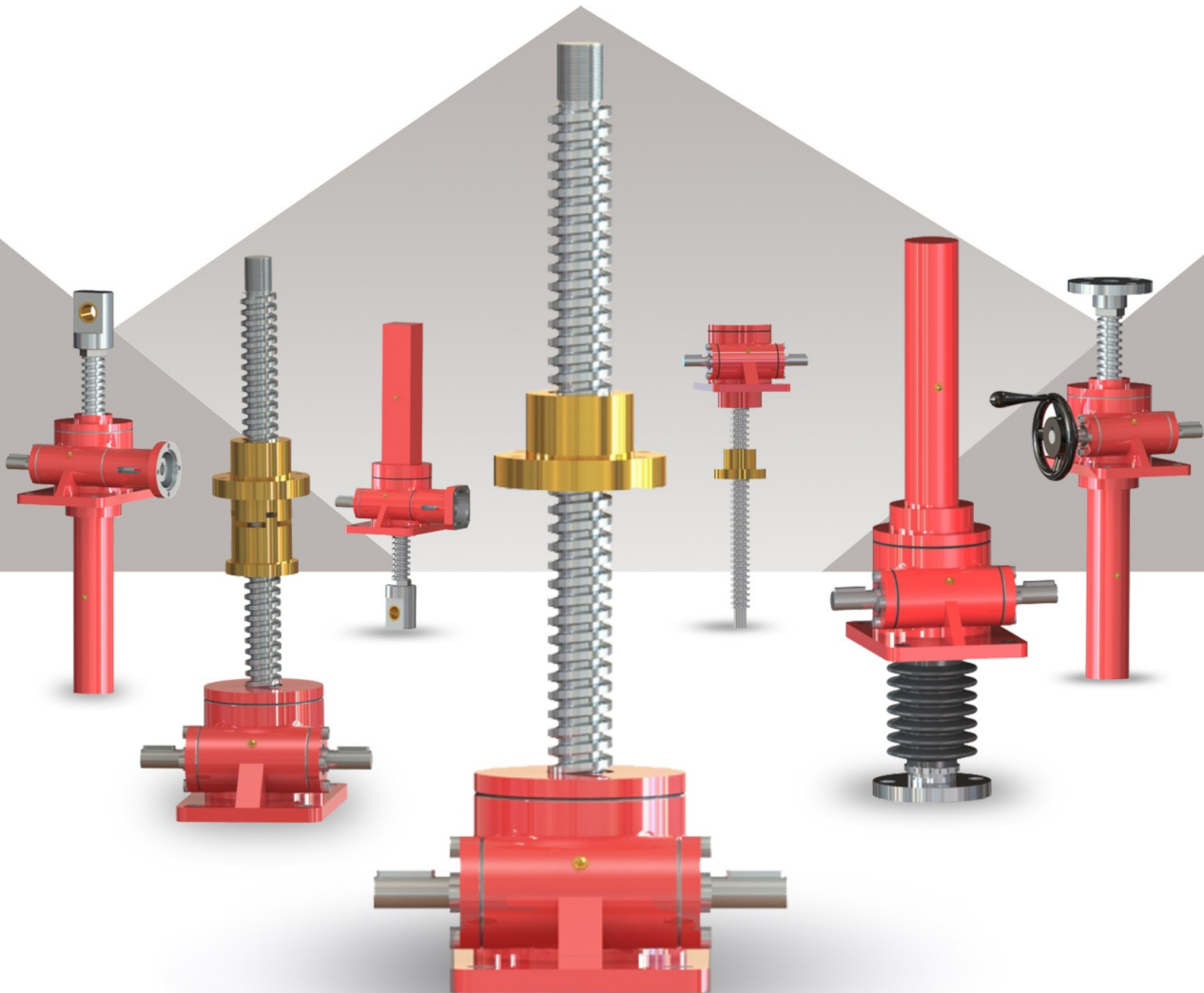# LUDE TRANSMISSION

HK Series Screw Jack

HK SERIES SCREW JACK

1. Product Introduction

1.1 HK series worm gear screw lifter (other name is Jack);

1.2 Compact structure, small size;

1.3 Easy mounting, varied types;

1.4 High reliability. Long service life;

1.5 With the function of ascending, descending, thrusting, overturning;

1.6 Can be applied in one unit or multiple units;

1.7 Wide motivity. It can be driven by electrical motor and manual force;

1.8 It is usually used in low speed situation, widely used in the fields of metallurgy, mechanical, construction, chemical, irrigation works, medical treatment.

2. Model Introduction

HK	D	10T	– 12	– A	R	– 300	– B	– P
1	2	3	4	5	6	7	8	9
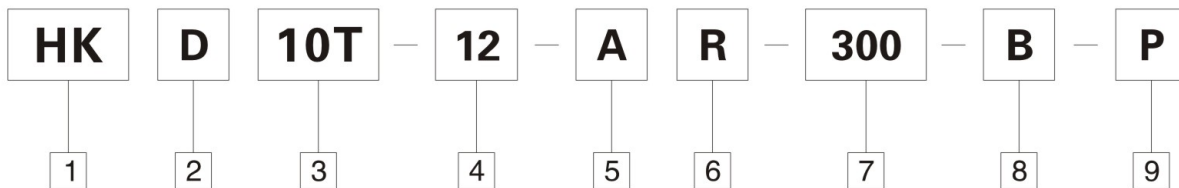
1
Products code
HK––worm gear
linear
actuator

2
Connector of
input shaft
D–with motor
flange
Non–code–basic

3
Specification
Expressed by
the Carrying
Tonnage

4
Ratio
12

5
Mounting Option code A
A.B––Basic Model
C.D––Screw fluctuate
without rotation
E.F––Screw rotate without
fluctuation
more information from 3
Mounting option

6
Code of screw head
R–Column type
H–Bolt hole type
S–Screw type
T–Coping type

7
Total 8 species model:
100.200.300.400.500.
600.700.800.1000mm.
choose according to
using situation. If other
model needed, can be
made to order

8
Shaft direction B
HK series have A.B
and C three species
HK D series have A.B.C
and D four species

9
Safeguard pipe
P– with safeguard pipe
Without safeguard pipe

3. Mounting Option

| Basic Model		Screw fluctuate without rotation		Screw rotate without fluctuation	
A	B	C	D	E	F

Explain:

1. Basic Model: The nut turns the screw to move up and down. This is the installation for basic screw lifter.
   ※Notice: There will be rotation force when screw is ascending and decending. So it's need to prevent rotation.
2. Screw fluctuate without rotation: work under the situation that doesnot have connection and other situations that anti–rotation cannot be realized.
3. Screw rotate without fluctuation: To get the longer travel, this prodel screw rotate without fluctuation is an option, which screw rotate and nut move. If longer travel, the shaft with bracket will achieve a good effect.

