2) According to the table of technical data, $P_{\max}=2.0\text{kW} > P_1$ is OK.

5. Verification of screw stability

According to the table of technical data,

$$d=30.5, L_a=522, f_m=20 \times 10^4, SF=4$$

$$P_{CR} = f_m \times \left(\frac{d^2}{L_a} \right)^2 = 20 \times 10^4 \times \left(\frac{30.5^2}{522} \right)^2 = 635168\text{N}$$

$$P_{CR} = 635168\text{N} > W \times SF = 33647 \times 4 = 134456\text{N} \quad \dots \dots \text{OK}。$$

6. Verification of critical speed

Because of none travelling nut type and low rotary speed, the verification of critical speed can be ignored.

Note: If the above verifications fail, select the larger size jack. For selection of T series gear units, refer to T series brochures.

7 Cautions:

- 1) None of static, dynamic or shock loads should exceed the max permissible load. Selection of a jack with sufficient capacity must be based on safety factor, stroke and screw stability.
- 2) Make sure that the speed matches the load. Verify the max permissible load, external permissible load and permitted rotary speed of the screw. In case these figures exceed those of the product, severe damage may occur in the machine.
- 3) The surface temperature of the reduction part and the travelling nut should be within $-15 \sim 80^\circ\text{C}$.
- 4) Permissible speed of the input shaft is 1500r/min . Higher speed are not allowed.



5) JWM升降机不可连续运转:

单台升降机的负荷时间率(%ED)以30分为单位计算,
JWM(梯形丝杆类型)的负荷时间内不得超过20%ED,

负荷时间率%ED=

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

- 6) 对于在同一轴线上连接数台升降机时,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) JWM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) 升降机使用的一般环境条件,环境温度: -10至40℃,空旷场地通风良好,海拔高度1000米以下,一般工厂灰尘。
- 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。

5) JWM screw jacks are not designed for continuous duty circle.

The unit of %ED for single screw jack is 30min

JWM s (Trapezoid screw) duty circle must be less than 20%ED

$$ED = \frac{\text{work time in one load circle}}{\text{work time in one load circle} + \text{rest time in one load circle}} \times 100\%$$

- 6) If several screw jacks are arranged in an axial line, verify the strength of the input shaft and make sure the torque of each jack stay within the permissible input torque.
- 7) Make sure the starting torque of the drive source is greater than 200% of the service torque.
- 8) When working under below 0℃, the screw jack must be guaranteed by sufficient drive source, for its efficiency decreases as a result of the viscosity change in the grease.
- 9) JWM has self-locking function theoretically, but may break down when working under heavy shock circumstance. So an additional break or a drive source with brake is recommended.
- 10) The normal ambient environment: ambient temperature -10 to 40℃, ample space, good ventilation, altitude not exceeding 1000m and normal plant dust.
- 11) When working in places with volume of dust, bellows should be supplied to guard the screw. In the open air, use the covers to protect the machine against rains and sunlight.
- 12) Do not halt the screw jack intentionally during its operation, for it may cause severe damage to the product.

8 基本参数表:

8 Technical Data:

型 号 Type		JWM010	JWM025	JWM050	JWM100	JWM150	JWM200	JWM300	JWM500	JWM750	JWM1000
最大载荷 Max. load	(kN)	9.80	24.5	49.0	98.0	147	196	294	490	735	980
丝杆外径 Outer diameter of screw	(mm)	20	26	40	50	55	65	85	120	130	150
丝杆底径 Screw root diameter	d (mm)	14.8	19.7	30.5	38.4	43.4	49.3	67	102	112	127
丝杆螺距 Screw pitch	L1 (mm)	4	5	8	10	10	12	16	16	16	20
减速比 Ratio i	H 速度 Speed	5	6	6	8	8	8	10 ₃	10 ₃	10 ₃	12
	L速度 Speed	20	24	24	24	24	24	32	32	32	36
综合效率 % Overall efficiency η	H 速度 Speed	21	21	22	22	20	20	19	15	13	13
	L速度 Speed	12	12	14	15	14	13	11	10	8	8
容许输入最大功率 Permissible input power (kW)	H 速度 Speed	0.49	1.0	2.0	2.8	3.1	5.0	8.4	13.4	14.4	21.4
	L速度 Speed	0.36	0.46	0.63	1.4	2.2	3.2	4.6	5.7	7.2	9.4
空载扭矩 No load torque	T0 (N·m)	0.29	0.62	1.4	2.0	2.6	3.9	9.8	19.6	29.4	39.2
容许输入轴扭矩* Permissible input torque	(N·m)	19.6	49.0	153.9	292.0	292.0	292.0	735.0	1372.0	1764.0	2450.0
最大载荷时所需输入轴扭矩** Input torque required at max load (N·m)	H 速度 Speed	6.2	16.1	48.7	90.7	149.0	238.1	400.1	856.0	1380.5	2040.9
	L速度 Speed	2.9	7.4	20.0	45.3	72.3	124.0	244.0	453.3	761.3	1278.3
输入轴每回一圈丝杆 (活动螺母)轴向位移量 Stroke for one input rotation of screw (or travelling nut) (mm)	H 速度 Speed	0.80	0.83	1.33	1.25	1.25	1.50	1.50	1.50	1.50	1.67
	L速度 Speed	0.20	0.21	0.33	0.42	0.42	0.50	0.50	0.50	0.50	0.56
最大载荷时容许输入轴回转速度 Permissible input rotary speed at max load (rpm)	H 速度 Speed	750	600	400	300	200	200	200	150	100	100
	L速度 Speed	1200	600	300	300	290	250	180	120	90	70
最大载荷时丝杆回转扭矩 Screw rotary torque at max load (N·m)		20.1	65.1	201.5	503.6	813.2	1287.7	2531.9	5551.3	8921.8	13878.3

* 减速机输入轴的容许扭矩。(连动运转时请确认)

** 包括无负荷空转扭矩的数值。

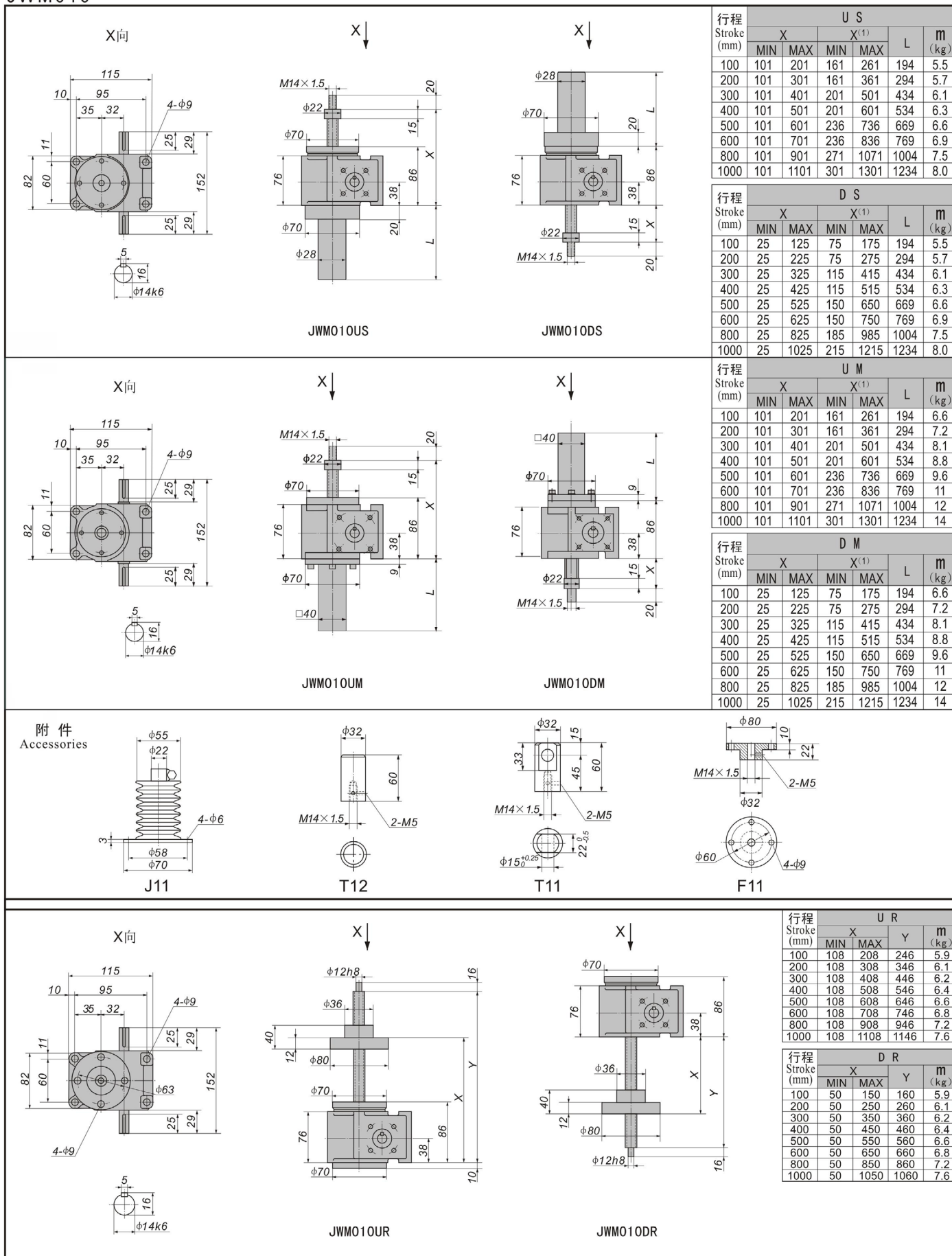
* Permissible torque on the input shaft of gear unit.(Consult us when operating continuously)

