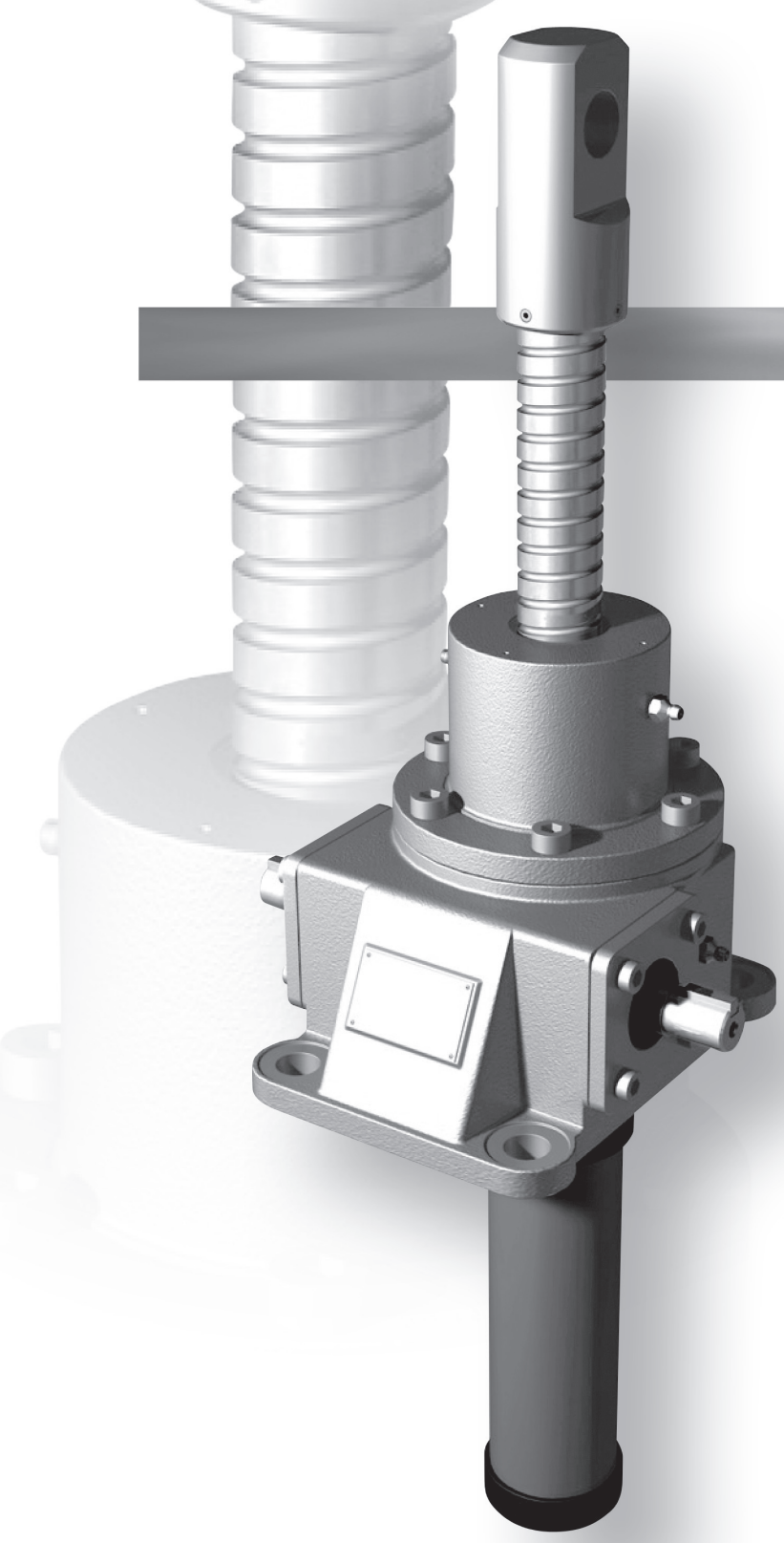
Ball Screw Jack

04

High efficiency, and best for high-speed operation

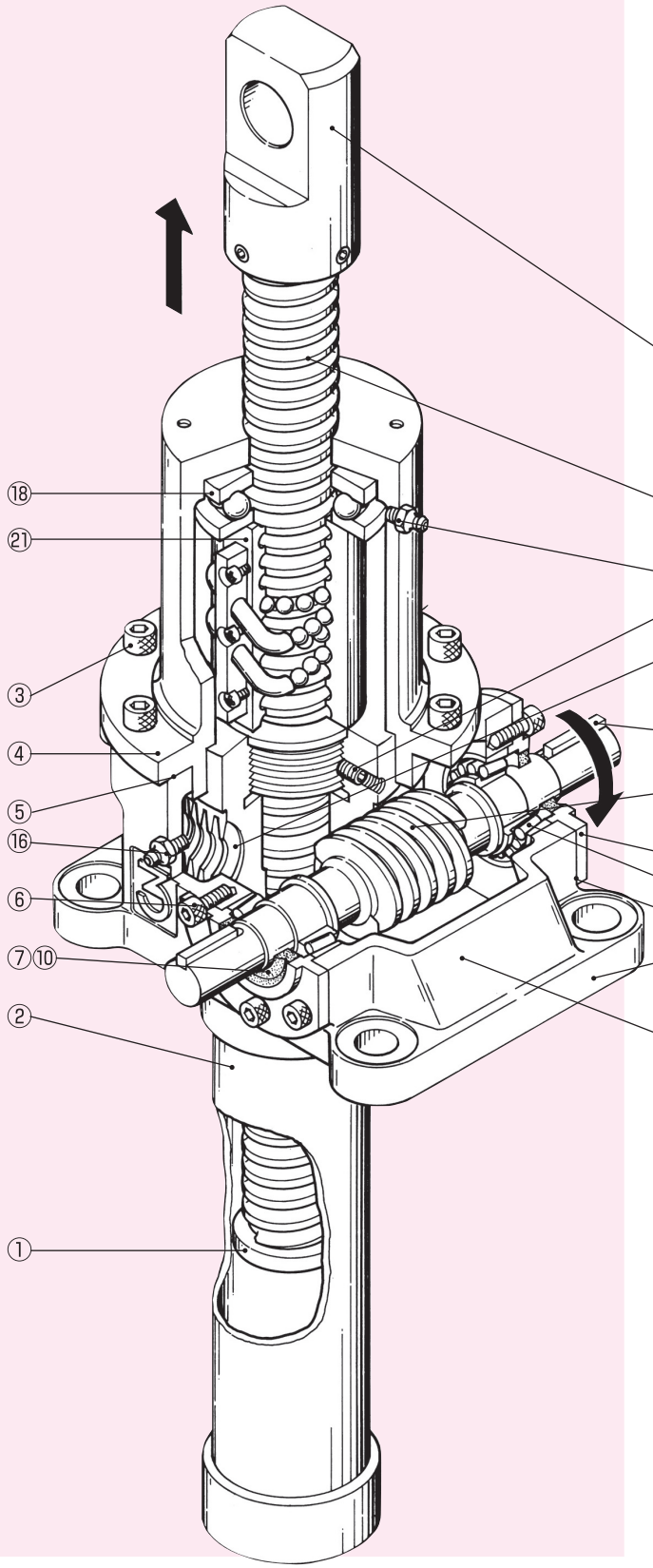


Structure & Features

Ball Screw Jack:Structure & Features

Standard ball screw jack using a ball screw shaft (lifting screw) which is best for high-speed operation

■Structural Drawing:
Upright Translating Ball Screw Jack



- This type uses rolling friction between the nut and lifting screw, and its efficiency is approximately 3 times higher than that of the trapezoidal screw type, realizing energy-saving operation.
- This type of jack does not have a self-locking function, so it is required to install a brake.
- We can also manufacture a jack with anti-rotation mechanism which prevents its lifting screw from drag turning.
- Wide-ranging options are available, including dustproof bellows to protect the lifting screw, trunnion base, limit switch for control, and RC encoder.

The lifting screw end is designed to allow attaching two types of end fittings (e.g. clevis in the drawing) in order to prevent the lifting screw from drag turning on the side of your device.

⑲ The lifting screw is made of carbon steel (right-hand thread).

⑰ The worm wheel is made of special bronze (right-hand thread). The ball bearing is used for holding the rotation.

⑨ The Input shaft key is new JIS compliant.

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

⑬ The housing is made of ductile cast iron.

■Part Names

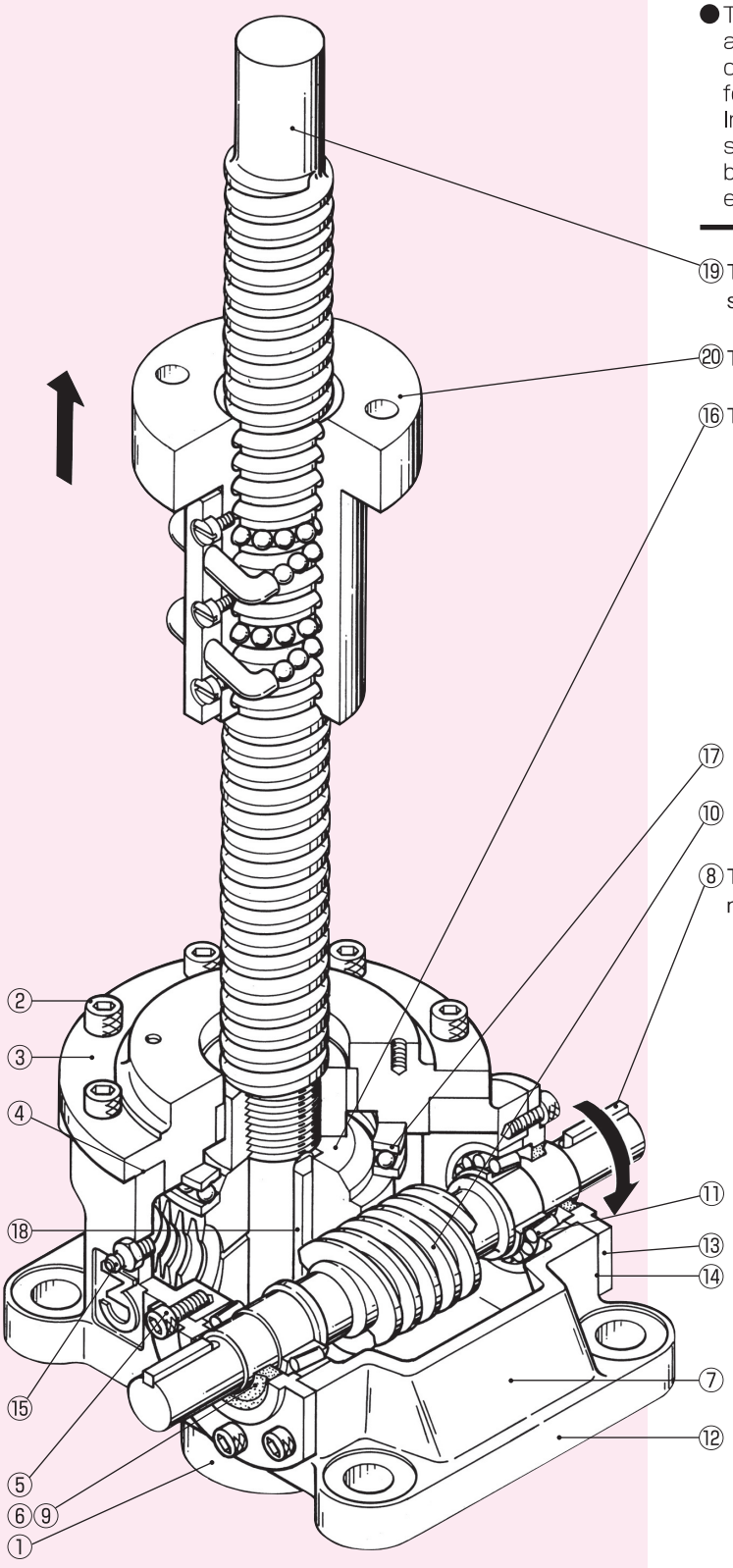
#	Part name	#	Part name
①	Fastening plate	⑫	Bearing
②	Lifting screw cover	⑬	Housing
③	Bolt	⑭	Side cover
④	Housing cover	⑮	Shim for side cover
⑤	Shim for housing cover	⑯	Grease nipple
⑥	Bolt	⑰	Worm wheel
⑦	Snap ring (JOB only)	⑱	Thrust ball bearing
⑧	Plate	⑲	Ball screw
⑨	Key	⑳	Locking screw
⑩	Oil seal (except JOB)	㉑	Ball screw nut
⑪	Worm shaft	㉒	Grease nipple

Structure & Features

Traveling Nut Type Ball Screw Jack:Structure & Features

The screw rotates and the nut travels along it – this type of jacks is called traveling nut type jacks.

■Structural Drawing:
Traveling Nut Type (Upright) Ball 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 prevent side force which ball screw jacks need to avoid, and to ensure 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.

⑲ The cylinder finish which is convenient for supporting the screw end.

⑳ Traveling nut which reduces friction by the rotation of the ball.

⑯ The worm wheel is made of special bronze (right-hand thread).

⑧ The Input shaft key is new JIS compliant.

