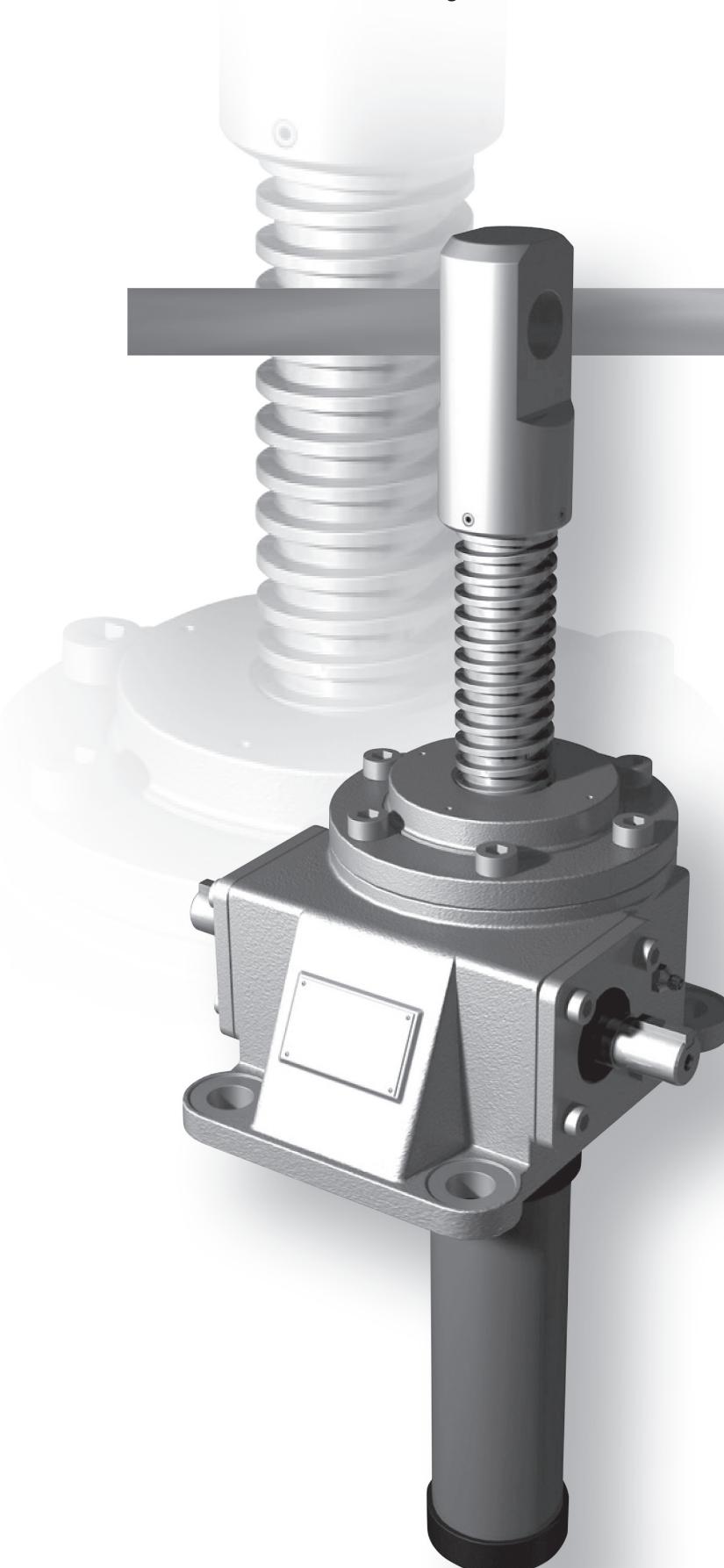


# Screw Jack

Versatile, with self-locking function

# 02



**Small Screw Jack /01**



**Screw Jack /02**



**Ball Small Jack /03**



**Ball Screw Jack /04**



**High-Lead Screw Jack /05**



**High-Lead Ball Screw Jack /06**



**Smoothy Screw Jack /07**



**Rack Jack /08**



**Bevel Gear Type Jack /09**



**Hi-Speed Jack /10**



**Geared Motor Jack /11**



**Option /12**



**Bevel Gear Box /13**



**Coupling /14**



**Technical Data /15**

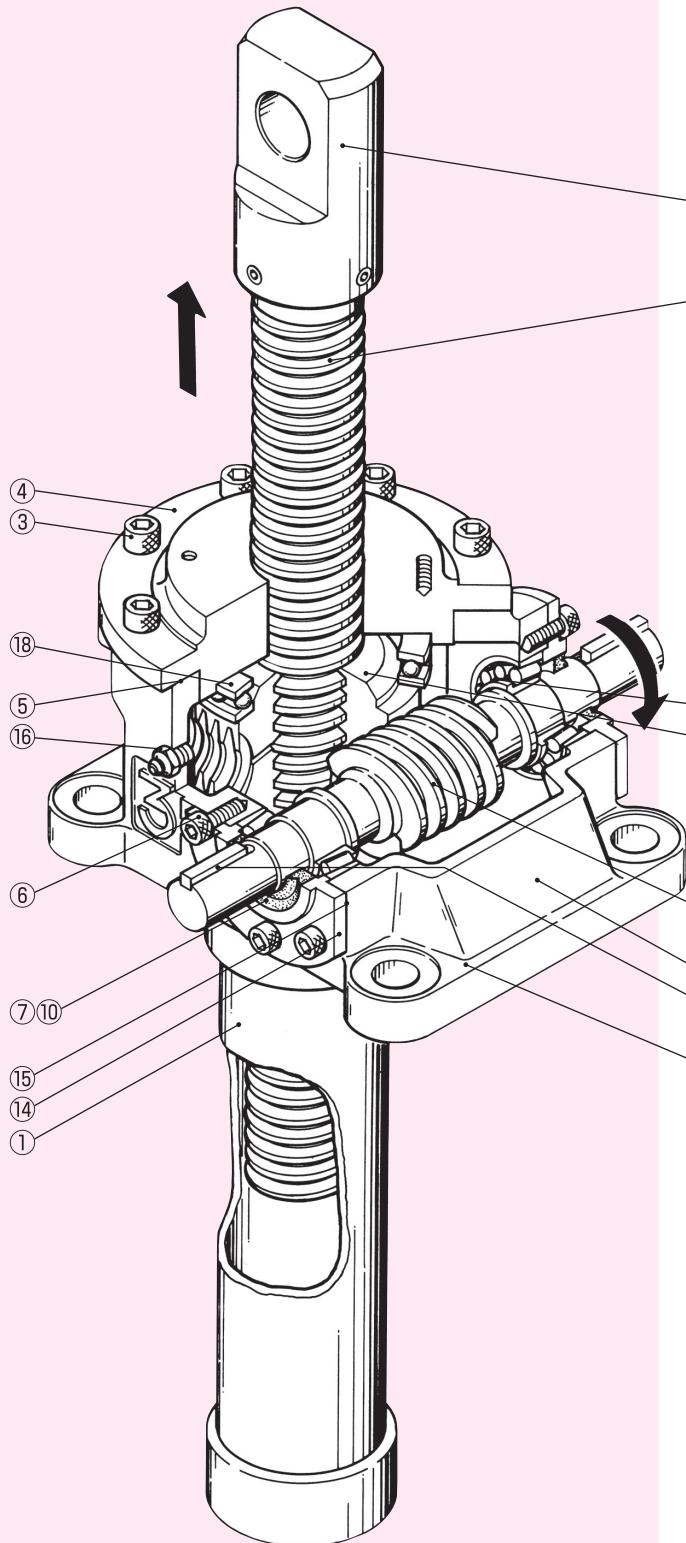


**Q&A, Caution and  
Other Information /16**

# Screw Jack:Structure & Features

Standard screw jack developed based on our experience and expertise as a manufacturer dedicated to jacks

## ■ Structural Drawing: Upright Translating Screw Jack



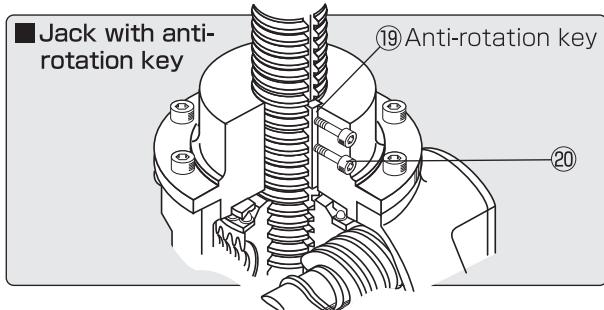
● The jack consists of a high-precision worm gear and a trapezoidal screw; and its self-locking function works at any position within a stroke.

● The speed reduction mechanism adopts grease lubrication as standard, realizing a long service life with smooth operation.

● Wide-ranging options are available, including dustproof bellows to protect the lifting screw, hand wheel for manual operation, trunnion base, limit switch for control, and RC encoder.

At the screw end, various end fittings (e.g. clevis in the drawing) can be attached.

② The lifting screw is made of carbon steel (right-hand thread). As shown in the following illustration, the jack can prevent rotation by using its lifting screw with keyway, and anti-rotation key.



⑯ JOG-J3G types: The adoption of the worm wheel using special copper alloy significantly increased the input rotation speed, allowable power, and product lifetime.

JGA-J7A types: The worm wheel is made of special brass. (right-hand thread)

⑪ The worm shaft is made of chrome molybdenum steel (right-hand thread).

⑯ The input shaft key is new JIS compliant.

⑯ The housing is made of ductile cast iron.

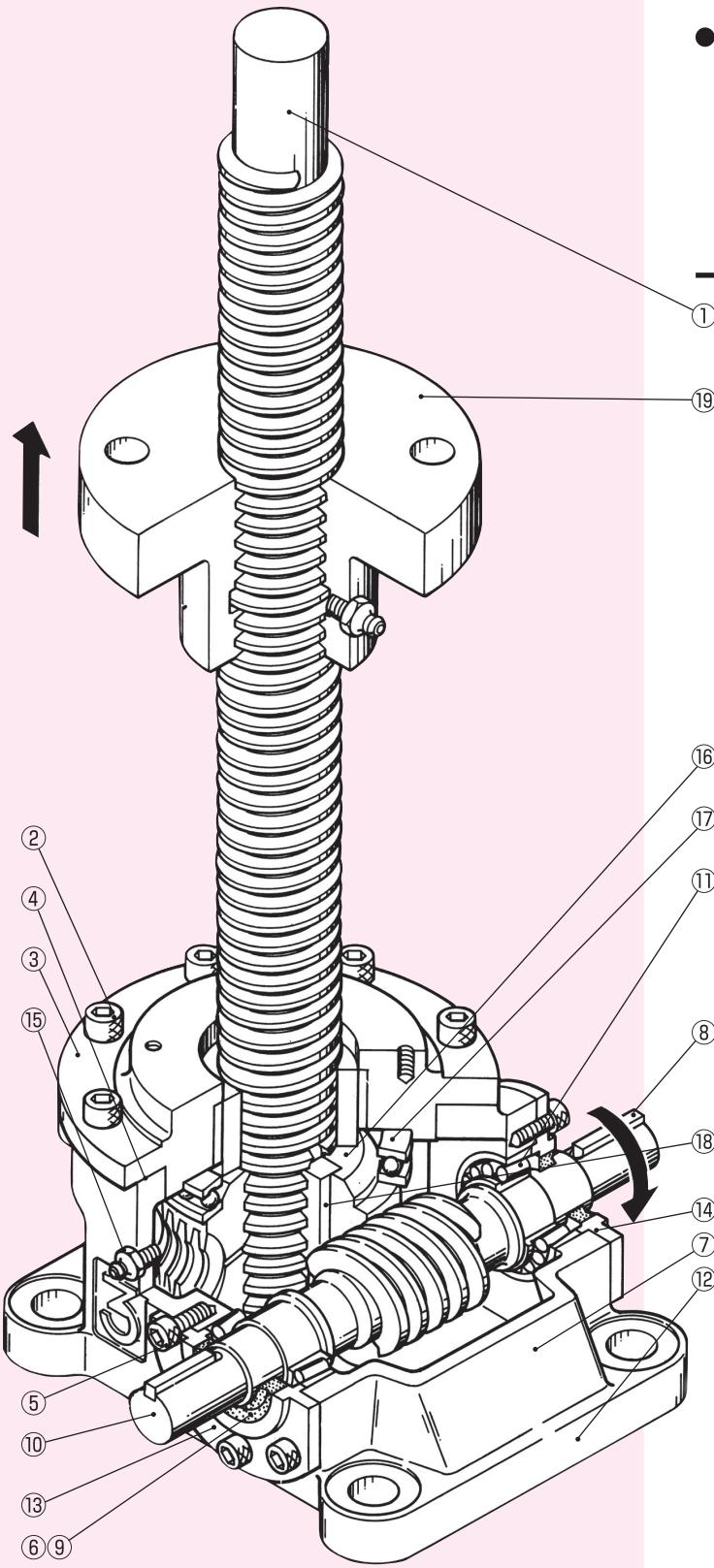
## ■ Part Names

#	Part name	#	Part name
①	Lifting screw cover	⑪	Worm shaft
②	Lifting screw	⑫	Bearing
③	Bolt	⑬	Housing
④	Housing cover	⑭	Side cover
⑤	Shim	⑮	Shim
⑥	Bolt	⑯	Grease nipple
⑦	Snap ring (JOG only)	⑰	Worm wheel
⑧	Plate	⑱	Thrust bearing
⑨	Key	⑲	Anti-rotation key
⑩	Oil seal (except JOG)	⑳	Bolt

# Traveling Nut Type Screw Jack: Structure & Features

The screw rotates and the nut travels along it - this type of jacks are called the traveling nut type jack.

## ■ Structural Drawing: Traveling Nut Type (Upright) Screw Jack



● This type does not require space for up-and-down motion of the screw shaft, so the full stroke length can be effectively utilized. This is especially convenient when available space is limited.

● To make it easy to support the screw end which allows steady ascent/descent even in case of a long stroke, the cylinder finish is adopted for the bearing at the screw end. Instead of a radial bearing, which is usually used to support the screw end, this type adopts a thrust bearing. By partially modifying the shape of the screw end, even in a long stroke, buckling can be prevented.

① The cylinder finish which is convenient for supporting the screw end.

⑯ Traveling nut

**J0G-J3G types:** The adoption of the traveling nut and the worm wheel using special copper alloy significantly increased the input rotation speed, allowable power, and product lifetime.

**JGA-J7A types:** The traveling nut and the worm wheel are made of special brass.

(As for orientation of the nut, you can choose either an upward or downward direction. The illustration shows an upward direction.)

## ■ Part Names

### # Part name

①	Lifting screw cover
②	Bolt
③	Housing cover
④	Shim
⑤	Bolt
⑥	Snap ring (JOG only)
⑦	Plate
⑧	Key
⑨	Oil seal (except JOG)
⑩	Worm shaft
⑪	Bearing
⑫	Housing
⑬	Side cover
⑭	Shim
⑮	Grease nipple
⑯	Worm wheel
⑰	Thrust bearing
⑱	Key
⑲	Traveling Nut

# Standard Specifications

Change of name: Former J31/2A changed to JGA

Series/size code		<b>J0G</b>	<b>J1G</b>	<b>J2G</b>	<b>J3G</b>	<b>JGA</b>
Capacity		10kN	25kN	50kN	100kN	150kN
Lifting screw diameter		20mm	25mm	40mm	50mm	55mm
Lifting screw lead		4mm	5mm	8mm	10mm	10mm
Worm gear ratio	H	5	6	6	8	8
	L	24	24	24	24	24
Efficiency	H	0.22	0.21	0.21	0.20	0.19
	L	0.13	0.13	0.12	0.15	0.14
Maximum allowable power per jack	H	0.75kW	1.3kW	2.3kW	3.1kW	2.8kW
	L	0.4kW	0.5kW	1.1kW	1.8kW	
Input shaft torque at no load (b)		0.3N·m	1N·m	2N·m	3N·m	4N·m
Torque coefficient (a)	H	0.57	0.63	0.99	0.97	1.05
	L	0.21	0.25	0.43	0.44	0.48
Required input torque at maximum load	H	6.0N·m	16.8N·m	51.7N·m	100.1N·m	162N·m
	L	2.4N·m	7.4N·m	23.7N·m	47.4N·m	76N·m
Speed coefficient (c) (screw lead per rotation of input shaft)	H	0.8mm	0.83mm	1.33mm	1.25mm	1.25mm
	L	0.17mm	0.21mm	0.33mm	0.42mm	0.42mm
Maximum allowable input rotation speed	H	1800min <sup>-1</sup>	1800min <sup>-1</sup>	1800min <sup>-1</sup>	1800min <sup>-1</sup>	870min <sup>-1</sup>
	L	1800min <sup>-1</sup>	1800min <sup>-1</sup>	1800min <sup>-1</sup>	1800min <sup>-1</sup>	1055min <sup>-1</sup>
Maximum input rotation speed at maximum load	H	1190min <sup>-1</sup>	735min <sup>-1</sup>	420min <sup>-1</sup>	295min <sup>-1</sup>	165min <sup>-1</sup>
	L	1600min <sup>-1</sup>	640min <sup>-1</sup>	440min <sup>-1</sup>	360min <sup>-1</sup>	350min <sup>-1</sup>
Anti-rotation key torque at maximum load		15N·m	45N·m	140N·m	360N·m	600N·m
Input shaft allowable overhang load		300N	450N	700N	1200N	1200N
Amount of filled grease		0.1Kg	0.25kg	0.6kg	0.8kg	1.0kg
Operating temperature range		-15~80°C	-15~80°C	-15~80°C	-15~80°C	-15~80°C

- Jack's life depends on installed conditions, loading conditions, frequency of use, operating conditions, lubrication conditions, surrounding environment, maintenance conditions. Please take those factors into account to estimate the product lifetime. Screw jack adopts a trapezoidal screw for its lifting shaft, so it is not possible to calculate its lifetime (estimated travel distance). An indication of the lifetime (estimated travel distance) is  
· JOG~J2G···5km · J3G~J7A···1km
- If your conditions of use are severe, please upsize your model or contact us for specialpurpose product.