** Including values for no load torque

9 外形尺寸图表：

9 Outline Dimensions:

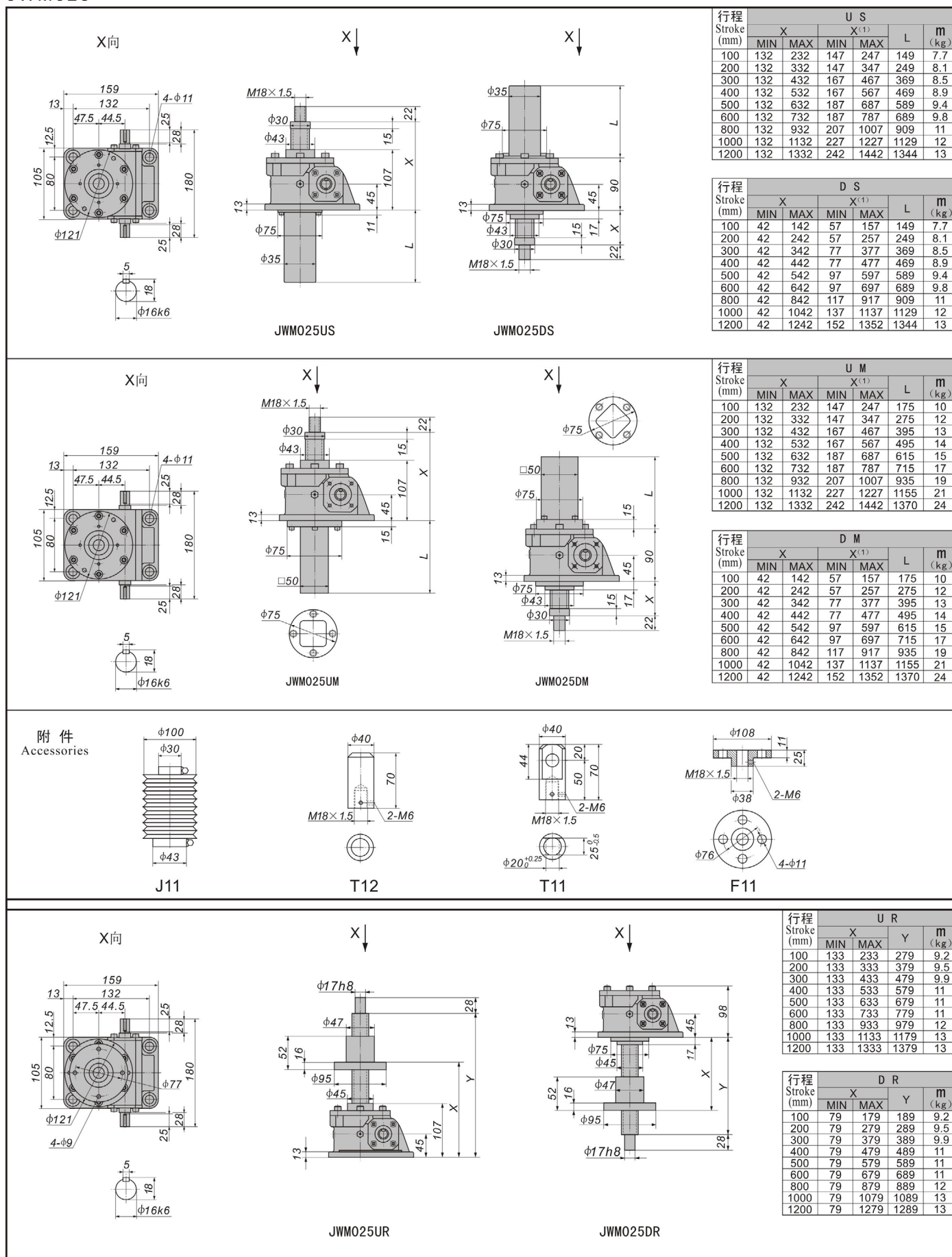
JWM010



注：X⁽¹⁾ 为加防尘罩时尺寸。

Note: X⁽¹⁾ is the dimensions for bellows.

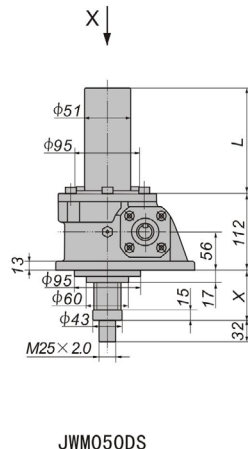
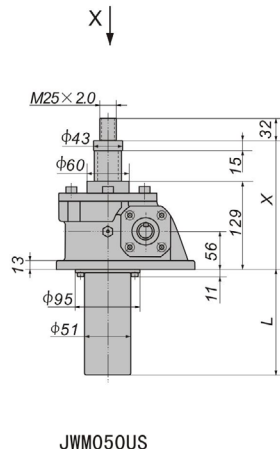
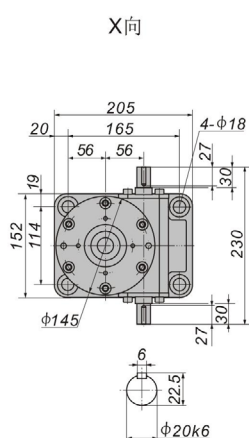
JWM025



注：X⁽¹⁾ 为加防尘罩时尺寸。

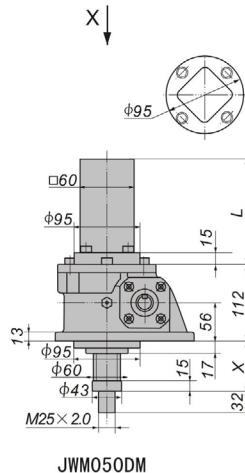
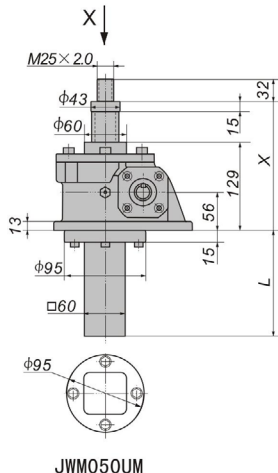
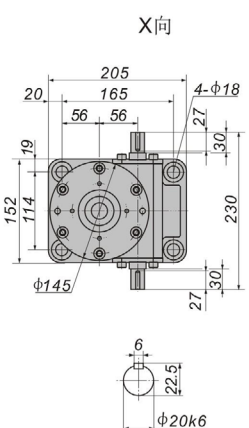
Note: X⁽¹⁾ is the dimensions for bellows.