■Part Names

#	Part name
①	Cover
②	Bolt
③	Housing cover
④	Shim for housing cover
⑤	Bolt
⑥	Snap ring (JOB only)
⑦	Plate
⑧	Key
⑨	Oil seal (except JOB)
⑩	Worm shaft
⑪	Bearing
⑫	Housing
⑬	Side cover
⑭	Shim for side cover
⑮	Grease nipple
⑯	Worm wheel
⑰	Thrust bearing
⑱	Key
⑲	Ball screw
⑳	⑳ Traveling nut

Specification

Standard Specifications

Series/size code		J0B	J1B	J2B	J3B	J4B
Capacity		10kN	25kN	50kN	100kN	200kN
Lifting screw diameter		20mm	25mm	36mm	45mm	60mm
Lifting screw lead		5mm	8mm	10mm	12mm	16mm
Worm gear ratio	H	5	6	6	8	8
	L	24	24	24	24	24
Efficiency	H	0.64	0.61	0.61	0.59	0.6
	L	0.36	0.38	0.35	0.43	0.44
Maximum allowable power per jack		0.75kW	1.3kW	2.5kW	3.7kW	6kW
Input shaft torque at no load (b)		0.3N·m	1N·m	2N·m	3N·m	5N·m
Torque coefficient (a)	H	0.25	0.35	0.43	0.4	0.53
	L	0.09	0.14	0.19	0.18	0.24
Required input torque at maximum load	H	2.8N·m	9.7N·m	24N·m	43N·m	111N·m
	L	1.2N·m	4.5N·m	12N·m	21N·m	53N·m
Holding torque at maximum load	H	1.5N·m	5N·m	13N·m	21N·m	56N·m
	L	0.18N·m	0.7N·m	1.5N·m	3.5N·m	10N·m
Worm rotation per 10mm of stroke	H	10	7.5	6	6.7	5
	L	48	30	24	20	15
Speed coefficient (c) (screw lead per rotation of input shaft)	H	1.0mm	1.33mm	1.67mm	1.50mm	2mm
	L	0.21mm	0.33mm	0.42mm	0.5mm	0.67mm
Maximum allowable input rotation speed ※ (in case the torque is 1000min⁻¹ or more, in principle, the lubricant is oil)		1800min⁻¹	1800min⁻¹	1800min⁻¹	1800min⁻¹	1800min⁻¹
Anti-rotation key torque at maximum load		5N·m	15N·m	45N·m	115N·m	300N·m
Input shaft allowable overhang load		300N	450N	700N	1200N	1200N
Amount of filled grease		0.15kg	0.35kg	0.8kg	1.5kg	2.3kg
Operating temperature range		−15～80℃	−15～80℃	−15～80℃	−15～80℃	−15～100℃

※The lubricant for the lifting screw is grease. J0B does not use oil lubricant.

Specification

Standard Specifications

Change of name: Former J61/2B changed to JFB

Series/size code		J5B	J6B	JFB	J7B
Capacity		300kN	500kN	750kN	1000kN
Lifting screw diameter		80mm	100mm	120mm	140mm
Lifting screw lead		20mm	24mm	28mm	32mm
Worm gear ratio	H	10 2/3	10 2/3	10 2/3	12 2/3
	L	32	32	38	36
Efficiency	H	0.61	0.6	0.61	0.62
	L	0.41	0.39	0.39	0.38
Maximum allowable power per jack		9.5kW	14kW	17kW	22kW
Input shaft torque at no load (b)		10N·m	20N·m	30N·m	40N·m
Torque coefficient (a)	H	0.49	0.6	0.68	0.65
	L	0.25	0.3	0.3	0.37
Required input torque at maximum load	H	157N·m	319N·m	542N·m	685N·m
	L	84N·m	172N·m	256N·m	412N·m
Holding torque at maximum load	H	80N·m	160N·m	180N·m	370N·m
	L	9N·m	14N·m	15N·m	21N·m
Worm rotation per 10mm of stroke	H	5.3	4.4	3.8	3.9
	L	16	13.3	13.6	11.2
Speed coefficient (c) (screw lead per rotation of input shaft)	H	1.87mm	2.26mm	2.62mm	2.53mm
	L	0.63mm	0.75mm	0.74mm	0.89mm
Maximum allowable input rotation speed ※ (in case the torque is 1000min^{-1} or more, in principle, the lubricant is oil)		1800min^{-1}	1800min^{-1}	1800min^{-1}	1800min^{-1}
Anti-rotation key torque at maximum load		600N·m	1250N·m	2250N·m	3500N·m
Input shaft allowable overhang load		2200N	2500N	2500N	3000N
Amount of filled grease		4.5kg	6kg	12kg	15kg
Operating temperature range		−15～100℃	−15～100℃	−15～100℃	−15～100℃

※The lubricant for the lifting screw is grease. JOB does not use oil lubricant.

Allowable buckling load

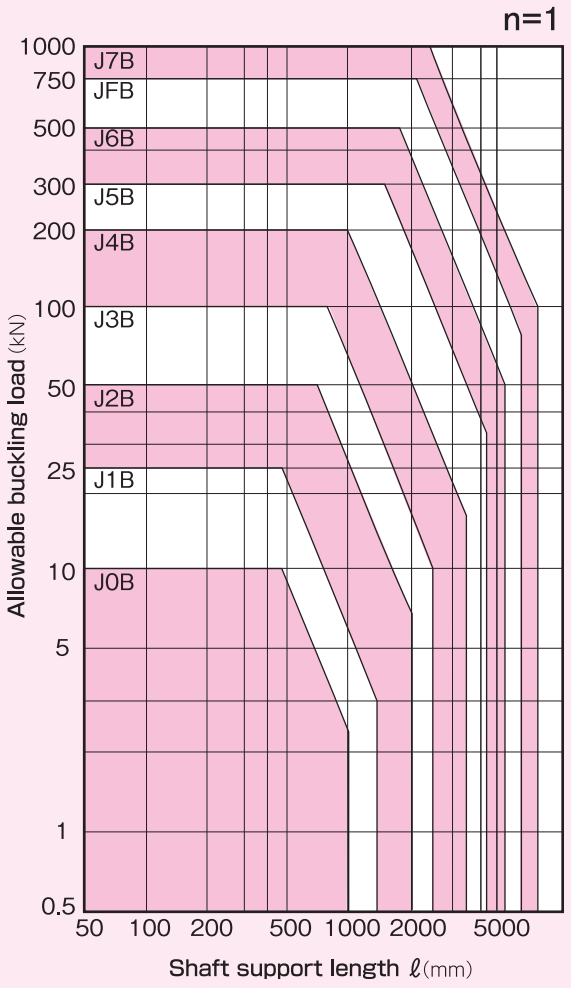
Allowable Buckling Load

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



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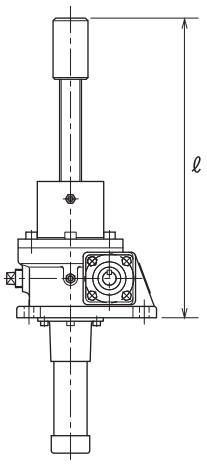
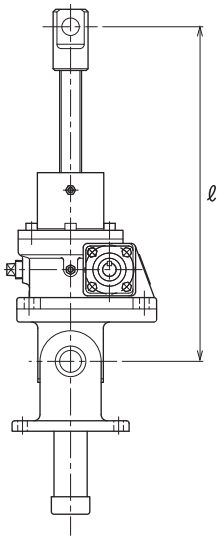


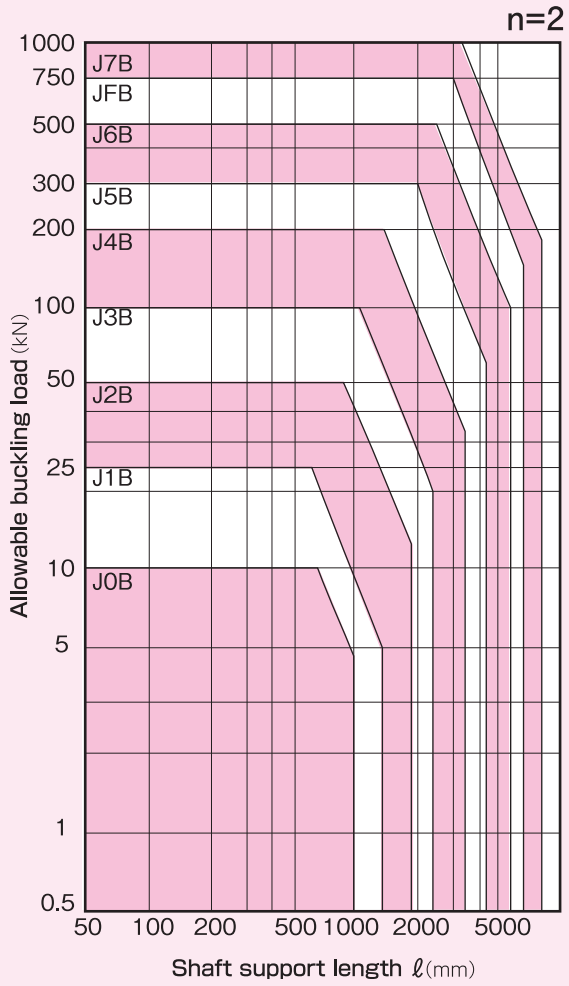
n=1



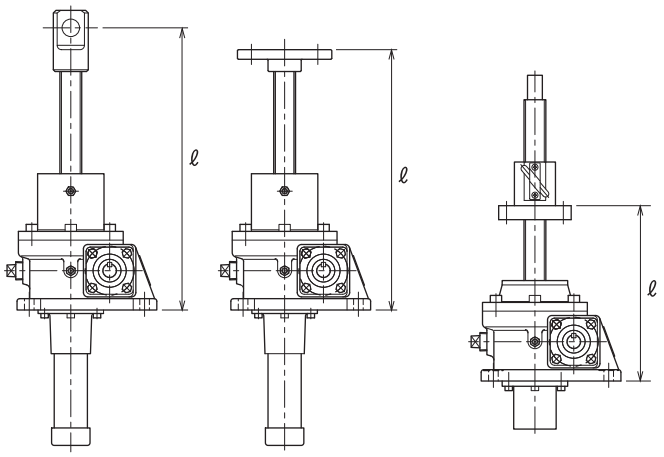
Allowable buckling load

Allowable Buckling Load

Jack fixed / screw end supported



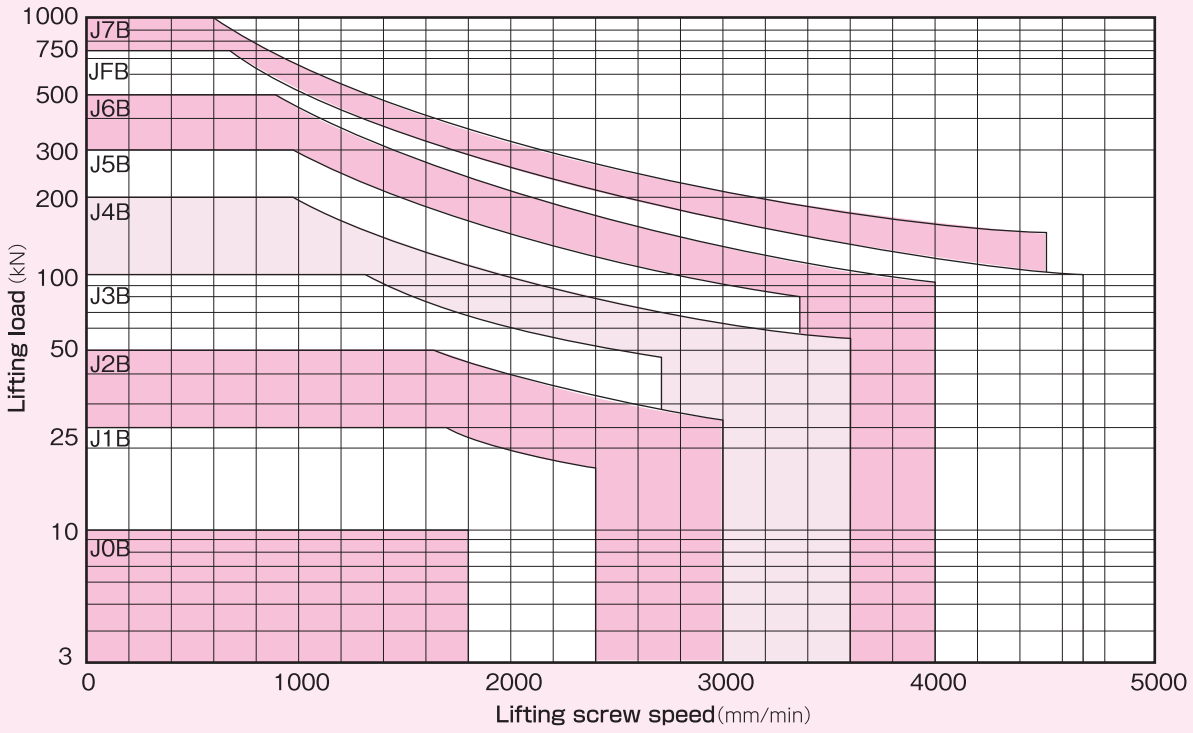
n=2



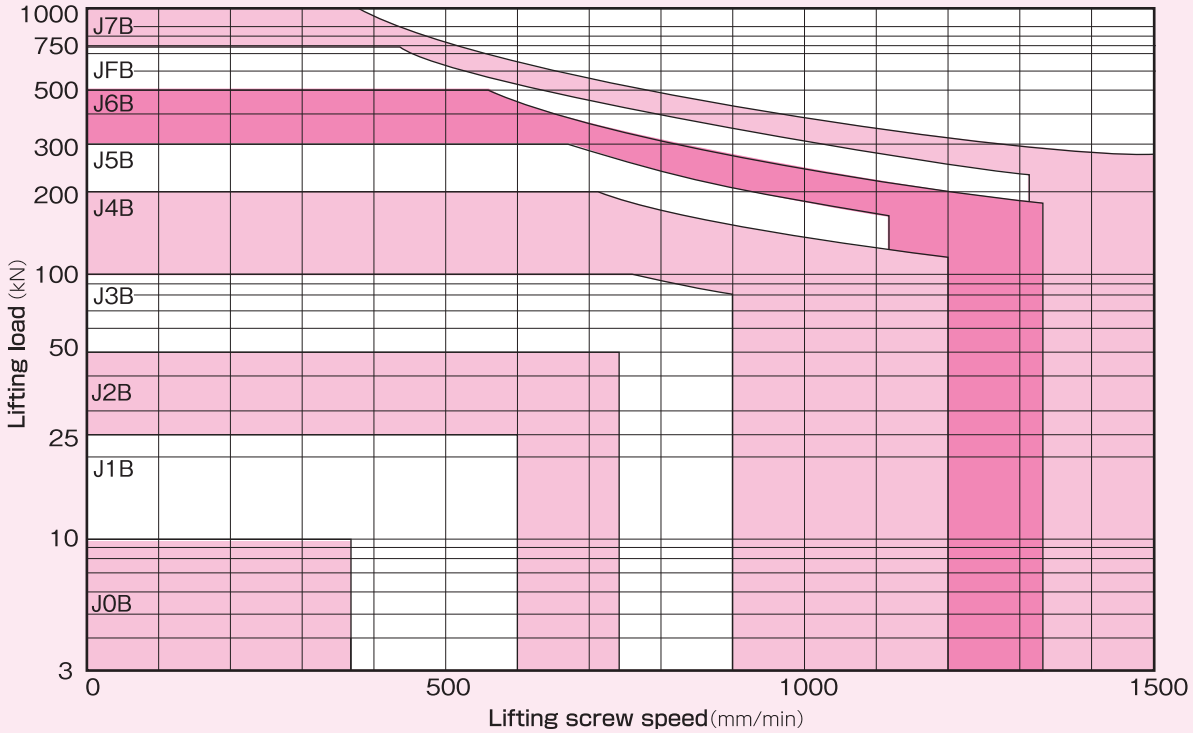
Lifting load/ Lifting screw speed graphs