Specification

# Standard Specifications

Change of name: Former J61/2A changed to JFA.

Series/size code		J4A	J5A	J6A	JFA	J7A
Capacity		200kN	300kN	500kN	750kN	1000kN
Lifting screw diameter		63mm	85mm	118mm	132mm	150mm
Lifting screw lead		12mm	16mm	16mm	16mm	20mm
Worm gear ratio	H	8	10 $\frac{2}{3}$	10 $\frac{2}{3}$	10 $\frac{2}{3}$	12 $\frac{2}{3}$
	L	24	32	32	38	36
Efficiency	H	0.2	0.2	0.15	0.14	0.16
	L	0.15	0.13	0.1	0.09	0.1
Maximum allowable power per jack		4kW	6.5kW	11kW	15kW	17kW
Input shaft torque at no load (b)		5N·m	10N·m	20N·m	30N·m	40N·m
Torque coefficient (a)	H	1.2	1.2	1.57	1.69	1.61
	L	0.54	0.6	0.8	0.74	0.93
Required input torque at maximum load	H	245N·m	369N·m	806N·m	1298N·m	1653N·m
	L	113N·m	189N·m	420N·m	588N·m	970N·m
Speed coefficient (c) (screw lead per rotation of input shaft)	H	1.5mm	1.5mm	1.5mm	1.5mm	1.58mm
	L	0.5mm	0.5mm	0.5mm	0.42mm	0.56mm
Maximum allowable input rotation speed	H	810min $^{-1}$	795min $^{-1}$	535min $^{-1}$	530min $^{-1}$	510min $^{-1}$
	L	995min $^{-1}$	825min $^{-1}$	555min $^{-1}$	540min $^{-1}$	400min $^{-1}$
Maximum input rotation speed at maximum load	H	155min $^{-1}$	165min $^{-1}$	130min $^{-1}$	110min $^{-1}$	95min $^{-1}$
	L	335min $^{-1}$	325min $^{-1}$	245min $^{-1}$	240min $^{-1}$	165min $^{-1}$
Anti-rotation key torque at maximum load		920N·m	1850N·m	4400N·m	7450N·m	11200N·m
Input shaft allowable overhang load		1200N	2200N	2500N	2500N	3000N
Amount of filled grease		1.2kg	2.5kg	4kg	7.5kg	11kg
Operating temperature range		-15~100°C	-15~100°C	-15~100°C	-15~100°C	-15~100°C

1. Jack's life depends on installed conditions, loading conditions, frequency of use, operating conditions, lubrication conditions, surrounding environment, maintenance conditions. Please take those factors into account to estimate the product lifetime. Screw jack adopts a trapezoidal screw for its lifting shaft, so it is not possible to calculate its lifetime (estimated travel distance). An indication of the lifetime (estimated travel distance) is
  - JOG~J2G···5km · J3G~J7A···1km
2. If your conditions of use are severe, please upsize your model or contact us for specialpurpose product.

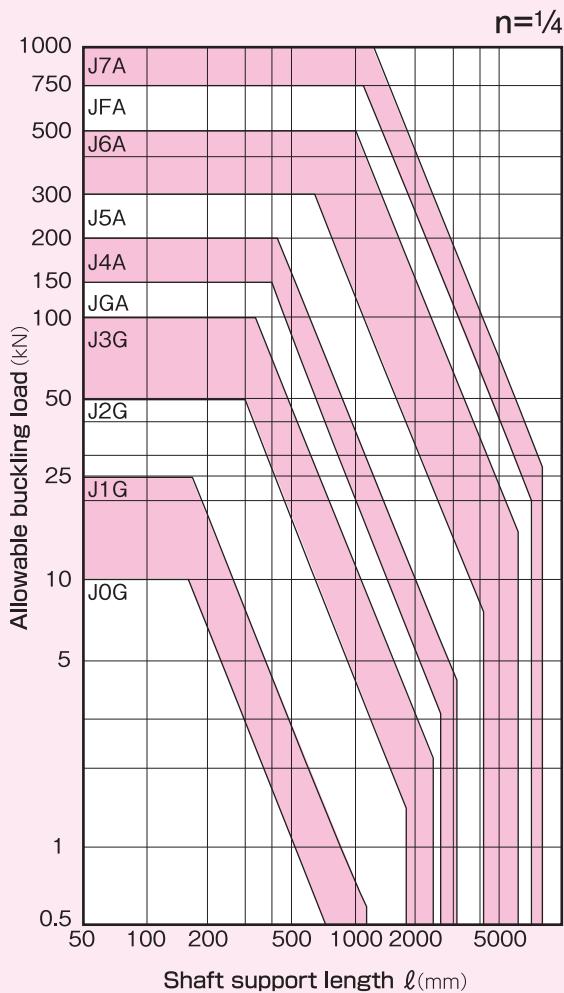
Allowable  
buckling  
load

# Allowable Buckling Load

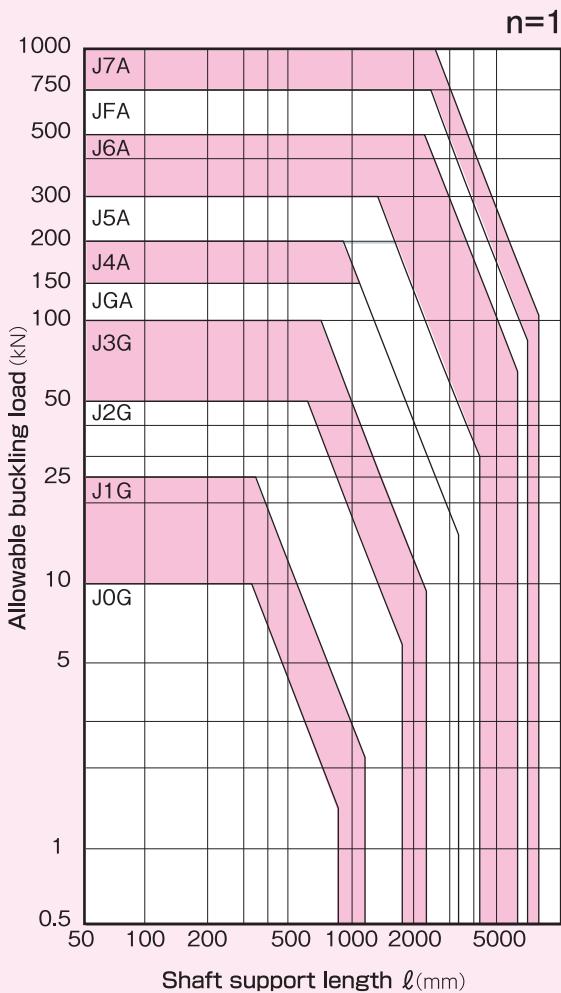
Longer stroke lengths with loads in compression are subject to buckling. Buckling loads differ depending on screw ends and whether the main part is fixed or supported. Please refer to the following graphs, and select the series/size at the intersection of load (vertical axis) and shaft support length (horizontal axis) or above it. To calculate the allowable buckling load, please refer to p.216.

\* When loaded in tension, there is no need to consider buckling.