JWM050



行程 Stroke (mm)	U S				
	X		X ⁽¹⁾		m (kg)
	MIN	MAX	MIN	MAX	
100	154	254	169	269	147
200	154	354	169	369	147
300	154	454	189	489	167
400	154	554	189	589	167
500	154	654	209	709	187
600	154	754	209	809	187
800	154	954	229	1029	207
1000	154	1154	249	1249	227
1200	154	1354	264	1464	247
1500	154	1654	289	1789	267

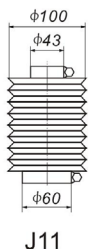
行程 Stroke (mm)	D S				
	X		X ⁽¹⁾		m (kg)
	MIN	MAX	MIN	MAX	
100	42	142	57	157	17
200	42	242	57	257	17
300	42	342	77	377	19
400	42	442	77	477	21
500	42	542	97	597	22
600	42	642	97	697	23
800	42	842	117	917	25
1000	42	1042	137	1137	27
1200	42	1242	152	1352	29
1500	42	1542	177	1677	32



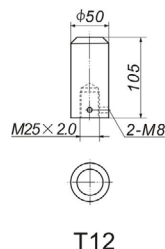
行程 Stroke (mm)	U M				
	X		X ⁽¹⁾		m (kg)
	MIN	MAX	MIN	MAX	
100	154	254	169	269	175
200	154	354	169	369	275
300	154	454	189	489	395
400	154	554	189	589	495
500	154	654	209	709	615
600	154	754	209	809	715
800	154	954	229	1029	935
1000	154	1154	249	1249	1155
1200	154	1354	264	1464	1391
1500	154	1654	289	1789	1716

行程 Stroke (mm)	D M				
	X		X ⁽¹⁾		m (kg)
	MIN	MAX	MIN	MAX	
100	42	142	57	157	175
200	42	242	57	257	275
300	42	342	77	377	395
400	42	442	77	477	495
500	42	542	97	597	615
600	42	642	97	697	715
800	42	842	117	917	935
1000	42	1042	137	1137	1155
1200	42	1242	152	1352	1391
1500	42	1542	177	1677	1716

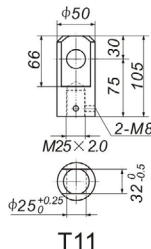
附件 Accessories



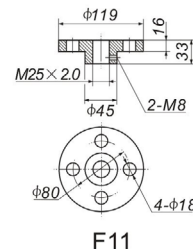
J11



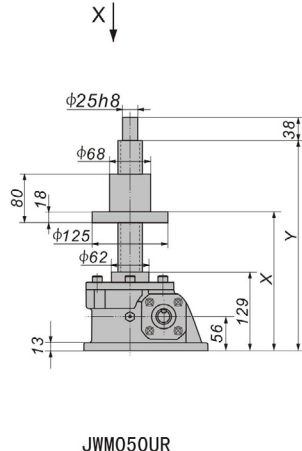
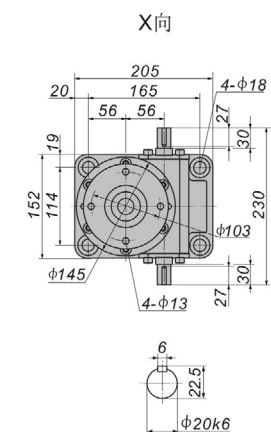
T12



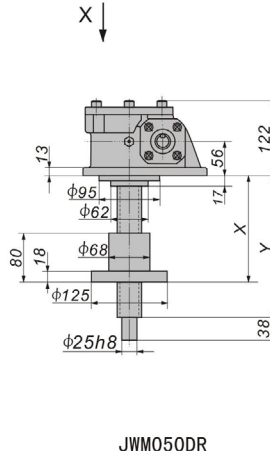
T11



F11



JWM050UR



JWM050DR

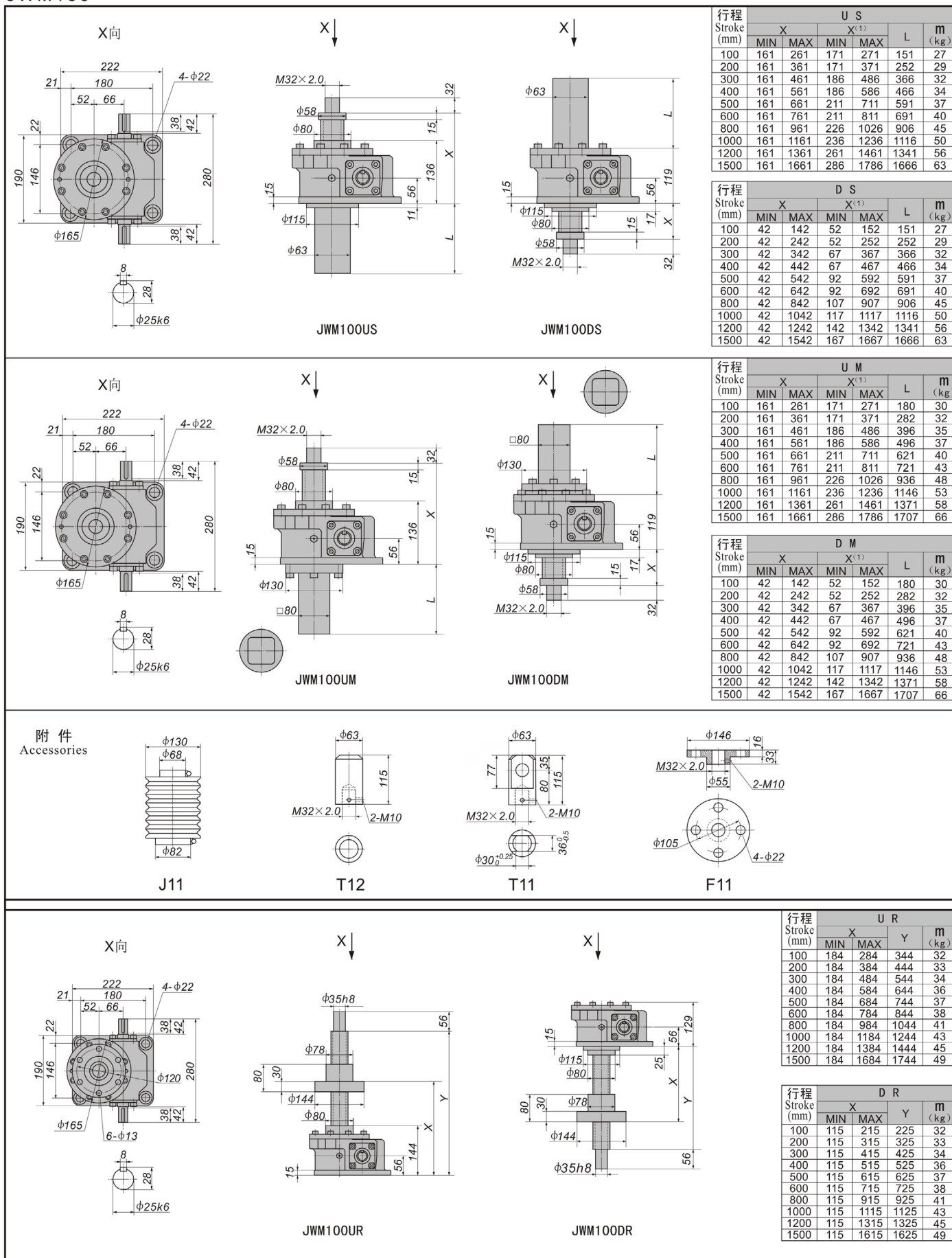
行程 Stroke (mm)	U R			
	X		Y	m (kg)
	MIN	MAX		
100	157	257	330	22
200	157	357	430	22
300	157	457	530	23
400	157	557	630	24
500	157	657	730	25
600	157	757	830	26
800	157	957	1030	27
1000	157	1157	1230	29
1200	157	1357	1430	30
1500	157	1657	1730	33

行程 Stroke (mm)	D R			
	X		Y	m (kg)
	MIN	MAX		
100	107	207	218	22
200	107	307	318	22
300	107	407	418	23
400	107	507	518	24
500	107	607	618	25
600	107	707	718	26
800	107	907	918	27
1000	107	1107	1118	29
1200	107	1307	1318	30
1500	107	1607	1618	33

注: X⁽¹⁾ 为加防尘罩时尺寸。

Note: X⁽¹⁾ is the dimensions for bellows.