Lifting Load / Lifting Screw Speed Graph

Worm gear ratio H



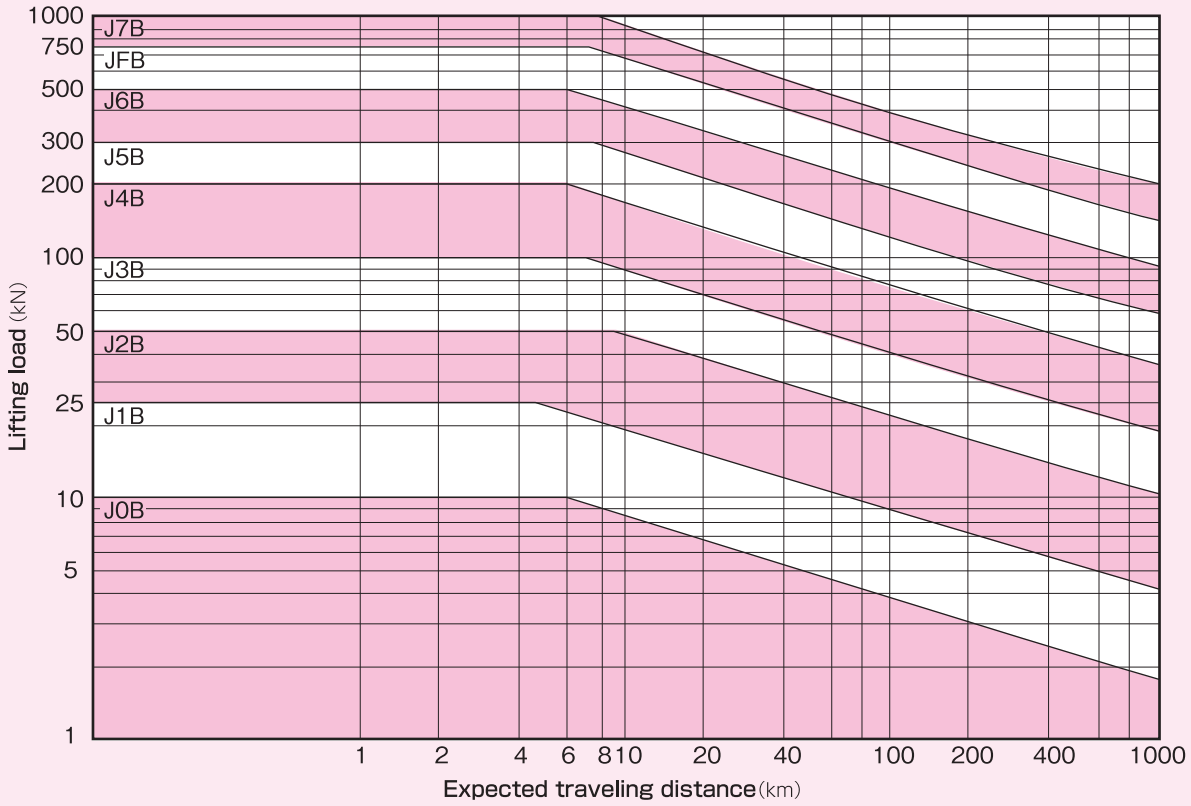
Worm gear ratio L



Expected traveling distance

Expected Traveling Distance

The ball screw life, similarly to the bearing life, is determined by the flaking of the ball rotating surface due to fatigue. The following graph shows the relationship between load on the ball screw and traveling distance.
It is necessary to consider the following factors which affect the ball screw life: installed conditions, loading conditions, frequency of use, operating conditions, lubrication conditions, surrounding environment, maintenance conditions. Furthermore, when selecting a jack, you also need to consider other machine and seal components, taking into account operating conditions. Please contact us to find necessary components.

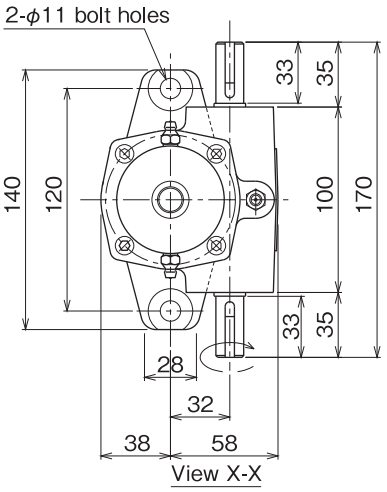


JOB
Dimensional Drawing

Dimensional Drawing: JOB Translating Ball Screw Jack

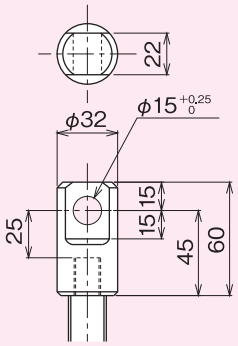
When the input shaft rotates in the direction indicated by an arrow, the lifting screw ascends.

Two-dimensional drawing

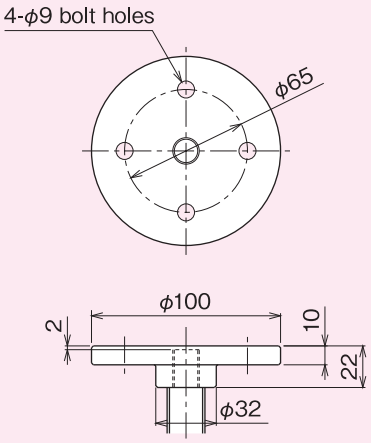


Dimensional drawing of screw end fittings

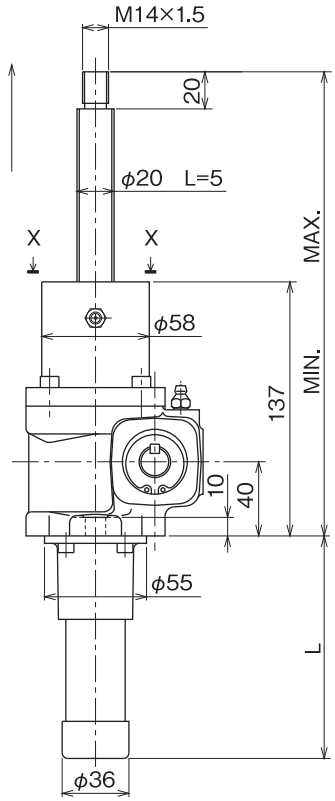
Clevis



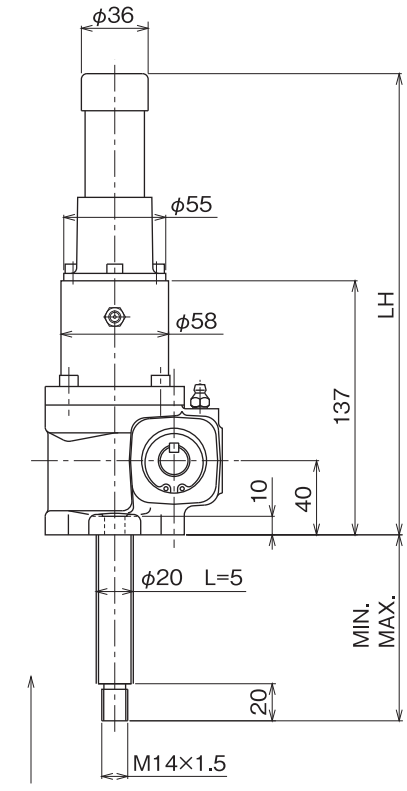
Flange



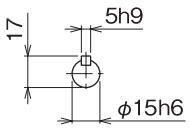
Upright



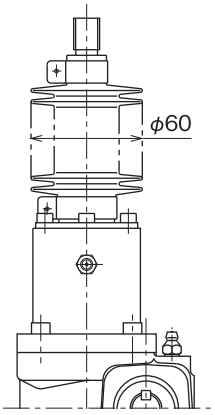
Inverted



Dimensional drawing of input shaft end



Outer diameter of bellows



■JOB Ball Screw Jack Measurement Table

Stroke	U: Upright						I: Inverted					
	N: Without bellows			B: With bellows			N: Without bellows			B: With bellows		
	MIN.	MAX.	L	MIN.	MAX.	L	MIN.	MAX.	LH	MIN.	MAX.	LH
100	175	275	150	225	325	250	40	140	287	90	190	387
200	175	375	250	225	425	350	40	240	387	90	290	487
300	175	475	350	255	555	450	40	340	487	120	420	587
400	175	575	450	255	655	550	40	440	587	120	520	687
500	175	675	550	265	765	650	40	540	687	130	630	787
600	175	775	650	265	865	850	40	640	787	130	730	987
800	175	975	850	315	1115	1050	40	840	987	180	980	1187

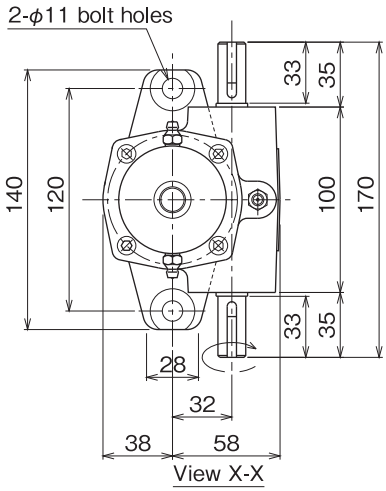
· If your required stroke is not shown in the above table, please consult with us, as we can manufacture what you need.

JOB
Dimensional Drawing

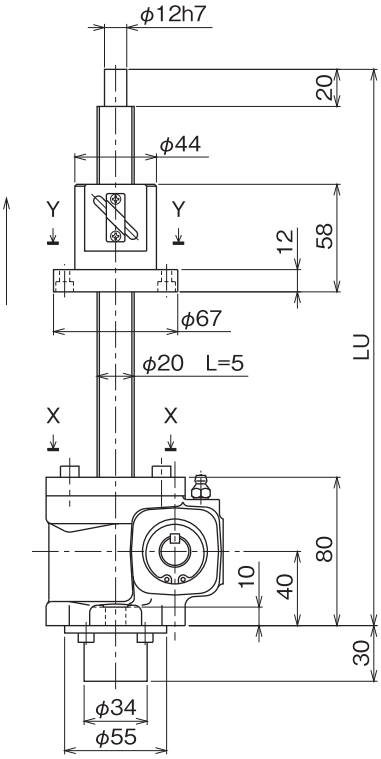
Dimensional Drawing: JOB Traveling Nut Type Ball Screw Jack

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.

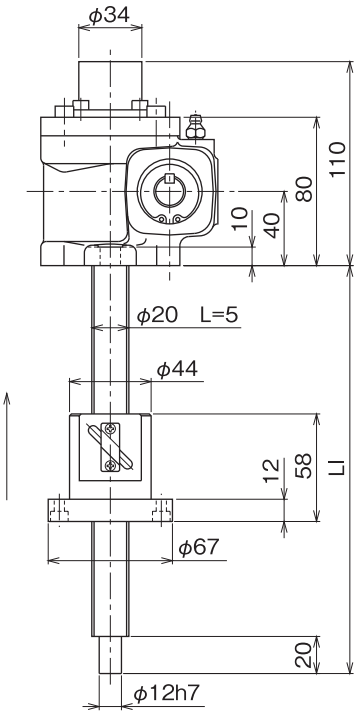
Two-dimensional drawing



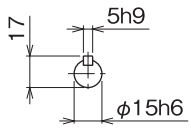
Upright



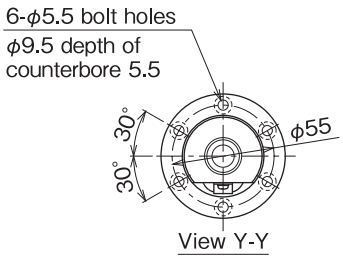
Inverted



Dimensional drawing of input shaft end



Traveling Nut



■Approximate Weight (kg)

Stroke	Translating		Traveling nut type
	Without bellows	With bellows	
100	5	5.5	5
200	5.3	6	5.3
300	5.6	6.5	5.6
400	5.9	7	5.9
500	6.2	7.5	6.2
600	6.5	8.5	6.5
800	7.1	9.5	7.1

■JOB

Stroke	Traveling nut type	
	U: Upright	I: Inverted
	LU	LI
100	300	220
200	400	320
300	500	420
400	600	520
500	700	620
600	800	720
800	1000	920

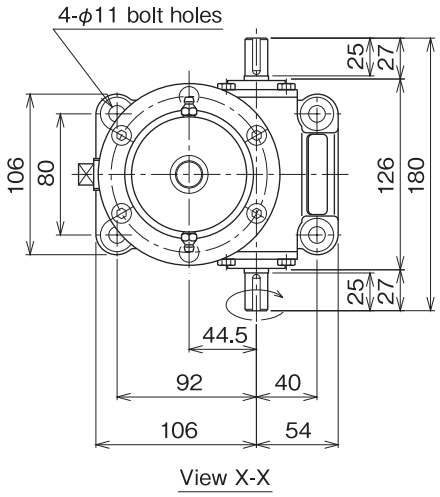
· If your required stroke is not shown in the above table, please consult with us, as we can manufacture what you need.