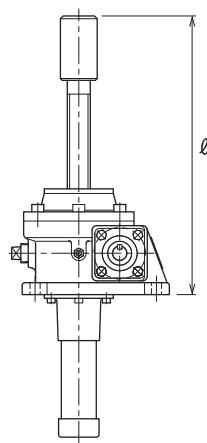
Jack fixed / screw end free



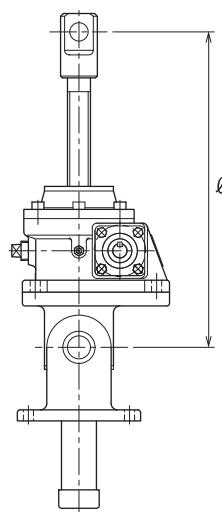
Jack supported / screw end supported



n=1/4



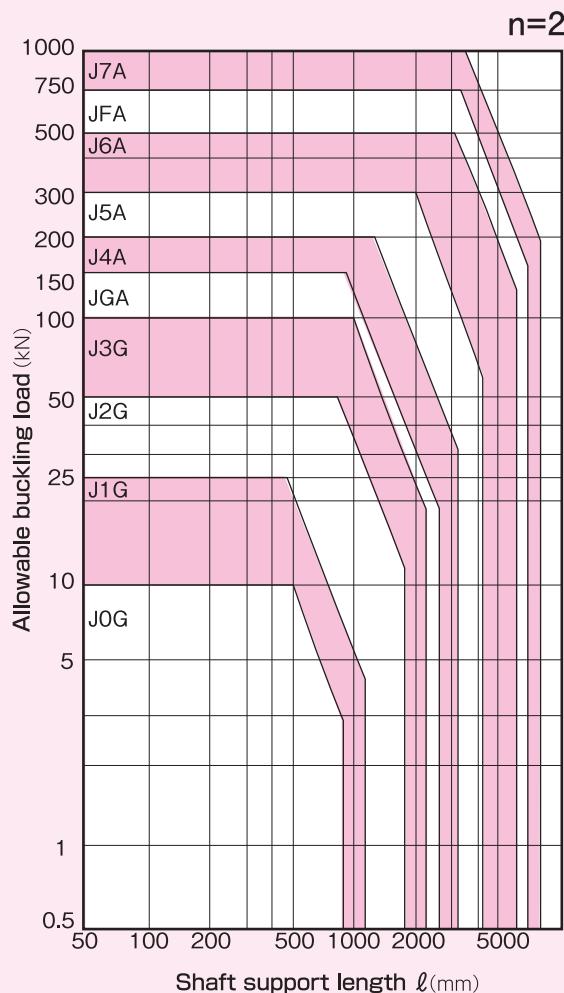
n=1



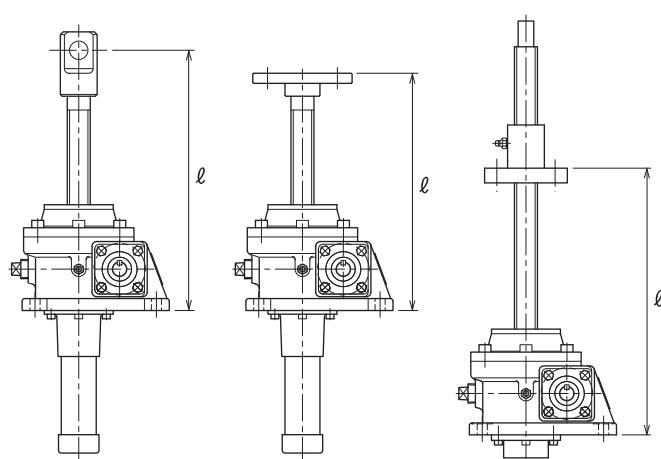
Allowable  
buckling  
load

# Allowable Buckling Load

Jack fixed / screw end supported

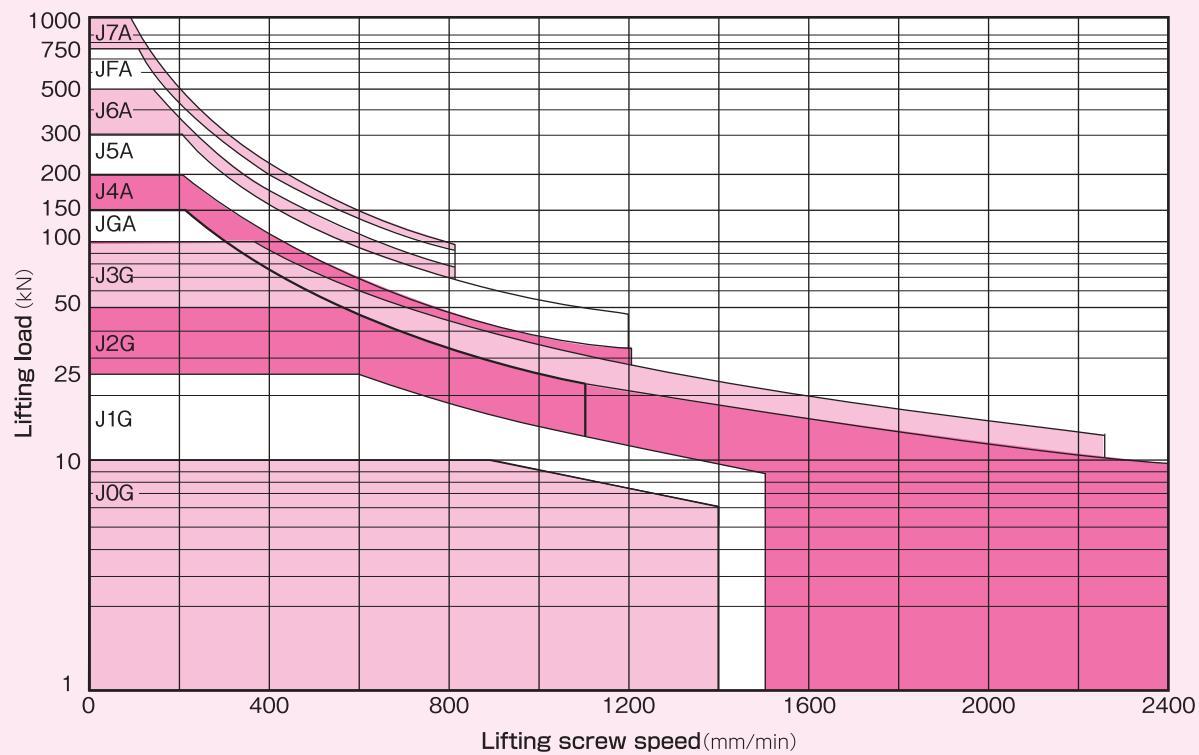


**n=2**

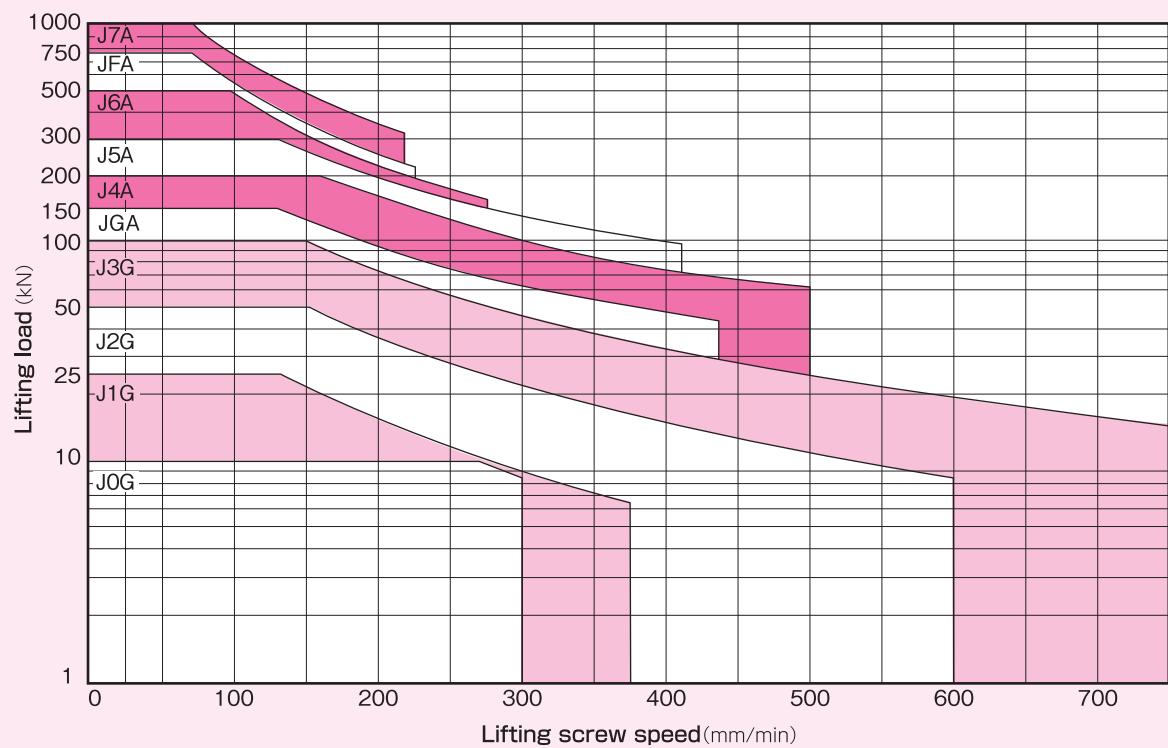


# Lifting Load / Lifting Screw Speed Graph

## Worm gear ratio H



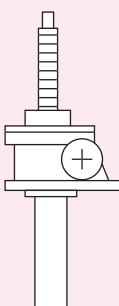
## Worm gear ratio L



Allowable  
side force

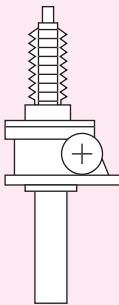
# Allowable Side Force

## ■Upright without bellows



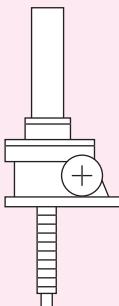
Series/Size	Stroke (mm)	100	200	300	400	500	600	800	1000
JOG	200	150	120	100	80	—	—	—	—
J1G	700	400	300	210	170	140	110	—	—
J2G	1450	900	600	500	400	350	250	210	210
J3G	1300	800	600	450	350	300	240	200	200
JGA	1700	1100	800	650	500	450	350	300	300
J4A	3050	2300	1900	1550	1350	1200	950	750	750
J5A	4750	3900	3200	2700	2250	1900	1500	1200	1200
J6A	12650	9150	6750	5650	4700	4050	3200	2600	2600
JFA	15900	12000	9300	7600	6400	5550	4400	3600	3600
J7A	18700	13750	10900	9000	7650	5700	5300	4400	4400

## ■Upright with bellows



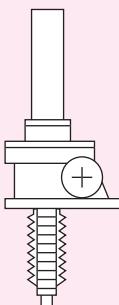
JOG	150	120	100	80	—	—	—	—
J1G	400	300	210	170	140	110	—	—
J2G	900	600	500	400	350	250	210	—
J3G	800	600	450	350	300	240	200	—
JGA	1100	800	650	500	450	350	300	—
J4A	2300	1900	1550	1350	1200	950	750	—
J5A	3900	3200	2700	2250	1900	1500	1200	—
J6A	9150	6750	5650	4700	4050	3200	2600	—
JFA	12000	9300	7600	6400	5550	4400	3600	—
J7A	13750	10900	9000	7650	5700	5300	4400	—

## ■Inverted without bellows



Series/Size	Stroke (mm)	100	200	300	400	500	600	800	1000
JOG	180	140	110	90	80	—	—	—	—
J1G	450	400	250	200	170	140	110	—	—
J2G	900	650	500	400	350	300	240	200	—
J3G	800	600	450	350	300	250	220	180	—
JGA	1000	750	600	500	450	400	300	250	—
J4A	2500	1950	1550	1300	1150	1000	800	600	—
J5A	3650	2850	2350	2000	1750	1550	1250	1050	—
J6A	6700	5450	4600	3750	3500	3100	2550	2200	—
JFA	8450	7000	6000	5250	4650	4200	3500	3000	—
J7A	8950	7600	6650	5950	5300	4800	4050	3500	—

## ■Inverted with bellows



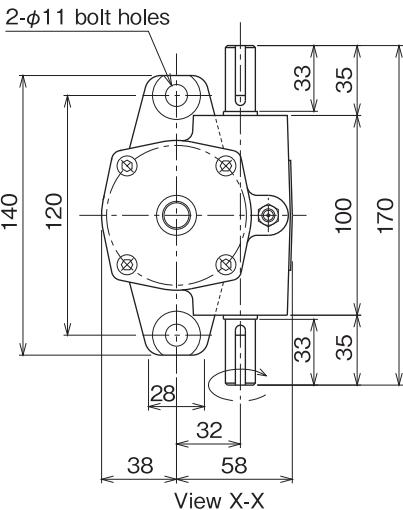
JOG	140	110	90	80	—	—	—	—
J1G	400	250	200	170	140	110	—	—
J2G	650	500	400	350	300	240	200	—
J3G	600	450	350	300	250	220	180	—
JGA	750	600	500	450	400	300	250	—
J4A	1950	1550	1300	1150	1000	800	600	—
J5A	2850	2350	2000	1750	1550	1250	1050	—
J6A	5450	4600	3750	3500	3100	2550	2200	—
JFA	7000	6000	5250	4650	4200	3500	3000	—
J7A	7600	6650	5950	5300	4800	4050	3500	—

JOG  
Dimensional  
Drawing

# Dimensional Drawing: JOG Translating Screw Jack

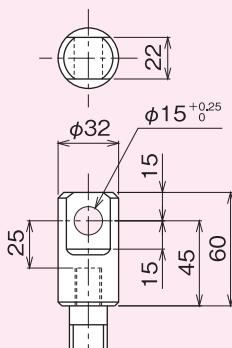
When the input shaft rotates in the direction indicated by an arrow, the lifting screw ascends.

## Two-dimensional drawing

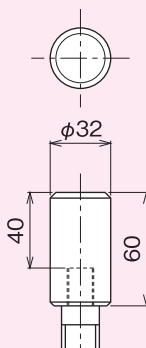


Dimensional drawing of screw end fittings

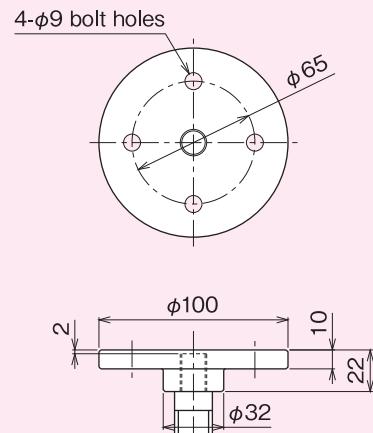
# Clevis



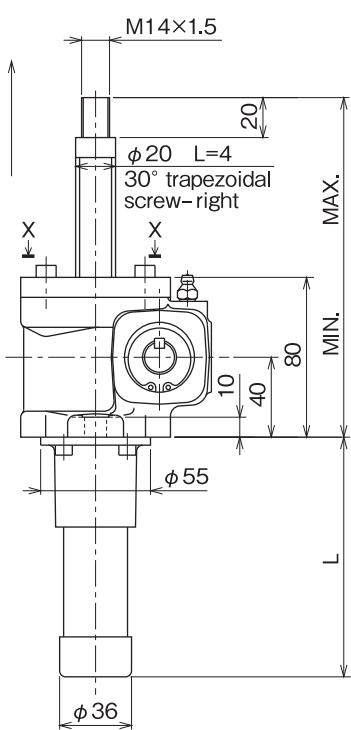
## Plain end



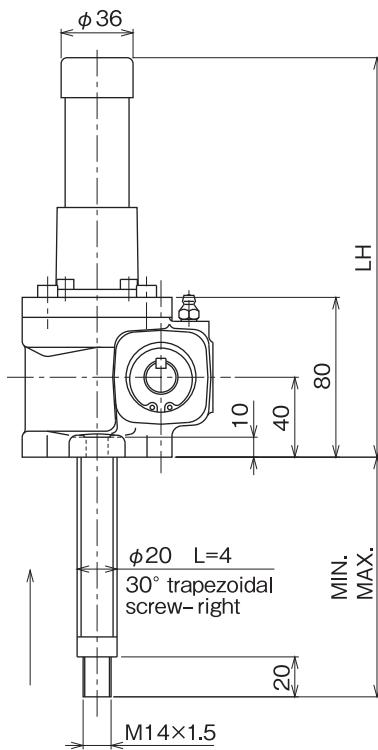
## Flange



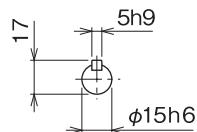
## Upright



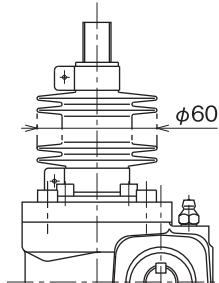
## Inverted



Dimensional drawing of input shaft end



#### **Outer diameter of bellows**



JOG Screw Jack Measurement Table

Stroke	U: Upright								I: Inverted											
	N: Without anti-rotation key				K: With anti-rotation key				N: Without anti-rotation key				K: With anti-rotation key							
	N: Without bellows		B: With bellows		N: Without bellows		B: With bellows		N: Without bellows		B: With bellows		N: Without bellows		B: With bellows					
	MIN.	MAX.	MIN.	MAX.	L	MIN.	MAX.	MIN.	MAX.	L	MIN.	MAX.	MIN.	MAX.	LH	MIN.	MAX.	MIN.	MAX.	LH
100	115	215	170	270	150	115	215	170	270	150	35	135	90	190	230	35	135	90	190	230
200	115	315	170	370	250	115	315	170	370	250	35	235	90	290	330	35	235	90	290	330
300	115	415	200	500	350	115	415	200	500	350	35	335	120	420	430	35	335	120	420	430
400	115	515	200	600	450	115	515	200	600	450	35	435	120	520	530	35	435	120	520	530
500	115	615	210	710	550	115	615	210	710	550	35	535	130	630	630	35	535	130	630	630
600	115	715	210	810	650	115	715	210	810	650	35	635	130	730	730	35	635	130	730	730
800	115	915	260	1060	850	115	915	260	1060	850	35	835	180	980	930	35	835	180	980	930

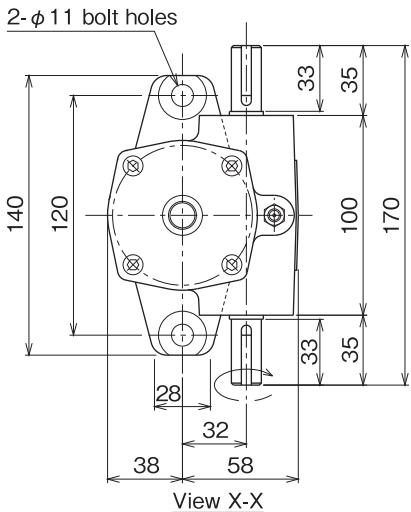
If your required stroke is not shown in the above table, please consult with us, as we can manufacture what you need.

**JOG**  
Dimensional  
Drawing

# Dimensional Drawing: JOG Traveling Nut Type Screw Jack

When the input shaft rotates in the direction indicated by an arrow, the traveling nut ascends.  
For information on sizes of the jack with bellows, please contact us.

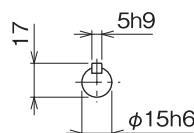
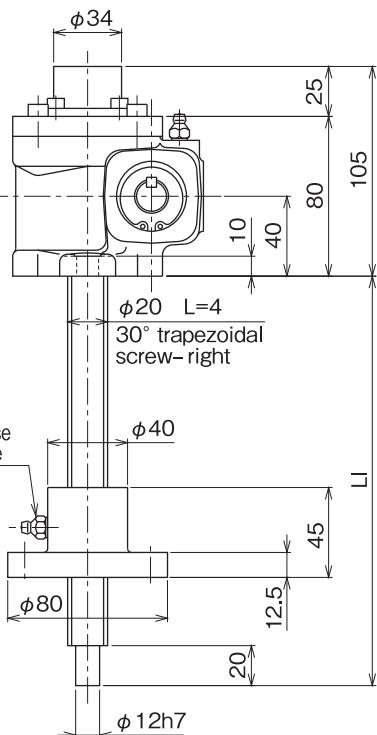
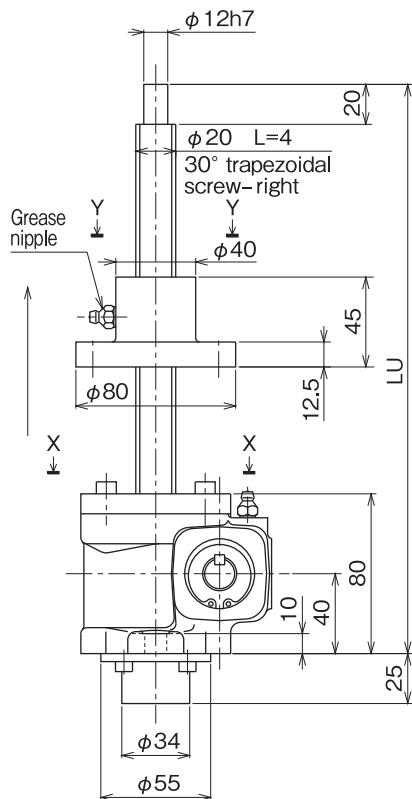
## Two-dimensional drawing



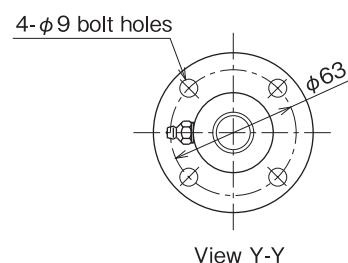
Upright

Inverted

Dimensional drawing of input shaft end



Traveling Nut



View Y-Y

## ■ Approximate Weight (kg)

Stroke	Translating		Traveling nut type
	Without bellows	With bellows	
	Without anti-rotation key	With anti-rotation key	
100	3.6	3.8	4.5
200	3.9	4.1	4.9
300	4.2	4.5	4.9
400	4.5	4.8	5.4
500	4.8	5.1	5.4
600	5.1	5.4	5.9
800	5.7	6.2	5.9

## ■ JOG

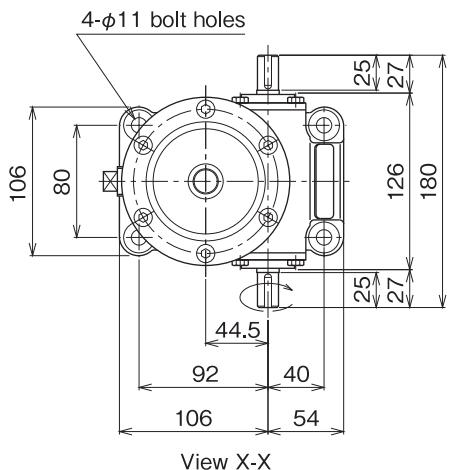
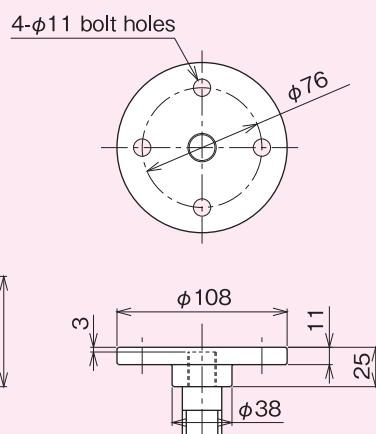
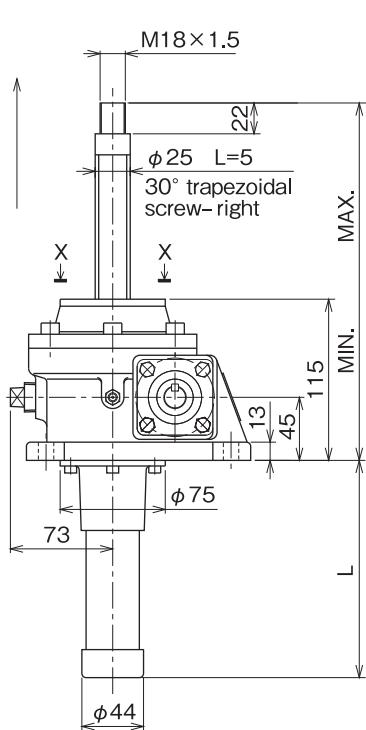
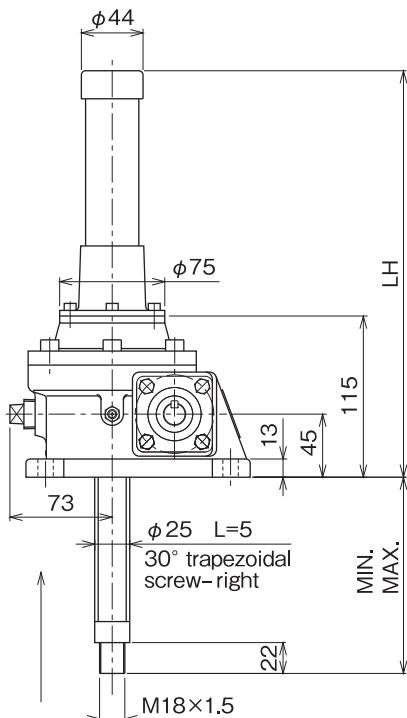
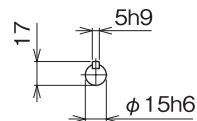
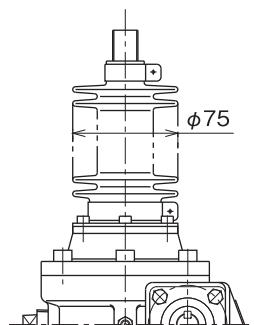
Stroke	Traveling nut type	
	U: Upright	I: Inverted
	LU	LI
100	285	205
200	385	305
300	485	405
400	585	505
500	685	605
600	785	705
800	985	905

If your required stroke is not shown in the above table, please consult with us, as we can manufacture what you need.

