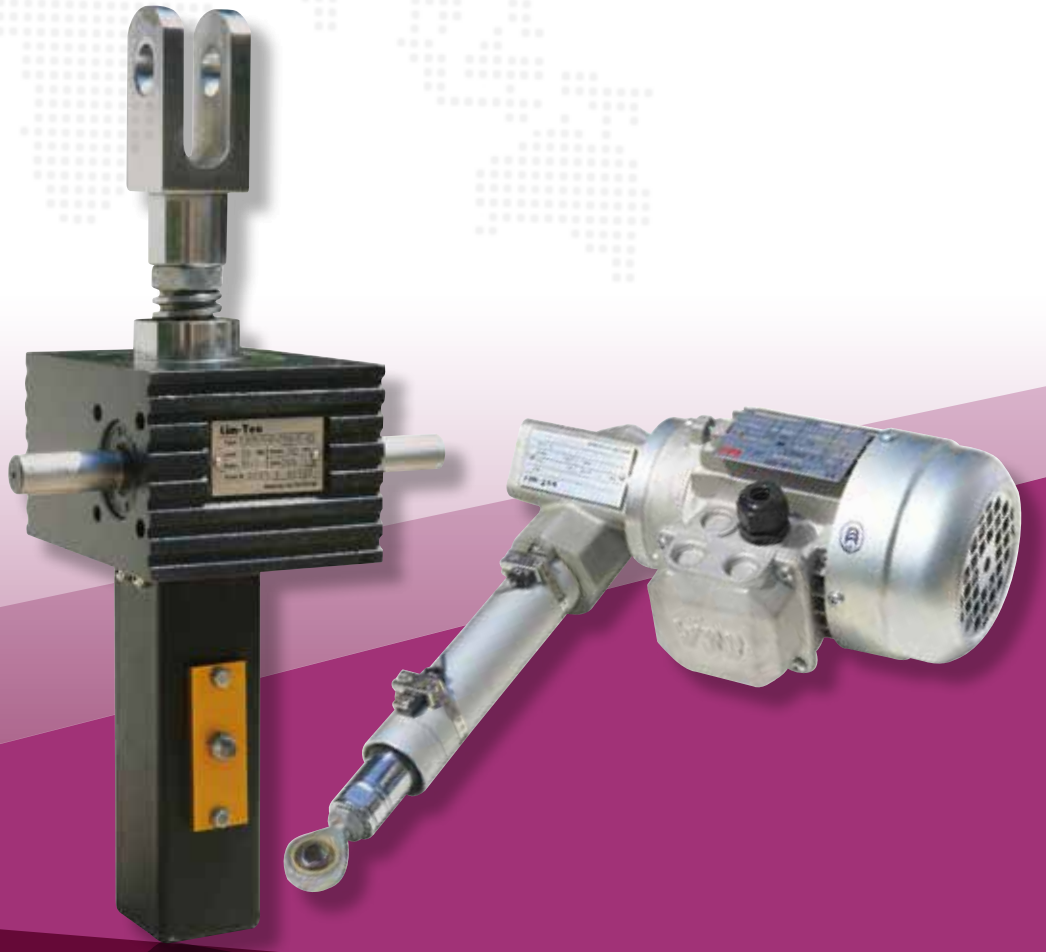
Lim-Tec®

Catalog 2020



LIM-TEC (Beijing) Transmission Equipment Co.,LTD.

Lim-Tec®

Perfect Linear Motion

On February 25, 2016, Lim-Tec successfully listed on NEEQ（code：836388）
The first listed company to make screw jack and linear actuator in CHINA and expert in China's linear motion

In 2005, Lim-Tec Group and Beijing Reloh International Trade Co.,LTD jointly established Lim-Tec (Beijing) Transmission Equipment Co., Ltd.,With the advanced technology and process from Europe, lim-tec has rapidly grown into a large domestic professional manufacturer of electric linear actuators / screw jacks / servo electric cylinder, leading the domestic linear motion industry,.

Lim-Tec has 10 sales offices in major cities in China. It provides high-quality products, comprehensive technical support, and fast after-sales service for domestic and foreign customers. Until Nov.30 2015, nearly 80,000 Lim-Tec products have been successfully applied in various industries such as automotive equipment, automation equipment, metallurgy industry, aerospace military industry, and port machinery.

Lim-Tec is a domestic joint venture manufacturer specializing in the manufacture of electric linear actuators/ screw jacks / servo electric cylinders

In 2008, Lim-Tec set up the automation control department, and successfully developed the 6-DOF platform, servo press systems and simulators other products

In 2015, Lim-Tec became a joint-stock company with registered capital increased to 30 million RMB.

In2019,Lim-Tec have invested 200 million yuan to purchase advanced CNCs and modern constant temperature plants with an annual production capacity of 100000 sets. We will build lim-tec into the world's most competitive professional manufacturing center of electric linear actuators/ screw jacks / servo electric cylinder.

Anti-impact ablility
High strength

Low noise
Long life
Small volume

Contents

Product category

Linear motion idea

The compact integrations of the motor and gear reducer with the acme screw, ball screw and the satellite roller screw, unique advantages in terms of the price and the performance provide much more space to the engineer for designing. The new idea dispensed with the consideration of the hydraulic and pneumatic leakage as well as the pipes and valves.

Self-locking: The majority of the products possess the self-locking function, thus increasing the performance security.
Positioning: the positioning accuracy can reach 0.1mm, and the positioning accuracy of servo actuator can reach 6um.
Precise control: equipped with encoder/potentiometer/ rotary transformator, the closed loop positioning can also be realized through the inverter, PLC controller and the servo controller.
Synchronousness: the synchronous lifting can be achieved through the mechanical connection of multiple screw actuators and screw jacks
Overload protection: can be equipped with the safety clutch, and the over-load sensor.
High load capacity: wide range of load capacity from 5kg to 250 ton, with the stroke 6 meters to the maximum.
High speed: the speed of the of the roller screw actuator can reach 2m/s, the continuous traveling life is 15 times than that of the ball screw actuators.
Others: Easy maintenance, low noise, can work normally under the harsh environment of high/low temperature, corrosive and explosive-prone environment.

Product category

LAM Linear actuator

LAM Series

Linear actuator

LAP Series

LBP Series

Screw Jack

SJA Series

SJB Series

SC Screw Jack

SCA Series

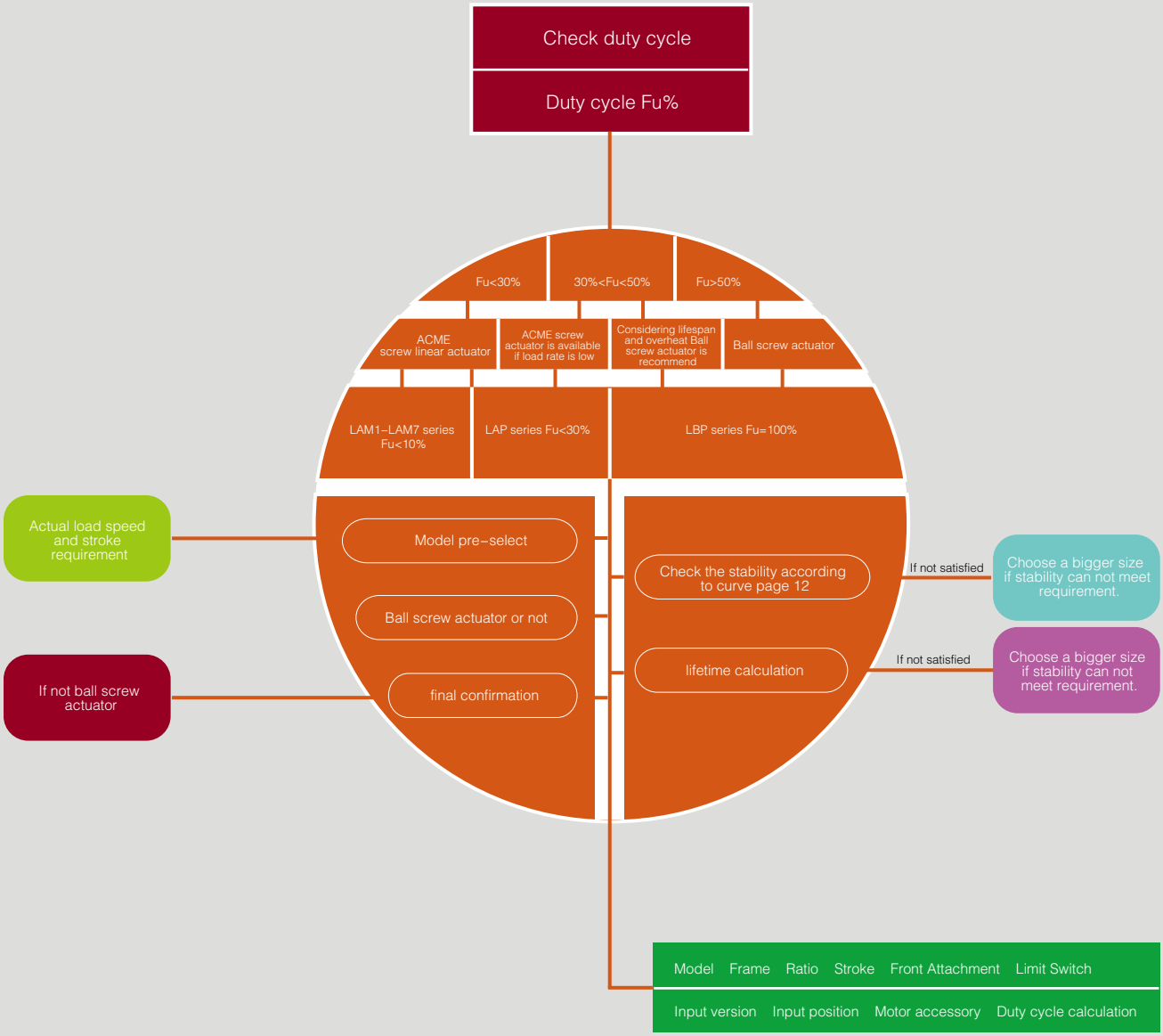
SCB Series

Servo Actuator

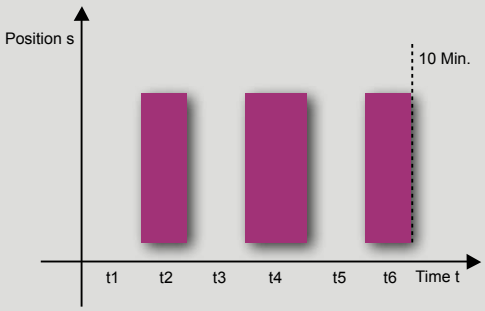
IMB Series

DMB Series

Linear actuator model selection



Duty cycle calculation



Fu%=(t2+t4+t6) / 10min

Fu%= Working Percentage within 10min

T2.t4.t6 : working time
T1,t3,t5: waiting time

Lifetime calculation

The lifetime of Ball screw linear LBP series depends on the lifetime of ball screw and worm gear and shaft, we just need to calculate the lifetime of screw, worm gear and shaft will wear but normally lifetime is longer than screw.

Nut lifetime calculation:

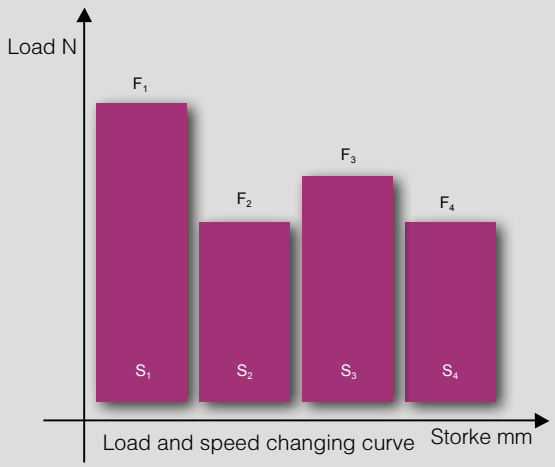
$L10=(C / Fm)^3 xS$

L10: theoretic lifetime km Fm: mean load N

C: Rated dynamic load N S: Ball screw lead mm

Fm mean load calcuation:

$$Fm=\sqrt[3]{\frac{F_1{}^3S_1 + F_2{}^3S_2 + F_3{}^3S_3 + F_4{}^3S_4}{S_1 + S_2 + S_3 + S_4}}$$



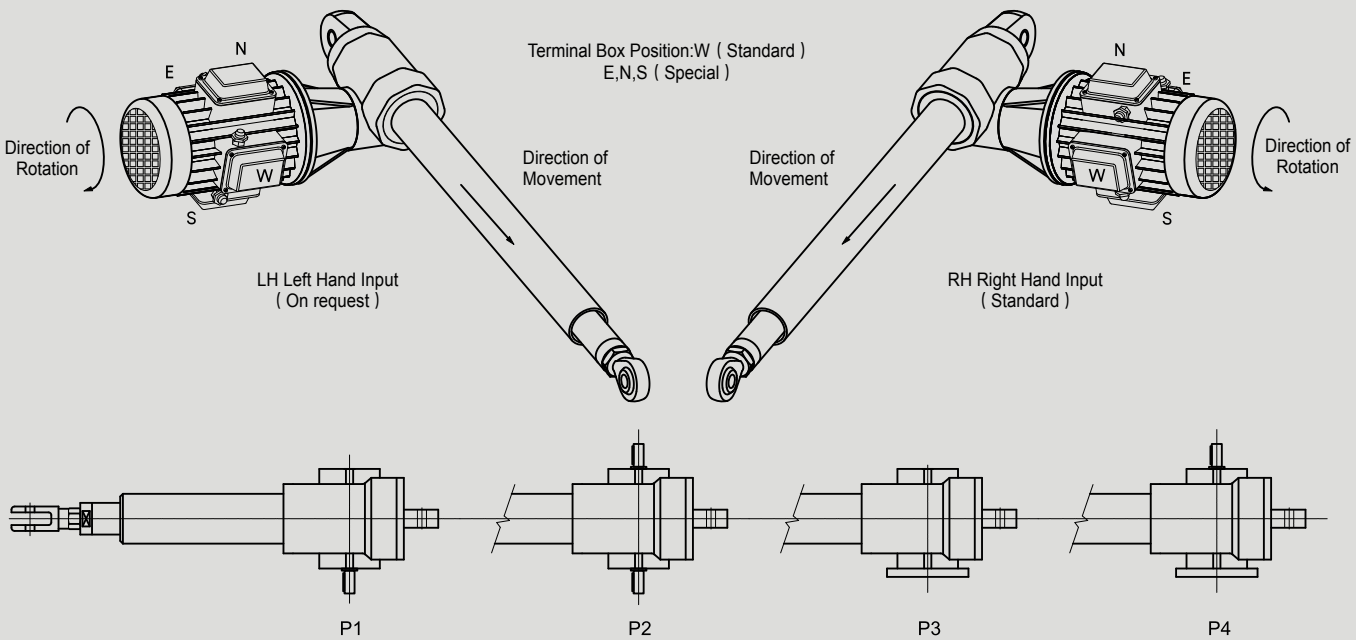
Coding

Linear actuator category

LAP Acme Screw Series / LBP Ball Screw Series

High load capacity, Self-Locking, Synchronous
Compact Size
Precision control, multiple positioning
Continuous duty cycle equipped with Ball screw
Modularized combination of various of motor
Push load range: 10kg to 20 tons

Mounting Position



Coding

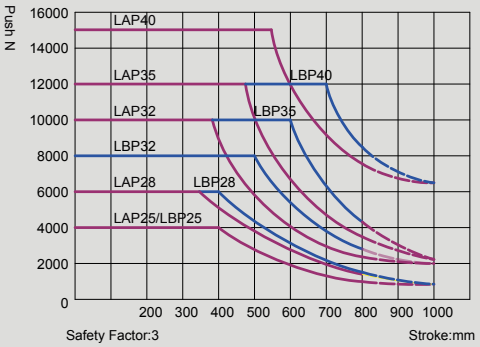
Series	Size	Ratio	Stroke	Front Attachment	Limit Device	Input Versions	Input Shaft	Motor	Power	RPM	Terminal Box Position	Accessories
LAP Series	22	H1	mm	BA Standard head	FCM（NC） Normally closed magnetic reed switches	P1 Single input shaft	RH Right hand	DC12V	kW	rpm	W standard	BRE Brake
LBP Series	25	H2	50	ROE Rod end	FCM（NO） Normally opened magnetic reed switches	P2 Double input shaft	LH Left hand	DC24V	0.06	900	N，S，E	SP Rear bracket
	28	V1	100	FO Clevis end	FCP Inductive proximity switches PNP normally closed	P3 Motor flange		AC 1-PH 220V 50HZ	0.09	1400		FI Intermediate support flange
	32	V2	200	TS Ball joint	FCE External limit switches	P4 Motor flange and		AC 3-PH 380/ 220V 50HZ	0.12	2800		FR Rear flange
	35	N1	300	FL Flange end				SERVO	0.18			FS Safety clutch
	40	N2	400					STEPPING	0.25			AR Anti-turn device
	56	L1	500						0.37			IRE Encoder
	63	L2	600						0.55			B Bellows
	80	XL1	700						0.75			SN Safety clutch
	120		800						1.1			ST Stainless steel protective tube
	200		Special						1.5			RPT90 Rear fixing attachment turn at 90°
									2.2			FCK Internal limit switch
									3			POR Internal potentiometer

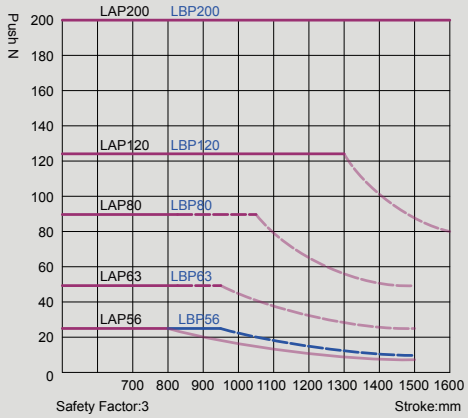
Series	Size	Ratio	Stroke	Front Attachment	Length Limit	Input Versions	Input Shaft	Motor	Power	RPM	Terminal Box Position	Accessories
LAM Series	1	mm	50	ROE Rod end				DC12V				FS Safety clutch
	2	S0	100	FO Clevis end				DC24V				PS Potentiometer
LBM Series	3	S1	150					AC220V				HP Reed switch
	4	S2	200					AC110V				BRE Brake
LMR Series	5	S3	250									L2 Limit Switch
	6	S4	300									Only for LAM8,LAM9
	7		Special									T Thermal protection
	8											
	9											

Note:standard motors with insulation class F and protection IP55, Protection class of Brake IP54.

LAM Linear Actuator

Critical Buckling Force Graphs





Cautions for choosing the model type of actuators:

◆ The percentage of the duty cycle within 10 minutes
LAM series: 10%
LAP22,25 series(acme screw actuator): 25%
LAP28,32,35,40,56,63,80 series(acme screw actuator) : 30%
The ball screw actuator:100%
The duty cycle can be increased if the actual load is less than the rated loads, please consult with the engineers of Lim-tec for the specifics

◆ For the stroke exceeding 800mm, the length of the inner tube and the protective tube should be increased 200mm accordingly.

◆ For the stroke exceeding 300mm, the stability should be checked, please refer to the chart that reflects the relationship between the load and the stroke. As regards to the stability of the LAP and LAP22,25 series whose stroke is above 300mm, please consult with the engineers.

◆ Please confirm the self-locking, and refer to the table of self-locking coefficients, choose the appropriate self-locking according to the actual application. To the acme screw and ball screw actuator without self-locking function, please match the brake with them.

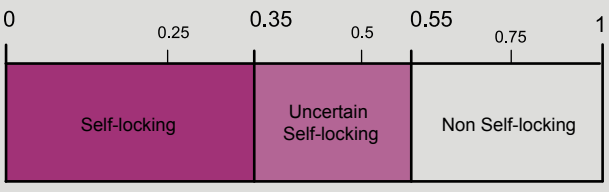
◆ For the acme screw and the ball screw actuator with the stroke of 300mm, the axial error is 0.1mm

◆ The catalogue only lists the parameters and the dimensions of the acme screw actuators, while that of the ball screw actuator, please consult with the engineers.

◆ For special custom design, please consult with engineers.

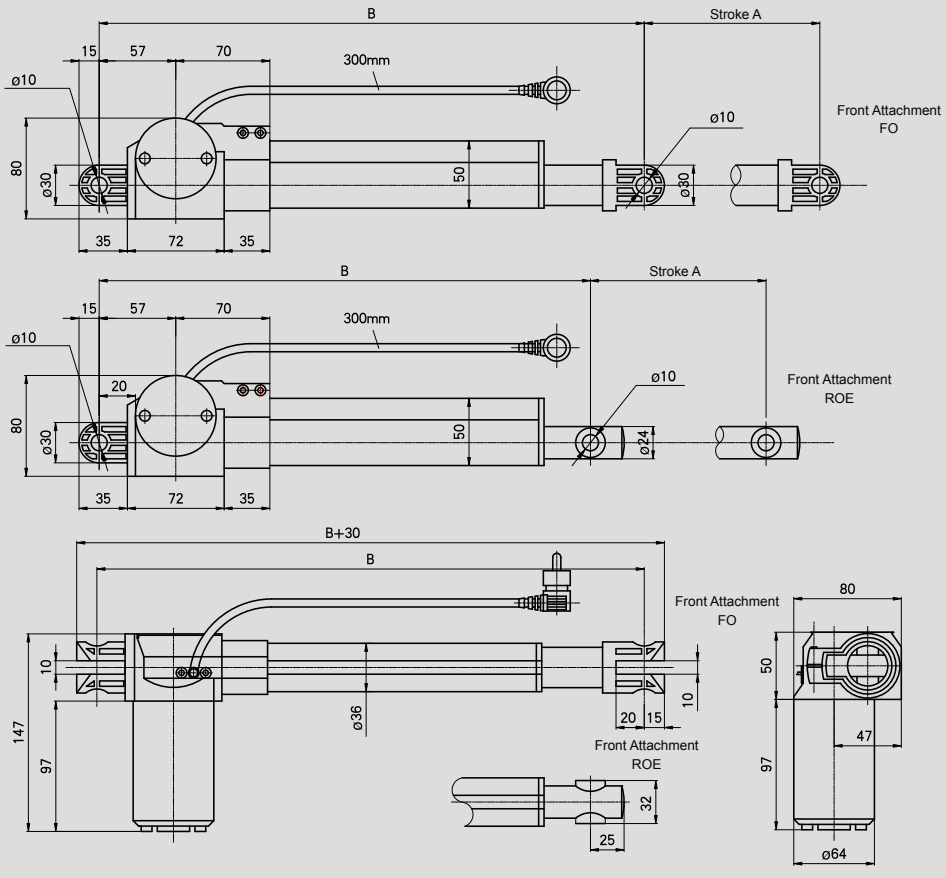
Self-locking conditions for the actuators:

The self-locking state of the actuators can be categorized into four types as follows:
Static self-locking
◆ Self-locking coefficients is less than 0.35
The actuator will not move under the external push or pull load, provided that there is not vibration.
Dynamic self-locking
◆ Self-locking coefficient is less than 0.3
If the load direction is opposite to the move direction, the actuator does not move in the case of power off.
Self-locking coefficient is less than 0.25
If the load direction is the same as the move direction, the actuator does not move in the case of power off
Uncertain self-locking
The self-locking coefficient is between 0.35 and 0.55
The actuator will move up and down under the increased external load
Non self-locking
Self-locking coefficient is above 0.55
The actuator will move up and down under a minimum load.



LAM1 Linear Actuator

- 24/12V DC motor
- Maximum push load up to 600kg, pull load up to 400kg
- Maximum stroke up to 500mm
- Low noise, steady speed
- Built-in unadjustable limit switch
- 10% duty cycle (10 minutes)
- Working temperature:-26℃ -+65℃
- Protection class: IP52
- Accessories: potentiometers, hall sensor, over-heat protection.



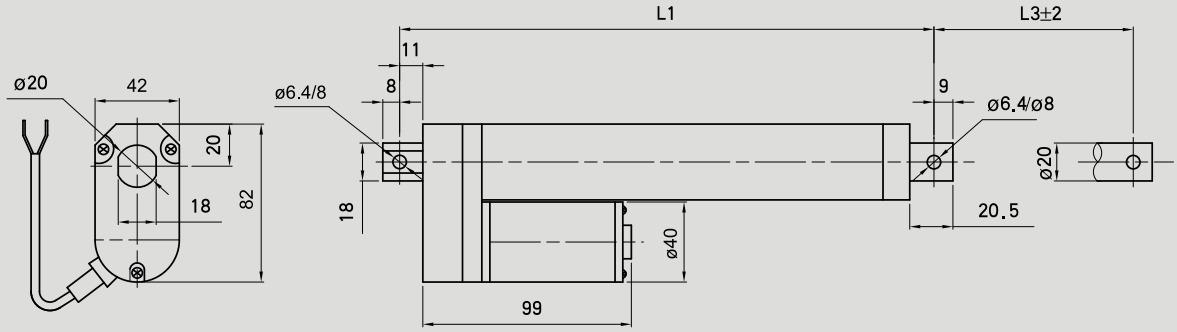
Stroke A	B/FO	B/ROE
50	250	210
100	300	260
150	360	320
200	410	370
250	470	430
300	520	480
400	–	590
500	–	710

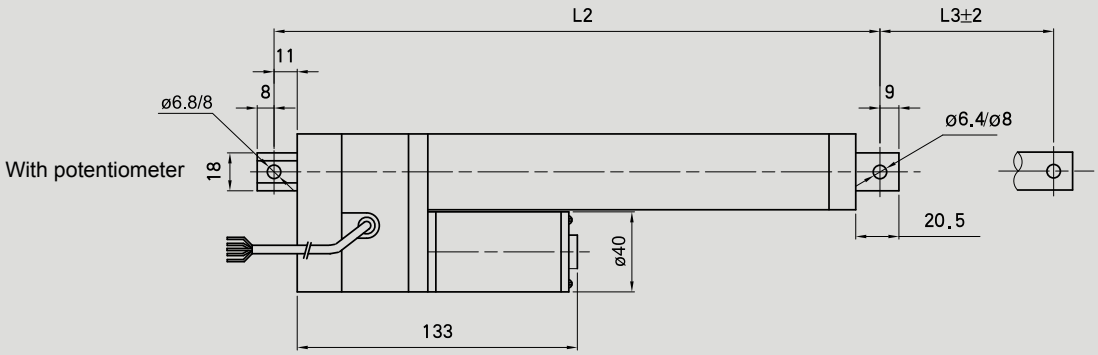
Type	Rated Push Load N	Rated Pull Load N	Self-lock Push Load N	Self-lock Pull Load N	Max Stroke mm	Rated Current (24V)A	Speed mm/s
LAM1–S0	3000	2000	3000	1500	500	2.4	6.2–8.2
LAM1–S1	6000	4000	6000	4000	500	2.8	2.6–4.2

If stroke exceed to 300mm , the rated load will be reduced.

LAM3 Linear Actuator

- 24V/12V DC motor
- Aluminum Alloy housing with rust-proof treatment
- Low noise; compact size
- Built-in un-adjustable limit switch
- Can be equipped with potentiometer with 10k/10 turns,
- 25% duty cycle within (10 minutes)
- Working temperature:-40℃ -+85℃
- Protection class: IP52
- Optional IP66
- Free maintenance





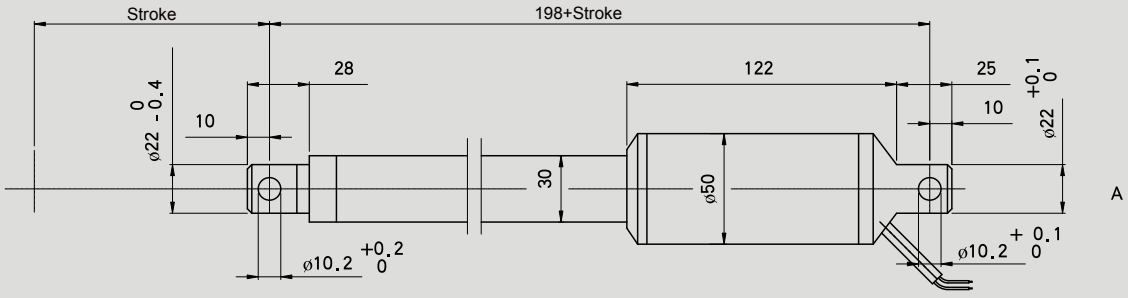
L3:Stroke	50	100	150	200	250	300
L1:Ratrected length (mm)	158	209	260	311	362	413
L2:Ratrected length (mm)	192	243	294	345	396	447

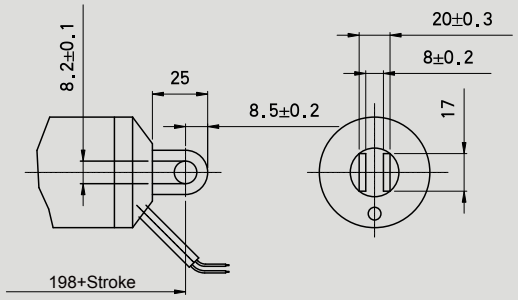
Model	Rated load N	Ratio i	Max. Stroke mm	Full load current (24V)A	Full load current (12V)A	Speed mm/s
LAM3–S0	120	5/1	300	2.2	3.4	45–57
LAM3–S1	240	10/1	300	1.9	3.2	22–30
LAM3–S2	500	20/1	300	1.8	3.0	12–17
LAM3–S3	750	30/1	300	1.8	3.0	8–10
LAM3–S4	1000	40/1	300	1.5	2.6	6–8

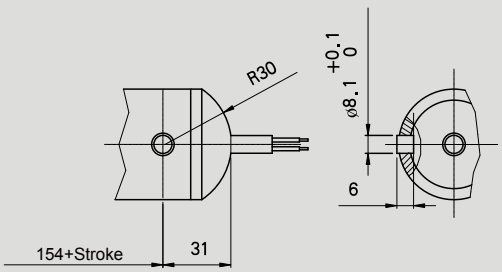
Note:Standard mounting hole dimension of LAM3 are Ø 6.4, and Ø 8 is optional.

LAM5 Linear Actuator

- ◆ 24V/12V DC motors
- ◆ High intensity housing, patented configuration design
- ◆ Maximum push load up to 40kg
- ◆ Stroke range: 50mm-200mm; at intervals of 50mm;
- ◆ Working temperature: 5℃ -+40℃
- ◆ Storage temperature: -40℃ -+70℃
- ◆ 10% duty cycle (within 10 minutes)
- ◆ Protection class: IP51; (IP65)
- ◆ Small and compact size; advantageous in terms of the
- ◆ Compact size





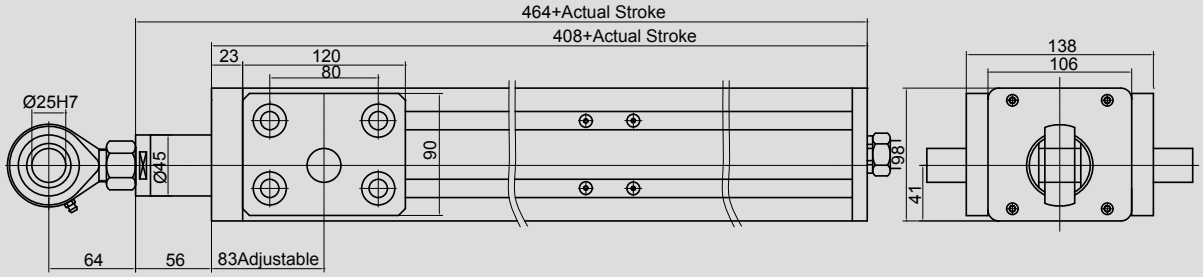


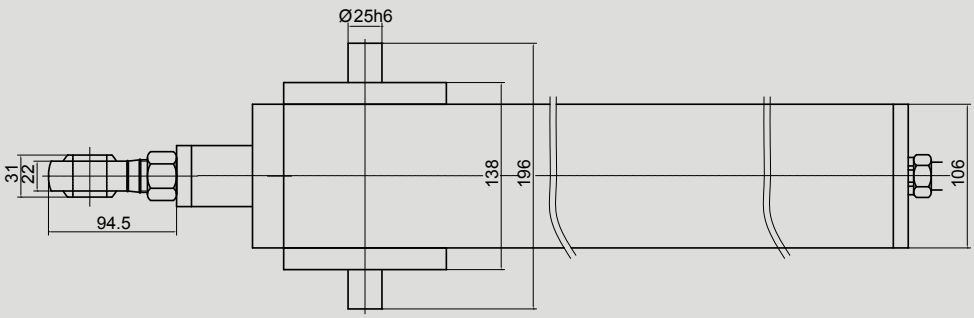
Type	Rated Push Load N	Rated Pull Load N	Self-lock Push Load N	Self-lock Pull Load N	Max Stroke mm	Rated Current (24V)A	Speed mm/s
LAM5–S0	300	–	300	–	200	2.1	17.5–37
LAM5–S1	400	–	400	–	200	2.5	13.5–27

LAM Linear Actuator

LAM6 Linear Actuator

- For solar tracking application
- DC 24/12V Motor
- Max. Dynamic load 10000N
- Max. Static load 20000N
- Speed: 2mm/s
- Stroke: 400,815,1000,1500 (Optional special stroke)
- Front attachment Ball joint
- Aluminium housing
- Limit switch
- Encoder
- Trunnion mounting
- Duty cycle: 10% S2/15min
- Protection class : IP65

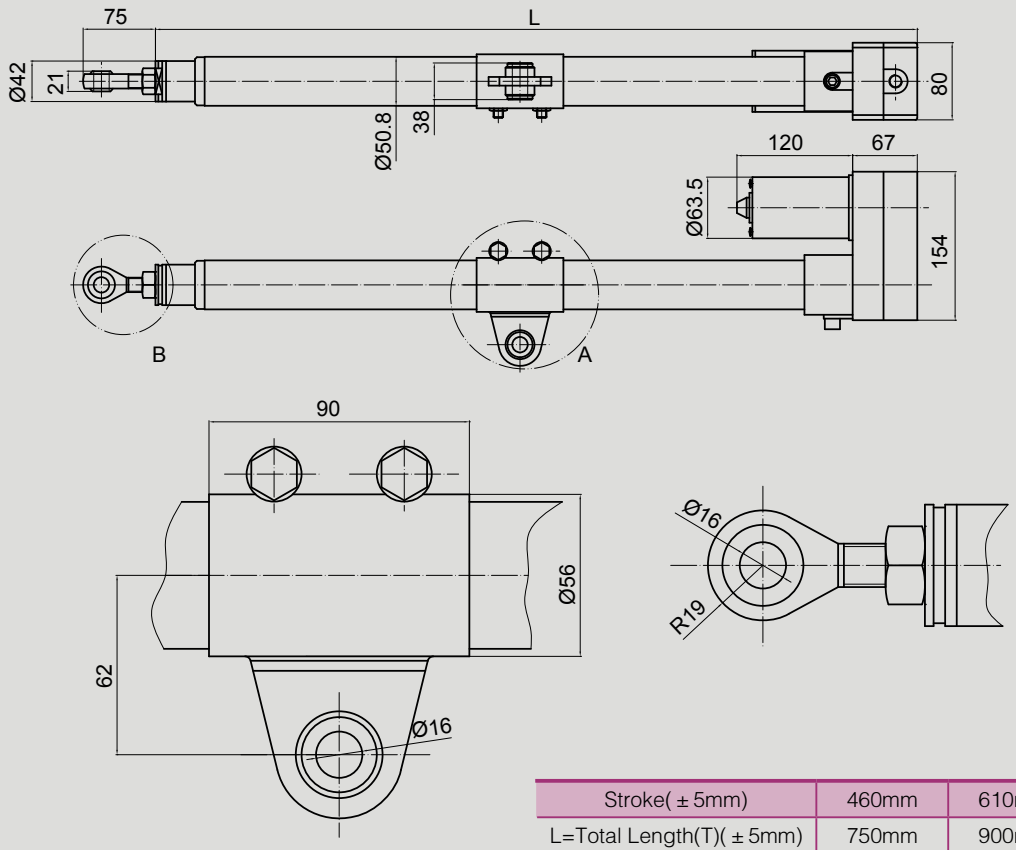




Type	Rated Push Load N	Rated Pull Load N	Self-lock Push Load N	Self-lock Pull Load N	Max Stroke mm	Rated Current (24V)A	Speed mm/s
LAM6–S1	20000	20000	20000	20000	2000	10	1.6

LAM7 Linear Actuator

- For antenna dirve application
- DC 24/36V
- Max. Dynamic load 10000N
- Max. Static load 20000N
- Speed: 3mm/s
- Stroke: 457,609,914, (Optional special stroke)
- ACME or Ball screw
- Aluminium housing
- Reed switch
- Trunnion mounting
- Duty cycle: 20%
- Protection class : IP65



Stroke(± 5mm)	460mm	610mm	915mm
L=Total Length(T)(± 5mm)	750mm	900mm	1205mm
L=Total Length(B)(± 5mm)	790mm	940mm	1250mm

Type	Rated Push Load N	Rated Pull Load N	Self-lock Push Load N	Self-lock Pull Load N	Max Stroke mm	Rated Current (24V)A	Speed mm/s
LAM7–S0	6000	6000	6000	6000	1000	4.5	3
LAM7–S1	8000	8000	8000	8000	1000	6	3
LAM7–S2	10000	10000	10000	10000	1000	7.5	3

LAP Series Linear Actuator

LAP Series Performance Table

Performance Table of LAP Series---With DC Motor 24V

Type	Speed mm/s	Dynamic Load N	Ratio	Motot Power	Rated Current A	Self-locking Coefficient	Weight kg	Extra Weight per 100mm stroke kg
LAP22	26–36	400	N2	DC24V	4.5	0.35	2	0.3
	13–18	750	L2		4.2	0.27		
	10–13.5	950	N1		4.2	0.22		
	5–6.5	1400	L1		4.5	0.16		
LAP25	32–40	1000	N2	DC24V	9.8	0.35	3.2	0.4
	16–20	1600	L2		9.5	0.28		
	12–15	2000	N1		9.6	0.22		
	6–7.5	3000	L1		9.5	0.17		

Performance Table of LAP Series---With AC 3-Phase Motor

Type	Speed mm/s	Dynamic Load N	Ratio	Motot Power	Self-locking Coefficient	Weight kg	Extra Weight per 100mm stroke kg
LAP22	30	500	N2	0.06kW 2800 380V 50HZ	0.35	2	0.3
	15	750	L2		0.27		
	11	900	N1		0.22		
	5.5	1400	L1		0.16		
LAP25	37	1000	N2	0.09kW 2800 380V 50HZ	0.35	3.2	0.4
	18.5	1600	L2		0.28		
	14	2000	N1		0.22		
	7	3000	L1		0.17		
LAP28	93	600	H2	0.12kW 2800 380V 50HZ	0.40	5.1	0.3
	60	1000	V2		0.41		
	46	850	H2	0.09kW 1400 380V 50HZ	0.40		
	35	1100	H1	0.12kW 2800 380V 50HZ	0.25		
	30	1750	N2		0.35		
	22	1500	V1		0.25		
	15	3000	L2		0.27		
	11	3600	N1		0.22		
	7.5	4000	L2	0.09kW 1400 380V 50HZ	0.27		
	5.5	4000	L1	0.12kW 2800 380V 50HZ	0.16		
	2.8	4000	L1	0.09kW 1400 380V 50HZ	0.16		
	1.9	4000	XL1		0.11		
LAP32	93	830	H2	0.18kW 2800 380V 50HZ	0.38	5.8	0.5
	60	1250	V2		0.38		
	46	1300	H1		0.27		
	30	2200	N2		0.33		
	23	1650	H1	0.12kW 1400 380V 50HZ	0.27		
	15	3750	L2	0.18kW 2800 380V 50HZ	0.25		
	7.5	5550	L1		0.18		
	3.5	6000	L1	0.12kW 1400 380V 50HZ	0.18		
	1.9	6000	XL1		0.12		
LAP35	93	1300	V2	0.25kW 2800 380V 50HZ	0.37	7.4	0.8
	46	2100	V1		0.25		
	23	4300	N2		0.28		
	15	6000	L2		0.22		
	11	6300	N1		0.20		
	7.5	10000	L1		0.16		
	5.5	9000	N1	0.18kW 1400 380V 50HZ	0.20		
	4	10000	L1		0.16		

Type	Speed mm/s	Dynamic Load N	Ratio	Motot Power	Self-locking Coefficient	Weight kg	Extra Weight per 100mm stroke kg
LAP40	93	3000	V2	0.55kW 2800 380V 50HZ	0.37	12.9	0.9
	46	4400	V1		0.26		
	23	10000	N2		0.25		
	18	12000	L2		0.24		
	11	12000	N1		0.18		
	9	12000	L2	0.37kW 1400 380V 50HZ	0.24		
	5.5	12000	N1		0.18		
	4.5	12000	L1		0.17		
LAP56	93	11000	V2	2.2kW 2800 380V 50HZ	0.35	50	2
	46	15000	V2	1.5kW 1400 380V 50HZ	0.35		
	30	20000	N2	2.2kW 2800 380V 50HZ	0.26		
	23	18000	V1	1.5kW 1400 380V 50HZ	0.24		
	15	25000	N2		0.26		
	11	25000	L2	0.75kW 1400 380V 50HZ	0.23	40	
	7.5	25000	N1		0.18		
	5.5	25000	L1		0.15		
LAP63	89	15000	V2	3.0kW 2800 380V 50HZ	0.34	80	4
	44	30000	V2	3.0kW 1400 380V 50HZ	0.34		
	30	40000	N2	3.0kW 2800 380V 50HZ	0.26		
	22	42000	V1	3.0kW 1400 380V 50HZ	0.21		
	15	50000	N2	2.2kW 1400 380V 50HZ	0.26		
	11	50000	L2		0.23		
	7.5	50000	N1	1.5kW 1400 380V 50HZ	0.18	70	
	5.5	50000	L1		0.15		
LAP80	134	14000	V2	4.0kW 2800 380V 50HZ	0.35	150	6
	77	20000	XV2		0.32		
	67	28000	V2	4.0kW 1400 380V 50HZ	0.35		
	46	35000	N2	4.0kW 2800 380V 50HZ	0.24		
	38	40000	XV2	4.0kW 1400 380V 50HZ	0.32		
	33	40000	V1		0.24		
	23	70000	N2		0.24		
	19	65000	XV1		0.20		
	17	80000	L2		0.22		
	11	80000	N1		0.16		
	8.5	80000	L1	3.0kW 1400 380V 50HZ	0.15	140	
LAP120	77	35 kN	H2	7.5kW 1400 380V 50HZ	0.35	310	9
	52	38 kN	H2	5.5kW 950 380V 50HZ	0.35		
	45	45 kN	H1	7.5kW 1400 380V 50HZ	0.23		
	38	65 kN	N2		0.30		
	30	50 kN	H1	5.5kW 950 380V 50HZ	0.23		
	26	75 kN	N2		0.30		
	22	90 kN	N1	7.5kW 1400 380V 50HZ	0.18		
	19	110 kN	L2		0.22		
	15	95 kN	N1	5.5kW 950 380V 50HZ	0.18		
	13	120 kN	L2		0.22		
	11	125 kN	L1	7.5kW 1400 380V 50HZ	0.16		
	7.5	125 kN	L1	4.0kW 950 380V 50HZ	0.16		

LAP Series Performance Table

Type	Speed mm/s	Dynamic Load KN	Ratio	Motot Power	Self–locking Coefficient	Weight kg	Extra Weight per 100mm stroke kg
LAP200	77	48	H2	11kW 1400 380V 50HZ	0.34	450	13
	52	48	H2	7.5kW 950 380V 50HZ	0.34		
	45	60	H1	11kW 1400 380V 50HZ	0.23		
	38	90	N2		0.26		
	30	60	H1	7.5kW 950 380V 50HZ	0.23		
	26	90	N2		0.26		
	22	115	N1	11kW 1400 380V 50HZ	0.16		
	19	165	L2		0.22		
	15	115	N1	7.5kW 950 380V 50HZ	0.16		
	13	165	L2		0.22		
	11	200	L1	11kW 1400 380V 50HZ	0.14		
	7.5	200	L1	7.5kW 950 380V 50HZ	0.14		

Note:LAP Series linear actuator can be driven by AC 1-phase motor,DC motor,stepping motor,servomotor,but the perfomances will be changed,please consult with Lim-Tec’s engineers.
Ambient temperature of LAP Series linear actuator is -15℃ – +40℃,please consult with Lim-Tec’s engineers if the special temperature required.

Performance Table of LBP Series–––With DC Motor 24V

Type	Speed mm/s	Dynamic Load N	Ratio	Motot Power	Rated Current	Self–locking Coefficient	Weight kg	Extra Weight per 100mm stroke kg
LBP22	12.5–16.5	900	N1	DC24V	4.2	0.49	2	0.3
	6.5–8.5	1400	L1		4.5	0.36		
LBP25	16–20	2000	N1	DC24V	9.6	0.49	3.2	0.4
	8–10	2700	L1		9.5	0.37		

Performance Table of LBP Series–––With AC 3–Phase Motor

Type	Speed mm/s	Dynamic Load N	Ratio	Motot Power	Self–locking Coefficient	Weight kg	Extra Weight per 100mm stroke kg
LBP22	15	900	N1	0.06kW 2800 380V 50HZ	0.49	2	0.3
	7.5	1400	L1		0.36		
LBP25	18.6	2000	N1	0.09kW 2800 380V 50HZ	0.49	3.2	0.4
	9.3	2700	L1		0.37		
LBP32	58	1500	H1	0.18kW 2800 380V 50HZ	0.56	5.8	0.5
	37	2200	V1		0.56		
	29	2400	H1	0.12kW 1400 380V 50HZ	0.56		
	18.5	3500	N1	0.18kW 2800 380V 50HZ	0.48		
	9.3	4400	N1	0.12kW 1400 380V 50HZ	0.48		
	4.6	4500	L1		0.37		
LBP35	58	2600	V1	0.25kW 2800 380V 50HZ	0.56	7.4	0.8
	29	3400	V1	0.18kW 1400 380V 50HZ	0.56		
	14.5	4500	N1	0.25kW 2800 380V 50HZ	0.43		
	9.7	5400	L1		0.34		
	7.2	5400	N1	0.18kW 1400 380V 50HZ	0.43		
	4.8	5500	L1		0.34		
LBP40	46.6	4800	V1	0.55kW 2800 380V 50HZ	0.56	13	0.9
	23.3	5800	V1	0.37kW 1400 380V 50HZ	0.56		
	11.6	7200	N1	0.55kW 2800 380V 50HZ	0.38		
	9.3	7600	L1		0.36		
	5.8	8000	N1	0.37kW 1400 380V 50HZ	0.38		
	4.6	8000	L1		0.36		

Type	Speed mm/s	Dynamic Load N	Ratio	Motot Power	Self–locking Coefficient	Weight kg	Extra Weight per 100mm stroke kg
LBP56	78	12500	V1	1.5kW 2800 380V 50HZ	0.56	50	2
	39	15500	V1	1.5kW 1400 380V 50HZ	0.56		
	26	18000	N1	1.5kW 2800 380V 50HZ	0.43		
	18.5	20000	L1	1.1kW 2800 380V 50HZ	0.37	40	
	13	22000	N1	0.75kW 1400 380V 50HZ	0.43		
	9.3	25000	L1		0.37		
LBP200	80	85 kN	H2	11kW 1400 380V 50HZ	0.55	470	13
	64	105 kN	H1	11kW 1400 380V 50HZ	0.55		
	54	85 kN	H2	7.5kW 950 380V 50HZ	0.55		
	43	105 kN	H1	7.5kW 950 380V 50HZ	0.55		
	40	165 kN	N2	11kW 1400 380V 50HZ	0.46		
	32	190 kN	N1	11kW 1400 380V 50HZ	0.46		
	27	165 kN	N2	7.5kW 950 380V 50HZ	0.46		
	21.5	190 kN	N1	7.5kW 950 380V 50HZ	0.46		
	20	190 kN	L2	7.5kW 1400 380V 50HZ	0.40	450	
	16	200 kN	L1	7.5kW 1400 380V 50HZ	0.40		
	13.5	200 kN	L2	5.5kW 950 380V 50HZ	0.40		
	10.5	200 kN	L1	5.5kW 950 380V 50HZ	0.40		

Note:LBP Series linear actuator can be driven by AC 1-phase motor,DC motor,stepping motor,servomotor,but the perfomances will be changed,please consult with Lim-Tec’s engineers.
Ambient temperature of LBP Series linear actuator is -15℃ – +40℃,please consult with Lim-Tec’s engineers if the special temperature required.
It is also available to supply LBP63/80/120.

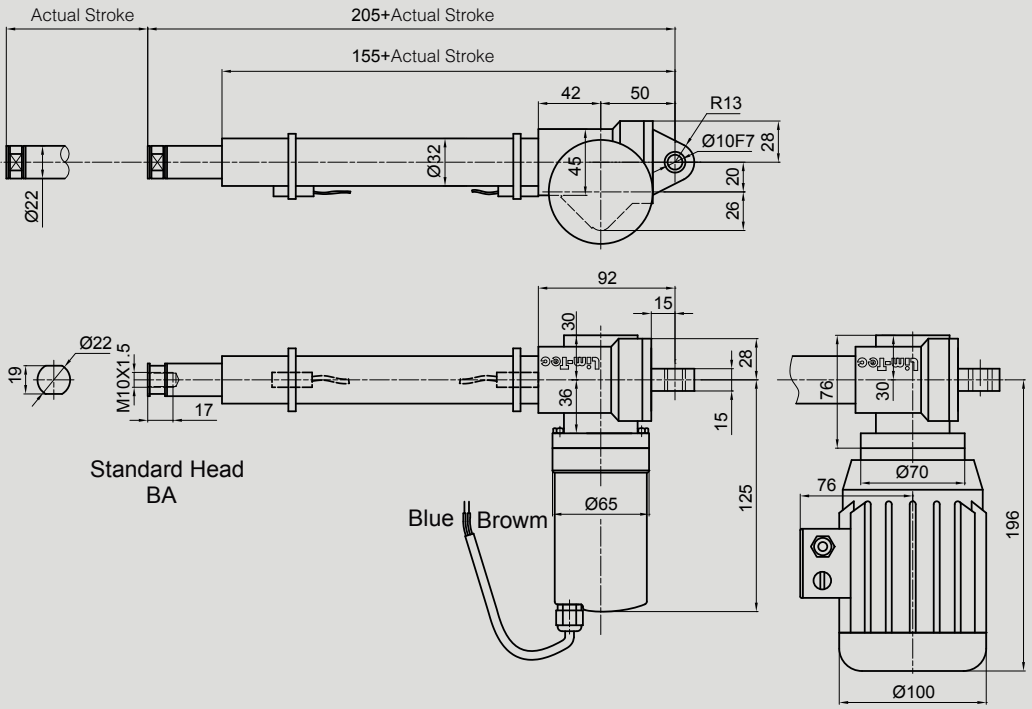
Rated dynamic load table:

Type	Rated dynamic load KN
LBP22	4.25
LBP25	4.25
LBP32	7.8
LBP35	11.3
LBP40	18.0
LBP56	33.9
LBP200	250

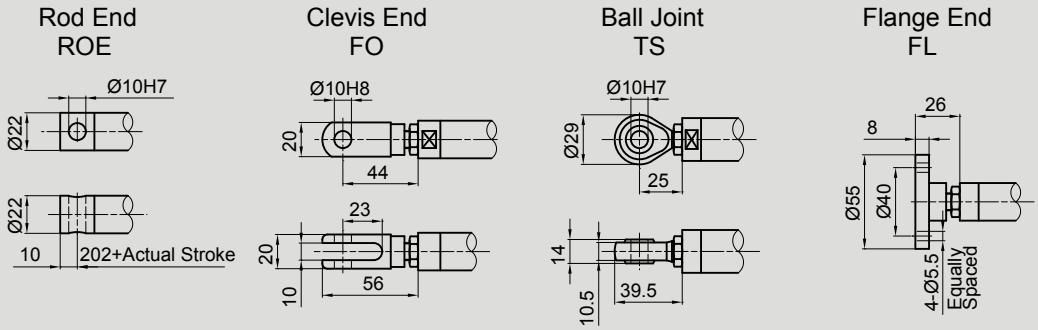
Overall Dimension of LAP Series Linear Actuator

Dimension of LAP22

With magnetic reed switches FCM



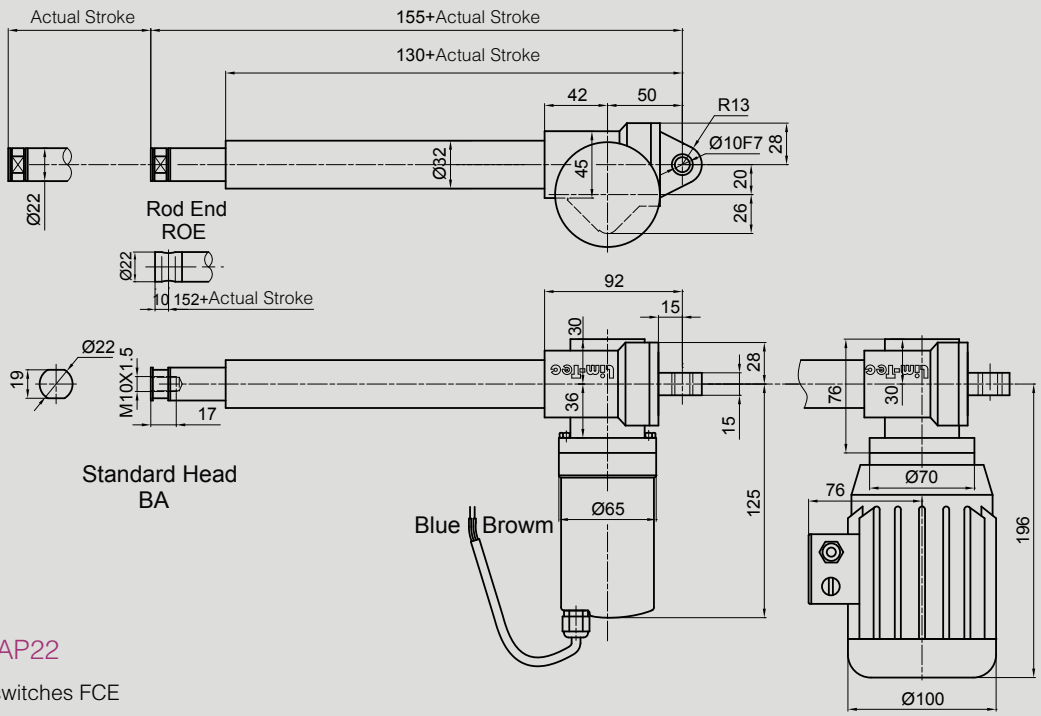
Front Attachment



Stroke Code	100	150	200	300
Actual Stroke	100	150	200	300

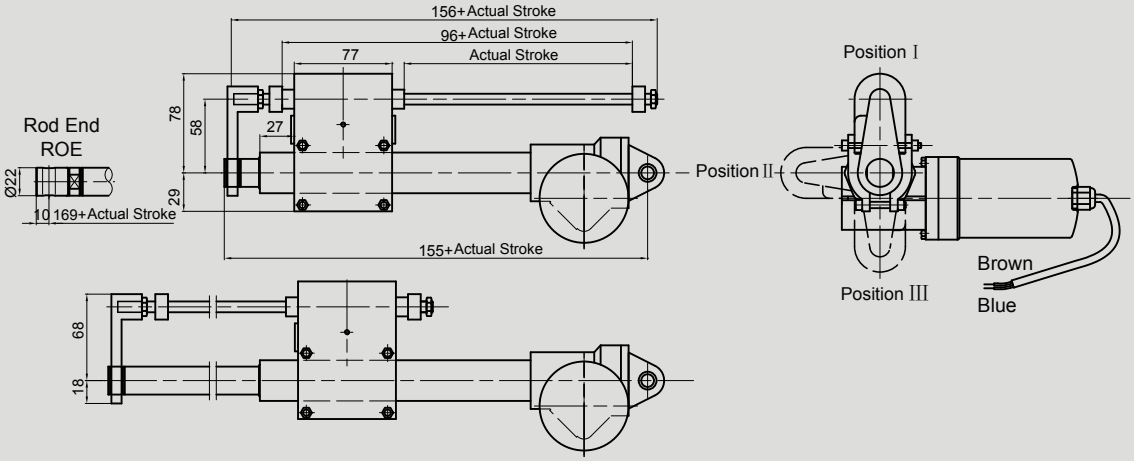
Dimension of LAP22

Without limit switches



Dimension of LAP22

With external limit switches FCE

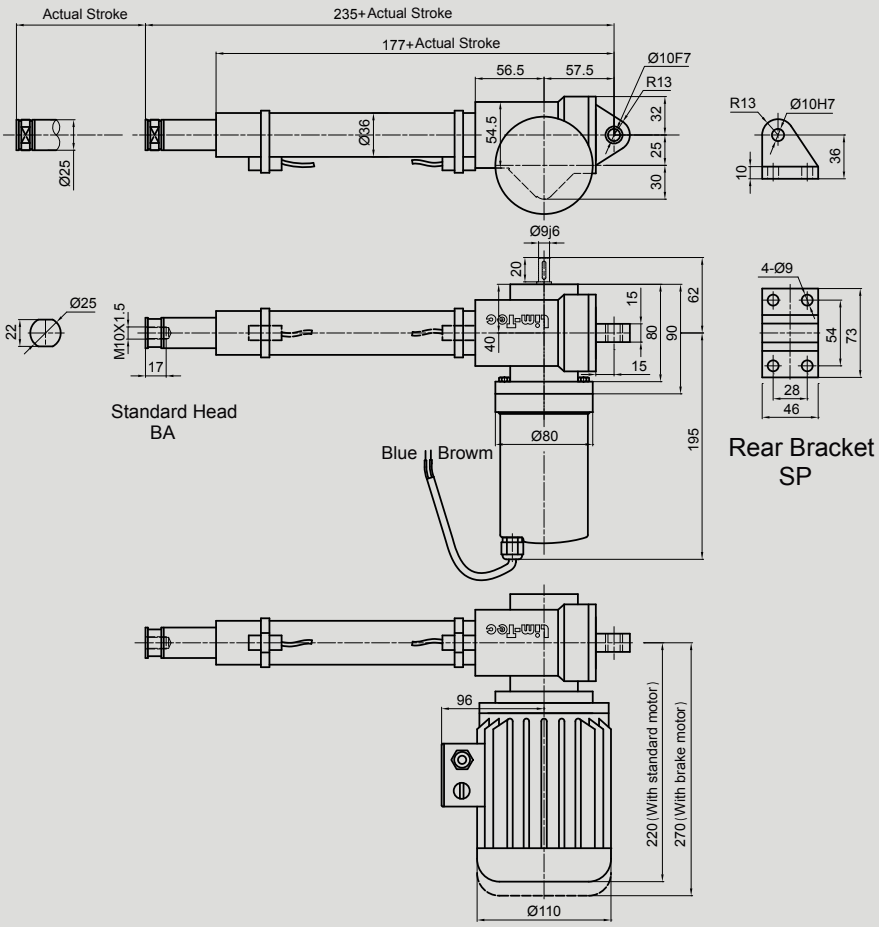


Stroke Code	100	150	200	300
Actual Stroke	125	175	225	325

Overall Dimension of LAP Series Linear Actuator

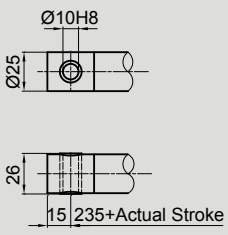
Dimension of LAP25

With magnetic reed switches FCM

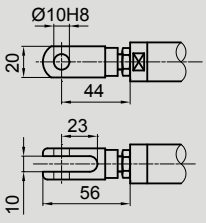


Front Attachment

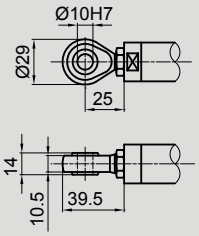
Rod End
ROE



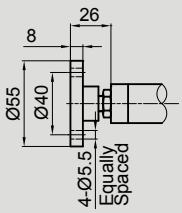
Clevis End
FO



Ball Joint
TS



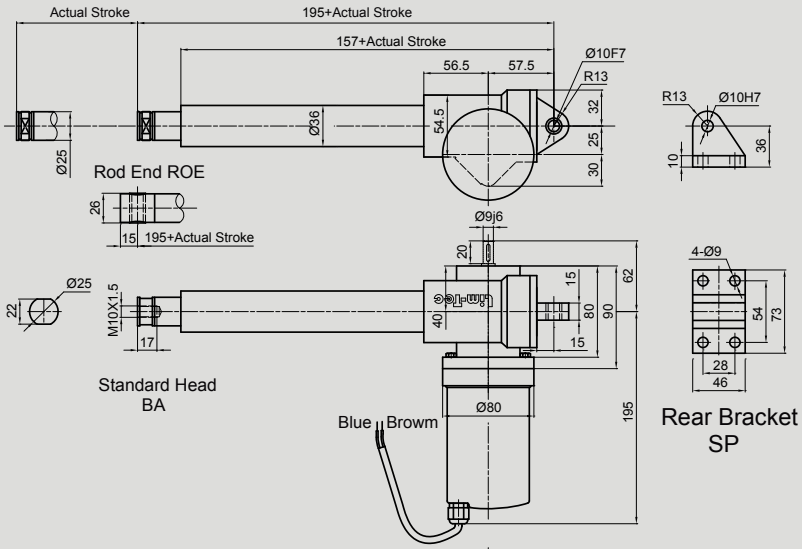
Flange End
FL

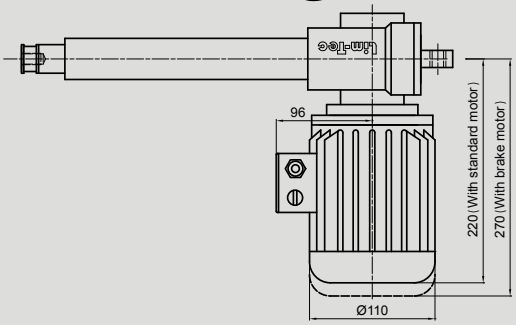


Stroke Code	100	200	300	400	500
Actual Stroke	100	200	300	400	500

Dimension of LAP25

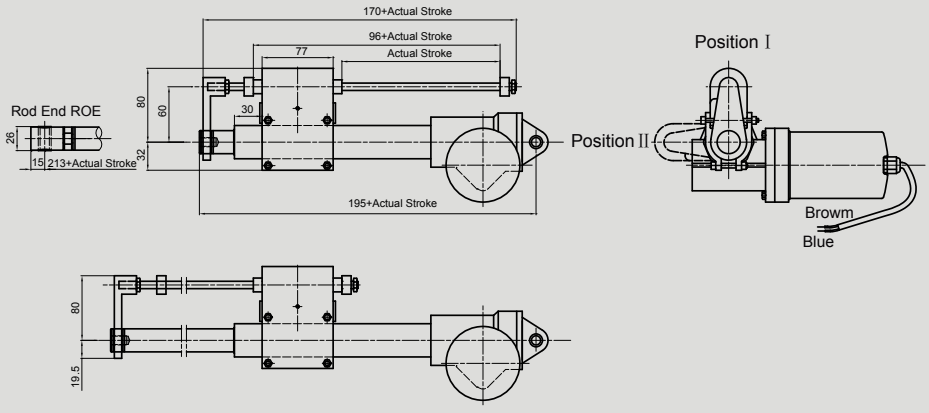
Without limit switches





Dimension of LAP25

With external limit switches FCE

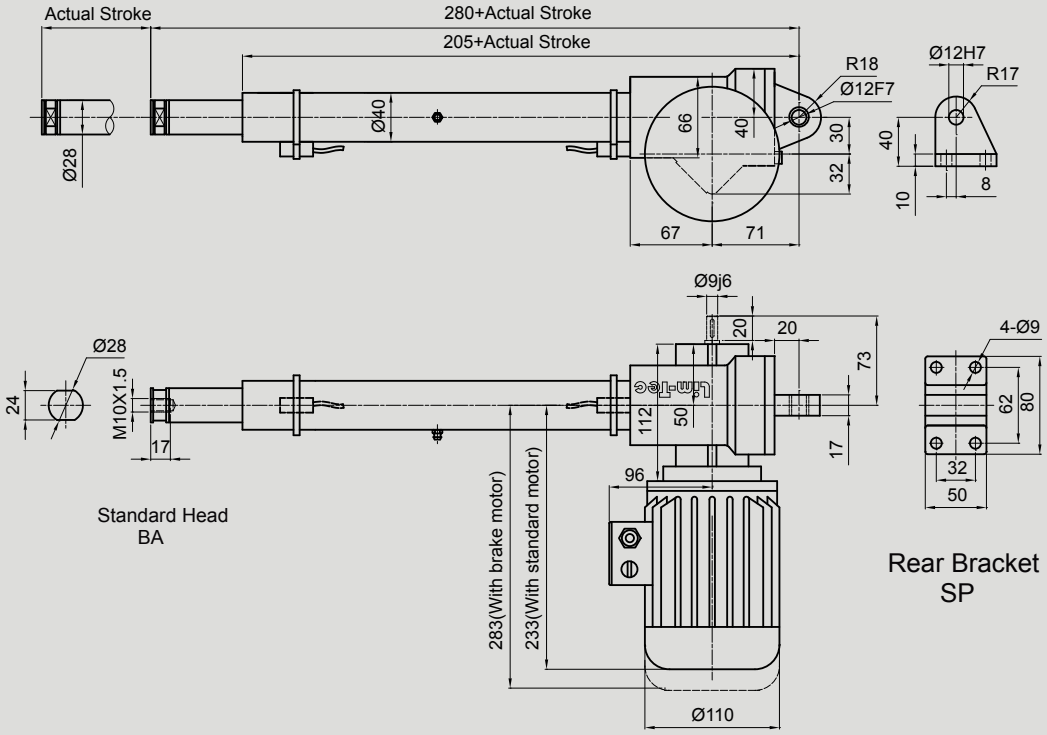


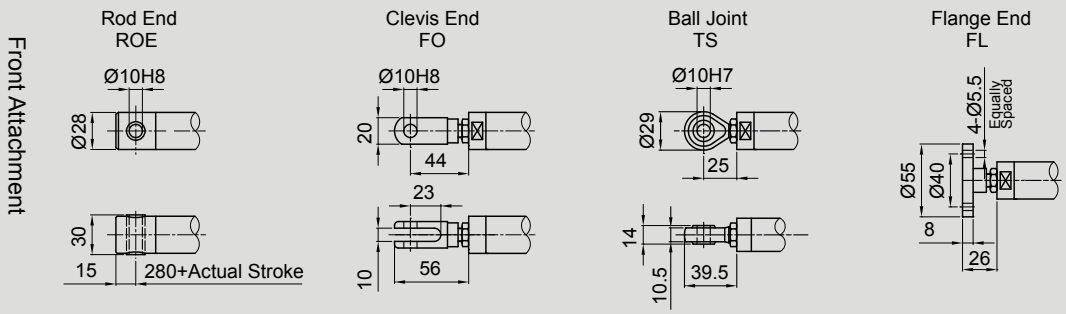
Stroke Code	100	200	300	400	500
Actual Stroke	120	220	320	420	520