J1B Dimensional Drawing

Dimensional Drawing: J1B Translating Ball Screw Jack

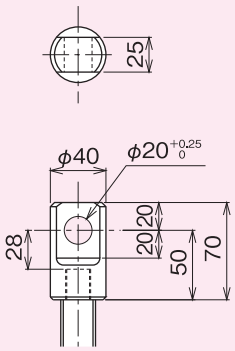
When the input shaft rotates in the direction indicated by an arrow, the lifting screw ascends.

Two-dimensional drawing

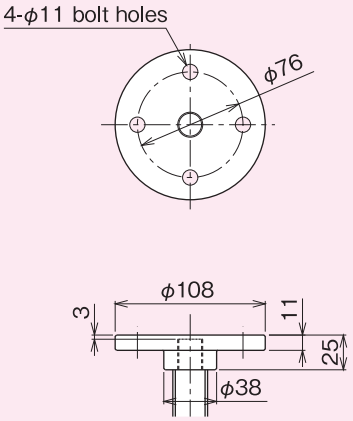


Dimensional drawing of screw end fittings

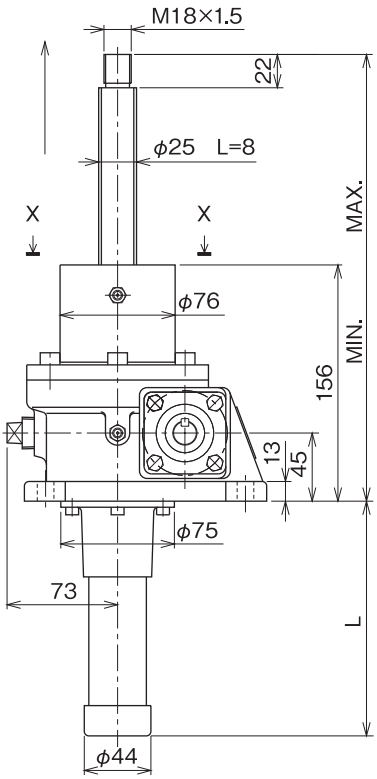
Clevis



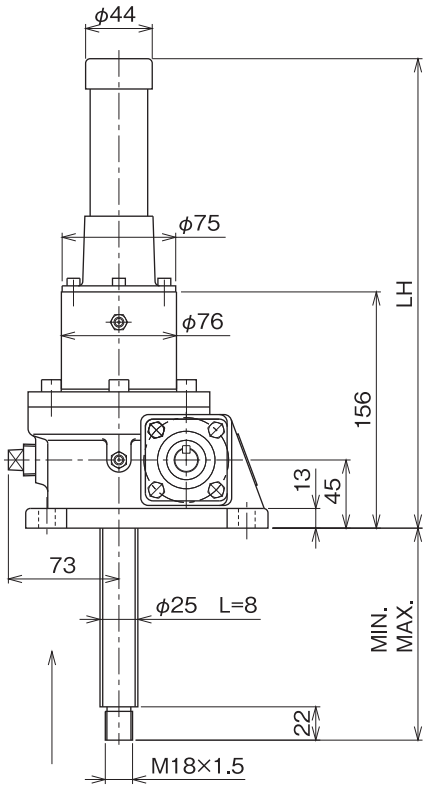
Flange



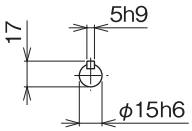
Upright



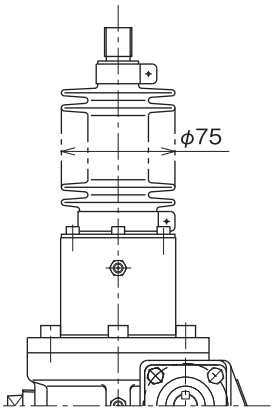
Inverted



Dimensional drawing of input shaft end



Outer diameter of bellows



■J1B Ball Screw Jack Measurement Table

Stroke	U: Upright						I: Inverted					
	N: Without bellows			B: With bellows			N: Without bellows			B: With bellows		
	MIN.	MAX.	L	MIN.	MAX.	L	MIN.	MAX.	LH	MIN.	MAX.	LH
100	200	300	155	235	335	255	45	145	311	80	180	411
200	200	400	255	235	435	355	45	245	411	80	280	511
300	200	500	355	270	570	455	45	345	511	115	415	611
400	200	600	455	270	670	555	45	445	611	115	515	711
500	200	700	555	270	770	655	45	545	711	115	615	811
600	200	800	655	310	910	855	45	645	811	155	755	1011
800	200	1000	855	310	1110	1055	45	845	1011	155	955	1211

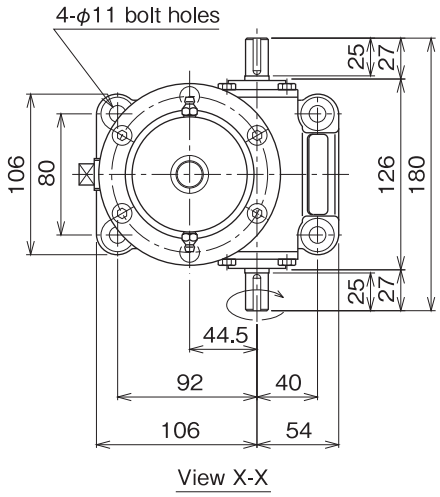
· If your required stroke is not shown in the above table, please consult with us, as we can manufacture what you need.

J1B
Dimensional Drawing

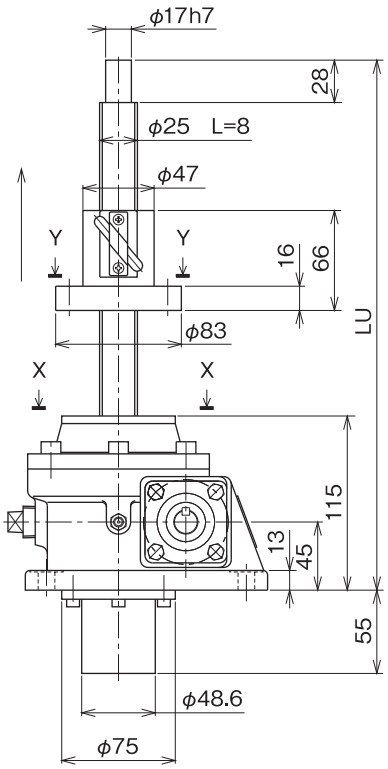
Dimensional Drawing: J1B Traveling Nut Type Ball Screw Jack

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.

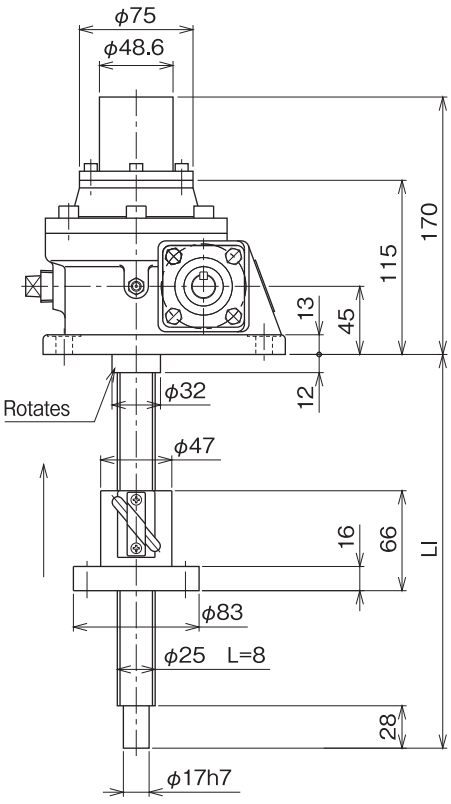
Two-dimensional drawing



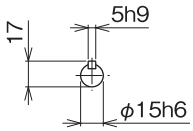
Upright



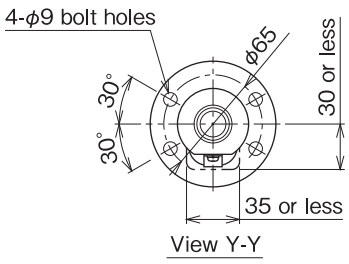
Inverted



Dimensional drawing of input shaft end



Traveling Nut



■Approximate Weight (kg)

Stroke	Translating		Traveling nut type
	Without bellows	With bellows	
100	11	11.5	11
200	11.5	12	11
300	12	12.5	12
400	12.5	13	12
500	13	13.5	13
600	13.5	14.5	13
800	14.5	15.5	14

■J1B

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

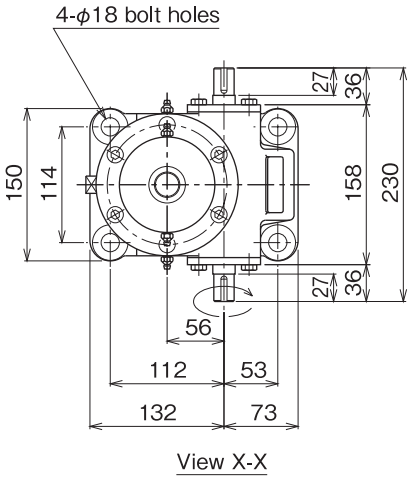
· If your required stroke is not shown in the above table, please consult with us, as we can manufacture what you need.

J2B
Dimensional Drawing

Dimensional Drawing: J2B Translating Ball Screw Jack

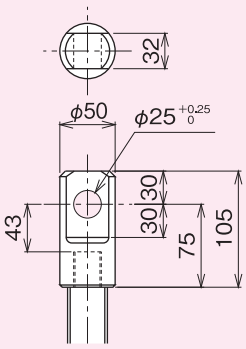
When the input shaft rotates in the direction indicated by an arrow, the lifting screw ascends.

Two-dimensional drawing

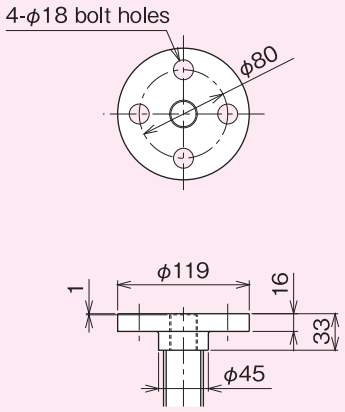


Dimensional drawing of screw end fittings

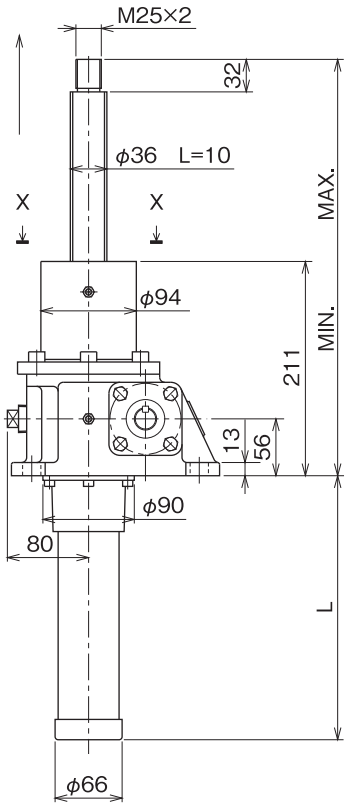
Clevis



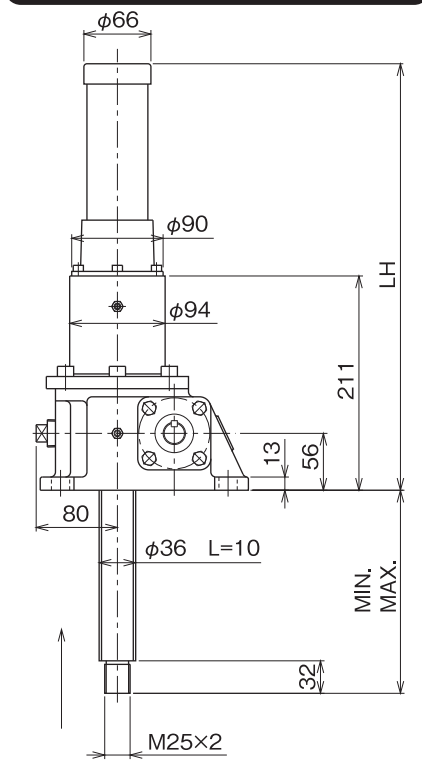
Flange



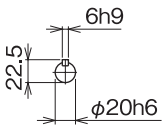
Upright



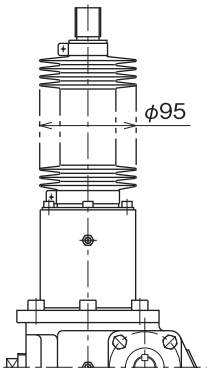
Inverted



Dimensional drawing of input shaft end



Outer diameter of bellows



■J2B Ball Screw Jack Measurement Table

Stroke	U: Upright						I: Inverted					
	N: Without bellows			B: With bellows			N: Without bellows			B: With bellows		
	MIN.	MAX.	L	MIN.	MAX.	L	MIN.	MAX.	LH	MIN.	MAX.	LH
100	265	365	160	300	400	260	55	155	371	90	190	471
200	265	465	260	300	500	360	55	255	471	90	290	571
300	265	565	360	335	635	460	55	355	571	125	425	671
400	265	665	460	335	735	560	55	455	671	125	525	771
500	265	765	560	335	835	660	55	555	771	125	625	871
600	265	865	660	375	975	860	55	655	871	165	765	1071
800	265	1065	860	375	1175	1060	55	855	1071	165	965	1271

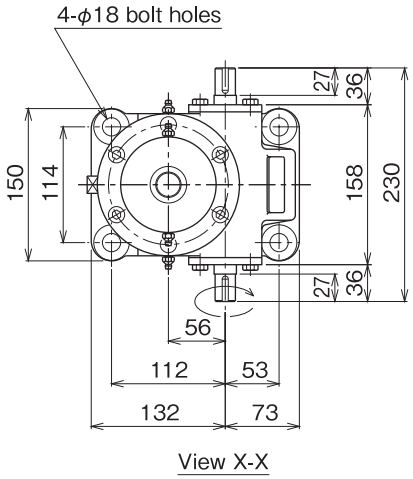
· If your required stroke is not shown in the above table, please consult with us, as we can manufacture what you need.

