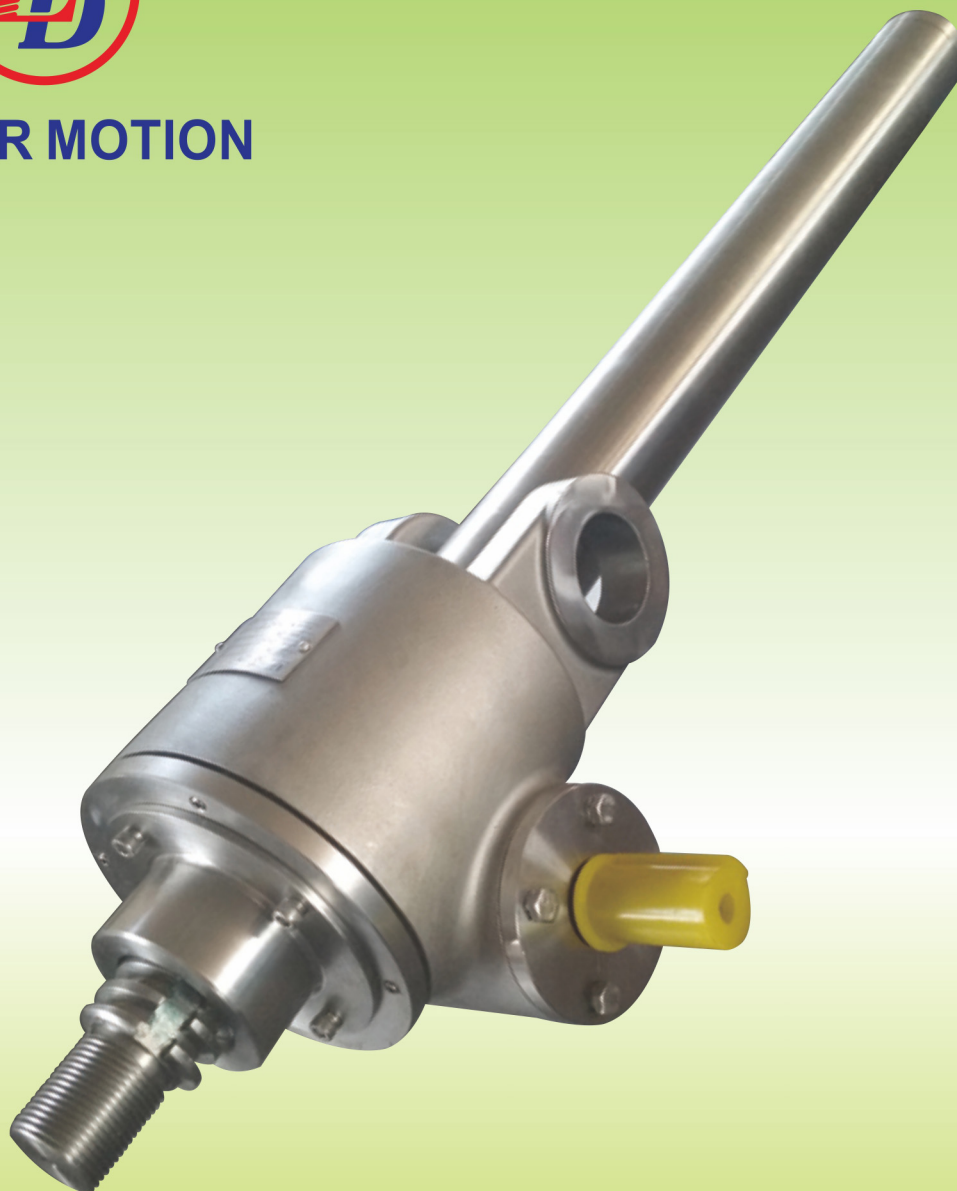


Stainless Screw Jack



LINEAR MOTION



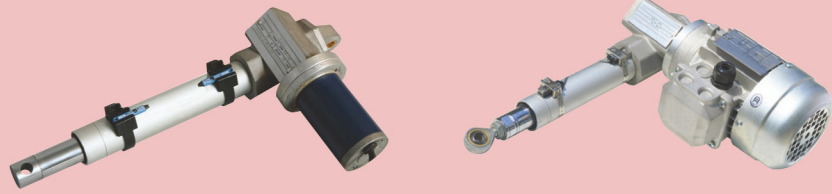


- LAP Series
- LBP Series
- SJA Series
- SJB Series
- DHB Series
- SCA Series
- SCB Series
- KVL Series
- HD Series
- DMB Series