**J1G**  
 Dimensional  
 Drawing

# Dimensional Drawing: J1G Translating Screw Jack

When the input shaft rotates in the direction indicated by an arrow, the lifting screw ascends.

**Two-dimensional drawing**

**Dimensional drawing of screw end fittings**
**Clevis**
**Plain end**
**Flange**

**Upright**

**Inverted**

**Dimensional drawing of input shaft end**

**Outer diameter of bellows**

**J1G Screw Jack Measurement Table**

Stroke	U: Upright						I: Inverted													
	N: Without anti-rotation key			K: With anti-rotation key			N: Without anti-rotation key			K: With anti-rotation key										
	N: Without bellows	B: With bellows	L	N: Without bellows	B: With bellows	L	N: Without bellows	B: With bellows	LH	N: Without bellows	B: With bellows	LH								
	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.								
100	155	255	195	295	155	155	255	195	295	155	40	140	80	180	270	40	140	80	180	270
200	155	355	195	395	255	155	355	195	395	255	40	240	80	280	370	40	240	80	280	370
300	155	455	230	530	355	155	455	230	530	355	40	340	115	415	470	40	340	115	415	470
400	155	555	230	630	455	155	555	230	630	455	40	440	115	515	570	40	440	115	515	570
500	155	655	230	730	555	155	655	230	730	555	40	540	115	615	670	40	540	115	615	670
600	155	755	270	870	655	155	755	270	870	655	40	640	155	755	770	40	640	155	755	770
800	155	955	270	1070	855	155	955	270	1070	855	40	840	155	955	970	40	840	155	955	970

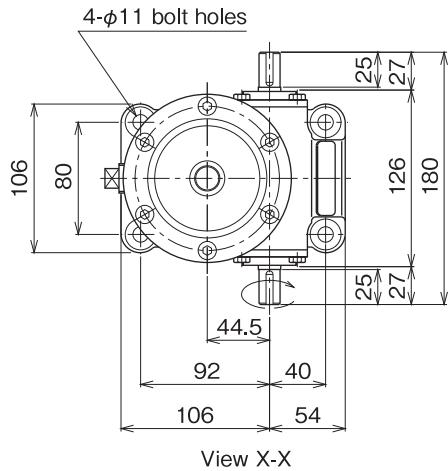
• If your required stroke is not shown in the above table, please consult with us, as we can manufacture what you need.

**J1G**  
Dimensional  
Drawing

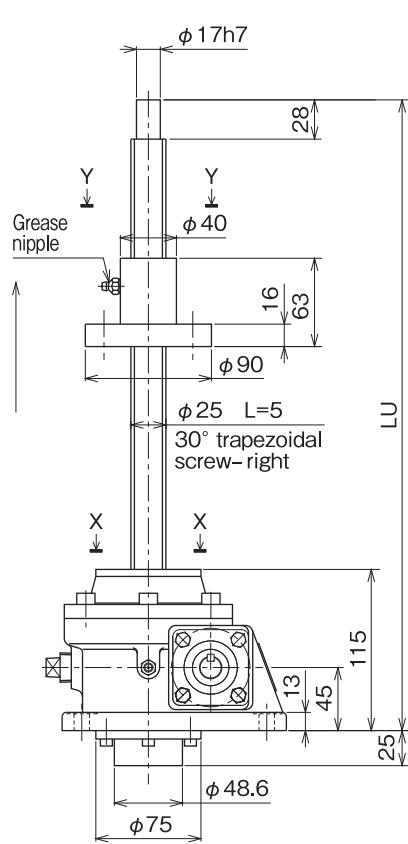
# Dimensional Drawing: J1G Traveling Nut Type Screw Jack

When the input shaft rotates in the direction indicated by an arrow, the traveling nut ascends.  
For information on sizes of the jack with bellows, please contact us.

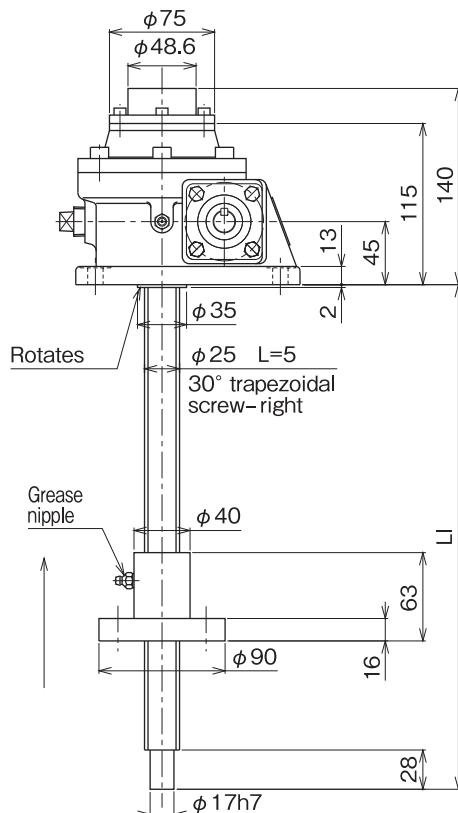
## Two-dimensional drawing



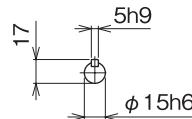
## Upright



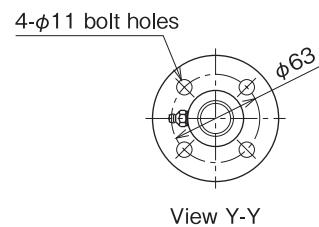
## Inverted



## Dimensional drawing of input shaft end



## Traveling Nut



## ■ Approximate Weight (kg)

Stroke	Translating		Traveling nut type
	Without bellows	With bellows	
	Without anti-rotation key	With anti-rotation key	
100	9	9.5	10.5
200	9.5	10	11
300	10	11	11.5
400	11	12	12.5
500	13	14	14.5
600	14.5	16	16
800	17	18.5	18.5

## J1G

Stroke	Traveling nut type	
	U: Upright	I: Inverted
	LU	LI
100	350	260
200	450	360
300	550	460
400	650	560
500	750	660
600	850	760
800	1050	960

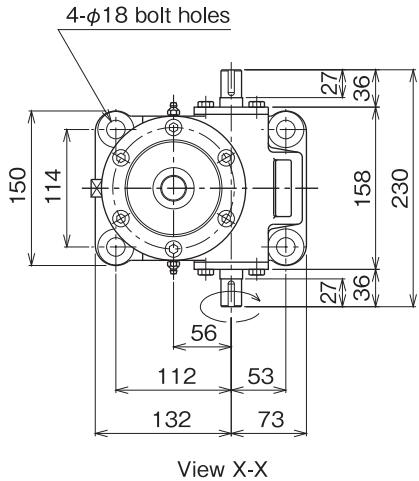
If your required stroke is not shown in the above table, please consult with us, as we can manufacture what you need.

J2G  
Dimensional  
Drawing

## Dimensional Drawing: J2G Translating Screw Jack

When the input shaft rotates in the direction indicated by an arrow, the lifting screw ascends.

## Two-dimensional drawing

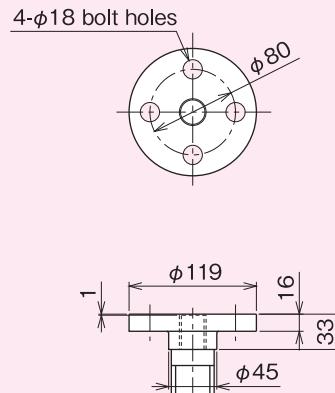


## Dimensional drawing of screw end fittings

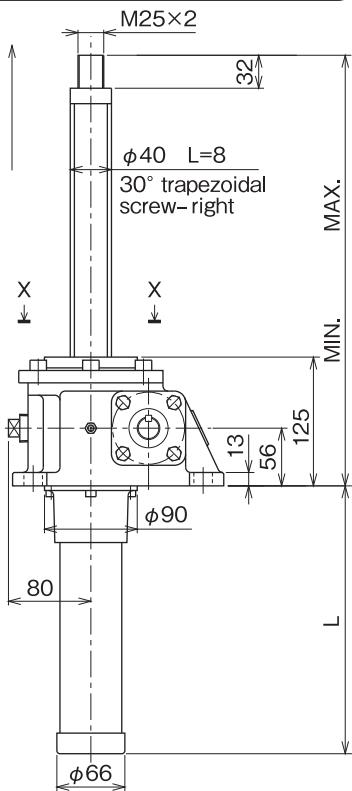
Clevis

## Plain end

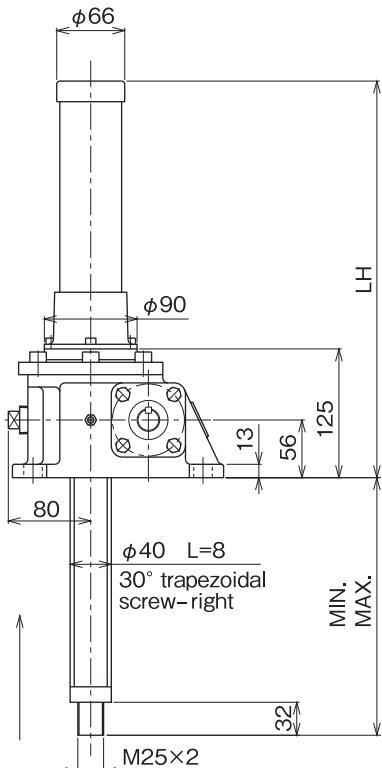
## Flange



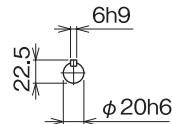
## Upright



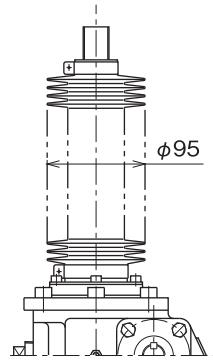
## Inverted



#### Dimensional drawing of input shaft end



## Outer diameter of bellows



J2G Screw Jack Measurement Table

Stroke	U: Upright								I: Inverted											
	N: Without anti-rotation key				K: With anti-rotation key				N: Without anti-rotation key				K: With anti-rotation key							
	N: Without bellows		B: With bellows		N: Without bellows		B: With bellows		N: Without bellows		B: With bellows		N: Without bellows		B: With bellows					
	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.				
100	175	275	215	315	160	175	275	215	315	160	50	150	90	190	285	50	150	90	190	285
200	175	375	215	415	260	175	375	215	415	260	50	250	90	290	385	50	250	90	290	385
300	175	475	250	550	360	175	475	250	550	360	50	350	125	425	485	50	350	125	425	485
400	175	575	250	650	460	175	575	250	650	460	50	450	125	525	585	50	450	125	525	585
500	175	675	250	750	560	175	675	250	750	560	50	550	125	625	685	50	550	125	625	685
600	175	775	290	890	660	175	775	290	890	660	50	650	165	765	785	50	650	165	765	785
800	175	975	290	1090	860	175	975	290	1090	860	50	850	165	965	985	50	850	165	965	985

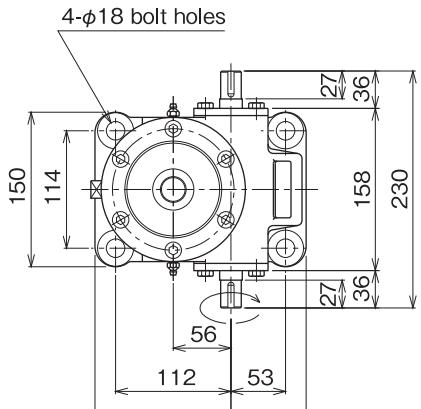
If your required stroke is not shown in the above table, please consult with us, as we can manufacture what you need.

**J2G**  
Dimensional  
Drawing

# Dimensional Drawing: J2G Traveling Nut Type Screw Jack

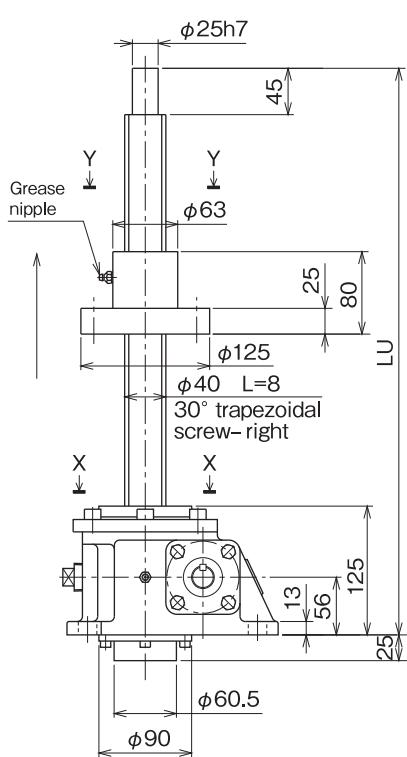
When the input shaft rotates in the direction indicated by an arrow, the traveling nut ascends.  
For information on sizes of the jack with bellows, please contact us.

## Two-dimensional drawing

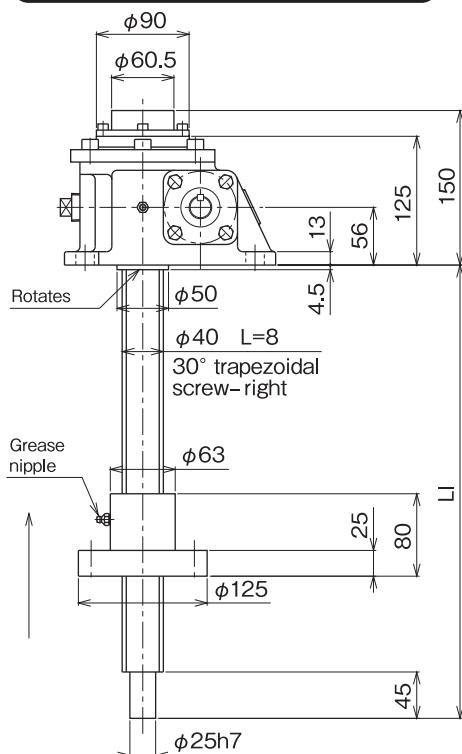


View X-X

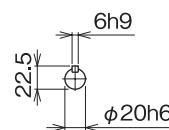
### Upright



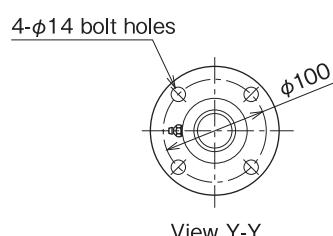
### Inverted



### Dimensional drawing of input shaft end



### Traveling Nut



View Y-Y

### ■ Approximate Weight (kg)

Stroke	Translating		Traveling nut type
	Without bellows	With bellows	
	Without anti-rotation key / With anti-rotation key	Without anti-rotation key / With anti-rotation key	
100	15	16	19
200	16	17	20
300	18	19.5	22
400	20	21.5	24
500	24	25.5	28
600	28	30	32
800	34	36	38

### ■ J2G

Stroke	Traveling nut type	
	U: Upright	I: Inverted
	LU	LI
100	390	280
200	490	380
300	590	480
400	690	580
500	790	680
600	890	780
800	1090	980

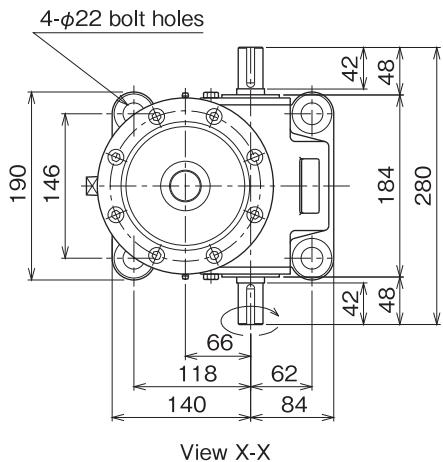
If your required stroke is not shown in the above table, please consult with us, as we can manufacture what you need.