4. Express of the Shaft Orientation

4.1 Express of HK series Bearing orientation
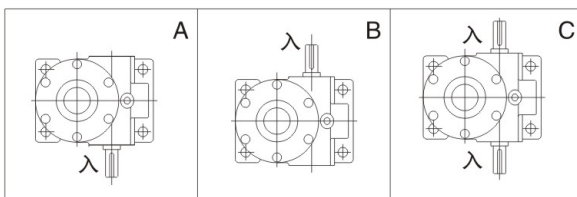
4.2 Express of HKD series Bearing orientation
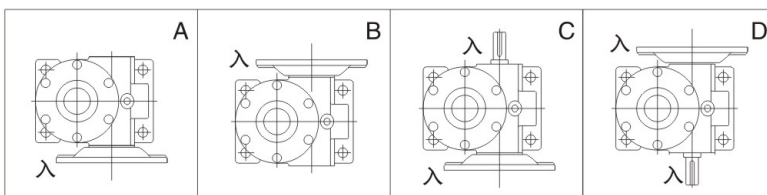
5. Capacity and Model Selection

Model size	Ratio	Input shaft revolution speed 1800r/min			Input shaft revolution speed 1500r/min			Input shaft revolution speed 1200r/min			Input shaft revolution speed 900r/min			Input shaft revolution speed 600r/min			Input shaft revolution speed 300r/min		
		Model size (kw)	Lifter froce (kg)	Hoist speed (m/min)	Model size (kw)	Lifter froce (kg)	Hoist speed (m/min)	Model size (kw)	Lifter froce (kg)	Hoist speed (m/min)	Model size (kw)	Lifter froce (kg)	Hoist speed (m/min)	Model size (kw)	Lifter froce (kg)	Hoist speed (m/min)	Model size (kw)	Lifter froce (kg)	Hoist speed (m/min)
HK–2T	1/5	0.69	500	1.80	0.64	550	1.50	0.65	700	1.20	0.63	900	0.90	0.46	1000	0.60	0.37	1000	0.30
	1/10	0.37	500	0.90	0.37	550	0.75	0.37	700	0.60	0.37	950	0.45	0.37	1000	0.30	0.19	1350	0.15
	1/20	0.37	600	0.45	0.37	700	0.38	0.37	900	0.30	0.37	1200	0.23	0.19	1350	0.15	0.19	1350	0.08
HK–3T	1/6	0.98	700	1.80	0.93	800	1.50	0.88	950	1.20	0.91	1300	0.90	0.84	1800	0.60	0.42	1800	0.30
	1/12	0.66	950	0.90	0.64	1100	0.75	0.61	1300	0.60	0.57	1650	0.45	0.46	2000	0.30	0.37	2000	0.15
	1/24	0.37	950	0.45	0.37	1100	0.38	0.37	1300	0.30	0.37	1650	0.23	0.37	2000	0.15	0.19	2000	0.08
HK–5T	1/6	1.39	900	1.80	1.28	1000	1.50	1.24	1200	1.20	1.16	1500	0.90	0.87	1700	0.60	0.54	2100	0.30
	1/12	1.10	1350	0.90	1.01	1500	0.75	0.98	1800	0.60	0.87	2150	0.45	0.58	2150	0.30	0.37	2500	0.15
	1/24	0.78	1800	0.45	0.72	2000	0.38	0.69	2400	0.30	0.55	2550	0.23	0.42	2900	0.15	0.37	2850	0.08
HK–10T	1/8	2.12	1300	1.80	1.97	1450	1.50	1.85	1700	1.20	1.72	2100	0.90	1.66	3050	0.60	1.31	4800	0.30
	1/16	1.12	1300	0.90	1.04	1450	0.75	0.98	1700	0.60	0.95	2200	0.45	0.87	3050	0.30	0.69	4800	0.15
	1/32	0.80	1750	0.45	0.75	1950	0.38	0.69	2250	0.30	0.64	2800	0.23	0.63	4100	0.15	0.48	6400	0.08
HK–15T	1/8	2.00	1300	1.80	1.86	1450	1.50	1.75	1700	1.20	1.62	2100	0.90	1.57	3050	0.60	1.24	4800	0.30
	1/16	1.06	1300	0.90	0.98	1450	0.75	0.93	1700	0.60	0.89	2200	0.45	0.83	3050	0.30	0.65	4800	0.15
	1/32	0.75	1750	0.45	0.70	1950	0.38	0.65	2250	0.30	0.61	2800	0.23	0.59	4100	0.15	0.46	6400	0.08
HK–20T	1/10	2.66	1400	1.80	2.42	1850	1.50	2.25	1950	1.20	2.12	2450	0.90	1.93	3350	0.60	1.41	4900	0.30
	1/20	1.42	1600	0.90	1.47	1850	0.75	1.37	2250	0.60	1.28	2800	0.45	1.18	3850	0.30	0.86	5600	0.15
	1/40	1.14	2400	0.45	1.17	2800	0.38	1.09	3350	0.30	1.07	4400	0.23	0.93	5750	0.15	0.69	8400	0.08
HK–30T	1/12	3.62	1850	1.80	3.51	2150	1.50	3.39	2600	1.20	3.18	3250	0.90	2.94	4500	0.60	2.09	6400	0.30
	1/18	2.65	1900	1.20	2.68	2300	1.00	2.57	2750	0.80	2.45	3500	0.60	2.19	4700	0.40	1.56	6700	0.20
	1/36	1.66	2200	0.60	1.63	2600	0.50	1.60	3200	0.40	1.47	3900	0.30	1.36	5400	0.20	1.20	9600	0.10
HK–40T	1/12	4.15	1975	1.80	4.02	2300	1.50	3.81	2725	1.20	3.80	3625	0.90	3.48	4975	0.60	2.48	7050	0.30
	1/18	3.20	2125	1.20	3.20	2550	1.00	3.04	3025	0.80	3.03	4025	0.60	2.74	5450	0.40	1.94	7725	0.20
	1/36	2.14	2625	0.60	2.07	3050	0.50	1.98	3650	0.40	1.99	4875	0.30	1.80	6600	0.20	1.40	10300	0.10
HK–50T	1/7	9.47	2100	3.60	9.17	2450	3.00	9.02	2850	2.40	8.58	4000	1.80	8.20	5450	1.20	5.84	7750	0.60
	1/14	5.76	2350	1.80	5.71	2800	1.50	5.57	3300	1.20	5.39	4550	0.90	5.06	6200	0.60	3.57	8750	0.30
	1/28	4.07	3050	0.90	3.89	3500	0.75	3.91	4100	0.60	3.65	5850	0.45	3.48	7800	0.30	2.45	11000	0.15
HK–100T	1/8	16.3	3500	3.60	16.1	4000	3.00	15.8	5400	2.40	15.1	7100	1.80	14.8	9850	1.20	9.70	12950	0.60
	1/16	11.7	4300	1.80	11.6	5400	1.50	10.5	7200	1.20	11.00	9450	0.90	9.62	11800	0.60	7.08	17350	0.30
	1/32	8.65	5500	0.90	9.55	6800	0.75	7.35	10000	0.60	7.53	14300	0.45	7.02	15750	0.30	5.80	26050	0.15