J2B
Dimensional Drawing

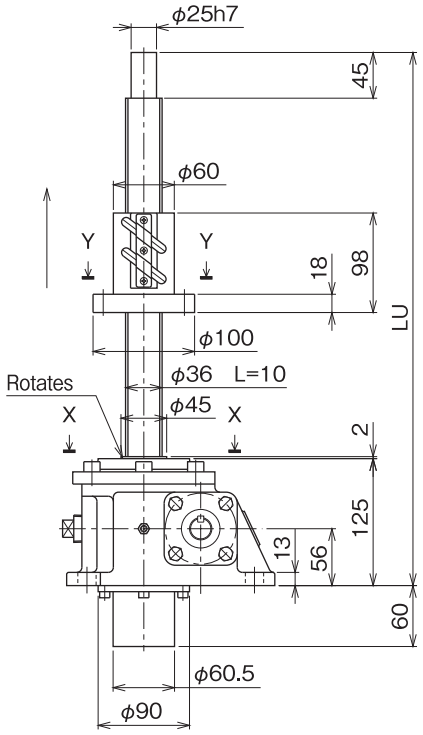
Dimensional Drawing: J2B Traveling Nut Type Ball Screw Jack

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.

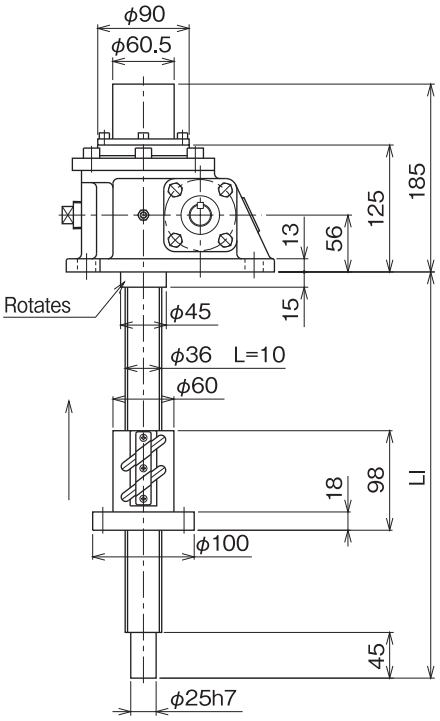
Two-dimensional drawing



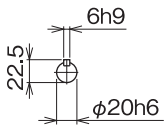
Upright



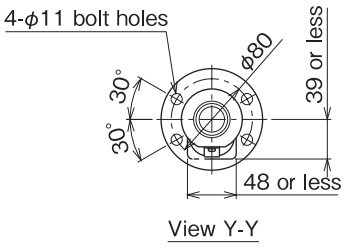
Inverted



Dimensional drawing of input shaft end



Traveling Nut



■Approximate Weight (kg)

Stroke	Translating		Traveling nut type
	Without bellows	With bellows	
100	20	21.5	20
200	21	23	21
300	22	24.5	22
400	23	26	23
500	24	27.5	24
600	25	30.5	25
800	27	33.5	27

■J2B

Stroke	Traveling nut type	
	U: Upright	I: Inverted
	LU	LI
100	410	300
200	510	400
300	610	500
400	710	600
500	810	700
600	910	800
800	1110	1000

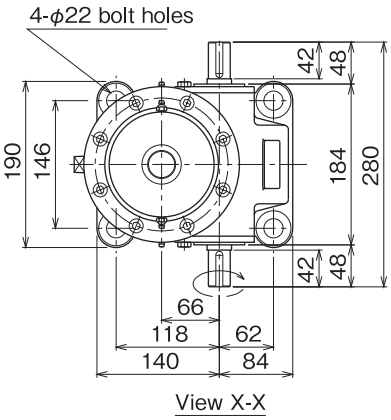
· If your required stroke is not shown in the above table, please consult with us, as we can manufacture what you need.

J3B
Dimensional Drawing

Dimensional Drawing: J3B Translating Ball Screw Jack

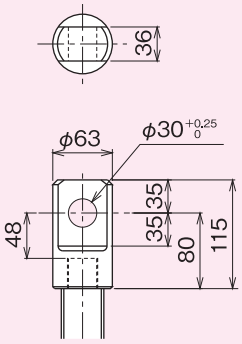
When the input shaft rotates in the direction indicated by an arrow, the lifting screw ascends.

Two-dimensional drawing

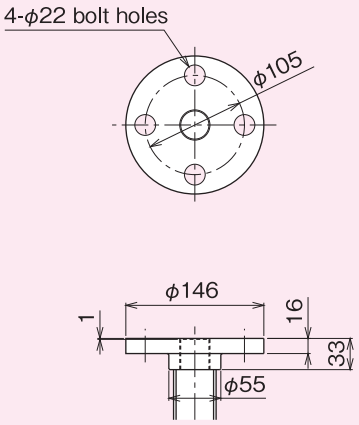


Dimensional drawing of screw end fittings

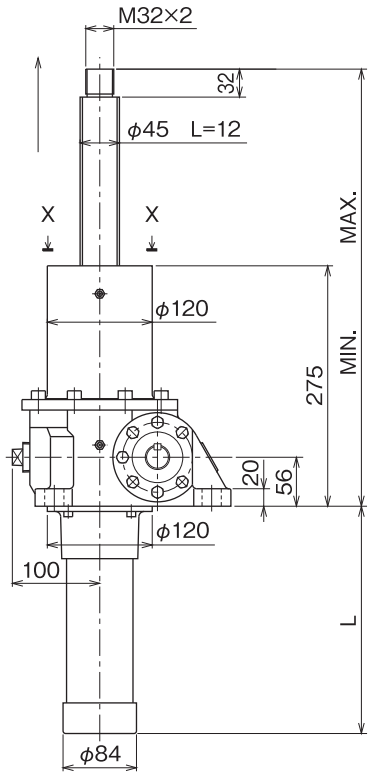
Clevis



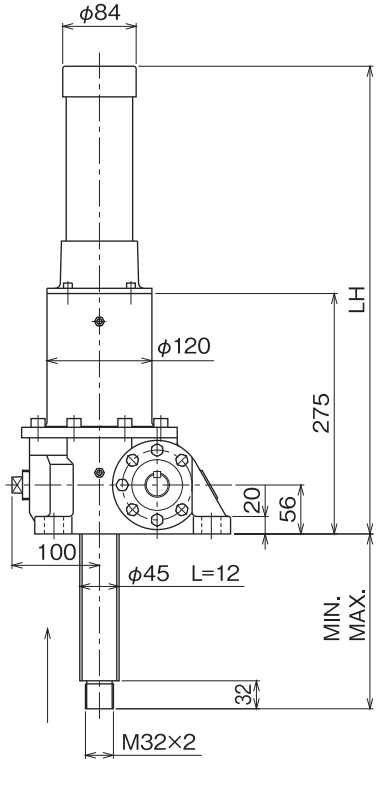
Flange



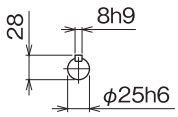
Upright



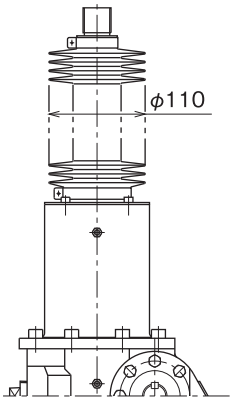
Inverted



Dimensional drawing of input shaft end



Outer diameter of bellows



■J3B Ball Screw Jack Measurement Table

Stroke	U: Upright						I: Inverted					
	N: Without bellows			B: With bellows			N: Without bellows			B: With bellows		
	MIN.	MAX.	L	MIN.	MAX.	L	MIN.	MAX.	LH	MIN.	MAX.	LH
100	330	430	160	365	465	260	55	155	435	90	190	535
200	330	530	260	365	565	360	55	255	535	90	290	635
300	330	630	360	400	700	460	55	355	635	125	425	735
400	330	730	460	400	800	560	55	455	735	125	525	835
500	330	830	560	400	900	660	55	555	835	125	625	935
600	330	930	660	440	1040	860	55	655	935	165	765	1135
800	330	1130	860	440	1240	1060	55	855	1135	165	965	1335

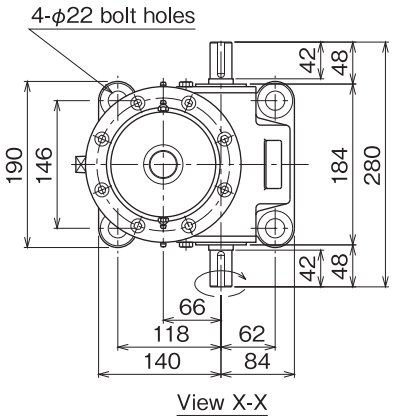
·If your required stroke is not shown in the above table, please consult with us, as we can manufacture what you need.

J3B
Dimensional Drawing

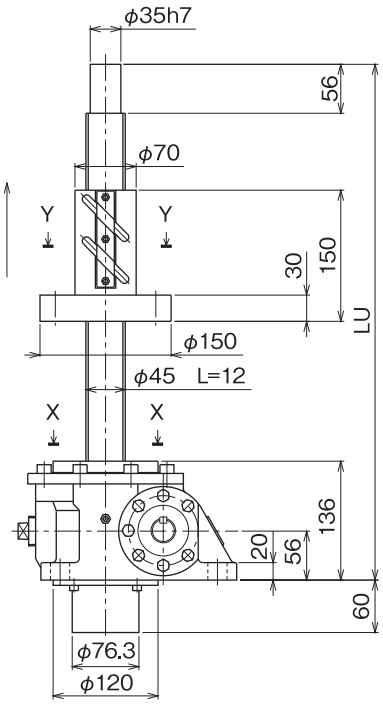
Dimensional Drawing: J3B Traveling Nut Type Ball Screw Jack

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.

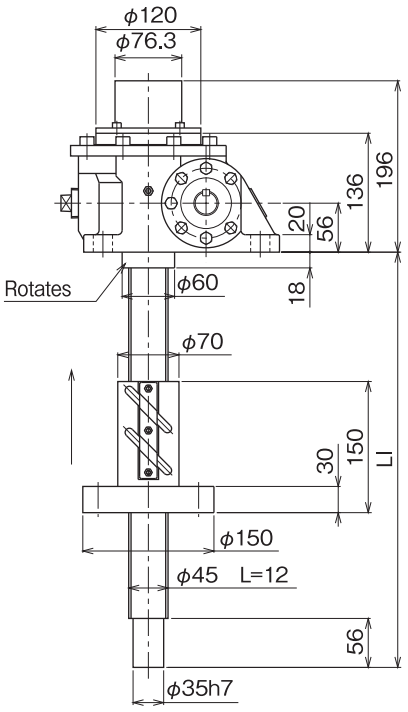
Two-dimensional drawing



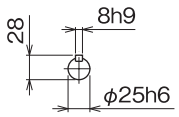
Upright



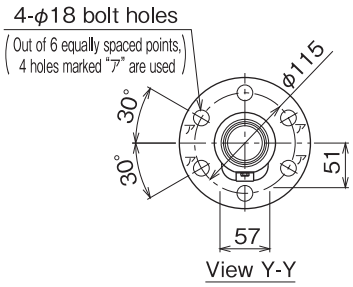
Inverted



Dimensional drawing of input shaft end



Traveling Nut



■Approximate Weight (kg)

Stroke	Translating		Traveling nut type
	Without bellows	With bellows	
100	40	42	40
200	41	44	41
300	42	46	42
400	43	48	43
500	44	50	44
600	45	54	45
800	47	58	47

■J3B

Stroke	Traveling nut type	
	U: Upright	I: Inverted
	LU	LI
100	490	375
200	590	475
300	690	575
400	790	675
500	890	775
600	990	875
800	1190	1075

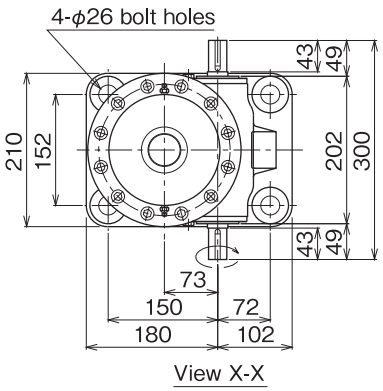
· If your required stroke is not shown in the above table, please consult with us, as we can manufacture what you need.

J4B Dimensional Drawing

Dimensional Drawing: J4B Translating Ball Screw Jack

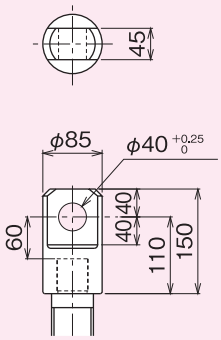
When the input shaft rotates in the direction indicated by an arrow, the lifting screw ascends.