**J3G**  
Dimensional  
Drawing

# Dimensional Drawing: J3G Translating Screw Jack

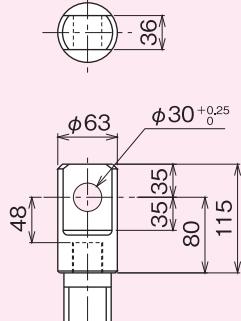
When the input shaft rotates in the direction indicated by an arrow, the lifting screw ascends.  
Figures in brackets are for the model with anti-rotation key.

## Two-dimensional drawing

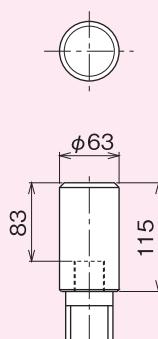


## Dimensional drawing of screw end fittings

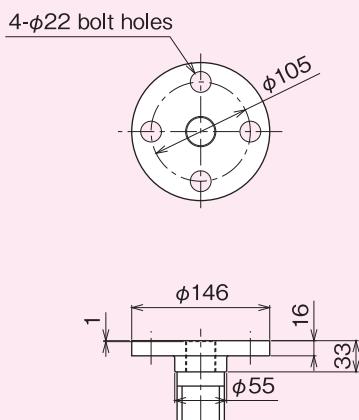
### Clevis



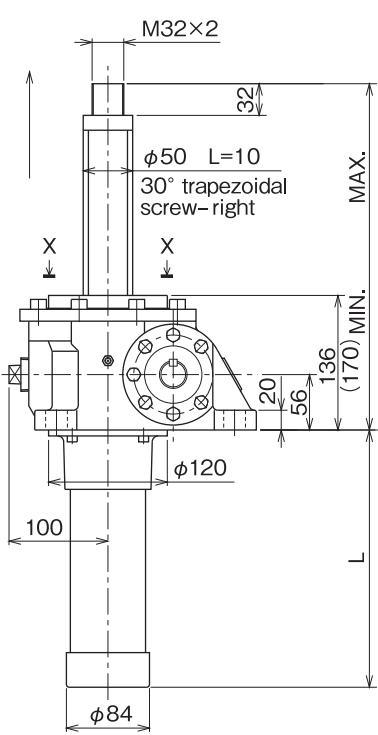
### Plain end



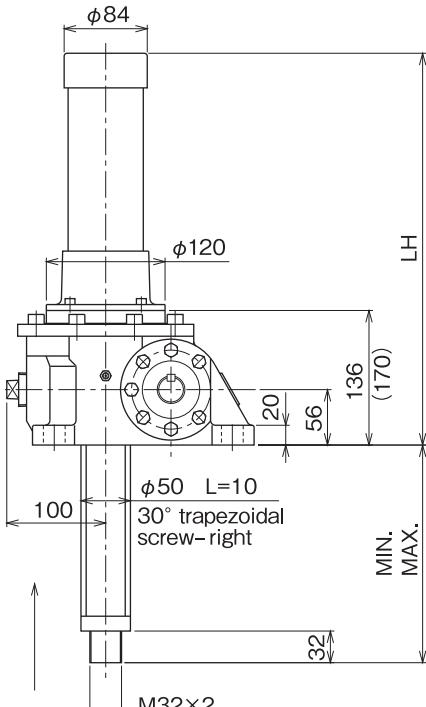
### Flange



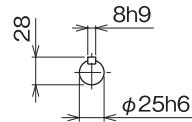
## Upright



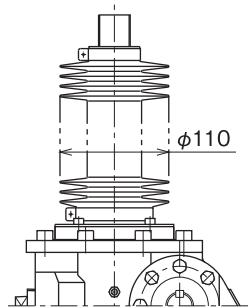
## Inverted



## Dimensional drawing of input shaft end



## Outer diameter of bellows



## ■ J3G Screw Jack Measurement Table

Stroke	U: Upright						I: Inverted													
	N: Without anti-rotation key			K: With anti-rotation key			N: Without anti-rotation key			K: With anti-rotation key										
	N: Without bellows	B: With bellows	L	N: Without bellows	B: With bellows	L	N: Without bellows	B: With bellows	LH	N: Without bellows	B: With bellows	LH								
	MIN.	MAX.	MIN.	MIN.	MAX.	L	MIN.	MAX.	MIN.	MIN.	MAX.	LH								
100	185	285	225	325	160	220	320	260	360	160	50	150	90	190	296	50	150	90	190	330
200	185	385	225	425	260	220	420	260	460	260	50	250	90	290	396	50	250	90	290	430
300	185	485	260	560	360	220	520	295	595	360	50	350	125	425	496	50	350	125	425	530
400	185	585	260	660	460	220	620	295	695	460	50	450	125	525	596	50	450	125	525	630
500	185	685	260	760	560	220	720	295	795	560	50	550	125	625	696	50	550	125	625	730
600	185	785	300	900	660	220	820	335	935	660	50	650	165	765	796	50	650	165	765	830
800	185	985	300	1100	860	220	1020	335	1135	860	50	850	165	965	996	50	850	165	965	1030

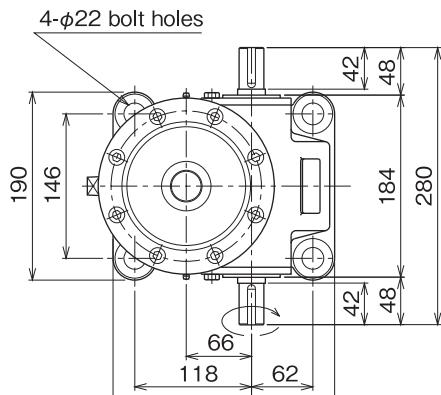
• If your required stroke is not shown in the above table, please consult with us, as we can manufacture what you need.

**J3G**  
Dimensional  
Drawing

# Dimensional Drawing: J3G Traveling Nut Type Screw Jack

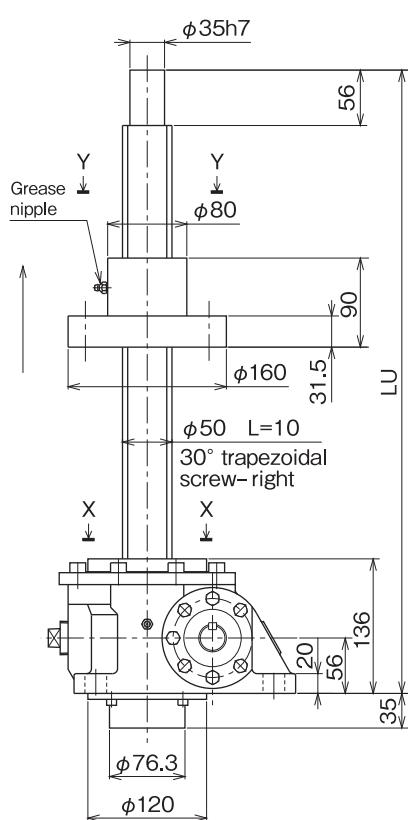
When the input shaft rotates in the direction indicated by an arrow, the traveling nut ascends.  
For information on sizes of the jack with bellows, please contact us.

## Two-dimensional drawing

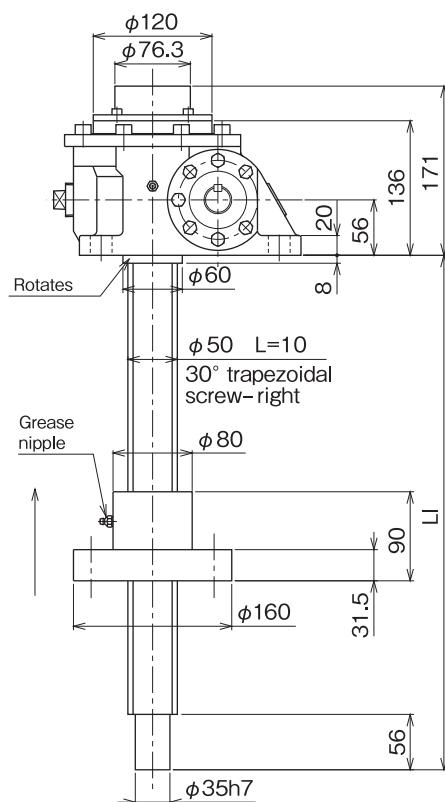


View X-X

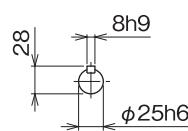
### Upright



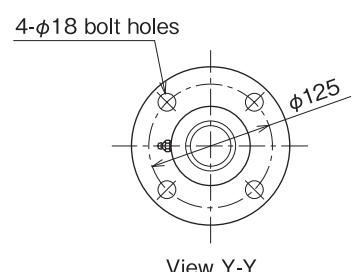
### Inverted



### Dimensional drawing of input shaft end



### Traveling Nut



View Y-Y

### ■ Approximate Weight (kg)

Stroke	Translating				Traveling nut type	
	Without bellows		With bellows			
	Without anti-rotation key	With anti-rotation key	Without anti-rotation key	With anti-rotation key		
100	29	32	30	33	40	
200	31	34	32	35	42	
300	32	35	33.5	37	43	
400	33	36	34.5	38	44	
500	35	38	36.5	40	46	
600	36	39	38	41.5	47	
800	39	42	41	44.5	50	

### ■ J3G

Stroke	Traveling nut type	
	U: Upright	I: Inverted
	LU	LI
100	430	320
200	530	420
300	630	520
400	730	620
500	830	720
600	930	820
800	1130	1020

If your required stroke is not shown in the above table, please consult with us, as we can manufacture what you need.

**JGA**  
Dimensional  
Drawing

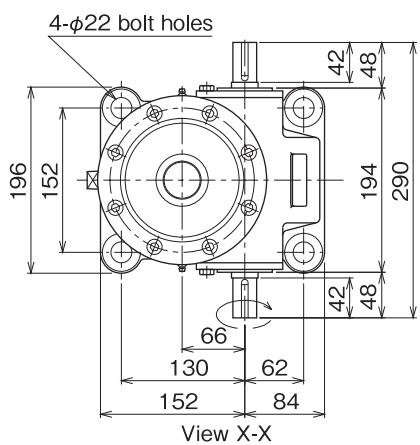
# Dimensional Drawing: JGA Translating Screw Jack

When the input shaft rotates in the direction indicated by an arrow, the lifting screw ascends.

Figures in brackets are for the model with anti-rotation key.

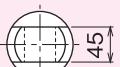
Change of name: Former J31/2A changed to JGA.

## Two-dimensional drawing



## Dimensional drawing of screw end fittings

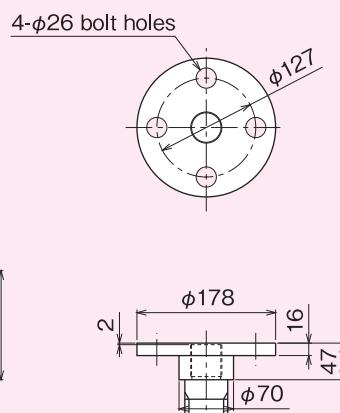
### Clevis



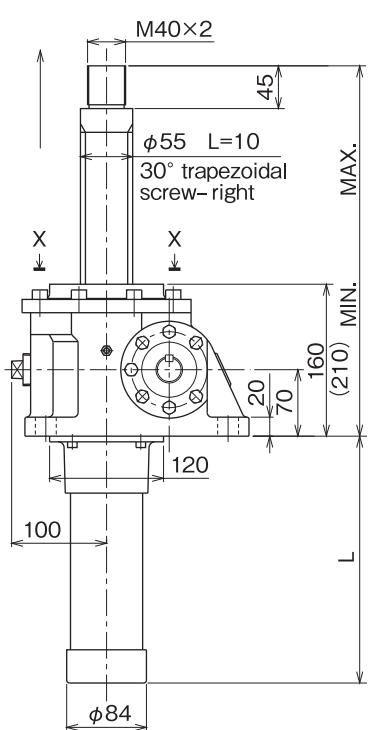
### Plain end



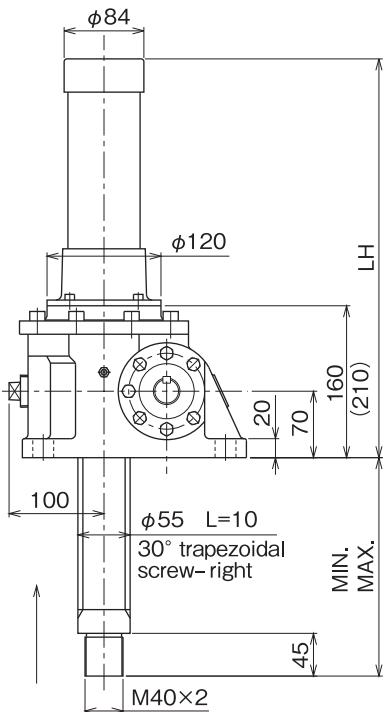
### Flange



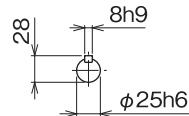
## Upright



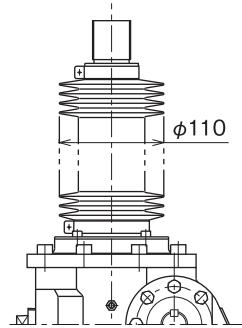
## Inverted



## Dimensional drawing of input shaft end



## Outer diameter of bellows



## JGA Screw Jack Measurement Table

Stroke	U: Upright						I: Inverted					
	N: Without anti-rotation key			K: With anti-rotation key			N: Without anti-rotation key			K: With anti-rotation key		
	N: Without bellows	B: With bellows	N: Without bellows	B: With bellows	N: Without bellows	B: With bellows	N: Without bellows	B: With bellows	N: Without bellows	B: With bellows	N: Without bellows	B: With bellows
100	220	320	160	265	365	260	270	370	260	315	415	160
200	220	420	260	265	465	360	270	470	360	315	515	260
300	220	520	360	300	600	360	270	570	460	350	650	460
400	220	620	460	300	700	460	270	670	560	350	750	560
500	220	720	560	300	800	560	270	770	660	350	850	860
600	220	820	660	340	940	860	270	870	860	390	990	660
800	220	1020	860	340	1140	1060	270	1070	1060	390	1190	860

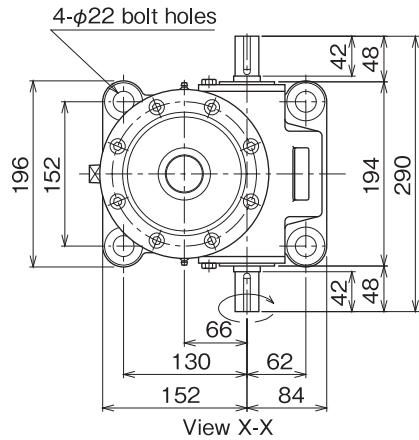
If your required stroke is not shown in the above table, please consult with us, as we can manufacture what you need.