6. Screw lifter selection

6.1 Total current load calculate

$Ws=Wmax \times fs$

Ws--current load　Wmax--max load　fs--using coefficient（more information in table1）

Table 1 using coefficient(fs)

Based on sitiuation	Smooth load;light load inertia	light shock load; mid load inertia	strong shock load; heavy load inertia
Based on cofficient	1.0~1.3	1.3~1.5	1.5~3.0

6.2 CActual load calculations for the screw lifting device or Current load calculations for the screw lifter

$W=Ws/(S \times fd)$

W--unit current load　Ws--current load　S --linkage quantity

fd--linkage coefficient(more information in table 2)

Table 2 linkage coefficient(fd)

Linkage quantity	1	2	3	4	5~8
Using coeffient	1	0.95	0.9	0.85	0.8

6.3 Stroke of screw option

Choose adequate stroke of the screw with concerning enough screw movement inertia...

6.4 Choose screw model

Choose screw model according to capacity, lifting speed, stroke and driving fountainhead.

6.5 The screw caculations(more information in table 3)

Table 3 Screw calculates

Model	Screw dia	length of protect pipe	"S"type screw end		"H"type screw end		"R"type screw end		"T"type screw end	
			L1=L+SC	L2=L1−SD	L1=L+HB+HD	L2=L1−HB−HE	L1=L+RB	L2=L1−RC	L1=L+TE	L2=L1−TF
HK−2T	Tr26×5	L+55		L1−40		L1−50−20	L+165	L1−55	L+135	L1−25
HK−3T	Tr32×6	L+60	L+180	L1−50	L+25+195	L1−65−25	L+195	L1−65	L+160	L1−30
HK−5T	Tr38×6	L+60		L1−50		L1−65−25	L+195	L1−65	L+160	L1−30
HK−10T	Tr46×8	L+65	L+220	L1−60	L+32+255	L1−95−32	L+225	L1−65	L+200	L1−40
HK−15T	Tr52×8	L+65		L1−60		L1−95−32	L+225	L1−65	L+210	L1−50
HK−20T	Tr65×10	L+75	L+260	L1−80	L+35+295	L1−115−35	L+250	L1−70	L+235	L1−55
HK−30T	Tr75×12			L1−80		L1−135−44	L+295	L1−75	L+285	L1−65
HK−40T	Tr80×12		L+360	L1−100	L+54+410	L1−150−54	L+355	L1−95	L+330	L1−70
HK−50T	Tr90×14			L1−120		L1−165−64	L+430	L1−115	L+390	L1−75
HK−100T	Tr100×16		L+495	L1−150	L+70+545	L1−200−70	L+485	L1−140	L+445	L1−100

Note: L1=Screw total length, L2=Thread length

6.6 Screw stability check
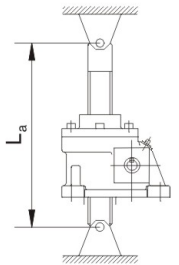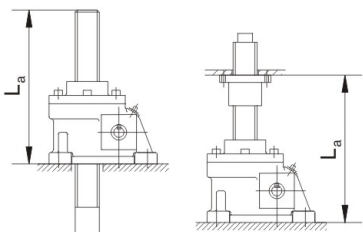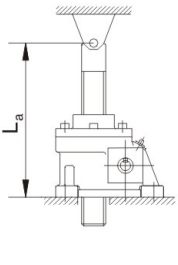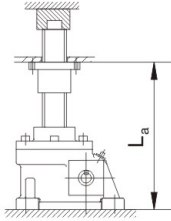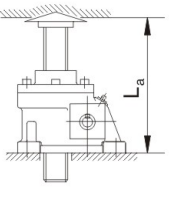
$P_{cr} = f_m \times (d^2/L_a)^2$ Should insure $P_{cr} > W \times S_f$ (usual $S_f=4$)

P_{cr}−−Screw critical loading(N) f_m−− Length coefficient(more information from table 4)

d−−diameter of screw bottom(mm)(more information from table 5) L_a−−working length(mm)

W−−Current load of unit screw lifter(N) S_f−−security coefficient(usual $S_f=4$)

Table 4 Length coefficient

Two ends sustation $f_m = 10 \times 10^4$	One shaft end fixed the other free $f_m = 2.5 \times 10^4$	Base fixed, shaft end uphold or fixed $f_m = 20 \times 10^4$

6.7 Screw speed check

$n_c = 96 \times 10^6 \times f_n \times d/L_b^2$

$n_s = n_l/i$ should insure $n_c > n_s$

n_c−−screw allowed speed(r/min) ; n_s−−screw screwing speed(r/min);

d−−diameter of screw bottom(mm);   i−−ratio;   nl−−input shaft screwing speed(r/min);

f_n−−Sustation coefficient (more information from table 6); L_b−−the distance between sustation(mm).

6.8 Input power check

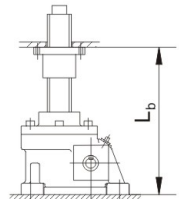$P = n_1 \times p_1 \times w \times 10^{-3}/(60 \times i \times \eta)$ should insure $p < p_{rated}$
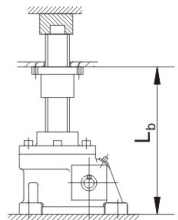
P−−needed input power(KW); p_1−−axial pitch distance(mm) n_1−−input shaft screwing speed(r/min);

w−−current load(KN);   i−−ratio η−−general efficiency

Table 5 Diameter of screw bottom

Model	HK–2T	HK–3T	HK–5T	HK–10T	HK–15T	HK–20T	HK–30T	HK–40T	HK–50T	HK–100T
	HK35	HK40	HK50	HK60	HK60B	HK70	HK100	HK120	HK130	HK150
Diameter of screwing bottom	20.5	25	31	37	43	54	62	67	74	82

Table 6 Sustaion coefficient(fn)

Two shaft end free fn=0.36	Two shaft end fixed fn=1.56

7. Notes

7.1 Select the model with the proper ratio and load.

7.2 The surface temperature of speed reducer and nut should be controlled whith in −15℃~80℃, while the screw lifter is working;

7.3 The screw lifter cannot work all the time. The unit is thirty mins for duty ratio of unit one and can not exceed 20%;

$$\text{Duty ratio } (T\%) = \frac{\text{Time under working/cycle}}{\text{Time under working/cycle} + \text{interval/cycle}} \times 100\%$$

7.4 Insure adequate drive fountainhead;

7.5 Theoretically screw has self−lock function, but the self−lock function may not work in heavy shock condition;

7.6 Using the situation for screw lifter.

Using situation	No rain and water
Ambient air	Dust: usual condition for mill
Ambient temperature	−15℃~40℃
Comparatively humidity	Below 85%

7.7 Transverse load is not allowed when screw lifter is working. If transverse load occured, please add the guiding device.