Linear Actuator

Acme screw

LAP Series



Ball screw

LBP Series



Screw Jack

Acme screw

SJA Series



Ball screw

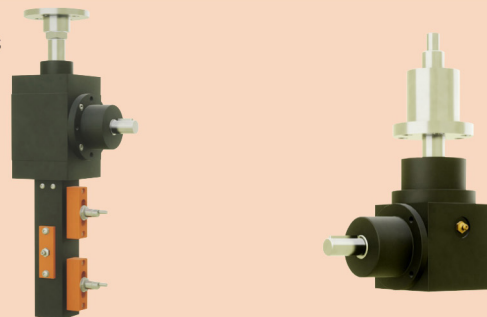
SJB Series



Bevel Gear Screw Jack

Ball screw

DHB Series



Screw Jack Actuator

Acme screw

Ball Screw

SCA Series
SCB Series

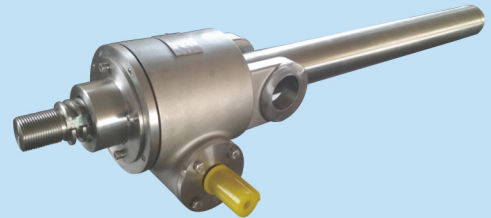


Stainless Screw Jack

Acme screw

KVL Series

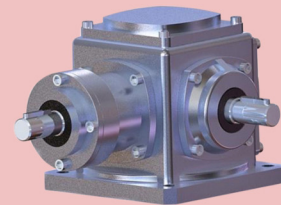
KVK Series



Bevel Gearbox

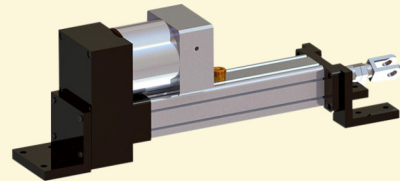
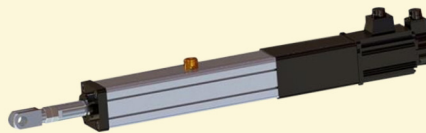
HD Series

T Series



Servo motor cylinder

DMB Series



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 ratio	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

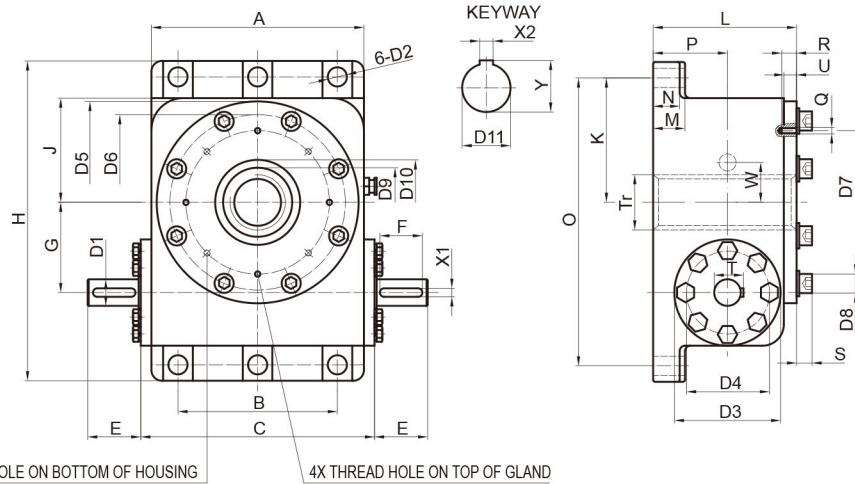
Note: Working temperature of K series is from -20°C - +40°C(Please contact Lude Transmission if you need special working temperature)

Coding:

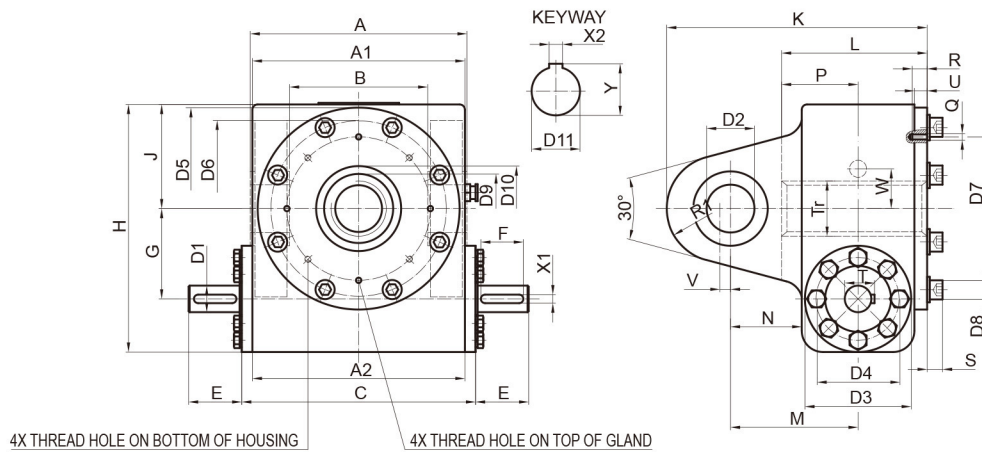
Type	Size	Model	Ratio	Stroke	Front Attachment	Input Versions	Input Shaft Direction	Assessories
KVL Foot Mounting	60	S Traveling screw	V1	100	NF Standard male thread	P1 Single input shaft	RH Right hand	SA Stainless screw
KVK Clevis Mounting	85	R Traveling nut	L1		TS Ball joint	P2 Double input shaft	LH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



Stainless Screw Jack



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	Ø20	Ø25	Ø30	Ø35
D2 mm	Ø18	Ø18	Ø22	Ø22
D3 mm	Ø85	Ø100	Ø100	Ø120
D4 mm	Ø65	Ø78	Ø78	Ø95
D5 mm	Ø140	Ø190	Ø220	Ø280
D6 mm	Ø120	Ø165	Ø195	Ø245
D7 mm	Ø90	Ø135	Ø140	Ø196
D8 mm	Ø16	Ø18	Ø24	Ø24
D9 mm	Ø45	Ø65	Ø90	Ø100
D10 mm	Ø60	Ø80	Ø110	Ø120
D11(H8) mm	Ø28	Ø48	Ø65	Ø70
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



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	Ø20	Ø25	Ø30	Ø35
D2(H8) mm	Ø25	Ø35	Ø45	Ø55
D3 mm	Ø85	Ø100	Ø100	Ø120
D4 mm	Ø65	Ø78	Ø78	Ø95
D5 mm	Ø140	Ø190	Ø220	Ø280
D6 mm	Ø120	Ø165	Ø195	Ø245
D7 mm	Ø90	Ø135	Ø140	Ø196
D8 mm	Ø16	Ø18	Ø24	Ø24
D9 mm	Ø45	Ø65	Ø90	Ø100
D10 mm	Ø60	Ø80	Ø110	Ø120
D11(H8) mm	Ø28	Ø48	Ø65	Ø70
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.

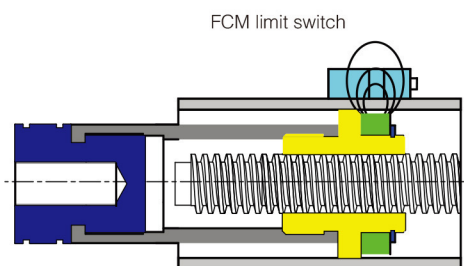
the magnetic ring at the end of the screw shaft moves along with the screw shaft, when the magnetic ring get close to the limit switch, the state of the limit switch will be changed through the magnetic field.

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°C -70°C

Anti-turn device is not available when the actuator is equipped with FCM



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

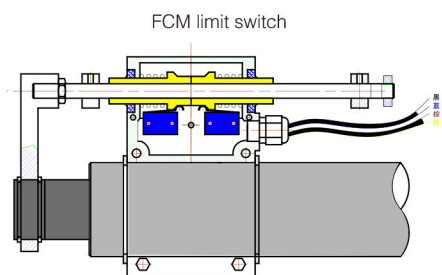
Control voltage: 3-130VDC/AC

Current: 100mA

Repetitive accuracy: 0.1mm

Ambient temperature: -30°C - 70°C

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.