Overall Dimension of LAP Series Linear Actuator

Dimension of LAP28

With magnetic reed switches FCM



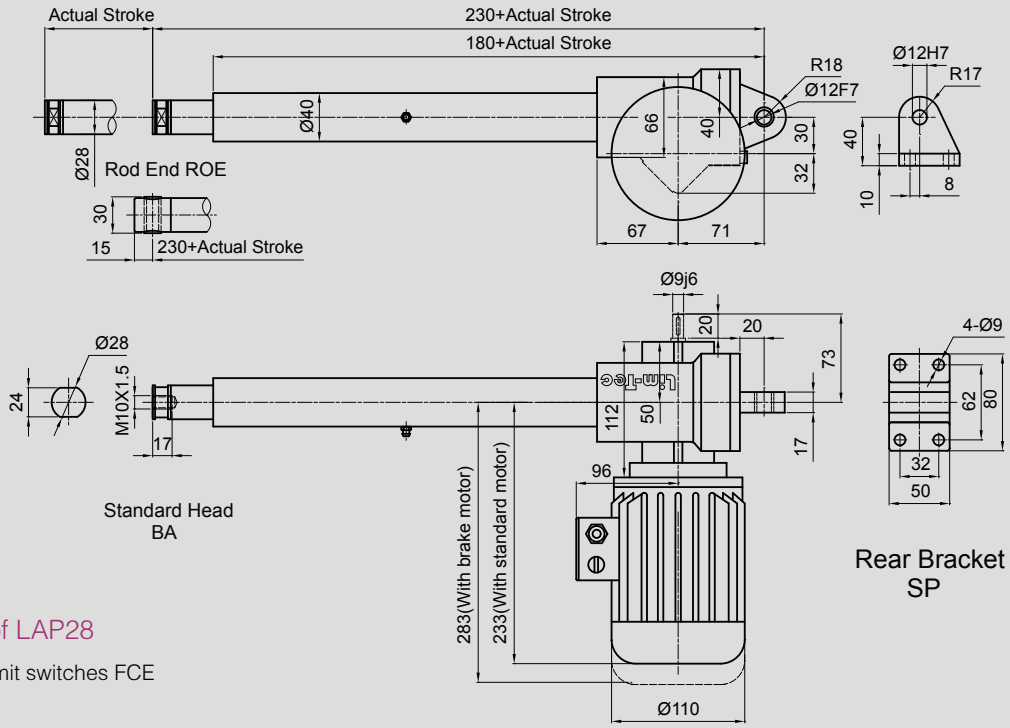


Stroke Code	100	200	300	400	500	600	700	800
Actual Stroke	100	200	300	400	500	600	700	800

Note:If the stroke between 800mm–1500mm,the length of external tube & push rod will increase 200mm
If the stroke exceed to 1500mm,please consult with Lim–Tec’s engineers

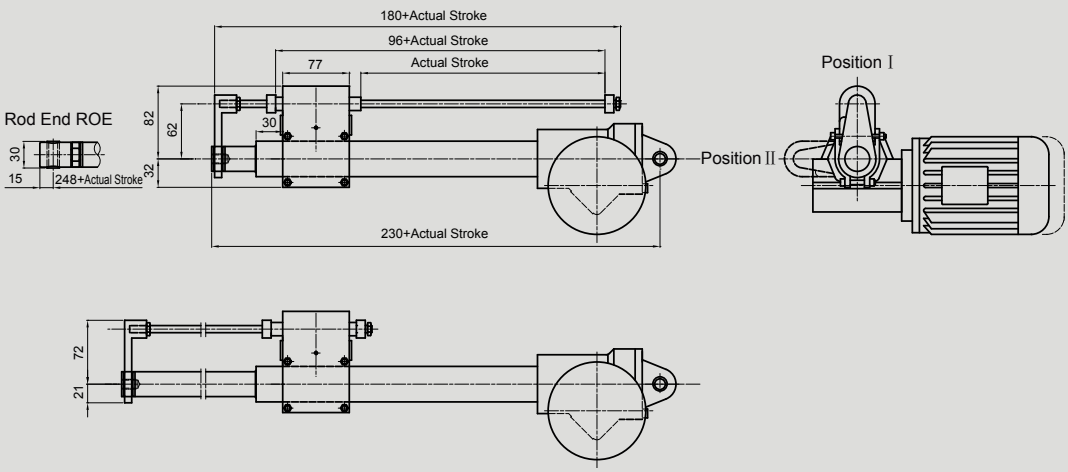
Dimension of LAP28

Without limit switches



Dimension of LAP28

With external limit switches FCE



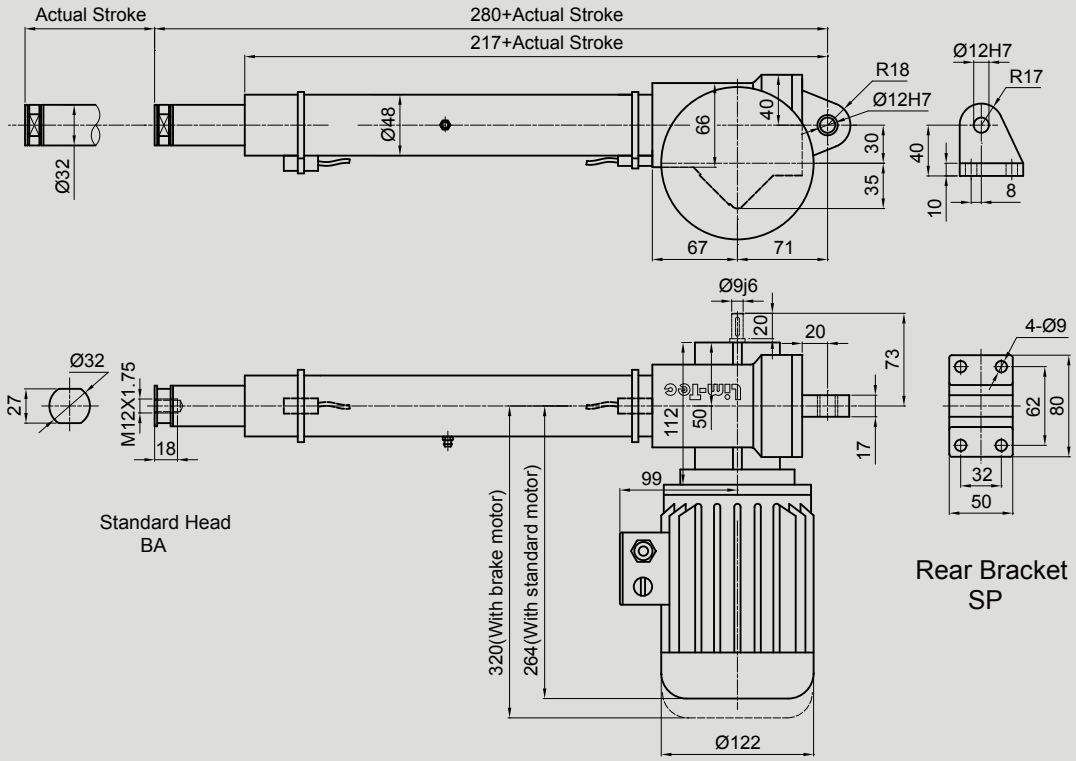
Stroke Code	100	200	300	400	500	600	700	800
Actual Stroke	125	225	325	425	525	625	725	825

Note:If the stroke between 800mm–1500mm,the length of external tube & push rod will increase 200mm
If the stroke exceed to 1500mm,please consult with Lim–Tec’s engineers

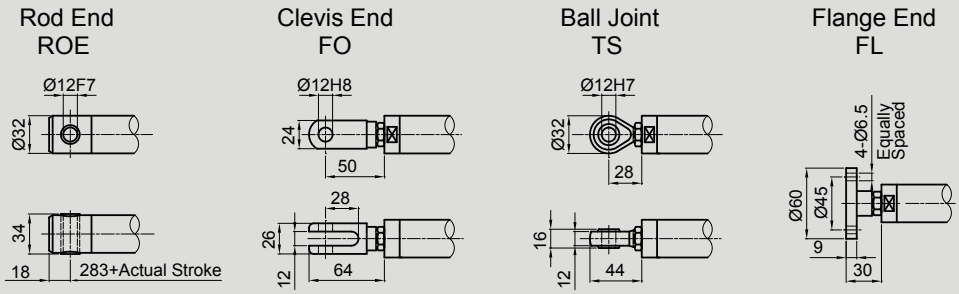
Overall Dimension of LAP Series Linear Actuator

Dimension of LAP32

With magnetic reed switches FCM



Front Attachment

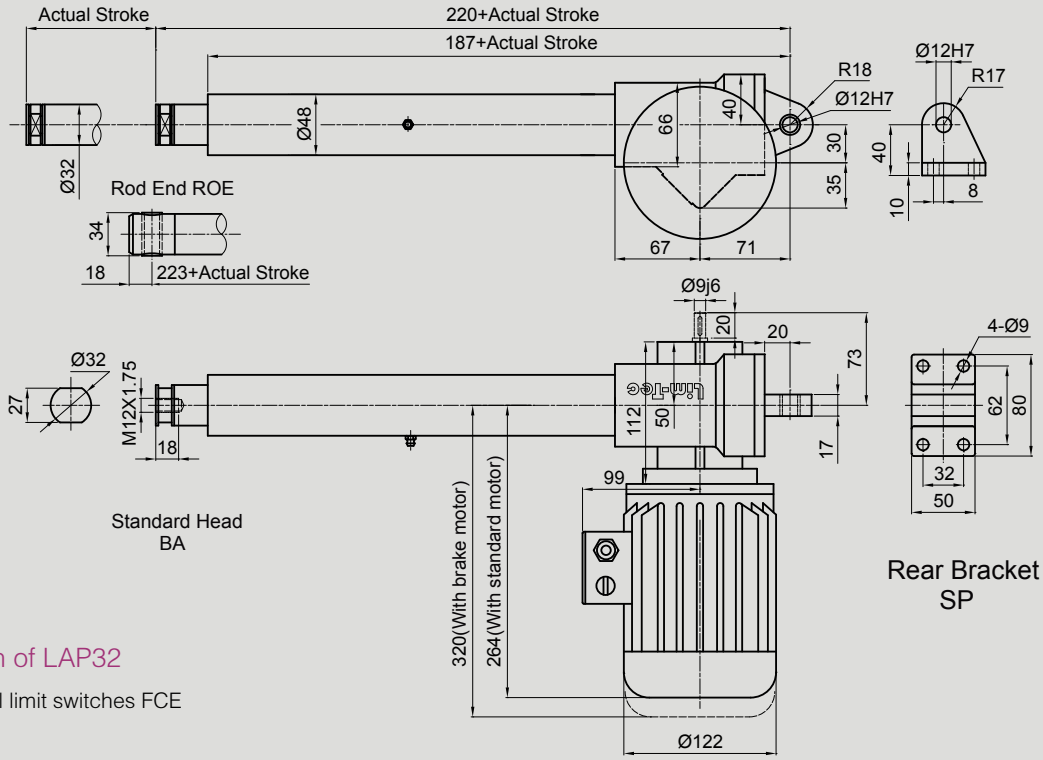


Stroke Code	100	200	300	400	500	600	700	800
Actual Stroke	100	200	300	400	500	600	700	800

Note:If the stroke between 800mm–1500mm,the length of external tube & push rod will increase 200mm
If the stroke exceed to 1500mm,please consult with Lim–Tec’s engineers

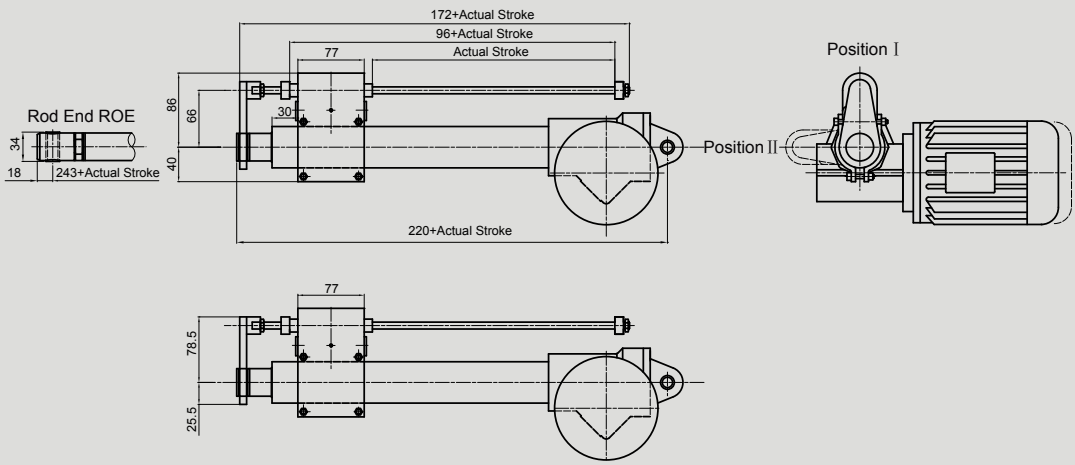
Dimension of LAP32

Without limit switches



Dimension of LAP32

With external limit switches FCE



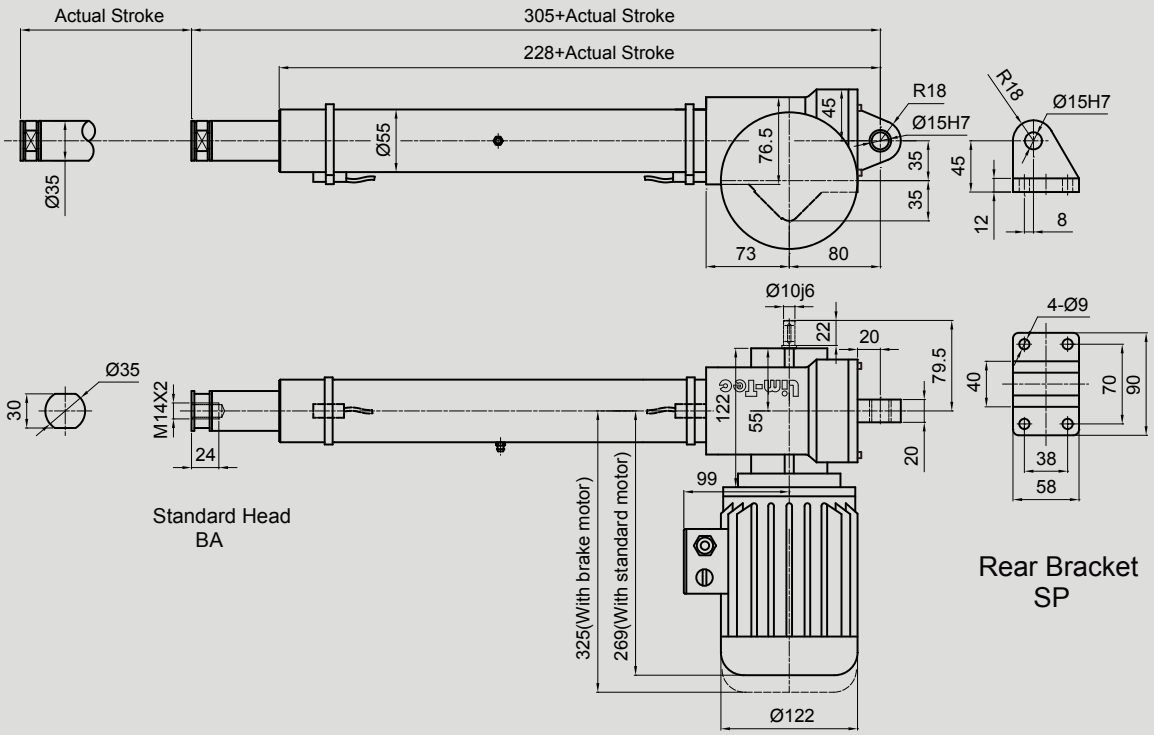
Stroke Code	100	200	300	400	500	600	700	800
Actual Stroke	130	230	330	430	530	630	730	830

Note:If the stroke between 800mm–1500mm,the length of external tube & push rod will increase 200mm
If the stroke exceed to 1500mm,please consult with Lim–Tec’s engineers

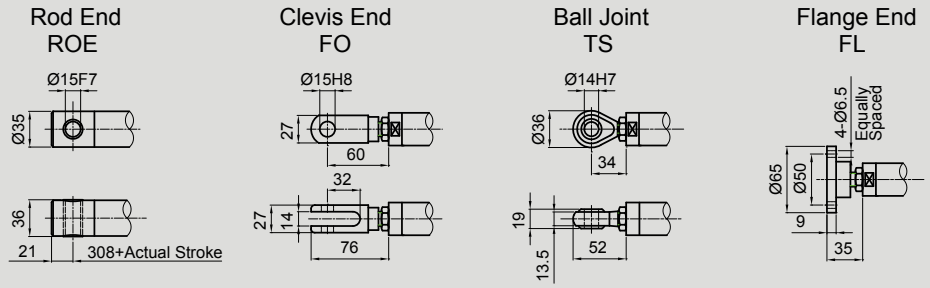
Overall Dimension of LAP Series Linear Actuator

Dimension of LAP35

With magnetic reed switches FCM



Front Attachment

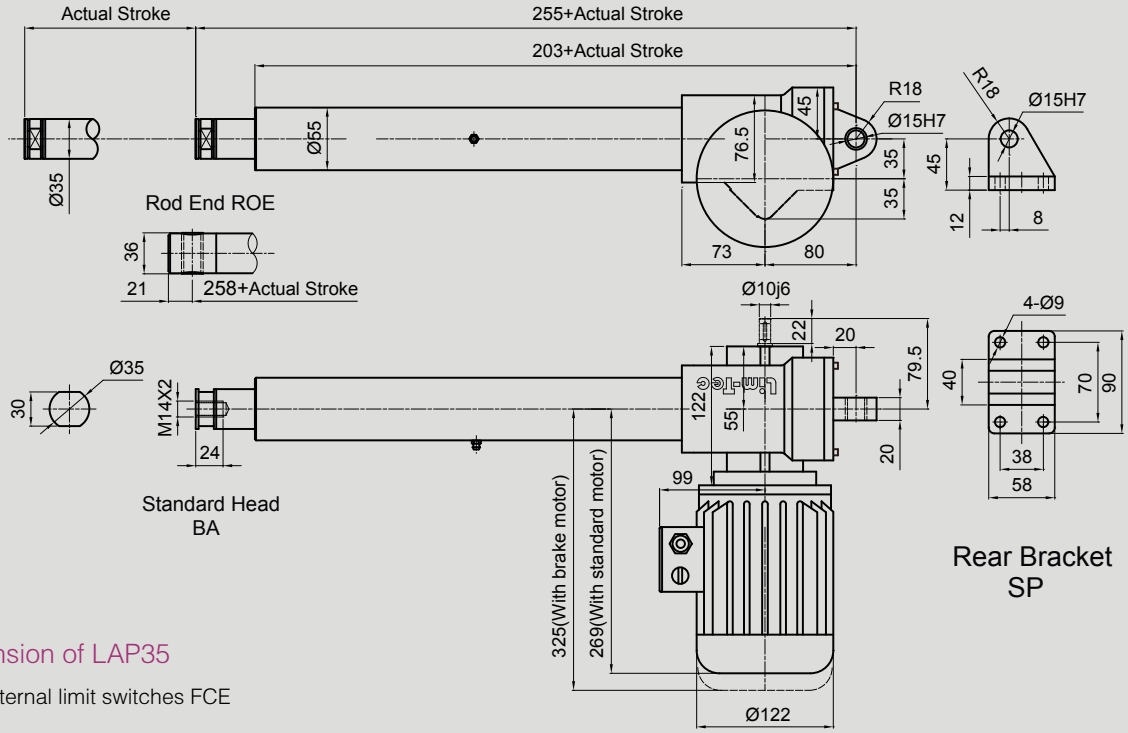


Stroke Code	100	200	300	400	500	600	700	800
Actual Stroke	100	200	300	400	500	600	700	800

Note:If the stroke between 800mm–1500mm,the length of external tube & push rod will increase 200mm
If the stroke exceed to 1500mm,please consult with Lim–Tec’s engineers

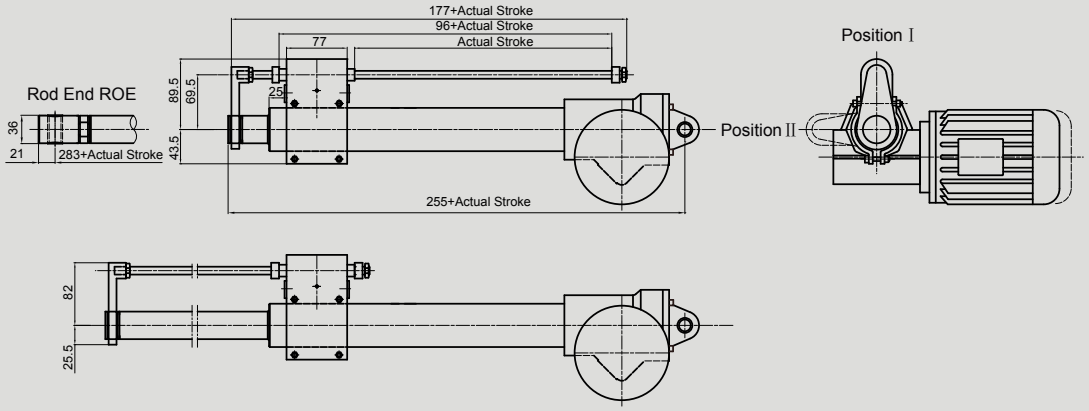
Dimension of LAP35

Without limit switches



Dimension of LAP35

With external limit switches FCE



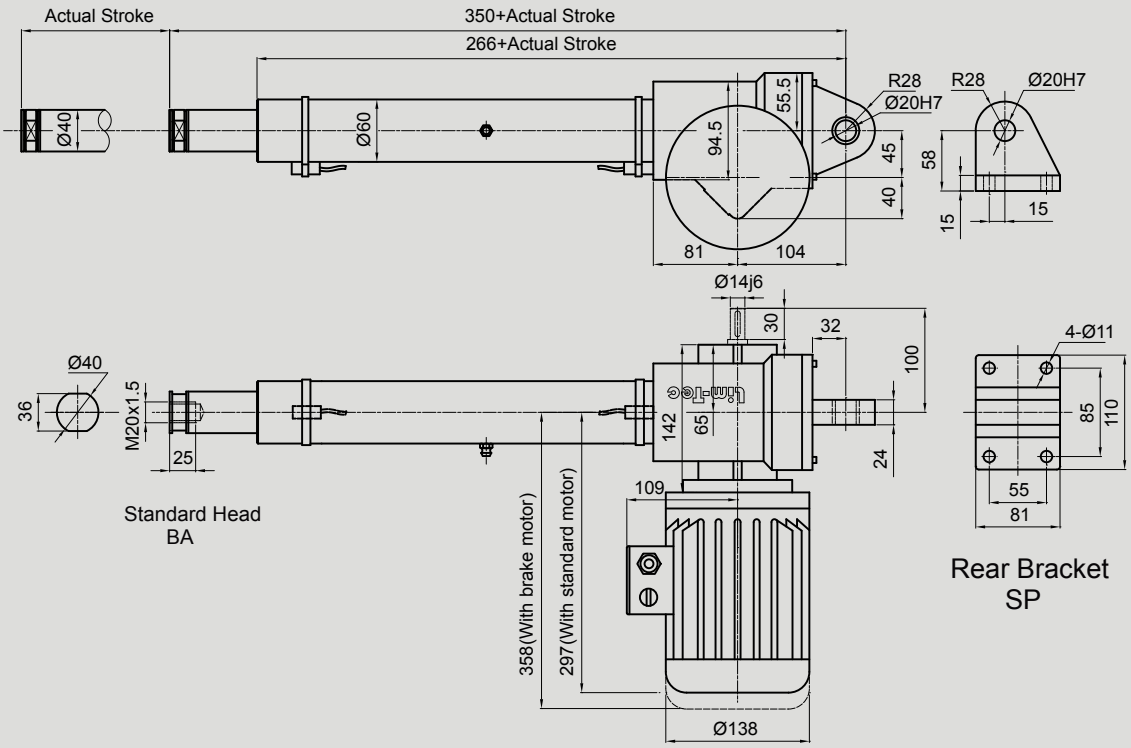
Stroke Code	100	200	300	400	500	600	700	800
Actual Stroke	125	225	325	425	525	625	725	825

Note:If the stroke between 800mm–1500mm,the length of external tube & push rod will increase 200mm
If the stroke exceed to 1500mm,please consult with Lim–Tec’s engineers

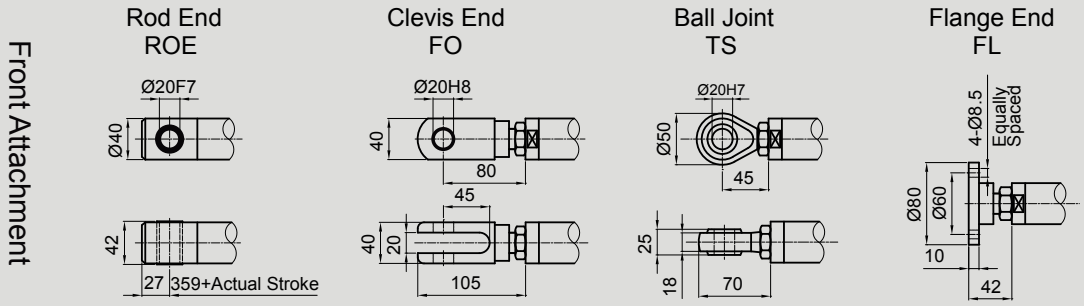
Overall Dimension of LAP Series Linear Actuator

Dimension of LAP40

With magnetic reed switches FCM



Front Attachment

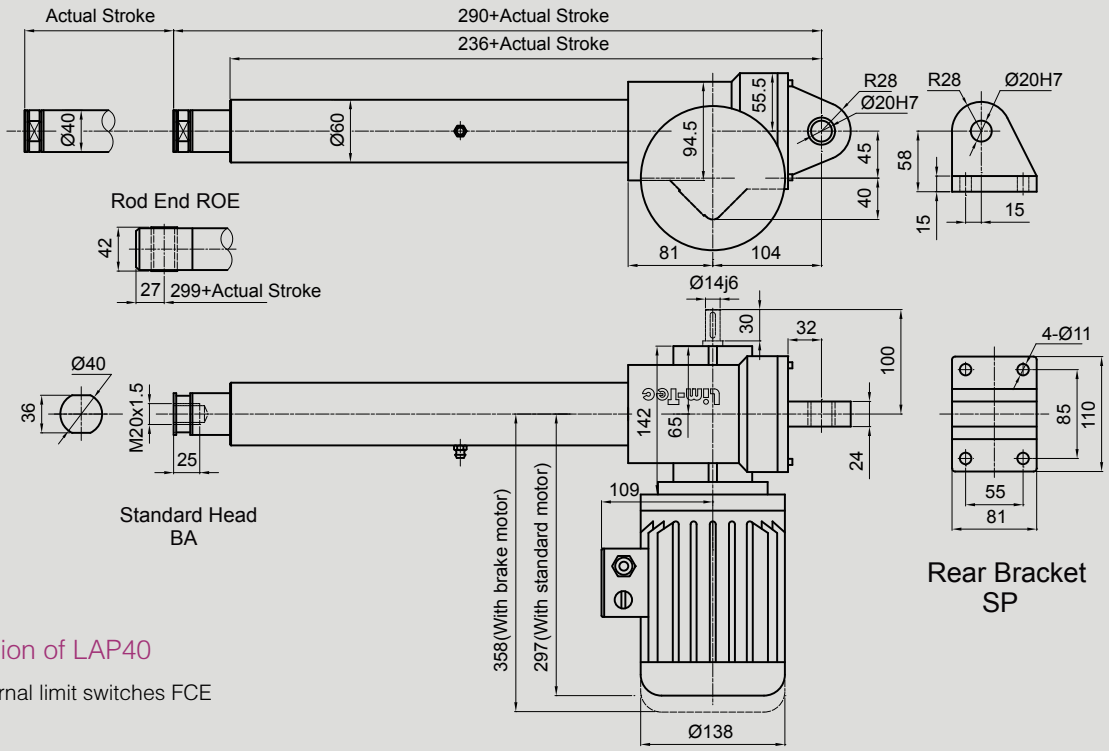


Stroke Code	100	200	300	400	500	600	700	800
Actual Stroke	100	200	300	400	500	600	700	800

Note:If the stroke between 800mm–1500mm,the length of external tube & push rod will increase 200mm
If the stroke exceed to 1500mm,please consult with Lim–Tec’s engineers

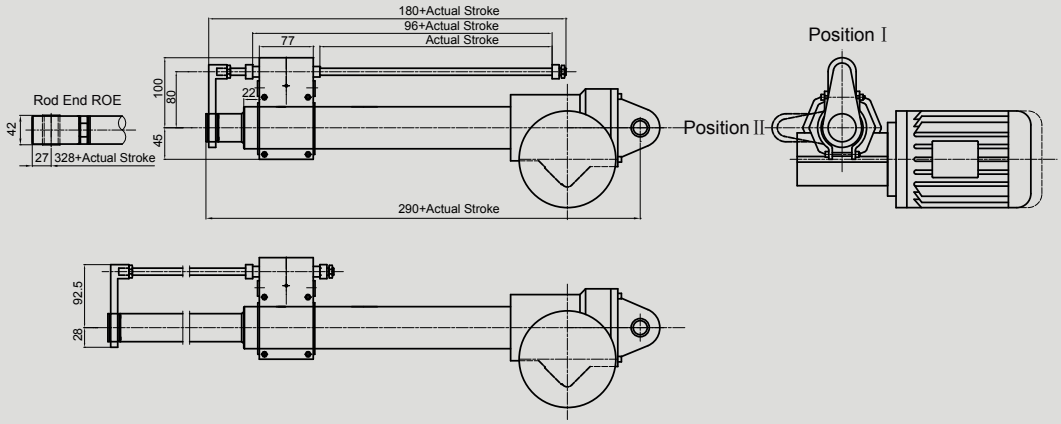
Dimension of LAP40

Without limit switches



Dimension of LAP40

With external limit switches FCE



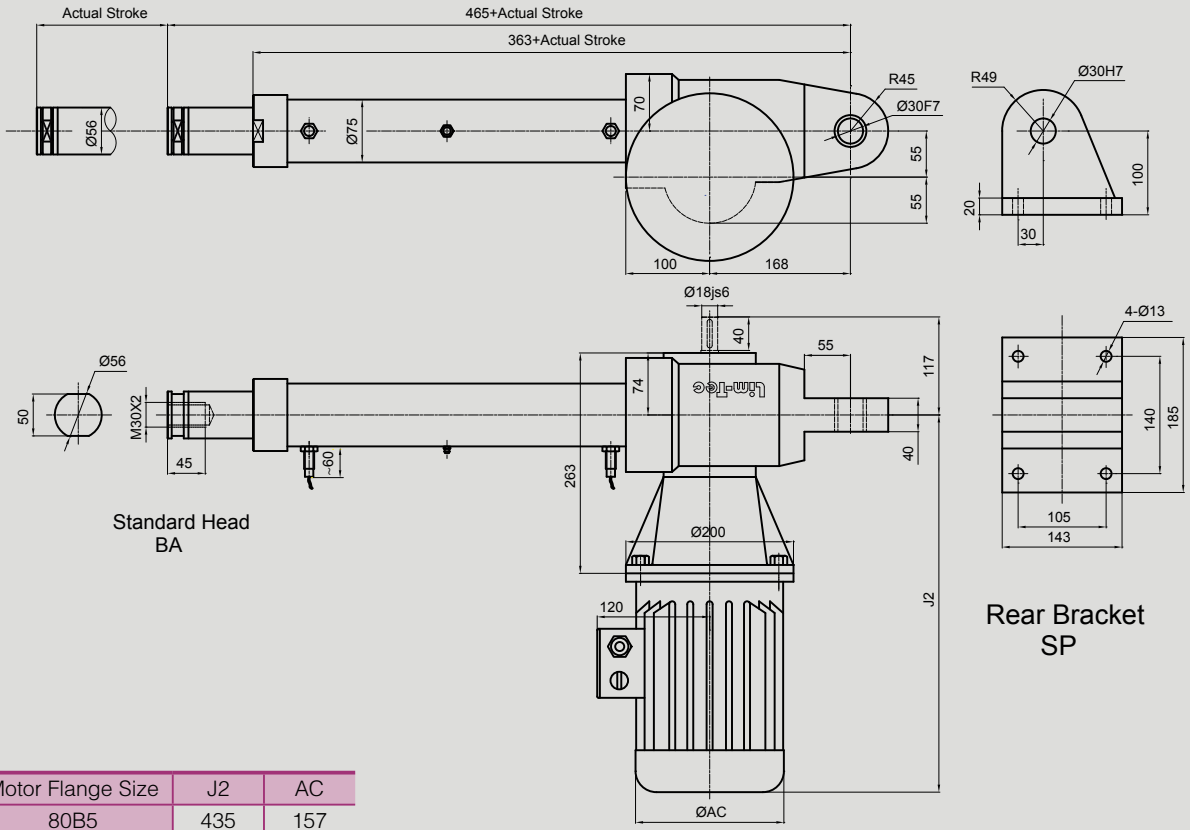
Stroke Code	100	200	300	400	500	600	700	800
Actual Stroke	130	230	330	430	530	630	730	830

Note:If the stroke between 800mm–1500mm,the length of external tube & push rod will increase 200mm
If the stroke exceed to 1500mm,please consult with Lim–Tec’s engineers

Overall Dimension of LAP Series Linear Actuator

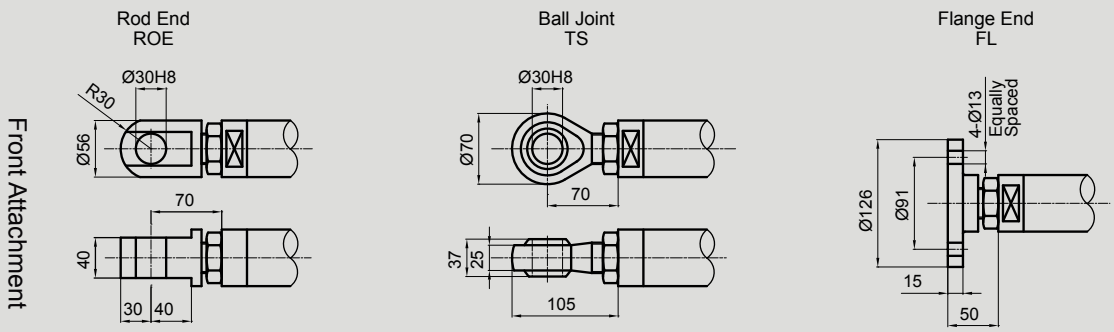
Dimension of LAP56

With Inductive Proximity switches FCP



Motor Flange Size	J2	AC
80B5	435	157
90B5	474	175

Dimension of brake motor reference to LBP56

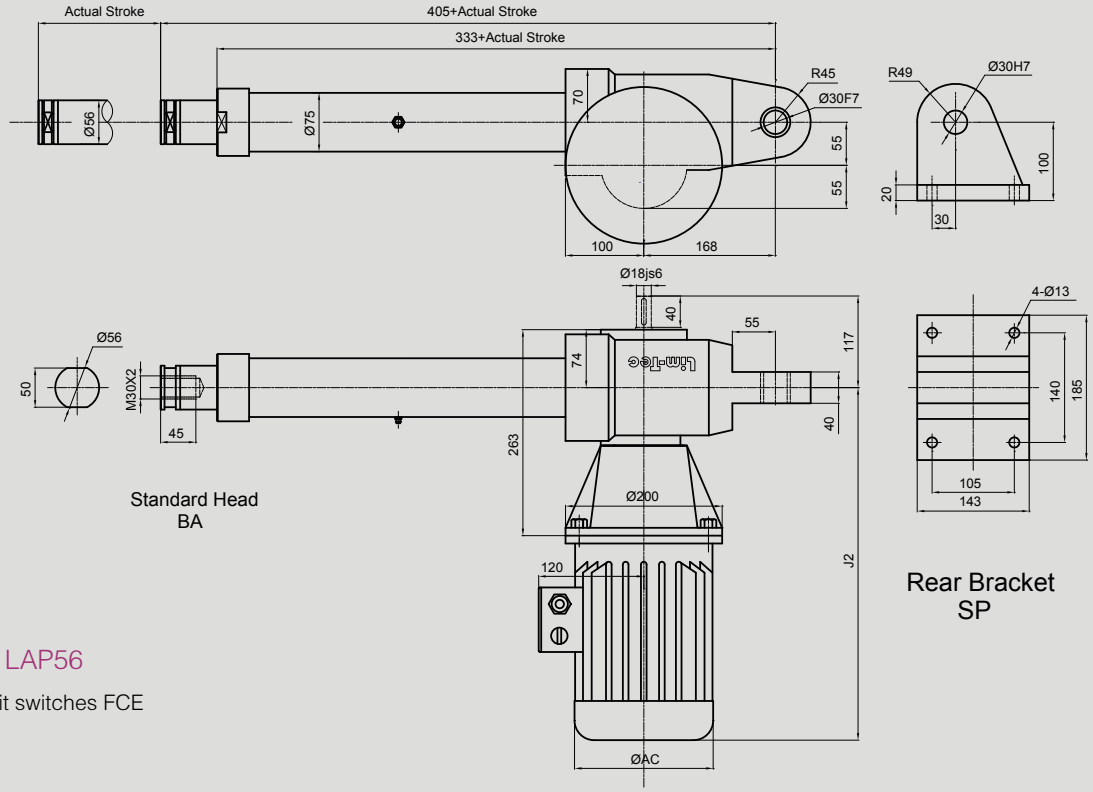


Stroke Code	100	200	300	400	500	600	700	800
Actual Stroke	100	200	300	400	500	600	700	800

Note:If the stroke between 800mm–1500mm,the length of external tube & push rod will increase 200mm
If the stroke exceed to 1500mm,please consult with Lim-Tec’s engineers

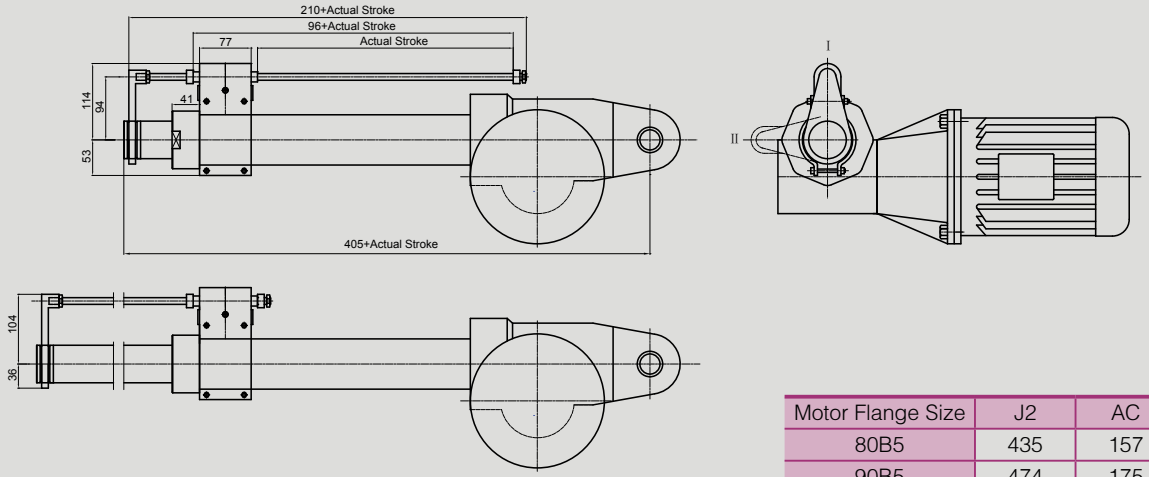
Dimension of LAP56

Without limit switches



Dimension of LAP56

With external limit switches FCE



Motor Flange Size	J2	AC
80B5	435	157
90B5	474	175

Dimension of brake motor reference to LBP56

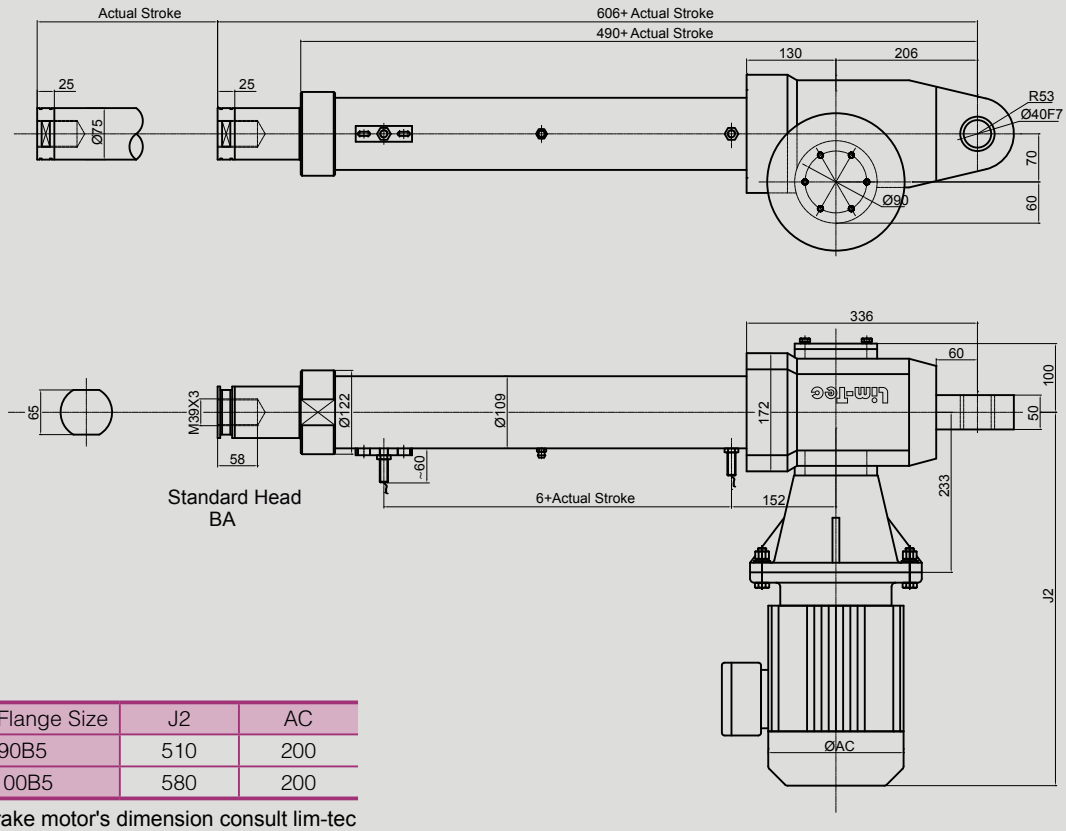
Stroke Code	100	200	300	400	500	600	700	800
Actual Stroke	130	230	330	430	530	630	730	830

Note:If the stroke between 800mm–1500mm,the length of external tube & push rod will increase 200mm
If the stroke exceed to 1500mm,please consult with Lim–Tec’s engineers

Overall Dimension of LAP Series Linear Actuator

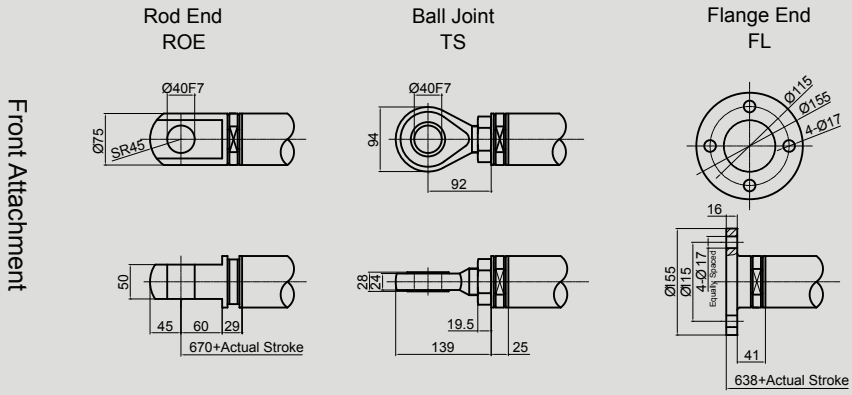
Dimension of LAP63

With Inductive Proximity switches FCP



Motor Flange Size	J2	AC
90B5	510	200
100B5	580	200

Note: brake motor's dimension consult lim-tec

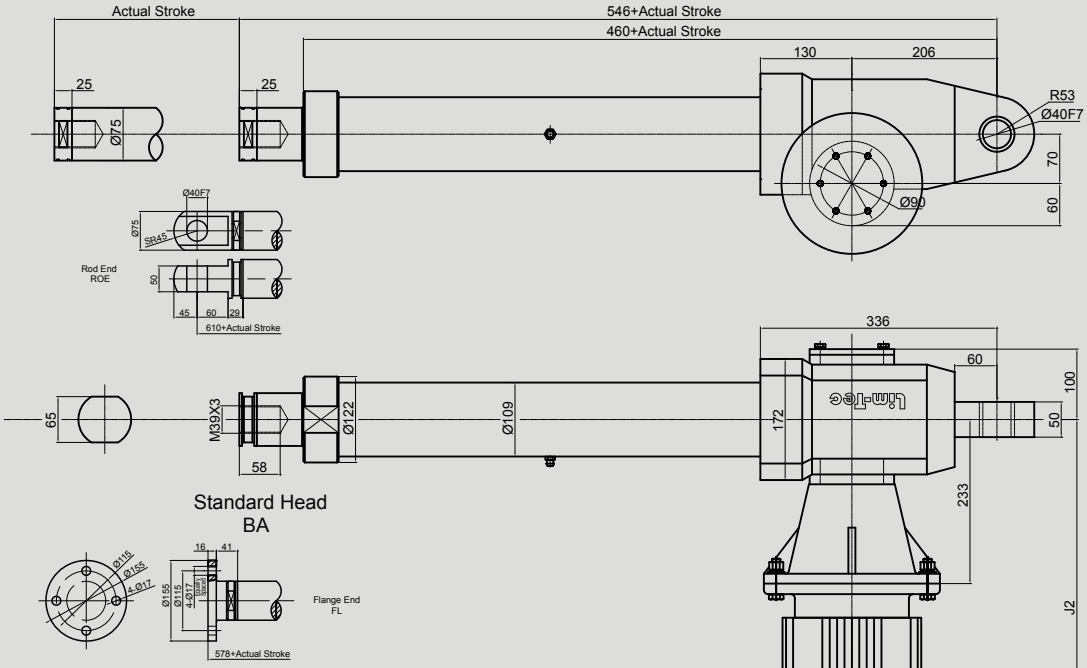


Stroke Code	100	200	300	400	500	600	700	800
Actual Stroke	100	200	300	400	500	600	700	800

Note:If the stroke between 800mm–1500mm,the length of external tube & push rod will increase 200mm
If the stroke exceed to 1500mm,please consult with Lim–Tec’s engineers

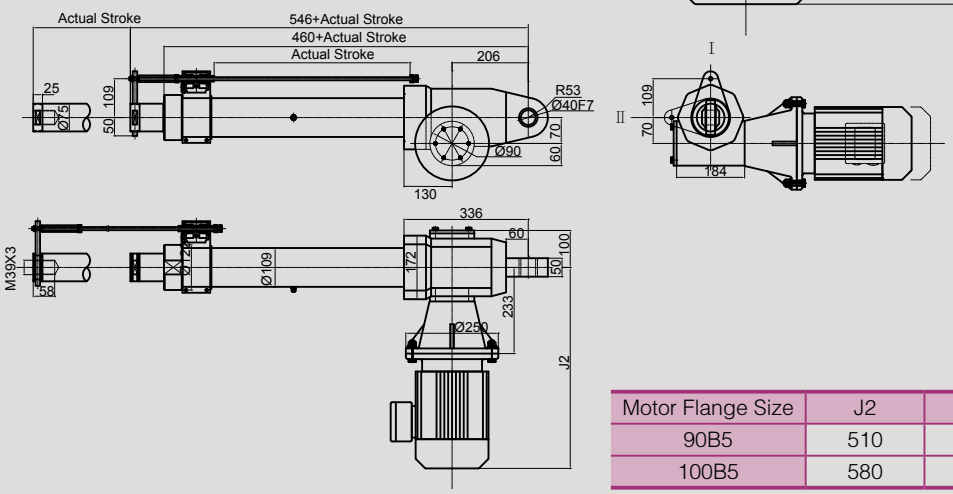
Dimension of LAP63

Without limit switches



Dimension of LAP63

With external limit switches FCE



Motor Flange Size	J2	AC
90B5	510	200
100B5	580	200

Note: brake motor's dimension consult lim-tec

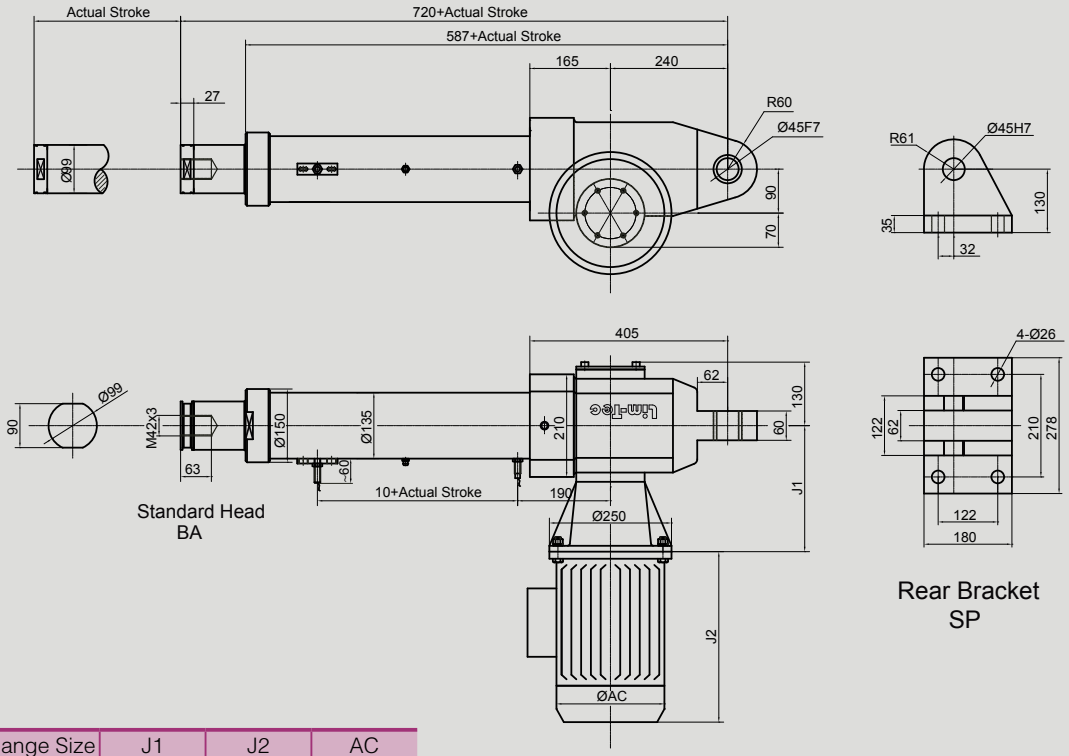
Stroke Code	100	200	300	400	500	600	700	800
Actual Stroke	130	230	330	430	530	630	730	830

Note:If the stroke between 800mm–1500mm,the length of external tube & push rod will increase 200mm
If the stroke exceed to 1500mm,please consult with Lim–Tec’s engineers

Overall Dimension of LAP Series Linear Actuator

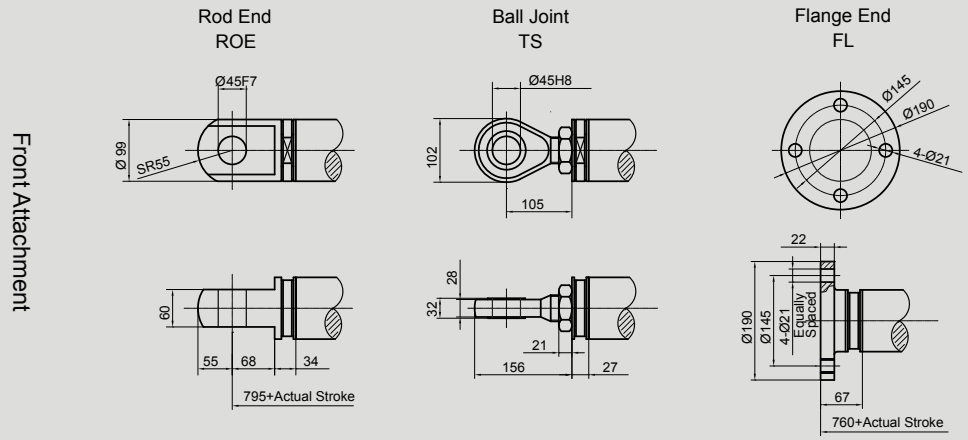
Dimension of LAP80

With Inductive Proximity switches FCP



Motor Flange Size	J1	J2	AC
112B5	258	350	221
132SB5	285	400	221

Note: brake motor's dimension consult lim-tec



Stroke Code	100	200	300	400	500	600	800	1000
Actual Stroke	100	200	300	400	500	600	800	1000

Note:If the stroke between 1000mm–1500mm,the length of external tube & push rod will increase 200mm
If the stroke exceed to 1500mm,please consult with Lim–Tec’s engineers

Dimension of LAP80

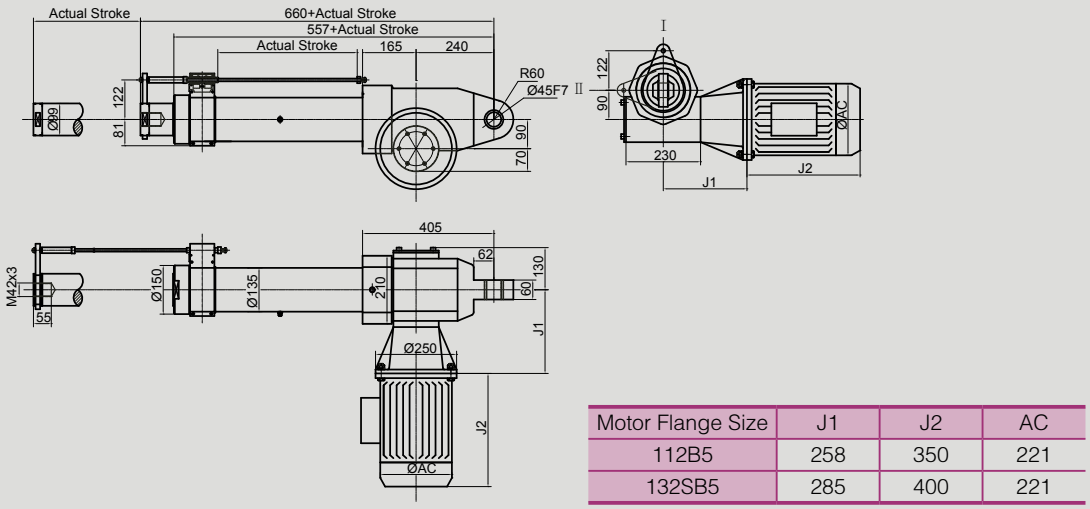
Without limit switches

Standard Head
BA

Rear Bracket
SP

Dimension of LAP80

With external limit switches FCE



Motor Flange Size	J1	J2	AC
112B5	258	350	221
132SB5	285	400	221

Note: brake motor's dimension consult lim-tec

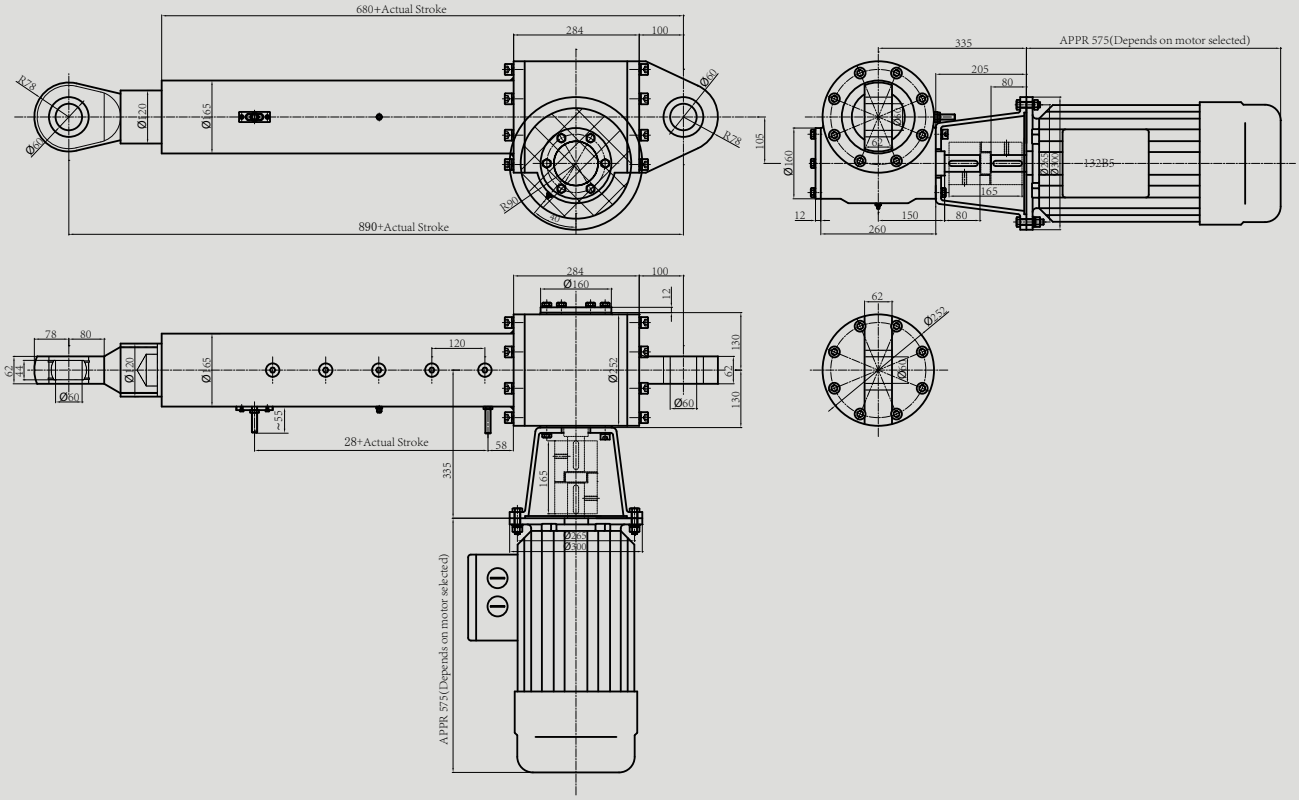
Stroke Code	100	200	300	400	500	600	800	1000
Actual Stroke	130	230	330	430	530	630	830	1030