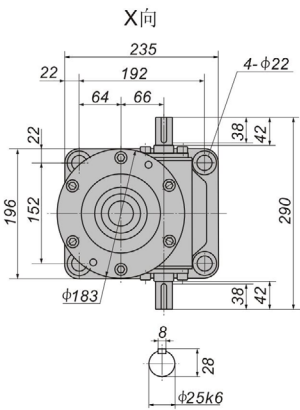
JWM100



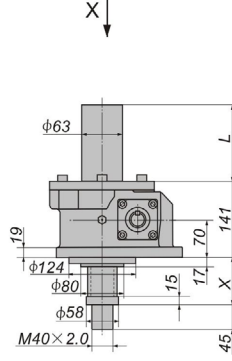
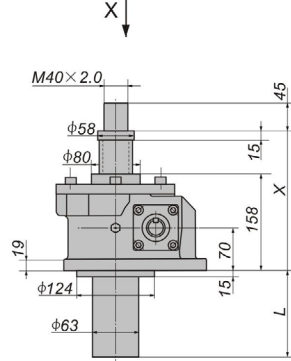
注: X⁽¹⁾ 为加防尘罩时尺寸。

Note: X⁽¹⁾ is the dimensions for bellows.

JWM150



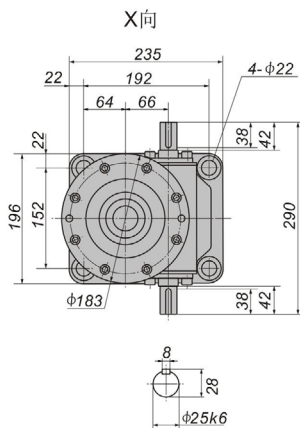
JWM150US



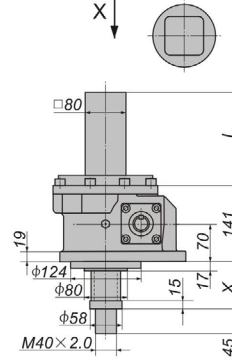
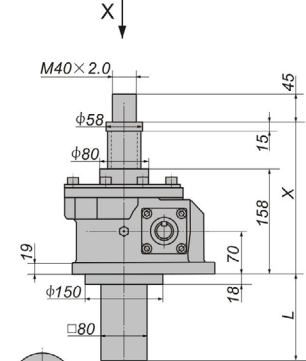
JWM150DS

行程 Stroke (mm)	U S				
	X		X ⁽¹⁾		m (kg)
	MIN	MAX	MIN	MAX	
100	183	283	193	293	151
200	183	383	193	393	252
300	183	483	208	508	366
400	183	583	208	608	466
500	183	683	233	733	591
600	183	783	233	833	691
800	183	983	248	1048	906
1000	183	1183	258	1258	1116
1200	183	1383	283	1483	1341
1500	183	1683	308	1688	1666

行程 Stroke (mm)	D S				
	X		X ⁽¹⁾		m (kg)
	MIN	MAX	MIN	MAX	
100	42	142	52	152	151
200	42	242	52	252	252
300	42	342	67	367	366
400	42	442	67	467	466
500	42	542	92	592	591
600	42	642	92	692	691
800	42	842	107	907	906
1000	42	1042	117	1117	1116
1200	42	1242	142	1342	1341
1500	42	1542	167	1667	1666



JWM150UM

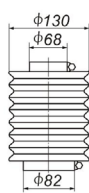


JWM150DM

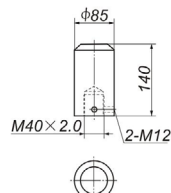
行程 Stroke (mm)	U M				
	X		X ⁽¹⁾		m (kg)
	MIN	MAX	MIN	MAX	
100	183	283	193	293	180
200	183	383	193	393	282
300	183	483	208	508	396
400	183	583	208	608	496
500	183	683	233	733	621
600	183	783	233	833	721
800	183	983	248	1048	936
1000	183	1183	258	1258	1146
1200	183	1383	283	1483	1371
1500	183	1683	308	1688	1707

行程 Stroke (mm)	D M				
	X		X ⁽¹⁾		m (kg)
	MIN	MAX	MIN	MAX	
100	42	142	52	152	180
200	42	242	52	252	282
300	42	342	67	367	396
400	42	442	67	467	496
500	42	542	92	592	621
600	42	642	92	692	721
800	42	842	107	907	936
1000	42	1042	117	1117	1146
1200	42	1242	142	1342	1371
1500	42	1542	167	1667	1707

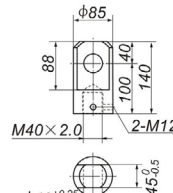
**附件
Accessories**



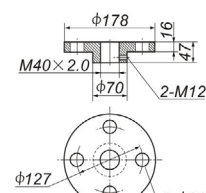
J11



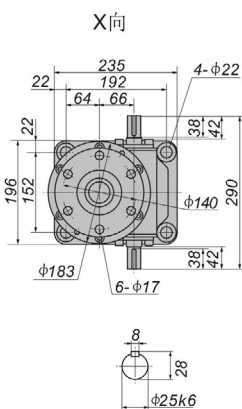
T12



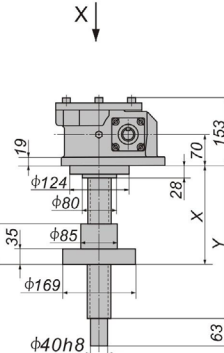
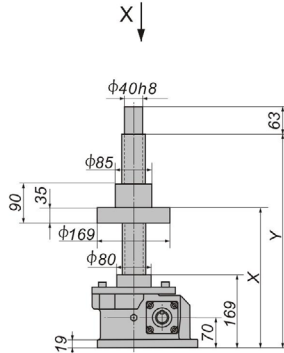
T11