Limit Switch Box FCH

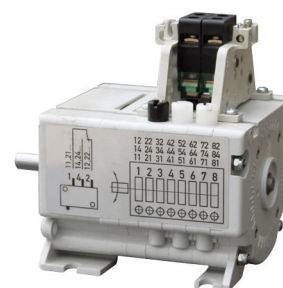
Mounting in shaft of SJ Screw Jack or SC Actuator. FCH is able to control the extreme position.

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°C - 80°C

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

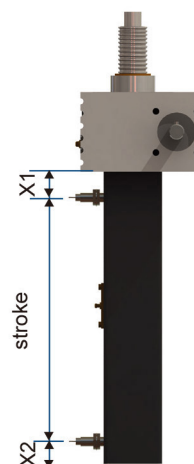
Max output current: 200mA

Repetitive accuracy: 0.04mm

Ambient temperature: -25°C -70°C

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

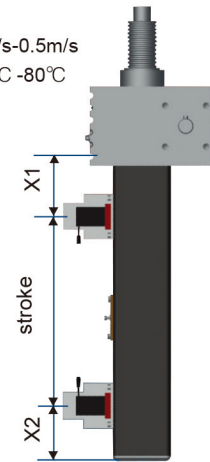


FCG limit switch

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

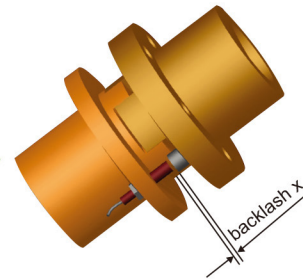
Operation speed: 0.05mm/s-0.5m/s
 Ambient temperature: -10°C -80°C
 Protective class: IP67
 Lifetime: 10,000,000 times
 Cable length 1m

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



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.



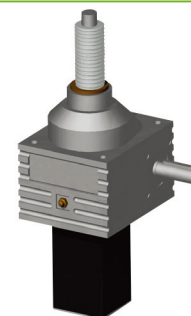
Bellow

Made of PVC polyester material with sewn construction.
 Applicable temperature: -15°C -70°C
 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.



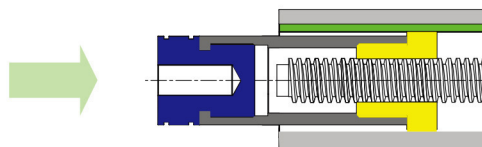


System Accessories:

Anti-turn device AR

Apply to the LAP/LBP series of actuators and SCA/SCB series 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: aution: Anti-turn device should not be used simultaneously with the magnetic limit switch FCM
 AR is standard configuration for SJA/SJB-S screw Jacks and DHB-S bevel gear screw jacks.



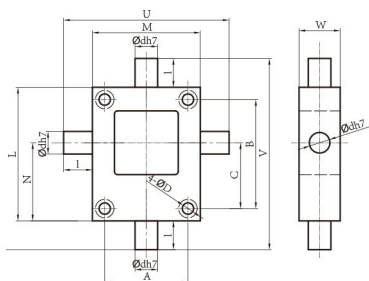
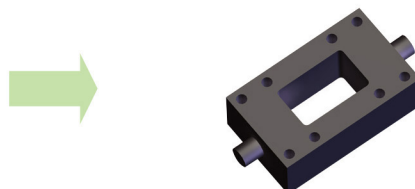
Incremental rotary encoder IRE

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°C -110°C
 Protective class: IP65

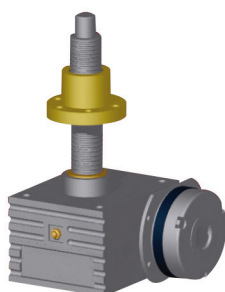


Trunnion mounting panel HBP

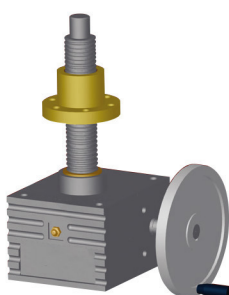
Fixed on the housing of the screw jack, enable the screw jack to rotate at a certain degree.
 The specific dimensions is related to the model type of the screw jack



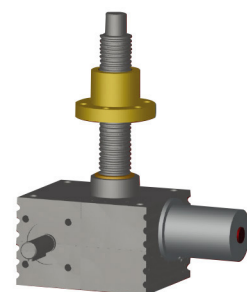
Model	Trunnion											
	A	B	C	D	L	M	N	U	V	W	d	l
SJA5-S...HBP	52	60	39	9	80	72	49	108	116	28	15	18
SJA10-S...HBP	63	78	49	9	100	85	60	127	142	30	17	21
SJA20-S...HBP	81	106	64	11	130	105	76	161	186	40	22	28
SJA50-S...HBP	115	150	87	13	180	145	102	225	260	50	32	40
SJA80-S...HBP	131	166	100	17	200	175	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