Two-dimensional drawing

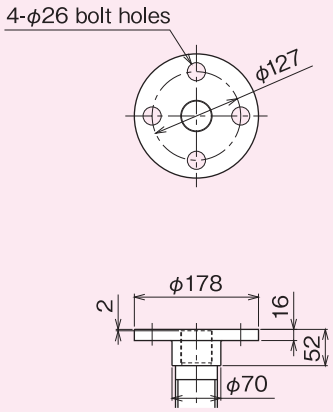


Dimensional drawing of screw end fittings

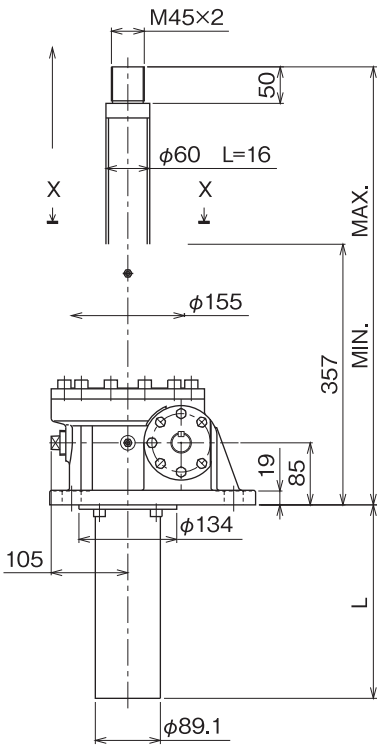
Clevis



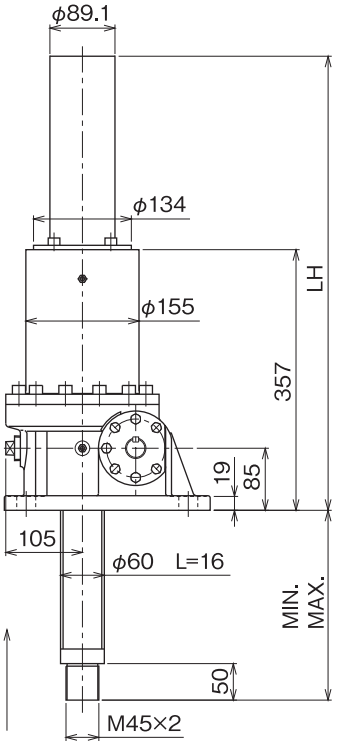
Flange



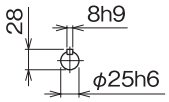
Upright



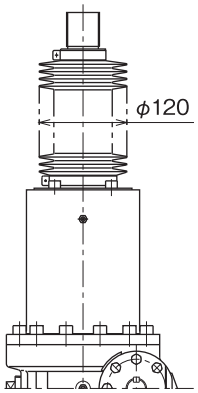
Inverted



Dimensional drawing of input shaft end



Outer diameter of bellows



■J4B Ball Screw Jack Measurement Table

Stroke	U: Upright						I: Inverted					
	N: Without bellows			B: With bellows			N: Without bellows			B: With bellows		
	MIN.	MAX.	L	MIN.	MAX.	L	MIN.	MAX.	LH	MIN.	MAX.	LH
100	430	530	165	465	565	265	75	175	522	110	210	622
200	430	630	265	465	665	365	75	275	622	110	310	722
300	430	730	365	500	800	465	75	375	722	145	445	822
400	430	830	465	500	900	565	75	475	822	145	545	922
500	430	930	565	500	1000	665	75	575	922	145	645	1022
600	430	1030	665	540	1140	865	75	675	1022	185	785	1222
800	430	1230	865	540	1340	1065	75	875	1222	185	985	1422

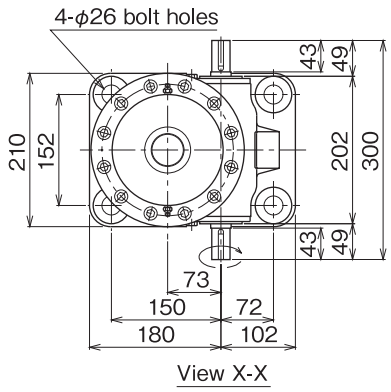
· If your required stroke is not shown in the above table, please consult with us, as we can manufacture what you need.

J4B
Dimensional Drawing

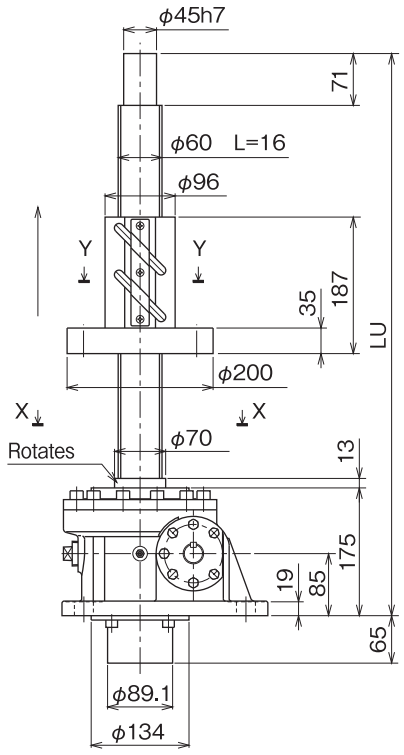
Dimensional Drawing: J4B Traveling Nut Type Ball Screw Jack

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.

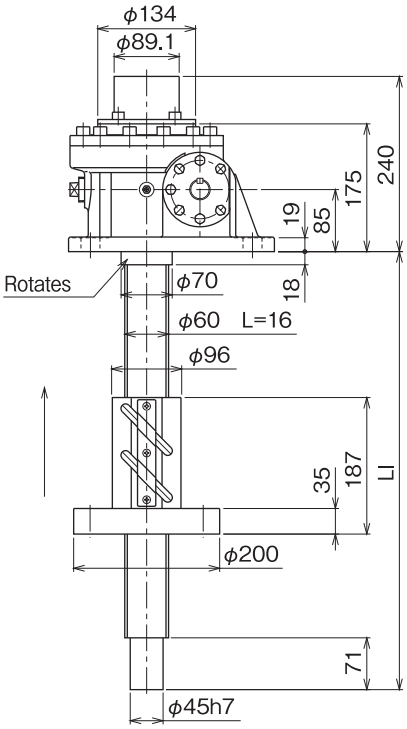
Two-dimensional drawing



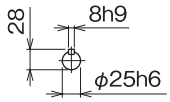
Upright



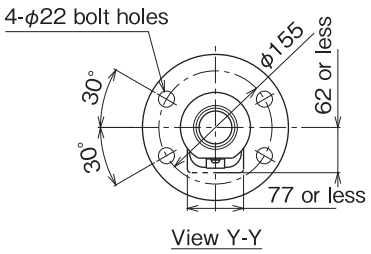
Inverted



Dimensional drawing of input shaft end



Traveling Nut



■Approximate Weight (kg)

Stroke	Translating		Traveling nut type
	Without bellows	With bellows	
100	70	74	70
200	73	78	73
300	76	82	76
400	79	86	79
500	82	90	82
600	85	98	85
800	91	106	91

■J4B

Stroke	Traveling nut type	
	U: Upright	I: Inverted
	LU	LI
100	590	420
200	690	520
300	790	620
400	890	720
500	990	820
600	1090	920
800	1290	1120

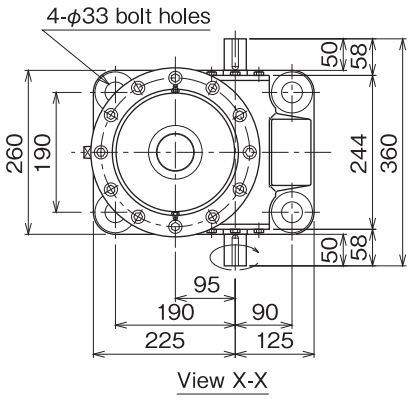
· If your required stroke is not shown in the above table, please consult with us, as we can manufacture what you need.

J5B Dimensional Drawing

Dimensional Drawing: J5B Translating Ball Screw Jack

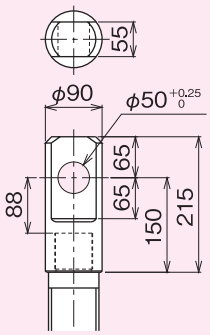
When the input shaft rotates in the direction indicated by an arrow, the lifting screw ascends.

Two-dimensional drawing

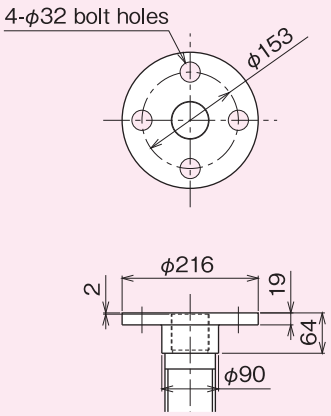


Dimensional drawing of screw end fittings

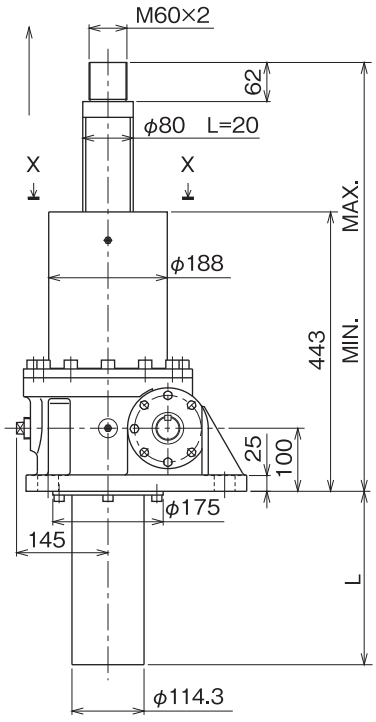
Clevis



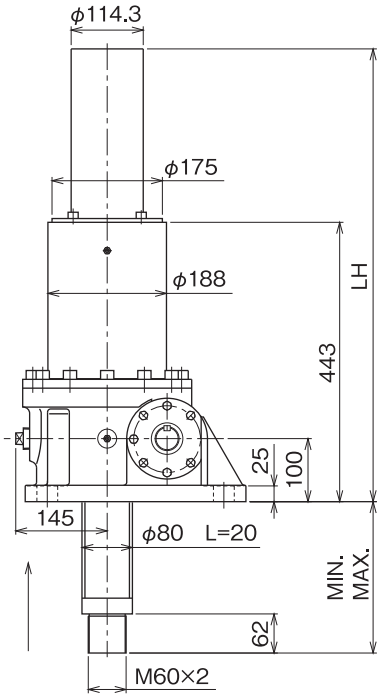
Flange



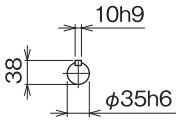
Upright



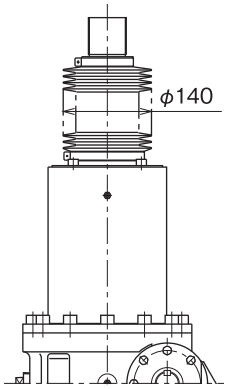
Inverted



Dimensional drawing of input shaft end



Outer diameter of bellows



■J5B Ball Screw Jack Measurement Table

Stroke	U: Upright						I: Inverted					
	N: Without bellows			B: With bellows			N: Without bellows			B: With bellows		
	MIN.	MAX.	L	MIN.	MAX.	L	MIN.	MAX.	LH	MIN.	MAX.	LH
100	525	625	175	570	670	275	85	185	618	125	225	718
200	525	725	275	570	770	375	85	285	718	125	325	818
300	525	825	375	605	905	475	85	385	818	160	460	918
400	525	925	475	605	1005	575	85	485	918	160	560	1018
500	525	1025	575	605	1105	675	85	585	1018	160	660	1118
600	525	1125	675	645	1245	875	85	685	1118	200	800	1318
800	525	1325	875	645	1445	1075	85	885	1318	200	1000	1518

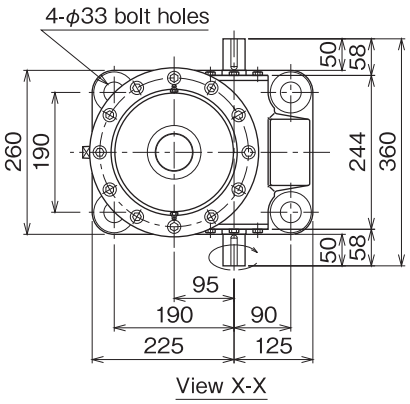
· If your required stroke is not shown in the above table, please consult with us, as we can manufacture what you need.

J5B
Dimensional Drawing

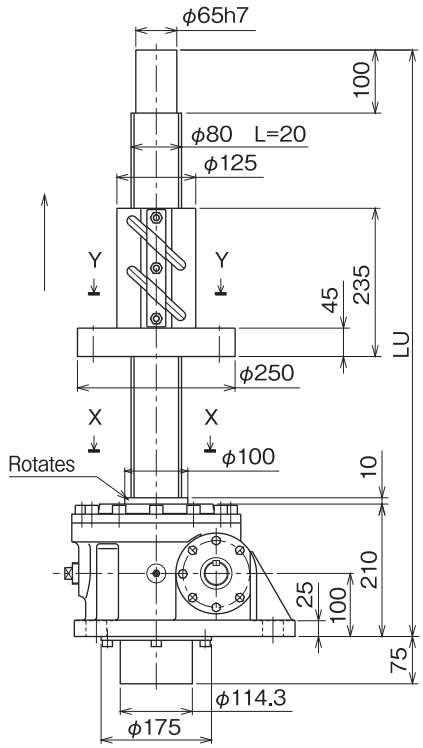
Dimensional Drawing: J5B Traveling Nut Type Ball Screw Jack

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.