Note:If the stroke between 1000mm–1500mm,the length of external tube & push rod will increase 200mm
If the stroke exceed to 1500mm,please consult with Lim–Tec’s engineers

Overall Dimension of LAP Series Linear Actuator

Dimension of LAP120

With Inductive Proximity switches FCP

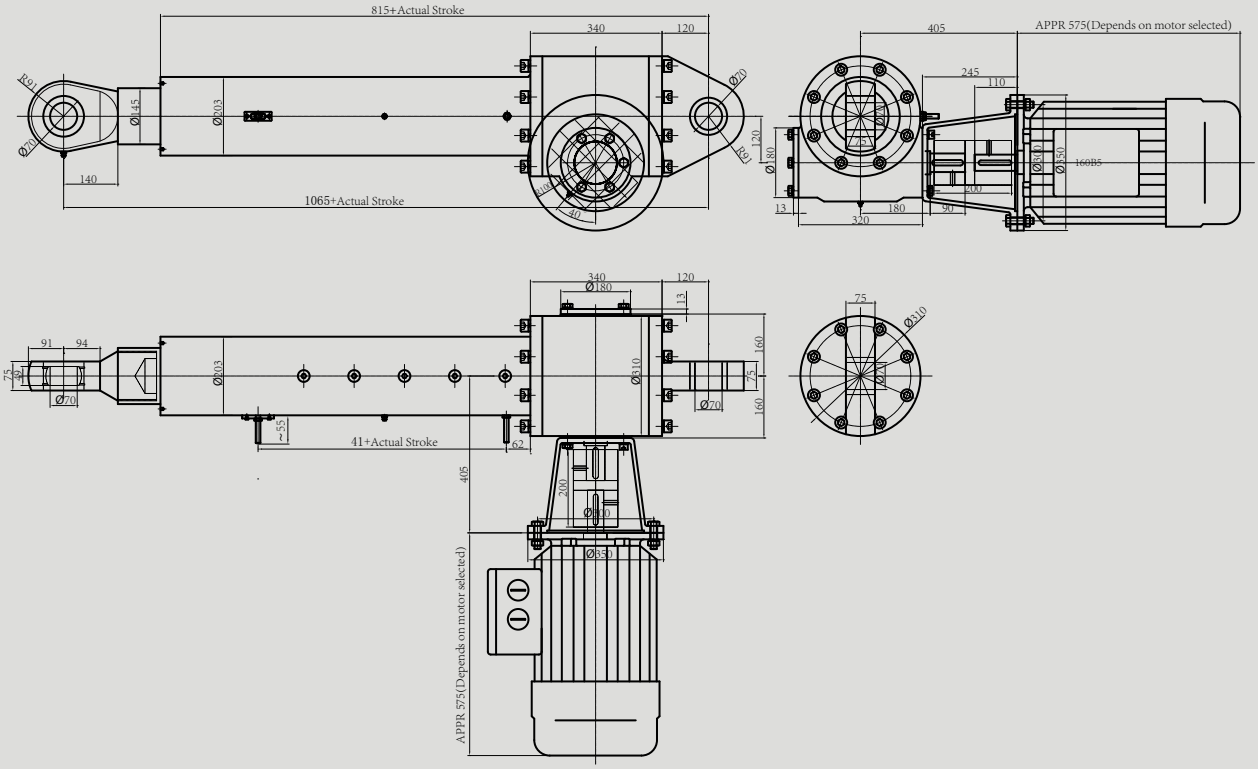


Stroke Code	200	400	500	600	800	1000	1200	1500
Actual Stroke	200	400	500	600	800	1000	1200	1500

Note:If the stroke between 1200mm–1800mm,the length of external tube & push rod will increase 250mm
If the stroke exceed to 1800mm,please consult with Lim–Tec’s engineers

Dimension of LAP200

With Inductive Proximity switches FCP



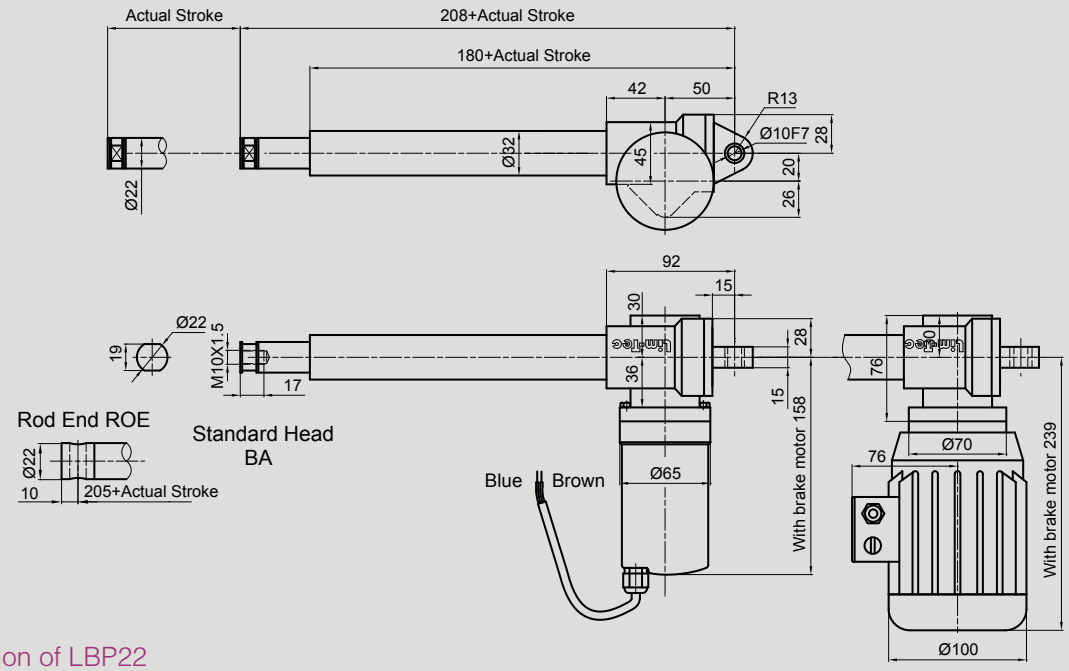
Stroke Code	200	400	500	600	800	1000	1500	2000
Actual Stroke	230	400	500	600	800	1000	1500	2000

Note:If the stroke between 1500mm–2200mm,the length of external tube & push rod will increase 300mm
If the stroke exceed to 2200mm,please consult with Lim–Tec’ s engineers

Overall Dimension of LBP Series Linear Actuator

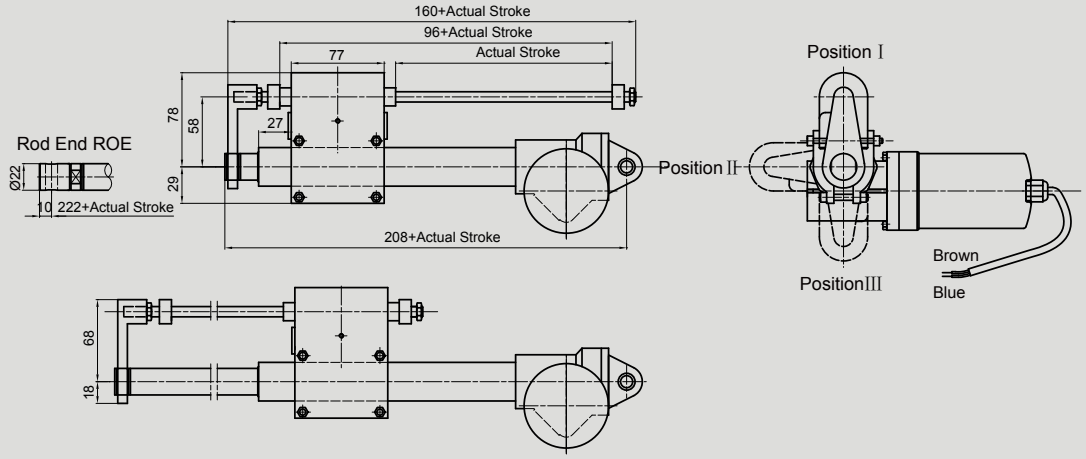
Dimension of LBP22

Without limit switches



Dimension of LBP22

With external limit switches FCE

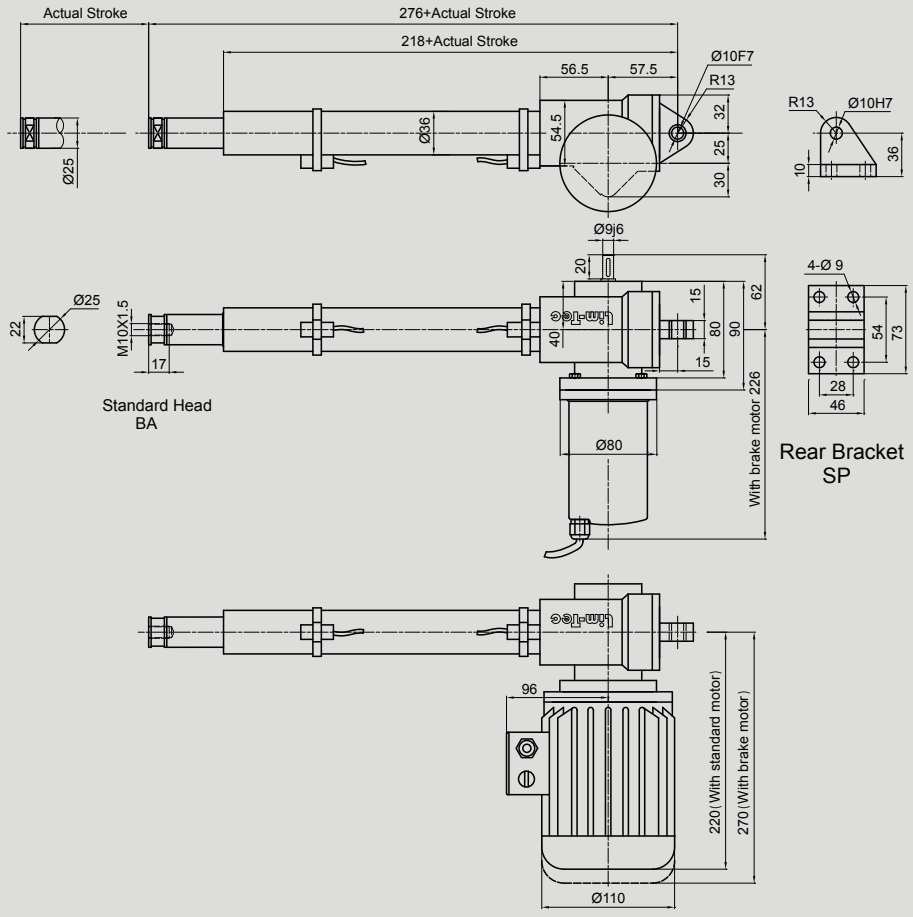


Stroke Code	100	150	200	300
Actual Stroke	100	150	200	300

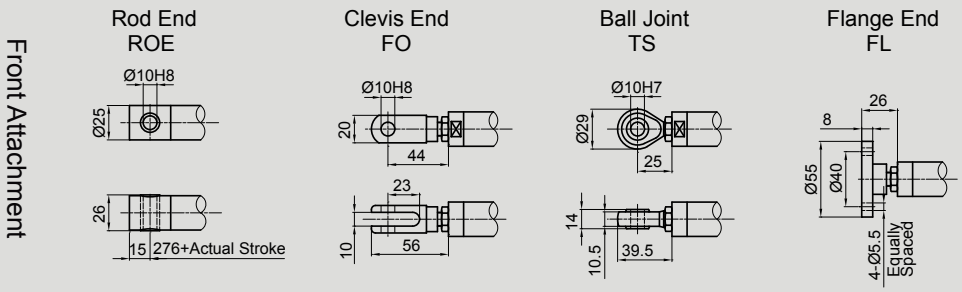
Note:LBP22 Series actuator is no available for FCM limit switch

Dimension of LBP25

With magnetic reed switches FCM



Front Attachment

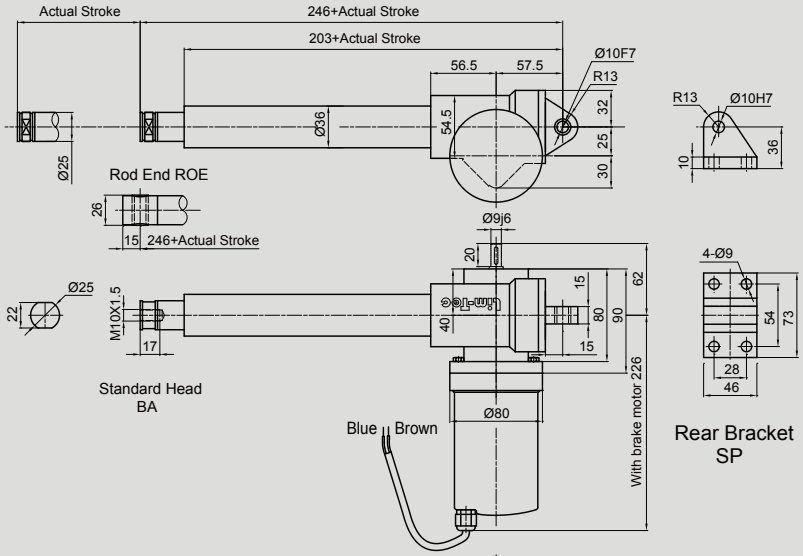


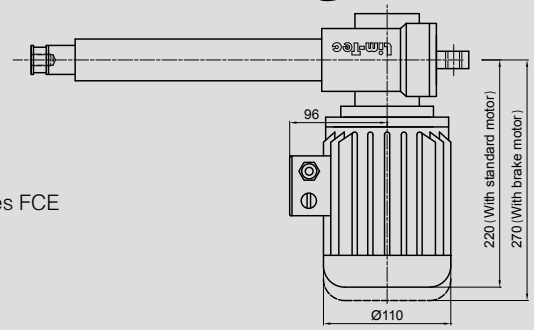
Stroke Code	100	200	300	400	500
Actual Stroke	100	200	300	400	500

Overall Dimension of LBP Series Linear Actuator

Dimension of LBP25

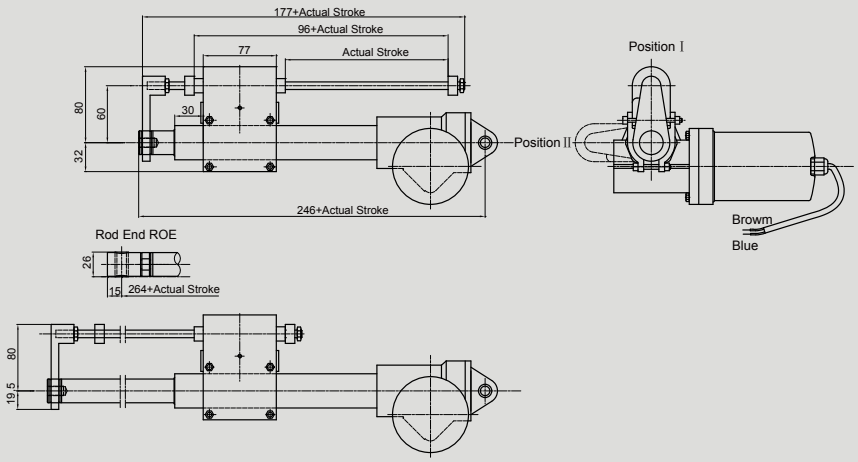
Without limit switches





Dimension of LBP25

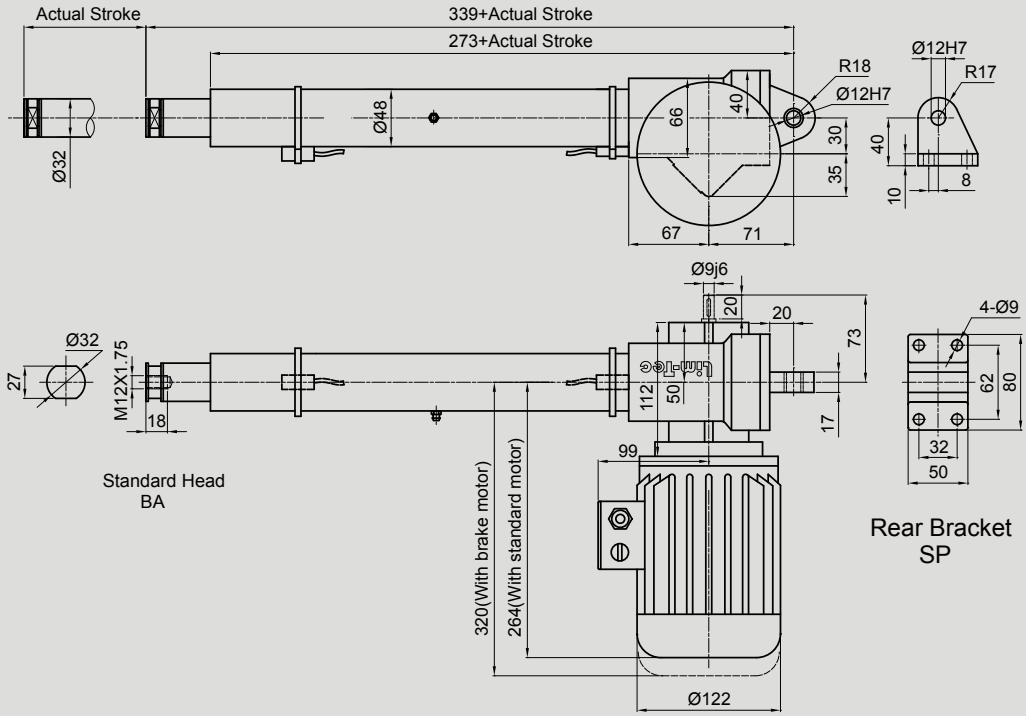
With external limit switches FCE



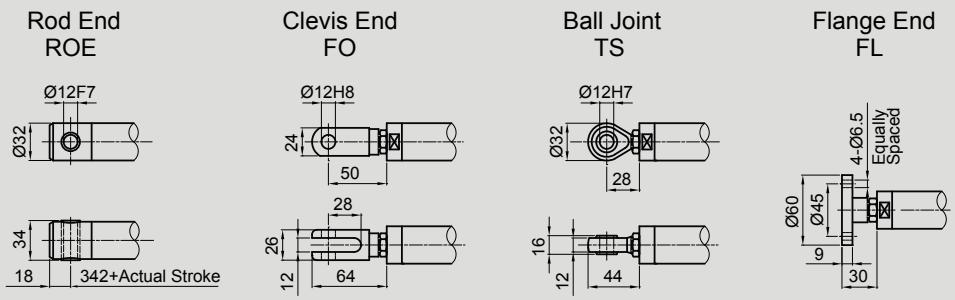
Stroke Code	100	200	300	400	500
Actual Stroke	115	215	315	415	515

Dimension of LBP32

With magnetic reed switches FCM



Front Attachment



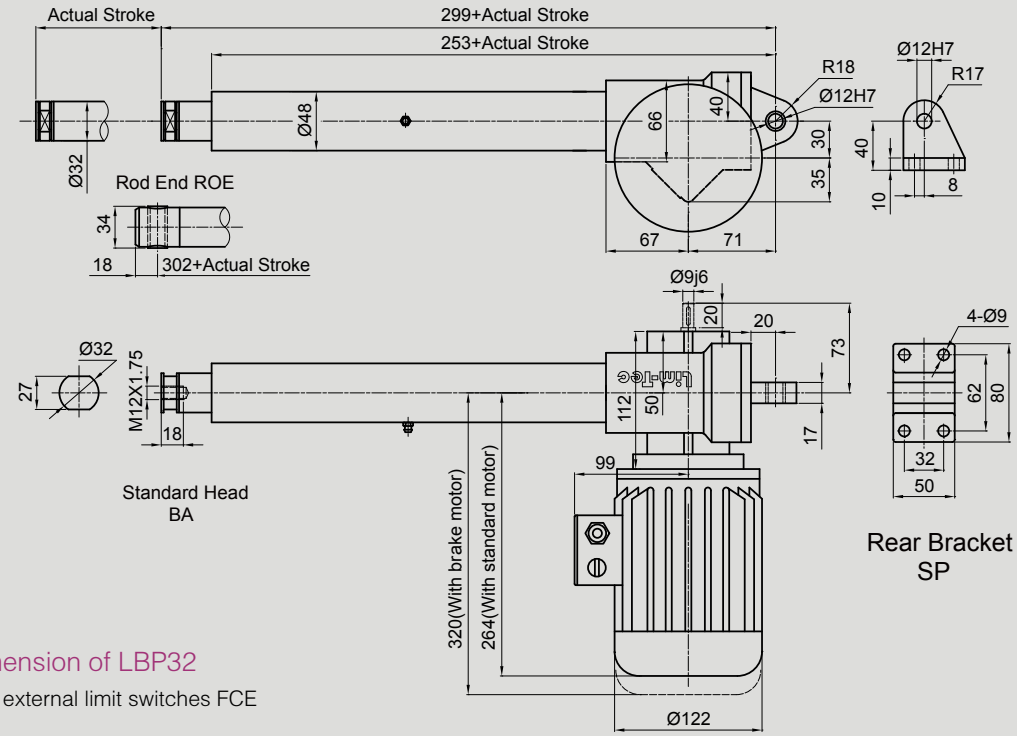
Stroke Code	100	200	300	400	500	600	700	800
Actual Stroke	100	200	300	400	500	600	700	800

Note:If the stroke between 800mm–1500mm,the length of external tube & push rod will increase 200mm
If the stroke exceed to 1500mm,please consult with Lim–Tec’s engineers

Overall Dimension of LBP Series Linear Actuator

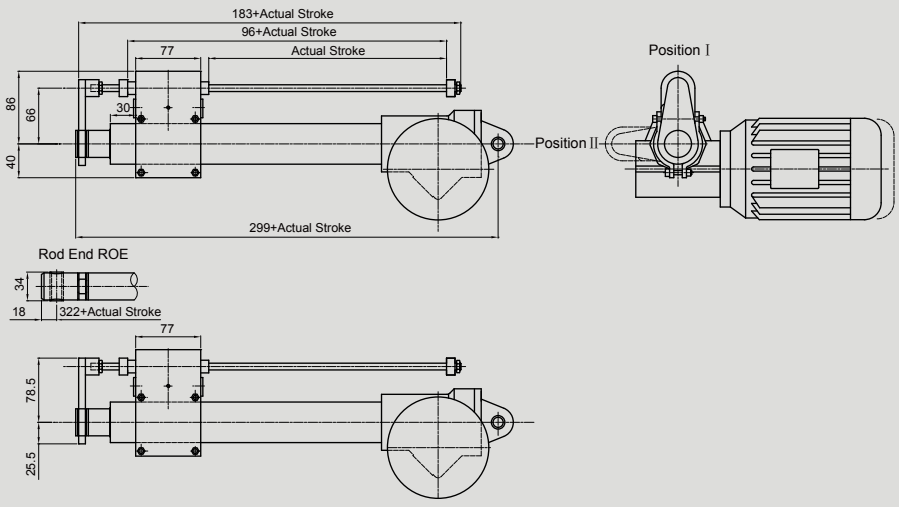
Dimension of LBP32

Without limit switches



Dimension of LBP32

With external limit switches FCE

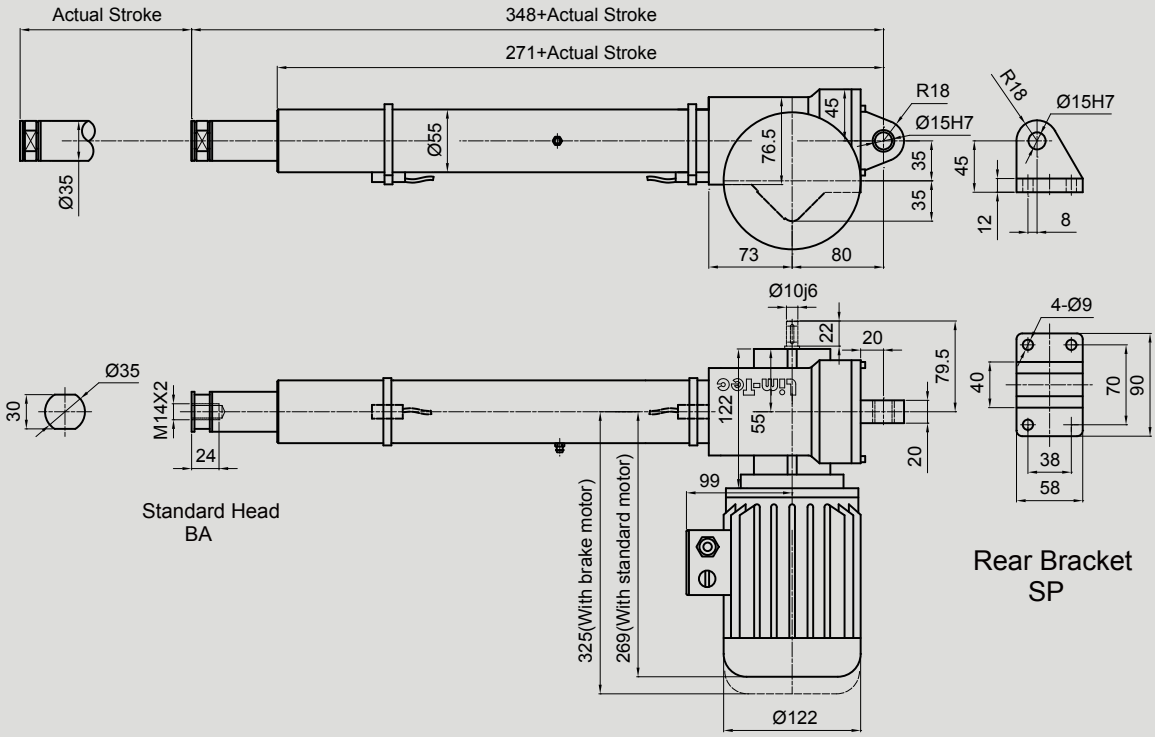


Stroke Code	100	200	300	400	500	600	700	800
Actual Stroke	120	220	320	420	520	620	720	820

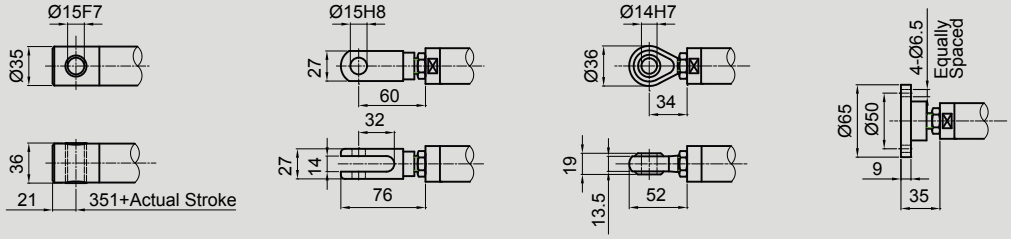
Note:If the stroke between 800mm–1500mm,the length of external tube & push rod will increase 200mm
If the stroke exceed to 1500mm,please consult with Lim–Tec’s engineers

Dimension of LBP35

With magnetic reed switches FCM



Front Attachment



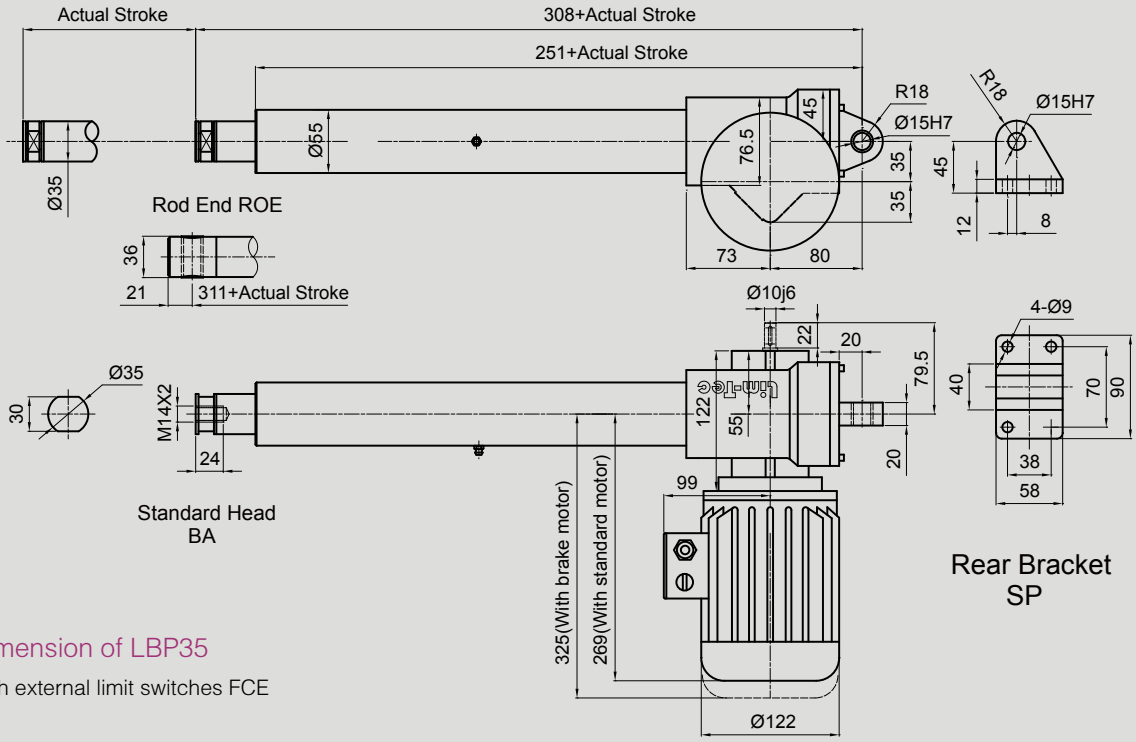
Stroke Code	100	200	300	400	500	600	700	800
Actual Stroke	100	200	300	400	500	600	700	800

Note:If the stroke between 800mm–1500mm,the length of external tube & push rod will increase 200mm
If the stroke exceed to 1500mm,please consult with Lim–Tec’s engineers

Overall Dimension of LBP Series Linear Actuator

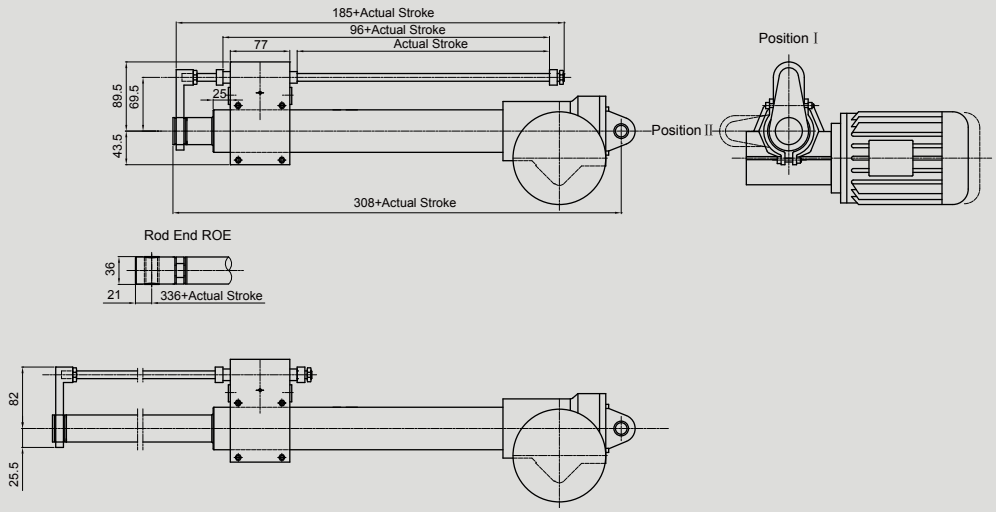
Dimension of LBP35

Without limit switches



Dimension of LBP35

With external limit switches FCE

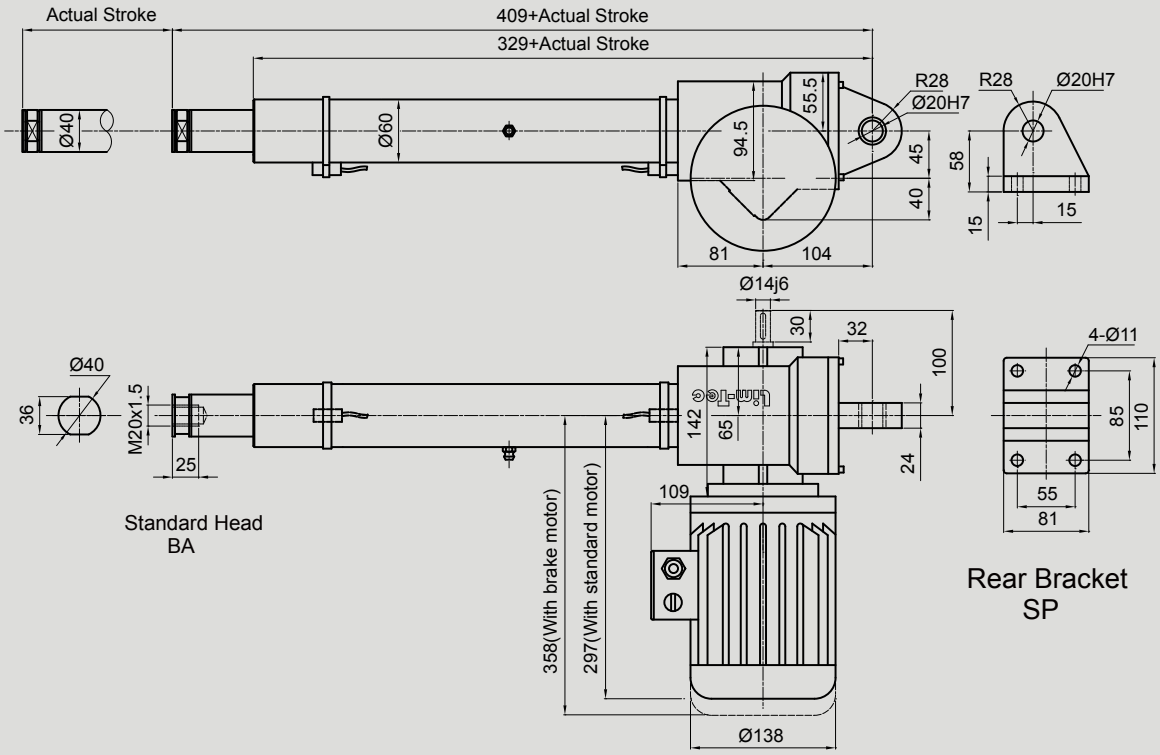


Stroke Code	100	200	300	400	500	600	700	800
Actual Stroke	120	220	320	420	520	620	720	820

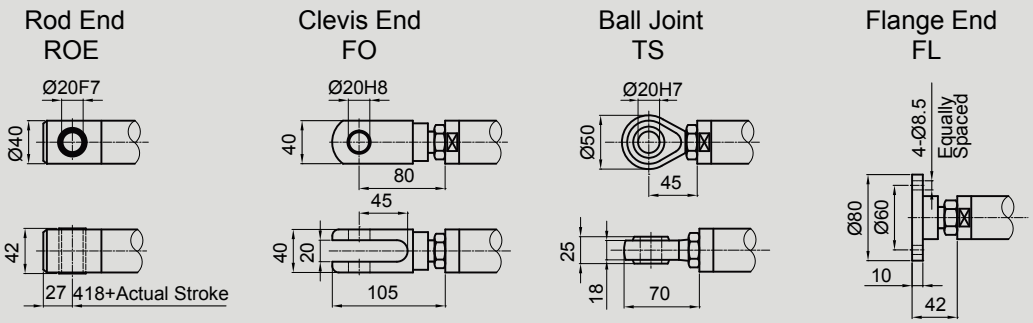
Note:If the stroke between 800mm–1500mm,the length of external tube & push rod will increase 200mm
If the stroke exceed to 1500mm,please consult with Lim–Tec’s engineers

Dimension of LBP40

With magnetic reed switches FCM



Front Attachment



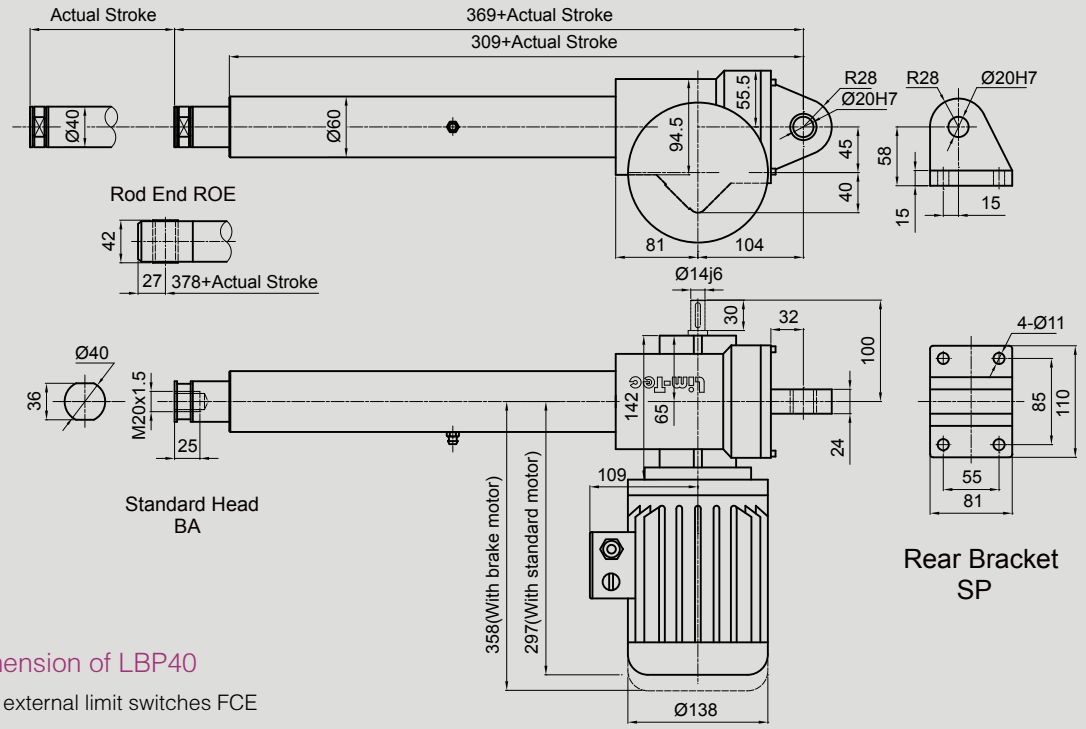
Stroke Code	100	200	300	400	500	600	700	800
Actual Stroke	100	200	300	400	500	600	700	800

Note:If the stroke between 800mm–1500mm,the length of external tube & push rod will increase 200mm
If the stroke exceed to 1500mm,please consult with Lim–Tec’s engineers

Overall Dimension of LBP Series Linear Actuator

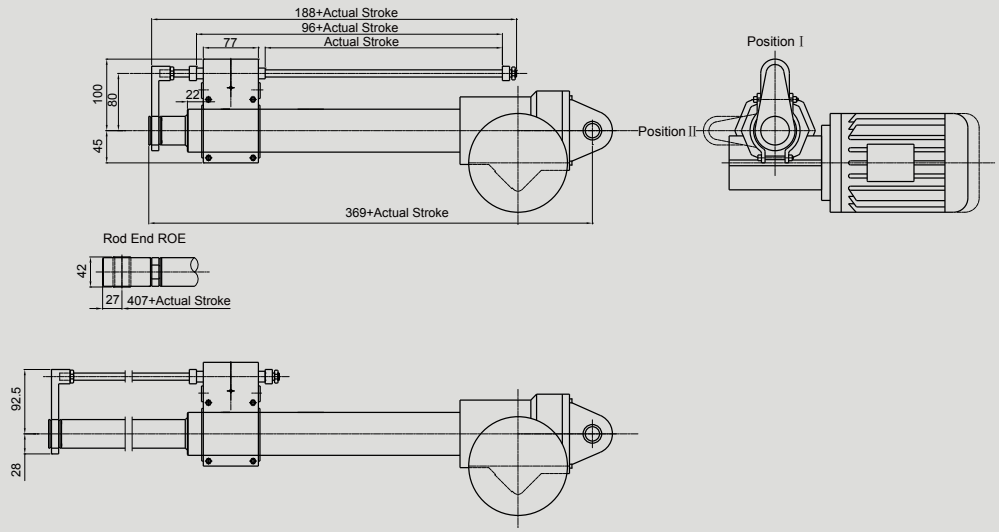
Dimension of LBP40

Without limit switches



Dimension of LBP40

With external limit switches FCE

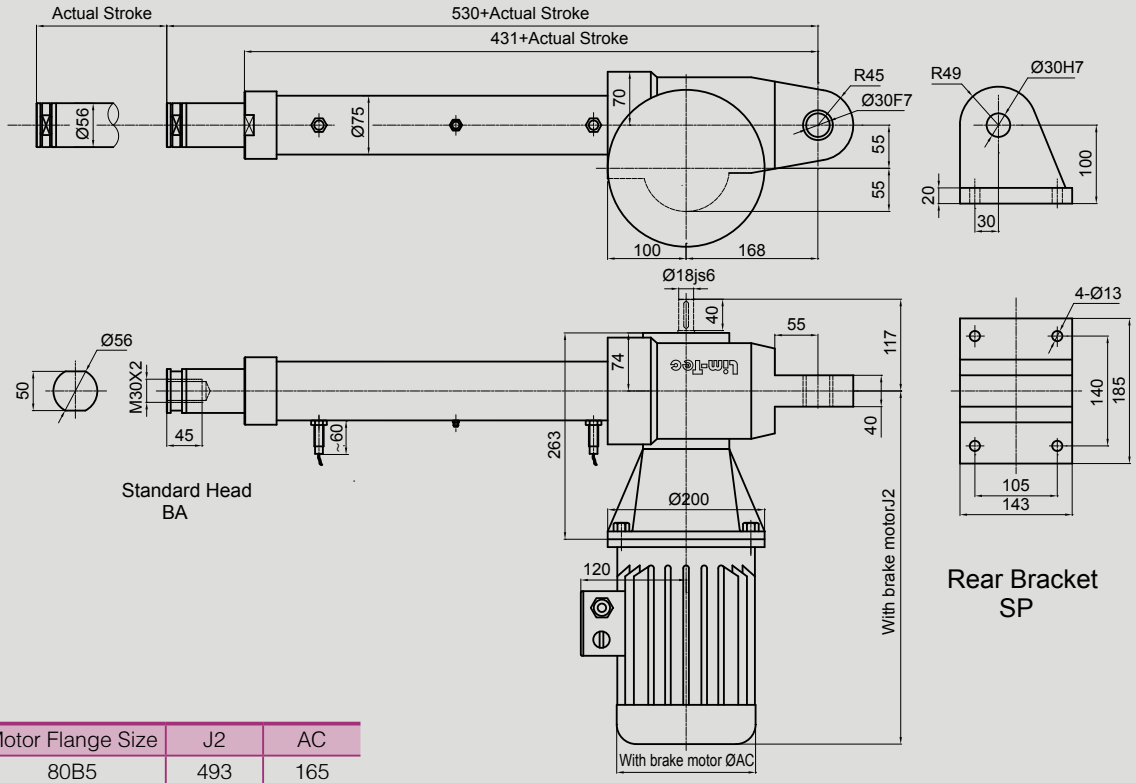


Stroke Code	100	200	300	400	500	600	700	800
Actual Stroke	120	220	320	420	520	620	720	820

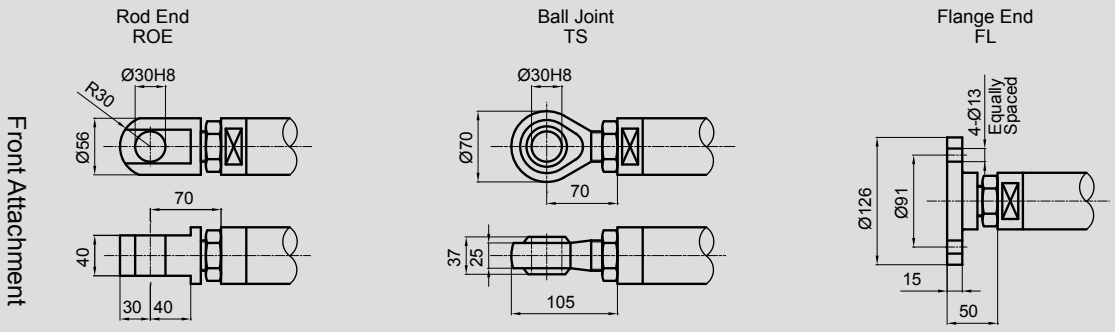
Note:If the stroke between 800mm–1500mm,the length of external tube & push rod will increase 200mm
If the stroke exceed to 1500mm,please consult with Lim–Tec’s engineers

Dimension of LBP56

With Inductive Proximity switches FCP



Motor Flange Size	J2	AC
80B5	493	165
90B5	541	180



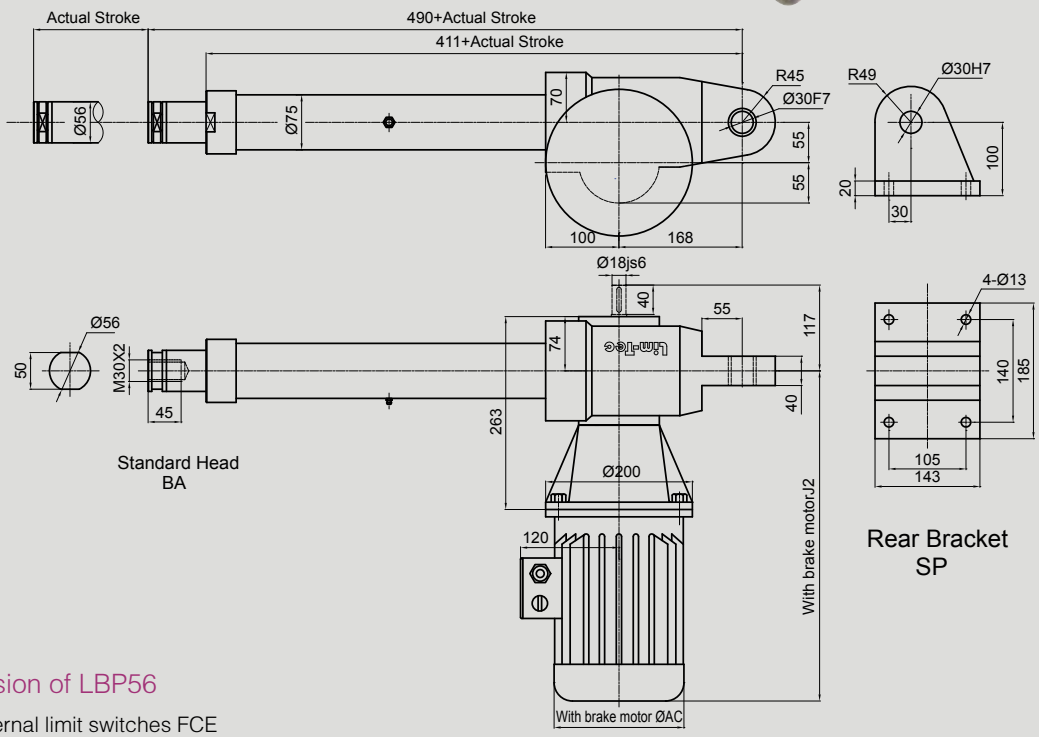
Stroke Code	100	200	300	400	500	600	700	800
Actual Stroke	100	200	300	400	500	600	700	800

Note:If the stroke between 800mm–1500mm,the length of external tube & push rod will increase 200mm
If the stroke exceed to 1500mm,please consult with Lim–Tec’s engineers

Overall Dimension of LBP Series Linear Actuator

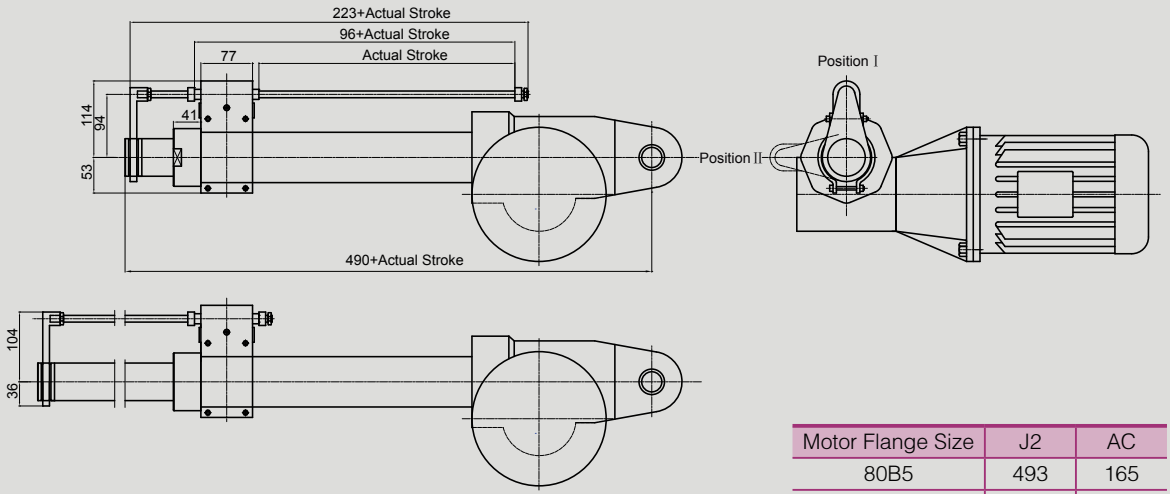
Dimension of LBP56

Without limit switches



Dimension of LBP56

With external limit switches FCE



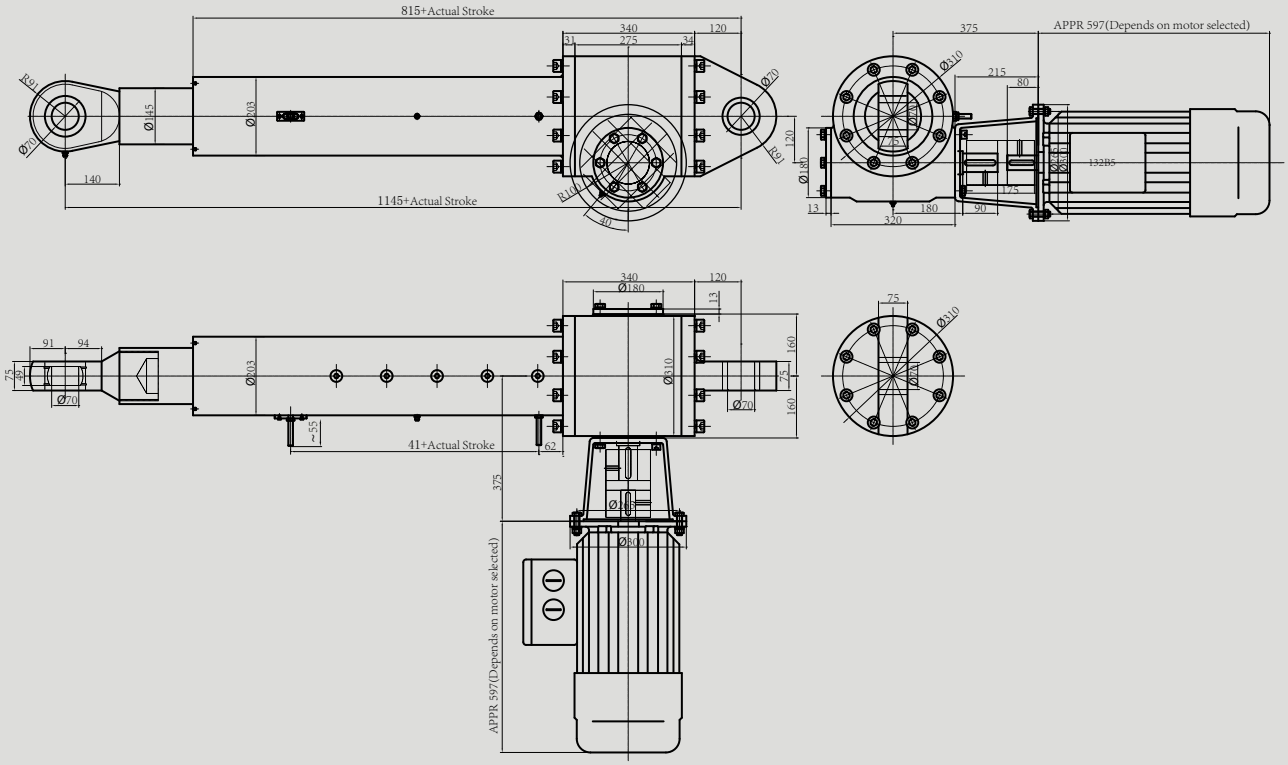
Motor Flange Size	J2	AC
80B5	493	165
90B5	541	180

Stroke Code	100	200	300	400	500	600	700	800
Actual Stroke	120	220	320	420	520	620	720	820

Note:If the stroke between 800mm–1500mm,the length of external tube & push rod will increase 200mm
If the stroke exceed to 1500mm,please consult with Lim–Tec’s engineers

Dimension of LBP200

With Inductive Proximity switches FCP



Stroke Code	200	400	500	600	800	1000	1500	2000
Actual Stroke	230	400	500	600	800	1000	1500	2000

Note:If the stroke between 1500mm–2200mm,the length of external tube & push rod will increase 300mm
If the stroke exceed to 2200mm,please consult with Lim–Tec’s engineers

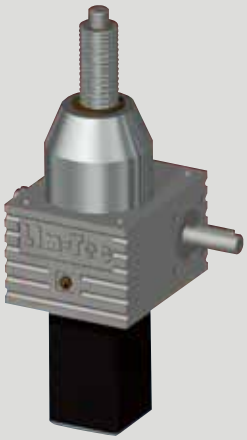
Screw Jack

Mounting Position&Application

Model S Traveling Screw

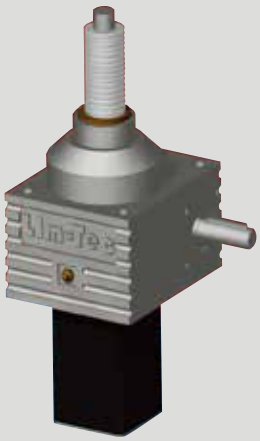
Model S : traveling screw

acme screw jack



ball screw jack

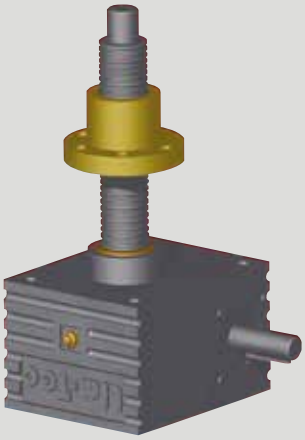
High performance spheroidal cast iron grooved housing
Patented rectangle protection tube prevent screw from rotating
Synchronous-Mechanical system
Safety nut designed to monitor abrasion of product
Available for various motor and gearmotors
Load capacity range from 500kg to 100tons



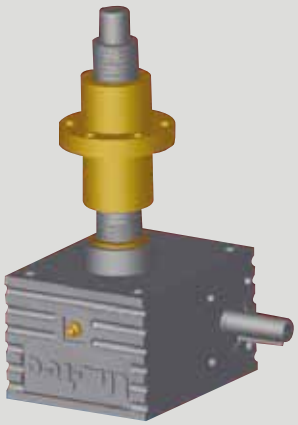
anti-backlash screw jack

safety nut screw jack

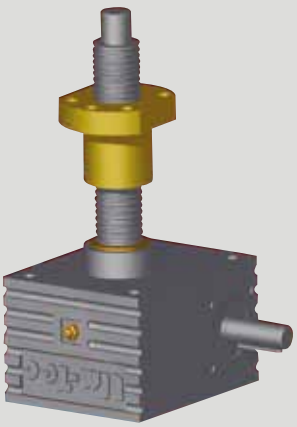
Model R : traveling nut



acme screw jack



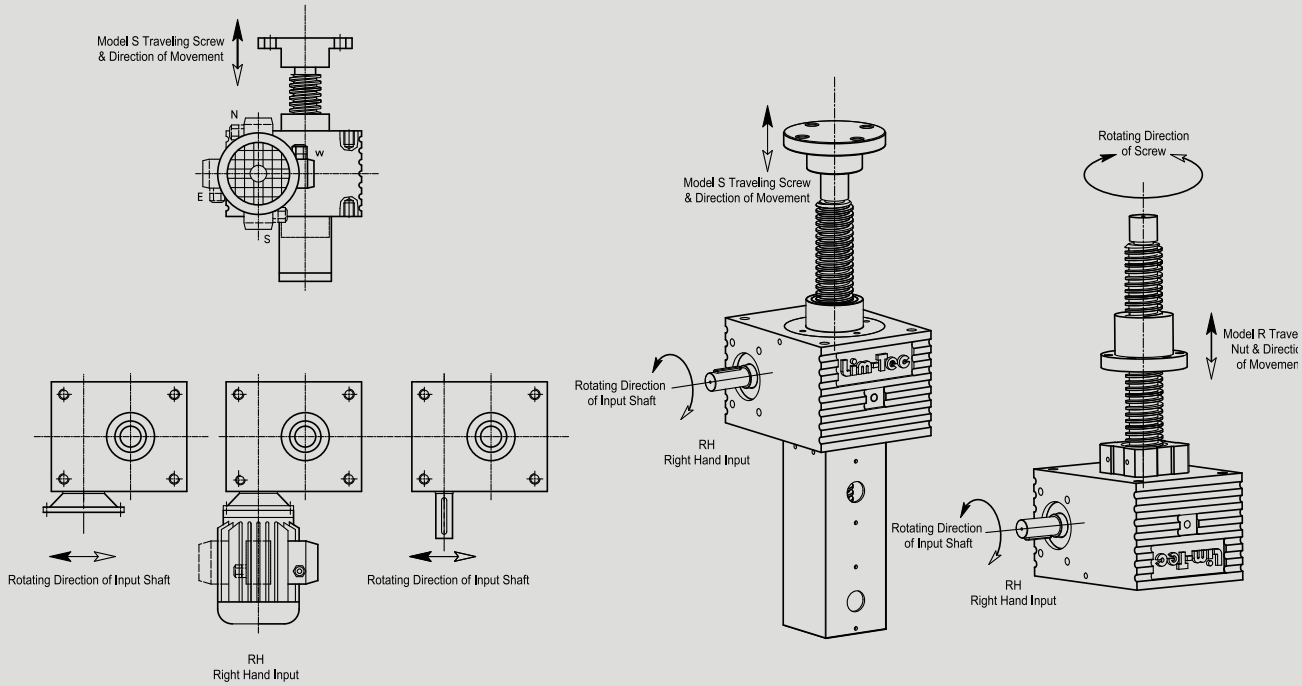
ball screw jack



safety nut screw jack

Mounting Position&Application

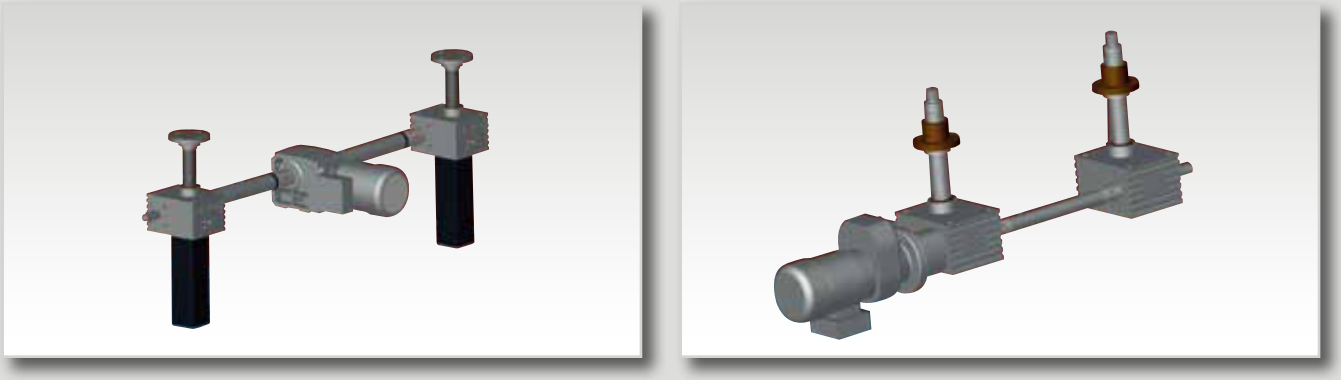
Mounting Position:



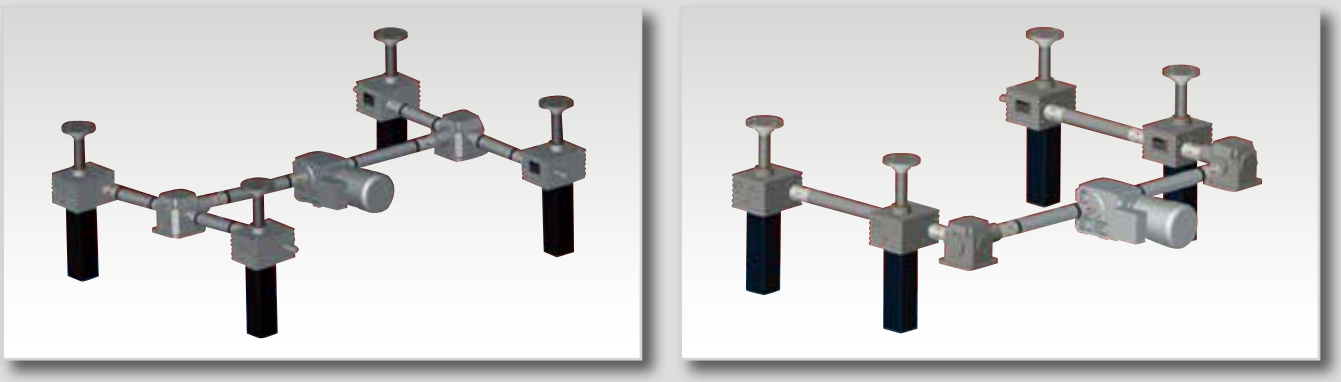
LAY-OUT AND APPLICATION OF SCREW JACK:

LIM-TEC supply complete system design and system accessories including Screw Jack, gear reducer, motor, shaft, coupling etc. System design and calculation need to know total rated load, Speed, Stroke and dimension requirement.