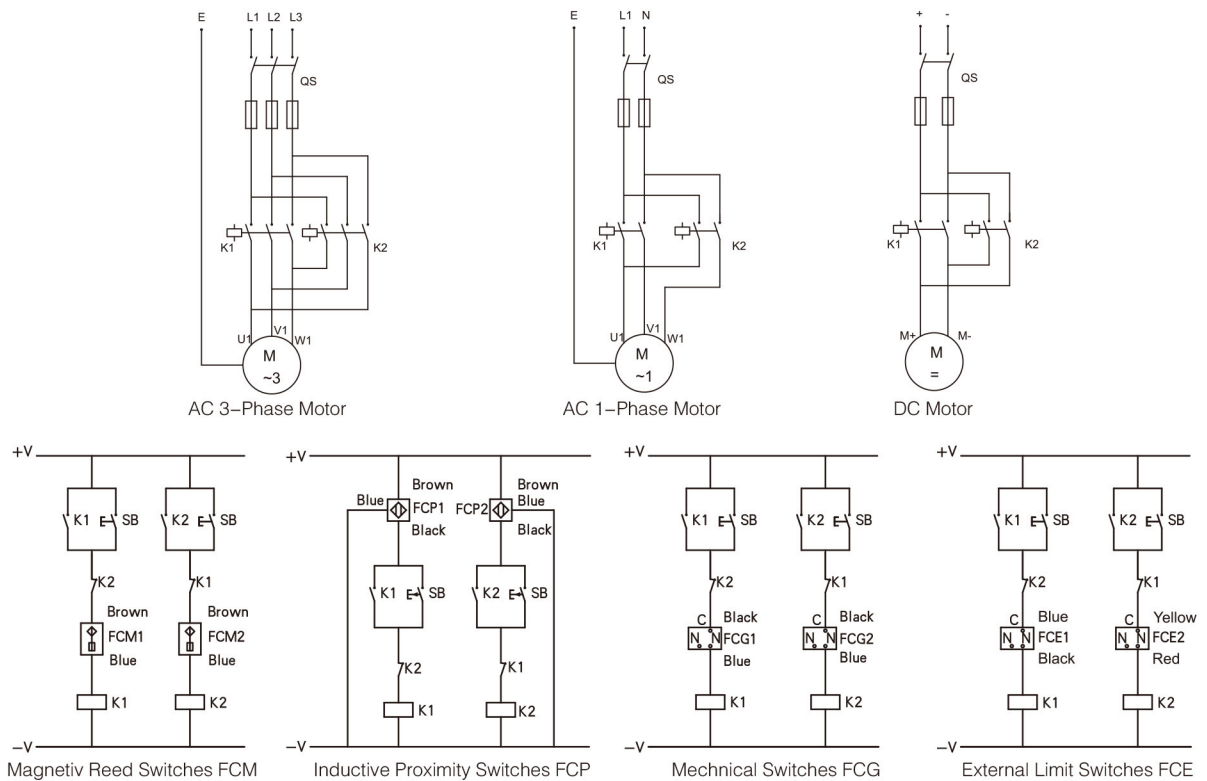


Hand Wheel



Automatic Lubricator

Wiring:



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/SCA/SCB300		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
LAP/LBP300		5500		2800					

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.

AC MOTOR

Actuator and Screw Jack 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's requirements.

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

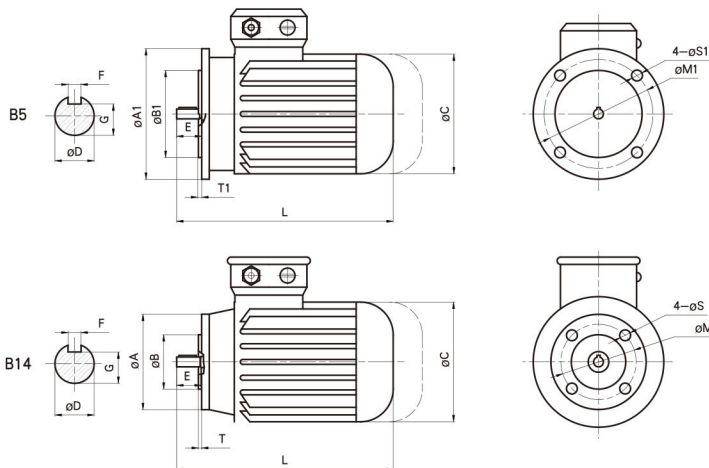
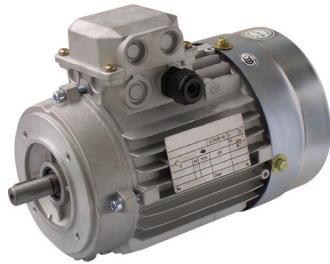
Protection Class: Standard IP54 and Optional : IP55 IP56 IP65 IP66