**JGA**  
Dimensional  
Drawing

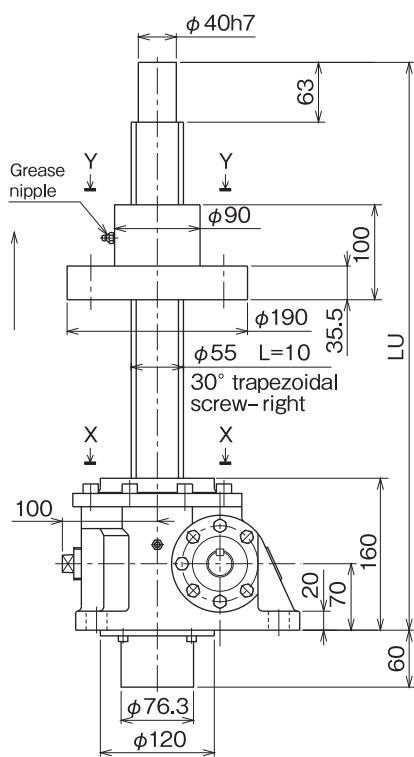
# Dimensional Drawing: JGA Traveling Nut Type Screw Jack

When the input shaft rotates in the direction indicated by an arrow, the traveling nut ascends.  
Change of name: Former J31/2A changed to JGA.  
For information on sizes of the jack with bellows, please contact us.

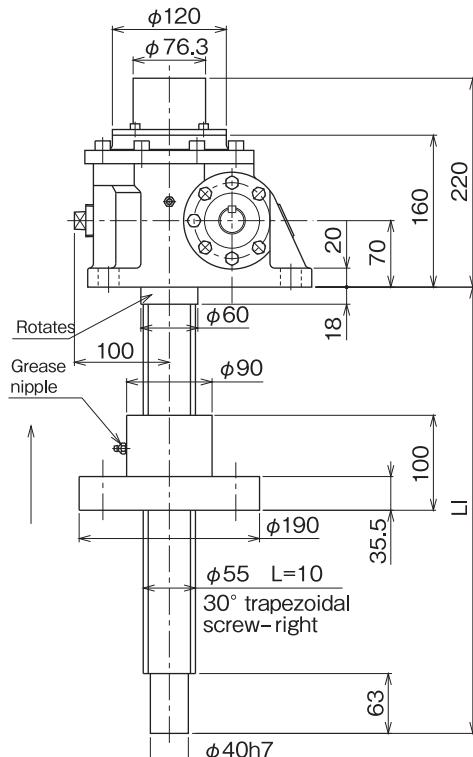
## Two-dimensional drawing



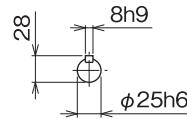
## Upright



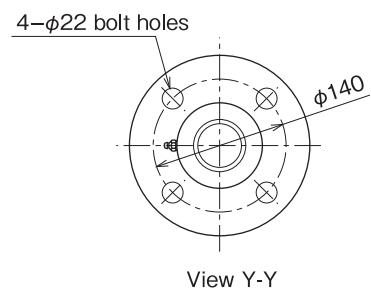
## Inverted



## Dimensional drawing of input shaft end



## Traveling Nut



## ■ Approximate Weight (kg)

Stroke	Translating				Traveling nut type
	Without bellows	With bellows	Without anti- rotation key	With anti- rotation key	
	(Without anti- rotation key)	(With anti- rotation key)	(Without anti- rotation key)	(With anti- rotation key)	
100	30	35	31	36	48
200	32	37	33	38	50
300	33	38	35	40	51
400	35	40	37	42	53
500	37	42	39	44	55
600	40	45	43	48	58
800	42	47	45	50	60

## ■ JGA

Stroke	Traveling nut type	
	U: Upright	I: Inverted
	LU	LI
100	485	345
200	585	445
300	685	545
400	785	645
500	885	745
600	985	845
800	1185	1045

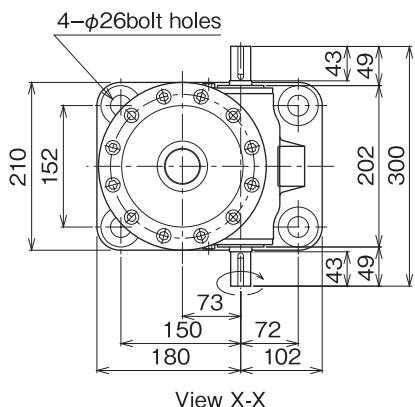
If your required stroke is not shown in the above table, please consult with us, as we can manufacture what you need.

**J4A**  
Dimensional  
Drawing

# Dimensional Drawing: J4A Translating Screw Jack

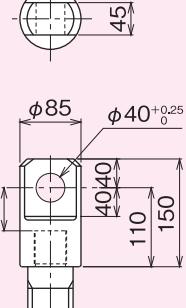
When the input shaft rotates in the direction indicated by an arrow, the lifting screw ascends.  
Figures in brackets are for the model with anti-rotation key.

## Two-dimensional drawing

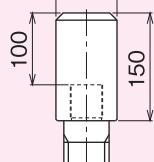


## Dimensional drawing of screw end fittings

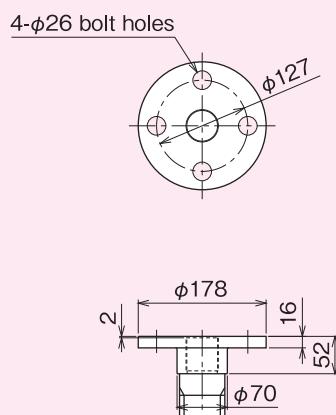
### Clevis



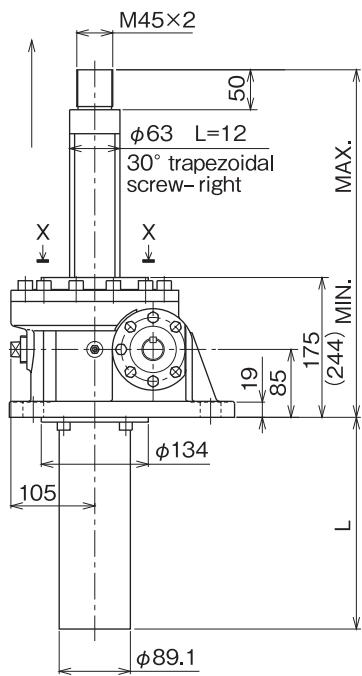
### Plain end



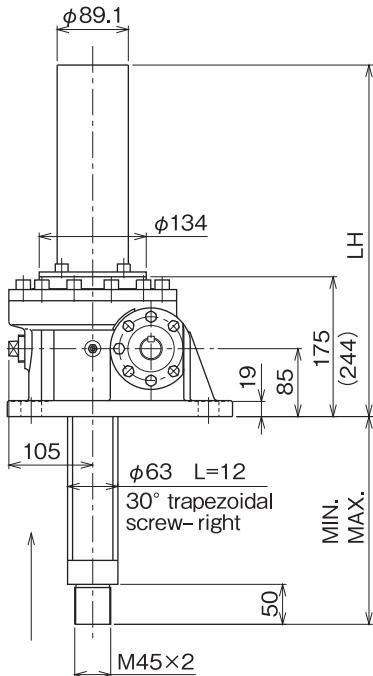
### Flange



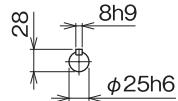
## Upright



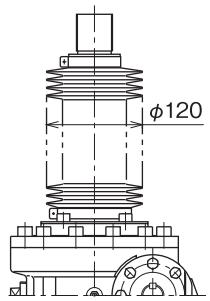
## Inverted



## Dimensional drawing of input shaft end



## Outer diameter of bellows



## J4A Screw Jack Measurement Table

Stroke	U: Upright								I: Inverted															
	N: Without anti-rotation key				K: With anti-rotation key				N: Without anti-rotation key				K: With anti-rotation key											
	N: Without bellows	B: With bellows	N: Without bellows	B: With bellows	N: Without bellows	B: With bellows	N: Without bellows	B: With bellows	N: Without bellows	B: With bellows	N: Without bellows	B: With bellows	N: Without bellows	B: With bellows	N: Without bellows	B: With bellows								
100	235	335	165	285	385	265	305	405	165	355	455	265	60	160	340	110	210	440	60	160	409	110	210	509
200	235	435	265	285	485	365	305	505	265	355	555	365	60	260	440	110	310	540	60	260	509	110	310	609
300	235	535	365	320	620	365	305	605	365	390	690	465	60	360	540	145	445	540	60	360	609	145	445	709
400	235	635	465	320	720	465	305	705	465	390	790	565	60	460	640	145	545	640	60	460	709	145	545	809
500	235	735	565	320	820	565	305	805	565	390	890	865	60	560	740	145	645	740	60	560	809	145	645	1109
600	235	835	665	360	960	865	305	905	865	430	1030	665	60	660	840	185	785	1040	60	660	1109	185	785	909
800	235	1035	865	360	1160	1065	305	1105	1065	430	1230	865	60	860	1040	185	985	1240	60	860	1309	185	985	1109

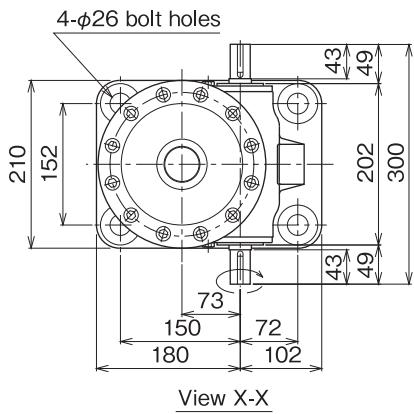
• If your required stroke is not shown in the above table, please consult with us, as we can manufacture what you need.

**J4A**  
Dimensional  
Drawing

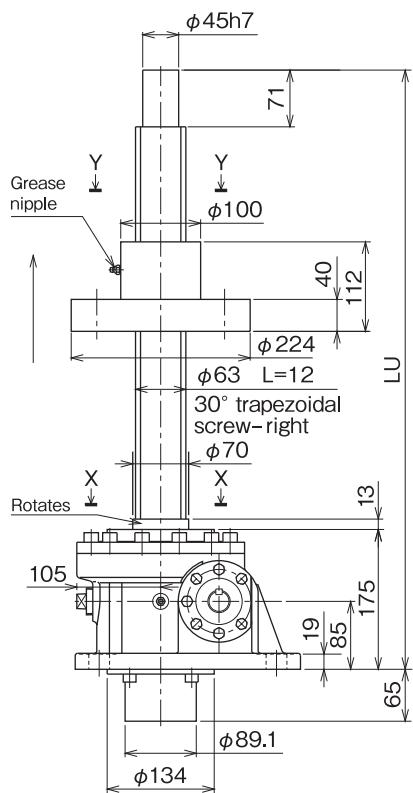
# Dimensional Drawing: J4A Traveling Nut Type Screw Jack

When the input shaft rotates in the direction indicated by an arrow, the traveling nut ascends.  
For information on sizes of the jack with bellows, please contact us.

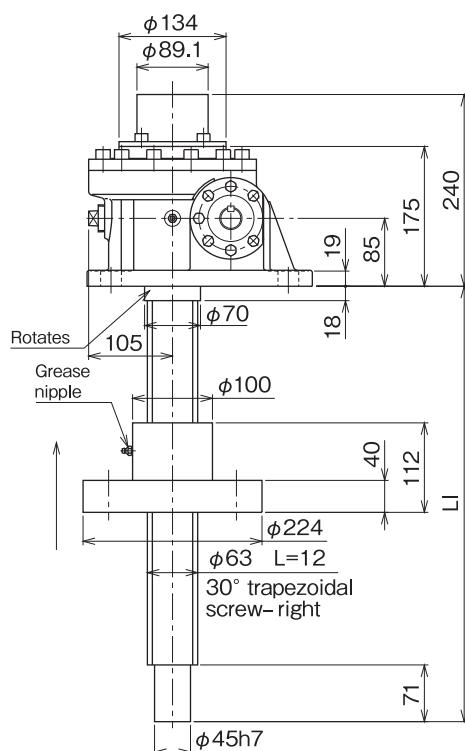
## Two-dimensional drawing



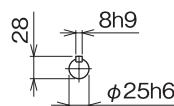
## Upright



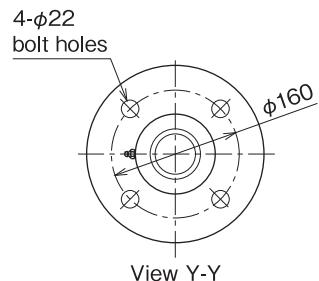
## Inverted



## Dimensional drawing of input shaft end



## Traveling Nut



## ■ Approximate Weight (kg)

Stroke	Translating		Traveling nut type
	Without bellows	With bellows	
	Without anti-rotation key	With anti-rotation key	
100	46	53	70
200	49	56	73
300	52	59	76
400	55	62	79
500	58	65	82
600	61	68	85
800	63	70	87

## ■ J4A

Stroke	Traveling nut type	
	U: Upright	I: Inverted
LU	515	345
LI	615	445
100	715	545
200	815	645
300	915	745
400	1015	845
600	1215	1045

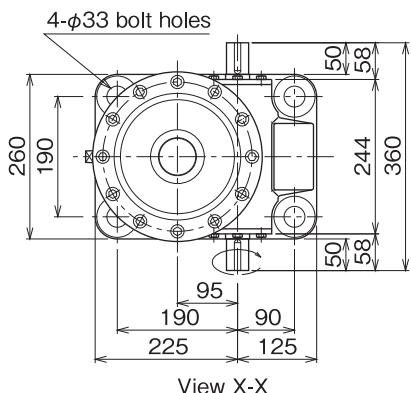
If your required stroke is not shown in the above table, please consult with us, as we can manufacture what you need.

**J5A**  
Dimensional  
Drawing

# Dimensional Drawing: J5A Translating Screw Jack

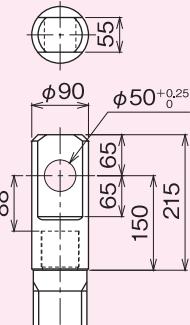
When the input shaft rotates in the direction indicated by an arrow, the lifting screw ascends.  
Figures in brackets are for the model with anti-rotation key.

## Two-dimensional drawing

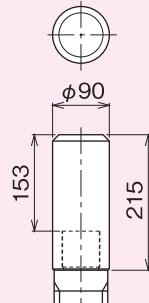


## Dimensional drawing of screw end fittings

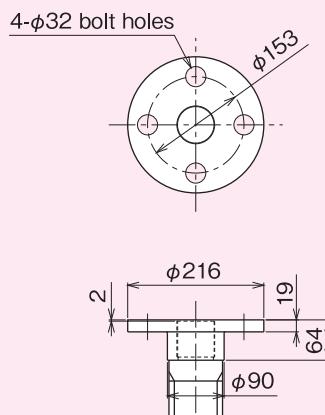
### Clevis



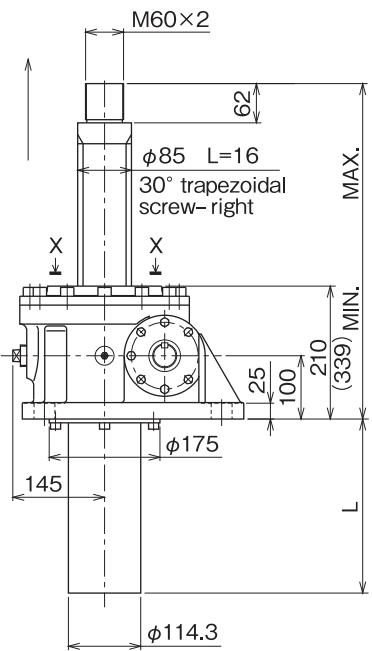
### Plain end



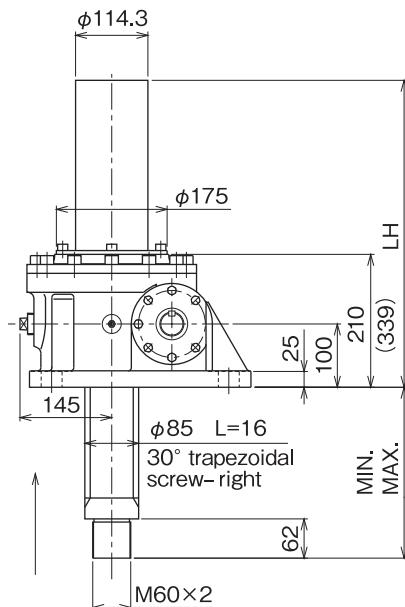
### Flange



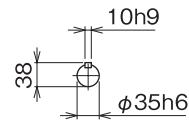
## Upright



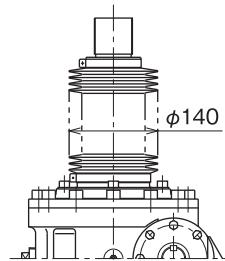
## Inverted



## Dimensional drawing of input shaft end



## Outer diameter of bellows



## ■ J5A Screw Jack Measurement Table

Stroke	U: Upright						I: Inverted					
	N: Without anti-rotation key			K: With anti-rotation key			N: Without anti-rotation key			K: With anti-rotation key		
	N: Without bellows	B: With bellows	MIN. / MAX.	N: Without bellows	B: With bellows	MIN. / MAX.	N: Without bellows	B: With bellows	MIN. / MAX.	N: Without bellows	B: With bellows	MIN. / MAX.
100	280	380	175	335	435	175	410	510	275	465	565	175
200	280	480	275	335	535	275	410	610	375	465	665	275
300	280	580	375	370	670	375	410	710	475	500	800	475
400	280	680	475	370	770	475	410	810	575	500	900	675
500	280	780	575	370	870	575	410	910	875	500	1000	675
600	280	880	675	410	1010	875	410	1010	875	540	1140	875
800	280	1080	875	410	1210	1075	410	1210	1075	540	1340	875

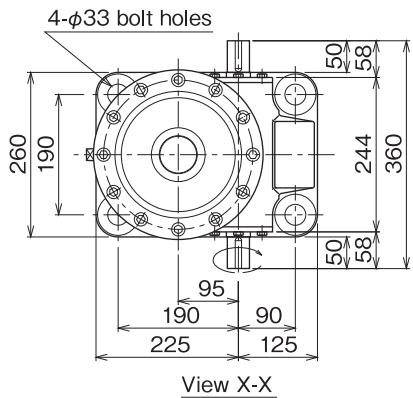
• If your required stroke is not shown in the above table, please consult with us, as we can manufacture what you need.