8. Mounting Dimensions of HK Series Worm Gear Screw Lifter
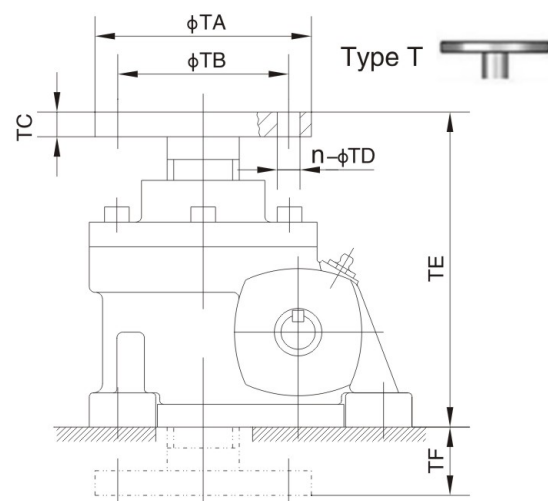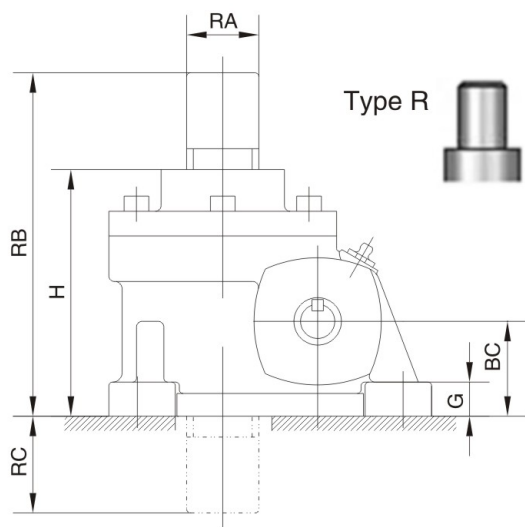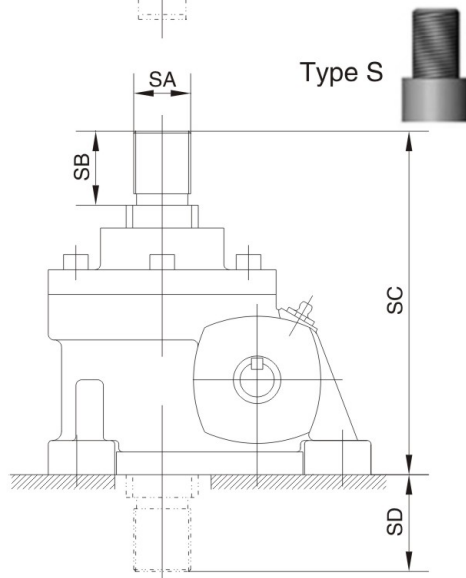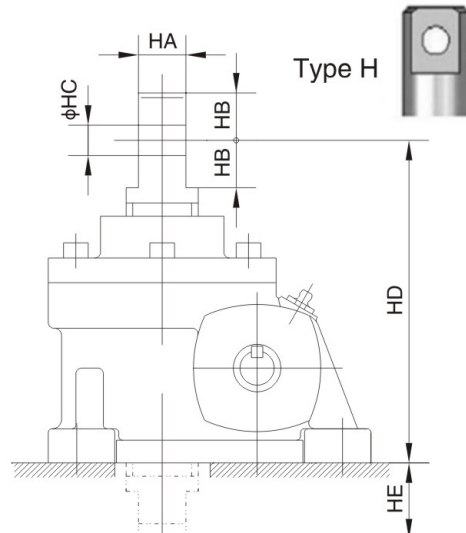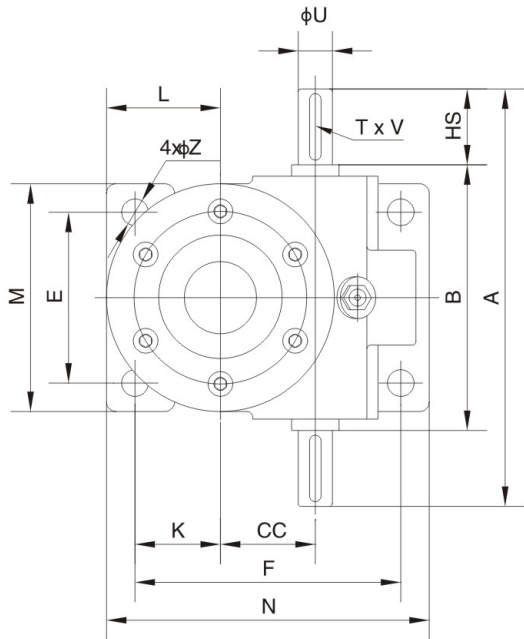
SHAFT DIRECTION