F11



JWM150UR



JWM150DR

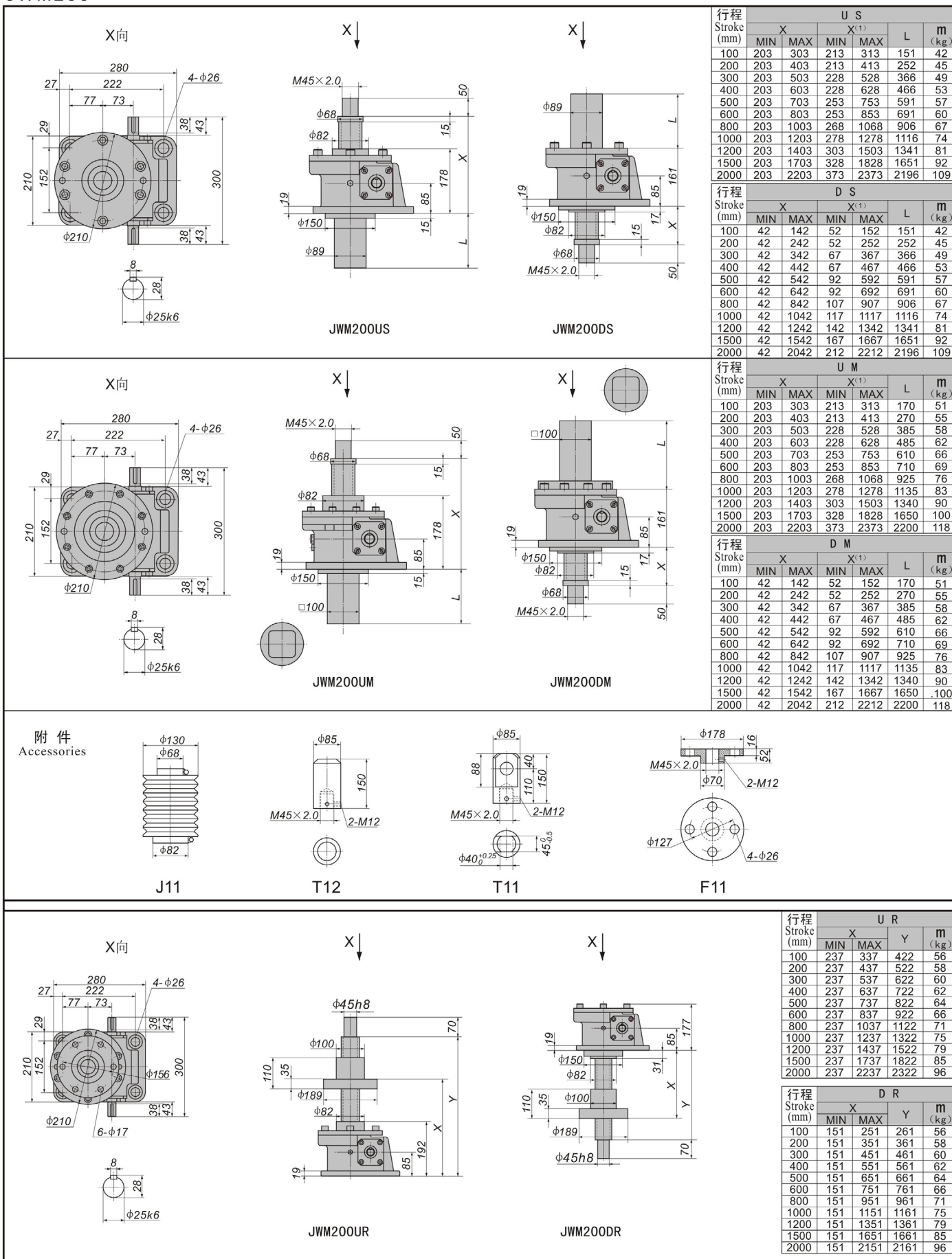
行程 Stroke (mm)	U R			
	X		Y	m (kg)
	MIN	MAX		
100	214	314	379	40
200	214	414	479	42
300	214	514	579	43
400	214	614	679	45
500	214	714	779	46
600	214	814	879	48
800	214	1014	1079	51
1000	214	1214	1279	54
1200	214	1414	1479	57
1500	214	1714	1779	61

行程 Stroke (mm)	D R			
	X		Y	m (kg)
	MIN	MAX		
100	128	228	239	40
200	128	328	339	42
300	128	428	439	43
400	128	528	539	45
500	128	628	639	46
600	128	728	739	48
800	128	928	939	51
1000	128	1128	1139	54
1200	128	1328	1339	57
1500	128	1628	1639	61

注: X⁽¹⁾ 为加防尘罩时尺寸。

Note: X⁽¹⁾ is the dimensions for bellows.

JWM200

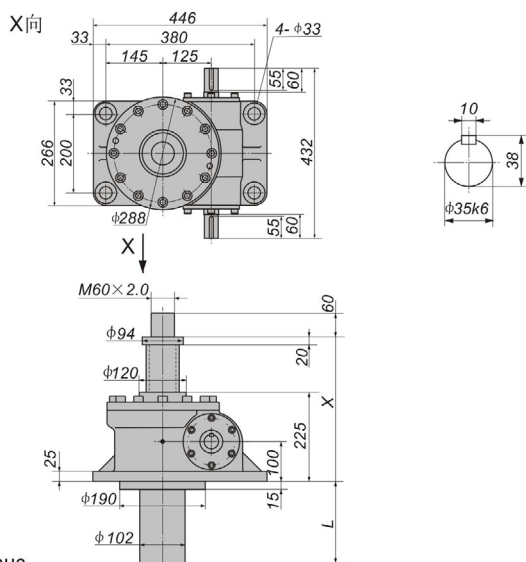


注: X⁽¹⁾ 为加防尘罩时尺寸。

Note: X⁽¹⁾ is the dimensions for bellows.

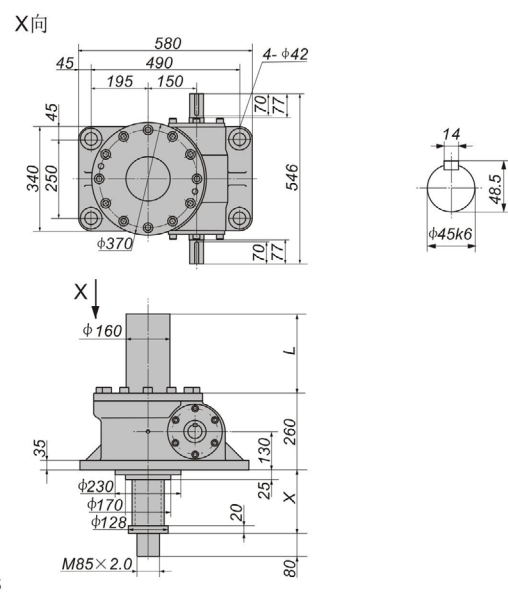
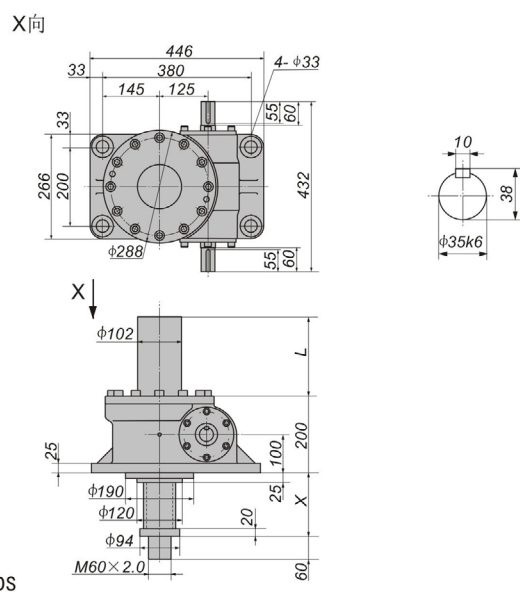
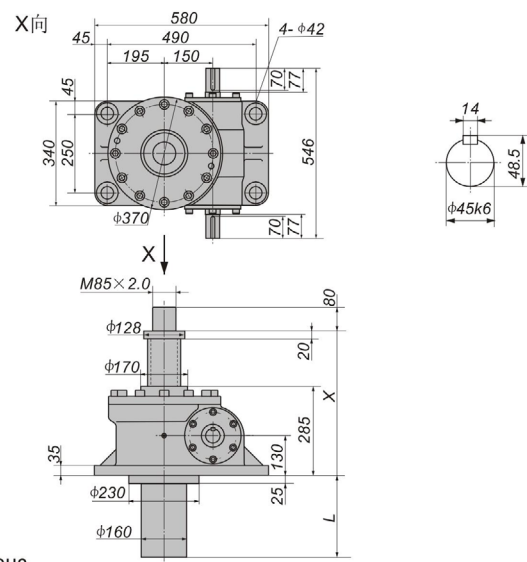
JWM300

行程 Stroke (mm)	U S					D S					m (kg)
	X		X ⁽¹⁾		L	X		X ⁽¹⁾		L	
	MIN	MAX	MIN	MAX		MIN	MAX	MIN	MAX		
100	255	355	265	365	160	55	155	65	165	160	118
200	255	455	265	465	260	55	255	65	265	260	123
300	255	555	280	580	375	55	355	80	380	375	128
400	255	655	280	680	475	55	455	80	480	475	134
500	255	755	295	795	590	55	555	95	595	590	139
600	255	855	295	895	690	55	655	95	695	690	145
800	255	1055	310	1110	905	55	855	110	910	905	155
1000	255	1255	330	1330	1125	55	1055	130	1130	1125	167
1200	255	1455	340	1540	1335	55	1255	140	1340	1335	177
1500	255	1755	365	1865	1660	55	1555	165	1665	1660	194
2000	255	2255	400	2400	2170	55	2055	200	2200	2170	221