Synchronous Lifting System of Two Screw Jacks



Synchronous Lifting System of Four Screw Jacks



Selection Table Guide

Performance Table

Size		SJA5	SJA10	SJA20	SJA50	SJA80	SJA100
Max lifting load [kN]		5	10	20	50	80	100
Screw dia x pitch [mm]		Tr18x 4	Tr20 x 4	Tr30 x 6	Tr40 x 7	Tr50x8	Tr60 x 9
Warm ratio	V1	1:4	1:4	1:6	1:7	1:8	1:8
	L1	1:16	1:16	1:24	1:28	1:32	1:32
Stroke for one input turn [mm]	V1	1	1	1	1	1	1.125
	L1	0.25	0.25	0.25	0.25	0.25	0.281
Max input power [kW]	V1	0.30	0.57	1.14	2.2	2.5	3
	L1	0.15	0.27	0.55	1.1	1.5	2.2
Max starting torpue at full load[Nm]	V1	4.2	8	18	48.5	75	100
	L1	1.5	3.1	6.7	20	30	41
Sarting efficiency	V1	0.24	0.25	0.19	0.18	0.17	0.18
	L1	0.16	0.16	0.12	0.11	0.10	0.11
Running efficiency at 1500mm	V1	0.34	0.35	0.33	0.32	0.31	0.33
	L1	0.25	0.25	0.24	0.23	0.22	0.23
Torque without load[Nm]	V1	0.11	0.29	0.40	0.84	1.85	2.1
	L1	0.09	0.18	0.29	0.59	1.12	1.4
Housing material		Spheroidal graphite iron					
Weight[kg]		3.2	5	8.5	21.5	36	58
Weight per 100mm screw &protective tube[kg]		0.36	0.50	0.75	1.52	2.44	3.02

Size		SJA200	SJA300	SJA450	SJA700	SJA1000
Max lifting load [kN]		200	300	450	700	1000
Screw dia x pitch [mm]		Tr80x 12	Tr100 x 16	Tr120 x 16	Tr140 x 20	Tr160x20
Warm ratio	V1	1:8:7.5	1:10.25	1:10.75	1:13.33	1:13.33
	L1	1:35	1:41	1:43	1:40	1:40
Stroke for one input turn [mm]	V1	1.371	1.56	1.49	1.5	1.5
	L1	0.343	0.39	0.37	0.5	0.5
Max input power [kW]	V1	4	7	11.5	18.5	22
	L1	3.5	5.5	5.5	7.5	9.5
Max starting torpue at full load[Nm]	V1	265	460	675	1050	1620
	L1	106	180	275	510	820
Sarting efficiency	V1	0.17	0.18	0.16	0.16	0.15
	L1	0.11	0.12	0.10	0.11	0.10
Running efficiency at 1500mm	V1	0.33	0.33	0.30	0.31	0.29
	L1	0.22	0.23	0.20	0.21	0.19
Torque without load[Nm]	V1	2.8	3.8	5.5	8.5	11
	L1	2.1	3.1	4.5	5.5	7.5
Housing material		Spheroidal graphite iron		cast steel		
Weight[kg]		75	110	200	400	800
Weight per 100mm screw &protective tube[kg]		4.5	6.8	9.0	12.5	16.5

Note:Ambient temperature of SJ screw jack is –10℃ – +40℃(–40℃ – +70℃ are available)

Acme screw with two or three start threads are available.

Selection Guide:

■ Cautions for choosing the model type of the screw jack.The percentage of the duty cycle within 10 minutes:SJA series acme screw jack: 30%.Ball screw and satellite roller screw jack: 50%.The duty cycle can be increased if the actual load is less than the rated loads, please consult with the engineers of Lim-tec for the specifics,

■ The maximum input running speed : 1800rpm

■ If the actual load is above 25% and less than 100% (inclusive) of the full load, the required input torque=load ratio × torque at full load

■ For the stroke exceeding 300mm, the stability should be checked, please refer to the chart reflecting the relationship between the load and the stroke.

■ Adjust the safety coefficient according to the load, 1.0-1.2 for the even load; 1.3-1.5 for the moderate load; 1.6-2.5 for the heavy load.

■ For the normal performance, the input power should not exceed the max input power, input power=(torque at full load × load ratio × input speed RPM)/9550

■ The working temperature affects the max input power.Actual max input power=rated max input power × the temperature coefficient.The temperature coefficient varies in terms of the temperature: -10℃ -25℃ temperature coefficient=1,30℃ temperature coefficient=0.85,40℃ temperature coefficient=0.65

■ For the application of synchronous lifting platform, the combination coefficient should be considered, the losing of combination should also be reckoned in calculating the total power. The combination coefficient varies according to the quantity of screw jacks in the synchronous platform: For 2 PCS screw jack in a platform, the combination coefficient is 0.95,For 3 PCS screw jack in a platform, the combination coefficient is 0.9,For 4 PCS screw jack in a platform, the combination coefficient is 0.85,For 6-8 PCs screw jack in a platform, the combination coefficient is 0.8,It is recommended to increase the combination coefficients appropriately if the double clevis mounting of the screw jack is adopted

■ The acme screw jack with big ratio possess the self-locking function, while that with small ratio has uncertain self-locking, the brake needs to be equipped in the safety and vibrating application.(situation)

■ The axial error of the acme and ball screw jack with the stroke of 300mm is 0.1 mm, while that of the screw jack equipped with anti-backlash fixings is 0.02mm.

■ To avoid the lateral load, the guide device can be used to offset the lateral load.

■ The catalogue only lists the parameters and dimensions of the acme screw jack, as for the parameters and dimensions of the ball screw jack, please consult with local engineer.

■ For non-standard screw jack, please consult with local engineer.

Selection Table Guide

CODING

Type
- SJA Acme screw
- SJB Ball screw

Size
- 5
- 10
- 20
- 50
- 80
- 100
- 200
- 300
- 450
- 700
- 1000

Model
- S Traveling screw
- R Traveling nut

Ratio
- V1
- L1

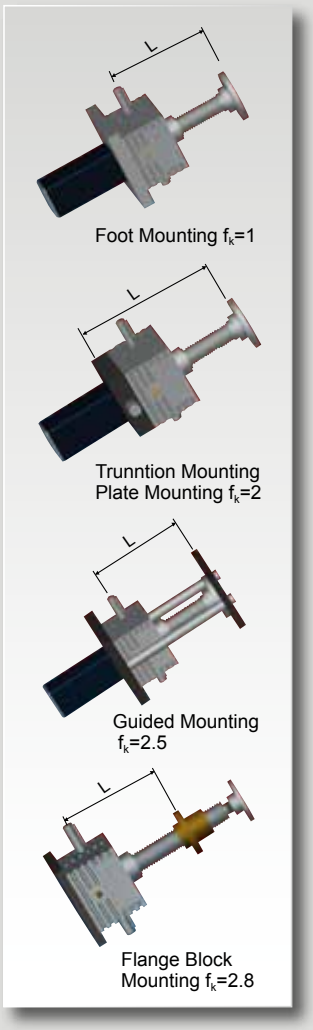
Stroke
- Special

Front Attachment
- NF Standard head
- TS Ball joint
- TF Rod end
- FL Flange end
- FO Clevis end
- FQ Spherical flange

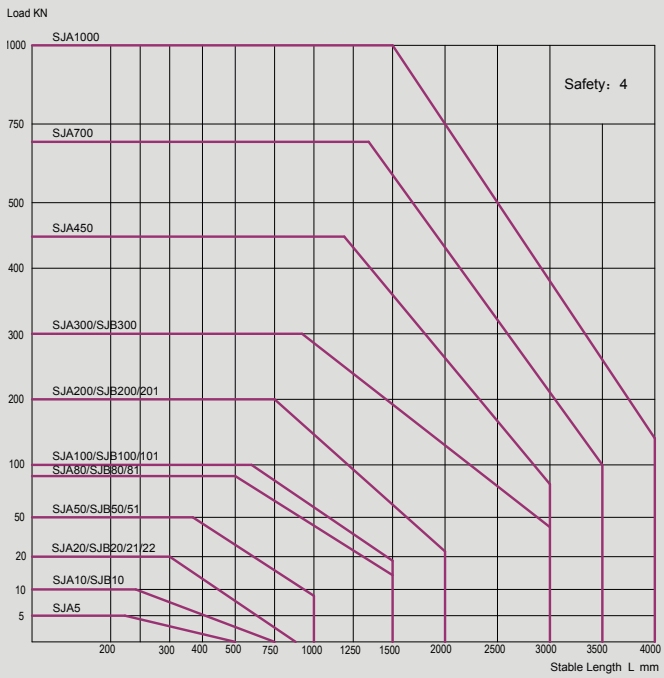
Input Version
- P1 Single input shaft
- P2 Double input shaft
- P3 Motor flange
- P4 Flange and extended shaft

Input Shaft
- RH Right hand
- LH left hand

Accessories
- BRE Brake
- FCG Mechanical Limit switches
- FCP Inductive proximity switches (PNP normally closed)
- B Bellows
- SN Safety nut
- SS Stainless steel housing
- SA Stainless steel screw
- AB Anti-bachlash device
- HBP Hinged bearing plate
- IRE Encoder
- FS Safety clutch
- PS Potentiometer
- STR Protection tube rear clevis
- AR Anti-turn device
- FMP Foot plate mounting
- XFM Housing casting with Foot mounting



Critical Bucking Force Graphs



The rated static load of Screw jack is 1.5 time of the rated Dynamic Load. The extreme wreck load is 2.5-4 time of rated Dynamic load, and screw length ect. will affect that. Screw Jack working in tension load are not need forstability checking.

The primary screw jack size selection factor is the bucking resistance of screw,Also know as Euler cures,the graphs above give safety operating atate for each size of screw jack

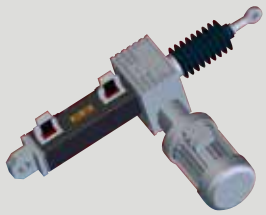
Buckling limits are relevant for compressive load only.

Max allowed axial load L=lk × fk

LK theoretical critical bucking force

fk correction value

Selection Table Guide



n1=input speed Nm=input torque required kW=input power required

SJA5			Lifting Load															
			5kN				4kN				3kN				1kN			
n1	Lifting speed mm/s		Ratio				Ratio				Ratio				Ratio			
			V1		L1		V1		L1		V1		L1		V1		L1	
RPM	V1	L1	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW
1400	23.3	5.8	2.34	0.34	0.80	0.12	1.87	0.27	0.64	0.09	1.40	0.206	0.477	0.070	0.468	0.069	0.159	0.023
900	15.0	3.7	2.49	0.23	0.83	0.08	1.99	0.19	0.66	0.06	1.49	0.141	0.497	0.047	0.497	0.047	0.166	0.016
700	11.7	2.9	2.57	0.19	0.90	0.07	2.05	0.15	0.72	0.05	1.54	0.113	0.543	0.040	0.513	0.038	0.181	0.013
500	8.3	2.1	2.74	0.14	0.95	0.05	2.20	0.11	0.76	0.04	1.65	0.086	0.568	0.030	0.549	0.029	0.189	0.010
300	5.0	1.2	2.84	0.09	1.05	0.03	2.27	0.07	0.84	0.03	1.72	0.054	0.628	0.020	0.568	0.054	0.209	0.007
100	1.7	0.4	3.06	0.03	1.17	0.01	2.45	0.03	0.94	0.01	1.84	0.019	0.702	0.007	0.612	0.006	0.234	0.002
50	0.8	0.2	3.18	0.02	1.24	0.01	2.55	0.01	0.99	0.01	1.91	0.010	0.746	0.004	0.637	0.003	0.249	0.001

SJA10			Lifting Load															
			10kN				8kN				5kN				2kN			
n1	Lifting speed mm/s		Ratio				Ratio				Ratio				Ratio			
			V1		L1		V1		L1		V1		L1		V1		L1	
RPM	V1	L1	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW
1400	23.3	5.8	4.55	0.67	1.59	0.23	3.64	0.53	1.27	0.19	2.27	0.333	0.796	0.117	0.910	0.133	0.318	0.047
900	15.0	3.7	4.82	0.45	1.66	0.16	3.86	0.36	1.33	0.12	2.41	0.227	0.829	0.078	0.965	0.091	0.332	0.031
700	11.7	2.9	4.97	0.36	1.73	0.13	3.98	0.29	1.38	0.10	2.49	0.182	0.865	0.063	0.995	0.073	0.346	0.025
500	8.3	2.1	5.13	0.27	1.89	0.10	4.11	0.22	1.52	0.08	2.57	0.134	0.947	0.050	1.027	0.054	0.379	0.020
300	5.0	1.2	5.49	0.17	1.99	0.06	4.39	0.14	1.59	0.05	2.74	0.086	0.995	0.031	1.098	0.034	0.398	0.012
100	1.7	0.4	5.90	0.06	2.21	0.02	4.72	0.05	1.77	0.02	2.95	0.031	1.105	0.012	1.179	0.012	0.442	0.005
50	0.8	0.2	6.37	0.03	2.49	0.01	5.09	0.03	1.99	0.01	3.18	0.017	1.243	0.007	1.273	0.007	0.497	0.003

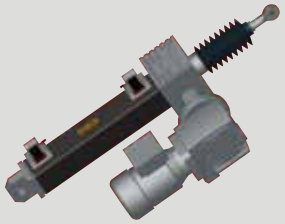
SJA20			Lifting Load															
			20kN				15kN				10kN				5kN			
n1	Lifting speed mm/s		Ratio				Ratio				Ratio				Ratio			
			V1		L1		V1		L1		V1		L1		V1		L1	
RPM	V1	L1	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW
1400	23.3	5.8	9.65	1.41	3.32	0.49	7.23	1.06	2.49	0.36	4.82	0.707	1.658	0.243	2.412	0.354	0.829	0.122
900	15.0	3.7	10.27	0.97	3.62	0.34	7.70	0.73	2.71	0.26	5.13	0.484	1.809	0.170	2.567	0.242	0.904	0.085
700	11.7	2.9	10.61	0.78	3.98	0.29	7.96	0.58	2.98	0.22	5.31	0.389	1.990	0.146	2.653	0.194	0.995	0.073
500	8.3	2.1	11.37	0.60	4.19	0.22	8.53	0.45	3.14	0.16	5.68	0.298	2.094	0.110	2.842	0.149	1.047	0.055
300	5.0	1.2	11.79	0.37	4.42	0.14	8.84	0.28	3.32	0.10	5.90	0.185	2.211	0.069	2.948	0.093	1.105	0.035
100	1.7	0.4	12.73	0.13	4.97	0.05	9.55	0.10	3.73	0.04	6.37	0.067	2.487	0.026	3.183	0.033	1.243	0.013
50	0.8	0.2	12.73	0.07	6.63	0.03	9.55	0.05	4.97	0.03	6.37	0.033	3.316	0.017	3.183	0.017	1.658	0.009

SJA50			Lifting Load															
			50kN				35kN				25kN				10kN			
n1	Lifting speed mm/s		Ratio				Ratio				Ratio				Ratio			
			V1		L1		V1		L1		V1		L1		V1		L1	
RPM	V1	L1	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW
1400	23.3	5.8	24.87	3.65	8.65	1.27	17.41	2.55	6.06	0.89	12.43	1.823	4.325	0.634	4.974	0.729	1.730	0.254
900	15.0	3.7	27.44	2.59	9.04	0.85	19.21	1.81	6.33	0.60	13.72	1.293	4.522	0.426	5.489	0.517	1.809	0.170
700	11.7	2.9	28.42	2.08	9.47	0.69	19.90	1.46	6.63	0.49	14.21	1.042	4.737	0.347	5.685	0.417	1.895	0.139
500	8.3	2.1	29.48	1.54	10.47	0.55	20.63	1.08	7.33	0.38	14.74	0.772	5.236	0.274	5.895	0.309	2.094	0.110
300	5.0	1.2	31.83	1.00	11.70	0.37	22.28	0.70	8.19	0.26	15.92	0.500	5.852	0.184	6.367	0.200	2.341	0.074
100	1.7	0.4	34.60	0.36	13.26	0.14	24.22	0.25	9.28	0.10	17.30	0.181	6.632	0.069	6.920	0.072	2.653	0.028
50	0.8	0.2	36.17	0.19	18.09	0.09	25.32	0.13	12.66	0.07	18.09	0.095	9.044	0.047	7.235	0.038	3.617	0.019

Note:The purple figures in the tables indicates operational restrictions due to thermal limits.Selection of screw jacks using these figures should only be carried out in consultation with our engineers.When your selection is made within the areas shaded purple,you will need to reduce duty cycle or choose the bigger size screw jack in order to allow effective heat dissipation.

Selection Table Guide

Selection Table Guide



n1=input speed Nm=input torque required kW=input power required

SJA80			Lifting Load															
			80kN				60kN				40kN				20kN			
n1	Lifting speed mm/s		Ratio V1		L1		Ratio V1		L1		Ratio V1		L1		Ratio V1		L1	
RPM	V1	L1	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW
1400	23.3	5.8	41.08	6.02	14.47	2.12	30.81	4.52	10.85	1.59	20.54	3.011	7.235	1.061	10.269	1.505	3.617	0.530
900	15.0	3.7	43.91	4.14	15.16	1.43	32.93	3.10	11.37	1.07	21.95	2.069	7.579	0.714	10.977	1.034	3.790	0.357
700	11.7	2.9	45.48	3.33	15.92	1.17	34.11	2.50	11.94	0.87	22.74	1.667	7.958	0.583	11.369	0.833	3.979	0.292
500	8.3	2.1	48.97	2.56	16.75	0.88	36.73	1.92	12.57	0.66	24.49	1.282	8.377	0.439	12.244	0.641	4.189	0.219
300	5.0	1.2	53.06	1.67	17.69	0.56	39.79	1.25	13.26	0.42	26.53	0.833	8.843	0.278	13.264	0.417	4.421	0.139
100	1.7	0.4	57.88	0.61	19.90	0.21	43.41	0.45	14.92	0.16	28.94	0.303	9.948	0.104	14.470	0.152	4.974	0.052
50	0.8	0.2	60.63	0.32	21.22	0.11	45.48	0.24	15.92	0.08	30.32	0.159	10.611	0.056	15.159	0.079	5.306	0.028

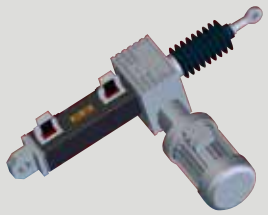
SJA100			Lifting Load															
			100kN				80kN				50kN				20kN			
n1	Lifting speed mm/s		Ratio V1		L1		Ratio V1		L1		Ratio V1		L1		Ratio V1		L1	
RPM	V1	L1	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW
1400	26.2	6.6	54.26	7.95	19.46	2.85	43.41	6.36	15.57	2.28	27.13	3.977	9.732	1.427	10.852	1.591	3.893	0.571
900	16.9	4.2	57.76	5.44	21.32	2.01	46.21	4.35	17.05	1.61	28.88	2.722	10.658	1.004	11.552	1.089	4.263	0.402
700	13.1	3.3	59.69	4.37	23.56	1.73	47.75	3.50	18.85	1.38	29.84	2.187	11.780	0.863	11.937	0.875	4.712	0.345
500	9.4	2.3	63.95	3.35	24.87	1.30	51.16	2.68	19.90	1.04	31.98	1.674	12.435	0.651	12.790	0.670	4.974	0.260
300	5.6	1.4	68.87	2.16	27.98	0.88	55.10	1.73	22.38	0.70	34.44	1.082	13.989	0.439	13.774	0.433	5.596	0.176
100	1.9	0.5	74.61	0.78	31.98	0.33	59.69	0.62	25.58	0.27	37.30	0.391	15.988	0.167	14.922	0.156	6.395	0.067
50	0.9	0.2	77.85	0.41	34.44	0.18	62.28	0.33	27.55	0.14	38.93	0.204	17.218	0.090	15.571	0.082	6.887	0.036

SJA200			Lifting Load															
			200kN				150kN				100kN				50kN			
n1	Lifting speed mm/s		Ratio V1		L1		Ratio V1		L1		Ratio V1		L1		Ratio V1		L1	
RPM	V1	L1	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW
1400	32.0	8.0	132.25	19.39	49.59	7.27	99.19	14.54	37.20	5.45	66.13	9.694	24.797	3.635	33.063	4.847	12.399	1.818
900	20.6	5.1	145.48	13.71	54.55	5.14	109.11	10.28	40.92	3.86	72.74	6.855	27.277	2.571	36.370	3.427	13.639	1.285
700	16.0	4.0	155.87	11.42	57.43	4.21	116.90	8.57	43.07	3.16	77.93	5.712	28.713	2.105	38.967	2.856	14.356	1.052
500	11.4	2.9	161.64	8.46	60.62	3.17	121.23	6.35	45.46	2.38	80.82	4.231	30.308	1.587	40.411	2.116	15.154	0.793
300	6.9	1.7	174.57	5.48	68.19	2.14	130.93	4.11	51.14	1.61	87.29	2.742	34.096	1.071	43.643	1.371	17.048	0.536
100	2.3	0.6	198.38	2.08	83.93	0.88	148.78	1.56	62.95	0.66	99.19	1.039	41.965	0.439	49.595	0.519	20.982	0.220
50	1.1	0.3	207.83	1.09	90.92	0.48	155.87	0.82	68.19	0.36	103.91	0.544	45.462	0.238	51.957	0.272	22.731	0.119

SJA300			Lifting Load															
			300kN				200kN				150kN				100kN			
n1	Lifting speed mm/s		Ratio V1		L1		Ratio V1		L1		Ratio V1		L1		Ratio V1		L1	
RPM	V1	L1	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW
1400	37.3	9.3	231.52	33.94	83.04	12.17	154.34	22.63	55.36	8.12	115.76	16.97	41.52	6.09	77.17	11.31	27.68	4.06
900	24.0	6.0	254.67	24.00	90.95	8.57	169.78	16.00	60.63	5.71	127.33	12.00	45.48	4.29	84.89	8.00	30.32	2.86
700	18.7	4.7	272.86	20.00	100.53	7.37	181.90	13.33	67.02	4.91	136.43	10.00	50.26	3.68	90.95	6.67	33.51	2.46
500	13.3	3.3	282.96	14.81	106.11	5.56	188.64	9.88	70.74	3.70	141.48	7.41	53.06	2.78	94.32	4.94	35.37	1.85
300	8.0	2.0	305.60	9.60	119.37	3.75	203.73	6.40	79.58	2.50	152.80	4.80	59.69	1.88	101.88	3.20	39.79	1.25
100	2.7	0.7	347.27	3.64	146.92	1.54	231.52	2.42	97.95	1.03	173.64	1.82	73.46	0.77	115.76	1.21	48.97	0.51
50	1.3	0.3	363.81	1.90	159.17	0.83	242.54	1.27	106.11	0.56	181.90	0.95	79.58	0.42	121.27	0.64	53.06	0.28

Note:The purple figures in the tables indicates operational restrictions due to thermal limits.Selection of screw jacks using these figures should only be carried out in consultation with our engineers.When your selection is made within the areas shaded purple,you will need to reduce duty cycle or choose the bigger size screw jack in order to allow effective heat dissipation.

Selection Table Guide



n1=input speed Nm=input torque required kW=input power required

SJA450			Lifting Load															
			450kN				350kN				200kN				100kN			
n1	Lifting speed mm/s		Ratio V1		Ratio L1		Ratio V1		Ratio L1		Ratio V1		Ratio L1		Ratio V1		Ratio L1	
RPM	V1	L1	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW
1400	34.7	8.68	355	52.1	133	19.5	276	40.5	104	15.2	158	23.2	59.2	8.68	79	11.6	29.6	4.34
900	22.3	5.58	381	35.9	148	14	296	27.9	115	10.9	169	15.9	65.8	6.2	84.6	7.97	32.9	3.1
700	17.4	4.34	410	30.1	157	11.5	319	23.4	122	8.94	182	13.4	69.7	5.11	91.1	6.68	34.8	2.55
500	12.4	3.1	444	23.3	167	8.72	345	18.1	130	6.78	197	10.3	74	3.88	98.7	5.17	37	1.94
300	7.44	1.86	485	15.2	190	5.98	377	11.8	148	4.65	215	6.76	84.6	2.66	108	3.38	42.3	1.33
100	2.48	0.62	561	5.87	222	2.33	436	4.57	173	1.81	249	2.61	98.7	1.03	125	1.31	49.4	0.52
50	1.24	0.31	666	3.49	266	1.4	518	2.71	207	1.09	296	1.55	118	0.62	148	0.78	59.2	0.31

SJA700			Lifting Load															
			700kN				550kN				400kN				200kN			
n1	Lifting speed mm/s		Ratio V1		Ratio L1		Ratio V1		Ratio L1		Ratio V1		Ratio L1		Ratio V1		Ratio L1	
RPM	V1	L1	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW
1400	35	11.7	539	79	265	38.9	424	62.1	208	30.6	308	45.2	152	22.2	154	22.6	75.8	11.1
900	22.5	7.5	576	54.3	293	27.6	453	42.7	230	21.7	329	31	168	15.8	165	15.5	83.8	7.89
700	17.5	5.83	619	45.4	309	22.7	486	35.7	243	17.8	354	25.9	177	13	177	13	88.4	6.48
500	12.5	4.17	669	35	328	17.2	525	27.5	257	13.5	382	20	187	9.8	191	10	93.6	4.9
300	7.5	2.5	760	23.9	371	11.7	597	18.8	292	9.17	434	13.6	212	6.67	217	6.82	106	3.33
100	2.5	0.83	880	9.21	428	4.49	691	7.24	337	3.53	503	5.26	245	2.56	251	2.63	122	1.28
50	1.25	0.42	1045	5.47	506	2.65	821	4.3	398	2.08	597	3.13	289	1.52	298	1.56	145	0.76

SJA1000			Lifting Load															
			1000kN				800kN				600kN				400kN			
n1	Lifting speed mm/s		Ratio V1		Ratio L1		Ratio V1		Ratio L1		Ratio V1		Ratio L1		Ratio V1		Ratio L1	
RPM	V1	L1	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW
1400	35	11.7	823	121	419	61.4	659	96.6	335	49.1	494	72.4	251	36.8	329	48.3	168	24.6
900	22.5	7.5	884	83.3	442	41.7	708	66.7	354	33.3	531	50	265	25	354	33.3	177	16.7
700	17.5	5.83	955	70	468	34.3	764	56	374	27.4	573	42	281	20.6	382	28	187	13.7
500	12.5	4.17	1038	54.4	497	26	831	43.5	398	20.8	623	32.6	298	15.6	415	21.7	199	10.4
300	7.5	2.5	1137	35.7	568	17.9	910	28.6	455	14.3	682	21.4	341	10.7	455	14.3	227	7.14
100	2.5	0.83	1327	13.89	663	6.94	1061	11.1	531	5.56	796	8.34	398	4.17	531	5.56	265	2.78
50	1.25	0.42	1592	8.33	796	4.17	1274	6.67	637	3.33	955	5	477	2.5	637	3.33	318	1.67

NON-STANDARD SCRE JACK

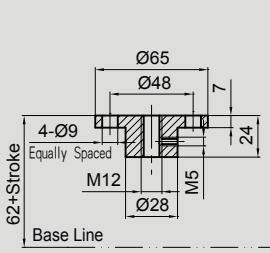
STAINLESS SCREW JACK

Note:The purple figures in the tables indicates operational restrictions due to thermal limits.Selection of screw jacks using these figures should only be carried out in consultation with our engineers.When your selection is made within the areas shaded purple,you will need to reduce duty cycle or choose the bigger size screw jack in order to allow effective heat dissipation.

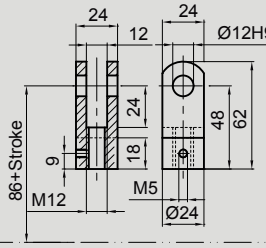
Overall Dimensions of Screw Jack

SJA5 Screw Jack

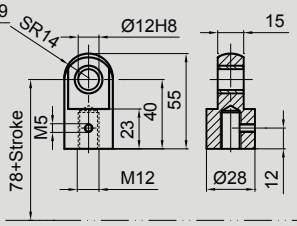
Flange end FL



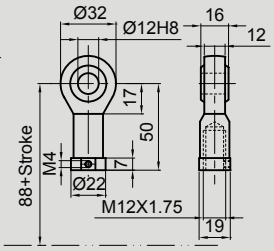
Clevis end FO



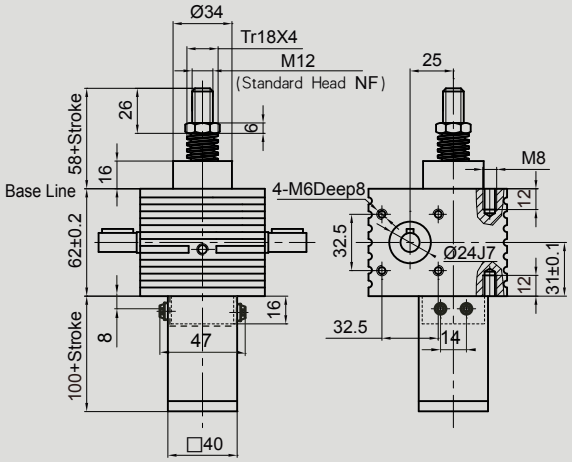
Rod end TF



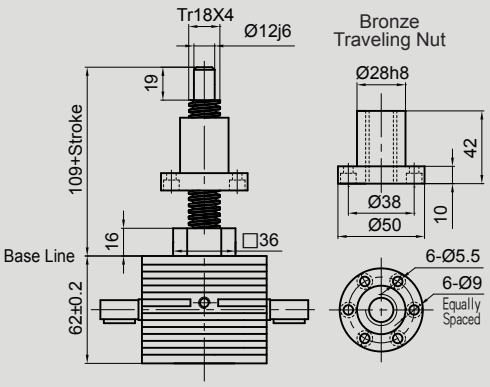
Ball joint TS



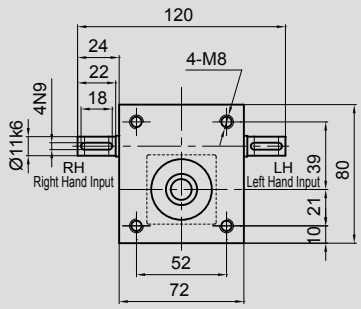
Model S Traveling Screw

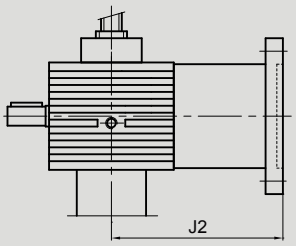


Model R Traveling Nut



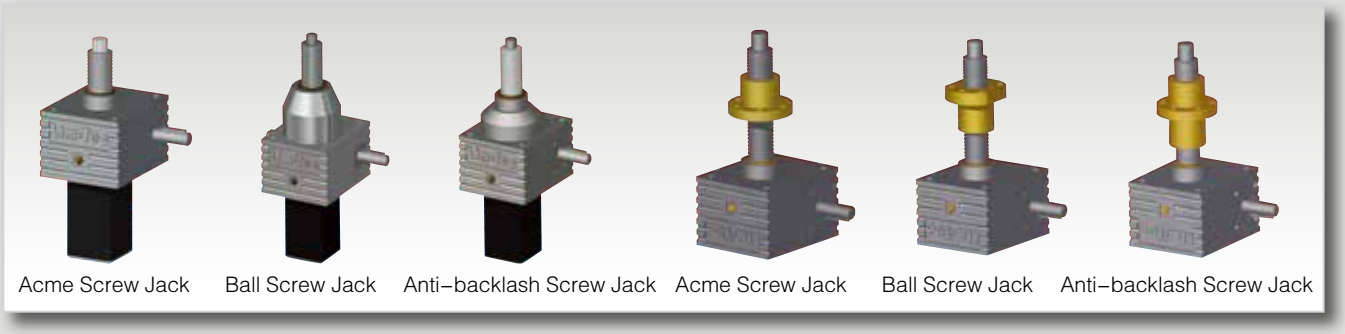
IEC Motor Flange End





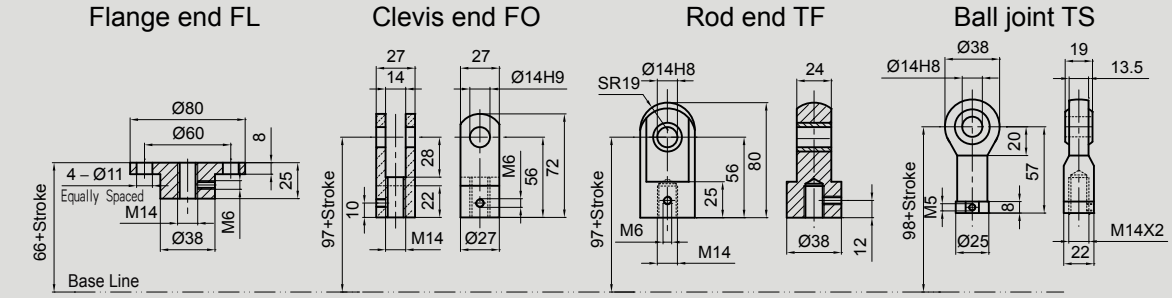
Motor Frame	J2
63B14	99
71B14	106

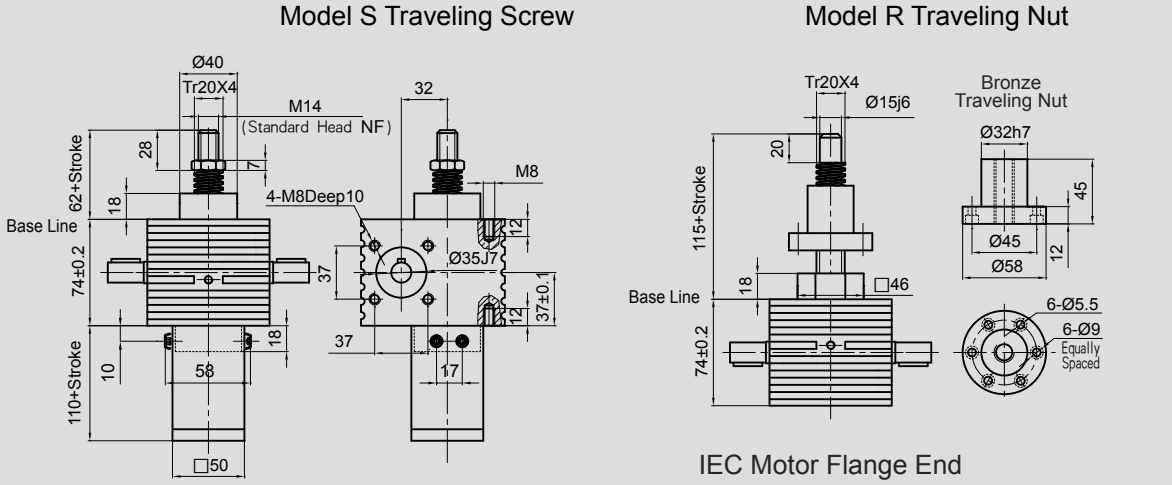
Note:If you need safety nut screw jack or anti-backlash screw jack,the overall dimension will be changed,please consult Lim-Tec's engineers.

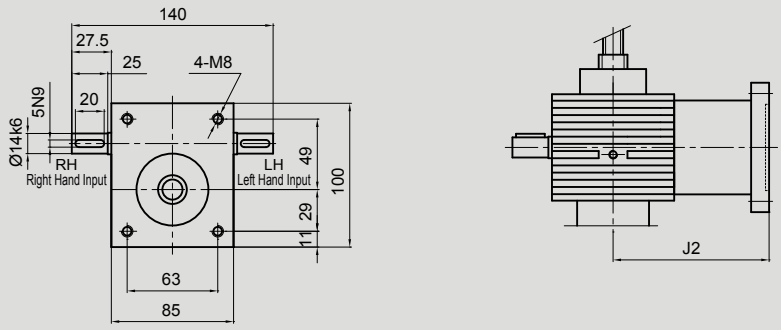


Acme Screw Jack | Ball Screw Jack | Anti-backlash Screw Jack | Acme Screw Jack | Ball Screw Jack | Anti-backlash Screw Jack

SJA10 Screw Jack

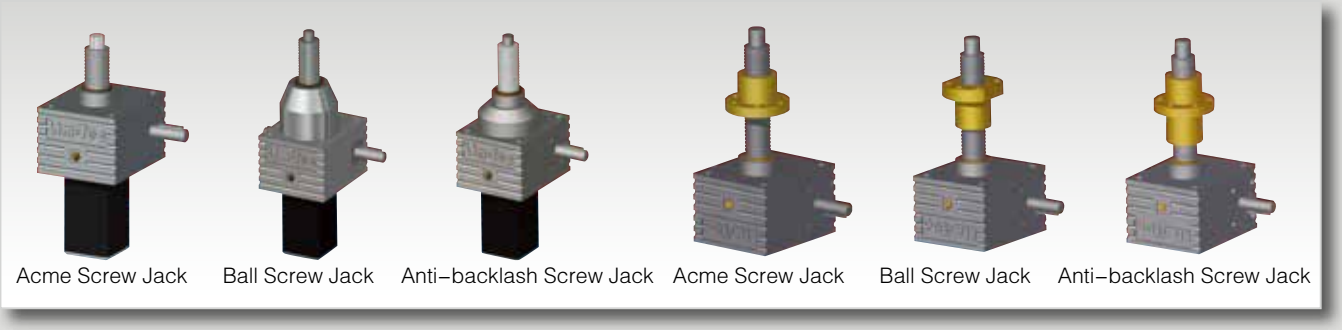






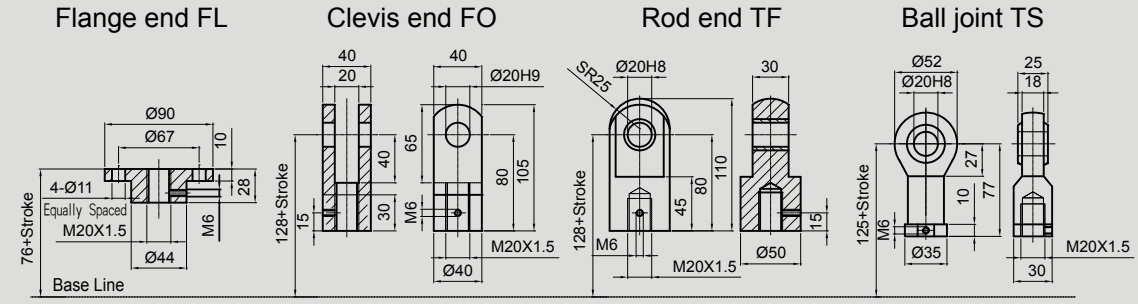
Motor Frame	J2
63B14	62.5
71B14	115.5
80B14	125.5

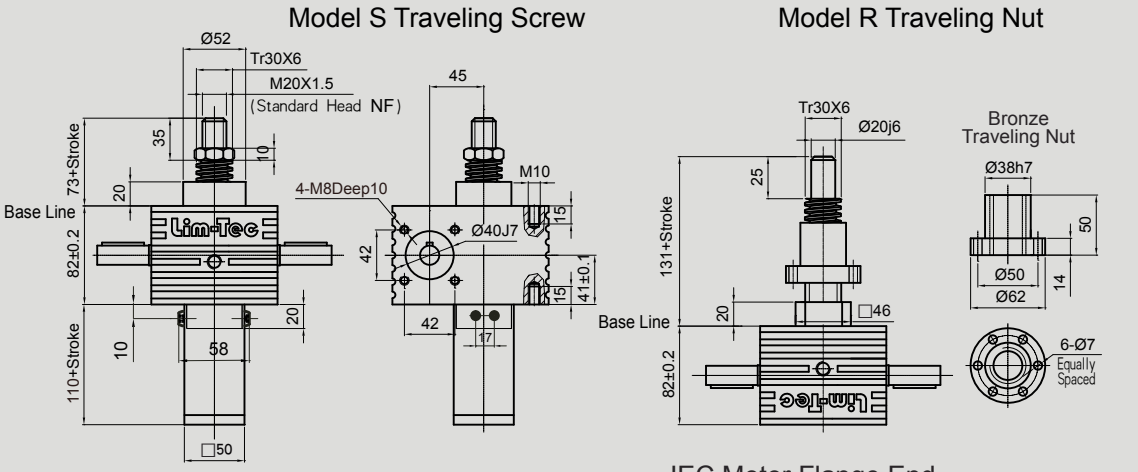
Note:If you need safety nut screw jack or anti–backlash screw jack,the overall dimension will be changed,please consult Lim–Tec’s engineers.

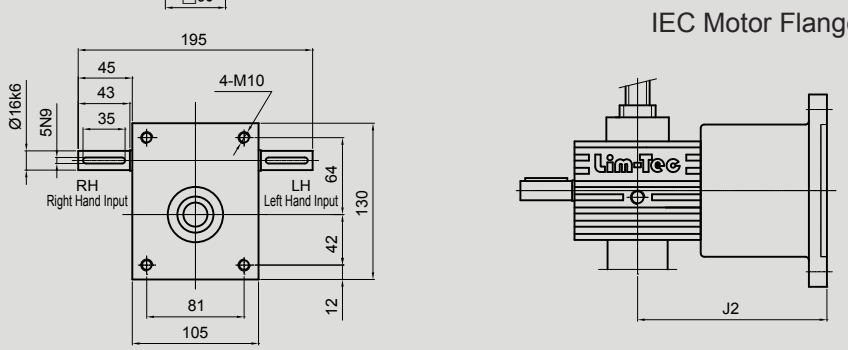


Overall Dimensions of Screw Jack

SJA20 Screw Jack

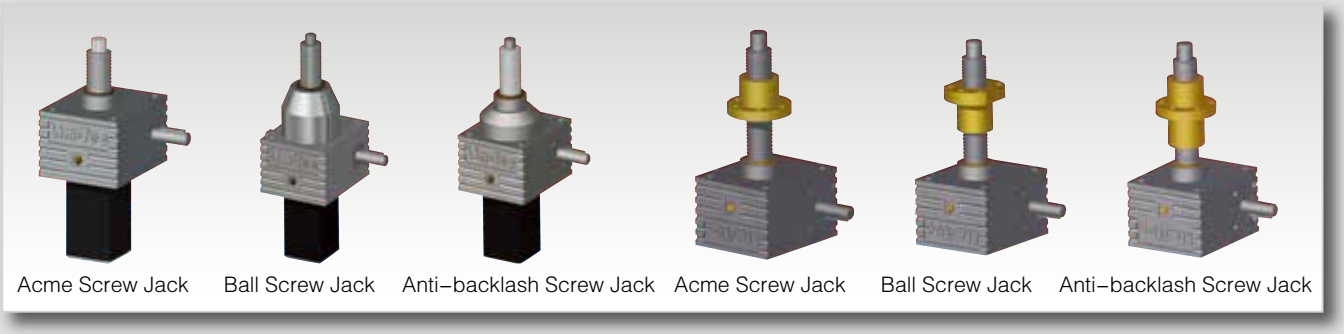




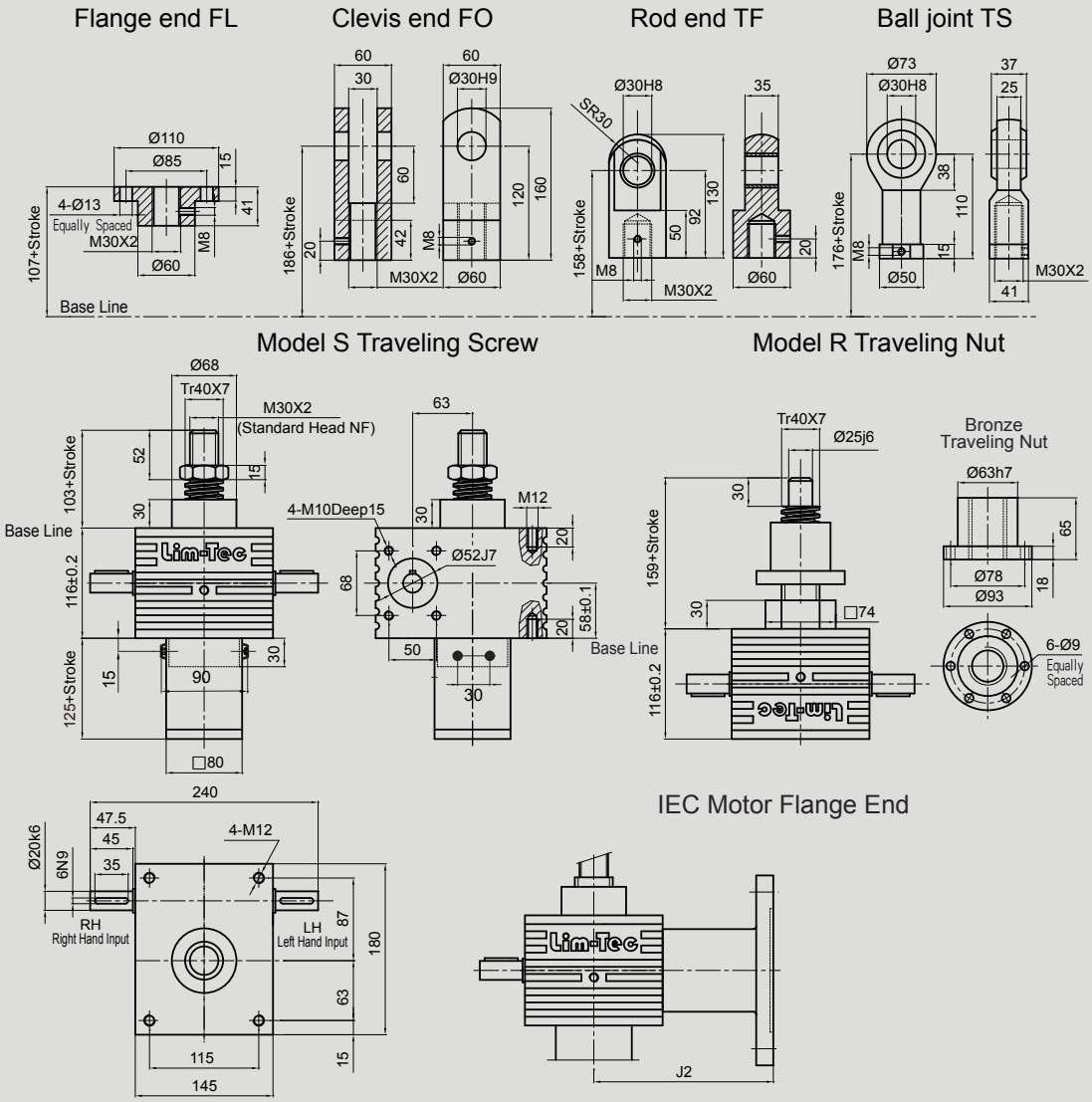


Motor Frame	J2
71B14	75
80B14	155
90B14	165

Note:If you need safety nut screw jack or anti-backlash screw jack,the overall dimension will be changed,please consult Lim-Tec's engineers.

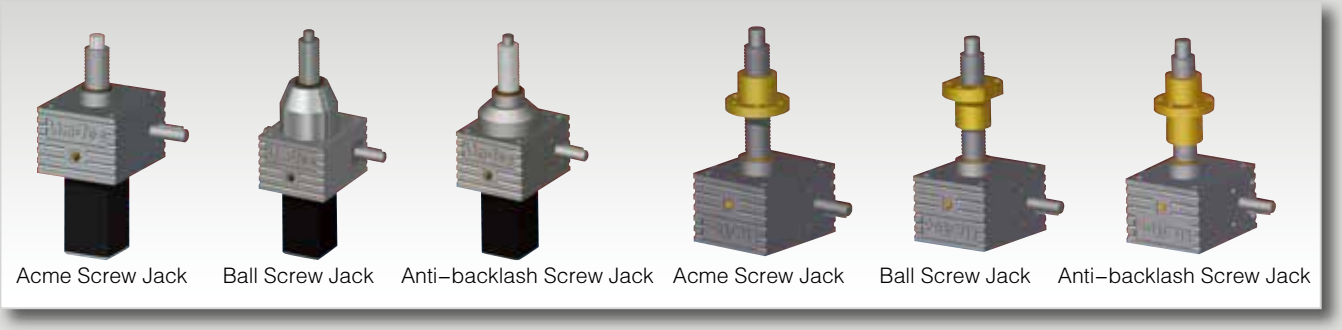


SJA50 Screw Jack



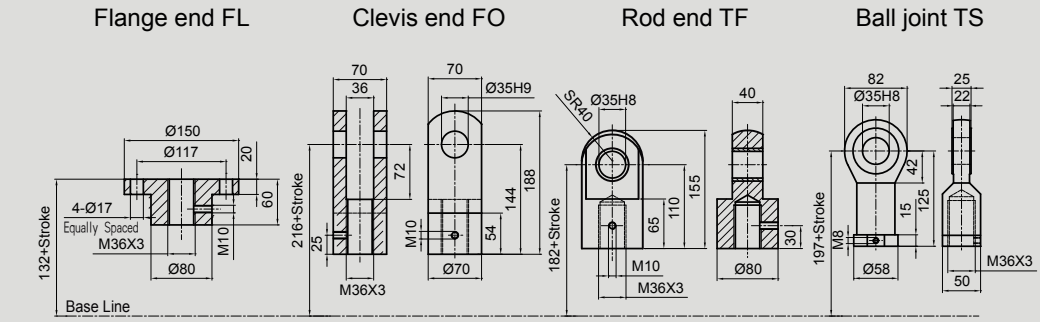
Motor Frame	J2
80B14	98
90B14	190
100B14	200

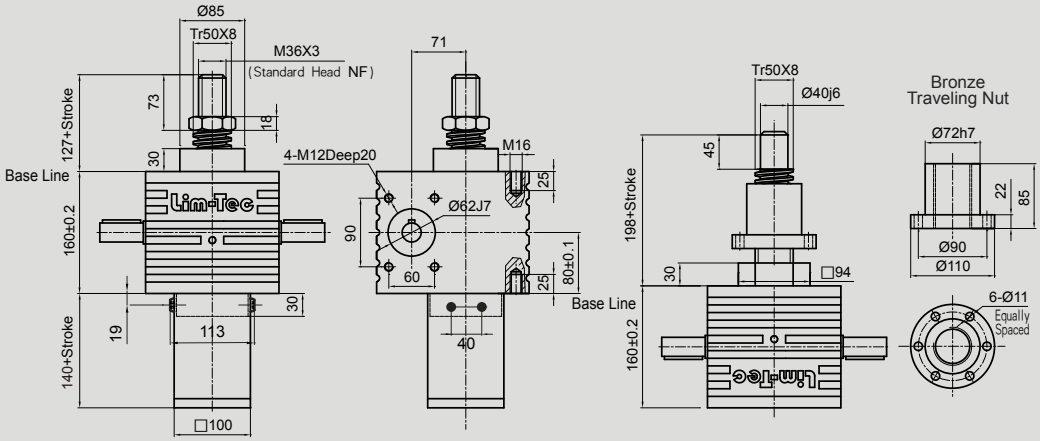
Note:If you need safety nut screw jack or anti-backlash screw jack,the overall dimension will be changed,please consult Lim-Tec's engineers.

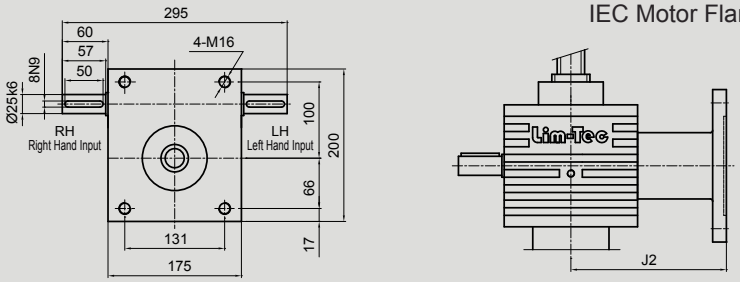


Overall Dimensions of Screw Jack

SJA80 Screw Jack

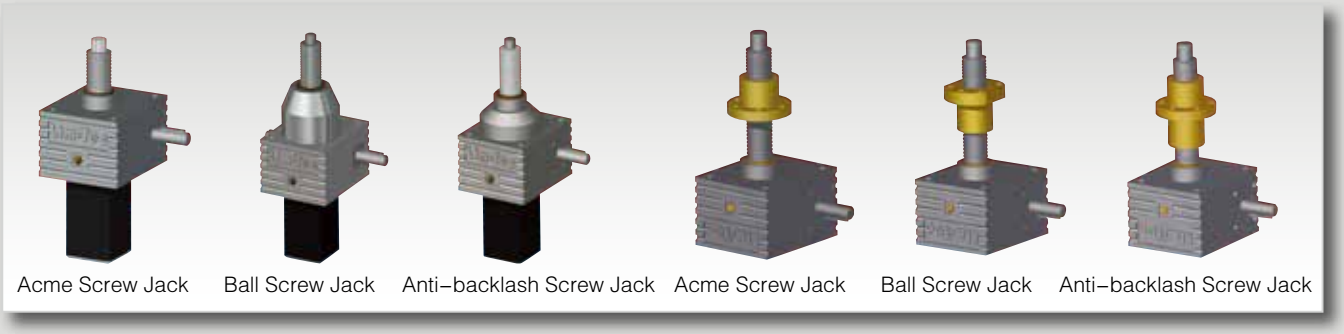




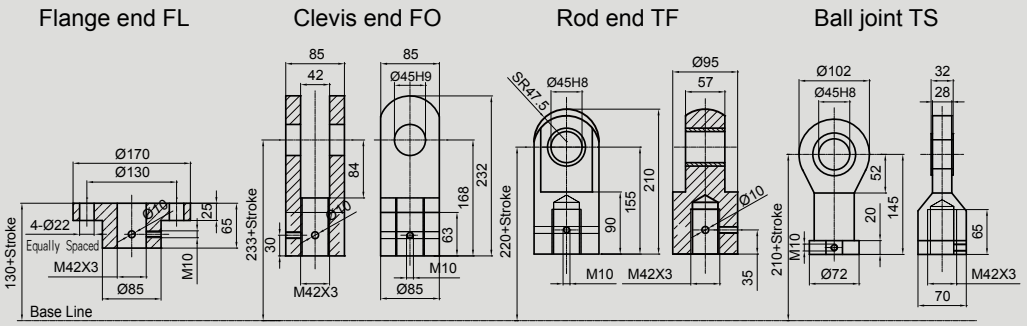


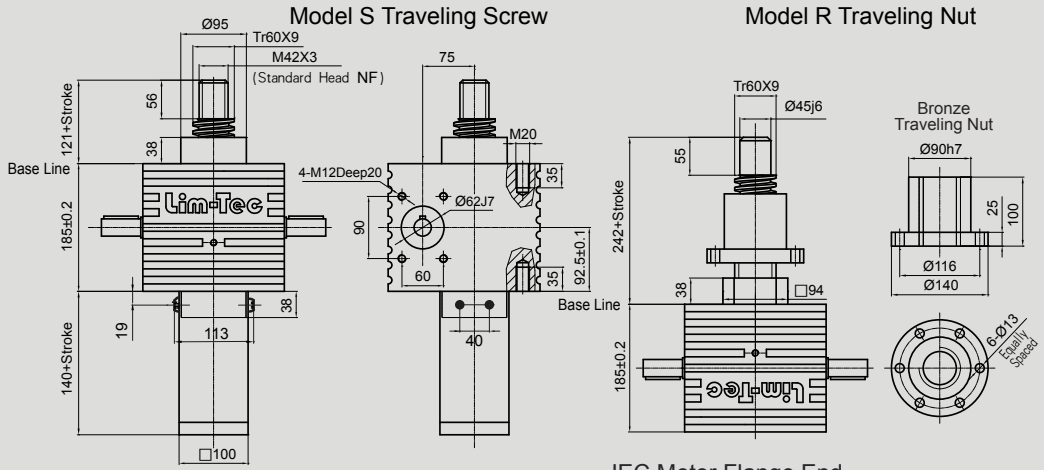
Motor Frame	J2
80B14	115
90B14	115
100B5	231

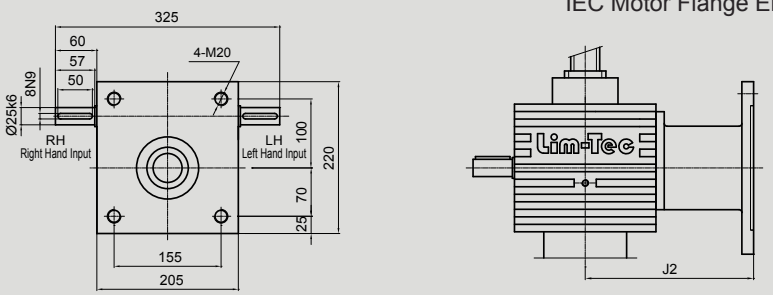
Note:If you need safety nut screw jack or anti–backlash screw jack,the overall dimension will be changed,please consult Lim–Tec’s engineers.



SJA100 Screw Jack

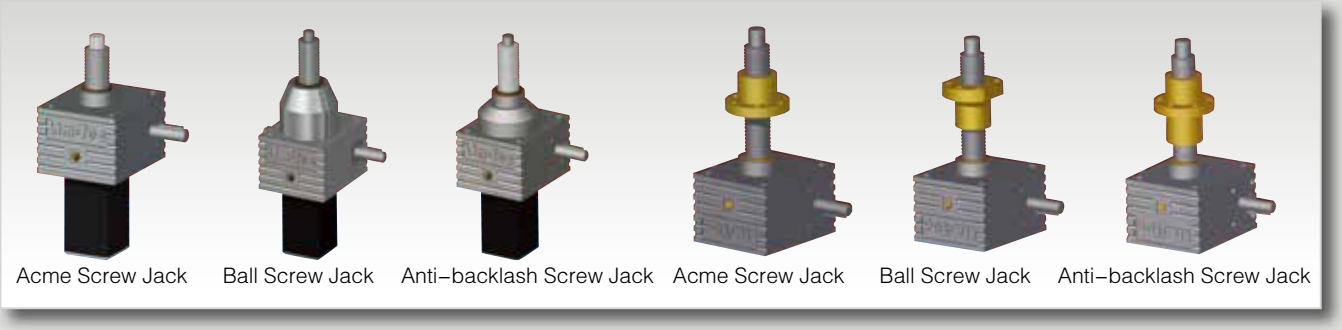






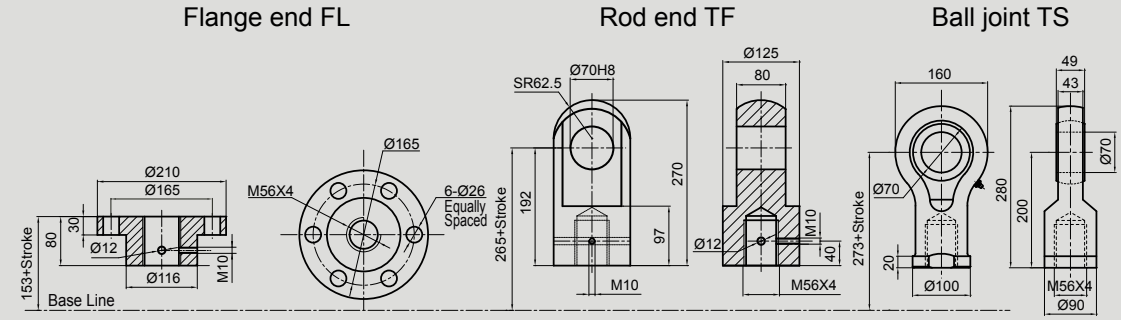
Motor Frame	J2
90B14	130
100B5	246

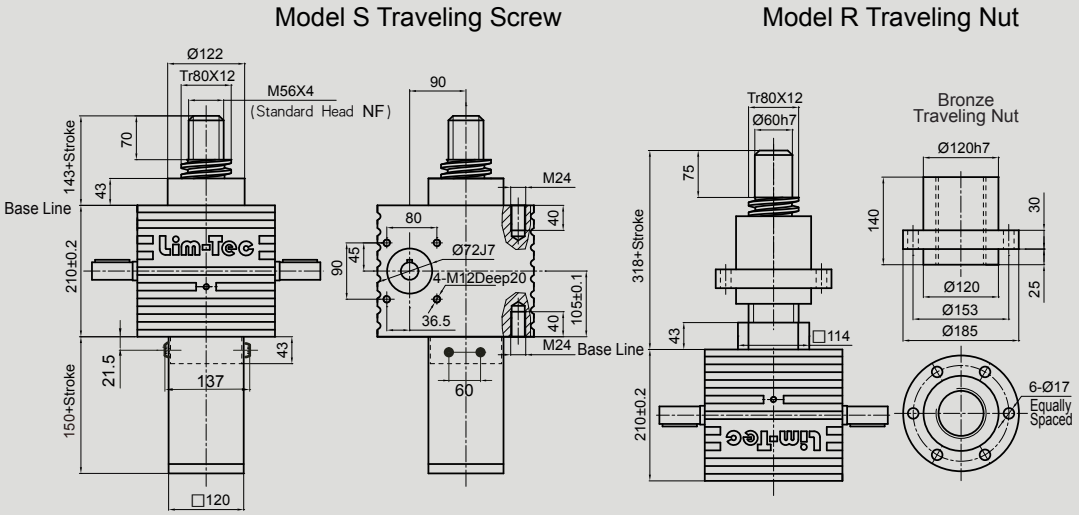
Note:If you need safety nut screw jack or anti–backlash screw jack,the overall dimension will be changed,please consult Lim–Tec’s engineers.