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	1300	0.66	0.45	4
	0.09	2750	0.31	0.42	
	0.12	2750	0.42	0.48	
63	0.18	2780	0.86	0.68	4.5
	0.12	1330	1.29	0.85	
	0.18	1330	0.62	0.51	
	0.25	2780	0.86	0.78	
71	0.18	900	1.91	0.85	6.2
	0.25	900	2.65	1	
	0.25	1360	1.76	0.9	
	0.37	1360	2.6	1.2	
	0.37	2800	1.26	1.3	
	0.55	2800	1.88	2	
80	0.18	690	2.49	0.76	17
	0.25	690	3.46	0.97	
	0.37	925	3.82	1.22	
	0.55	925	5.68	1.63	
	0.55	1430	3.67	1.7	
	0.75	1430	5.01	2	
	0.75	2870	2.5	1.8	
	1.1	2875	3.65	2.5	
90S	0.37	695	5.08	1.3	29
	0.55	695	7.56	1.9	
	0.75	945	7.58	2.5	
	1.1	950	11.1	3.3	
	1.1	1430	7.35	3.8	
	1.5	1430	10	4.6	
	1.5	2880	4.97	3.7	
	2.2	2880	7.3	4.6	
100	0.75	705	10.2	2.3	37
	1.1	705	14.9	3.1	
	1.5	950	15.1	4.4	
	2.2	1440	14.6	7.3	
	3	1440	19.9	8.9	
	3	2880	9.95	7.2	
112	1.5	710	20.2	4.1	50
	2.2	965	21.8	7.2	
	4	1455	26.3	8.4	
132	2.2	725	29	5.7	77
	3	725	39.5	7.5	
	3	975	29.4	7.2	
	4	975	39.2	9.5	
	5.5	1465	35.9	11.2	
	7.5	1465	48.9	15	
160	4	730	52.3	9.8	146
	5.5	730	72.0	13.1	
	7.5	980	73.1	16.2	
	11	980	107	23.1	
	11	1470	71.5	21.5	
	15	1470	97.4	28.8	

Frame Size	A	A1	B	B1	C	D	E	F	G	L	M	M1	S	S1	T	T1
56M	80	120	50	80	115	9	20	3	7.2	198	65	100	M5	7	2.5	3
63M	90	140	60	95	127	11	23	4	8.5	225	75	115	M5	10	2.5	3
71M	105	160	70	110	145	14	30	5	11	255	85	130	M6	10	2.5	3.5
80M	120	200	80	130	165	19	40	6	15.5	295	100	165	M6	12	3	3.5
90S	140	200	95	130	180	24	50	8	20	345	115	165	M8	12	3	3.5
90L	140	200	95	130	180	24	50	8	20	385	115	165	M8	12	3	3.5
100L	160	250	110	180	205	28	60	8	24	390	130	215	M8	15	3.5	4
112M	160	250	110	180	225	28	60	8	24	455	130	215	M8	15	3.5	4
132S	200	300	130	230	270	38	80	10	33	475	165	265	M10	15	4	4
132M	200	300	130	230	270	38	80	10	33	510	165	265	M10	15	4	4
160M	300	350	230	250	320	42	110	12	37	610	265	300	M12	18.5	4	5
160L	300	350	230	250	320	42	110	12	37	655	265	300	M12	18.5	4	5



Dezhou Lude Transmission Equipments CO.,LTD

NO.2758 Mengyin Road, Economic&Technical Development Zone, Dezhou, Shandong, China

TEL: 0086-534-2765998 2761998

E-mail: ludetransmission@gmail.com china@ludetransmission.com

Web: www.ludetransmission.com