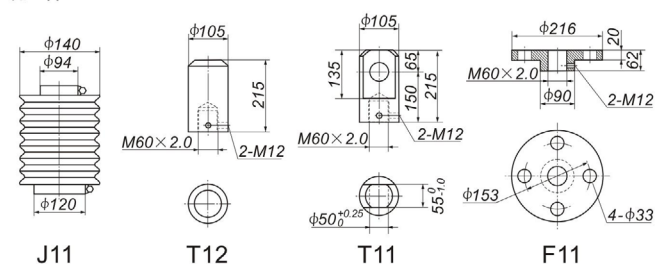


JWM500

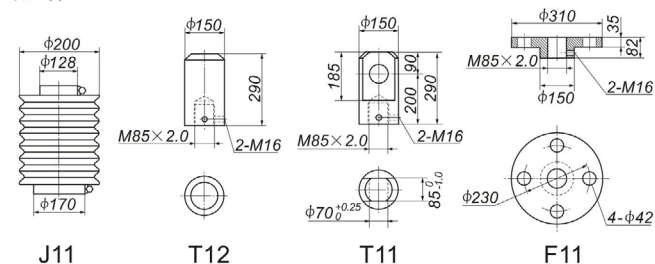
行程 Stroke (mm)	U S					D S					m (kg)
	X		X ⁽¹⁾		L	X		X ⁽¹⁾		L	
	MIN	MAX	MIN	MAX		MIN	MAX	MIN	MAX		
100	315	415	320	420	165	55	155	60	160	165	248
200	315	515	320	520	265	55	255	60	260	265	260
300	315	615	340	640	385	55	355	80	380	385	273
400	315	715	340	740	485	55	455	80	480	485	284
500	315	815	350	850	595	55	555	90	590	595	279
600	315	915	350	950	695	55	655	90	690	695	308
800	315	1115	365	1165	910	55	855	105	905	910	332
1000	315	1315	380	1380	1125	55	1055	120	1120	1125	357
1200	315	1515	390	1590	1335	55	1255	130	1330	1335	380
1500	315	1815	410	1910	1665	55	1555	150	1650	1665	417
2000	315	2315	445	2445	2190	55	2055	185	2185	2190	477



附件 Accessories



附件 Accessories

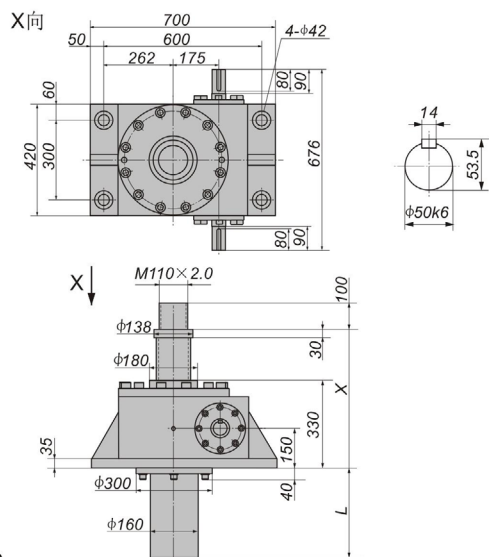


注: X⁽¹⁾ 为加防尘罩时尺寸。

Note: X⁽¹⁾ is the dimensions for bellows.

JWM750

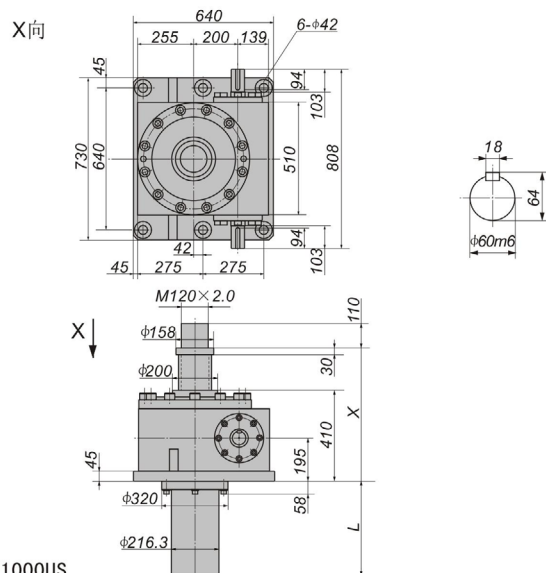
行程 Stroke (mm)	U S					D S					m (kg)
	X		X ⁽¹⁾		L	X		X ⁽¹⁾		L	
	MIN	MAX	MIN	MAX		MIN	MAX	MIN	MAX		
100	370	470	380	480	165	70	170	80	180	165	370
200	370	570	380	580	265	70	270	80	280	265	384
300	370	670	395	695	385	70	370	95	395	385	401
400	370	770	395	795	485	70	470	95	495	485	415
500	370	870	410	910	595	70	570	110	610	595	431
600	370	970	410	1010	695	70	670	110	710	695	445
800	370	1170	425	1225	910	70	870	125	925	910	476
1000	370	1370	435	1435	1125	70	1070	135	1135	1125	506
1200	370	1570	450	1650	1335	70	1270	150	1350	1335	536
1500	370	1870	465	1965	1665	70	1570	165	1665	1665	581
2000	370	2370	500	2500	2190	70	2070	200	2200	2190	657



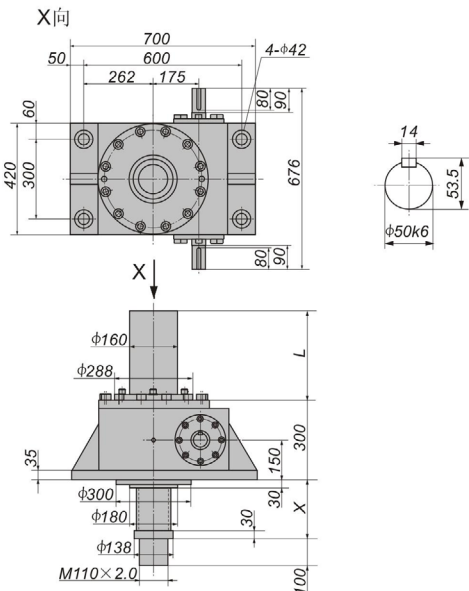
JWM750US

JWM1000

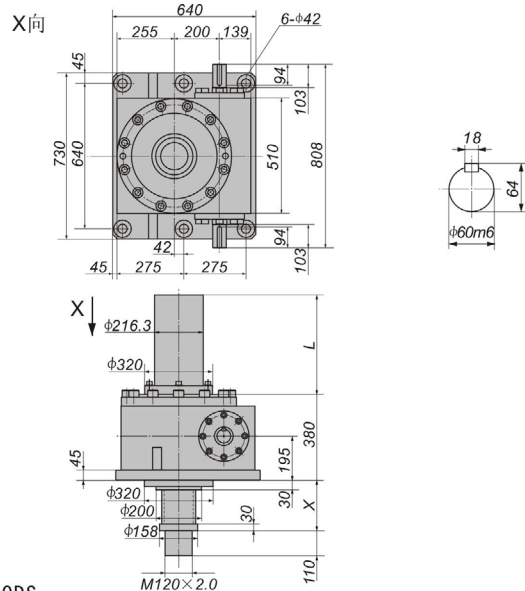
行程 Stroke (mm)	U S					D S					m (kg)
	X		X ⁽¹⁾		L	X		X ⁽¹⁾		L	
	MIN	MAX	MIN	MAX		MIN	MAX	MIN	MAX		
100	450	550	460	560	165	70	170	80	180	165	748
200	450	650	460	660	265	70	270	80	280	265	766
300	450	750	475	775	385	70	370	95	395	385	787
400	450	850	475	875	485	70	470	95	495	485	805
500	450	950	485	985	595	70	570	105	605	595	824
600	450	1050	485	1085	695	70	670	105	705	695	842
800	450	1250	500	1300	910	70	870	120	920	910	881
1000	450	1450	510	1510	1125	70	1070	130	1130	1125	918
1200	450	1650	525	1725	1335	70	1270	145	1345	1335	957
1500	450	1950	545	2045	1665	70	1570	165	1665	1665	1014
2000	450	2450	575	2575	2190	70	2070	195	2195	2190	1109