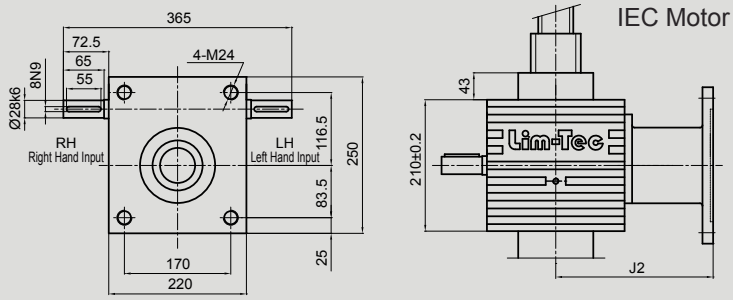


Overall Dimensions of Screw Jack

SJA200 Screw Jack

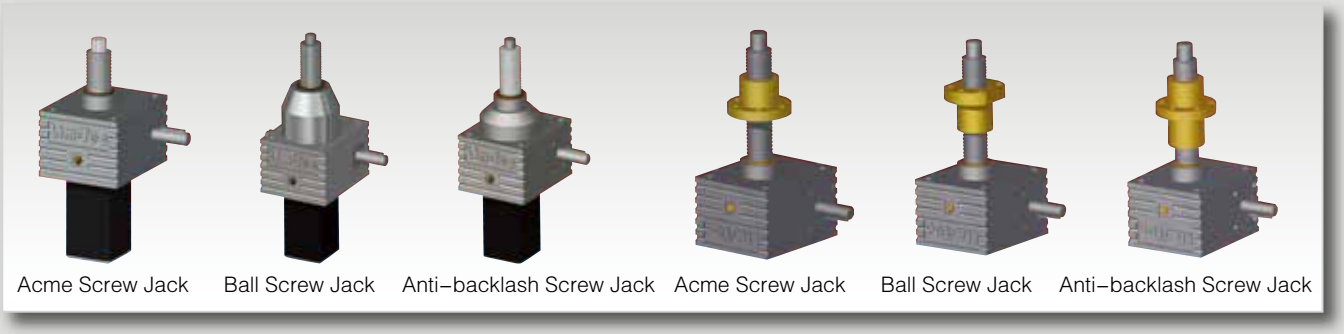






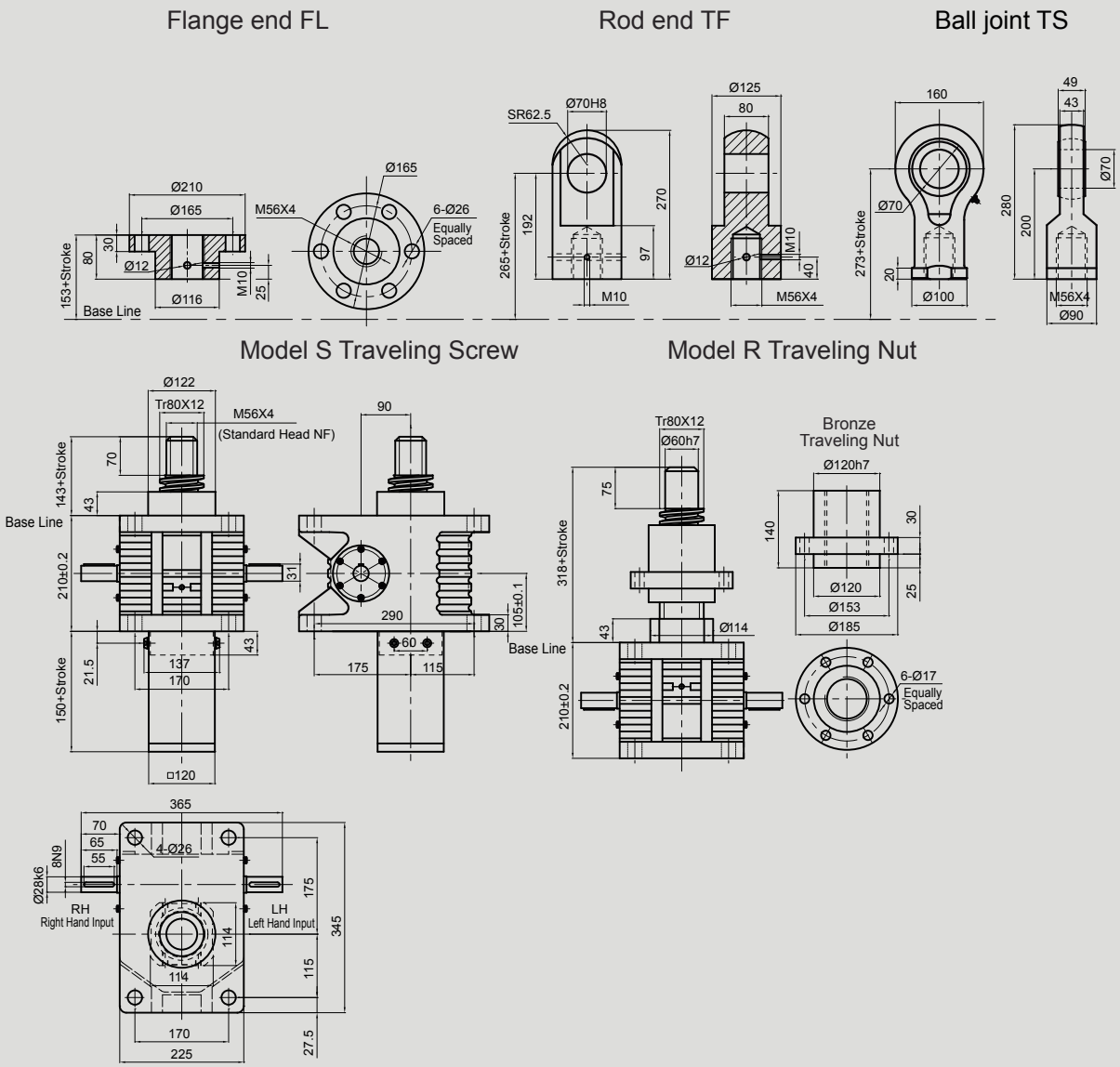
Motor Frame	J2
90B5	138
100B5	268
112B5	268

Note:If you need safety nut screw jack or anti–backlash screw jack,the overall dimension will be changed,please consult Lim–Tec’s engineers.

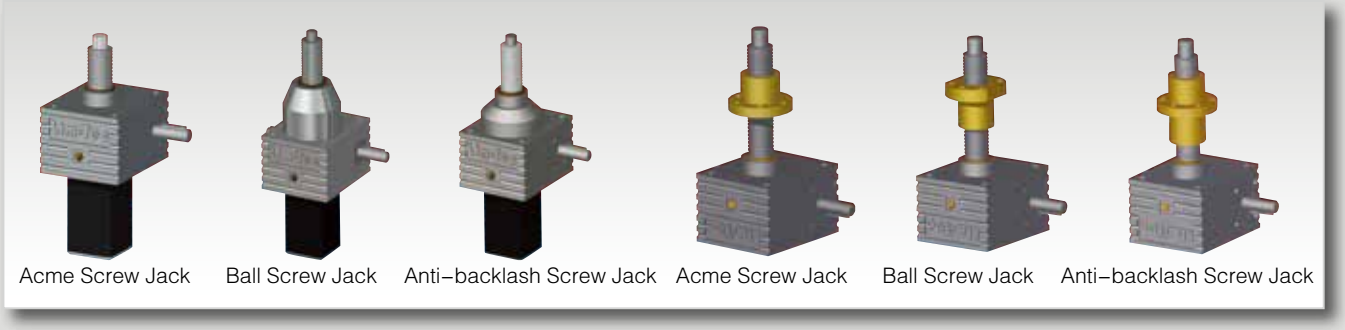


Acme Screw Jack | Ball Screw Jack | Anti–backlash Screw Jack | Acme Screw Jack | Ball Screw Jack | Anti–backlash Screw Jack

Foot Mounting SJA200–XFM SCREW JACK



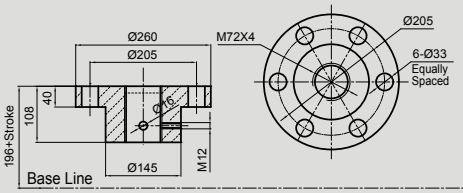
Note:If you need safety nut screw jack or anti–backlash screw jack,the overall dimension will be changed,please consult Lim–Tec’s engineers.



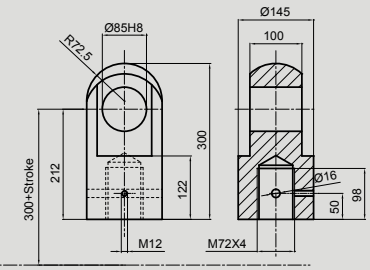
Overall Dimensions of Screw Jack

SJA300 Screw Jack

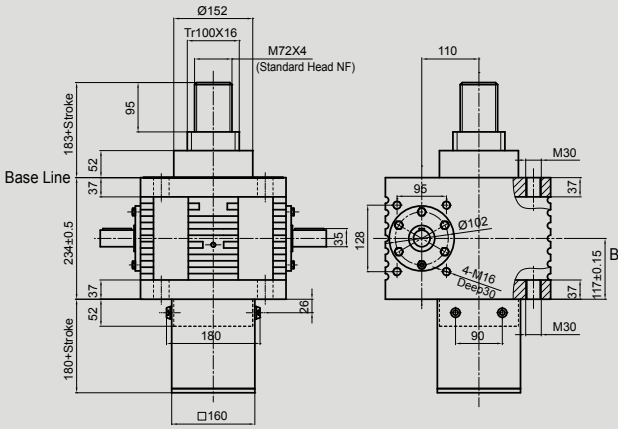
Flange end FL



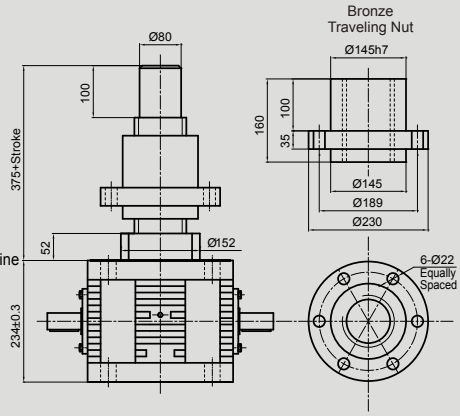
Rod end TF

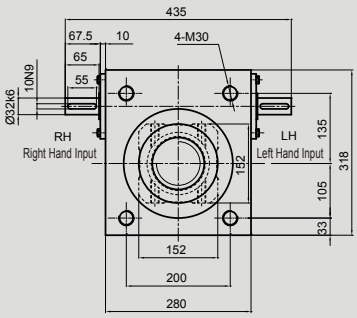


Model S Traveling Screw

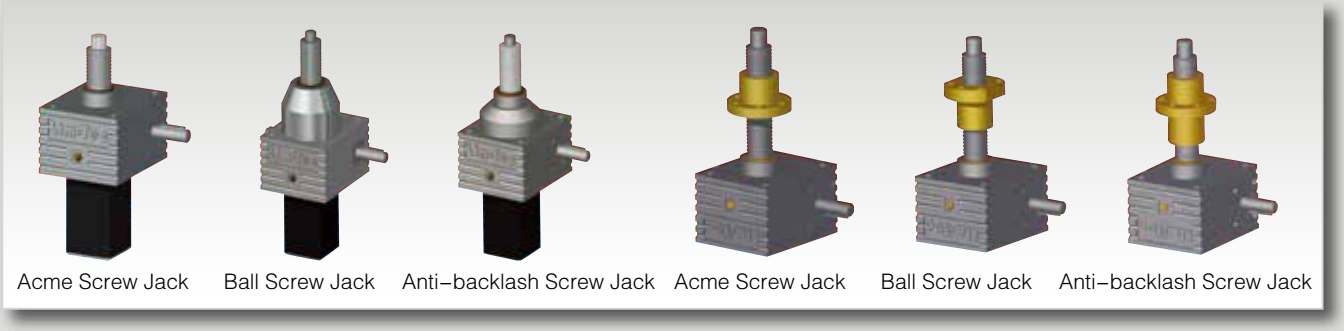


Model R Traveling Nut





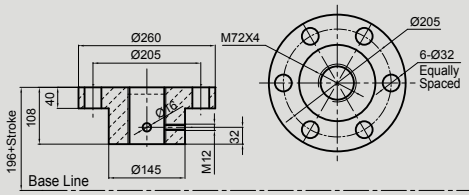
Note:If you need safety nut screw jack or anti–backlash screw jack,the overall dimension will be changed,please consult Lim–Tec’s engineers.



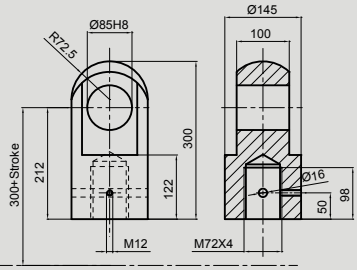
Acme Screw Jack | Ball Screw Jack | Anti–backlash Screw Jack | Acme Screw Jack | Ball Screw Jack | Anti–backlash Screw Jack

Foot Mounting SJA300–XFM SCREW JACK

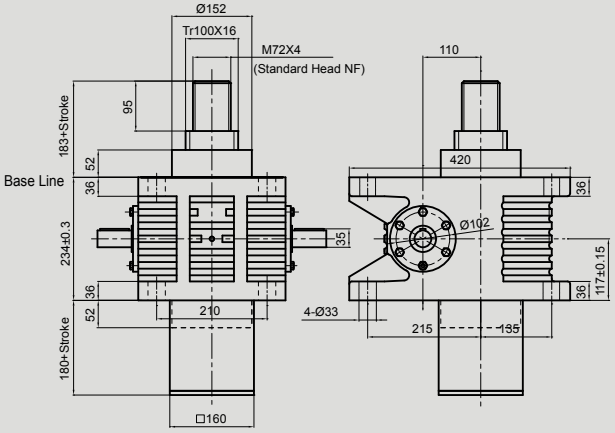
Flange end FL



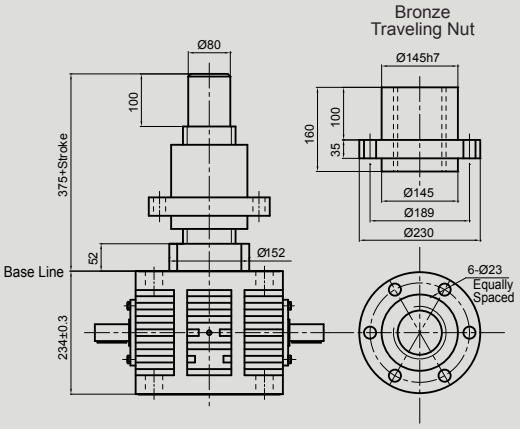
Rod end TF

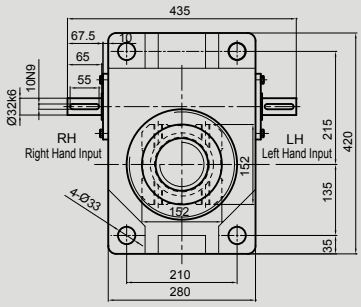


Model S Traveling Screw

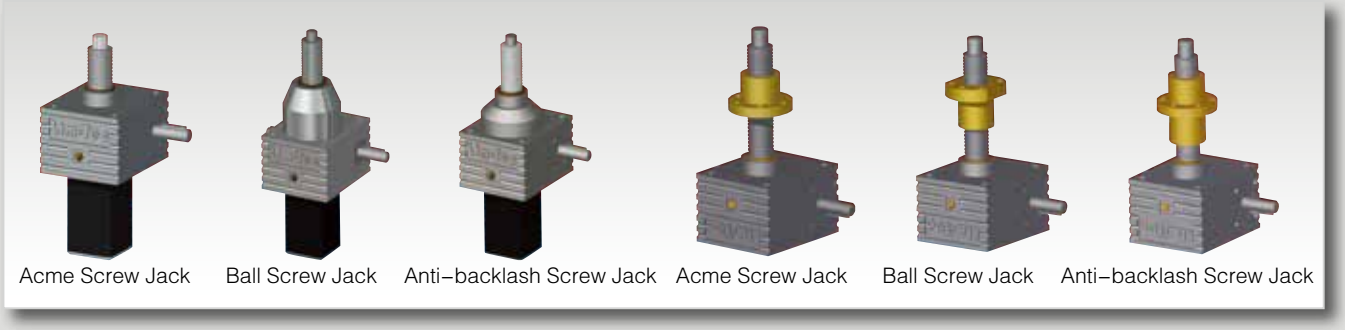


Model R Traveling Nut





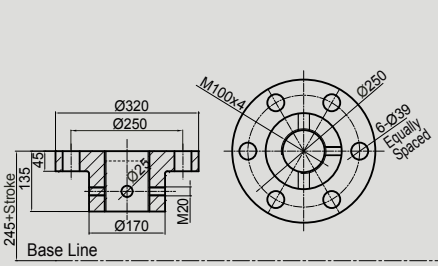
Note:If you need safety nut screw jack or anti–backlash screw jack,the overall dimension will be changed,please consult Lim–Tec’s engineers.



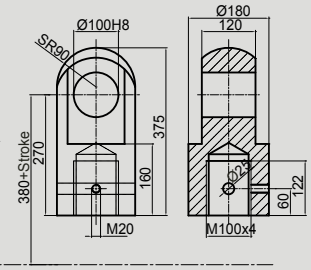
Overall Dimensions of Screw Jack

SJA450 Screw Jack

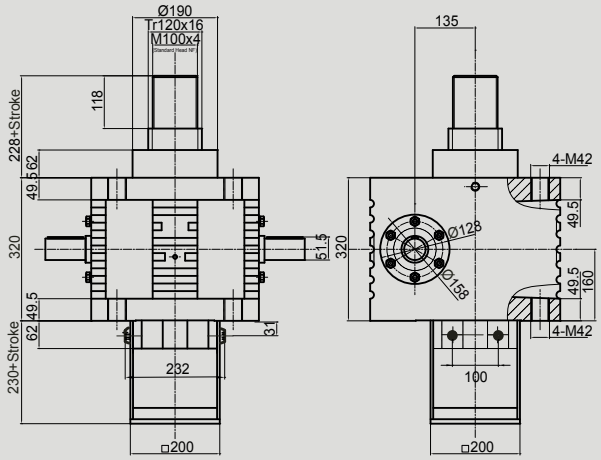
Flange end FL



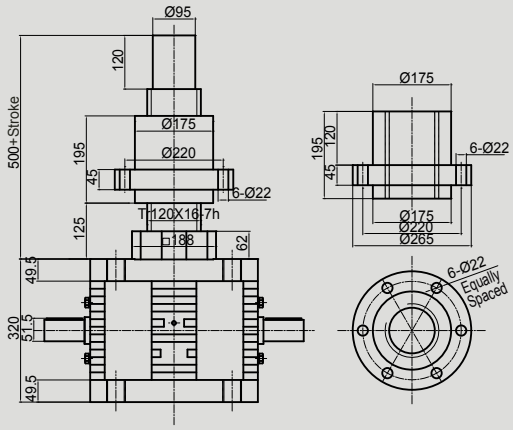
Rod end TF

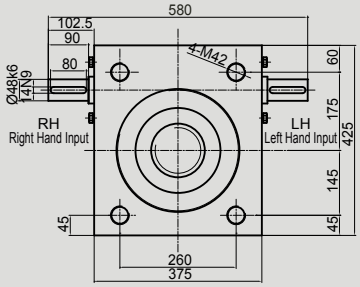


Model S Traveling Screw

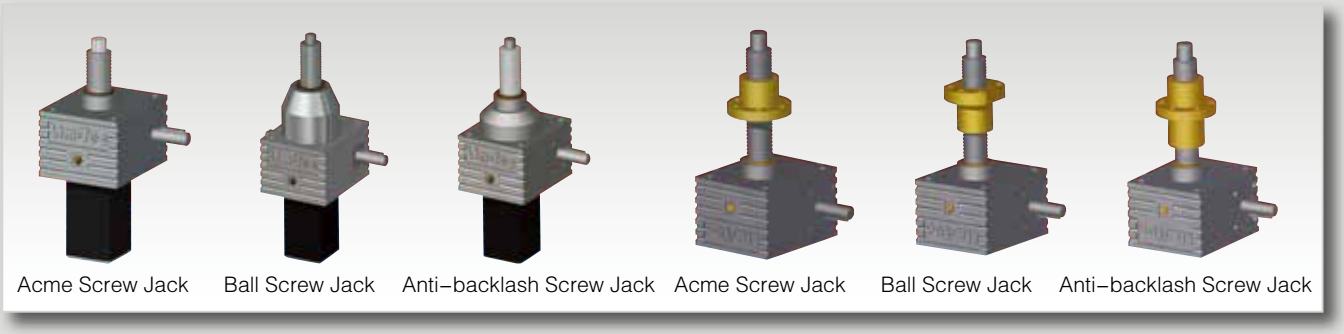


Model R Traveling Nut





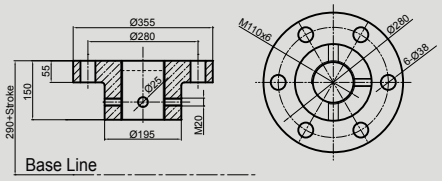
Note:If you need safety nut screw jack or anti–backlash screw jack,the overall dimension will be changed,please consult Lim–Tec’s engineers.



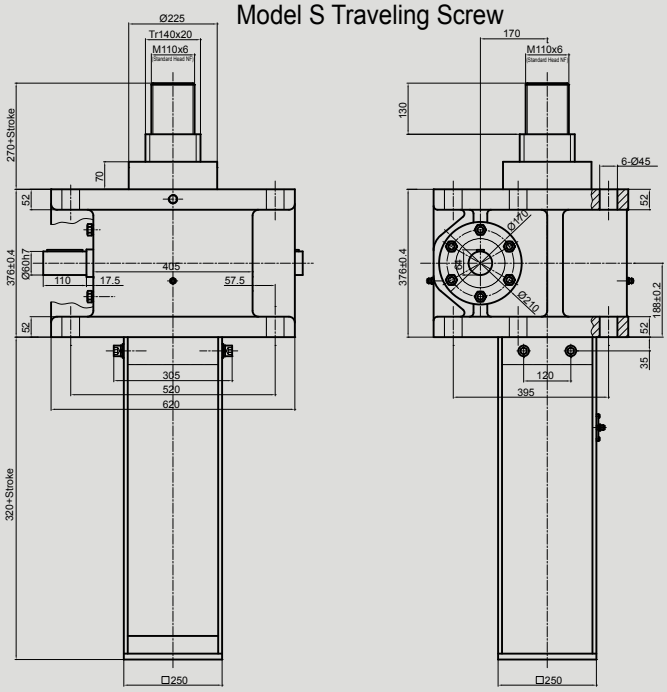
Acme Screw Jack | Ball Screw Jack | Anti–backlash Screw Jack | Acme Screw Jack | Ball Screw Jack | Anti–backlash Screw Jack

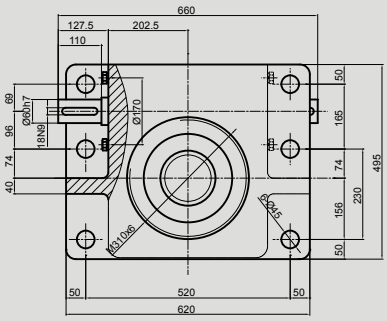
SJA700 Screw Jack

Flange end FL

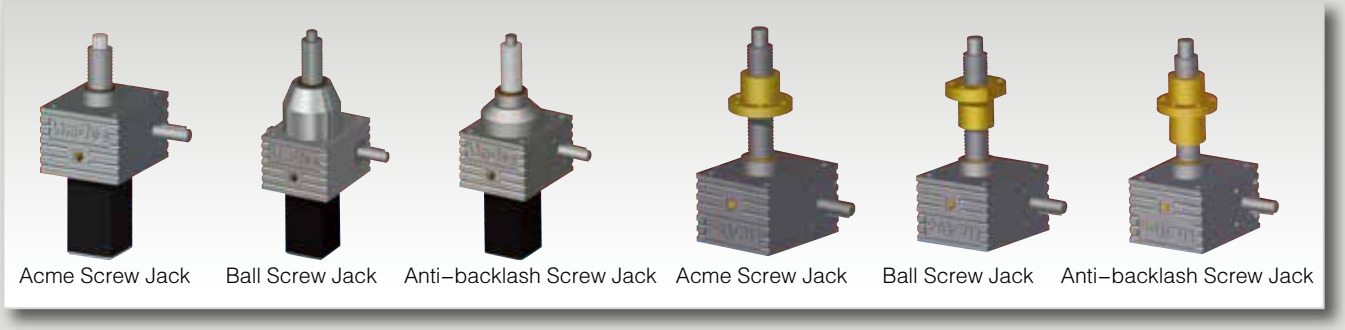


Model S Traveling Screw





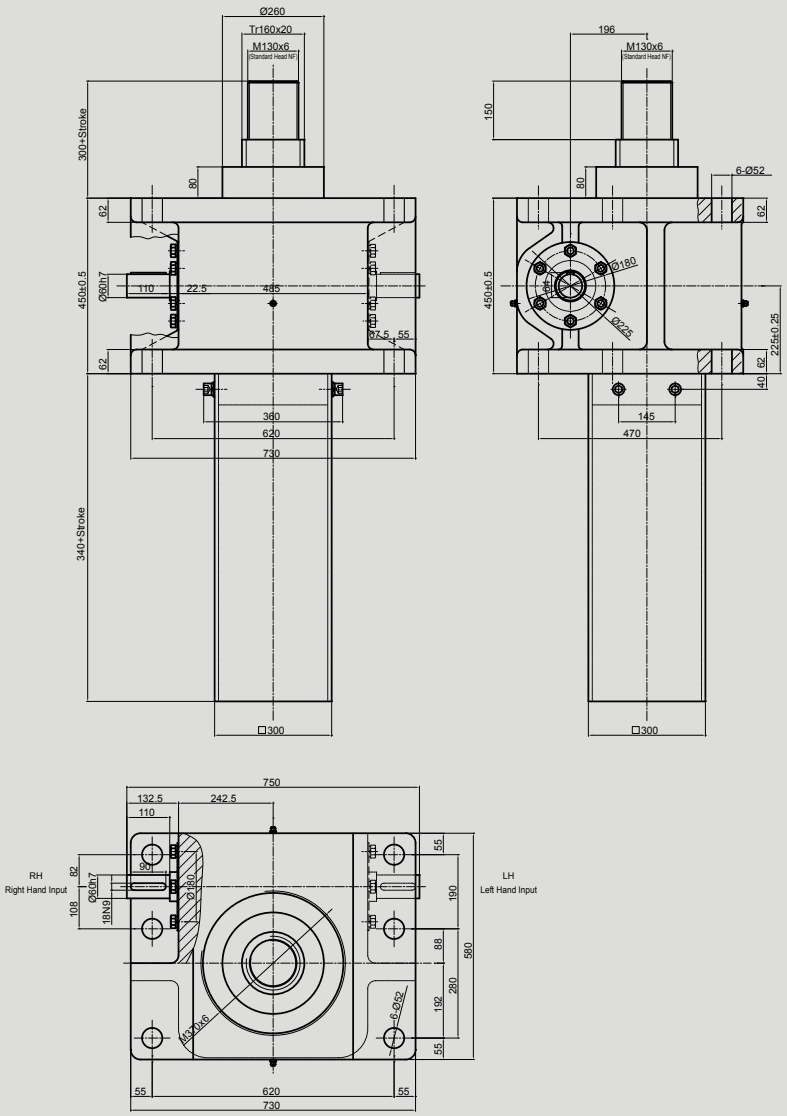
Note:If you need safety nut screw jack or anti-backlash screw jack,the overall dimension will be changed,please consult Lim-Tec's engineers.



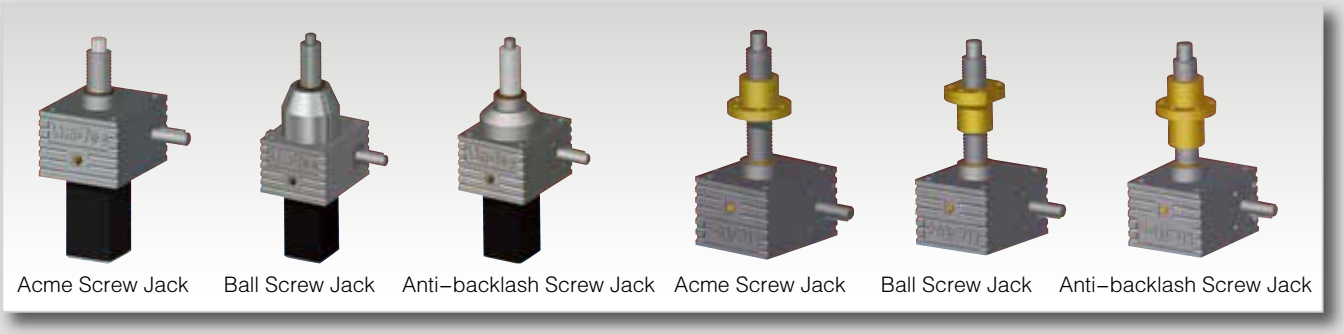
Overall Dimensions of Screw Jack

SJA1000 Screw Jack

Model S Traveling Screw



Note:If you need safety nut screw jack or anti–backlash screw jack,the overall dimension will be changed,please consult Lim–Tec’s engineers.



Acme Screw Jack | Ball Screw Jack | Anti–backlash Screw Jack | Acme Screw Jack | Ball Screw Jack | Anti–backlash Screw Jack

Ball Screw Jack

Selection Table Guide

Performance Table

Size		SJB10	SJB20	SJB21	SJB22	SJB50	SJB51	SJB80	SJB81	SJB100	SJB101	SJB200	SJB201	SJB300
Max lifting load [kn]		10	20	20	20	50	35	60	60	80	70	90	100	150
Rated dynamic load kN		11	17	25	25	46	30	53	56	71	62	78	97	111
Screw dia x pitch[mm]		20×5	32×5	32×10	32×20	40×10	40×20	50×10	50×20	63×10	63×20	80×10	80×20	100×20
Worm ratio	V1	1:4	1:6	1:6	1:6	1:7	1:7	1:8	1:8	1:8	1:8	1:8.75	1:8.75	1:10.25
	L1	1:16	1:24	1:24	1:24	1:28	1:28	1:32	1:32	1:32	1:32	1:35	1:35	1:41
Stroke for one input turn[mm]	V1	1.25	0.83	1.67	3.34	1.43	2.86	1.25	2.5	1.25	2.5	1.14	2.28	1.95
	L1	0.31	0.21	0.42	0.84	0.36	0.72	0.31	0.62	0.31	0.62	0.29	0.58	0.488
Max input power[kw]	V1	0.57	1.14	1.14	1.14	2.2	2.2	2.5	2.5	3	3	4	4	7
	L1	0.27	0.55	0.55	0.55	1.1	1.1	1.5	1.5	2.2	2.2	3.5	3.5	5.5
Max starting torque at full load[nm]	V1	4.8	8.2	15.3	29.2	34.4	47.4	36.8	72.3	49.0	82.9	53.2	118	157
	L1	1.8	3.4	6.3	12.1	14.6	19.4	15.3	29.9	20.4	34	23.4	52	66.7
Starting efficiency	V1	0.41	0.32	0.35	0.36	0.33	0.34	0.32	0.33	0.32	0.34	0.31	0.31	0.30
	L1	0.27	0.20	0.21	0.22	0.20	0.21	0.20	0.20	0.20	0.21	0.18	0.18	0.18
Running efficiency at 1500rpm	V1	0.59	0.58	0.62	0.65	0.59	0.60	0.58	0.59	0.58	0.60	0.55	0.55	0.53
	L1	0.42	0.39	0.42	0.44	0.39	0.41	0.39	0.40	0.39	0.41	0.35	0.35	0.35
Housing material		Spheroidal graphite iron												
Weight[kg]		6	9.5	9.5	10	23	24	38	40	62	64	78	78	125
Weight per 100mm screw & protective tube[kg]		0.5	0.8	0.8	0.8	1.6	1.6	2.5	2.5	3.2	3.2	4.6	4.6	7.3

Note:Ambient temperature of SJ screw jack is –20℃ – +40℃(–40℃ – +70℃ are available)

Lifetime calculation

The lifetime of Ball screw Jack SJB series depends on the lifetime of ball screw and worm gear and shaft, we just need to calculate the lifetime of screw, worm gear and shaft will wear but normally lifetime is longer than screw.

Theoretically Ball screw lifetime L10 is 90% of stroke ability that screw could reach before metal fatigue, Unit is million millimeter. Theoretically lifetime is not guarantee lifetime. In order to reach max. Lifetime the screw need been appropriate maintainece and lubricate.

If the theoretically lifetime need higher than 90%, need multiply follow coefficient

95%: L10x62% 96%: L10x53% 97%: L10x44%

98%: L10x33% 99%: L10x21%

Nut lifetime calculation:

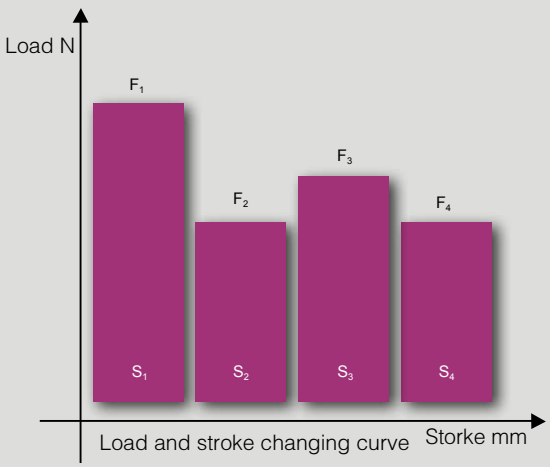
$L10=(C / Fm)^3 xS$

L10: theoretic lifetime km Fm: mean load N

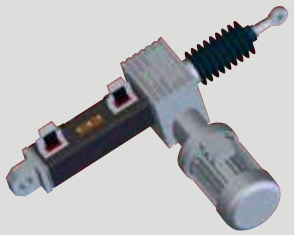
C: Rated dynamic load N S: Ball screw lead mm

Fm mean load calcuation:

$$Fm=\sqrt[3]{\frac{F_1^3S_1+F_2^3S_2+F_3^3S_3+F_4^3S_4}{S_1+S_2+S_3+S_4}}$$



Selection Table Guide



n1=input speed Nm=input torque required kW=input power required

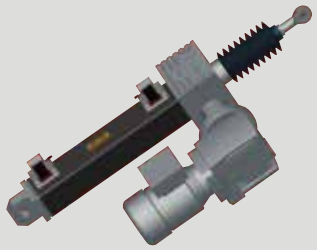
SJB10			Lifting Load															
			10kN				8kN				5kN				2kN			
n1	Lifting speed [mm/s]		Ratio V1		L1		Ratio V1		L1		Ratio V1		L1		Ratio V1		L1	
RPM	V1	L1	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW
1400	29.2	7.3	3.37	0.49	1.18	0.17	2.70	0.40	0.95	0.14	1.69	0.247	0.592	0.087	0.674	0.099	0.237	0.035
900	18.7	4.7	3.62	0.34	1.28	0.12	2.89	0.27	1.02	0.10	1.81	0.170	0.638	0.060	0.723	0.068	0.255	0.024
700	14.6	3.6	3.75	0.28	1.31	0.10	3.00	0.22	1.05	0.08	1.88	0.138	0.654	0.048	0.751	0.055	0.262	0.019
500	10.4	2.6	3.98	0.21	1.38	0.07	3.18	0.17	1.11	0.06	1.99	0.104	0.691	0.036	0.796	0.042	0.276	0.014
300	6.2	1.6	4.14	0.13	1.51	0.05	3.32	0.10	1.21	0.04	2.07	0.065	0.754	0.024	0.829	0.026	0.301	0.009
100	2.1	0.5	4.42	0.05	1.66	0.02	3.54	0.04	1.33	0.01	2.21	0.023	0.829	0.009	0.884	0.009	0.332	0.003
50	1.0	0.3	4.63	0.02	1.78	0.01	3.70	0.02	1.42	0.01	2.31	0.012	0.888	0.005	0.925	0.005	0.355	0.002

SJB20			Lifting Load															
			20kN				15kN				10kN				5kN			
n1	Lifting speed [mm/s]		Ratio V1		L1		Ratio V1		L1		Ratio V1		L1		Ratio V1		L1	
RPM	V1	L1	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW
1400	19.4	4.8	4.56	0.67	1.69	0.25	3.42	0.50	1.27	0.19	2.28	0.334	0.847	0.124	1.139	0.167	0.423	0.062
900	12.4	3.1	4.80	0.45	1.74	0.16	3.60	0.34	1.30	0.12	2.40	0.226	0.869	0.082	1.201	0.113	0.435	0.041
700	9.7	2.4	4.99	0.37	1.79	0.13	3.74	0.27	1.34	0.10	2.49	0.183	0.893	0.065	1.246	0.091	0.446	0.033
500	6.9	1.7	5.28	0.28	1.83	0.10	3.96	0.21	1.38	0.07	2.64	0.138	0.917	0.048	1.321	0.069	0.459	0.024
300	4.1	1.0	5.50	0.17	2.00	0.06	4.13	0.13	1.50	0.05	2.75	0.086	1.001	0.031	1.376	0.043	0.500	0.016
100	1.4	0.3	5.87	0.06	2.20	0.02	4.40	0.05	1.65	0.02	2.94	0.031	1.101	0.012	1.468	0.015	0.550	0.006
50	0.7	0.2	6.14	0.03	2.36	0.01	4.61	0.02	1.77	0.01	3.07	0.016	1.180	0.006	1.536	0.008	0.590	0.003

SJB21			Lifting Load															
			20kN				15kN				10kN				5kN			
n1	Lifting speed [mm/s]		Ratio V1		L1		Ratio V1		L1		Ratio V1		L1		Ratio V1		L1	
RPM	V1	L1	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW
1400	39.0	9.7	8.57	1.26	3.16	0.46	6.43	0.94	2.37	0.35	4.29	0.628	1.582	0.232	2.144	0.314	0.791	0.116
900	25.0	6.3	9.01	0.85	3.32	0.31	6.76	0.64	2.49	0.23	4.51	0.425	1.661	0.157	2.253	0.212	0.831	0.078
700	19.5	4.9	9.49	0.70	3.50	0.26	7.12	0.52	2.62	0.19	4.75	0.348	1.749	0.128	2.373	0.174	0.874	0.064
500	13.9	3.5	10.03	0.53	3.69	0.19	7.52	0.39	2.77	0.14	5.02	0.263	1.846	0.097	2.508	0.131	0.923	0.048
300	8.3	2.1	10.63	0.33	4.03	0.13	7.97	0.25	3.02	0.09	5.32	0.167	2.014	0.063	2.658	0.083	1.007	0.032
100	2.8	0.7	11.56	0.12	4.43	0.05	8.67	0.09	3.32	0.03	5.78	0.061	2.215	0.023	2.889	0.030	1.108	0.012
50	1.4	0.3	12.08	0.06	4.58	0.02	9.06	0.05	3.44	0.02	6.04	0.032	2.291	0.012	3.021	0.016	1.146	0.006

Note:The purple figures in the tables indicates operational restrictions due to thermal limits.Selection of screw jacks using these figures should only be carried out in consultation with our engineers.When your selection is made within the areas shaded purple,you will need to reduce duty cycle or choose the bigger size screw jack in order to allow effective heat dissipation.

Selection Table Guide



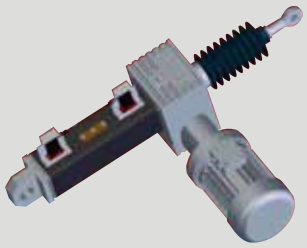
n1=input speed Nm=input torque required kW=input power required

SJB22			Lifting Load															
			20kN				15kN				10kN				5kN			
n1	Lifting speed [mm/s]		Ratio V1		L1		Ratio V1		L1		Ratio V1		L1		Ratio V1		L1	
RPM	V1	L1	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW
1400	77.9	19.5	16.61	2.44	6.04	0.89	12.46	1.83	4.53	0.66	8.31	1.218	3.021	0.443	4.153	0.609	1.510	0.221
900	50.1	12.5	17.43	1.64	6.48	0.61	13.07	1.23	4.86	0.46	8.72	0.821	3.242	0.305	4.358	0.411	1.621	0.153
700	39.0	9.7	18.33	1.34	6.82	0.50	13.75	1.01	5.11	0.37	9.17	0.672	3.408	0.250	4.583	0.336	1.704	0.125
500	27.8	7.0	19.33	1.01	7.18	0.38	14.50	0.76	5.39	0.28	9.67	0.506	3.592	0.188	4.833	0.253	1.796	0.094
300	16.7	4.2	20.45	0.64	7.59	0.24	15.34	0.48	5.70	0.18	10.22	0.321	3.797	0.119	5.112	0.161	1.899	0.060
100	5.6	1.4	22.15	0.23	8.31	0.09	16.61	0.17	6.23	0.07	11.08	0.116	4.153	0.043	5.538	0.058	2.077	0.022
50	2.8	0.7	23.63	0.12	8.86	0.05	17.72	0.09	6.65	0.03	11.81	0.062	4.430	0.023	5.907	0.031	2.215	0.012

SJB50			Lifting Load															
			50kN				35kN				25kN				10kN			
n1	Lifting speed [mm/s]		Ratio V1		L1		Ratio V1		L1		Ratio V1		L1		Ratio V1		L1	
RPM	V1	L1	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW
1400	33.4	8.3	19.29	2.83	7.30	1.07	13.50	1.98	5.11	0.75	9.64	1.414	3.648	0.535	3.858	0.566	1.459	0.214
900	21.4	5.4	20.69	1.95	7.49	0.71	14.48	1.36	5.24	0.49	10.35	0.975	3.744	0.353	4.138	0.390	1.497	0.141
700	16.7	4.2	21.47	1.57	7.69	0.56	15.03	1.10	5.38	0.39	10.74	0.787	3.845	0.282	4.294	0.315	1.538	0.113
500	11.9	3.0	22.76	1.19	7.90	0.41	15.93	0.83	5.53	0.29	11.38	0.596	3.952	0.207	4.552	0.238	1.581	0.083
300	7.1	1.8	23.71	0.74	8.62	0.27	16.60	0.52	6.04	0.19	11.85	0.372	4.311	0.135	4.742	0.149	1.724	0.054
100	2.4	0.6	25.29	0.26	9.48	0.10	17.70	0.19	6.64	0.07	12.64	0.132	4.742	0.050	5.058	0.053	1.897	0.020
50	1.2	0.3	26.47	0.14	10.16	0.05	18.53	0.10	7.11	0.04	13.23	0.069	5.081	0.027	5.293	0.028	2.032	0.011

SJB51			Lifting Load															
			50kN				35kN				25kN				10kN			
n1	Lifting speed [mm/s]		Ratio V1		L1		Ratio V1		L1		Ratio V1		L1		Ratio V1		L1	
RPM	V1	L1	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW
1400	66.7	16.7	37.31	5.47	13.88	2.03	26.12	3.83	9.71	1.42	18.66	2.735	6.939	1.017	7.463	1.094	2.776	0.407
900	42.9	10.7	38.58	3.64	14.59	1.37	27.00	2.54	10.21	0.96	19.29	1.818	7.295	0.687	7.716	0.727	2.918	0.275
700	33.4	8.3	39.93	2.93	15.38	1.13	27.95	2.05	10.77	0.79	19.97	1.463	7.689	0.564	7.986	0.585	3.076	0.225
500	23.8	6.0	42.94	2.25	15.81	0.83	30.06	1.57	11.06	0.58	21.47	1.124	7.903	0.414	8.589	0.450	3.161	0.166
300	14.3	3.6	44.63	1.40	17.24	0.54	31.24	0.98	12.07	0.38	22.31	0.701	8.622	0.271	8.926	0.280	3.449	0.108
100	4.8	1.2	47.42	0.50	18.97	0.20	33.19	0.35	13.28	0.14	23.71	0.248	9.484	0.099	9.484	0.099	3.793	0.040
50	2.4	0.6	50.58	0.26	20.32	0.11	35.41	0.19	14.23	0.07	25.29	0.132	10.161	0.053	10.116	0.053	4.064	0.021

Note:The purple figures in the tables indicates operational restrictions due to thermal limits.Selection of screw jacks using these figures should only be carried out in consultation with our engineers.When your selection is made within the areas shaded purple,you will need to reduce duty cycle or choose the bigger size screw jack in order to allow effective heat dissipation.



n1=input speed Nm=input torque required kW=input power required

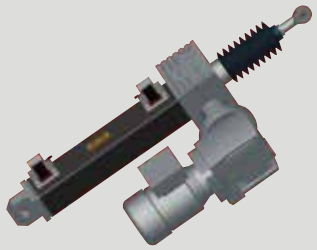
SJB80			Lifting Load															
			80kN				60kN				40kN				20kN			
n1	Lifting speed [mm/s]		Ratio V1		L1		Ratio V1		L1		Ratio V1		L1		Ratio V1		L1	
RPM	V1	L1	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW
1400	29.2	7.3	27.44	4.02	10.20	1.50	20.58	3.02	7.65	1.12	13.72	2.011	5.101	0.748	6.861	1.006	2.551	0.374
900	18.7	4.7	28.94	2.73	10.47	0.99	21.70	2.05	7.85	0.74	14.47	1.364	5.236	0.493	7.235	0.682	2.618	0.247
700	14.6	3.6	30.03	2.20	10.75	0.79	22.52	1.65	8.07	0.59	15.02	1.101	5.377	0.394	7.508	0.550	2.689	0.197
500	10.4	2.6	31.83	1.67	11.05	0.58	23.87	1.25	8.29	0.43	15.92	0.833	5.527	0.289	7.958	0.417	2.763	0.145
300	6.2	1.6	33.16	1.04	12.06	0.38	24.87	0.78	9.04	0.28	16.58	0.521	6.029	0.189	8.290	0.260	3.015	0.095
100	2.1	0.5	35.37	0.37	13.26	0.14	26.53	0.28	9.95	0.10	17.69	0.185	6.632	0.069	8.843	0.093	3.316	0.035
50	1.0	0.3	37.02	0.19	14.21	0.07	27.76	0.15	10.66	0.06	18.51	0.097	7.106	0.037	9.254	0.048	3.553	0.019

SJB81			Lifting Load															
			80kN				60kN				40kN				20kN			
n1	Lifting speed [mm/s]		Ratio V1		L1		Ratio V1		L1		Ratio V1		L1		Ratio V1		L1	
RPM	V1	L1	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW
1400	58.3	14.6	53.95	7.91	19.90	2.92	40.47	5.93	14.92	2.19	26.98	3.955	9.948	1.458	13.489	1.977	4.974	0.729
900	37.5	9.4	57.88	5.45	20.94	1.97	43.41	4.09	15.71	1.48	28.94	2.727	10.471	0.987	14.470	1.364	5.236	0.493
700	29.2	7.3	60.06	4.40	21.51	1.58	45.05	3.30	16.13	1.18	30.03	2.201	10.755	0.788	15.016	1.101	5.377	0.394
500	20.8	5.2	63.67	3.33	22.11	1.16	47.75	2.50	16.58	0.87	31.83	1.667	11.053	0.579	15.917	0.833	5.527	0.289
300	12.5	3.1	66.32	2.08	24.12	0.76	49.74	1.56	18.09	0.57	33.16	1.042	12.058	0.379	16.580	0.521	6.029	0.189
100	4.2	1.0	70.74	0.74	26.53	0.28	53.06	0.56	19.90	0.21	35.37	0.370	13.264	0.139	17.685	0.185	6.632	0.069
50	2.1	0.5	74.03	0.39	28.42	0.15	55.52	0.29	21.32	0.11	37.02	0.194	14.211	0.074	18.508	0.097	7.106	0.037

SJB100			Lifting Load															
			100kN				80kN				50kN				20kN			
n1	Lifting speed [mm/s]		Ratio V1		L1		Ratio V1		L1		Ratio V1		L1		Ratio V1		L1	
RPM	V1	L1	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW
1400	29.2	7.3	34.30	5.03	12.75	1.87	27.44	4.02	10.20	1.50	17.15	2.514	6.377	0.935	6.861	1.006	2.551	0.374
900	18.7	4.7	36.17	3.41	13.09	1.23	28.94	2.73	10.47	0.99	18.09	1.705	6.545	0.617	7.235	0.682	2.618	0.247
700	14.6	3.6	37.54	2.75	13.44	0.99	30.03	2.20	10.75	0.79	18.77	1.376	6.722	0.493	7.508	0.550	2.689	0.197
500	10.4	2.6	39.79	2.08	13.82	0.72	31.83	1.67	11.05	0.58	19.90	1.042	6.908	0.362	7.958	0.417	2.763	0.145
300	6.2	1.6	41.45	1.30	15.07	0.47	33.16	1.04	12.06	0.38	20.72	0.651	7.536	0.237	8.290	0.260	3.015	0.095
100	2.1	0.5	44.21	0.46	16.58	0.17	35.37	0.37	13.26	0.14	22.11	0.231	8.290	0.087	8.843	0.093	3.316	0.035
50	1.0	0.3	46.27	0.24	17.76	0.09	37.02	0.19	14.21	0.07	23.13	0.121	8.882	0.047	9.254	0.048	3.553	0.019

Note:The purple figures in the tables indicates operational restrictions due to thermal limits.Selection of screw jacks using these figures should only be carried out in consultation with our engineers.When your selection is made within the areas shaded purple,you will need to reduce duty cycle or choose the bigger size screw jack in order to allow effective heat dissipation.

Selection Table Guide



n1=input speed Nm=input torque required kW=input power required

SJB101			Lifting Load															
			100kN				80kN				50kN				20kN			
n1	Lifting speed [mm/s]		Ratio V1		L1		Ratio V1		L1		Ratio V1		L1		Ratio V1		L1	
RPM	V1	L1	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW
1400	58.3	14.6	66.32	9.72	24.26	3.56	53.06	7.78	19.41	2.85	33.16	4.861	12.132	1.778	13.264	1.944	4.853	0.711
900	37.5	9.4	68.61	6.47	25.51	2.40	54.89	5.17	20.41	1.92	34.30	3.233	12.754	1.202	13.721	1.293	5.101	0.481
700	29.2	7.3	71.06	5.21	26.18	1.92	56.85	4.17	20.94	1.54	35.53	2.604	13.089	0.959	14.211	1.042	5.236	0.384
500	20.8	5.2	75.08	3.93	26.89	1.41	60.06	3.14	21.51	1.13	37.54	1.965	13.443	0.704	15.016	0.786	5.377	0.282
300	12.5	3.1	79.58	2.50	28.42	0.89	63.67	2.00	22.74	0.71	39.79	1.250	14.211	0.446	15.917	0.500	5.685	0.179
100	4.2	1.0	82.90	0.87	31.09	0.33	66.32	0.69	24.87	0.26	41.45	0.434	15.544	0.163	16.580	0.174	6.217	0.065
50	2.1	0.5	88.43	0.46	33.16	0.17	70.74	0.37	26.53	0.14	44.21	0.231	16.580	0.087	17.685	0.093	6.632	0.035

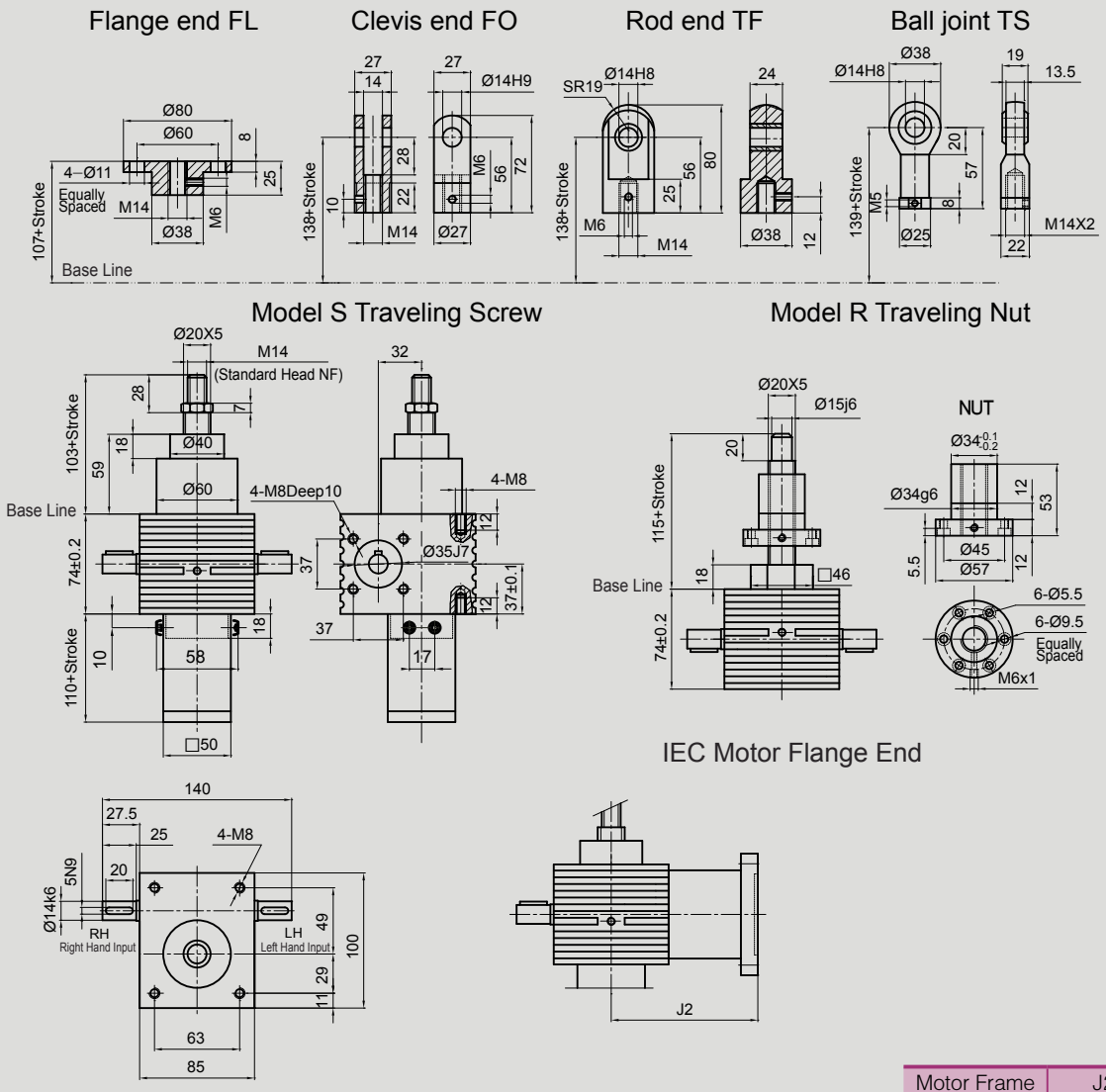
SJB201			Lifting Load															
			200kN				150kN				100kN				50kN			
n1	Lifting speed [mm/s]		Ratio V1		L1		Ratio V1		L1		Ratio V1		L1		Ratio V1		L1	
RPM	V1	L1	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW
1400	53.2	13.3	131.96	19.35	51.84	7.60	98.97	14.51	38.88	5.70	65.98	9.673	25.921	3.800	32.991	4.836	12.961	1.900
900	34.2	8.5	136.94	12.91	54.98	5.18	102.71	9.68	41.24	3.89	68.47	6.453	27.492	2.591	34.236	3.226	13.746	1.295
700	26.6	6.6	142.31	10.43	58.53	4.29	106.74	7.82	43.90	3.22	71.16	5.216	29.266	2.145	35.578	2.608	14.633	1.073
500	19.0	4.7	148.12	7.76	62.57	3.28	111.09	5.82	46.93	2.46	74.06	3.878	31.284	1.638	37.031	1.939	15.642	0.819
300	11.4	2.8	154.43	4.85	64.80	2.04	115.82	3.64	48.60	1.53	77.21	2.426	32.402	1.018	38.606	1.213	16.201	0.509
100	3.8	0.9	161.29	1.69	67.20	0.70	120.97	1.27	50.40	0.53	80.64	0.844	33.602	0.352	40.322	0.422	16.801	0.176
50	1.9	0.5	168.79	0.88	69.79	0.37	126.59	0.66	52.34	0.27	84.40	0.442	34.894	0.183	42.198	0.221	17.447	0.091

SJB300			Lifting Load															
			300kN				200kN				150kN				100kN			
n1	Lifting speed [mm/s]		Ratio V1		L1		Ratio V1		L1		Ratio V1		L1		Ratio V1		L1	
RPM	V1	L1	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW	Nm	kW
1400	45.5	11.4	175.68	25.75	66.51	9.75	117.12	17.17	44.34	6.50	87.84	12.877	33.254	4.875	58.561	8.585	22.170	3.250
900	29.2	7.3	182.57	17.21	70.54	6.65	121.72	11.47	47.03	4.43	91.29	8.603	35.270	3.324	60.858	5.735	23.513	2.216
700	22.7	5.7	186.22	13.65	75.09	5.50	124.15	9.10	50.06	3.67	93.11	6.825	37.545	2.752	62.075	4.550	25.030	1.835
500	16.2	4.1	190.03	9.95	80.27	4.20	126.68	6.63	53.51	2.80	95.01	4.974	40.135	2.101	63.342	3.316	26.756	1.401
300	9.7	2.4	198.11	6.22	83.14	2.61	132.07	4.15	55.42	1.74	99.06	3.112	41.568	1.306	66.037	2.074	27.712	0.871
100	3.2	0.8	206.92	2.17	86.22	0.90	137.94	1.44	57.48	0.60	103.46	1.083	43.108	0.451	68.972	0.722	28.738	0.301
50	1.6	0.4	216.54	1.13	89.53	0.47	144.36	0.76	59.69	0.31	108.27	0.567	44.766	0.234	72.180	0.378	29.844	0.156

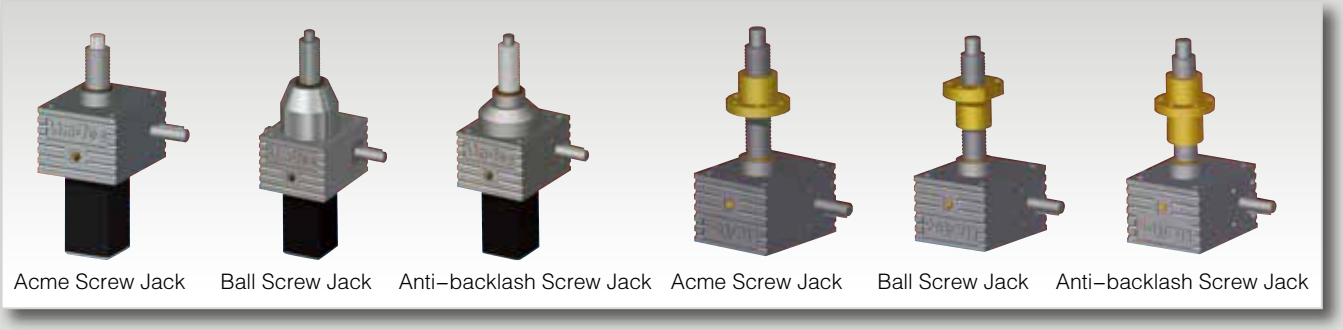
Note:The purple figures in the tables indicates operational restrictions due to thermal limits.Selection of screw jacks using these figures should only be carried out in consultation with our engineers.When your selection is made within the areas shaded purple,you will need to reduce duty cycle or choose the bigger size screw jack in order to allow effective heat dissipation.