**J5A**  
Dimensional  
Drawing

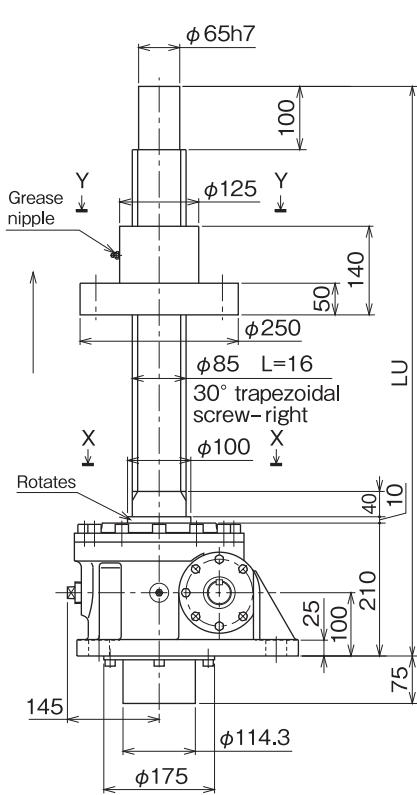
# Dimensional Drawing: J5A Traveling Nut Type Screw Jack

When the input shaft rotates in the direction indicated by an arrow, the traveling nut ascends.  
For information on sizes of the jack with bellows, please contact us.

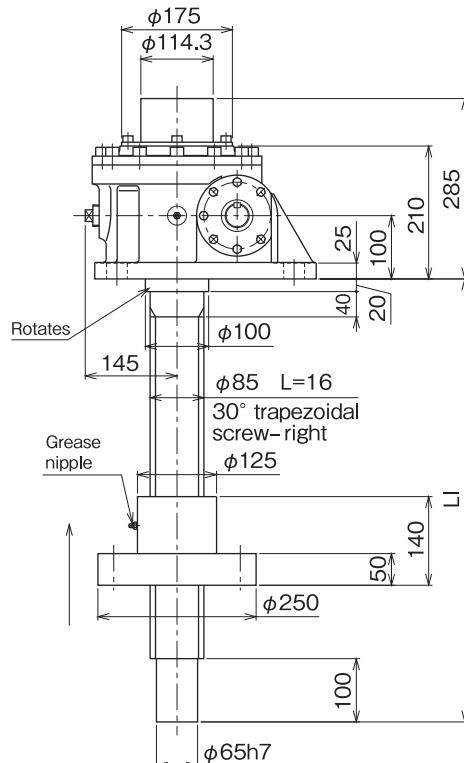
## Two-dimensional drawing



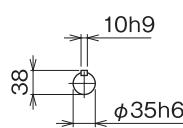
## Upright



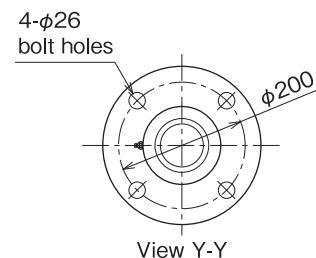
## Rotates



## Dimensional drawing of input shaft end



## Traveling Nut



## ■ Approximate Weight (kg)

Stroke	Translating		Traveling nut type
	Without bellows	With bellows	
	Without anti-rotation key + rotation key	With anti-rotation key + rotation key	
100	76	101	130
200	80	105	134
300	84	109	138
400	88	113	142
500	94	117	146
600	100	121	150
800	112	130	159

## J5A

Stroke	Traveling nut type	
	U: Upright	I: Inverted
LU	LI	
100	600	400
200	700	500
300	800	600
400	900	700
500	1000	800
600	1100	900
800	1300	1100

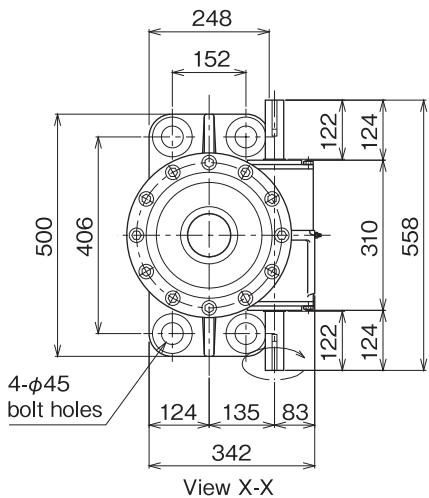
If your required stroke is not shown in the above table, please consult with us, as we can manufacture what you need.

**J6A**  
Dimensional  
Drawing

# Dimensional Drawing: J6A Translating Screw Jack

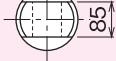
When the input shaft rotates in the direction indicated by an arrow, the lifting screw ascends.  
Figures in brackets are for the model with anti-rotation key.

## Two-dimensional drawing

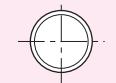


## Dimensional drawing of screw end fittings

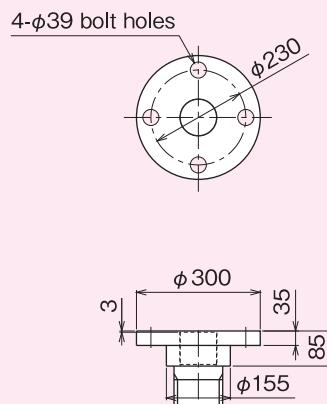
### Clevis



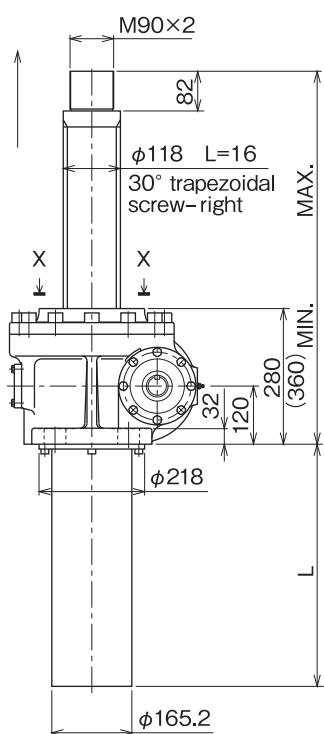
### Plain end



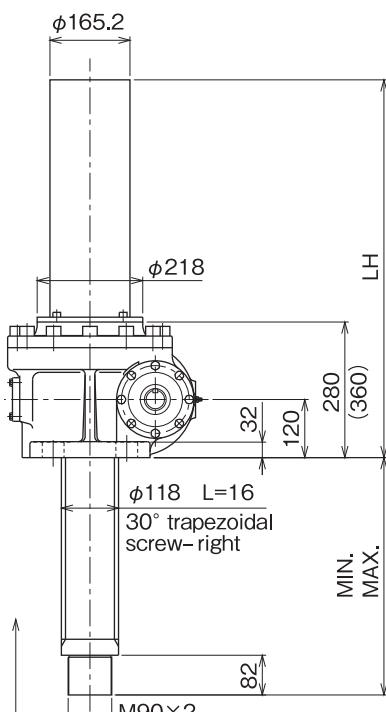
### Flange



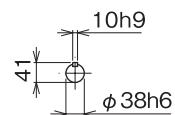
## Upright



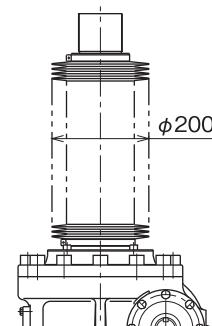
## Inverted



## Dimensional drawing of input shaft end



## Outer diameter of bellows



## J6A Screw Jack Measurement Table

Stroke	U: Upright								I: Inverted															
	N: Without anti-rotation key				K: With anti-rotation key				N: Without anti-rotation key				K: With anti-rotation key											
	N: Without bellows	B: With bellows	N: Without bellows	B: With bellows	N: Without bellows	B: With bellows	N: Without bellows	B: With bellows	N: Without bellows	B: With bellows	N: Without bellows	B: With bellows	N: Without bellows	B: With bellows	N: Without bellows	B: With bellows								
100	370	470	200	425	525	200	450	550	200	505	605	200	90	190	480	145	245	480	90	190	560	145	245	560
200	370	570	300	425	625	300	450	650	300	505	705	300	90	290	580	145	345	580	90	290	660	145	345	660
300	370	670	400	460	760	400	450	750	400	540	840	400	90	390	680	180	480	680	90	390	760	180	480	760
400	370	770	500	460	860	500	450	850	500	540	940	500	90	490	780	180	580	780	90	490	860	180	580	860
500	370	870	600	460	960	600	450	950	600	540	1040	700	90	590	880	180	680	880	90	590	960	180	680	1060
600	370	970	700	500	1100	700	450	1050	900	580	1180	900	90	690	980	220	820	980	90	690	1260	220	820	1260
800	370	1170	900	500	1300	900	450	1250	1100	580	1380	900	90	890	1180	220	1020	1180	90	890	1460	220	1020	1260

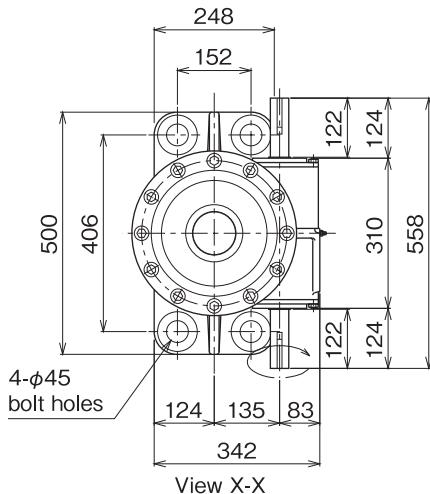
• If your required stroke is not shown in the above table, please consult with us, as we can manufacture what you need.

**J6A**  
Dimensional  
Drawing

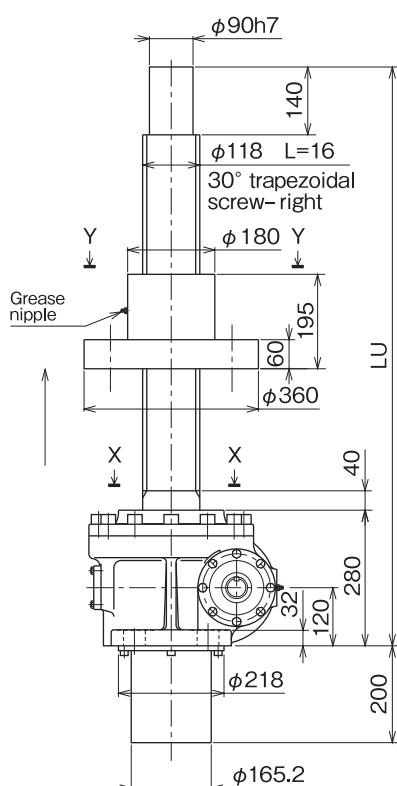
# Dimensional Drawing: J6A Traveling Nut Type Screw Jack

When the input shaft rotates in the direction indicated by an arrow, the traveling nut ascends.  
For information on sizes of the jack with bellows, please contact us.

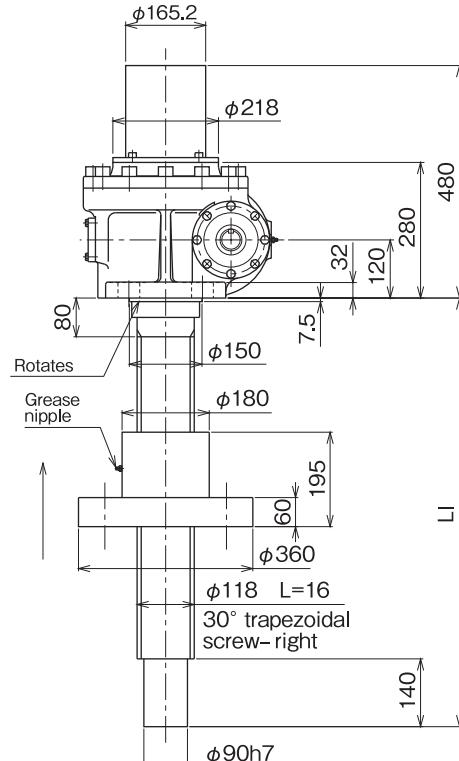
## Two-dimensional drawing



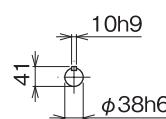
## Upright



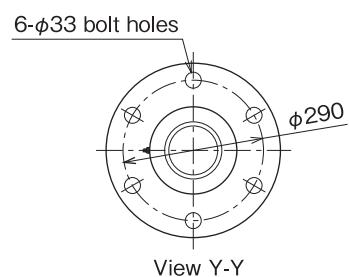
## Inverted



## Dimensional drawing of input shaft end



## Traveling Nut



## ■ Approximate Weight (kg)

Stroke	Translating		Traveling nut type
	Without bellows	With bellows	
	Without anti-rotation key	With anti-rotation key	
100	182	205	303
200	192	215	310
300	201	224	326
400	211	234	333
500	220	243	340
600	224	252	348
800	244	271	355

## ■ J6A

Stroke	Traveling nut type	
	U: Upright	I: Inverted
100	795	555
200	895	655
300	995	755
400	1095	855
500	1195	955
600	1295	1055
800	1495	1255

If your required stroke is not shown in the above table, please consult with us, as we can manufacture what you need.

**JFA**  
Dimensional  
Drawing

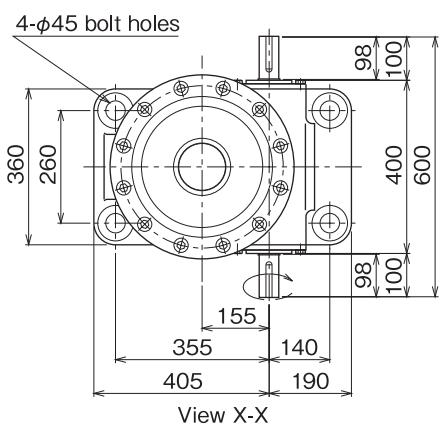
# Dimensional Drawing: JFA Translating Screw Jack

When the input shaft rotates in the direction indicated by an arrow, the lifting screw ascends.

Figures in brackets are for the model with anti-rotation key.

Change of name: Former J61/2A changed to JFA.