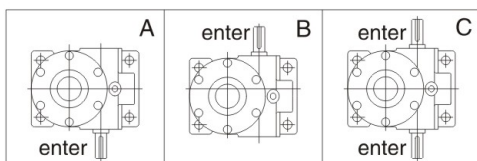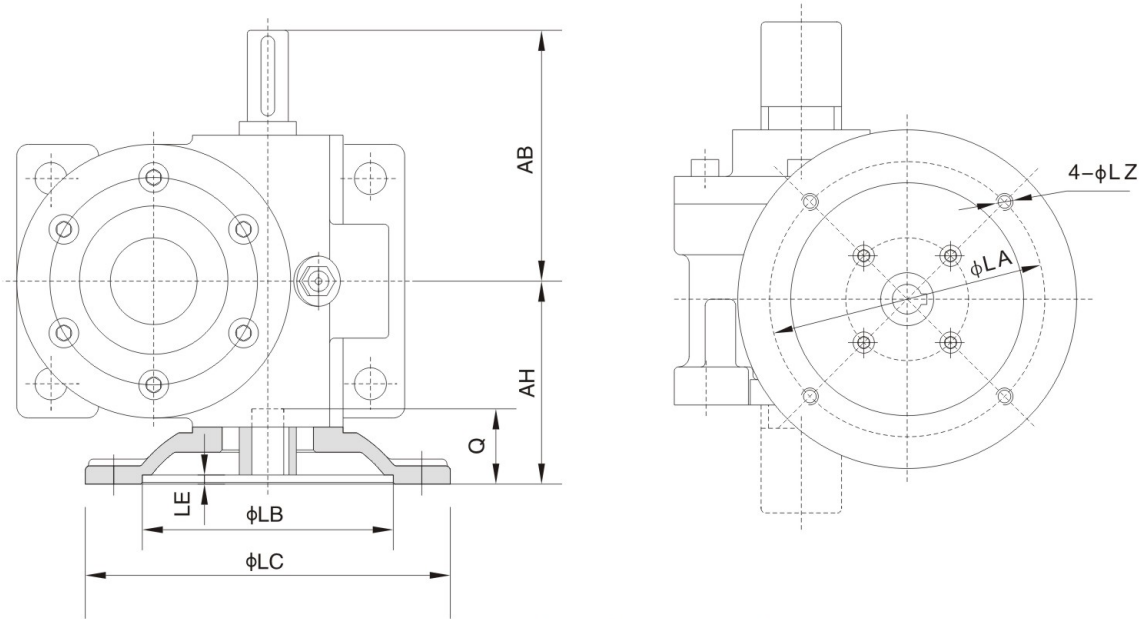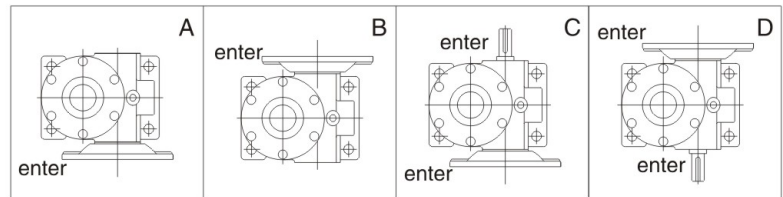| Model size	A / B / HS	E / F / Z	BC / G / H	CC / K	Tr	L / M / N	U / T x V	Type R — RA / RB / RC	Type H — HA / HB / HC	Type H — HD / HE	Type S — SA	Type S — SB / SC / SD	Type T — TA / TB / TC	Type T — n-TD / TE / TF
HK–2T	170 / 110 / 30	66 / 111 / 12	40 / 15 / 110	35 / 38	Tr26x5	50 / 90 / 135	15 / 5 x 3	26 / 165 / 55	16 / 20 / 12	165 / 55	M16x1.5	28 / 150 / 40	88 / 70 / 10	4–φ10 / 135 / 25
HK–3T	220 / 140 / 40	80 / 125 / 12	50 / 18 / 130	40 / 42	Tr32x6	57 / 110 / 155	18 / 6 x 3.5	32 / 195 / 65	20 / 25 / 14	195 / 65	M22x1.5	32 / 180 / 50	98 / 80 / 13	4–φ10 / 160 / 30
HK–5T	220 / 140 / 40	90 / 140 / 14	50 / 18 / 130	50 / 45	Tr38x6	60 / 120 / 170	22 / 6 x 3.5	38 / 195 / 65	25 / 25 / 16	195 / 65	M30x1.5	35 / 180 / 50	114 / 90 / 13	4–φ12 / 160 / 30
HK–10T	256 / 176 / 40	100 / 190 / 18	60 / 20 / 160	60 / 70	Tr46x8	90 / 140 / 230	25 / 8 x 4	46 / 225 / 65	32 / 32 / 20	255 / 95	M33x1.5	40 / 220 / 60	138 / 100 / 16	4–φ14 / 200 / 40
HK–15T	264 / 184 / 40	110 / 190 / 18	60 / 20 / 160	60 / 70	Tr52x8	90 / 150 / 230	25 / 8 x 4	52 / 225 / 65	36 / 32 / 24	255 / 95	M39x1.5	45 / 220 / 60	148 / 110 / 20	4–φ18 / 210 / 50
HK–20T	316 / 216 / 50	140 / 210 / 18	70 / 25 / 180	70 / 75	Tr65x10	95 / 180 / 250	28 / 8 x 4	65 / 250 / 70	44 / 35 / 26	295 / 115	M45x1.5	55 / 260 / 80	178 / 125 / 25	4–φ21 / 235 / 55
HK–30T	390 / 260 / 65	190 / 260 / 22	85 / 30 / 220	100 / 85	Tr75x12	110 / 230 / 310	32 / 10 x 5	75 / 295 / 75	56 / 44 / 35	355 / 135	M60x2	65 / 300 / 80	188 / 140 / 28	4–φ21 / 285 / 65
HK–40T	420 / 290 / 65	210 / 305 / 22	100 / 30 / 260	120 / 105	Tr80x12	130 / 260 / 355	35 / 10 x 5	80 / 355 / 95	60 / 54 / 38	410 / 150	M64x2	70 / 360 / 100	218 / 170 / 30	4–φ25 / 330 / 70
HK–50T	480 / 340 / 70	240 / 355 / 22	120 / 30 / 315	130 / 130	Tr90x14	160 / 300 / 415	45 / 14 x 5.5	90 / 430 / 115	70 / 64 / 45	480 / 165	M76x2	75 / 435 / 120	248 / 200 / 32	4–φ27 / 390 / 75
HK–100T	550 / 360 / 95	250 / 385 / 27	125 / 35 / 345	150 / 135	Tr100x16	170 / 320 / 455	50 / 14 x 5.5	100 / 485 / 140	80 / 70 / 55	545 / 200	M90x2	100 / 495 / 150	358 / 280 / 35	6–φ27 / 445 / 100

9. Mounting Dimensions of HKD Series Worm Gear Screw Lifter

SHAFT DIRECTION

Model size	Flange size	AB	AH	LA	LB	LC	LE	LZ	D	Q	TxV
HK–3T	71B5	110	72	130	110	160	4	M8	φ14	33	5x16.3
HK–5T	71B5	110	80	130	110	160	4	M8	φ14	33	5x16.3
HK–10T	80B5	128	100	165	130	200	4.5	M10	φ19	43	6x21.8
	90B5								φ24	53	8x27.3
HK–15T	80B5	132	100	165	130	200	4.5	M10	φ19	43	6x21.8
	90B5								φ24	53	8x27.3
HK–20T	90B5	158	120	165	130	200	4.5	M10	φ24	53	8x27.3
HK–30T	100/112B5	195	150	215	180	250	5	M12	φ28	63	8x31.3
HK–40T	100/112B5	210	165	215	180	250	5	M12	φ28	63	8x31.3
HK–50T	132B5	240	194	265	230	300	5	M16	φ38	83	10x41.3
HK–100T	132B5	275	218	265	230	300	5	M16	φ38	83	10x41.3