Overall Dimensions of Screw Jack

SJB10 Screw Jack

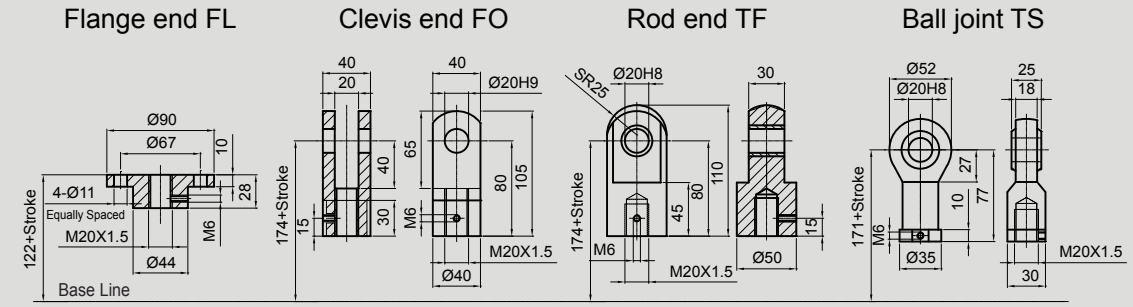


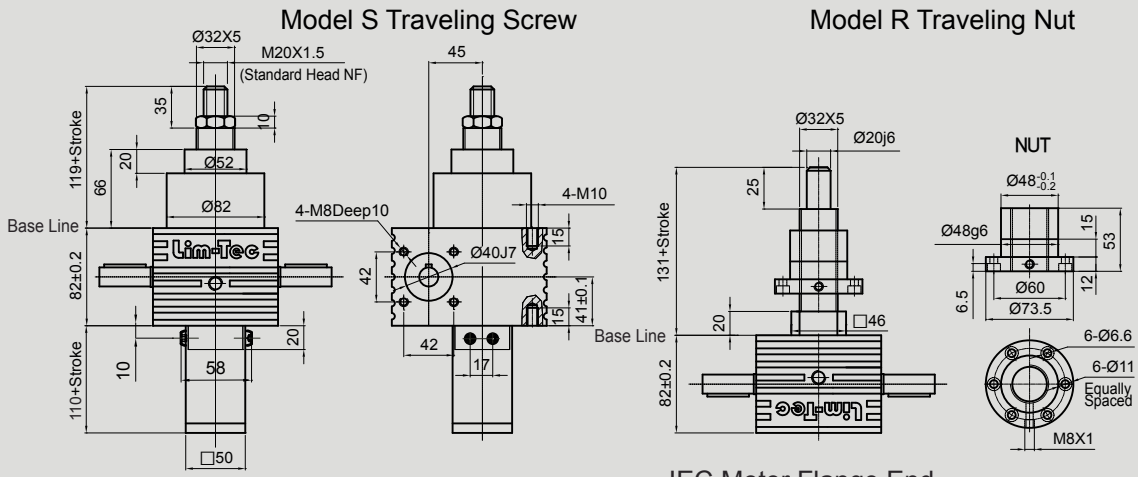
Motor Frame	J2
63B14	62.5
71B14	115.5
80B14	125.5

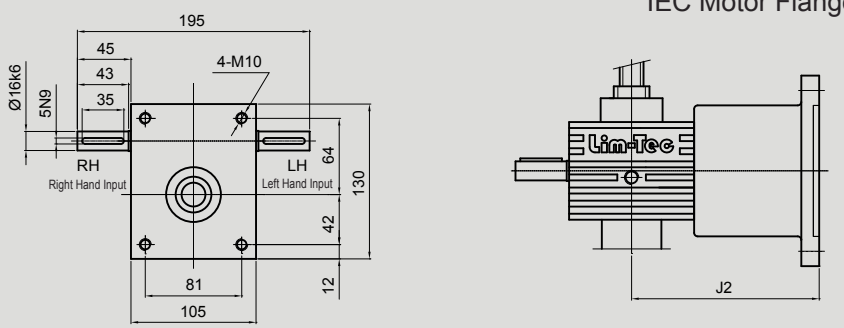


Overall Dimensions of Screw Jack

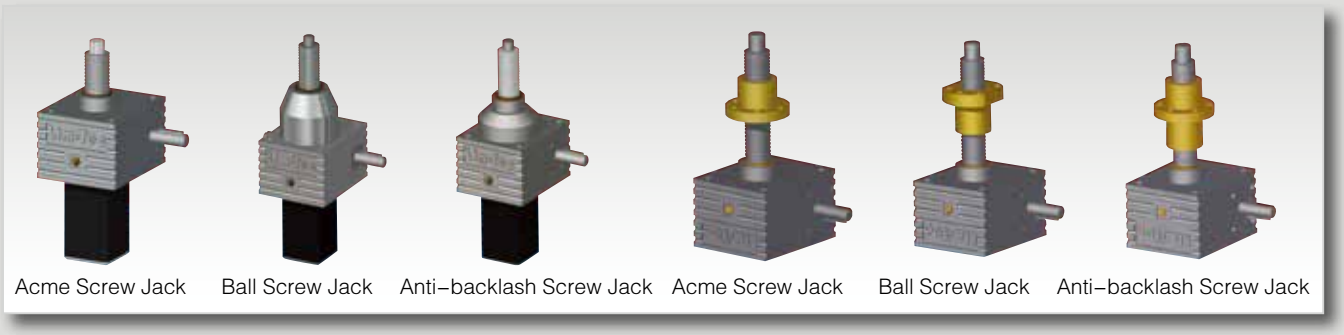
SJB20 Screw Jack



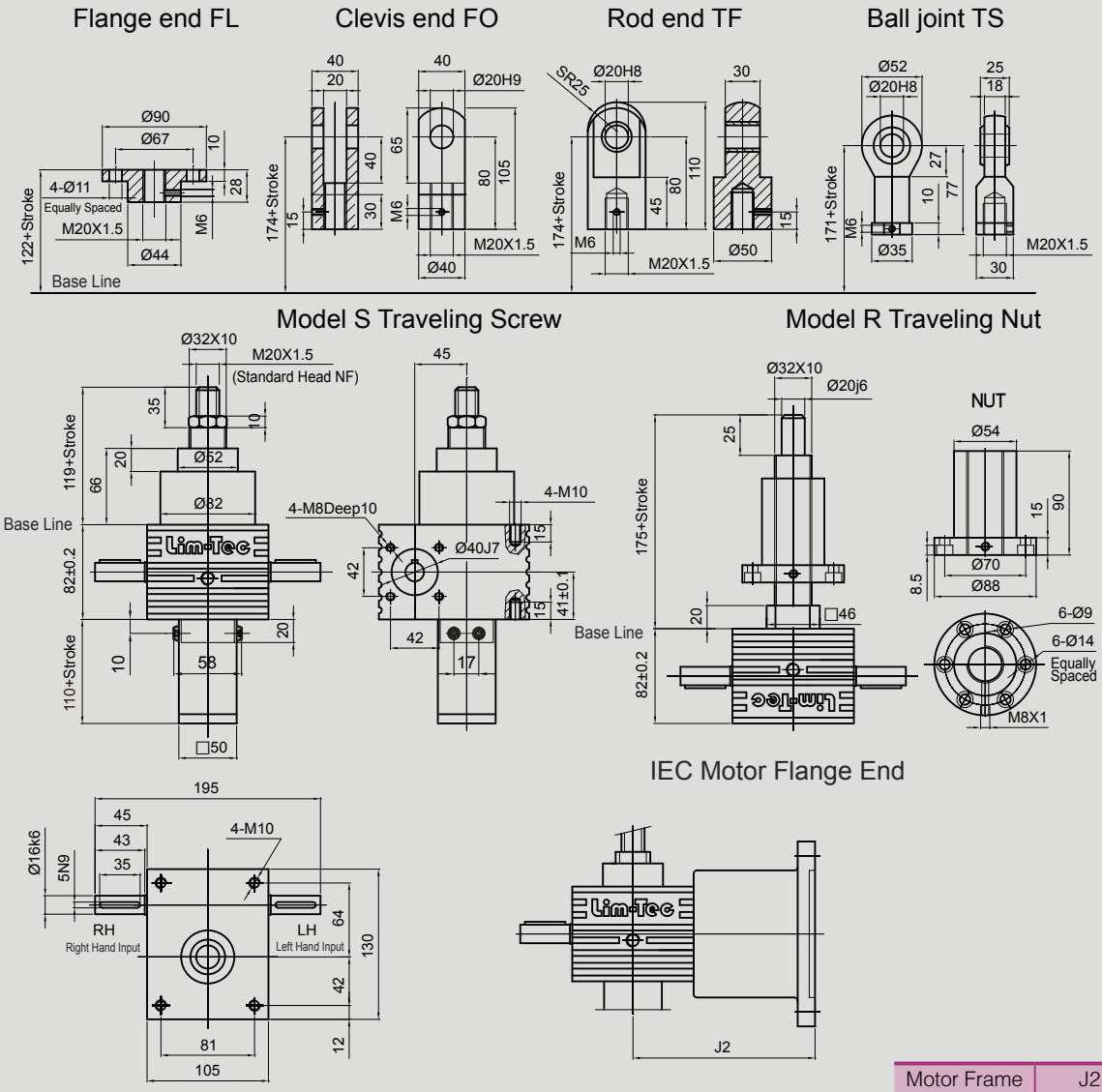




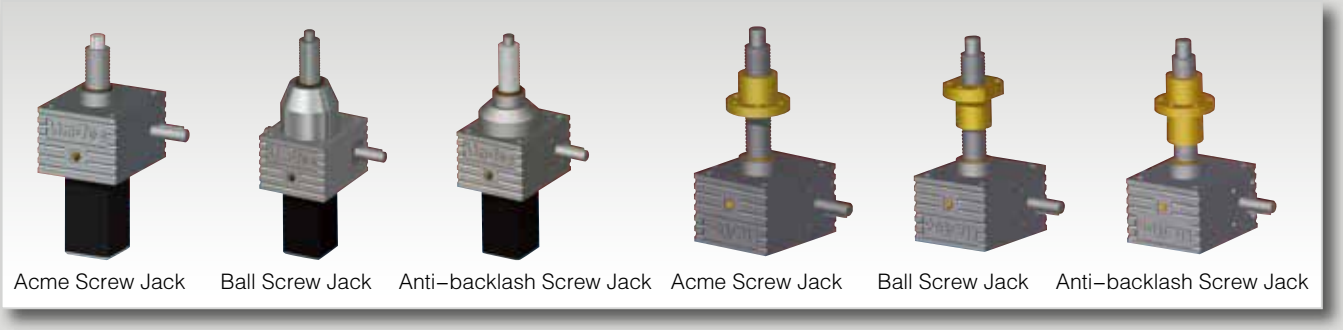
Motor Frame	J2
71B14	75
80B14	155
90B14	165



SJB21 Screw Jack

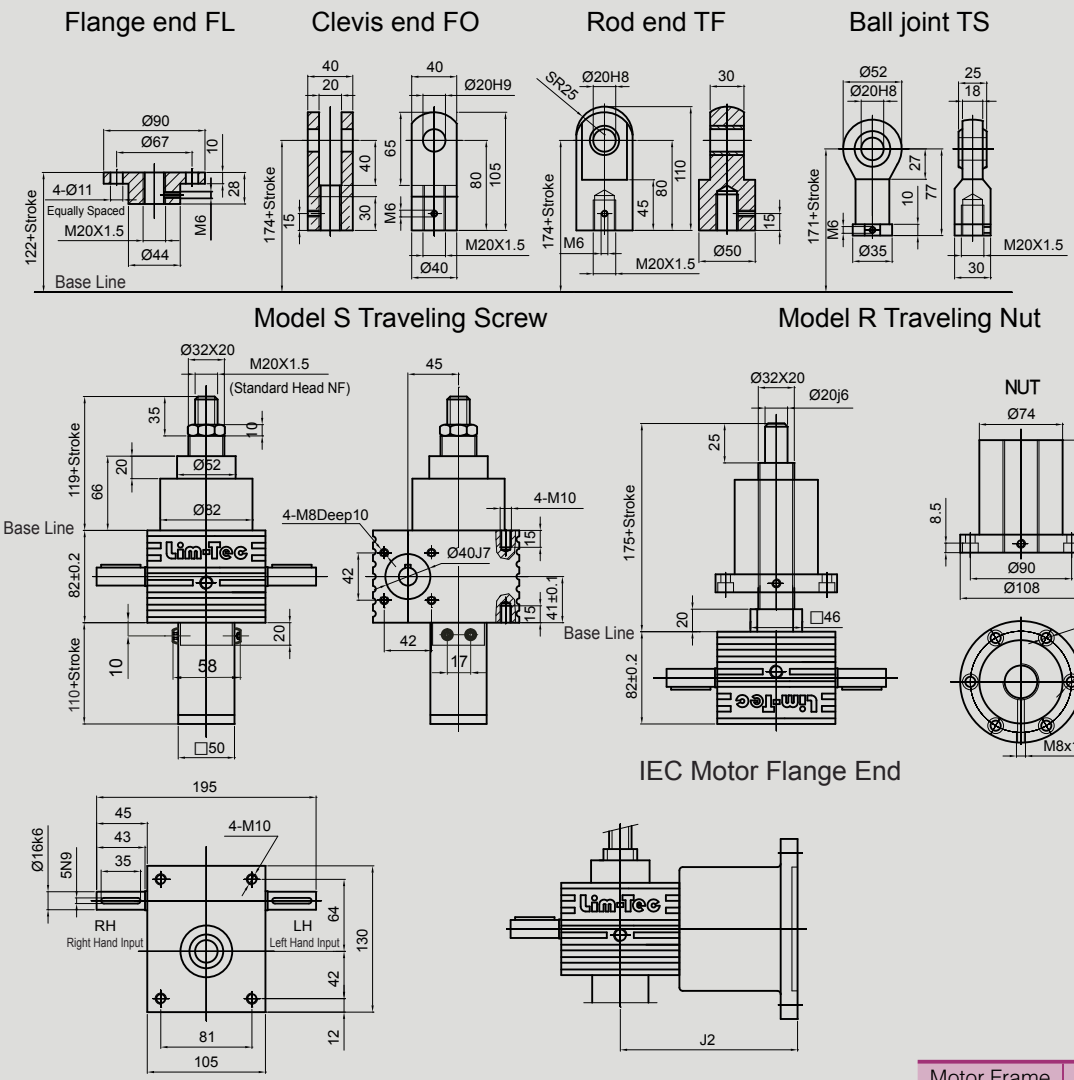


Motor Frame	J2
71B14	75
80B14	155
90B14	165

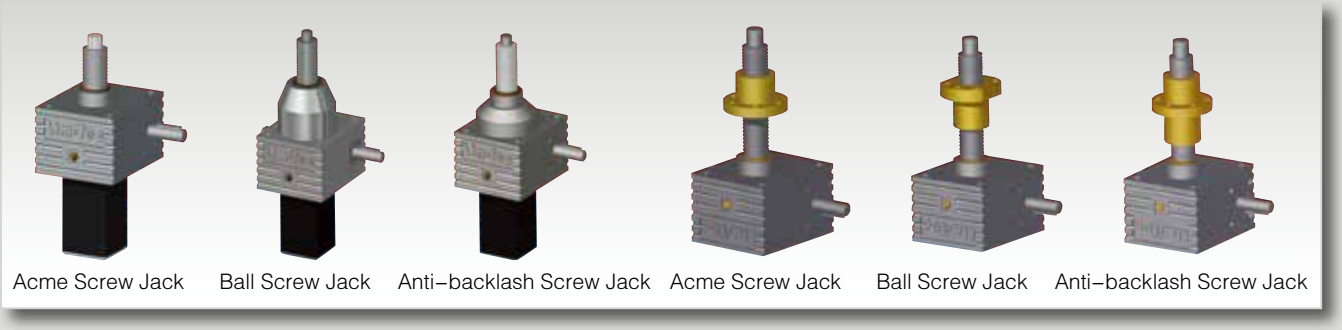


Overall Dimensions of Screw Jack

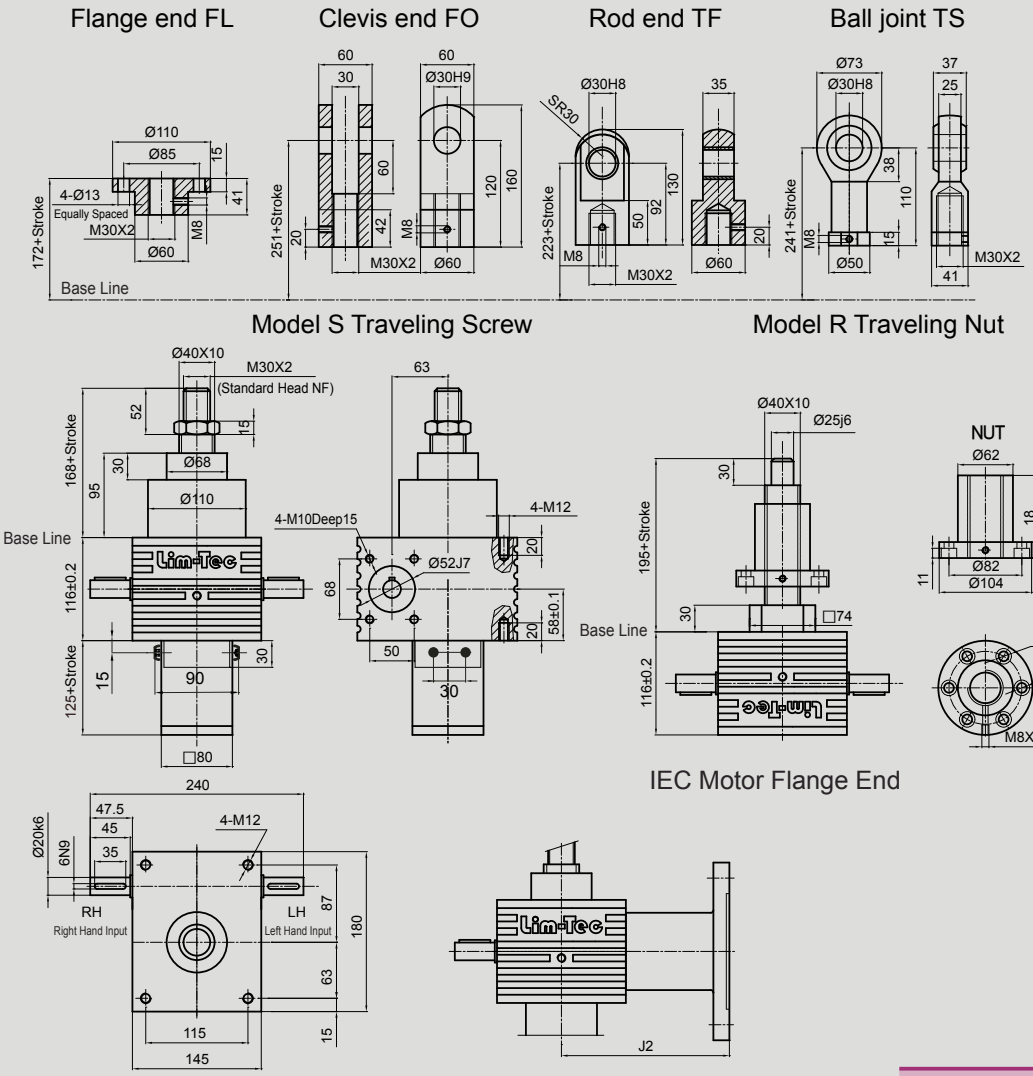
SJB22 Screw Jack



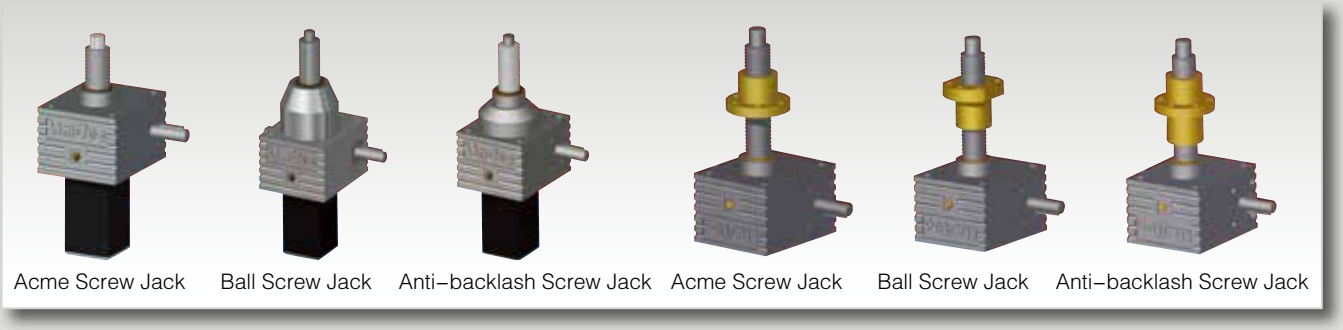
Motor Frame	J2
71B14	75
80B14	155
90B14	165



SJB50 Screw Jack

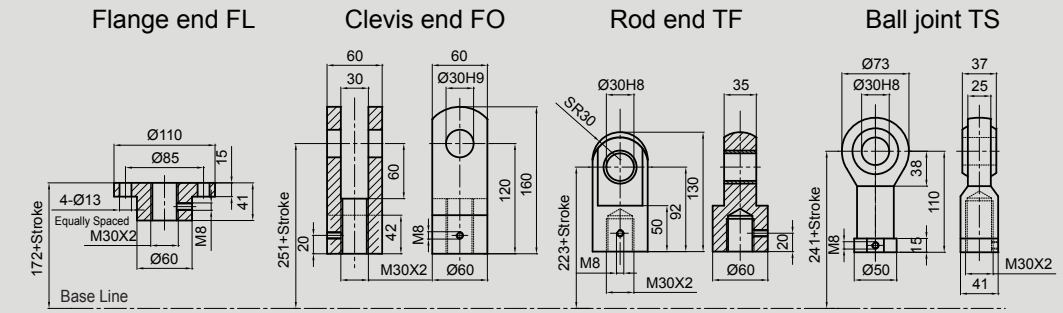


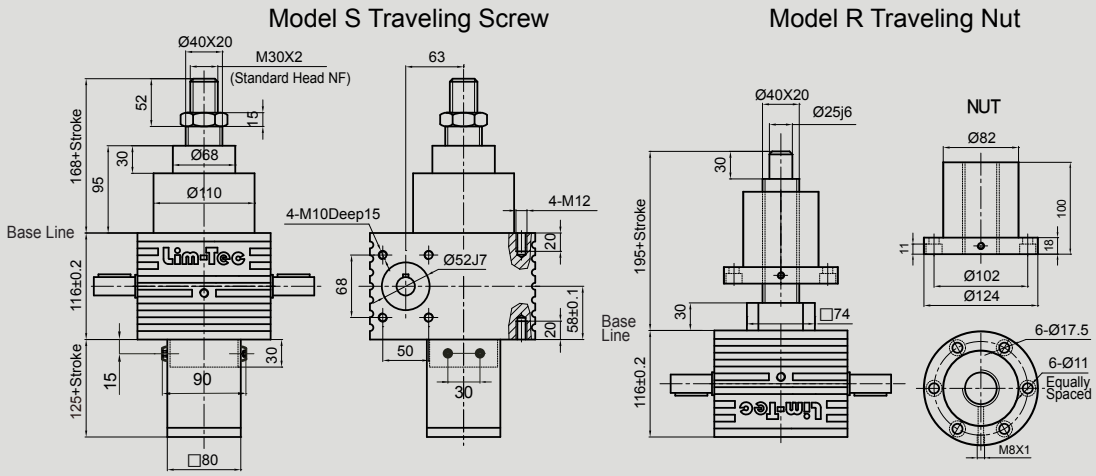
Motor Frame	J2
80B14	98
90B5	190
100B14	200

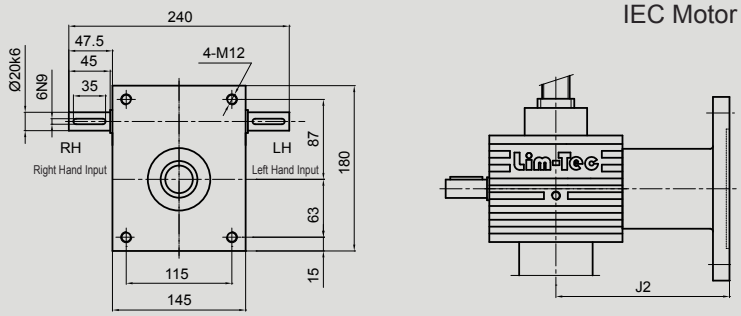


Overall Dimensions of Screw Jack

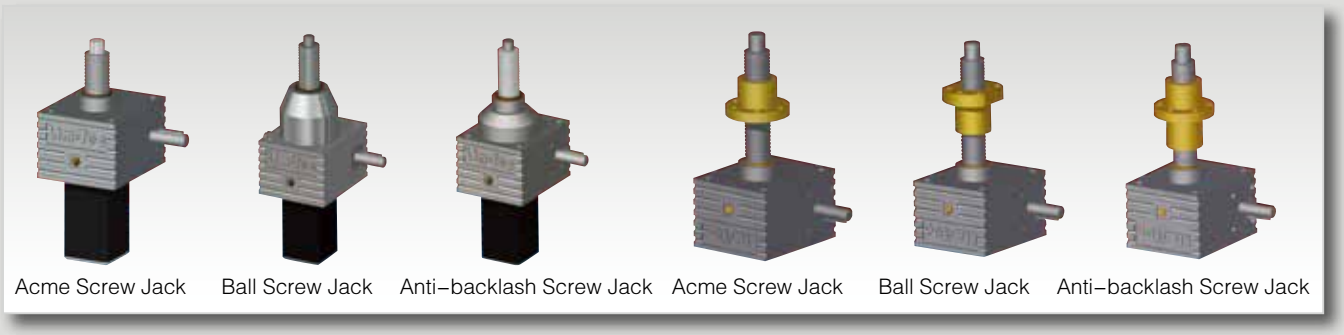
SJB51 Screw Jack



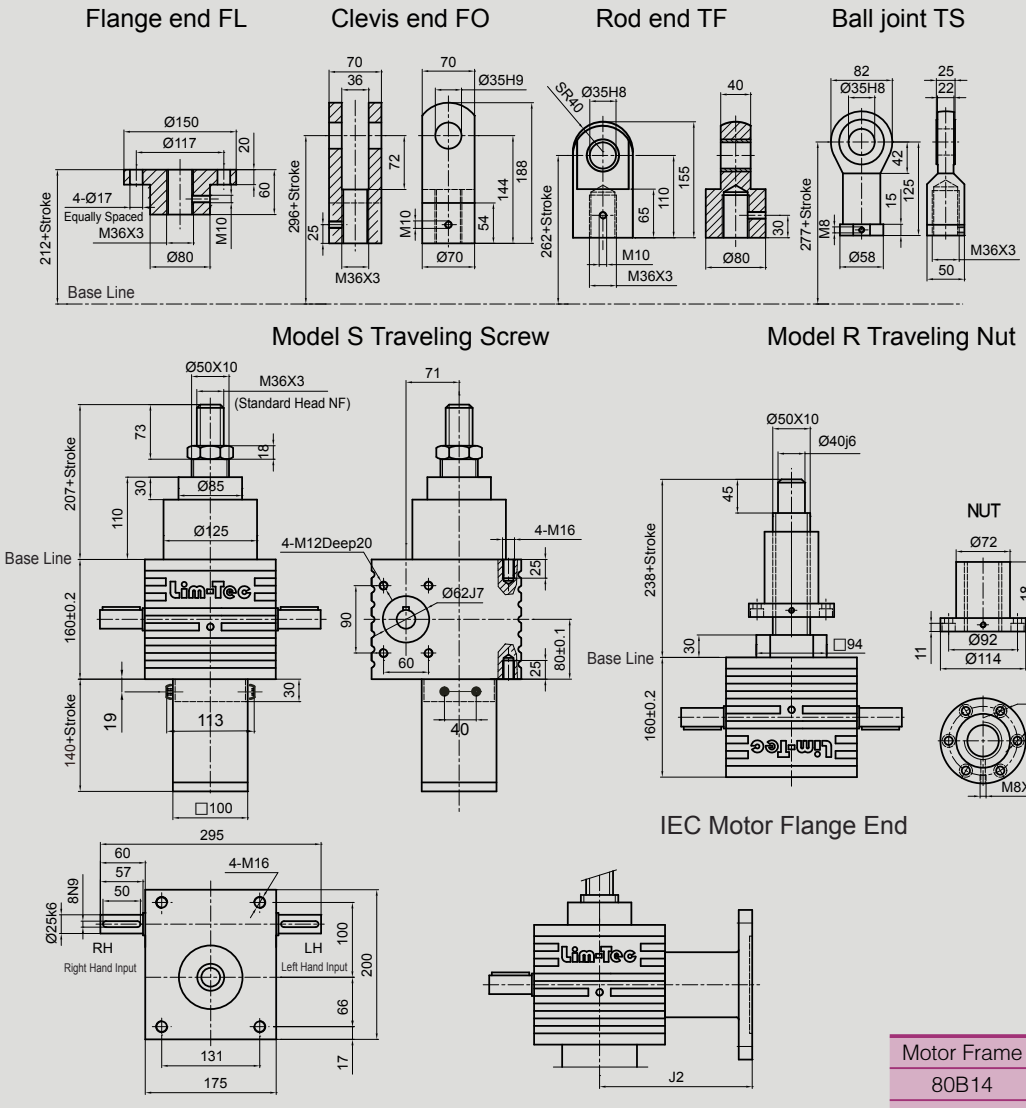




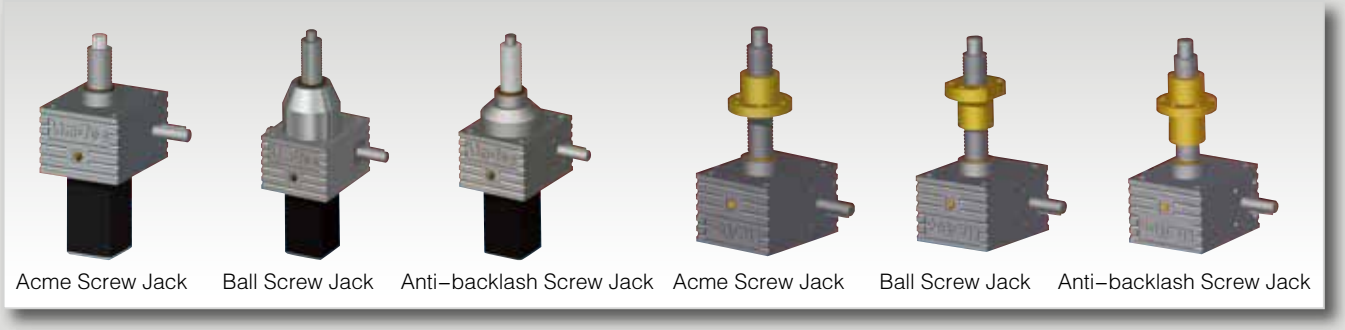
Motor Frame	J2
80B14	98
90B5	190
100B14	200



SJB80 Screw Jack

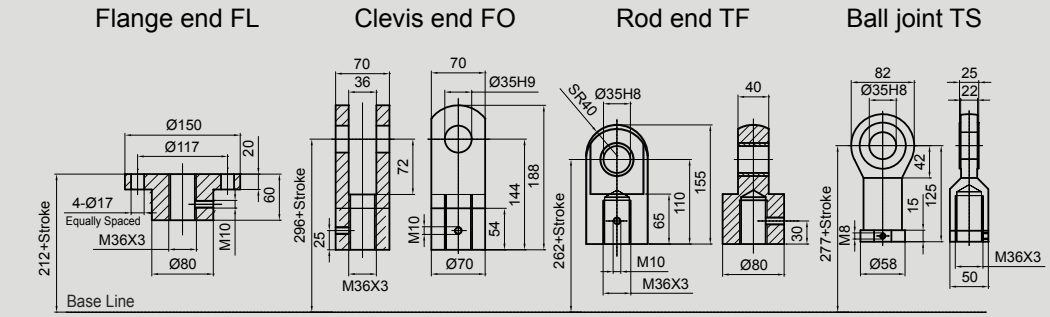


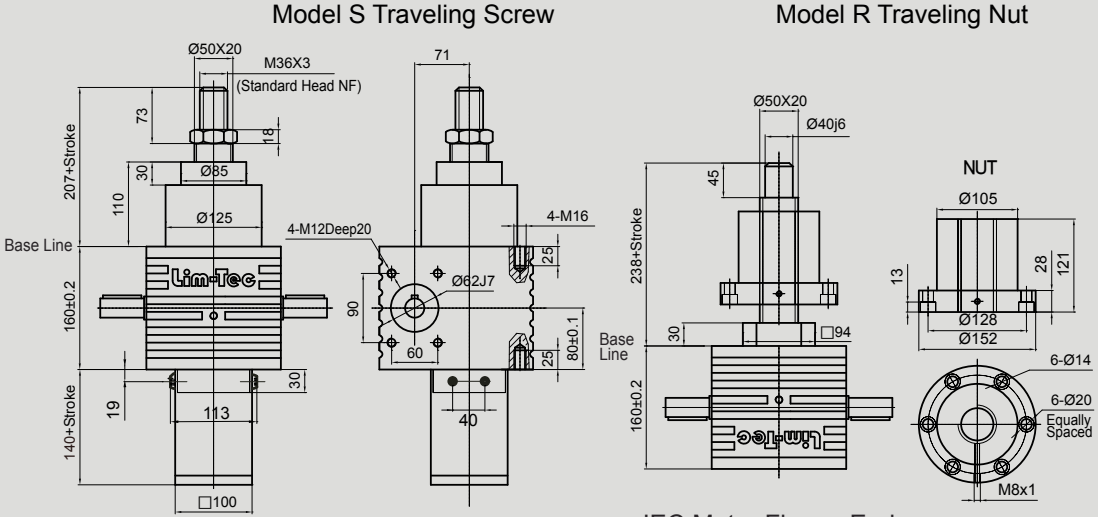
Motor Frame	J2
80B14	115
90B14	115
100B5	231

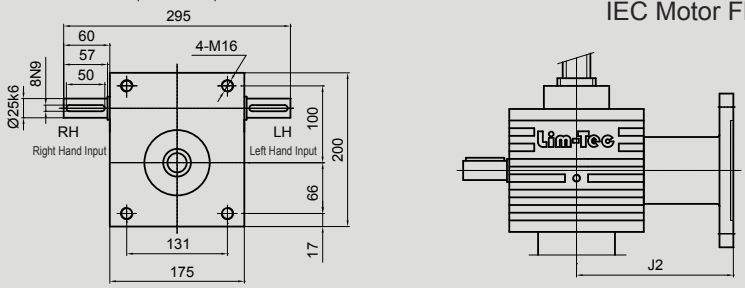


Overall Dimensions of Screw Jack

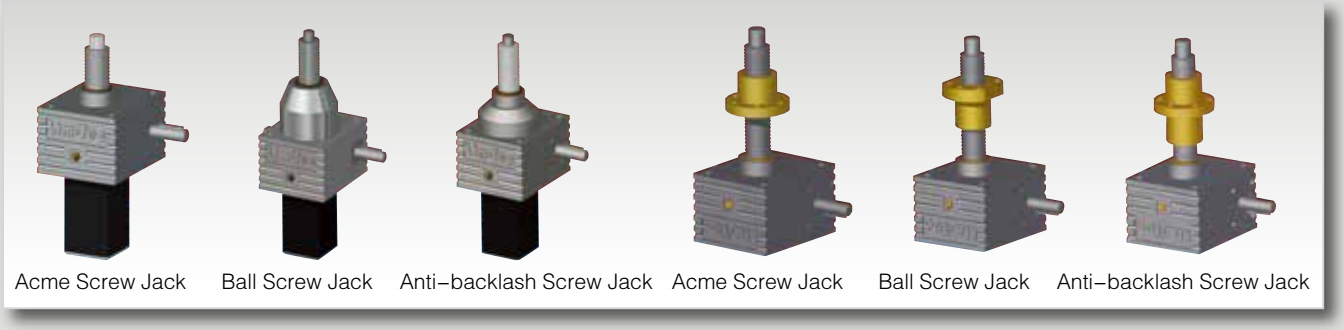
SJB81 Screw Jack



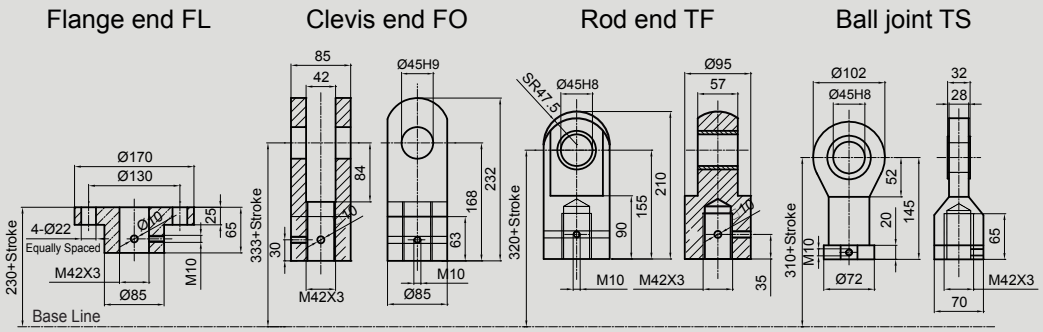


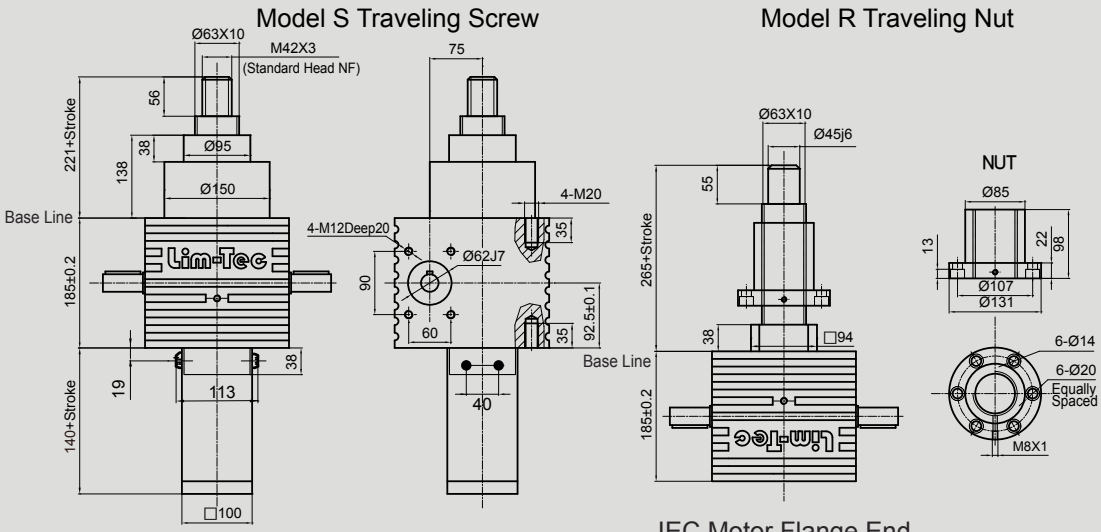


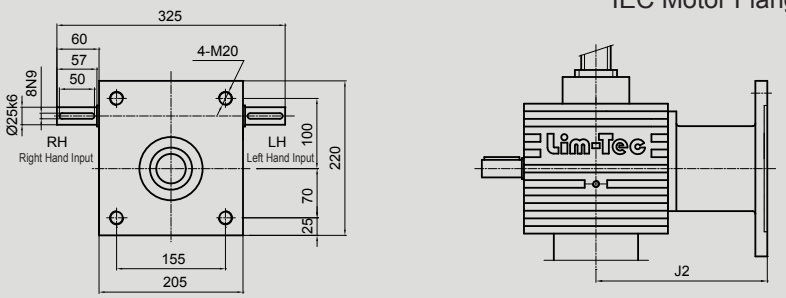
Motor Frame	J2
80B14	115
90B14	115
100B5	231



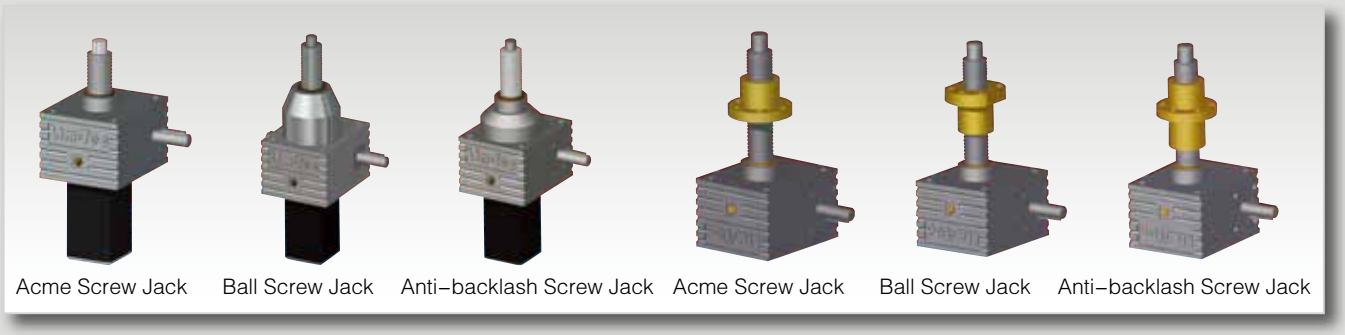
SJB100 Screw Jack





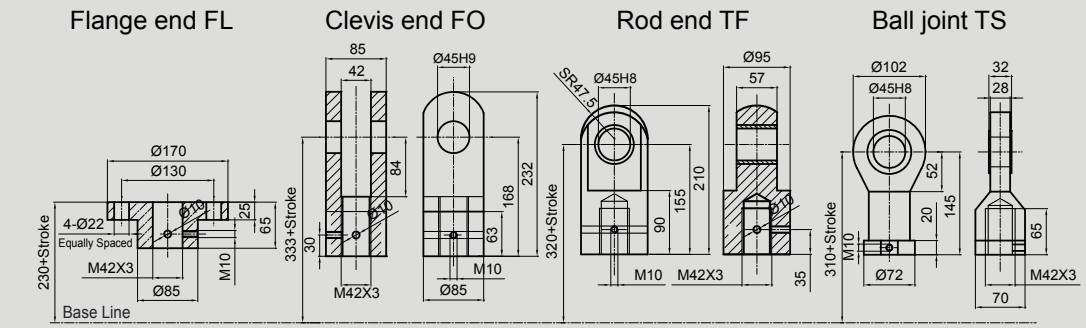


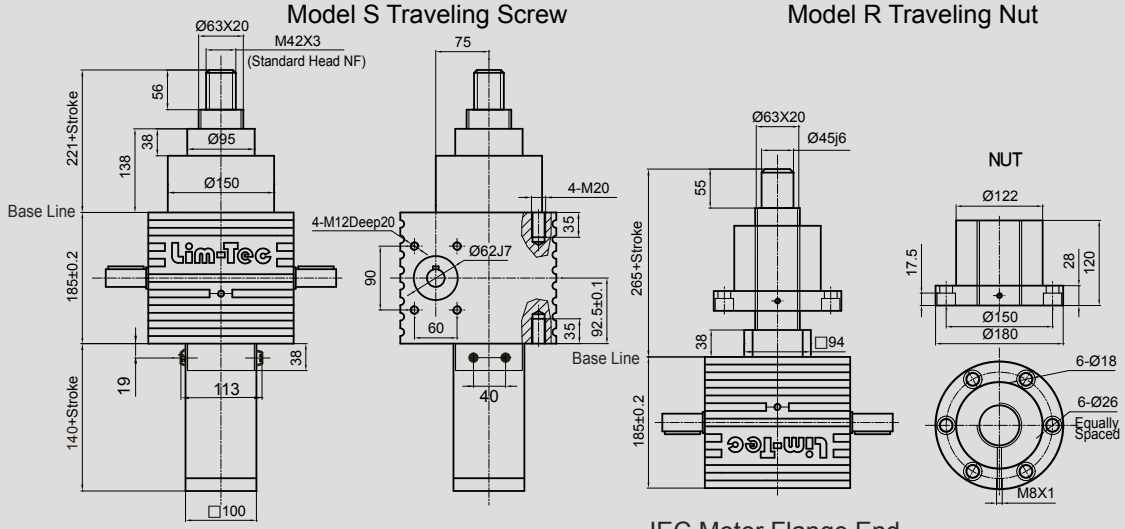
Motor Frame	J2
90B14	130
100B5	246

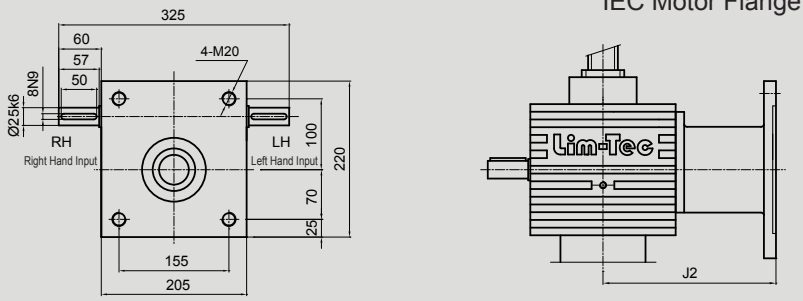


Overall Dimensions of Screw Jack

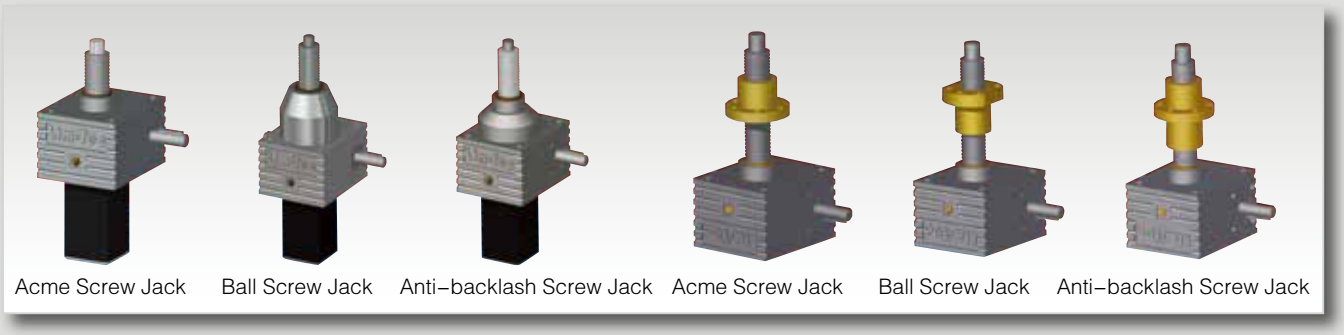
SJB101 Screw Jack



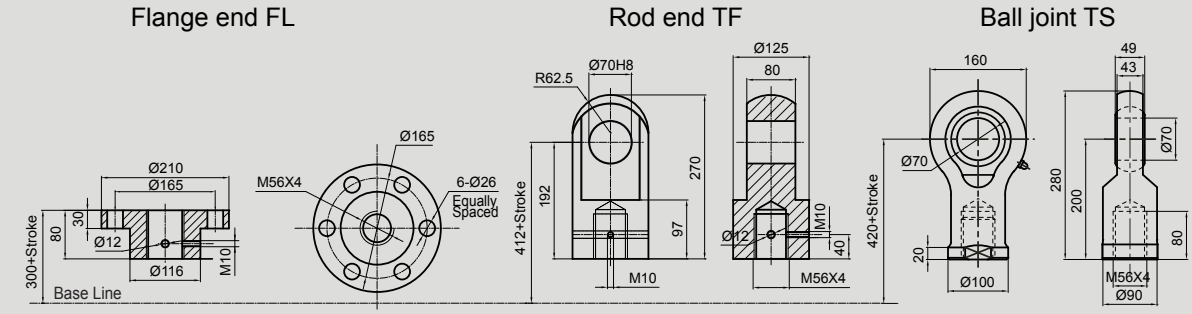


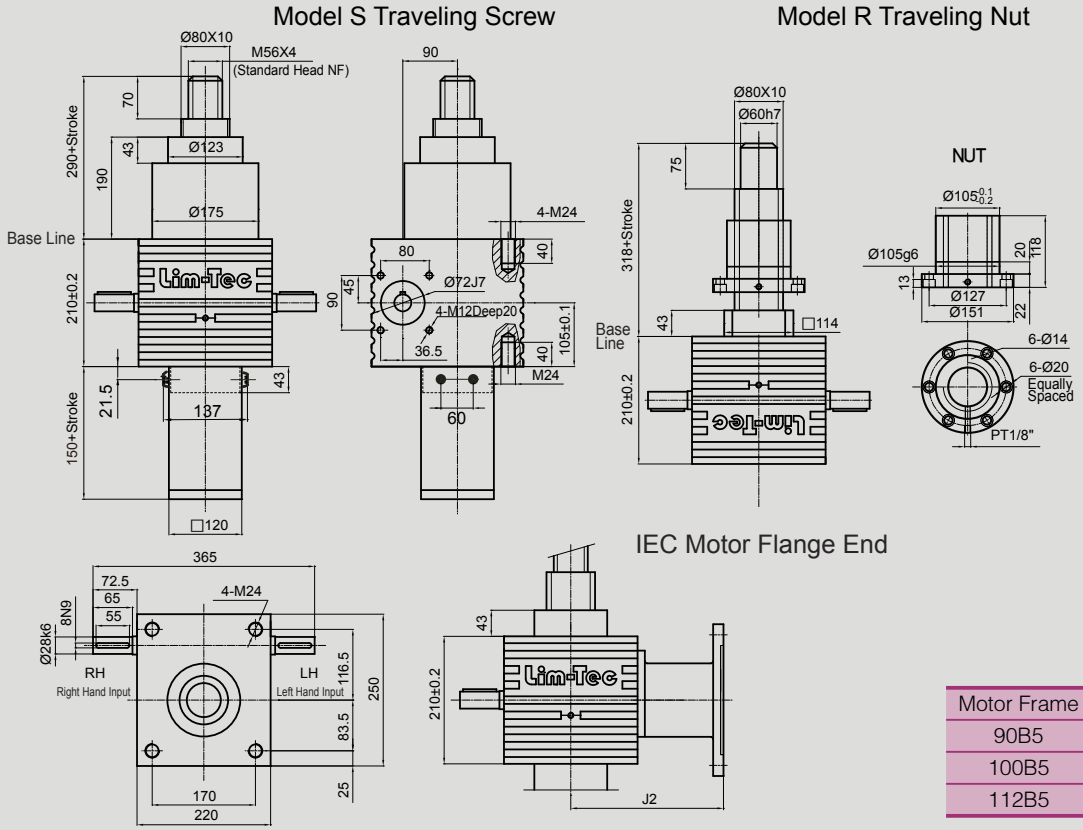


Motor Frame	J2
90B14	130
100B5	246

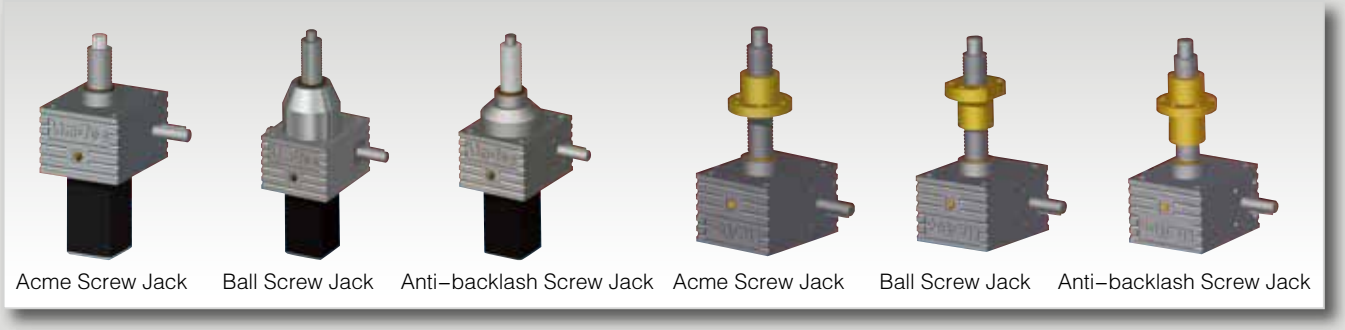


SJB200 Screw Jack



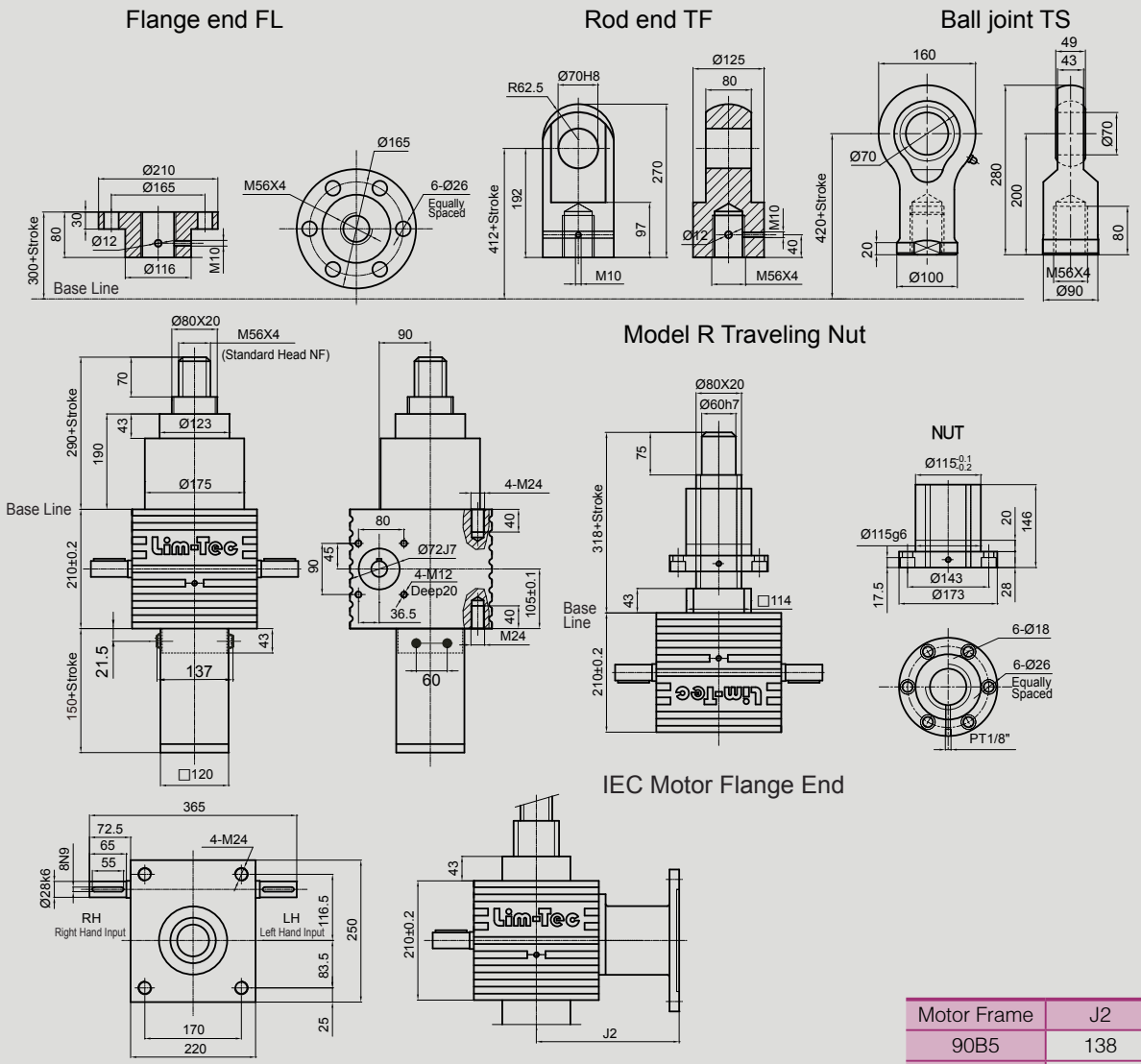


Motor Frame	J2
90B5	138
100B5	268
112B5	268

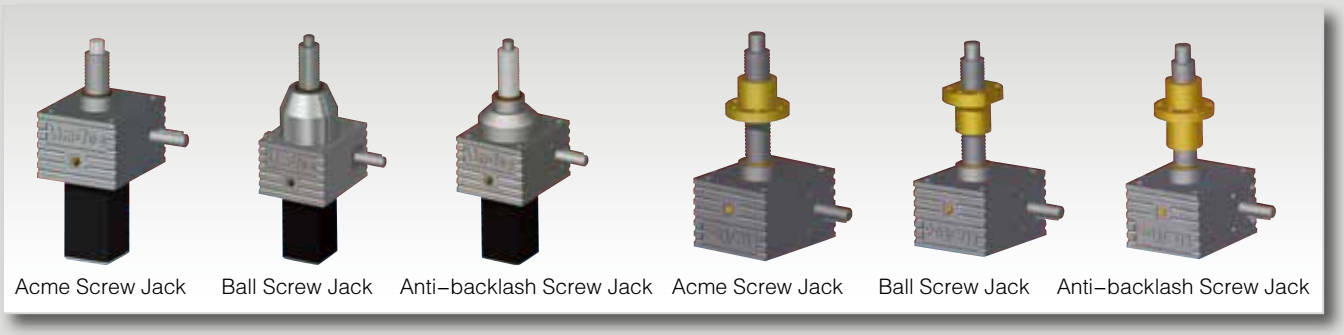


Overall Dimensions of Screw Jack

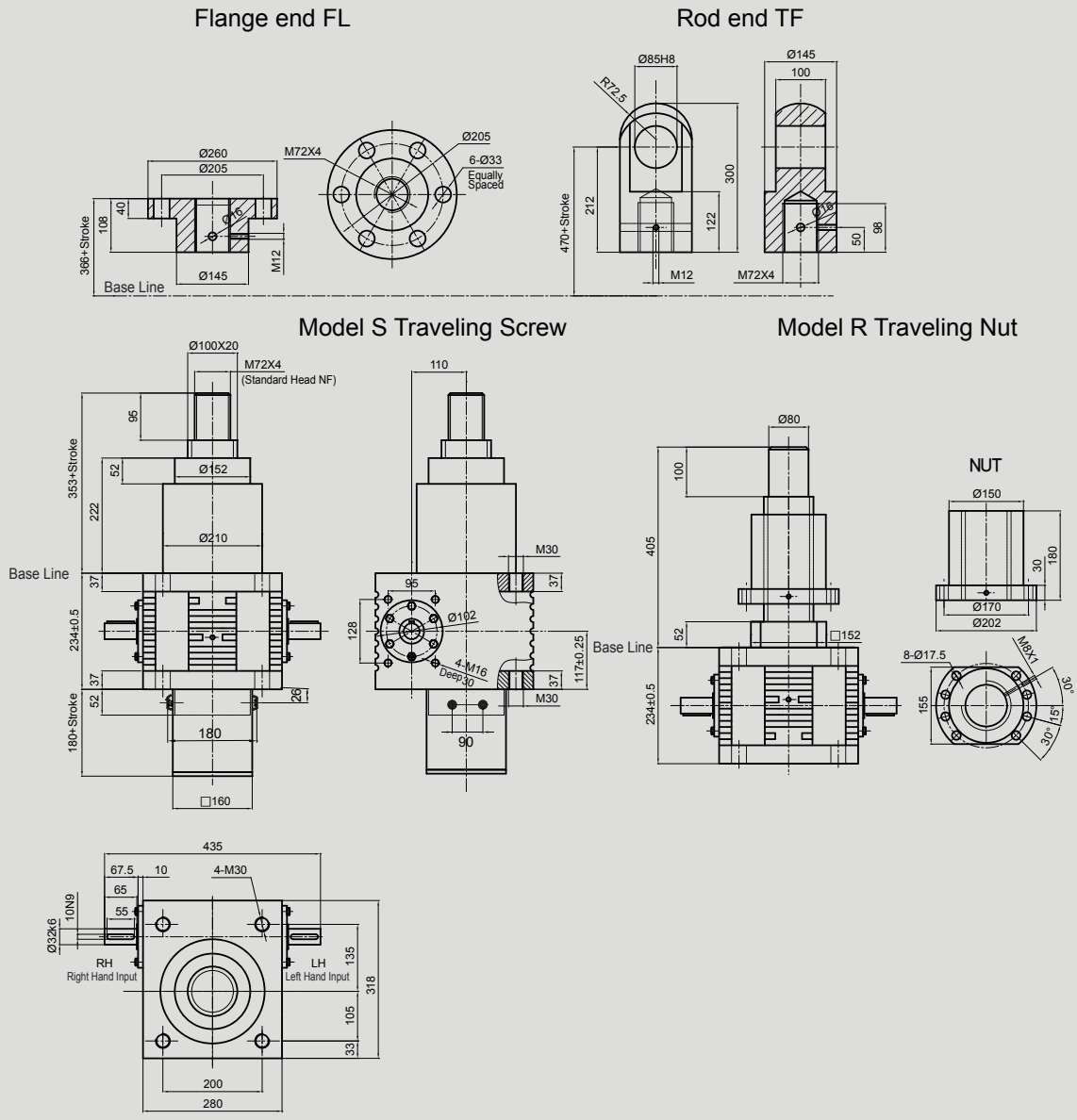
SJB201 Screw Jack

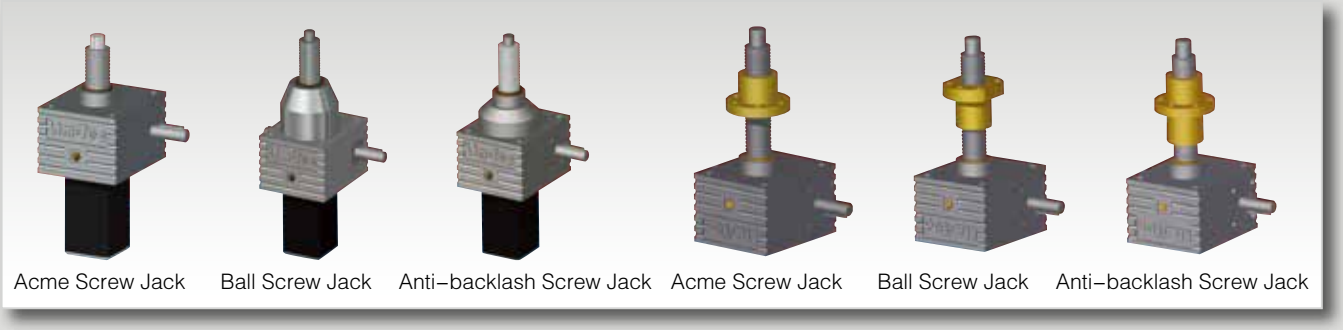


Motor Frame	J2
90B5	138
100B5	268
112B5	268

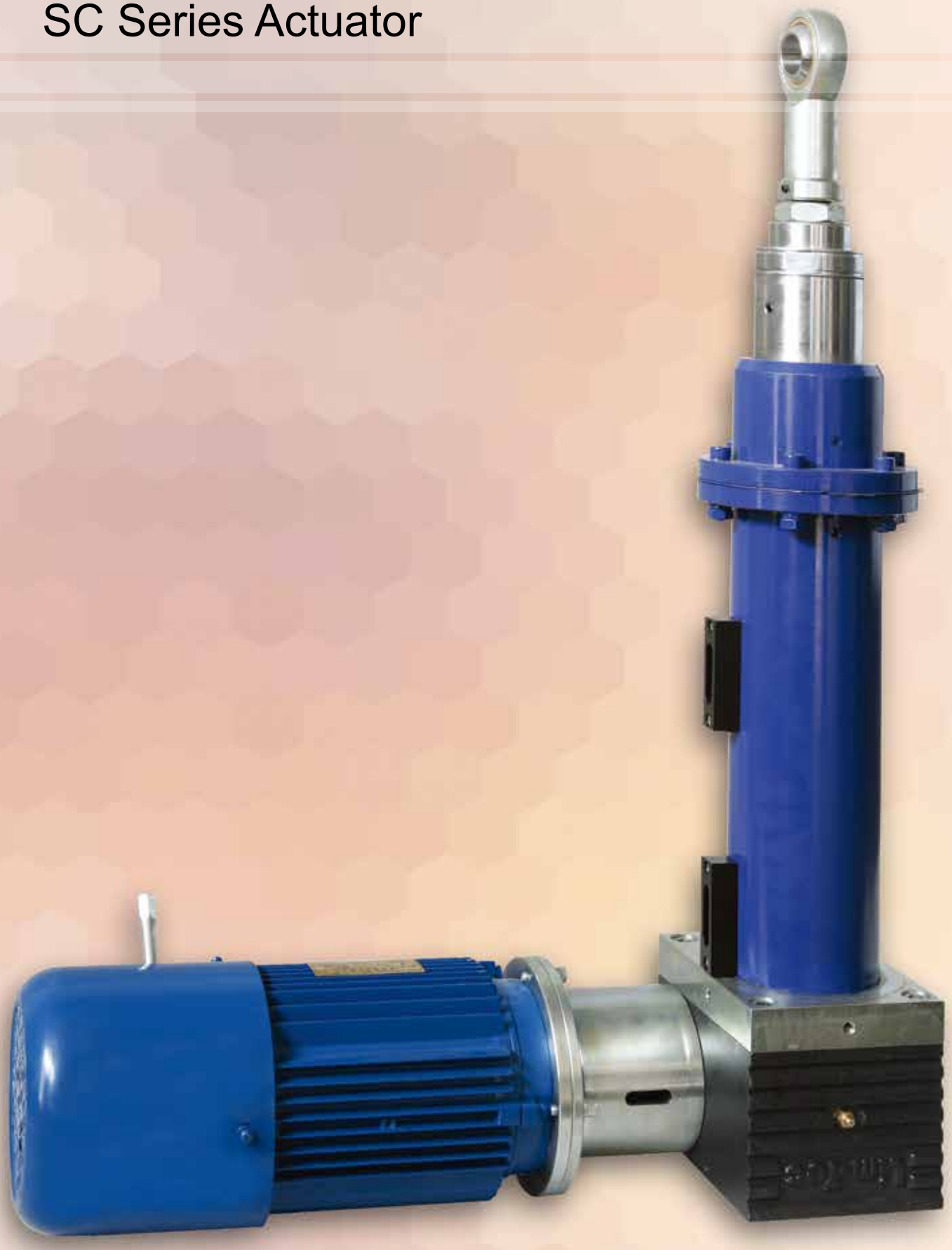


SJB300 Screw Jack





SC Series Actuator



SCB/SCA Series Actuator

Lim-Tec presented a new range of SCB/SCA series Actuator for high load linear motion solutions.
Combined the advantages of Linear actuator and Screw Jack to achieve the high load lifting in industry application.The sealed and high protection class allow the actuator work even in harsh environments. Which is a good solution for Hydraulic and Pneumatic replacement to reduce cost and pollution.