JWM1000US

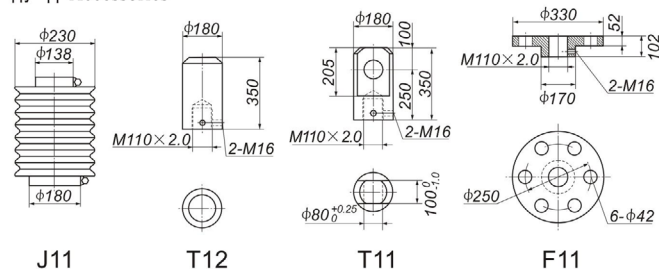


JWM750DS

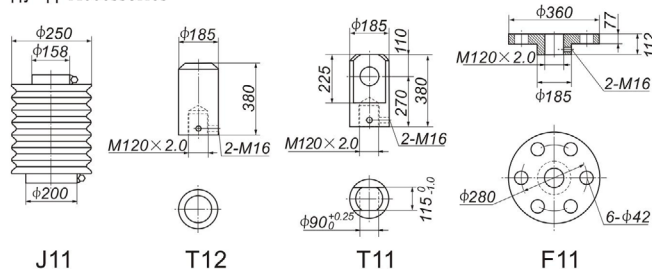


JWM1000DS

附件 Accessories



附件 Accessories

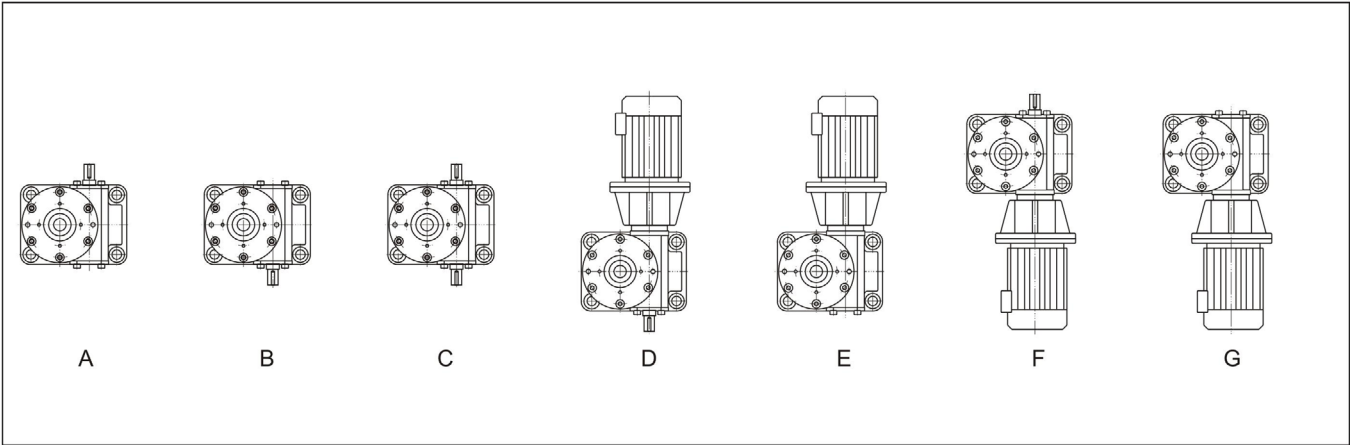


注：X⁽¹⁾ 为加防尘罩时尺寸。

Note: X⁽¹⁾ is the dimensions for bellows.

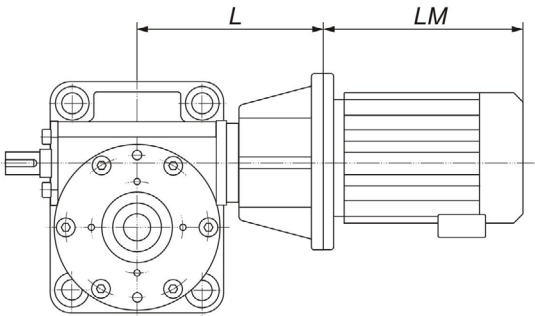
10 输入方式:

10 Input Modes:



11 输入部分:
电机直联:

11 Input Part:
With coupled motor:



型号 Type	JWM010				JWM025						JWM050					
电机功率 (kW) Power of motor	0.12	0.18	0.25	0.37	0.12	0.18	0.25	0.37	0.55	0.75	0.25	0.37	0.55	0.75	1.1	1.5
L (mm)	136				142						170					

型 号 Type	JWM100						JWM150						JWM200					
电机 功率 (kW) Power of motor	0.37	0.55	0.75	1.1	1.5	2.2	0.55	0.75	1.1	1.5	2.2	3	0.75	1.1	1.5	2.2	3	4
L (mm)	225						232						260					

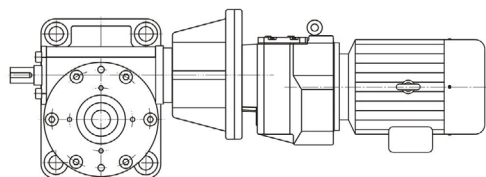
注: 1.电机功率的选择应符合传动能力表;
2.表中所列功率为4极普通电机功率。

Note: 1.Power of motor should conform with the transmission capacity.
2. The power is for 4-pole motor.

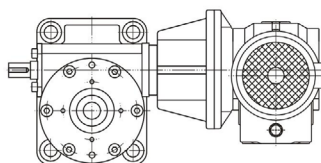


12 组合型(敬请垂询):

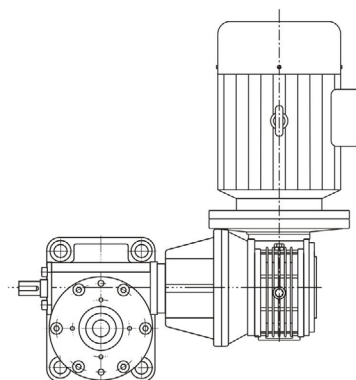
12 Combination type (On request):



JWM接CR
JWM+CR Series Gear Units



JWM接K或S
JWM+K or S Series Gear Units

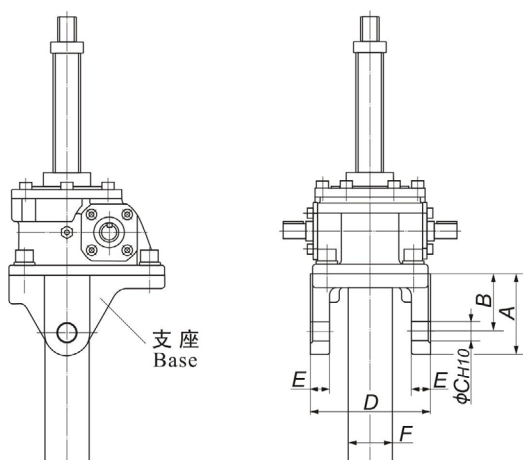


JWM接R或RV
JWM+R or RV Series Gear Units

13 附件:

13.1 支座(附件代号B21):

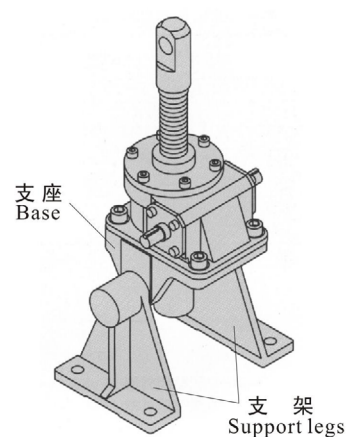
支座安装广泛应用于开关装置、倾斜装置。如图:



13 Accessories:

13.1 Base (code B21)

Bases are widely used in switching and inclining devices. As shown in the figure:



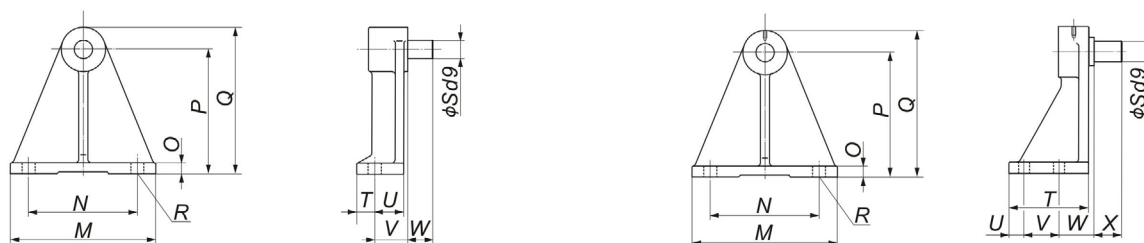
型号 Type	A	B	C	D	E	F
JWM010	75	60	15	86	15	35
JWM025	100	75	20	115	20	45
JWM050	105	75	25	158	25	58
JWM100	145	100	40	201	30	76.3
JWM150	155	105	50	224	44	76.3
JWM200	173	110	63	244	50	89.1

13.2 支架(附件代号B22)

支座与支架配合, 实现多方位升降。

13.2 Support legs (code B22)

Bases and support legs are often used together to make lifting function in multiple directions.