B5 Electric Motors Dimensions
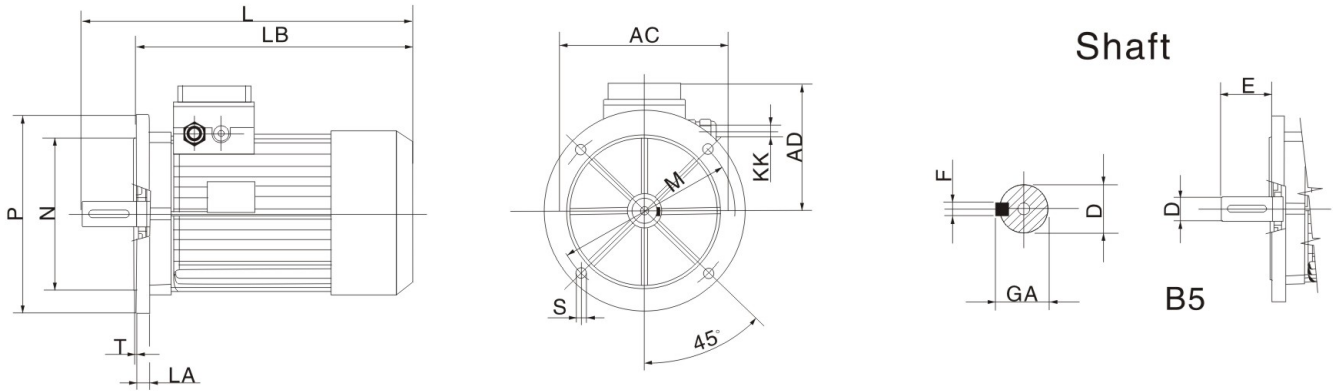
Motor	Overall dim.					Flange B5						Shaft			
	AC	AD	L	LB	KK	M	Nj6	P	LA	S(0)	T	D(0)	E	F	GA
56	110	96	189	169	M16X1,5	100	80	120	10	7	3	9 M4	20	3	10,2
63	122	96	218	195	M16X1,5	115	95	140	10	9	3	11 M4	23	4	12,5
71	145	125	255	225	M20X1,5	130	110	160	13	10	3,5	14 M5	30	5	16
80	165	135	295	255	M20X1,5	165	130	200	13	12	3,5	19 M6	40	6	21,5
90S	185	145	310	260	M25X1,5	165	130	200	13	12	3,5	24 M8	50	8	27
90L	185	145	335	285	M25X1,5	165	130	200	15	12	3,5	24 M8	50	8	27
100	215	170	380	320	M25X1,5	215	180	250	15	15	4	28 M10	60	8	31
112	240	180	400	340	M25X1,5	215	180	250	15	15	4	28 M10	60	8	31
132S	275	210	470	390	M25X1,5	265	230	300	15	15	4	38 M12	80	10	41
132M	275	210	510	430	M25X1,5	265	230	300	15	15	4	38 M12	80	10	41

B14 Electric Motors Dimensions
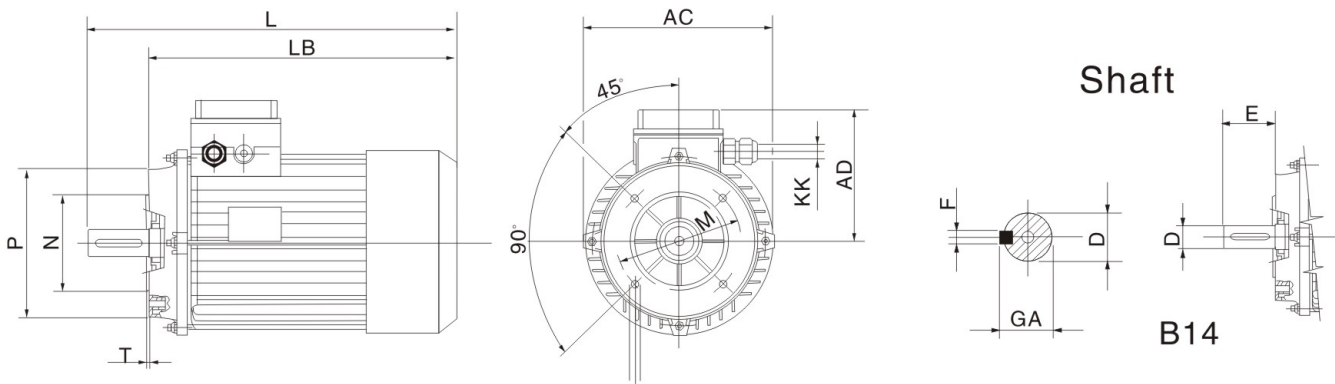
Motor	Overall dim.					Flange B5						Shaft			
	AC	AD	L	LB	KK	M	Nj6	P	LA	S(0)	T	D(0)	E	F	GA
56	110	96	189	169	M16X1,5	65	50	80		M5	3	9 M4	20	3	10,2
63	122	96	218	195	M16X1,5	75	60	90		M5	3	11 M4	23	4	12,5
71	145	125	255	225	M20X1,5	85	70	105		M6	3	14 M5	30	5	16
80	165	135	295	255	M20X1,5	100	80	120		M6	3	19 M6	40	6	21,5
90S	185	145	310	260	M25X1,5	115	95	140		M8	3	24 M8	50	8	27
90L	185	145	335	285	M25X1,5	115	95	140		M8	3	24 M8	50	8	27
100	215	170	380	320	M25X1,5	130	110	160		M8	4	28 M10	60	8	31
112	240	180	400	340	M25X1,5	130	110	160		M8	4	28 M10	60	8	31
132S	275	210	470	390	M25X1,5	165	130	200		M10	5	38 M12	80	10	41
132M	275	210	510	430	M25X1,5	165	130	200		M10	5	38 M12	80	10	41

FLEXIBLE COUPLINGS

FL Jaw Flexible Couplings
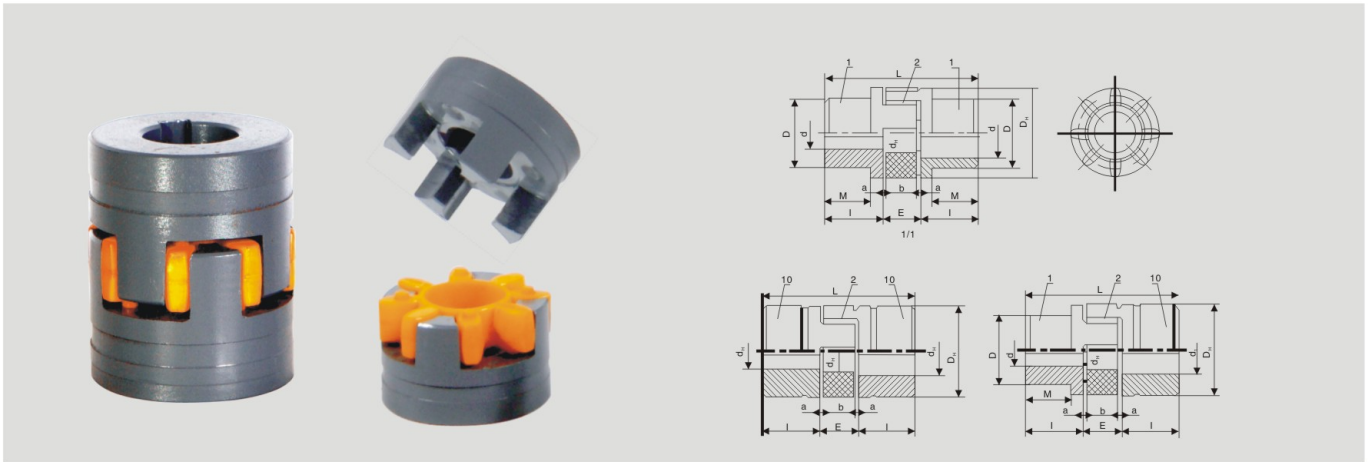
Type & Expressions