Synchronized Lifting, 2-18 pieces Actuator could be driven by one motor for Synchronized lifting with 0.1mm accuracy. Simple operation but reliable. Please contact Lim-Tec engineering for synchronized lifting system design.

Alternative SCB ball screw actuator and SCA acme screw actuator. Load capacity from 2 ton to 20 ton , could be classified as 2 ton, 5 ton , 8 ton , 10 ton , 20 ton unit. Max. speed and stroke could reach 100mm/s and 2.5m. Duty cycle 50%.

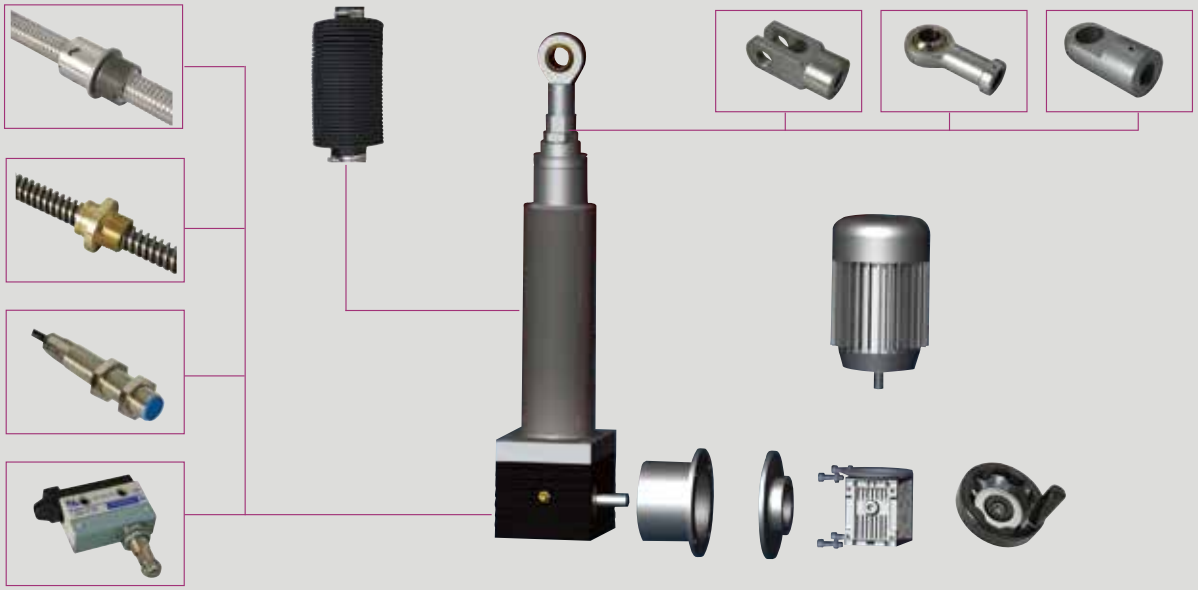
The SC series Actuator can be ordered to accept the motor type of your choice, whether gear motor,or AC motor etc. The SC series offers flexibility in order to accept any type to meet your requirement.

Features of SC series actuator

- ◆ Load capacity range from 2ton to 20 ton
- ◆ The unique spheroidal graphite iron casting rectangle fluted housing improved the mechanical performance.
- ◆ Special design of guided bearing increase the stability and side loading capacity.
- ◆ Anti-rotate device
- ◆ Self-locking , provided equipment security.
- ◆ Double seal to prevent abrasive particles and contaminants from entering the actuator critical mechanisms, and assures trouble-free operation even in most severe environments.
- ◆ Protection class IP55, Optional IP56
- ◆ Precise positioning control , control accuracy reach 0.1mm
- ◆ High stiffness to resist shock load.
- ◆ Long life time , low noise , simple maintenance
- ◆ Synchronized lifting

SC series Actuator

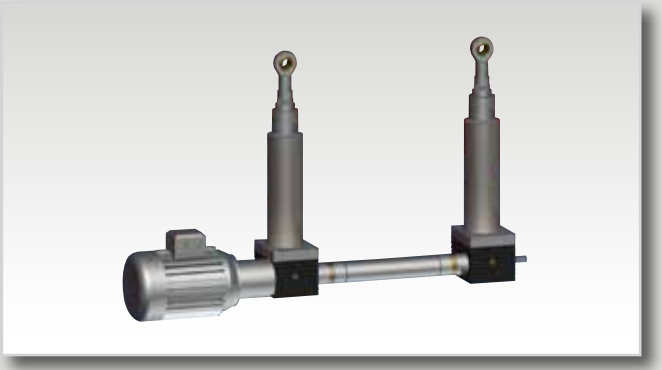
Actuator optional component system

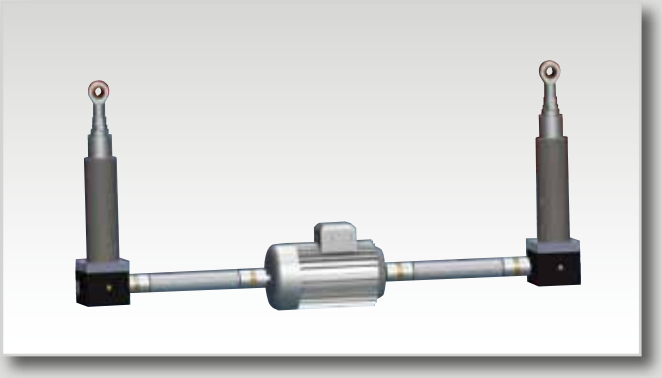


Applications of synchronized lifting

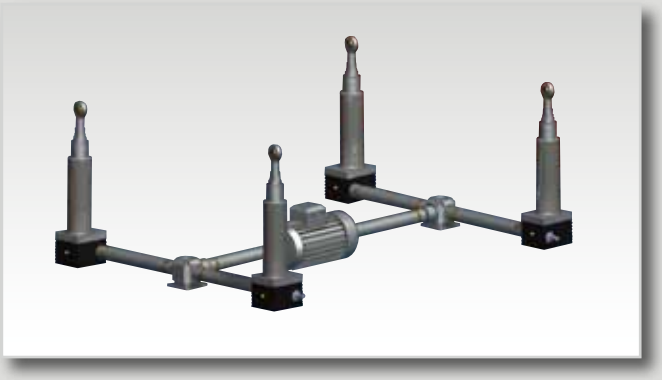
Lim-Tec provided complete system design and components, Which including Actuator , motor, gear box, shaft, coupling , brake , clutch etc.Customer just need let us know your requirement of total load capacity, speed, stroke and dimension, Lim-Tec engineering will provided you a design scheme with calculation process and components selection, CAD drawing is also available.

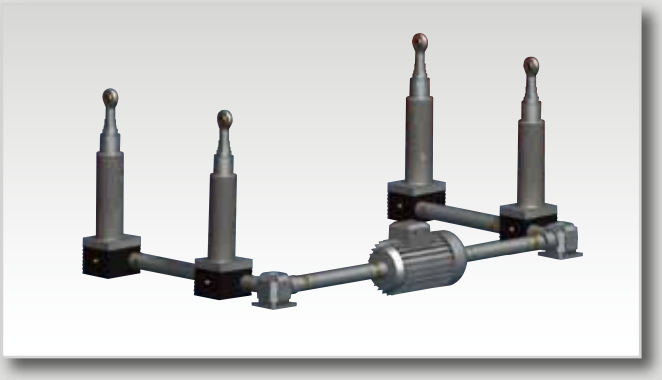
Synchronized Lifting system of Two Actuators





Synchronized Lifting system of Four Actuators





Coding

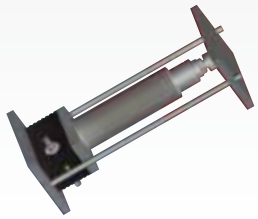
Series	Size	Ratio	Stroke	Front Attachment	Input Versions	Input Shaft	Assessories
SCA Series	20	V1	100	NF Standard male thread	P1 Single input shaft	RH Right hand	FCH Limit switch box
SCB Series	21	L1	300	TS Ball joint	P2 Double input shaft	LH Left hand	FCP Inductive proximity switches (PNP normally closed)
	22		500	TF Rod end	P3 Motor flange		FCG Cam limit switch
	50		800	FL Flange end	P4 Flange and extend shaft		B Bellows
	51		1000	FO Clevis end			SZ Stainless out tube
	80		1500	FQ Spherical flange			SA Stainless steel screw
	81		Special				SW Stainless steel protective tube
	100						HBP Hinged bearing plate
	101						IRE Encoder
	200						GE Gear motor
	201						Power RPM Mounting direction
							MO Motor
							FMP Foot mounting

EXAMPLE:

SCB	50	V1	300	FO	P3	RH	FCP/B/IRE/MO:1.1KW 1400RPM B14

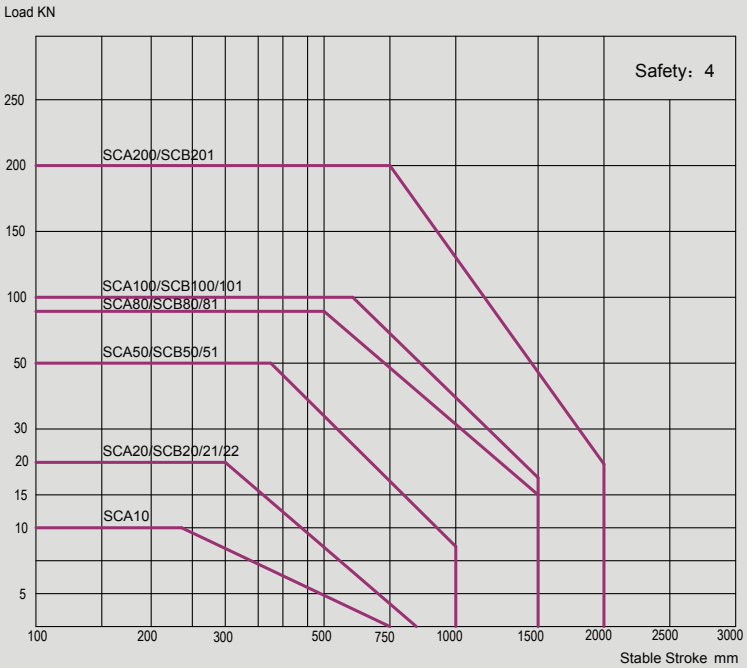
Foot Mounting f_k=0.7

Rear Clevis Mounting f_k=1



Guided Mounting f_k=1.25

Critical Bucking Force Graphs



The rated static load of Screw jack is 1.5 time of the rated Dynamic Load. The extreme wreck load is 2.5-4 time of rated Dynamic load, and screw length ect. will affect that. Screw Jack working in tension load are not need forstability checking.

The primary screw jack size selection factor is the bucking resistance of screw,Also know as Euler cures,the graphs above give safety operating atate for each size of screw jack

Buckling limits are relevant for compressive load only.

Max allowed axial load L=lk × fk

LK theoretical critical bucking force

fk correction value

SC series Actuator

Model selection guide

◆ Duty cycle is working percentage in 10 min.
SCB series duty cycle 50%
SCA series duty cycle 30%
◆ Max. Input revolution 1800RPM
◆ Please check the stability curve when stroke exceed 500mm
◆ Adjust the safety coefficient according to the load, 1.0-1.2 for the even load; 1.3-1.5 for the moderate load; 1.6-2.5 for the heavy load.
◆ For the normal performance, the input power should not exceed the max input power, input power
◆ Working temperature : -20℃ - + 40℃ (Special for -40℃ - +100℃)
◆ For the application of synchronous lifting platform, the combination coefficient should be considered, the losing of combination should also be reckoned in calculating the total power. The combination coefficient varies according to the quantity of screw jacks in the synchronous platform:
For 2 PCS screw jack in a platform, the combination coefficient is 0.95
For 3 PCS screw jack in a platform, the combination coefficient is 0.9
For 4 PCS screw jack in a platform, the combination coefficient is 0.85
For 6-8 PCs screw jack in a platform, the combination coefficient is 0.8
It is recommended to increase the combination coefficients appropriately if the double clevis mounting of the screw jack is adopted
◆ The acme screw actuator with ratio L1 possess the self-locking function, while that with ratio V1 has uncertain self-locking, the brake needs to be equipped in the safety and vibrating application.The axial error of the acme screw SCA series are 0.1 mm within 300mm stroke, Ball screw SCB series are 0.05-0.02mm within 300mm stroke

Lifetime calculation

Life time of ACME Screw actuator SCA series base on the wear of worm and nut, and the working condition, side load etc. Please contact local office for support.
The lifetime of Ball screw actuator SCB series depends on the lifetime of ball screw and worm gear and shaft, we just need to calculate the lifetime of screw, worm gear and shaft will wear but normally lifetime is longer than screw.
Theoretically Ball screw lifetime L10 is 90% of stroke ability that screw could reach before metal fatigue, Unit is million millimeter. Theoretically lifetime is not guarantee lifetime. In order to reach max. Lifetime the screw need been appropriate maintainece and lubricate.

If the theoretically lifetime need higher than 90%, need multiply follow coefficient

95%: L10x62% 96%: L10x53% 97%: L10x44%
98%: L10x33% 99%: L10x21%

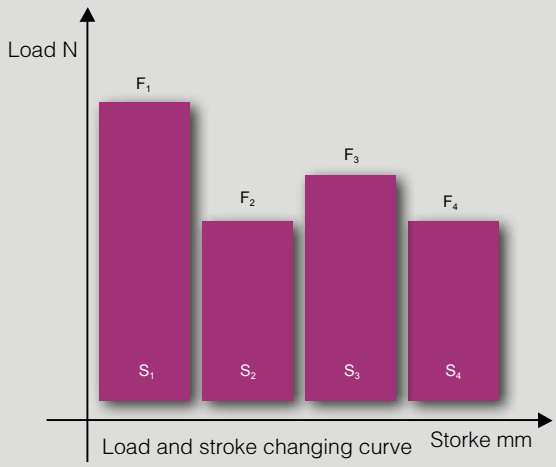
Nut lifetime calculation:

$L10=(C / Fm)^3 xS$

L10: theoretic lifetime km Fm: mean load N
C: Rated dynamic load N S: Ball screw lead mm

Fm mean load calcuation:

$$Fm=3\sqrt{\frac{F_1{}^3S_1 + F_2{}^3S_2 + F_3{}^3S_3 + F_4{}^3S_4}{S_1 + S_2 + S_3 + S_4}}$$



Rated dynamic load:

	Rated dynamic load KN
SCB20	17
SCB21	25
SCB22	25
SCB50	46

	Rated dynamic load KN
SCB51	30
SCB80	53
SCB81	56
SCB100	71

	Rated dynamic load KN
SCB101	62
SCB200	78
SCB201	97
SCB300	111

SC20 Performance Data

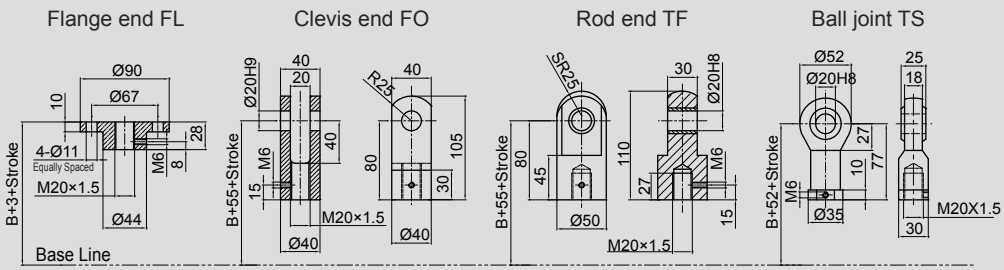
Type	Rated Push KN	Speed mm/s	Stroke for input turn mm	Max. input power kw	Drive	Self-locking	Motor or reducer model
ACME screw actuator SCA20							
SCA20-V1	15	23	1.04	1.14	MOTOR	Uncertain	1.1kw 1400rpm
SCA20-V1	20	15	1.04	1.14	MOTOR	Uncertain	1.1kw 900rpm
SCA20-V1	20	12	1.04	1.14	Helical geared motor	Uncertain	RXF57DT90S4 1.1kw 729rpm
SCA20-V1	20	9	1.04	1.14	Helical geared motor	Uncertain	RXF57DT80N4 0.75kw 582rpm
SCA20-L1	20	6	0.25	0.55	MOTOR	Certain	0.55kw 1400rpm
SCA20-V1	20	5	1.04	1.14	Worm gear motor	Uncertain	NMRV040 71B4 0.37kw 280rpm
SCA20-L1	20	4	0.25	0.55	MOTOR	Certain	0.37kw 900rpm
SCA20-L1	20	3	0.25	0.55	Helical geared motor	Certain	RXF57DT71D4 0.37kw 719rpm
SCA20-V1	20	2.5	1.04	1.14	Worm gear motor	Uncertain	NMRV040 71A4 0.25kw 140rpm
SCA20-L1	20	2	0.25	0.55	Helical geared motor	Certain	RXF57DR63L4 0.25kw 446rpm
SCA20-V1	20	1.2	1.04	1.14	Worm gear motor	Uncertain	NMRV030 63A4 0.12kw 70rpm
SCA20-L1	20	1.2	0.25	0.55	Worm gear motor	Certain	NMRV030 63B4 0.18kw 280rpm
SCA20-V1	20	0.8	1.04	1.14	Worm gear motor	Uncertain	NMRV030 63A4 0.12kw 46rpm
SCA20-L1	20	0.6	0.25	0.55	Worm gear motor	Certain	NMRV030 63A4 0.12kw 140rpm
SCA20-L1	20	0.3	0.25	0.55	Worm gear motor	Certain	NMRV030 63A4 0.12kw 70rpm
SCA20-L1	20	0.2	0.25	0.55	Worm gear motor	Certain	NMRV030 63A4 0.12kw 46rpm

Type	Rated Push KN	Speed mm/s	Stroke for input turn mm	Max. input power kw	Drive	Self-locking	Motor or reducer model
Ball screw actuator SCB20							
SCB22-V1	9	76	3.48	1.14	MOTOR	Uncertain	1.1kw 1400rpm
SCB22-V1	13	50	3.48	1.14	MOTOR	Uncertain	1.1kw 900rpm
SCB21-V1	18	38.3	1.74	1.14	MOTOR	Uncertain	1.1kw 1400rpm
SCB21-V1	20	25	1.74	1.14	MOTOR	Uncertain	1.1kw 900rpm
SCB21-V1	20	20	1.74	1.14	Helical geared motor	Uncertain	RXF57DT80N4 0.75kw 719rpm
SCB20-V1	20	19	0.87	1.14	MOTOR	Uncertain	0.75kw 1400rpm
SCB21-V1	20	15	1.74	1.14	Helical geared motor	Uncertain	RXF57DT80K4 0.55kw 574rpm
SCB20-V1	20	12	0.87	1.14	MOTOR	Uncertain	0.55kw 900rpm
SCB21-L1	20	10	0.42	0.55	MOTOR	Certain	0.55kw 1400rpm
SCB21-V1	20	8.3	1.74	1.14	Worm gear motor	Uncertain	NMRV040 71B4 0.37kw 280rpm
SCB21-L1	20	6.7	0.42	0.55	MOTOR	Certain	0.37kw 900rpm
SCB21-L1	20	5	0.42	0.55	Helical geared motor	Certain	RXF57DT71D4 0.37kw 719rpm
SCB21-V1	20	4.2	1.74	1.14	Worm gear motor	Uncertain	NMRV040 71A4 0.25kw 140rpm
SCB21-L1	20	3.3	0.42	0.55	Helical geared motor	Certain	RXF57DR63L4 0.25kw 446rpm
SCB21-V1	20	2	1.74	1.14	Worm gear motor	Uncertain	NMRV030 63A4 0.12kw 70rpm
SCB21-L1	20	2	0.42	0.55	Worm gear motor	Certain	NMRV030 63B4 0.18kw 280rpm
SCB21-V1	20	1.3	1.74	1.14	Worm gear motor	Uncertain	NMRV030 63A4 0.12kw 46rpm
SCB21-L1	20	1	0.42	0.55	Worm gear motor	Certain	NMRV030 63A4 0.12kw 140rpm
SCB21-L1	20	0.5	0.42	0.55	Worm gear motor	Certain	NMRV030 63A4 0.12kw 70rpm
SCB21-L1	20	0.3	0.42	0.55	Worm gear motor	Certain	NMRV030 63A4 0.12kw 46rpm
Weight		8.5kg					
Weight per 100mm stroke		1.9kg					

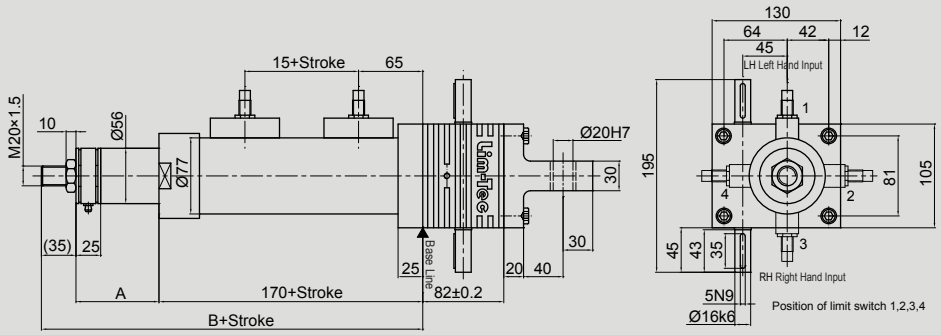
Note:The motor power can be reduced if actual load less than rated load.
Uncertain Actuator are recommended match brake motor

Overall Dimensions of SC Series

SCA/SCB20 Actuator



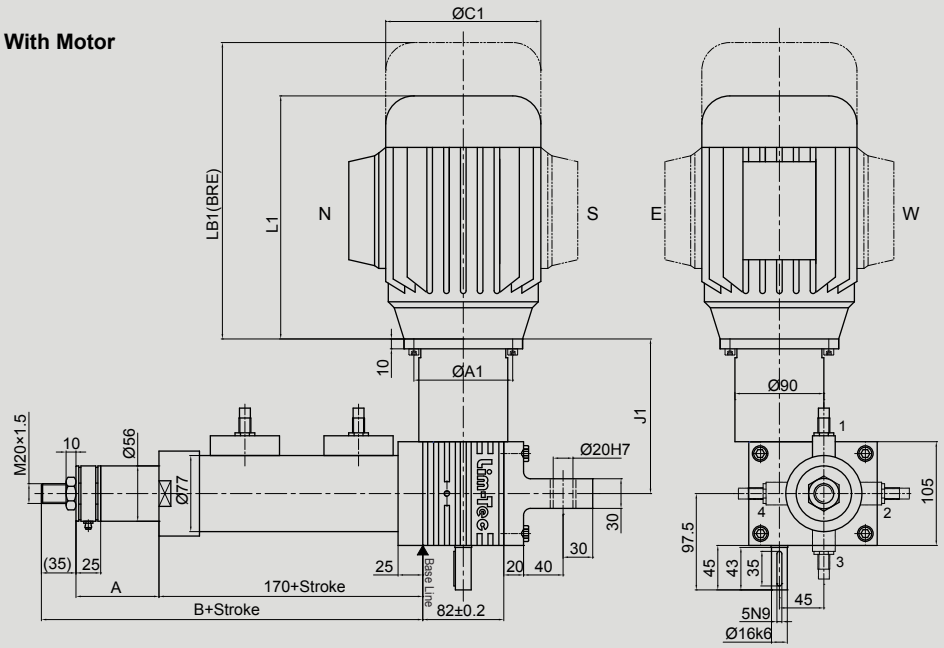
Standard actuator



	SCA20	SCB20
A	80	110
B	285	315

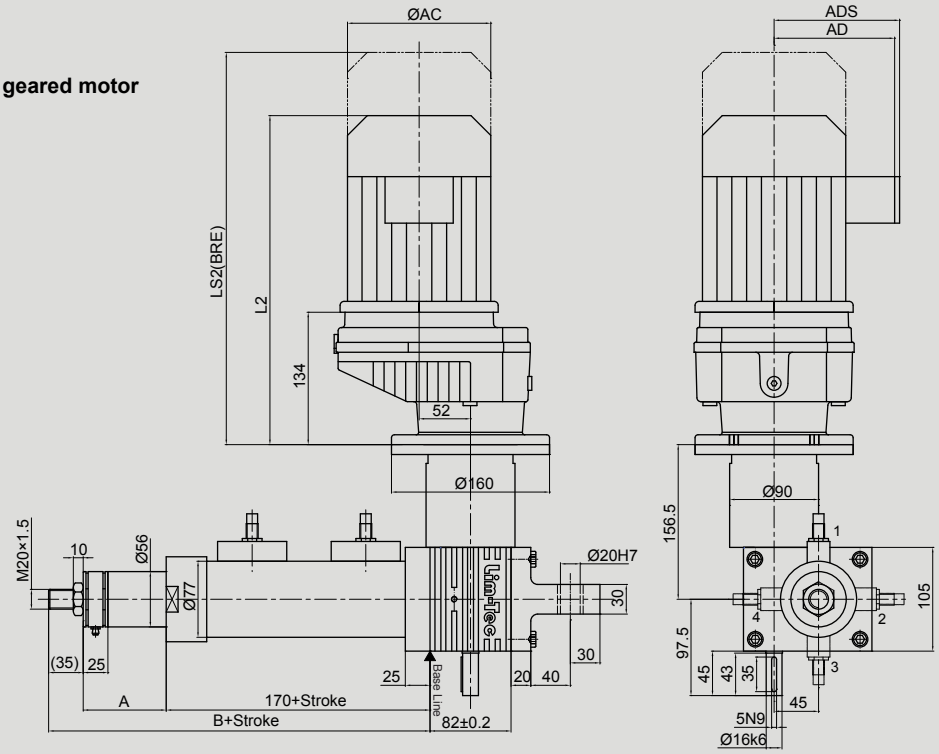
	80B14	90B14
A1	100	115
C1	157	175
L1	246	270
LB1	300	334
J1	155	165

With Motor



SCA/SCB20 Actuator

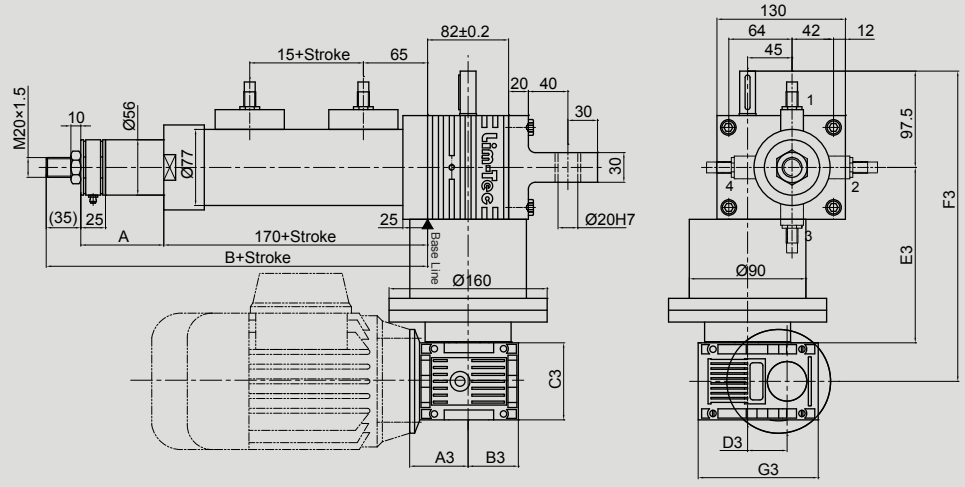
With helical geared motor



	DR63	DT71D	DT80	DT90
AC	132	145	145	197
AD	105	122	122	154
ADS	105	127	127	161
L2	319	333	383	403
LS2	374	397	447	488

	NMRV030	NMRV040
A3	55	70
B3	40	50
C3	63	78
D3	30	40
E3	156.5	169.5
F3	285.5	306
G3	97	121.5

with worm gear motor



Overall Dimensions of SC Series

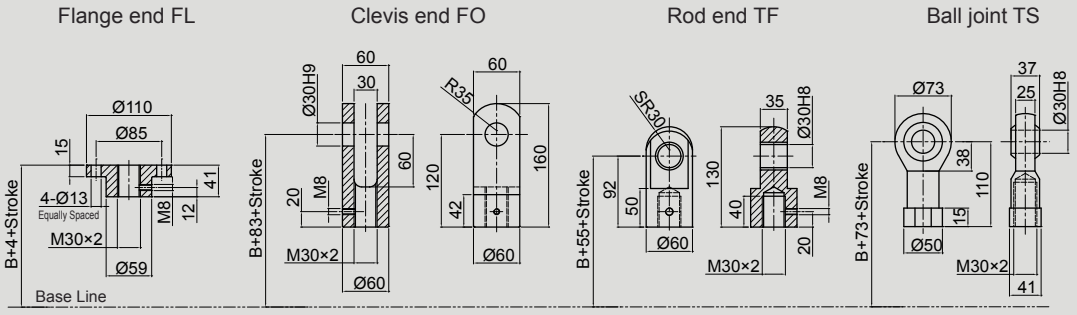
SC50 Performance date

Type	Rated Push KN	Speed mm/s	Stroke for input turn mm	Max. input power kw	Drive	Self-locking	Motor or reducer model
ACME screw actuator SCA50							
SCA50-V1	30	23	1.04	2.2	MOTOR	Uncertain	2.2kw 1400rpm
SCA50-V1	40	15	1.04	2.2	MOTOR	Uncertain	2.2kw 900rpm
SCA50-V1	50	12	1.04	2.2	Helical geared motor	Uncertain	RXF57DT100M4 2.2kw 734rpm
SCA50-V1	50	9	1.04	2.2	Helical geared motor	Uncertain	RXF57DT90L4 1.5kw 534rpm
SCA50-L1	40	6	0.25	1.1	MOTOR	Certain	1.1kw 1400rpm
SCA50-V1	50	5	1.04	2.2	Worm gear motor	Uncertain	NMRV050 80B2 1.1kw 280rpm
SCA50-L1	50	4	0.25	1.1	MOTOR	Certain	1.1kw 900rpm
SCA50-L1	50	3	0.25	1.1	Helical geared motor	Certain	RXF57DT80N4 0.75kw 719rpm
SCA50-V1	50	2.5	1.04	2.2	Worm gear motor	Uncertain	NMRV050 80A4 0.55kw 140rpm
SCA50-L1	50	2	0.25	1.1	Helical geared motor	Certain	RXF57DT80K4 0.55kw 447rpm
SCA50-V1	50	1.2	1.04	2.2	Worm gear motor	Uncertain	NMRV040 71B4 0.37kw 70rpm
SCA50-L1	50	1.2	0.25	1.1	Worm gear motor	Certain	NMRV040 71B4 0.37kw 280rpm
SCA50-V1	50	0.8	1.04	2.2	Worm gear motor	Uncertain	NMRV040 71A4 0.25kw 46rpm
SCA50-L1	50	0.6	0.25	1.1	Worm gear motor	Certain	NMRV040 71A4 0.25kw 140rpm
SCA50-L1	50	0.3	0.25	1.1	Worm gear motor	Certain	NMRV030 63B4 0.18kw 70rpm
SCA50-L1	50	0.2	0.25	1.1	Worm gear motor	Certain	NMRV030 63C6 0.15kw 45rpm

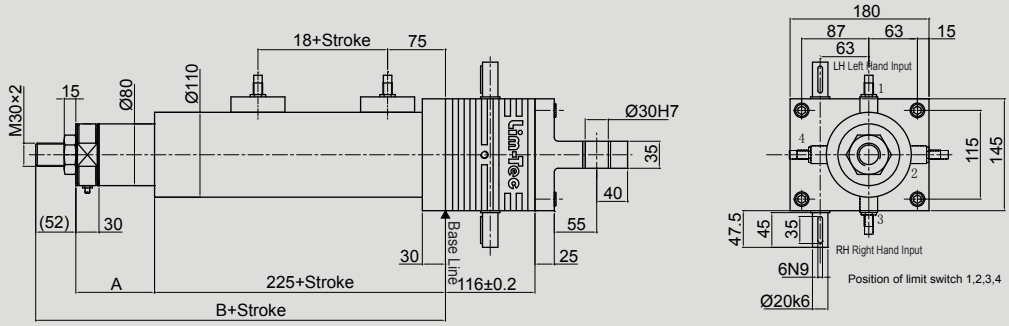
Type	Rated Push KN	Speed mm/s	Stroke for input turn mm	Max. input power kw	Drive	Self-locking	Motor or reducer model
Ball screw actuator SCB50							
SCB51-V1	20	66	2.96	2.2	MOTOR	Uncertain	2.2kw 1400rpm
SCB51-V1	30	42	2.96	2.2	MOTOR	Uncertain	2.2kw 900rpm
SCB50-V1	40	33	1.48	2.2	MOTOR	Uncertain	2.2kw 1400rpm
SCB50-V1	50	21	1.48	2.2	MOTOR	Uncertain	2.2kw 900rpm
SCB50-V1	50	17	1.48	2.2	Helical geared motor	Uncertain	RXF57DT90L4 1.5kw 691rpm
SCB50-V1	50	13	1.48	2.2	Helical geared motor	Uncertain	RXF57DT90L4 1.5kw 534rpm
SCB50-L1	50	8.6	0.36	1.1	MOTOR	Certain	1.1kw 1400rpm
SCB50-V1	50	7	1.48	2.2	Worm gear motor	Uncertain	NMRV050 80B2 1.1kw 280rpm
SCB50-L1	50	5.7	0.36	1.1	MOTOR	Certain	0.75kw 900rpm
SCB50-L1	50	4.3	0.36	1.1	Helical geared motor	Certain	RXF57DT80N4 0.75kw 719rpm
SCB50-V1	50	3.6	1.48	2.2	Worm gear motor	Uncertain	NMRV050 80A4 0.55kw 140rpm
SCB50-L1	50	2.9	0.36	1.1	Helical geared motor	Certain	RXF57DT80K4 0.55kw 447rpm
SCB50-V1	50	1.7	1.48	2.2	Worm gear motor	Uncertain	NMRV040 71B4 0.37kw 70rpm
SCB50-L1	50	1.7	0.36	1.1	Worm gear motor	Certain	NMRV040 71B4 0.37kw 280rpm
SCB50-V1	50	1.1	1.48	2.2	Worm gear motor	Uncertain	NMRV040 71A4 0.25kw 46rpm
SCB50-L1	50	0.9	0.36	1.1	Worm gear motor	Certain	NMRV040 71A4 0.25kw 140rpm
SCB50-L1	50	0.4	0.36	1.1	Worm gear motor	Certain	NMRV030 63B4 0.18kw 70rpm
SCB50-L1	50	0.3	0.36	1.1	Worm gear motor	Certain	NMRV030 63C6 0.15kw 45rpm
Weight		22kg					
Weight per 100mm stroke		3.4kg					

Note:The motor power can be reduced if actual load less than rated load.
Uncertain Actuator are recommended match brake motor

SCA/SCB50 Actuator



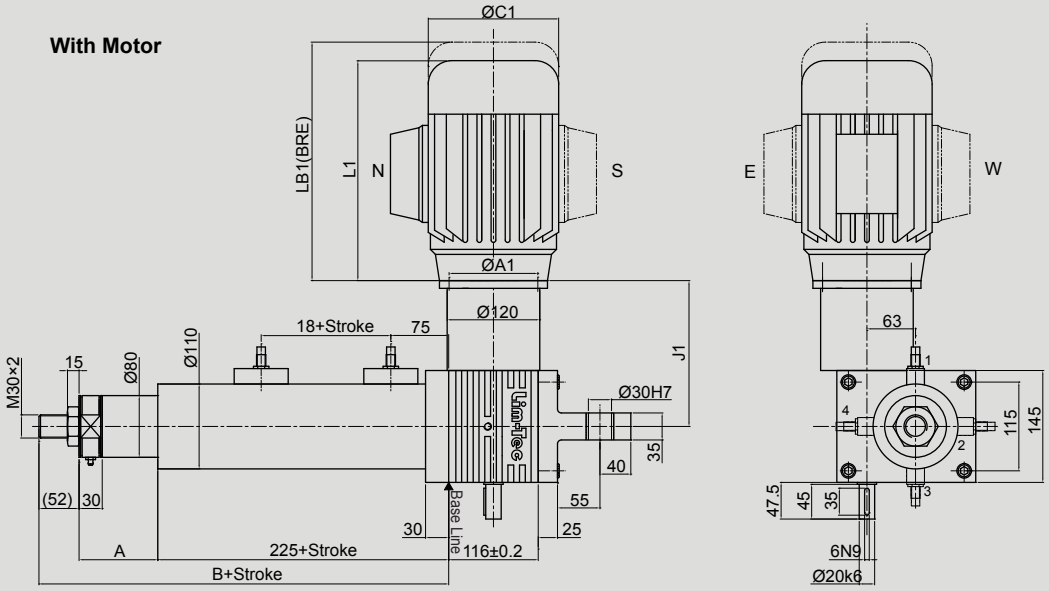
Standard actuator



	SCA50	SCB50
A	100	140
B	377	417

	90B14	100B14	112B14
A1	115	130	130
C1	175	196	220
L1	310	317	335
LB1	334	384	393
J1	190	200	200

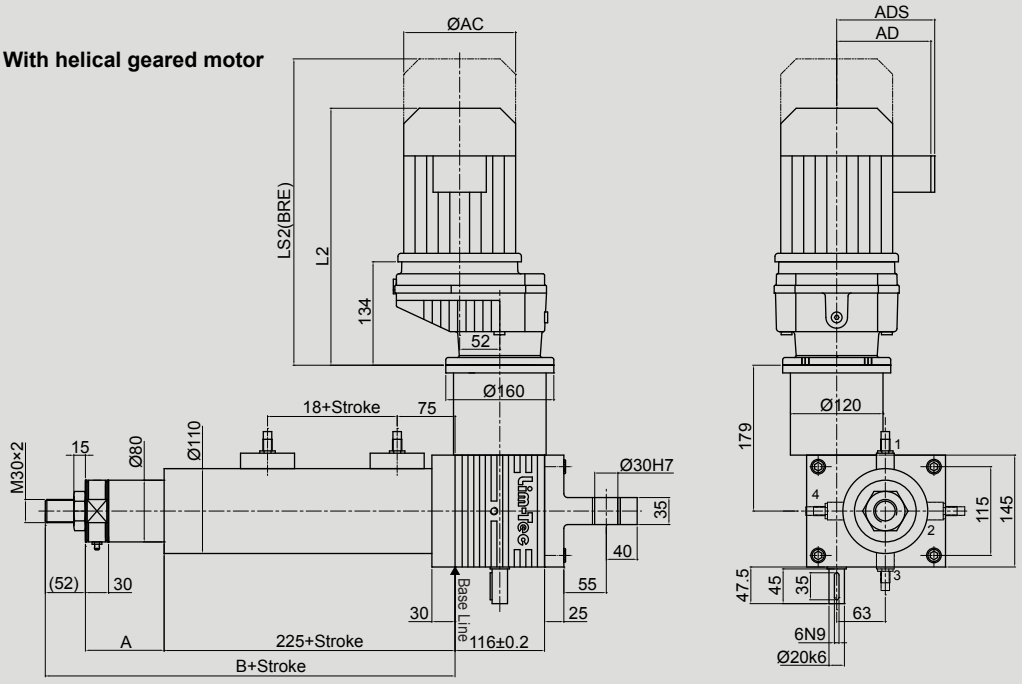
With Motor



Overall Dimensions of SC Series

SCA/SCB50 Actuator

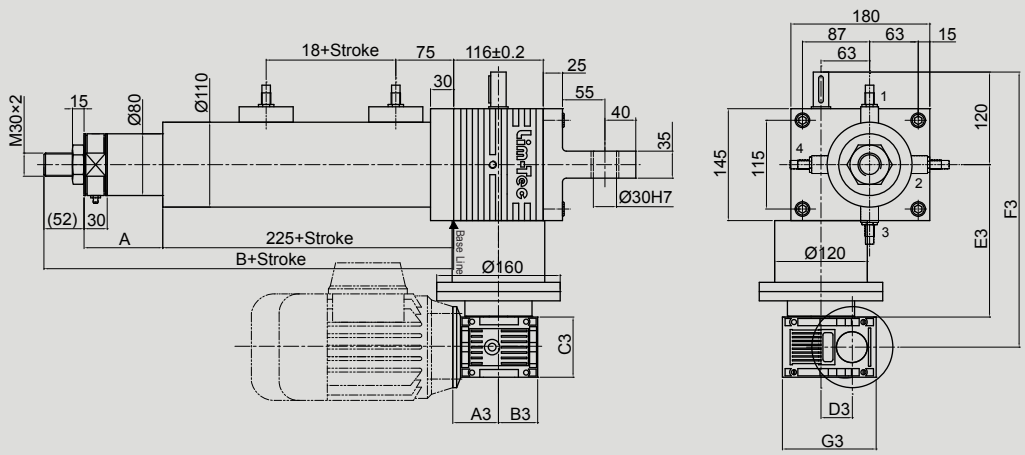
With helical geared motor



	DT80	DT90	DV100M	DV100L
AC	145	197	197	197
AD	122	154	166	166
ADS	127	161	166	166
L2	383	403	453	483
LS2	447	488	538	568

	NMRV030	NMRV040	NMRV050
A3	55	70	80
B3	40	50	60
C3	63	78	92
D3	30	40	50
E3	189	199	199
F3	340.5	358	365
G3	97	121.5	144

with worm gear motor



SC80 Performance date

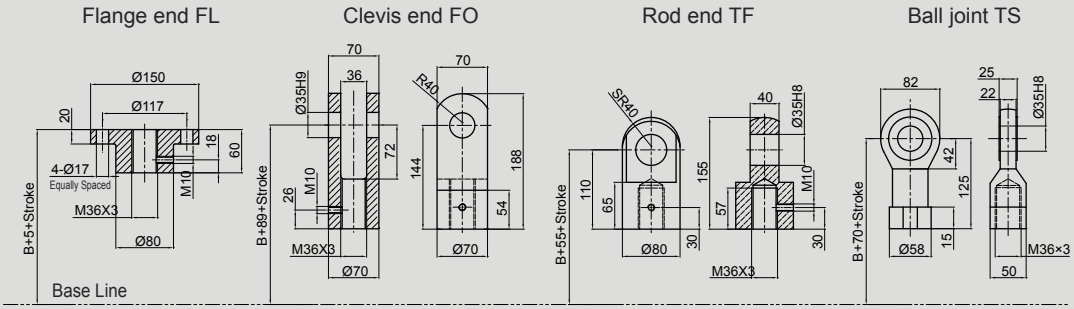
Type	Rated Push KN	Speed mm/s	Stroke for input turn mm	Max. input power kw	Drive	Self-locking	Motor or reducer model
ACME screw actuator SCA80							
SCA80-V1	30	23	1.03	2.5	MOTOR	Uncertain	2.2kw 1400rpm
SCA80-V1	50	15	1.03	2.5	MOTOR	Uncertain	2.2kw 900rpm
SCA80-V1	60	12	1.03	2.5	Helical geared motor	Uncertain	RXF57DT100M4 2.2kw 734rpm
SCA80-V1	75	9	1.03	2.5	Helical geared motor	Uncertain	RXF57DT100M4 2.2kw 534rpm
SCA80-L1	60	6	0.25	1.5	MOTOR	Certain	1.5kw 1400rpm
SCA80-V1	80	5	1.03	2.5	Worm gear motor	Uncertain	NMRV063 90L2 2.2kw 280rpm
SCA80-L1	80	4	0.25	1.5	MOTOR	Certain	1.5kw 900rpm
SCA80-L1	80	3	0.25	1.5	Helical geared motor	Certain	RXF57DT90L4 1.5kw 734rpm
SCA80-V1	80	2.5	1.03	2.5	Worm gear motor	Uncertain	NMRV063 90S4 1.1kw 140rpm
SCA80-L1	80	2	0.25	1.5	Helical geared motor	Certain	RXF57DT90S4 1.1kw 481rpm
SCA80-V1	80	1.2	1.03	2.5	Worm gear motor	Uncertain	NMRV050 80B4 0.75kw 70rpm
SCA80-L1	80	1.2	0.25	1.5	Worm gear motor	Certain	NMRV050 80B4 0.75kw 280rpm
SCA80-V1	80	0.8	1.03	2.5	Worm gear motor	Uncertain	NMRV050 80A4 0.55kw 46rpm
SCA80-L1	80	0.6	0.25	1.5	Worm gear motor	Certain	NMRV040 71B4 0.37kw 140rpm
SCA80-L1	80	0.3	0.25	1.5	Worm gear motor	Certain	NMRV040 71A4 0.25kw 70rpm
SCA80-L1	80	0.2	0.25	1.5	Worm gear motor	Certain	NMRV030 63C6 0.15kw 45rpm

Type	Rated Push KN	Speed mm/s	Stroke for input turn mm	Max. input power kw	Drive	Self-locking	Motor or reducer model
Ball screw actuator SCB80							
SCB81-V1	22	58	2.58	2.5	MOTOR	Uncertain	2.2kw 1400rpm
SCB81-V1	35	38	2.58	2.5	MOTOR	Uncertain	2.2kw 900rpm
SCB80-V1	45	29	1.29	2.5	MOTOR	Uncertain	2.2kw 1400rpm
SCB80-V1	60	19	1.29	2.5	MOTOR	Uncertain	2.2kw 900rpm
SCB80-V1	60	15	1.29	2.5	Helical geared motor	Uncertain	RXF57DT100M4 2.2kw 734rpm
SCB80-V1	60	11	1.29	2.5	Helical geared motor	Uncertain	RXF57DT90L4 1.5kw 534rpm
SCB80-L1	60	7.5	0.31	1.5	MOTOR	Certain	1.5kw 1400rpm
SCB80-V1	60	6.3	1.29	2.5	Worm gear motor	Uncertain	NMRV050 80B2 1.1kw 280rpm
SCB80-L1	60	5	0.31	1.5	MOTOR	Certain	1.1kw 900rpm
SCB80-L1	60	3.6	0.31	1.5	Helical geared motor	Certain	RXF57DT80N4 0.75kw 719rpm
SCB80-V1	60	3.1	1.29	2.5	Worm gear motor	Uncertain	NMRV040 80K4 0.55kw 140rpm
SCB80-L1	60	2.5	0.31	1.5	Helical geared motor	Certain	RXF57DT80K4 0.55kw 467rpm
SCB80-V1	60	1.5	1.29	2.5	Worm gear motor	Uncertain	NMRV040 71B4 0.37kw 70rpm
SCB80-L1	60	1.5	0.31	1.5	Worm gear motor	Certain	NMRV040 71A2 0.37kw 280rpm
SCB80-V1	60	1	1.29	2.5	Worm gear motor	Uncertain	NMRV040 71A4 0.25kw 46rpm
SCB80-L1	60	0.8	0.31	1.5	Worm gear motor	Certain	NMRV040 71A4 0.25kw 140rpm
SCB80-L1	60	0.4	0.31	1.5	Worm gear motor	Certain	NMRV030 63B4 0.18kw 70rpm
SCB80-L1	60	0.3	0.31	1.5	Worm gear motor	Certain	NMRV030 63A4 0.12kw 45rpm
Weight		36kg					
Weight per 100mm stroke		4.2kg					

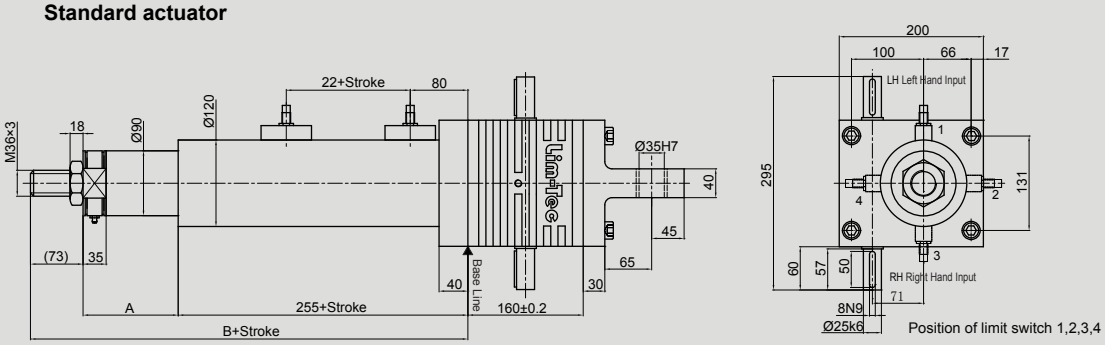
Note:The motor power can be reduced if actual load less than rated load.
Uncertain Actuator are recommended match brake motor

Overall Dimensions of SC Series

SCA/SCB80 Actuator



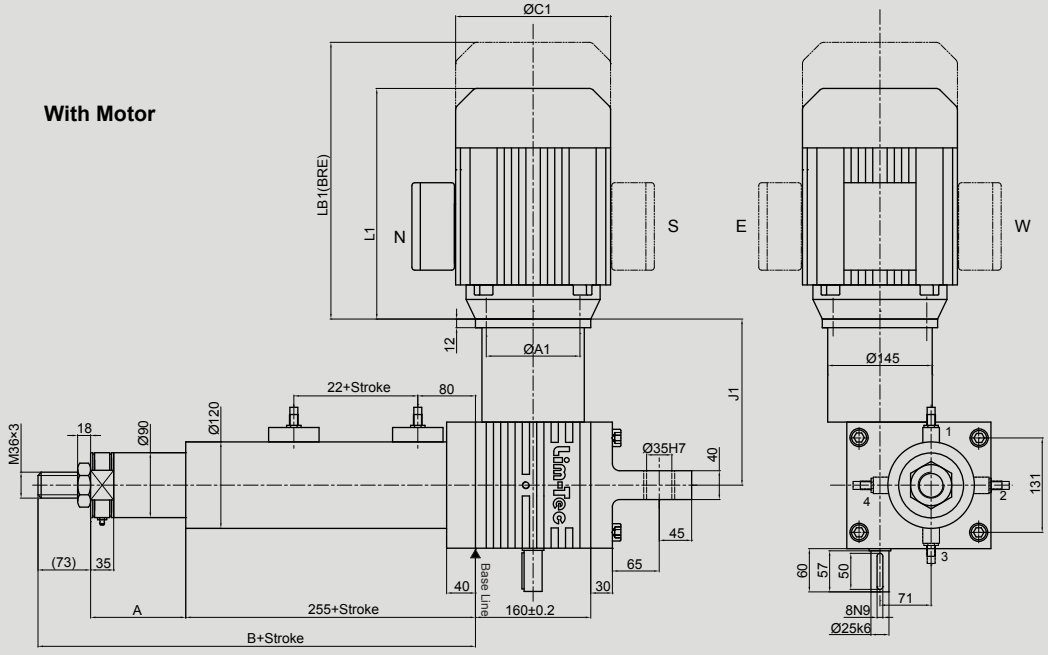
Standard actuator



	SCA80	SCB80
A	130	185
B	458	513

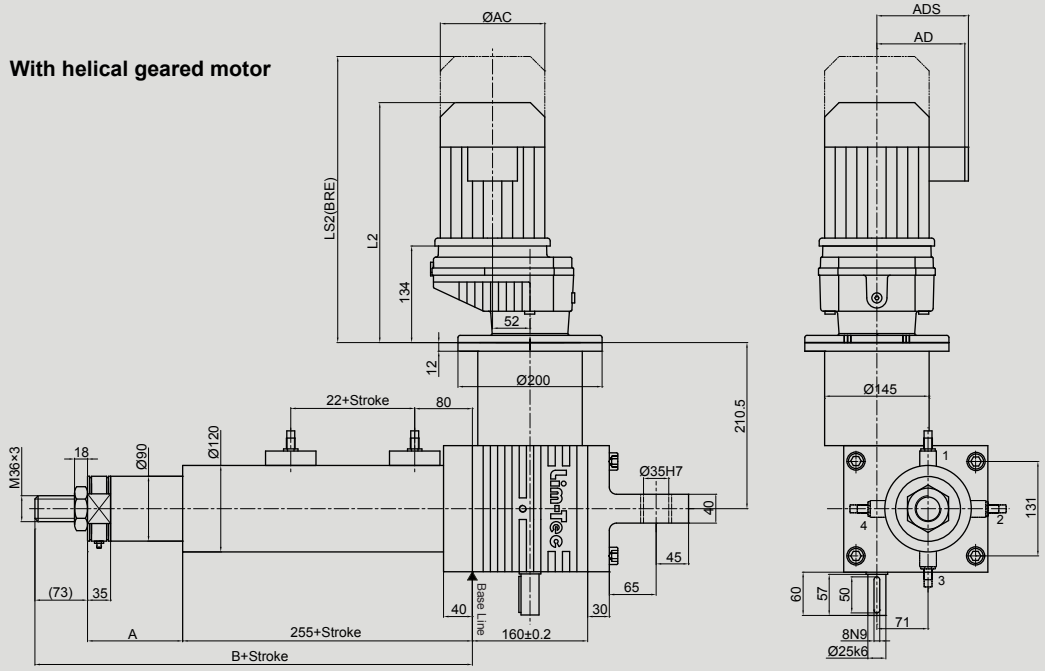
	90B14	100B14	112B14
A1	115	130	130
C1	175	196	220
L1	310	317	335
LB1	334	384	393
J1	221	231	231

With Motor



SCA/SCB80 Actuator

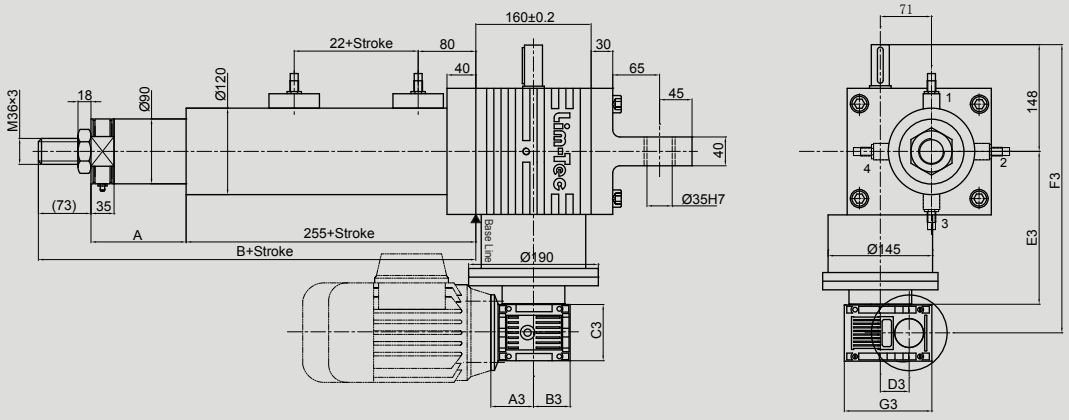
With helical geared motor



	DT90	DV100M	DV100L
AC	197	197	197
AD	154	166	166
ADS	161	166	166
L2	403	453	483
LS2	488	538	568

	NMRV030	NMRV040	NMRV050	NMRV063
A3	55	70	80	95
B3	40	50	60	72
C3	63	78	92	112
D3	30	40	50	63
E3	206.5	219.5	230.5	230.5
F3	335.5	356	364	374
G3	97	121.5	144	174

with worm gear motor



Overall Dimensions of SC Series

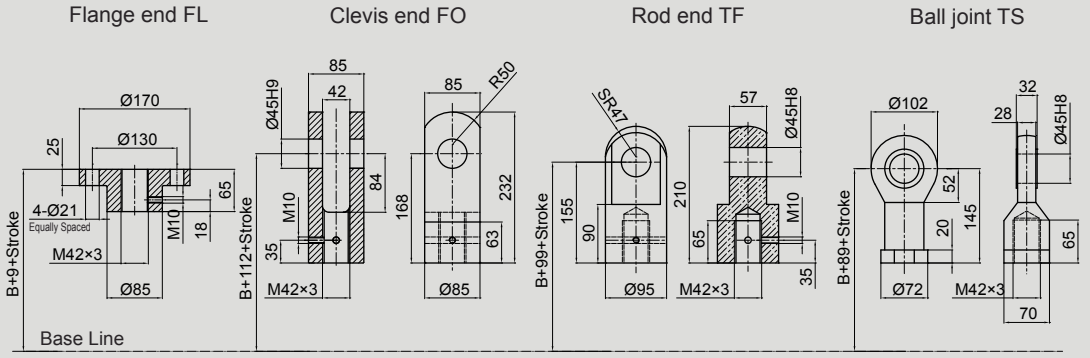
SCA100 Performance date

Type	Rated Push KN	Speed mm/s	Stroke for input turn mm	Max. input power kw	Drive	Self-locking	Motor or reducer model
ACME screw actuator SCA100							
SCA100-V1	38	26	1.16	3	MOTOR	Uncertain	3kw 1400rpm
SCA100-V1	54	17	1.16	3	MOTOR	Uncertain	3kw 900rpm
SCA100-V1	65	13	1.16	3	Helical geared motor	Uncertain	RXF57DV100L4 3kw 729rpm
SCA100-V1	80	9	1.16	3	Helical geared motor	Uncertain	RXF57DT100L4 3kw 530rpm
SCA100-L1	75	6.6	0.28	2.2	MOTOR	Certain	2.2kw 1400rpm
SCA100-V1	100	5.4	1.16	3	Worm gear motor	Uncertain	NMRV075 100LA2 3kw 280rpm
SCA100-L1	100	4.2	0.28	2.2	MOTOR	Certain	2.2kw 900rpm
SCA100-L1	100	3.3	0.28	2.2	Helical geared motor	Certain	RXF57DV100M4 2.2kw 734rpm
SCA100-V1	100	2.7	1.16	3	Worm gear motor	Uncertain	NMRV063 90L4 1.5kw 140rpm
SCA100-L1	100	2.5	0.28	2.2	Helical geared motor	Certain	RXF57DT90L4 1.5kw 484rpm
SCA100-V1	100	1.3	1.16	3	Worm gear motor	Uncertain	NMRV050 80B4 0.75kw 70rpm
SCA100-L1	100	1.2	0.28	2.2	Worm gear motor	Certain	NMRV050 80B2 1.1kw 280rpm
SCA100-V1	100	0.9	1.16	3	Worm gear motor	Uncertain	NMRV050 80A4 0.55kw 46rpm
SCA100-L1	100	0.6	0.28	2.2	Worm gear motor	Certain	NMRV040 71B2 0.55kw 140rpm
SCA100-L1	100	0.3	0.28	2.2	Worm gear motor	Certain	NMRV040 71B4 0.37kw 70rpm
SCA100-L1	100	0.2	0.28	2.2	Worm gear motor	Certain	NMRV040 71A4 0.25kw 46rpm