## Two-dimensional drawing



## Dimensional drawing of screw end fittings

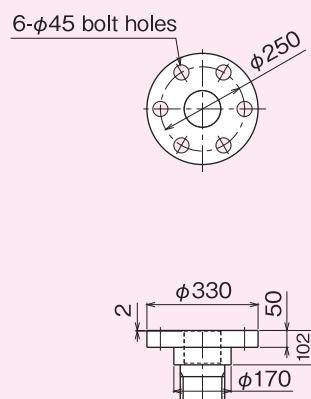
### Clevis



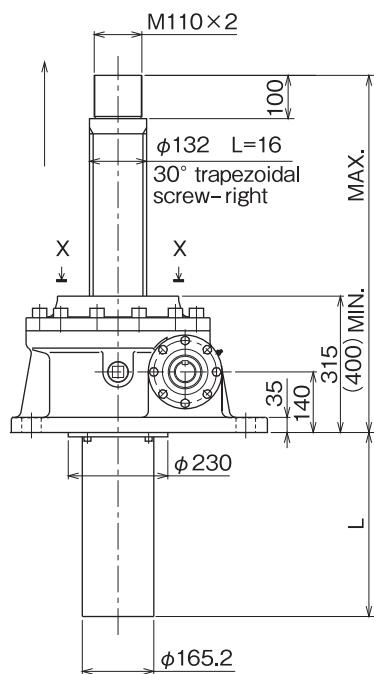
### Plain end



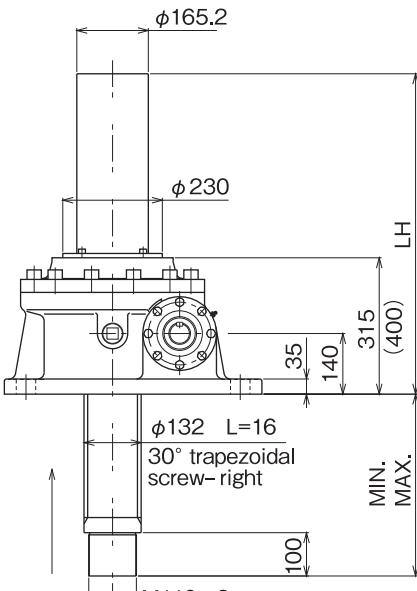
### Flange



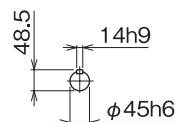
## Upright



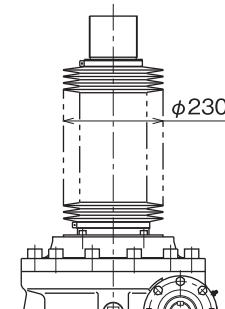
## Inverted



## Dimensional drawing of input shaft end



## Outer diameter of bellows



## ■ JFA Screw Jack Measurement Table

Stroke	U: Upright								I: Inverted									
	N: Without anti-rotation key				K: With anti-rotation key				N: Without anti-rotation key				K: With anti-rotation key					
	N: Without bellows	B: With bellows	N: Without bellows	B: With bellows	N: Without bellows	B: With bellows	N: Without bellows	B: With bellows	N: Without bellows	B: With bellows	N: Without bellows	B: With bellows	N: Without bellows	B: With bellows	N: Without bellows	B: With bellows		
100	425	525	125	490	590	225	510	610	225	575	675	225	110	210	440	175	275	540
200	425	625	225	490	690	325	510	710	325	575	775	325	110	310	540	175	375	640
300	425	725	325	525	825	325	510	810	425	610	910	425	110	410	640	210	510	825
400	425	825	425	525	925	425	510	910	525	610	1010	524	110	510	740	210	610	925
500	425	925	525	525	1025	525	510	1110	625	610	1110	725	110	610	840	210	710	1025
600	425	1025	625	565	1165	725	510	1110	925	650	1250	925	110	710	940	250	850	1040
800	425	1225	925	565	1365	925	510	1310	1125	650	1450	925	110	910	1240	250	1050	1325

• If your required stroke is not shown in the above table, please consult with us, as we can manufacture what you need.

**JFA**  
Dimensional  
Drawing

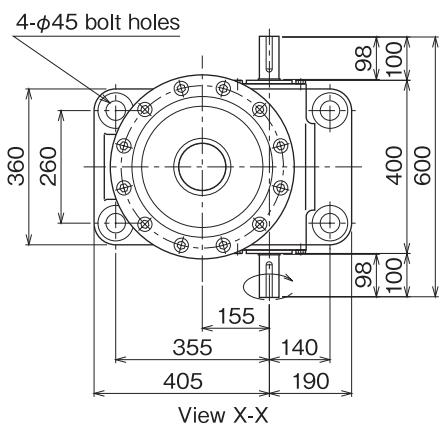
# Dimensional Drawing: JFA Traveling Nut Type Screw Jack

When the input shaft rotates in the direction indicated by an arrow, the traveling nut ascends.

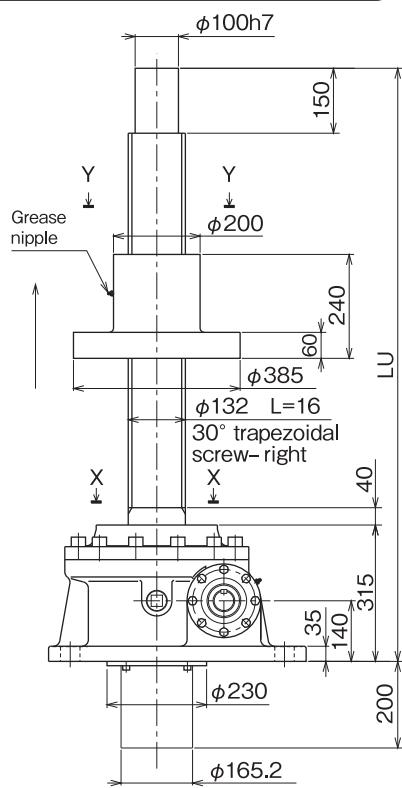
Change of name: Former J61/2A changed to JFA.

For information on sizes of the jack with bellows, please contact us.

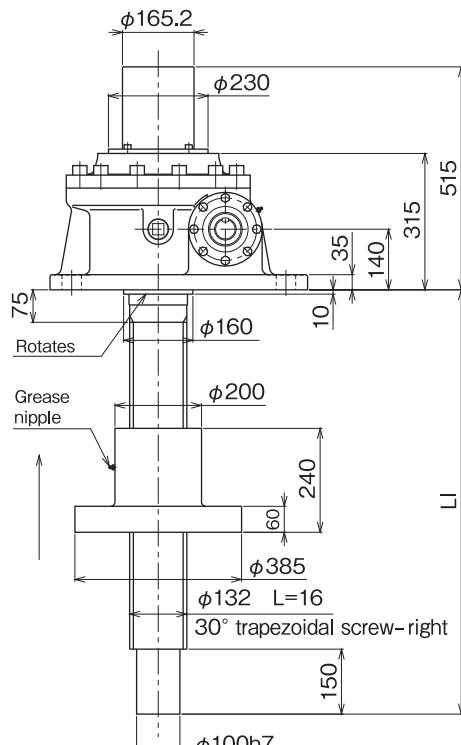
## Two-dimensional drawing



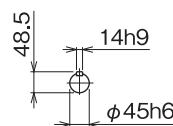
## Upright



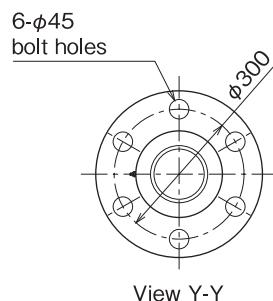
## Inverted



## Dimensional drawing of input shaft end



## Traveling Nut



## ■ Approximate Weight (kg)

Stroke	Translating		Traveling nut type		
	Without bellows	With bellows			
	Without anti-rotation key + rotation key	With anti-rotation key + rotation key			
100	315	350	323	358	429
200	327	362	335	370	440
300	338	373	350	385	451
400	350	385	362	397	462
500	361	396	374	409	473
600	373	408	388	423	484
800	395	430	410	445	495

## ■ JFA

Stroke	Traveling nut type	
	U: Upright	I: Inverted
100	885	605
200	985	705
300	1085	805
400	1185	905
500	1285	1005
600	1385	1105
800	1585	1305

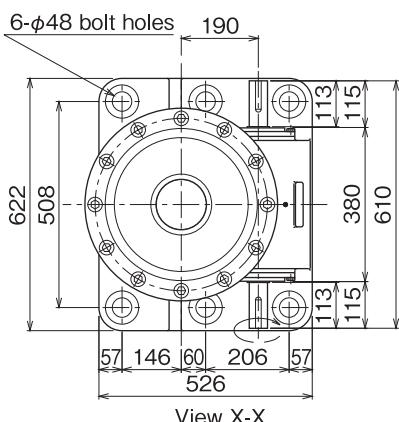
If your required stroke is not shown in the above table, please consult with us, as we can manufacture what you need.

**J7A**  
Dimensional  
Drawing

# Dimensional Drawing: J7A Translating Screw Jack

When the input shaft rotates in the direction indicated by an arrow, the lifting screw ascends.

## Two-dimensional drawing



## Dimensional drawing of screw end fittings

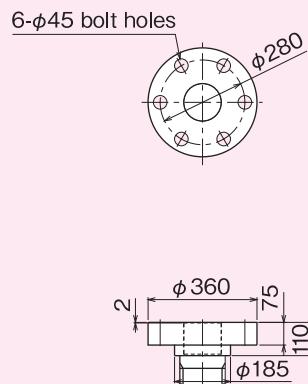
Clevis



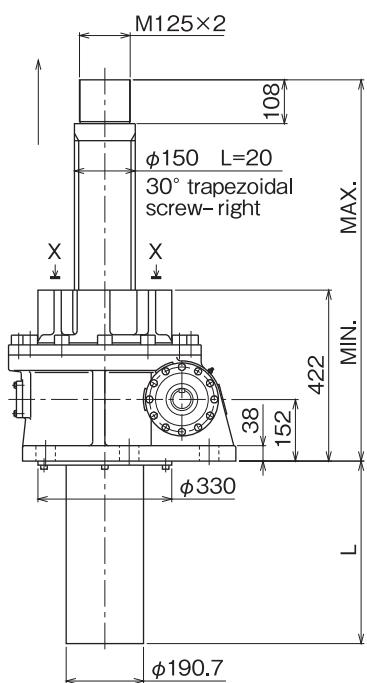
Plain end



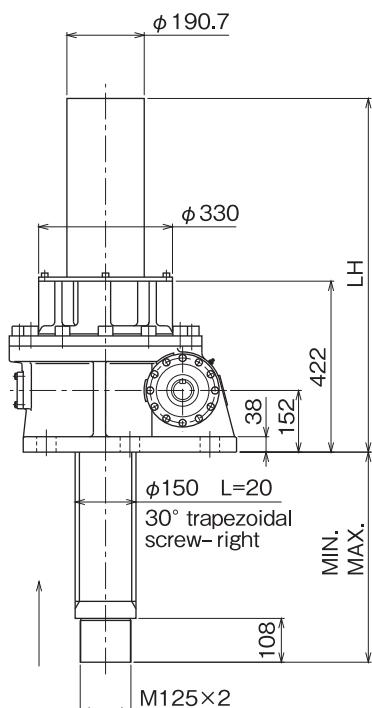
Flange



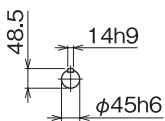
## Upright



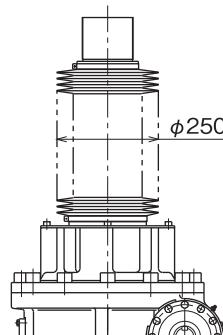
## Inverted



## Dimensional drawing of input shaft end



## Outer diameter of bellows



## ■ J7A Screw Jack Measurement Table

Stroke	U: Upright								I: Inverted									
	N: Without anti-rotation key				K: With anti-rotation key				N: Without anti-rotation key				K: With anti-rotation key					
	N: Without bellows	B: With bellows	N: Without bellows	B: With bellows	N: Without bellows	B: With bellows	N: Without bellows	B: With bellows	N: Without bellows	B: With bellows	N: Without bellows	B: With bellows	N: Without bellows	B: With bellows	N: Without bellows	B: With bellows		
100	540	640	150	600	700	250	540	640	150	600	700	250	118	218	572	180	280	672
200	540	740	250	600	800	350	540	740	250	600	800	350	118	318	672	180	380	772
300	540	840	350	635	935	350	540	840	350	635	935	350	118	418	772	215	515	772
400	540	940	450	635	1035	450	540	940	450	635	1035	450	118	518	872	215	615	872
500	540	1040	550	635	1135	550	540	1040	550	635	1135	550	118	618	972	215	715	972
600	540	1140	650	675	1275	750	540	1140	650	675	1275	750	118	718	1072	255	855	1172
800	540	1340	950	675	1475	950	540	1340	950	675	1475	950	118	918	1372	255	1055	1372

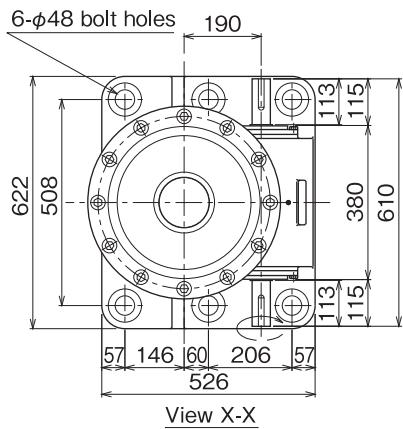
• If your required stroke is not shown in the above table, please consult with us, as we can manufacture what you need.

**J7A**  
Dimensional  
Drawing

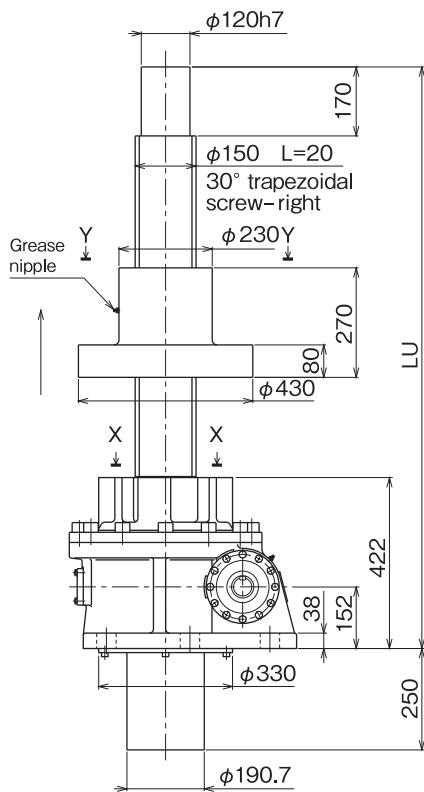
# Dimensional Drawing: J7A Traveling Nut Type Screw Jack

When the input shaft rotates in the direction indicated by an arrow, the traveling nut ascends.  
For information on sizes of the jack with bellows, please contact us.

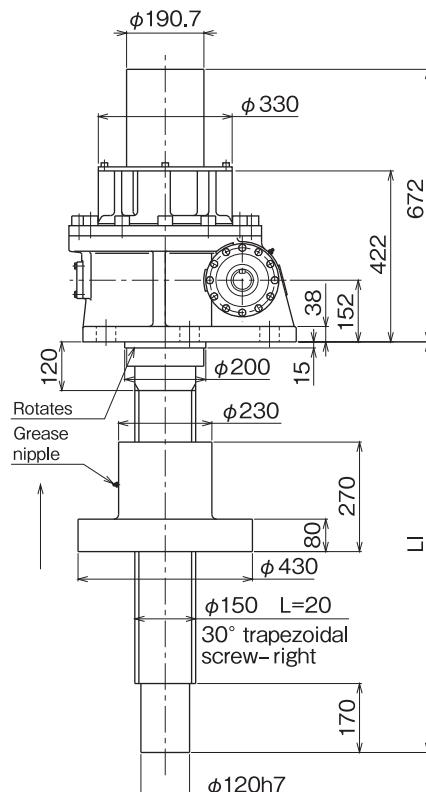
## Two-dimensional drawing



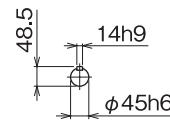
## Upright



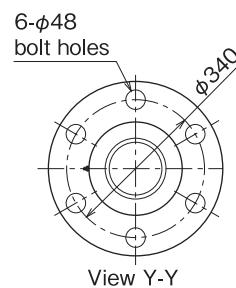
## Inverted



## Dimensional drawing of input shaft end



## Traveling Nut



## ■ Approximate Weight (kg)

Stroke	Translating		Traveling nut type
	Without bellows	With bellows	
	Without anti-rotation key	With anti-rotation key	
100	565	574	805
200	580	589	817
300	594	609	829
400	609	623	841
500	623	638	853
600	638	653	865
800	667	687	1065

## ■ J7A

Stroke	Traveling nut type	
	U: Upright	I: Inverted
100	1005	700
200	1105	800
300	1205	900
400	1305	1000
500	1405	1100
600	1505	1200
800	1705	1400

If your required stroke is not shown in the above table, please consult with us, as we can manufacture what you need.