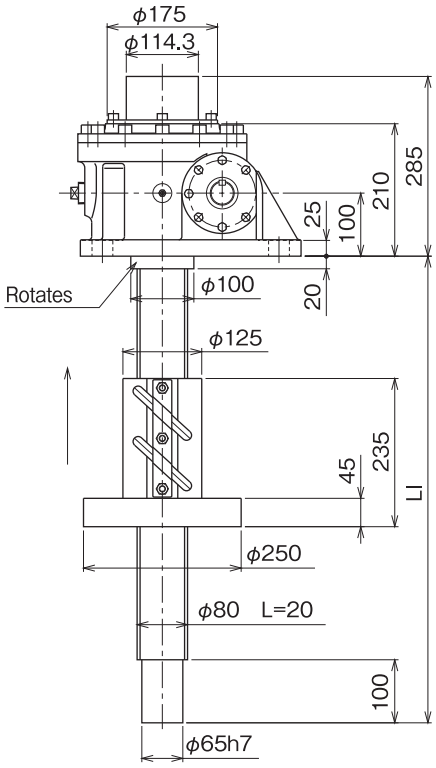
Two-dimensional drawing



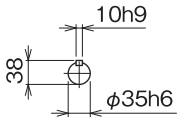
Upright



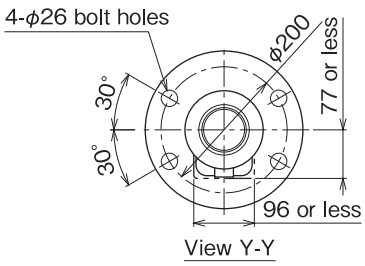
Inverted



Dimensional drawing of input shaft end



Traveling Nut



■Approximate Weight (kg)

Stroke	Translating		Traveling nut type
	Without bellows	With bellows	
100	130	131	130
200	134	144	134
300	136	151	139
400	142	156	141
500	146	165	145
600	150	179	148
800	158	193	155

■J5B

Stroke	Traveling nut type	
	U: Upright	I: Inverted
	LU	LI
100	710	510
200	810	610
300	910	710
400	1010	810
500	1110	910
600	1210	1010
800	1410	1210

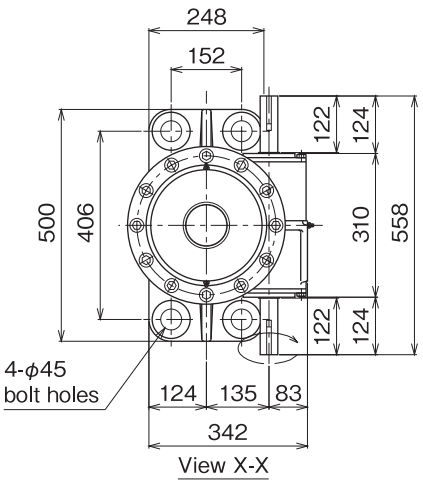
· If your required stroke is not shown in the above table, please consult with us, as we can manufacture what you need.

J6B
Dimensional Drawing

Dimensional Drawing: J6B Translating Ball Screw Jack

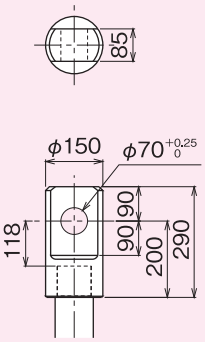
When the input shaft rotates in the direction indicated by an arrow, the lifting screw ascends.

Two-dimensional drawing

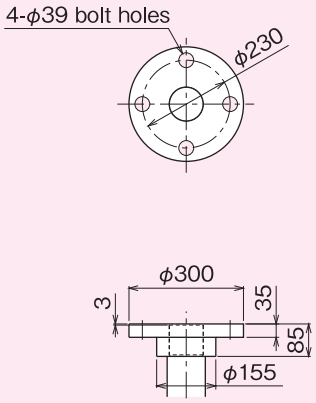


Dimensional drawing of screw end fittings

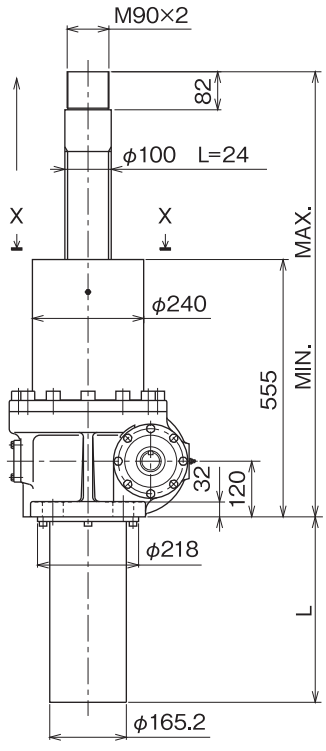
Clevis



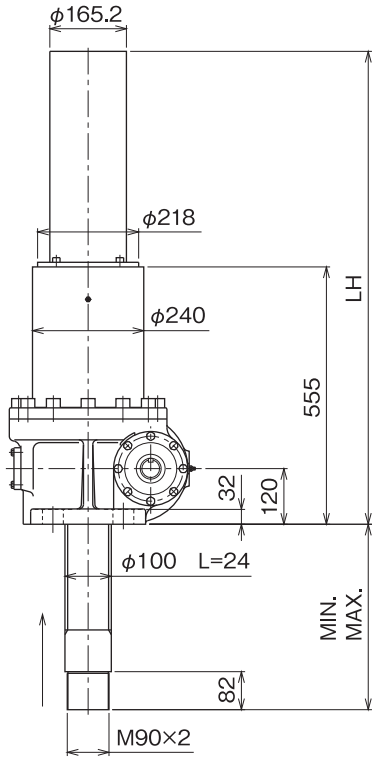
Flange



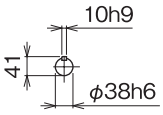
Upright



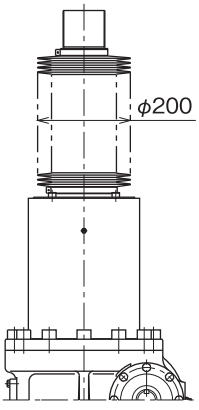
Inverted



Dimensional drawing of input shaft end



Outer diameter of bellows



■J6B Ball Screw Jack Measurement Table

Stroke	U: Upright						I: Inverted					
	N: Without bellows			B: With bellows			N: Without bellows			B: With bellows		
	MIN.	MAX.	L	MIN.	MAX.	L	MIN.	MAX.	LH	MIN.	MAX.	LH
100	660	760	200	700	800	300	105	205	755	145	245	855
200	660	860	300	700	900	400	105	305	855	145	345	955
300	660	960	400	735	1035	500	105	405	955	180	480	1055
400	660	1060	500	735	1135	600	105	505	1055	180	580	1155
500	660	1160	600	735	1235	700	105	605	1155	180	680	1255
600	660	1260	700	775	1375	900	105	705	1255	220	820	1455
800	660	1460	900	775	1575	1100	105	905	1455	220	1020	1655

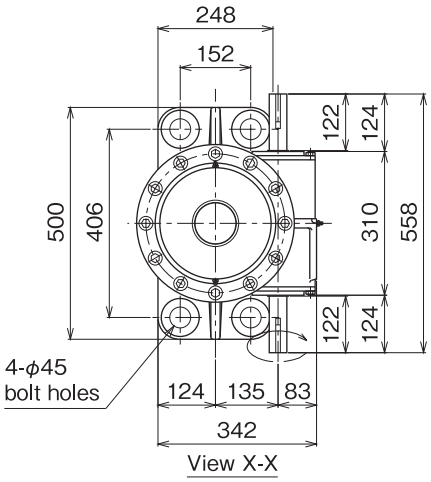
· If your required stroke is not shown in the above table, please consult with us, as we can manufacture what you need.

J6B
Dimensional Drawing

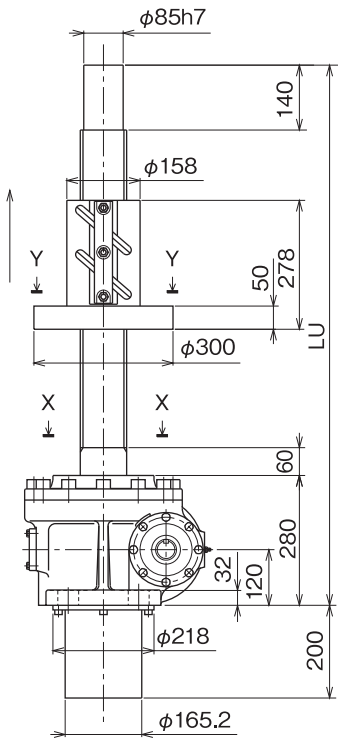
Dimensional Drawing: J6B Traveling Nut Type Ball Screw Jack

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.

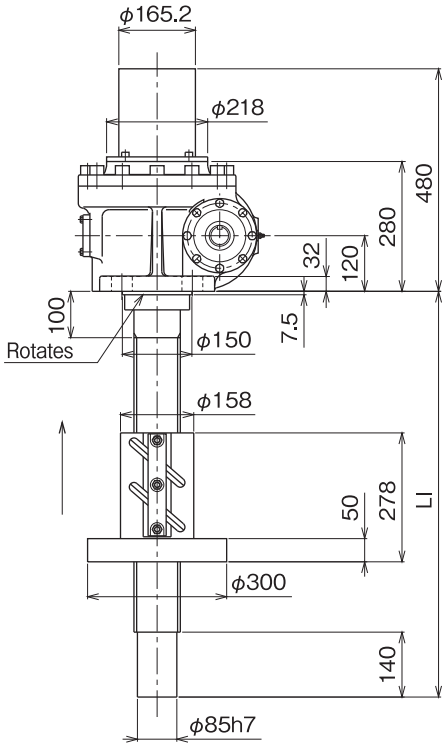
Two-dimensional drawing



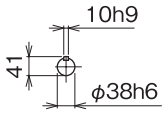
Upright



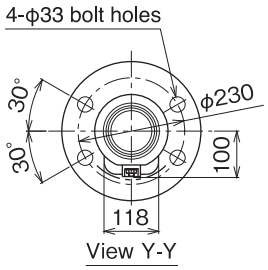
Inverted



Dimensional drawing of input shaft end



Traveling Nut



■Approximate Weight (kg)

Stroke	Translating		Traveling nut type
	Without bellows	With bellows	
100	270	285	270
200	278	292	278
300	285	299	285
400	292	307	292
500	300	314	300
600	307	329	307
800	322	344	322

■J6B

Stroke	Traveling nut type	
	U: Upright	I: Inverted
	LU	LI
100	900	660
200	1000	760
300	1100	860
400	1200	960
500	1300	1060
600	1400	1160
800	1600	1360

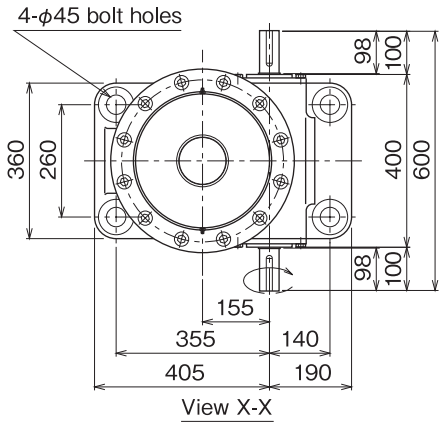
· If your required stroke is not shown in the above table, please consult with us, as we can manufacture what you need.

JFB
Dimensional Drawing

Dimensional Drawing: JFB Translating Ball Screw Jack

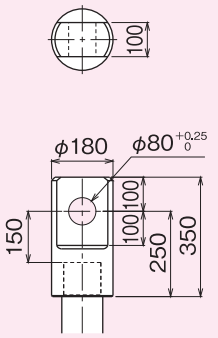
When the input shaft rotates in the direction indicated by an arrow, the lifting screw ascends.
Change of name: Former J61/2B changed to JFB

Two-dimensional drawing

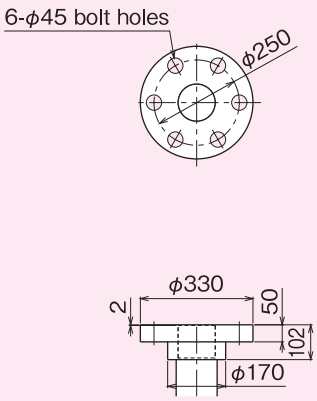


Dimensional drawing of screw end fittings

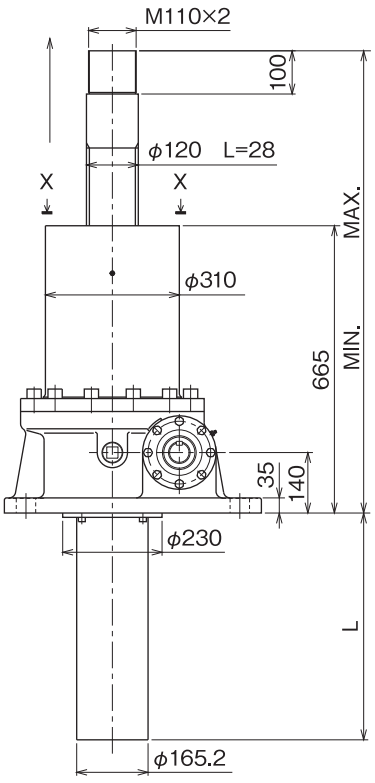
Clevis



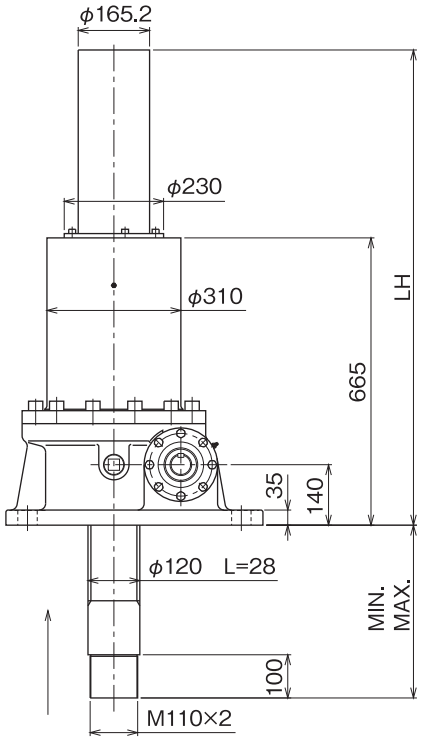
Flange



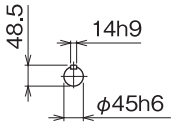
Upright



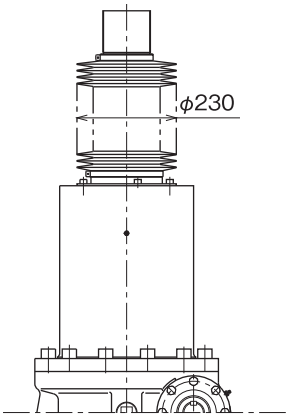
Inverted



Dimensional drawing of input shaft end



Outer diameter of bellows



■JFB Ball Screw Jack Measurement Table

Stroke	U: Upright						I: Inverted					
	N: Without bellows			B: With bellows			N: Without bellows			B: With bellows		
	MIN.	MAX.	L	MIN.	MAX.	L	MIN.	MAX.	LH	MIN.	MAX.	LH
100	785	885	225	840	940	325	120	220	890	175	275	990
200	785	985	325	840	1040	425	120	320	990	175	375	1090
300	785	1085	425	875	1175	425	120	420	1090	210	510	1090
400	785	1185	525	875	1275	525	120	520	1190	210	610	1190
500	785	1285	625	875	1375	625	120	620	1290	210	710	1290
600	785	1385	725	915	1515	925	120	720	1390	250	850	1590
800	785	1585	925	915	1715	1125	120	920	1590	250	1050	1790