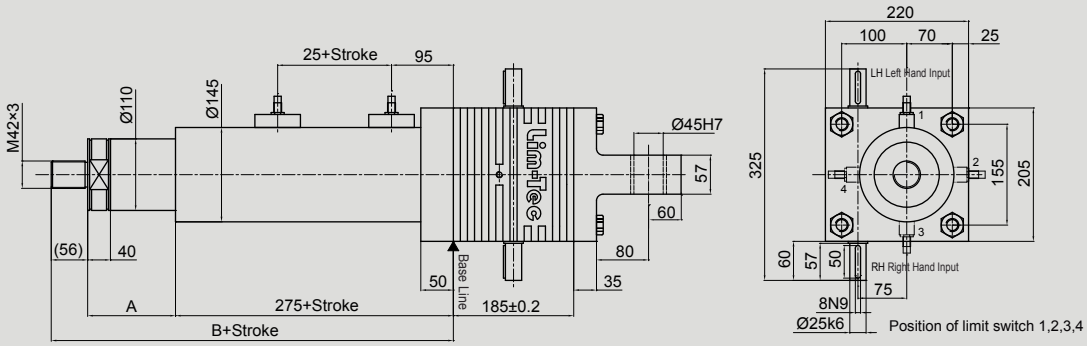
Type	Rated Push KN	Speed mm/s	Stroke for input turn mm	Max. input power kw	Drive	Self-locking	Motor or reducer model
Ball screw actuator SCB100							
SCB101-V1	30	58	2.58	3	MOTOR	Uncertain	3kw 1400rpm
SCB101-V1	42	38	2.58	3	MOTOR	Uncertain	3kw 900rpm
SCB100-V1	60	29	1.29	3	MOTOR	Uncertain	3kw 1400rpm
SCB100-V1	80	19	1.29	3	MOTOR	Uncertain	3kw 900rpm
SCB100-V1	80	14.4	1.29	3	Helical geared motor	Uncertain	RXF57DV100L4 3kw 729rpm
SCB100-V1	80	11	1.29	3	Helical geared motor	Uncertain	RXF57DT100M4 2.2kw 534rpm
SCB100-L1	80	7.3	0.31	2.2	MOTOR	Certain	2.2kw 1400rpm
SCB100-V1	80	6	1.29	3	Worm gear motor	Uncertain	NMRV050 90S2 1.5kw 280rpm
SCB100-L1	80	4.7	0.31	2.2	MOTOR	Certain	1.5kw 900rpm
SCB100-L1	80	3.7	0.31	2.2	Helical geared motor	Certain	RXF57DT90S4 1.1kw 729rpm
SCB100-V1	80	3	1.29	3	Worm gear motor	Uncertain	NMRV050 80B4 0.75kw 140rpm
SCB100-L1	80	2.8	0.31	2.2	Helical geared motor	Certain	RXF57DT80N4 0.75kw 474rpm
SCB100-V1	80	1.4	1.29	3	Worm gear motor	Uncertain	NMRV050 71B4 0.37kw 70rpm
SCB100-L1	80	1.3	0.31	2.2	Worm gear motor	Certain	NMRV04071B2 0.55kw 280rpm
SCB100-V1	80	1	1.29	3	Worm gear motor	Uncertain	NMRV050 71B4 0.37kw 46rpm
SCB100-L1	80	0.7	0.31	2.2	Worm gear motor	Certain	NMRV040 71B4 0.37kw 140rpm
SCB100-L1	80	0.3	0.31	2.2	Worm gear motor	Certain	NMRV040 71A4 0.25kw 70rpm
SCB100-L1	80	0.2	0.31	2.2	Worm gear motor	Certain	NMRV040 63B4 0.18kw 46rpm
Weight		58kg					
Weight per 100mm stroke		6.9kg					

Note:The motor power can be reduced if actual load less than rated load.
Uncertain Actuator are recommended match brake motor

SCA/SCB100 Actuator



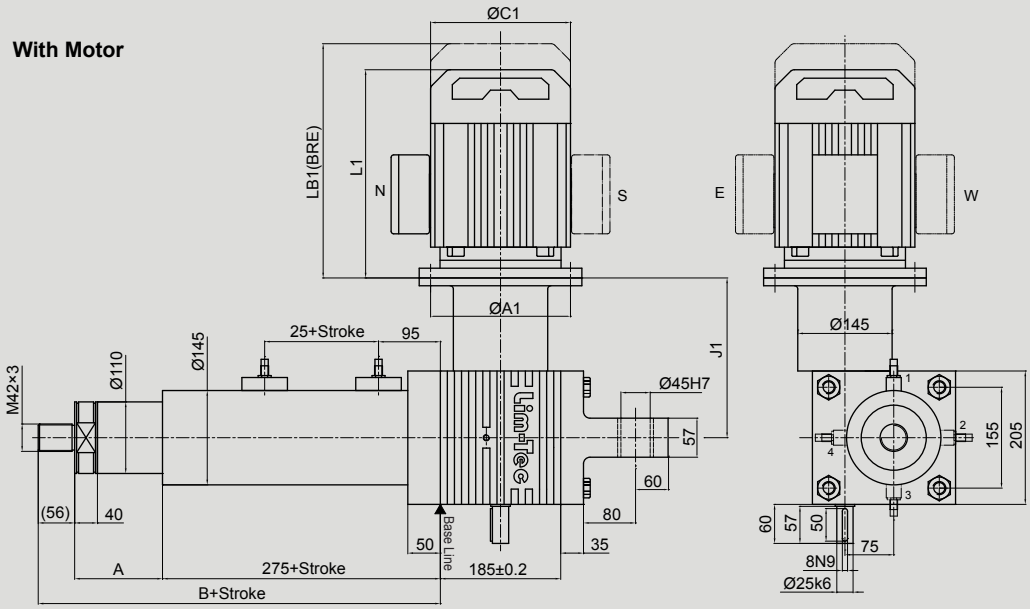
Standard actuator



	SCA100	SCB100
A	160	220
B	491	551

	100B5	112B5	132B5
A1	215	215	265
C1	215	240	275
L1	317	335	395
LB1	384	393	496
J1	246	246	275.5

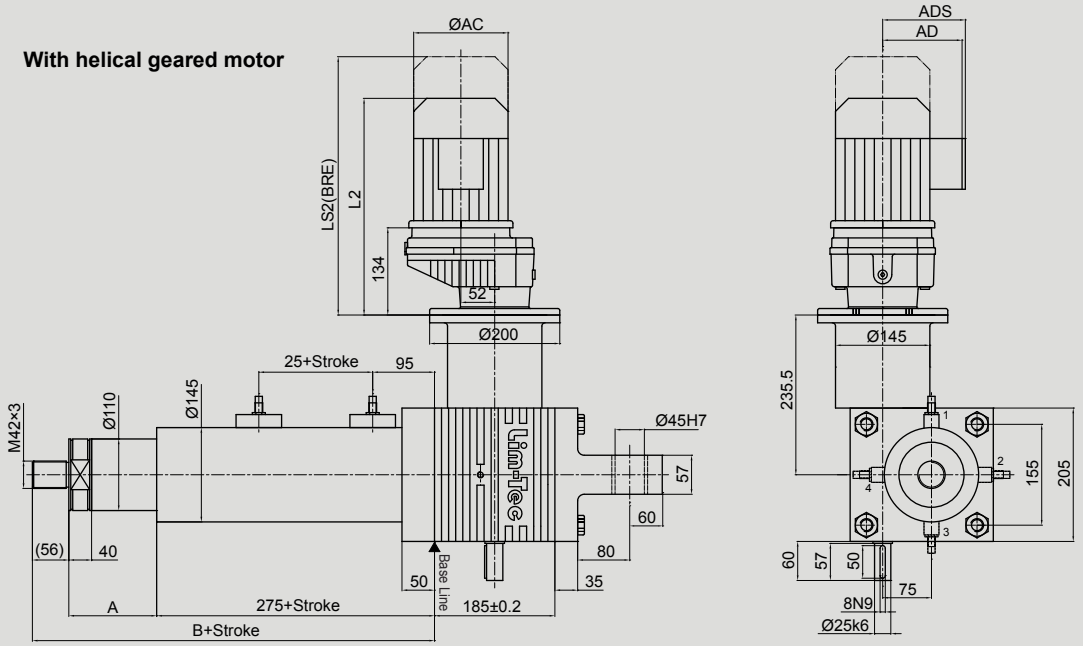
With Motor



Overall Dimensions of SC Series

SCA/SCB100 Actuator

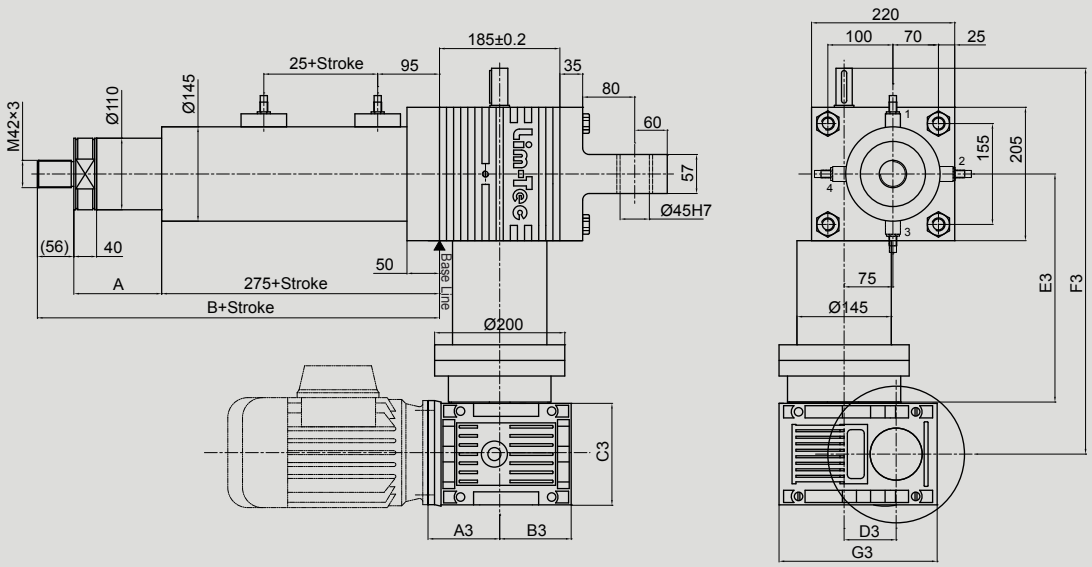
With helical geared motor



	DT80	DT90	DV100M	DV100L
AC	145	197	197	197
AD	122	154	166	166
ADS	127	161	166	166
L2	383	403	453	483
LS2	447	488	538	568

	NMRV040	NMRV050	NMRV063	NMRV075
A3	70	80	95	112.5
B3	50	60	72	86
C3	78	92	112	120
D3	40	50	63	75
E3	255.5	255.5	275.5	275.5
F3	457	464	494	498
G3	121.5	144	174	205

with worm gear motor



SCA200 Performance date

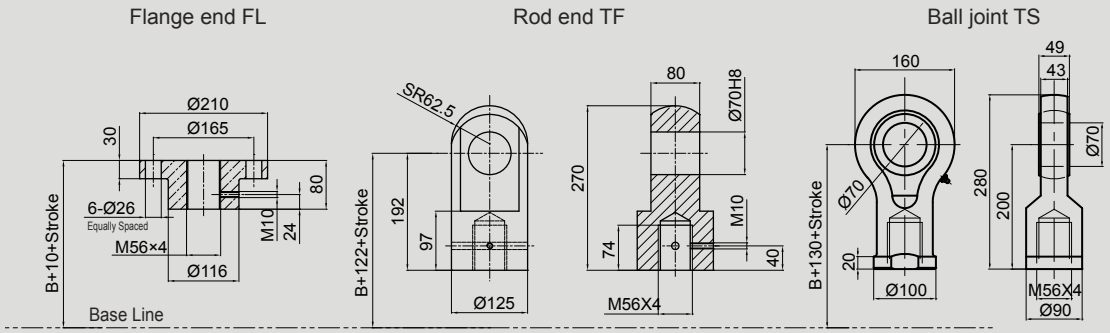
Type	Rated Push KN	Speed mm/s	Stroke for input turn mm	Max. input power kw	Drive	Self-locking	Motor or reducer model
ACME screw actuator SCA200							
SCA200-V1	44	32	1.37	4	MOTOR	Uncertain	4kw 1400rpm
SCA200-V1	60	21	1.37	4	MOTOR	Uncertain	4kw 900rpm
SCA200-V1	70	16	1.37	4	Helical geared motor	Uncertain	RXF57DV112M4 4kw 740rpm
SCA200-V1	85	12	1.37	4	Helical geared motor	Uncertain	RXF57DT112M4 4kw 538rpm
SCA200-L1	80	8	0.34	3.5	MOTOR	Certain	3kw 1400rpm
SCA200-V1	130	6.5	1.37	4	Worm gear motor	Uncertain	NMRV075 112M2 4kw 280rpm
SCA200-L1	110	5	0.34	3.5	MOTOR	Certain	3kw 900rpm
SCA200-L1	130	4	0.34	3.5	Helical geared motor	Certain	RXF57DV100L4 3kw 729rpm
SCA200-V1	200	3.3	1.37	4	Worm gear motor	Uncertain	NMRV075 112M4 4kw 140rpm
SCA200-L1	200	2.6	0.34	3.5	Helical geared motor	Certain	RXF57DV100L4 3kw 446rpm
SCA200-V1	200	1.6	1.37	4	Worm gear motor	Uncertain	NMRV090 100LA4 2.2kw 70rpm
SCA200-L1	200	1.5	0.34	3.5	Worm gear motor	Certain	NMRV063 90L2 2.2kw 280rpm
SCA200-V1	200	1	1.37	4	Worm gear motor	Uncertain	NMRV075 90L4 1.5kw 46rpm
SCA200-L1	200	0.8	0.34	3.5	Worm gear motor	Certain	NMRV063 90L4 1.5kw 140rpm
SCA200-L1	200	0.4	0.34	3.5	Worm gear motor	Certain	NMRV063 90L4 1.1kw 70rpm
SCA200-L1	200	0.3	0.34	3.5	Worm gear motor	Certain	NMRV063 80B4 0.75kw 46rpm

Type	Rated Push KN	Speed mm/s	Stroke for input turn mm	Max. input power kw	Drive	Self-locking	Motor or reducer model
Ball screw actuator SCB201							
SCB201-V1	40	53	2.29	4	MOTOR	Uncertain	4kw 1400rpm
SCB201-V1	60	35	2.29	4	MOTOR	Uncertain	4kw 900rpm
SCB201-V1	75	27	2.29	4	Helical geared motor	Uncertain	RXF57DV112M4 4kw 740rpm
SCB201-V1	90	20	2.29	4	Helical geared motor	Uncertain	RXF57DT112M4 4kw 538rpm
SCB201-L1	75	13	0.57	3.5	MOTOR	Certain	3kw 1400rpm
SCB201-V1	100	11	2.29	4	Worm gear motor	Uncertain	NMRV075 100LA2 3kw 280rpm
SCB201-L1	100	8.3	0.57	3.5	MOTOR	Certain	3kw 900rpm
SCB201-L1	100	6.7	0.57	3.5	Helical geared motor	Certain	RXF57DV100L4 3kw 729rpm
SCB201-V1	100	5.5	2.29	4	Worm gear motor	Uncertain	NMRV063 90L4 1.5kw 140rpm
SCB201-L1	100	4.3	0.57	3.5	Helical geared motor	Certain	RXF57DV100M4 2.2kw 450rpm
SCB201-V1	100	2.7	2.29	4	Worm gear motor	Uncertain	NMRV063 80B4 0.75kw 70rpm
SCB201-L1	100	2.5	0.57	3.5	Worm gear motor	Certain	NMRV050 90S2 1.5kw 280rpm
SCB201-V1	100	1.7	2.29	4	Worm gear motor	Uncertain	NMRV050 80A4 0.55kw 46rpm
SCB201-L1	100	1.3	0.57	3.5	Worm gear motor	Certain	NMRV050 80B4 0.75kw 140rpm
SCB201-L1	100	0.7	0.57	3.5	Worm gear motor	Certain	NMRV050 71B4 0.37kw 70rpm
SCB201-L1	100	0.5	0.57	3.5	Worm gear motor	Certain	NMRV050 71A4 0.25kw 46rpm
Weight		75kg					
Weight per 100mm stroke		9.3kg					

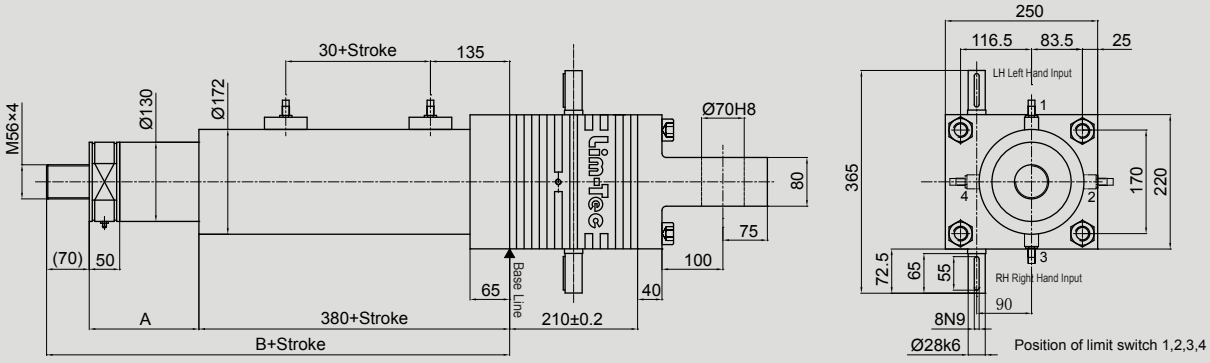
Note:The motor power can be reduced if actual load less than rated load.
Uncertain Actuator are recommended match brake motor

Overall Dimensions of SC Series

SCA200/SCB201 Actuator



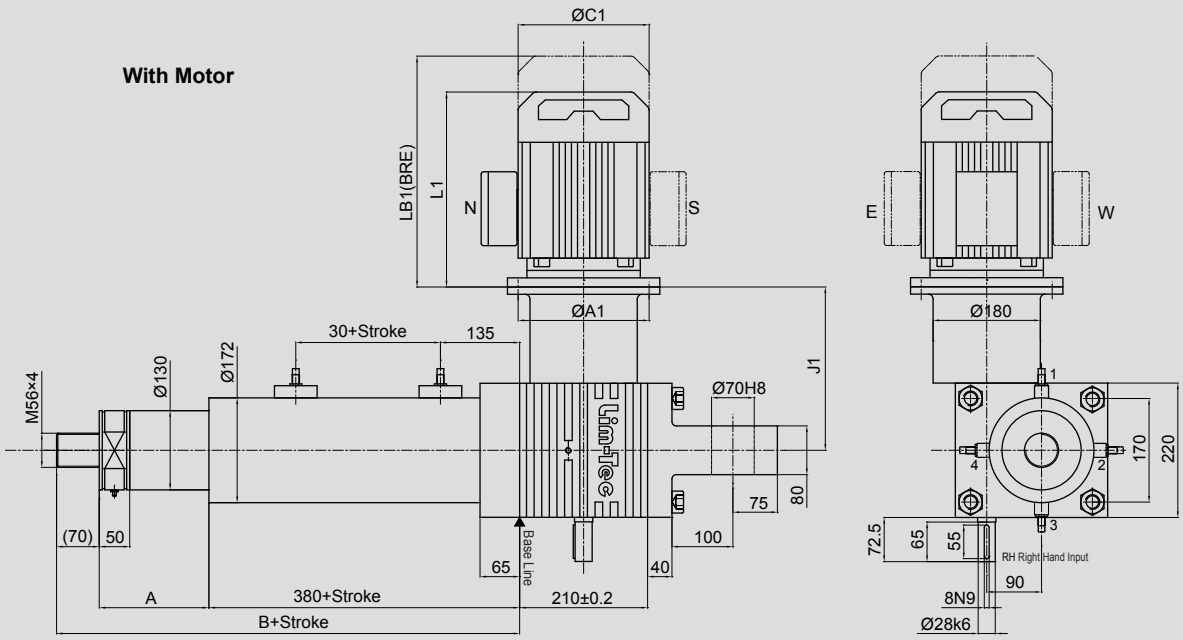
Standard actuator



	SCA200	SCB200
A	180	205
B	630	655

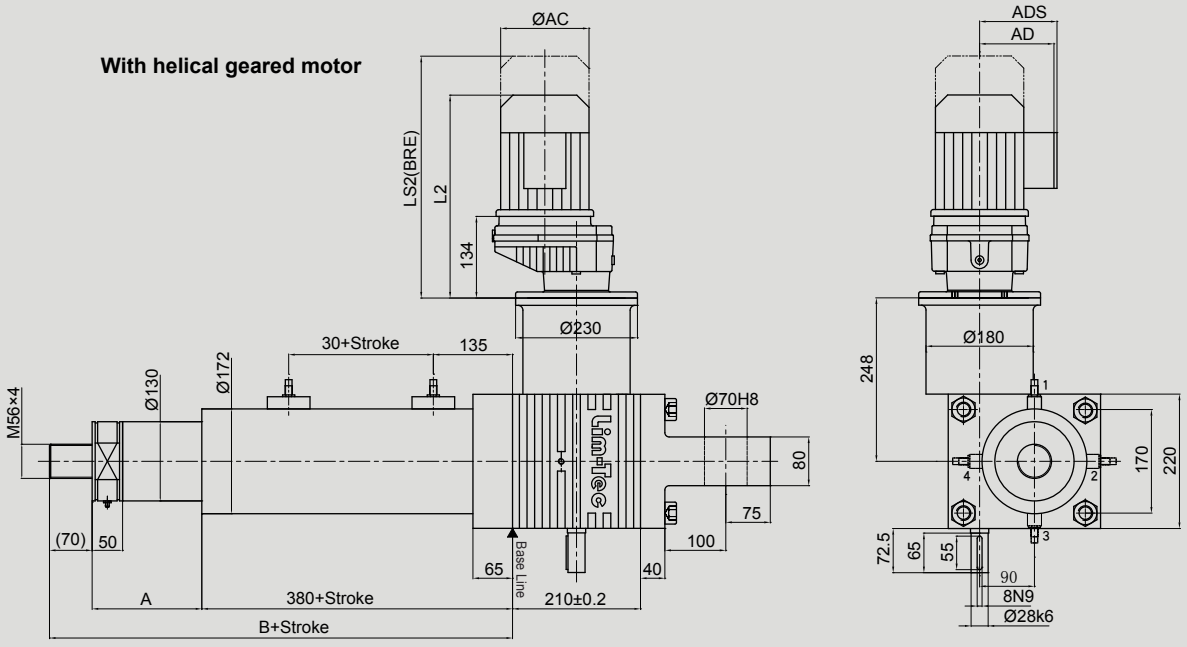
	100B5	112B5	132B5
A1	215	215	265
C1	215	240	275
L1	317	335	395
LB1	384	393	496
J1	268	268	288

With Motor



SCA200/SCB201 Actuator

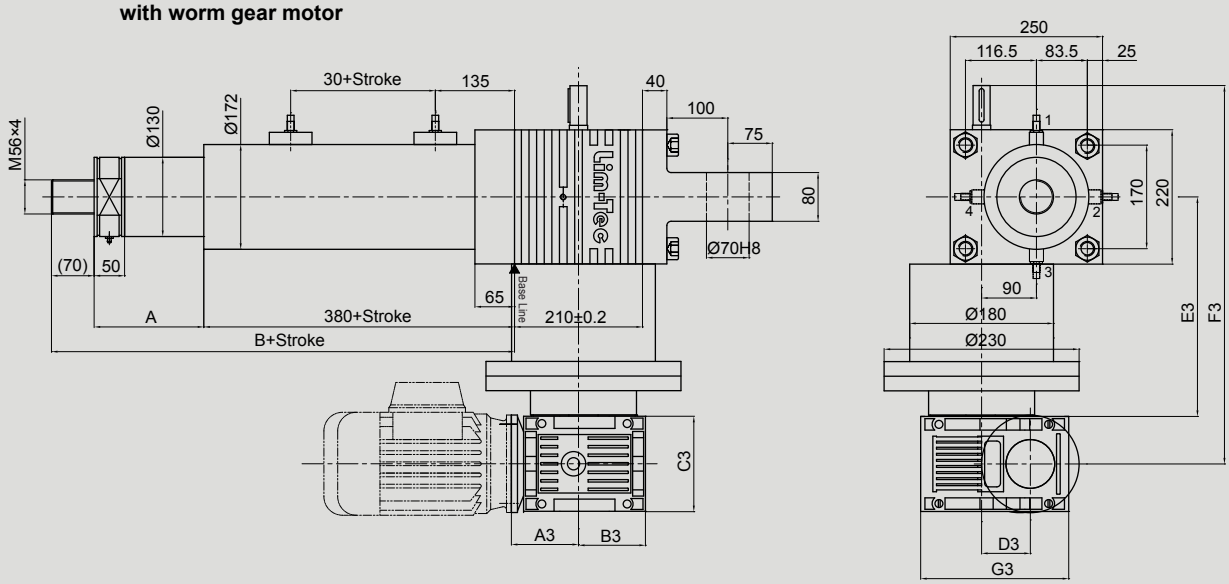
With helical geared motor



	DV100M	DV100L	DV112M
AC	197	197	221
AD	166	166	179
ADS	166	166	182
L2	453	483	488
LS2	538	568	568

	NMRV050	NMRV063	NMRV075	NMRV090
A3	80	95	112.5	129.5
B3	60	72	86	103
C3	92	112	120	140
D3	50	63	75	90
E3	257.5	267.5	267.5	288
F3	486	506	510	540.5
G3	144	174	205	238

with worm gear motor



Stainless Screw Jack

KVL(K) Series Stainless Screw Jack

- ◆ KVL(K)60,85,10,120 Series
- ◆ Load capacity : From 5 Ton - 20 Ton
- ◆ Entire Stainless with SS316(Optional SS304,SS329)
- ◆ Including housing, gland, protection tube, Worm shaft, Screw,
- ◆ Worm gear and nut with tin bronze
- ◆ Application : Food , Papermaking , outdoors ambient
- ◆ Classify according to mounting method : KVL Series are foot mounting, KVK series are Clevis mounting
- ◆ Classify according to Movement model: KVL(K)-S are Screw travelling , KVL(K)-R are Nut Traveling

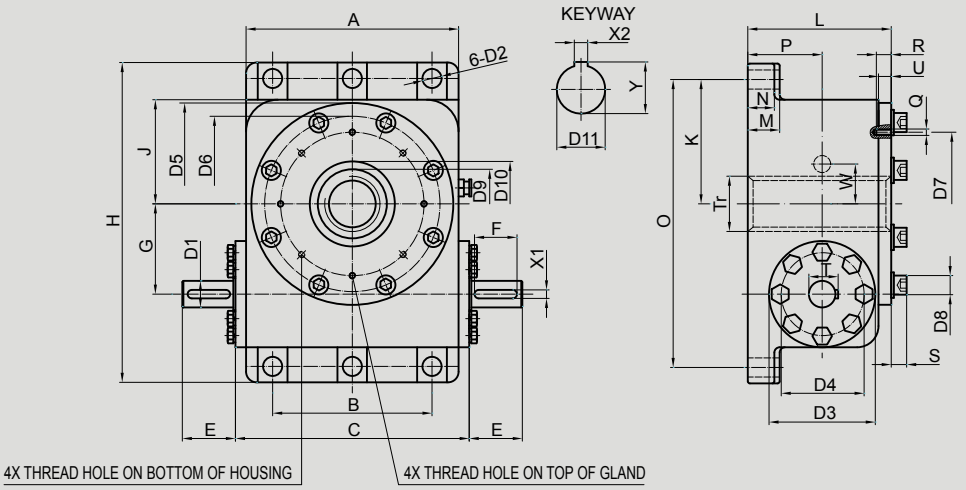
KVL(K) Series performance table

Model		KV60	KV85	KV100	KV120
Rated load kN		50	100	150	200
Screw Dia.X Lead mm		Tr32 × 6	Tr52 × 8	Tr70 × 10	Tr80 × 10
Worm gear radio	V1	1 : 7.25	1 : 12	1 : 18.5	1 : 19
	L1	1 : 20	1 : 24	1 : 56	1 : 38
Stroke for each input turn(mm)	V1	0.83	0.67	0.54	0.526
	L1	0.3	0.33	0.18	0.263
Max. input power kW	V1	1.3	2.5	3	4.5
	L1	1.0	2.0	2.5	3.5
Start torque at full load Nm	V1	36	70	100	130
	L1	18	50	48	90
Start efficiency	V1	0.17	0.14	0.12	0.12
	L1	0.12	0.10	0.08	0.09
Working efficiency at 100 RPM	V1	0.25	0.21	0.18	0.18
	L1	0.18	0.16	0.13	0.13
Housing material		AISI316			
Weight kg	KVL	15	31	55	90
	KVK	17	35	62	100

Note: Working temperature of K series is from -20℃ - +40℃(Please contact Lim-Tec if you need special working temperature)

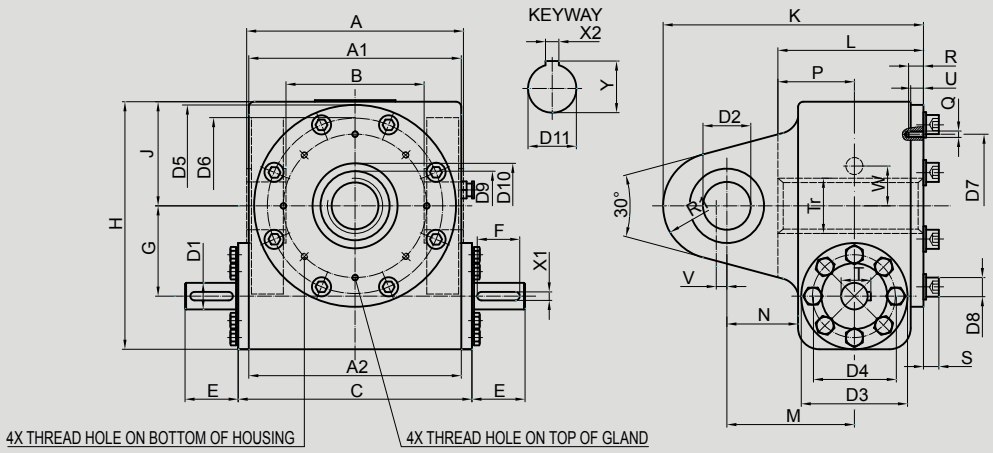
Coding:

Type	Size	Model	Ratio	Stroke	Front Attachment	Input Versions	Input Shaft Direction	Assessories
KVL Foot Mounting	60	S Traveling screw	V1	100	NF Standard male thread	P1 Single input shaft	RH Right hand	SA Stainless screw
KVK Clevis Mounting	85	R Traveling nut	L1		TS Ball joint	P2 Double input shaft	LH Left hand	AR Anti-Rotate device
	100				TF Rod end			WZ Stainless protection tube
	120				FL Flange end			FCH External limit switch box



Model	KVL60	KVL85	KVL100	KVL120
A mm	140	200	230	294
B mm	112	150	180	244
C mm	156	220	250	322
D1(k6) mm	20	25	30	35
D2 mm	18	18	22	22
D3 mm	85	100	100	120
D4 mm	65	78	78	95
D5 mm	140	190	220	280
D6 mm	120	165	195	245
D7 mm	90	135	140	196
D8 mm	16	18	24	24
D9 mm	45	65	90	100
D10 mm	60	80	110	120
D11(H8) mm	28	48	65	70
E mm	40	50	68	61
F mm	32	40	50	55
G mm	60	85	100	120
H mm	235	301	340	416
J mm	70	98	113	145
K mm	86	118	135	170
L mm	111	135	165	214
M mm	23	30	35	43
N mm	20	25	30	38
O mm	207	271	305	376
P mm	57	70	85	109
Q mm	M6	M6	M6	M8
R mm	10	10	12	15
S mm	12	14.5	21	21
T mm	22.5	28	33	38
Tr mm	32×6	52×8	70×10	80×10
U mm	10	12	15	15
W mm	30	15	25	30
X1 mm	6	8	8	10
X2 mm	8	14	18	20
Y mm	31.3	51.8	69.4	74.9

Stainless Screw Jack



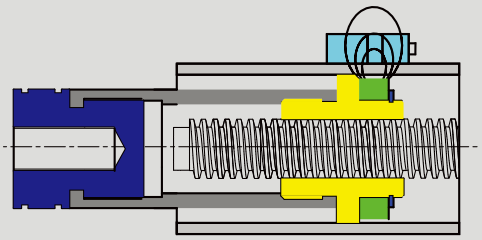
Model	KVK60	KVK85	KVK100	KVK120
A(h12) mm	140	200	230	294
A1 mm	140	200	226	292
A2 mm	140	200	230	294
B(H13) mm	96	130	150	204
C mm	156	220	250	322
D1(k6) mm	20	25	30	35
D2(H8) mm	25	35	45	55
D3 mm	85	100	100	120
D4 mm	65	78	78	95
D5 mm	140	190	220	280
D6 mm	120	165	195	245
D7 mm	90	135	140	196
D8 mm	16	18	24	24
D9 mm	45	65	90	100
D10 mm	60	80	110	120
D11(H8) mm	28	48	65	70
E mm	40	50	68	61
F mm	32	40	50	55
G mm	60	85	100	120
H mm	175	233	265	330
J mm	70	98	115	142
K mm	209	245	295	367
L mm	111	137	165	214
M mm	107	120	145	179
N mm	63	67	75	80
P mm	57	72	85	109
Q mm	M6	M6	M6	M8
R mm	10	10	12	15
R1 mm	40	50	70	68
S mm	12	14.5	21	21
T mm	22.5	28	33	38
Tr mm	32 × 6	52 × 8	70 × 10	80 × 10
U mm	10	12	15	15
V mm	8	10	0	15
W mm	30	15	25	30
X1 mm	6	8	8	10
X2 mm	8	14	18	20
Y mm	31.3	51.8	69.4	74.9

System Accessories:

Magnetic Reed Switch (FCM)

The magnetic reed switches have two types: normally closed reed switch (standard) and the normally open limit switch.
the magnetic ring at the end of the screw shaft moves along with the screw shaft, when the magnetic ring get close to the limit switch, the state of the limit switch will be changed through the magnetic field.
More reed switch can be placed along the stroke length, while the minimal distance between the two switches is 10mm and the magnetic limit switch must be connected to the control circuit. Cable length 1m
Control voltage: 3-130VDC/AC Current: 100mA
Repetitive accuracy: 0.1mm Ambient temperature: -10℃ -70℃
Anti-turn device is not available when the actuator is equipped with FCM

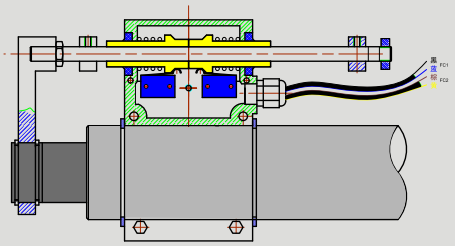
FCM limit switch



External Limit Switches FCE

The FCE device consists of a sealed aluminum alloy box and steel rod. Adjust the position of the rings on steel rod which fixed by screw,we can get the stop position of actuator。 Cable length 1m
Control voltage：3-130VDC/AC
Current：100mA
Repetitive accuracy：0.1mm
Ambient temperature：-30℃ - 70℃
Note:The FCE device is recommended for linear speed lower than 30mm/s，for higher speed it is better to use FCM or use brake.

FCE limit switch



Limit Switch Box FCH

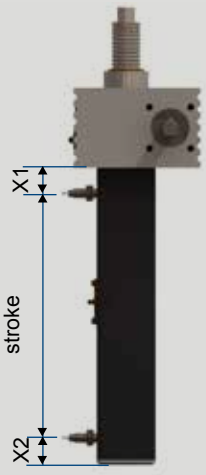
Mounting in shaft of SJ Screw Jack or SC Actuator.FCH is able to control the extreme position.
Structure with planet gear reducer + cam limit switch + potentiometer. Numbers of control position depends on number of cam switch, Max. 4 position control. Potentiometer is optional, could monitor the position of actuator to achieve close loop control.
Ambient Temperature -40℃ - 80℃
Volt: 380V/220V
Protection: IP55, IP67

Proximity limit switch (FCP)

The thread is fixed on the required position outside the protective tube, and can not be adjusted; the normally closed limit switch is the standard.
Control voltage: 10-30VDC
Max output current: 200mA

Repetitive accuracy: 0.04mm
Ambient temperature: -25℃ -70℃
Cable length 1m

Type	X1	X2
SJA5	40	45
SJA10/SJB10	40	55
SJA20/SJB20/21/22	45	50
SJA50/SJB50/51	55	45
SJA80/SJB80/81	60	60
SJA100/SJB100/101	70	50
SJA200/SJB200/201	75	50
SJA300/SJB300	95	60



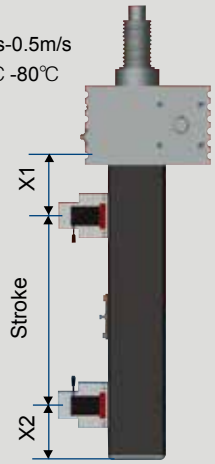
System Accessories

FCG limit switch

Fixed on the rear tube of the screw jack to control the extreme position of the screw shaft. Can be adjusted +5mm up and down when mounted.
The configuration dimension of the limit switch: 80 × 70 × 22cm
Control voltage: 220AC
Operation current: 10A

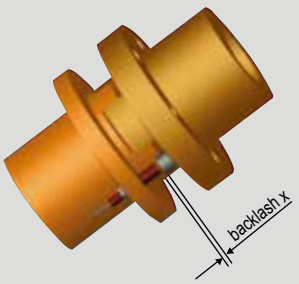
Type	X1	X2
SJA5	40	45
SJA10/SJB10	40	55
SJA20/SJB20/21/22	45	50
SJA50/SJB50/51	55	45
SJA80/SJB80/81	60	60
SJA100/SJB100/101	70	50
SJA200/SJB200/201	75	50
SJA300/SJB300	95	60

Operation speed: 0.05mm/s-0.5m/s
Ambient temperature: -10℃ -80℃
Protective class: IP67
Lifetime: 10,000,000 times
Cable length 1m



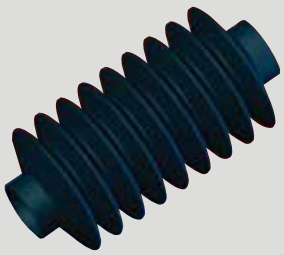
Safety nut SN

SN-S safety nut is used in the screw jack with the traveling screw model
SN-R safety nut is used in the screw jack with the traveling nut movement style.
The safety nut is mounted below / above the main nut and normally will not withstand the axial load and only works against the lateral load. The safety nut will hold the whole load if the nut screw does not function. Replacement for the nut is imperative if the wear of the screw exceeds 20% of the pitch (clearance × changing volume=wear volume). The wear degree can be checked either with eyes or through connecting the sensor to the control circuit, which can sound the alarm timely. Mounting the safety nut will increase the length of the nut, therefore change the configuration of the screw jack, for the specific dimensions please contact the sales engineer.



Bellow

Made of PVC polyester material with sewn construction.
Applicable temperature: -15℃ -70℃
The minimum compressed length of the bellow should be taken into account when mounting the bellow. The compress ratio of the bellow is 10:1
Bellow is preferred for the acme and ball screw jack to prevent the dust and contaminants from damaging the screw.
Both ends of the bellows need to be fixed with the clamps, the position of the bellows need to be confirmed when the order is issued. The BS bellow is also a choice to protect the screw in the harsh environment.

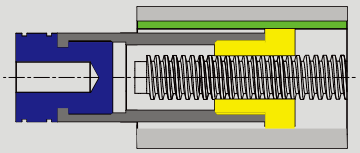


Anti-backlash device AB

Used to adjust the opposite clearance of the acme thread nut. The preload will eliminate the teeth clearance of the screw nut, the smaller the clearance; the higher the position accuracy, but the appropriate clearance > 0.02mm must be guaranteed. Mounting the anti-backlash will decrease the transmission efficiency therefore changing the mechanical parameters of the screw jack. It is advised to lower the duty cycle accordingly.

Anti-turn device AR

Apply to the LAP series of actuators.
It is recommended that the anti-turn device be used in the application, which requires that actuator will not self-rotate in the process of movement. A key groove is made on the nut, which ensures the nut and the actuator move in the direction of the key thus prevent the rotating of the actuator.
Caution: due to the mounting interference, anti-turn device should not be used simultaneously in conjunction with the magnetic limit switch FCM.

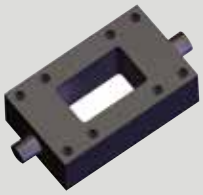


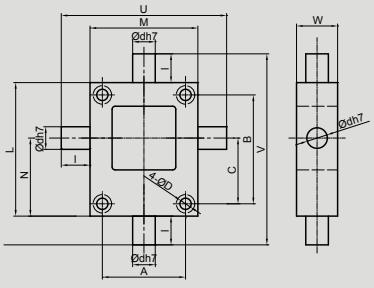
Incremental rotary encoder IRE

Mounted on the input shaft of the screw jack or the screw actuator, the feedback signal forms the closed loop to control the movement of the actuator
Impulse value: 100/500 impulse per running
Voltage: 5VDC
Power supply voltage:5-30VDC
Ambient temperature: -20℃ -110℃
Protective class: IP65

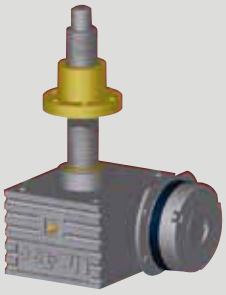
Trunnion mounting panel HBP

Fixed on the housing of the screw jack, enable the screw jack to rotate at a certain degree.
The specific dimensions is related to the model type of the screw jack

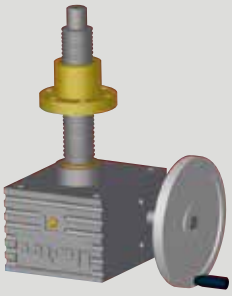




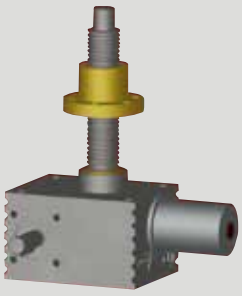
Model	Trunnion											
	A	B	C	D	L	M	N	U	V	W	d	l
SJA5-S-..-HBP	52	60	39	9	80	72	49	108	116	28	15	18
SJA10-S-..-HBP	63	78	49	9	100	85	60	127	142	30	17	21
SJA20-S-..-HBP	81	106	64	11	130	105	76	161	186	40	22	28
SJA50-S-..-HBP	115	150	87	13	180	145	102	225	260	50	32	40
SJA80-S-..-HBP	131	166	100	17	200	175	117	277	302	70	42	51
SJA100-S-..-HBP	155	170	100	21	220	205	125	321	336	75	48	58
SJA200-S-..-HBP	170	200	116.5	26	250	220	141.5	360	390	105	63	70
SJA300-S-..-HBP	200	235	135	30	295	270	165	420	445	115	68	75



Disk brake

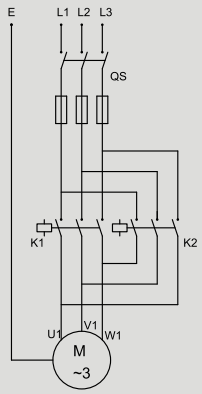


Hand Wheel

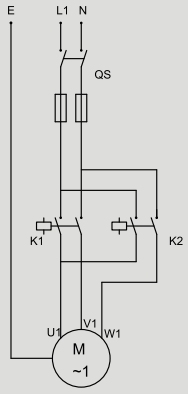


Automatic Lubricator

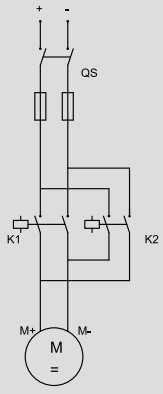
Wiring



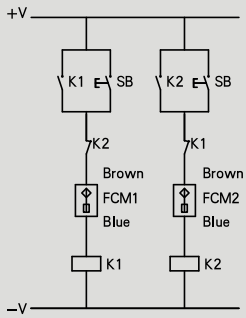
AC 3–Phase Motor



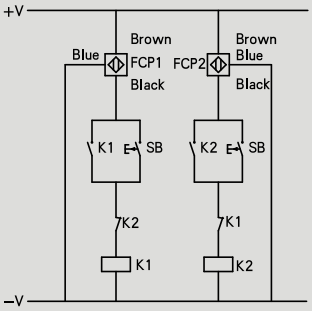
AC 1–Phase Motor



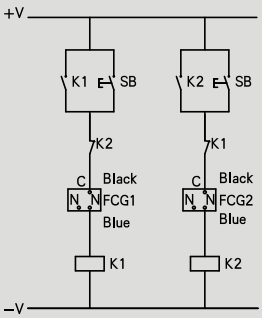
DC Motor



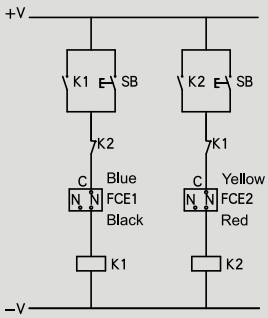
Magnetiv Reed Switches FCM



Inductive Proximity Switches FCP



Mechnical Switches FCG



External Limit Switches FCE

Lubrication and Maintenance

LAP/LBP series of actuator

Long life lubricated, free from maintenance.
The worm gear, worm shaft, bearing and the screw has been well lubricated in the factory, unless there is some leakage of oil or damage, please lubricate the actuators according to the following table.

SJA/SJB/SCA/SCB series of screw jack

The worm gear, worm shaft, bearing and the screw has been well lubricated at the factory, the lubricating volume exceeding the volume stated in the table will impinge the mechanical efficiency of the screw jack meantime increase the possibility of the oil leakage.

Actuator	Worm gearbox		Actuating parts		Screw Jack	Worm gearbox		Actuating parts	
	Lubricant	Quantity[g]	Lubricant	Quantity Per 1m[g]		Lubricant	Quantity[g]	Lubricant	Quantity Per 1m[g]
LAP/LBP22	MOBILEP3 or equivalent	30	MOBIL XHP222 or equivalent	100	SJA5	MOBILEP3 or equivalent	80	MOBIL XHP222 or equivalent	300
LAP/LBP25		45		150	SJA/SJB10		130		400
LAP/LBP28		60		200	SJA/SJB/SCA/SCB20/21/22		170		550
LAP/LBP32		60		300	SJA/SJB/SCA/SCB50/51		430		650
LAP/LBP35		90		400	SJA/SJB/SCA/SCB80/81		850		750
LAP/LBP40		130		500	SJA/SJB/SCA/SCB100/101		1100		850
LAP/LBP56		350		700	SJA/SJB/SCA/SCB200/201		1700		1000
LAP/LBP63		700		950	SJA/SJB300		2550		1500
LAP/LBP80		1500		1200	SJA/SJB450		3570		2000
LAP/LBP120		2500		1500	SJA/SJB700		5100		2600
LAP/LBP200		3600		2000	SJA/SJB1000		7200		3300

Choose different types of grease according to different working environments (high or low temperature environment)

Special grease for the food industry is also available

For the high duty cycle screw jack, the grease will lose its lubricating function; entry of granule contaminants might deteriorate the working performance. It is advised to do a thorough cleaning and re-lubricating the screw jack.

It is recommend to use the grease can which is able to supply the continuous lubrication to the inside surface of the housing automatically.

Appropriate lubrication to the lubricating board inside the rear tube should be carried out periodically.

The nut and the screw should be lubricated appropriately every 200 working hours or according to the specific environment.

Right Angle Gear Reducer

Right Angle Gear Reducer R series

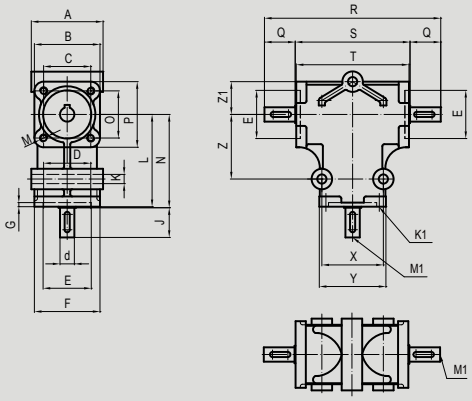
Aluminium alloy housing

Ratio 1,2,3

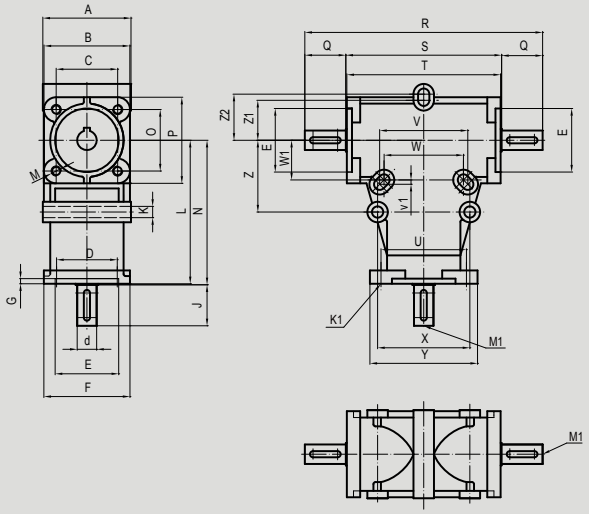
High Efficiency

Model		Max. Torque Nm / Max. output Power KW							
		R9		R14		R19		R24	
		Nm	KW	Nm	KW	Nm	KW	Nm	kw
Output speed	2800	3	0.82	9	2.7	26	7.9	26	7.9
	1400	3	0.45	10	1.5	29	4.4	29	4.4
	900	3	0.32	11	1.1	32	3.1	32	3.1
	710	2	0.15	10	0.76	32	2.4	32	2.4
	450	2	0.11	11	0.53	35	1.7	35	1.7
	300			8	0.25	22	0.71	22	0.71

R9-R14



R19-R24

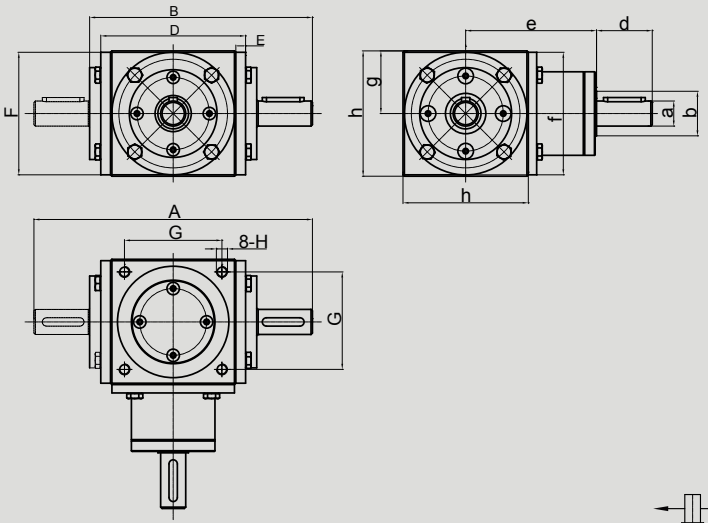


	A	B	C	D	(Ø) d	(Ø) E	F	G	J	(Ø) K	K1	L	M	M1	N	O	P	Q	R	S	T	U	V	V1	W	W1	(Ø)Y	X	Z	Z1	Z2
R9	43	42	30	30	9	30	42	2.5	20	5	Ø5	60	M4	M4	61	30	42	20	117	77	75						50	40	35	20	
R14	70	64	46	46	14	47	64	4	30	9	M8	90	M8	M5	91	46	64	30	172	112	110						65	60	63	32	
R19	86	84	60	60	19	62	84	5	40	11	Ø10.5	140	M10	M8	141	60	84	40	232	152	150	80	86	4.3	77.5	38.7	105	90	70	39	45
R24	86	84	60	60	24	62	84	6	50	11	Ø10.5	140	M10	M8	141	60	84	50	252	152	150	80	86	4.3	77.5	38.7	105	90	70	39	45

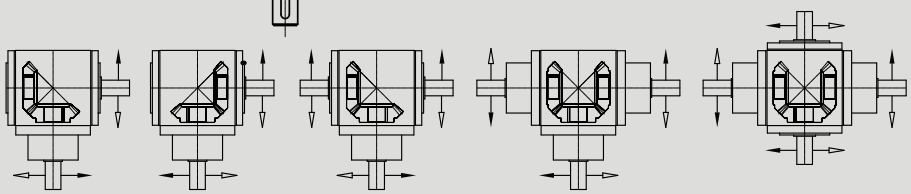
Right Angle Gear Reducer RS series

Single or double output shaft , double or single input shaft
Solid or hollow Shaft

Max. Torque Nm					
Model		090	120	140	160
Output speed	1400	47	105	241	373
	900	51	114	260	411
	710	51	128	264	440
	560	57	130	267	453
	450	60	135	280	470



Ratio	Model
1	090-160
2	090-160



RSS RSSsin RSD RSV RSVF

Size	a	b	d	e	f	g	h	A	B	D	E	F	G	H
090	18_{g6}	22	40	94	88	45	90	200	160	104	7	88	70	M8
120	25_{g6}	30	45	123	118	60	120	246	201	136	8	118	100	M10
140	28_{g6}	35	60	134	138	70	140	296	236	160	10	138	120	M10
160	35_{g6}	40	80	152	158	80	160	464	280	190	15	158	140	M12

Coding:

RS	S	090	/ 1
Model	Output version	Frame	Ratio

AC MOTOR

Actuator and Screw Jace are configured with IEC standard AC 3 Phase motor

Depends Motor RPM we supply 2 Poles , 4 Poles and 6 Poles motor for Linear Actuator

Standard Motor Flange diemsnion are IEC B14 or B5, we also supply non standard flange to meet customer requirement.

Customer can also choose AC single phase motor, DC motor , Step Motor , Servo motor or Expplosion-Proof motor.

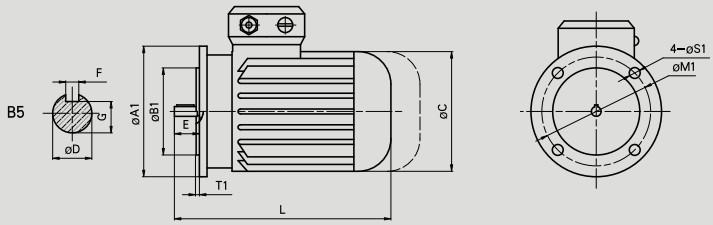
Protection Class: Standard IP54 and Optional : IP55 IP56 IP65 IP66

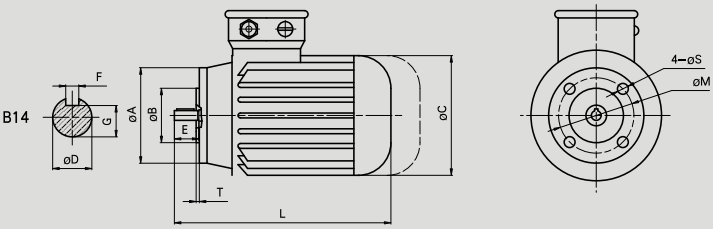
Insulation Class: F , Optional H

Voltage: 380/220V 50Hz, 440V/255 60Hz

Frequency range: 10-60Hz

Accessories: Brake, Temperature pretection device, Encoder

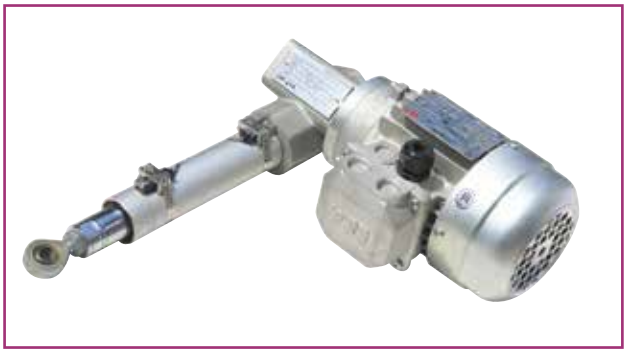




Frame Size	Power kw	Speed RPM	Rated Torque Nm	Current A/400V	Weight kg
56	0.09	1380	0.65	0.45	3.2
	0.09	2830	0.31	0.42	
	0.12	2710	0.48	0.48	
63	0.09	800	1.0	0.5	4.4
	0.12	880	1.3	0.7	
	0.18	2800	0.61	0.51	
	0.12	1370	0.92	0.68	
	0.18	1370	1.3	0.85	
	0.25	2800	0.9	0.78	
71	0.18	890	1.9	0.85	7.5
	0.25	900	2.7	1.0	
	0.25	1400	1.7	0.9	
	0.37	1380	2.5	1.2	
	0.37	2880	1.1	1.3	
	0.55	2860	1.8	2.0	
80	0.37	900	3.9	1.22	12.2
	0.55	1400	3.8	1.7	
	0.75	1410	5.0	2.0	
	0.75	2870	2.56	1.8	
90S	0.75	920	7.8	2.5	15.4
	1.1	1390	10.7	3.8	
	1.5	2800	5.2	3.7	
	1.5	1400	12.8	4.6	
	2.2	2800	7.37	4.53	
100	1.5	940	15.4	4.4	26.5
	2.2	1425	14.8	7.3	
	3.0	1430	20.2	8.9	
	3.0	2860	10.8	7.2	
112	2.2	950	22.0	7.0	36
	4.0	1440	27.0	8.9	

Frame Size	A	A1	B	B1	C	D	E	F	G	L	M	M1	S	S1	T	T1
56	80	120	50	80	110	9	20	3	7.2	189	65	100	M5	7	3.0	3.0
63	90	140	60	95	122	11	23	4	8.5	225	75	115	M5	9	3.0	3.0
71	105	160	70	110	138	14	30	5	11.0	251	85	130	M6	9	3.5	3.5
80	120	200	80	130	157	19	40	6	15.5	286	100	165	M6	12	3.5	3.5
90S	140	200	95	130	175	24	50	8	20.0	320	115	165	M8	12	3.5	3.5
90L	140	200	95	130	175	24	50	8	20.0	335	115	165	M8	12	3.5	3.5
100	160	250	110	180	196	28	60	8	24.0	377	130	215	M8	15	4.0	4.0
112	160	250	110	180	220	28	60	8	24.0	395	130	215	M8	15	4.0	4.0

Product Application：

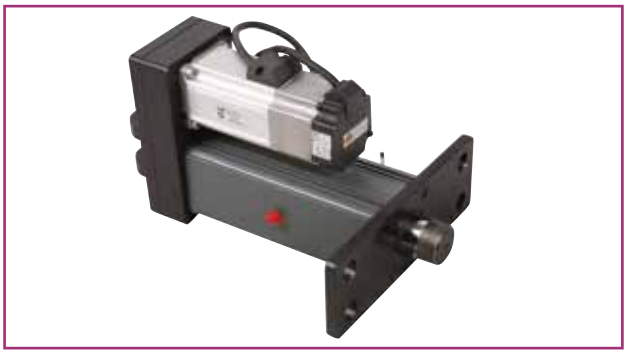


LAP Series Linear Actuator

LAM Series Mini Linear Actuator

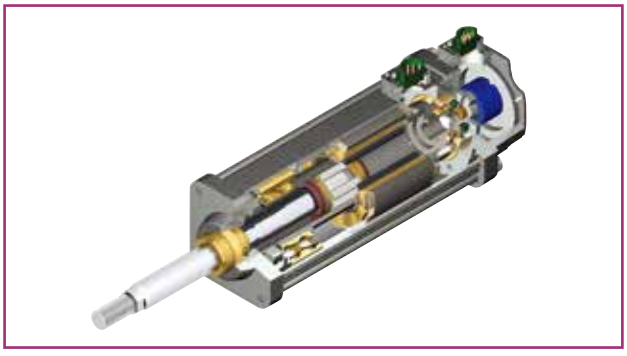
SJA Series Screw Jack

SJB Series Screw Jack



Servo Cylinder

Linear Installation Servo Electric Cylinder



Servo Cylinder

Six degrees of freedom platform

LIM-TEC (Beijing) Transmission Equipment Co.,LTD.

Head office

Circuit court west,Fuxi road ,Industril center of chaobai river ,dachang city ,Hebei provice,China

Tel: 8610-58411399 86316-5276189

Http://www.lim-tec.com E-mail:info@lim-tec.com