JWM010-JWM050

JWM100-JWM200

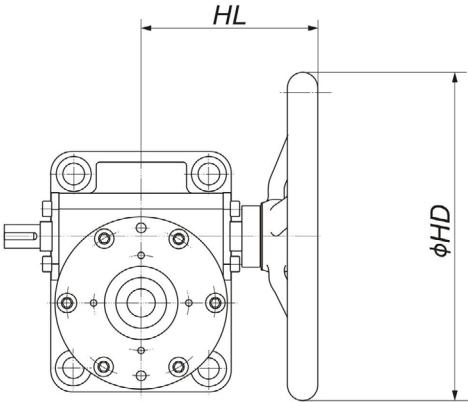
型号 Type	M	N	O	P	Q	R	S	T	U	V	W	X
JWM010	180	130	15	150	178	2- ϕ 17.5	15	25	40	45	17	-
JWM025	180	130	15	150	178	2- ϕ 17.5	20	25	40	45	30	-
JWM050	200	150	15	170	200	2- ϕ 17.5	25	25	40	45	35	-
JWM100	280	220	22	240	290	4- ϕ 22	40	159	30	70	70	55
JWM150	360	280	27	300	360	4- ϕ 33	50	195	40	85	85	70
JWM200	400	320	30	380	450	4- ϕ 33	63	210	40	90	90	75

13.3 手轮盘:

(1) 手动操作扭矩=所需输入扭矩/手轮操作盘半径

13.3 Handwheel

(1) The manual torque=Required input torque/radius of handwheel



(2) 尺寸表:

(2) Dimensions:

(mm)

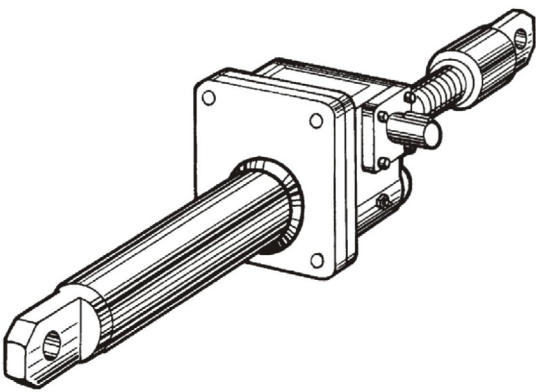
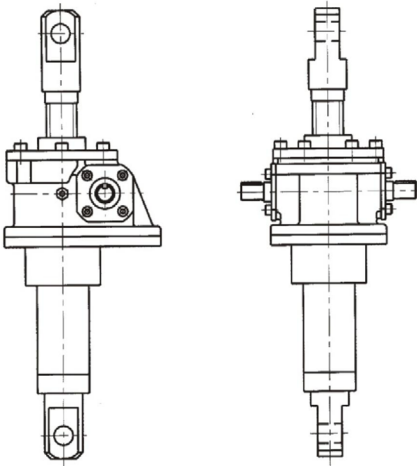
附件代号 Accessories Code	N08		N10		N20		N28		N45	
	HD	HL	HD	HL	HD	HL	HD	HL	HD	HL
JWM010	80	72	100	85	—	—	—	—	—	—
JWM025	—	—	100	90	200	100	—	—	—	—
JWM050	—	—	—	—	200	111	280	114	—	—
JWM100	—	—	—	—	—	—	280	129	450	145
JWM150	—	—	—	—	—	—	280	129	450	145
JWM200	—	—	—	—	—	—	—	—	450	162

13.4 扭力臂式安装(来电咨询):

适用于开闭装置、反转装置。

13.4 Torque-arm mounted (on request)

Applicable to opening and reversing devices.



JWM

13.5 润滑油

注:在环境温度-10℃~+40℃时,

- (1) JW010-JW150润滑油为000#锂基脂,附件代号V00;
- (2) JW200-JW1000润滑油牌号为VG220(ISO粘度等级),附件代号V22。

13.5 Oil

Note:When ambient temperature is -10℃~+40℃,

- (1) JW010-JW150 lubricant is 000# lithium grease, accessory code is V00;
- (2) JW200-JW1000 lubricant brand is VG220(ISO viscosity class), accessory code is V22.

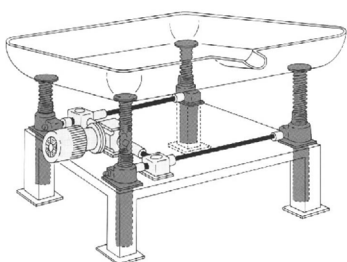
13.6 电机附件详见电机部分5/M页。

13.6 For details about motor accessories,see page 5/M for motor section.

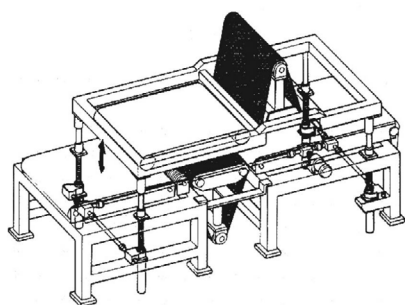
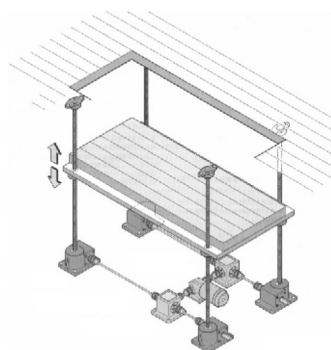


14 应用举例:

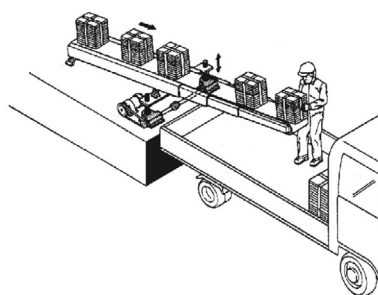
14 Application Exmaples:



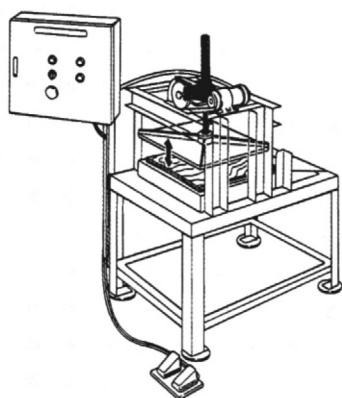
平台升降
Lifting platform



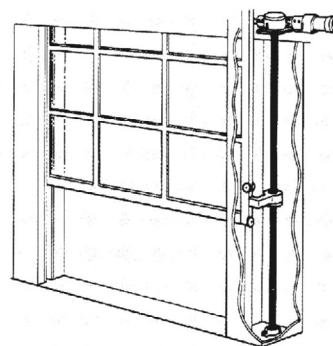
调整表面加工机的工作高度
Height adjustment of surface machining tool



调整滑动传送带的倾斜程度
Inclination adjustment of the apron conveyor



更改校正器的作业高
Height adjustment of straightening machine



大型窗户（门）自动开关
Auto opening of large windows or doors