FL 9/24 (1a/1a)

- Style
- dmax/d1max
- Jaw Flexible Couplings

Summary

1. Applicable to all types of machinery and hydraulics.

2. Small volume and large transmitted torque.

3. To be plugged in axially,easy assembly,maintenance–free.

4. Balancing axiad, radial and angular misalignment.

5. Dimensions of bore d,d1 available on customer request.

6. Applicable from –40℃ to +100℃,temperature peaks up to 120℃.

Performance parameters

| Type		Max speed r/min	Rated power (n=1500r/min) kW	Rated torque N.m	Rated torque N.m	Max.torsio angle
FL9	FL19/24	28000	0.28	1.8	3.5	6.4°
FL14	FL24/28	19000	0.62	4.0	8.0	
	FL28/38	14000	0.77	4.9	9.7	3.2°
	FL38/45	10600	2.67	17	34	
	FL2/55	8500	7.22	46	92	
FL38	FL48/60	7100	14.6	93	185	
FL42	FL55/70	6000	20.4	130	260	
FL48	FL65/75	5600	23.6	150	300	
FL55	FL75/90	4750	28.3	180	360	
FL65	FL90/100	4250	32.2	205	410	
FL75		3550	74.6	475	950	
Fl90		2800	184	1175	2350	

Type	Style	Prebored	Form 1 / d Min	Form 1 / d Min	Form 1a / d1 Min	Form 1a / d1 Max	1	E	S	b	L	M	D_H	D	d_H	Min.Weight (kg)
铝合金压铸 Aluminium Diecasting(Al–D)																
FL9	1a/1a				4	9	10	10	1.0	8	30		20		6	0.017
Fl14	1a/1a				4	16	11	13	1.5	10	35		30		10	0.048
Steel–Noular Iron																Steel
FL19/24	1a/1a				6	24	25	16	2.0	12	66		40		18	0.328
FL24/28	1/1a				8	28	30	18	2.0	14	78		55		27	0.660
FL28/38	1a/1a				10	38	35	20	2.5	15	90		65		30	1.160
FL38/45	1/1a	11	12	38	38	45	45	24	3	18	114	37	80	66	38	2.27
FL42/55	1/1a	13	14	42	42	55	50	26	3	20	126	40	95	75	46	3.57
FL48/60	1/1a	14	15	48	48	60	56	28	3.5	21	140	45	105	85	51	4.80
FL55/70	1/1a	18	20	55	55	70	65	30	4	22	160	52	120	98	60	7.37
FL65/75	1/1a	20	22	65	65	75	75	35	4.5	26	185	61	135	115	68	10.89
FL75/90	1/1a	28	30	75	75	90	85	40	5	30	210	69	160	135	80	17.73
FL90/100	1/1a	38	40	90	90	100	100	45	5.5	34	245	81	200	160	100	29.6
FL38	1/1	11	12	38			45	24	3.0	18	114	37	80	66	38	2.080
FL42	1/1	13	14	42			50	26	3.0	20	126	40	95	75	46	3.210
FL48	1/1	14	15	48			56	28	3.5	21	140	45	105	85	51	4.410
Fl55	1/1	18	20	55			65	30	4.0	22	160	52	120	98	60	6.640
FL65	1/1	20	22	65			75	35	4.5	26	185	61	135	115	68	10.130
FL75	1/1	28	30	75			85	40	5.0	30	210	69	160	135	80	16.030
Fl90	1/1	38	40	90			100	45	5.5	34	245	81	200	160	100	27.50

FCL Jaw Flexible Couplings
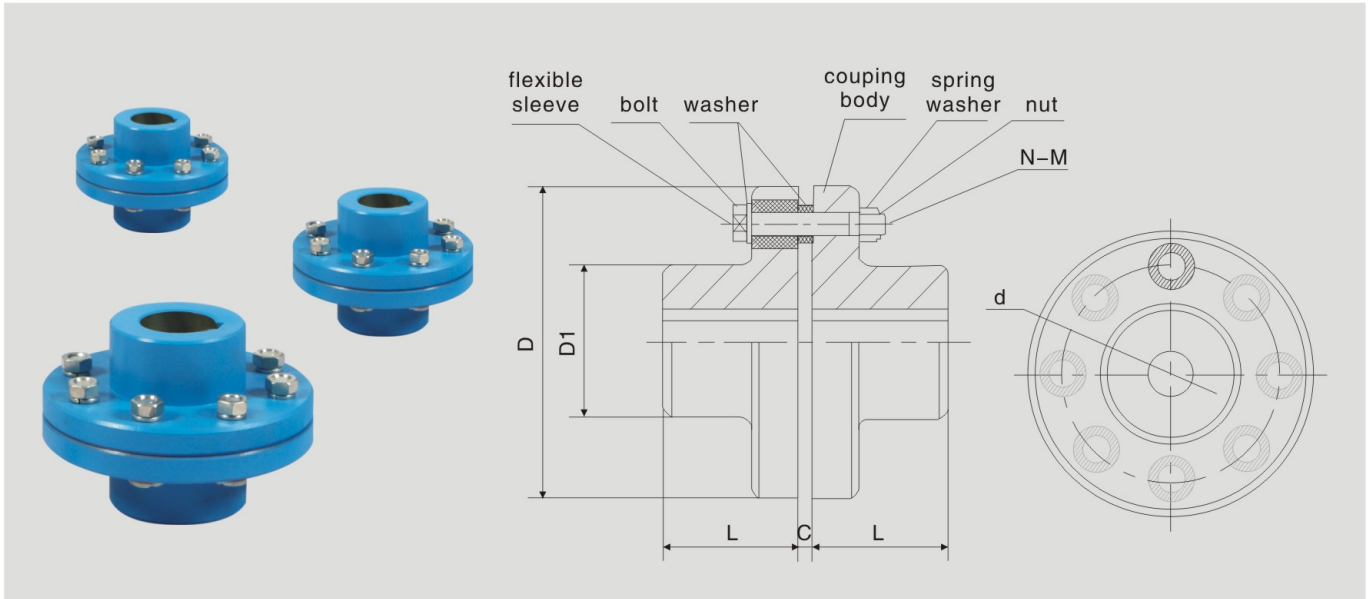
Types & Expressions