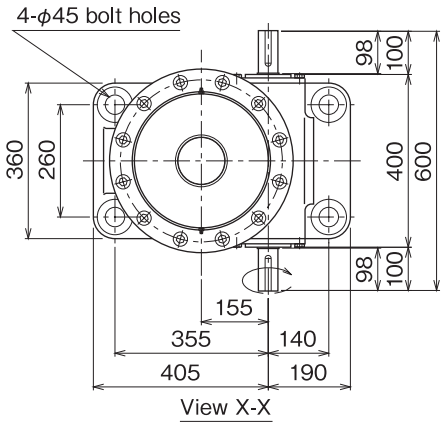
· If your required stroke is not shown in the above table, please consult with us, as we can manufacture what you need.

JFB
Dimensional Drawing

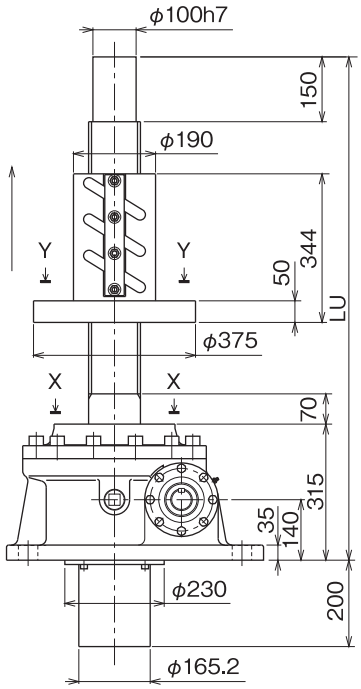
Dimensional Drawing: JFB Traveling Nut Type Ball Screw Jack

When the input shaft rotates in the direction indicated by an arrow, the traveling nut ascends.
Change of name: Former J61/2B changed to JFB
For information on sizes of the jack with bellows, please contact us.

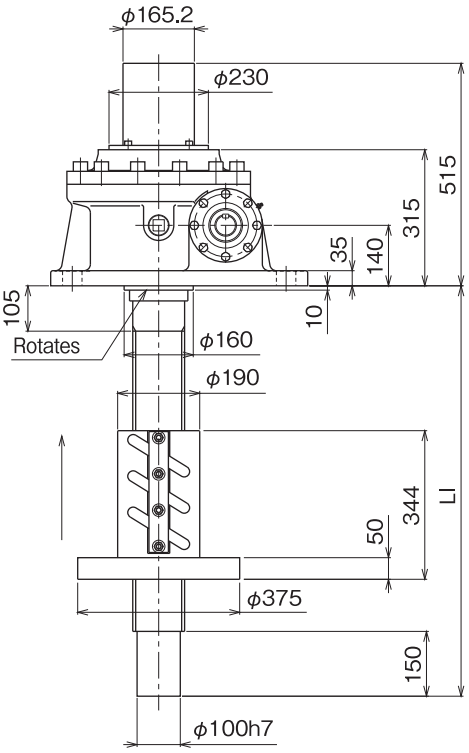
Two-dimensional drawing



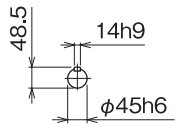
Upright



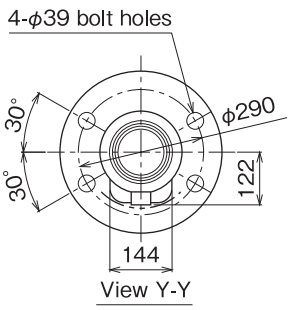
Inverted



Dimensional drawing of input shaft end



Traveling Nut



■Approximate Weight (kg)

Stroke	Translating		Traveling nut type
	Without bellows	With bellows	
100	500	505	610
200	510	515	621
300	520	530	632
400	530	540	643
500	540	550	654
600	550	565	665
800	570	585	676

■JFB

Stroke	Traveling nut type	
	U: Upright	I: Inverted
	LU	LI
100	1020	740
200	1120	840
300	1220	940
400	1320	1040
500	1420	1140
600	1520	1240
800	1720	1440

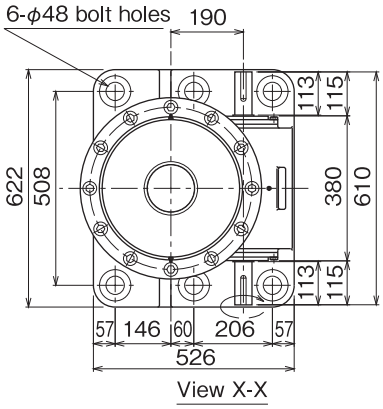
· If your required stroke is not shown in the above table, please consult with us, as we can manufacture what you need.

J7B Dimensional Drawing

Dimensional Drawing: J7B Translating Ball Screw Jack

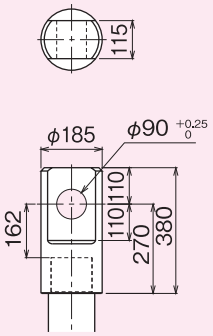
When the input shaft rotates in the direction indicated by an arrow, the lifting screw ascends.

Two-dimensional drawing

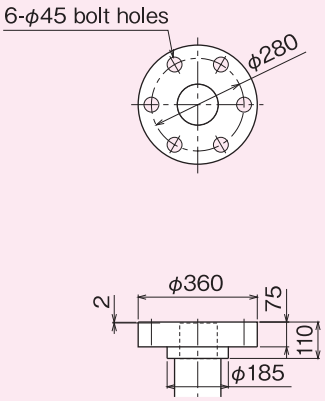


Dimensional drawing of screw end fittings

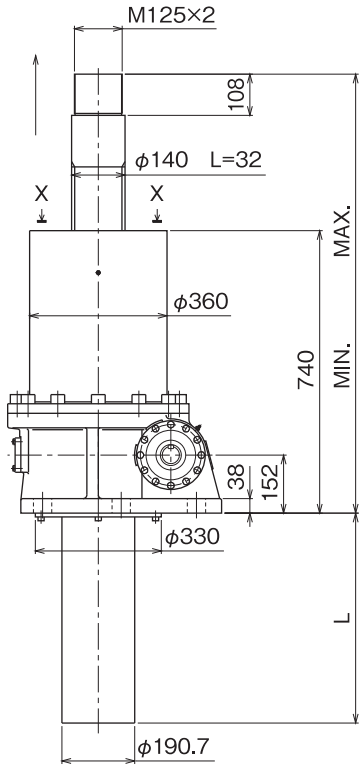
Clevis



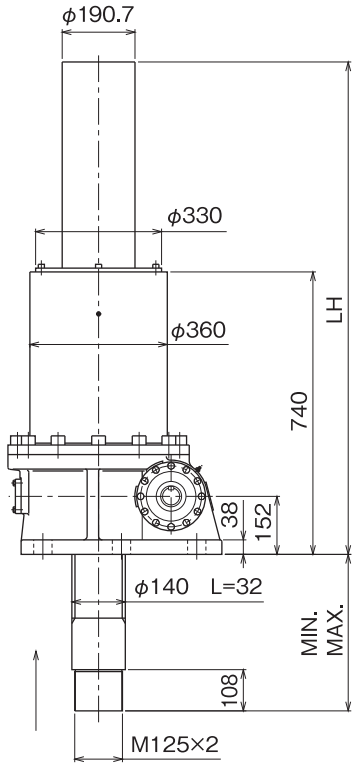
Flange



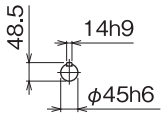
Upright



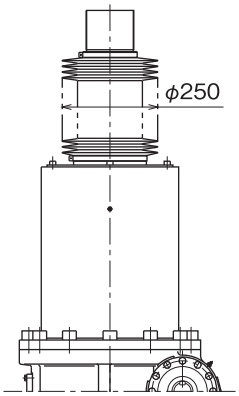
Inverted



Dimensional drawing of input shaft end



Outer diameter of bellows



■J7B Ball Screw Jack Measurement Table

Stroke	U: Upright						I: Inverted					
	N: Without bellows			B: With bellows			N: Without bellows			B: With bellows		
	MIN.	MAX.	L	MIN.	MAX.	L	MIN.	MAX.	LH	MIN.	MAX.	LH
100	870	970	250	915	1015	250	130	230	990	175	275	990
200	870	1070	350	915	1115	350	130	330	1090	175	375	1090
300	870	1170	450	950	1250	450	130	430	1190	210	510	1190
400	870	1270	550	950	1350	550	130	530	1290	210	610	1290
500	870	1370	650	950	1450	650	130	630	1390	210	710	1390
600	870	1470	750	990	1590	950	130	730	1490	250	850	1690
800	870	1670	950	990	1790	1150	130	930	1690	250	1050	1890

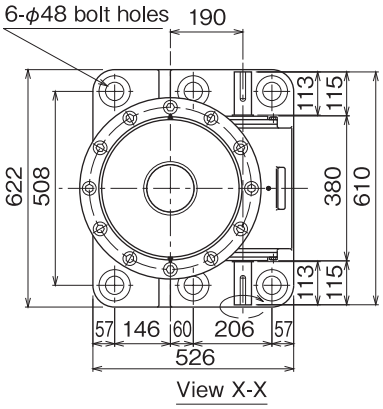
· If your required stroke is not shown in the above table, please consult with us, as we can manufacture what you need.

J7B
Dimensional Drawing

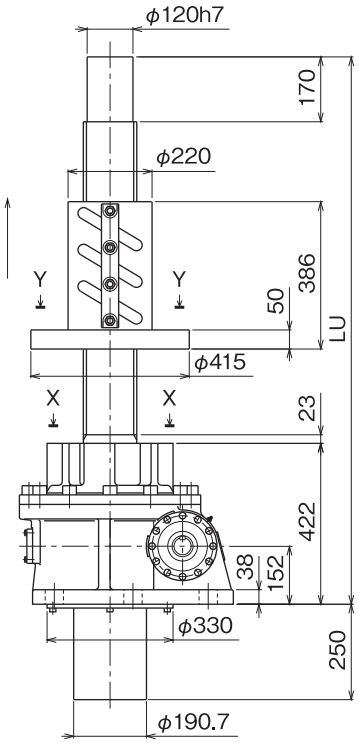
Dimensional Drawing: J7B Traveling Nut Type Ball Screw Jack

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.

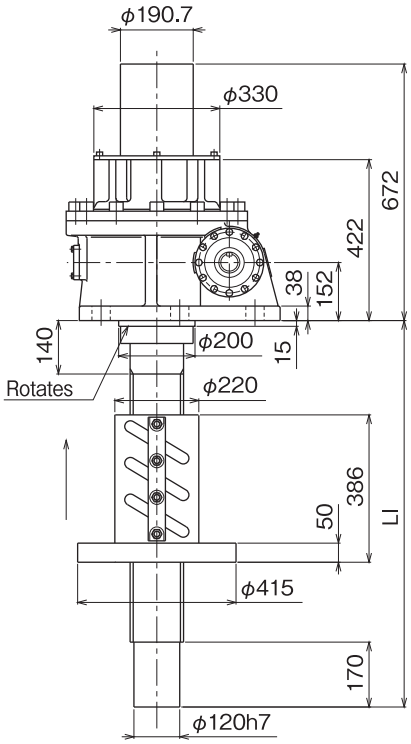
Two-dimensional drawing



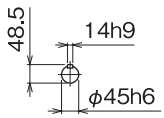
Upright



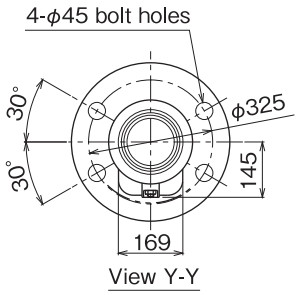
Inverted



Dimensional drawing of input shaft end



Traveling Nut



■Approximate Weight (kg)

Stroke	Translating		Traveling nut type
	Without bellows	With bellows	
100	750	756	800
200	764	770	812
300	777	788	824
400	790	801	836
500	803	814	848
600	815	831	860
800	845	861	884

■J7B

Stroke	Traveling nut type	
	U: Upright	I: Inverted
	LU	LI
100	1145	840
200	1245	940
300	1345	1040
400	1445	1140
500	1545	1240
600	1645	1340
800	1845	1540

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