FCL 160

── maximum diameter

── Flexible couplings
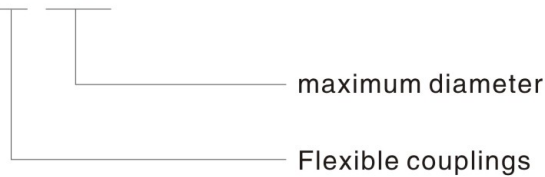
Summary

Flexible Couplings Model (FCL) is widely used for its compact designing, easy installation, convenient maintenance,small size and light weight. As long as the relative displacement between shafts is kept within the specified tolerance, B couplings will operate the best function and have a longer working life. Thus it is greatly demanded in medium and minor power transmission systems driven by moters, such as speed reducers, hoists, compressors,conveyers, spinning and weaving machines and ball mills.

Permittable relative displacement:

Radial displacement: 0.2~0.6mm

Angle displacement: 0°30'~1°30'

Size chart & Parameters

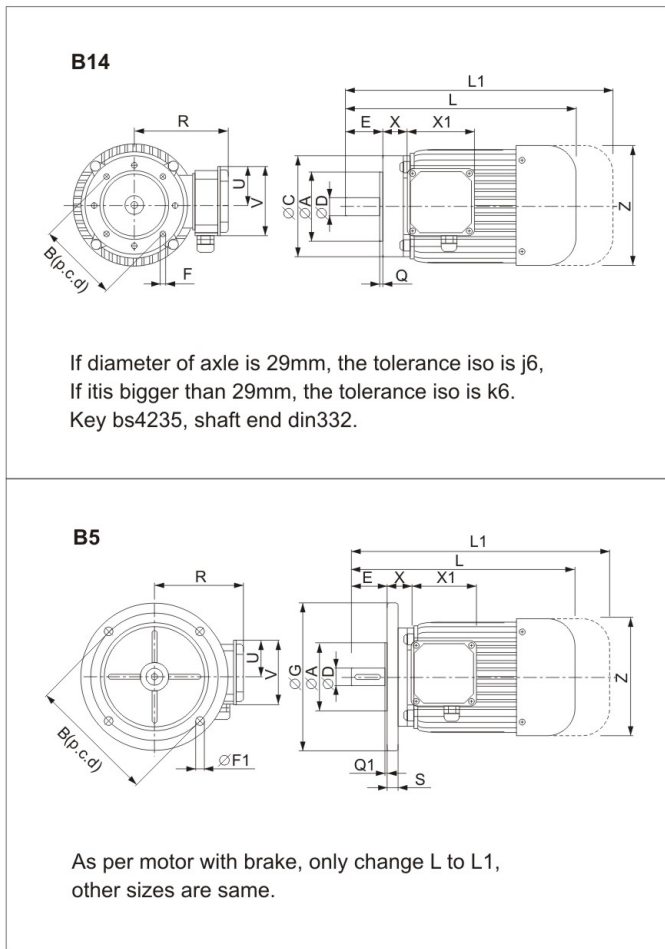| Type	Max torque N.m	Max speed r/min	D	D_1	d_1	L	C	n−M	kg
FCL90	4	4000	90	35.5	11	28	3	4−M8x50	1.7
FCL100	10	4000	100	40	11	35.5	3	4−M10x56	2.3
FCL112	16	4000	112	45	13	40	3	4−M10x56	2.8
FCL125	25	4000	125	50	13	45	3	4−M12x64	4.0
FCL140	50	4000	140	63	13	50	3	6−M12x64	5.4
FCL160	110	4000	160	80	15	56	3	8−M12x64	8.0
FCL180	157	3500	180	90	15	63	3	8−M12x64	10.5
FCL200	245	3200	200	100	21	71	4	8−M20x85	16.2
FCL224	392	2850	224	112	21	80	4	8−M20x85	21.3
FCL250	618	2550	250	125	25	90	4	8−M24x110	31.6
FCL280	980	2300	280	140	34	100	4	8−M24x116	44.0
FCL315	1568	2050	315	160	41	112	4	10−M24x116	57.7
FCL355	2450	1800	355	180	60	125	5	8−M30x50	89.5
FCL400	3920	1600	400	200	60	125	5	10−M30x150	113
FCL450	6174	1400	450	224	65	140	5	12−M30x150	145
FCL560	9800	1150	560	250	85	160	5	14−M30x150	229
FCL630	15680	1000	630	280	95	180	5	18−M30x150	296

ELECTRIC MOTOR

Standard Motor Parameters

Screw jacks can match with the IEC flange size 56---112, B14 and B5
AC motor or motor with brake, it can also match with single phase motor,
explosion-proof motor, DC motor and servo motor.

- 3 phase AC motor
- Protection clase: IP44, IP54, IP55
- Voltage: 380V 50HZ
- Insulation: F

Note: Pls consult us for special requires.

B14

If diameter of axle is 29mm, the tolerance iso is j6,
If itis bigger than 29mm, the tolerance iso is k6.
Key bs4235, shaft end din332.

B5

As per motor with brake, only change L to L1,
other sizes are same.

Size of motor flange	power kw	rotate 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	
	0.13	2710	0.48	0.48	
63	0.09	800	1.0	0.5	4.4
	0.12	880	1.3	0.7	
	0.13	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
90S	1.1	1390	10.7	3.8	15.4
90L	1.5	1400	12.8	4.6	13.0
90S	1.5	2800	5.2	3.7	15.4
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	

size of flange	A	A1	B	B1	C	D	E	F	F1	G	L	L1	Q1	R	S	U	V	X	X1	Z
56	50	80	65	100	80	9	20	M5	8.5	120	187	213	3	110	9	52	92	30	92	110
63	60	95	75	115	90	11	23	M5	9	140	216	238	3	115	10	52	92	25	92	123
71	-	110	-	130	-	14	30	-	9	160	245	276	3.5	124	10	52	92	25	92	138
80	-	130	-	165	-	19	40	-	11	200	275	317	3.5	141	10	60	108	30	108	156
90S	-	130	-	165	-	24	50	-	11	200	300	342	3.5	146	10	60	108	33	108	176
90L	-	130	-	165	-	24	50	-	11	200	325	366	3.5	146	10	60	108	33	108	176
100	-	180	-	215	-	28	60	-	14	250	365	430	4	157	15	60	108	40	108	194
112	-	180	-	215	-	28	60	-	14	250	385	466	4	170	15	60	108	45	108	220

LINEAR MOTION

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