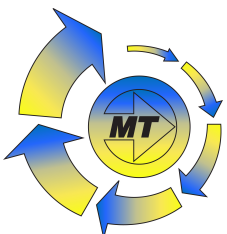


2D/3D  
CAD



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# LAP / LA

## Electric Linear Cylinders

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## Product Description

**JACTON LAP LA Series Electric linear cylinders** as an alternative to pneumatic cylinders or hydraulic cylinders. Electric cylinders are self-locking linear drives, which means that no power is supplied when at a standstill, easy installation with two trunnion mounting feet, no pipework, powerpack and valves, low power consumption and running costs, no oil leaks, contamination or fire risk, low noise system, higher dynamic capacity, higher speed capability and longer life. These make jacton electric cylinders an interesting alternative to pneumatic and hydraulic actuators.

### ● Features:

JACTON electric cylinder is consists of either a ACME screw and nut, driven by an electric motor, through a reduction gearbox. The lead screw converts rotary motion to linear movement. As the screw rotates, the nut extends and retracts the ram, which is attached to the load. There are two designs for jacton electric cylinders, they are LAP Series parallel motor design electric cylinders, and LA Series in line motor design electric cylinders. LAP Series parallel configuration electric cylinders load capacities are from 100 kgf to 25 tons, travel speeds up to 84 mm per second, rated power of motor is from 0.18kw to 18.5kw. LA Series in-line configuration electric cylinders load capacities are from 10 kgf to 1000 kgf, travel speeds up to 85 mm per second, rated power of motor is from 0.06kw to 1.5kw. For all jacton electric linear cylinders with no standard stroke, all travel length is built to your specifications. Jacton electric cylinders can come with a DC or AC motor. The most common motor type is three-phase AC motor - 220V, 240V, 380V, 400V, 415V, 460V, and 480V for heavy duty, also available in single phase AC motor - 110V, 220V, 230V, and 240V. And DC motor - 12V, 24V. If you want slow speed electric cylinders, DC or AC gear motor is recommended. For precision control, servo motors, and stepping motors are adaptable. With stroke limit switches to control different travel length.

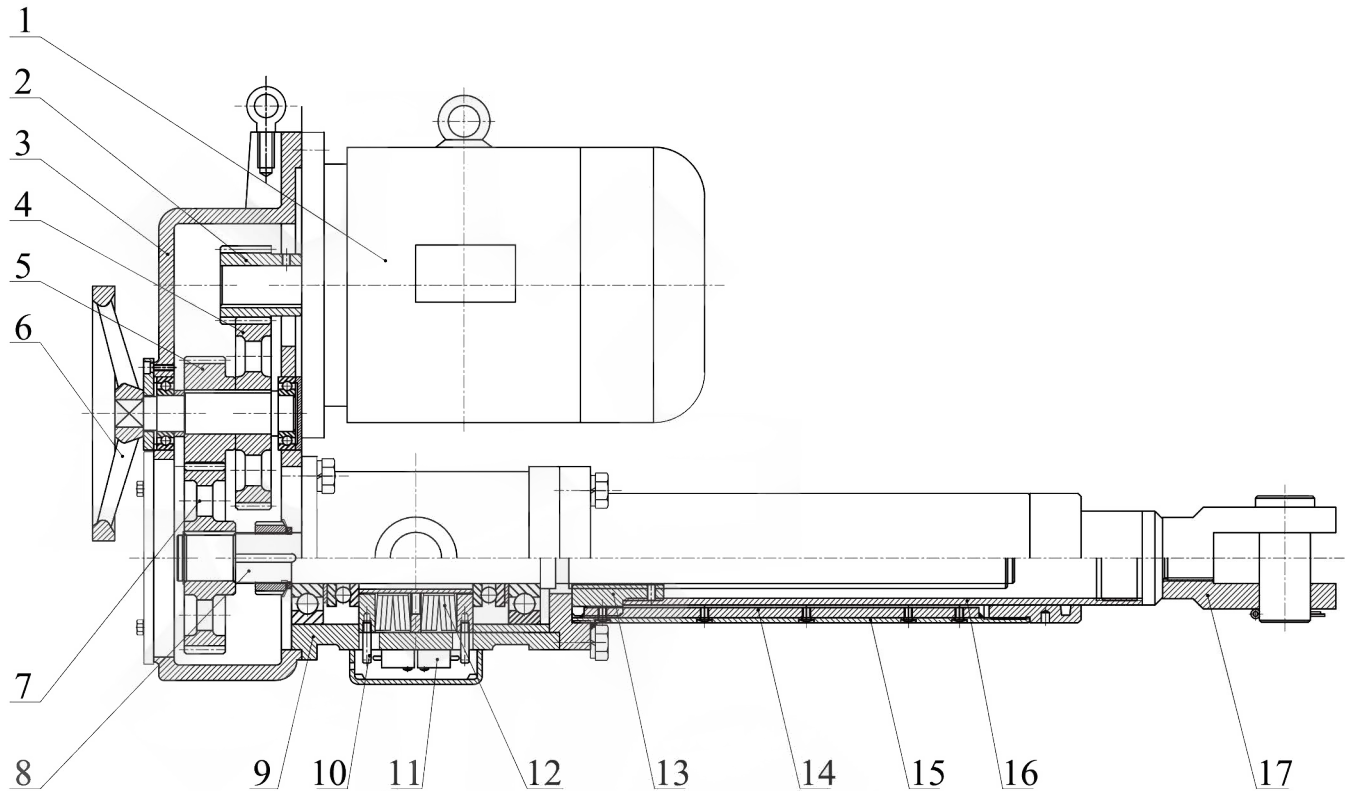
### ● Application:

JACTON electric cylinders are application in gates, dampers, oven and processing tank doors, antennas, orthopedic tables and other medical equipment, ergonomic furniture, and agricultural equipment, scissor lifts, scissor platforms, lifting platforms, robotics, continuous paint pumps, medical beds, coiling machines, tundish cars, continuous operation process lines opening and closing, tilting and pivoting, lifting and lowering, and positioning etc. Custom designs linear cylinders are also available for your special applications.





Internal Structure



- |                  |                |                     |                 |
|------------------|----------------|---------------------|-----------------|
| 1. Motor         | 2. Gear (1st)  | 3. Gearbox          | 4. Gear (2nd)   |
| 5. Gear (3rd)    | 6. Handwheel   | 7. Gear (4th)       | 8. ACME screw   |
| 9. Base          | 10. Pull rod   | 11. Safety switches | 12. Disc spring |
| 13. Screw nut    | 14. Guide rail | 15. Guide bush      | 16. Cylinder    |
| 17. Rod end fork |                |                     |                 |



## Sample Part Number

**LAP - 2500 - M - 2.2 - 900 - TMF - LS - B**

**1      2      3      4      5      6      7      8**

### 1. Series

**LAP:** Parallel Motor Design Electric Cylinder

**LA:** Inline Motor Design Electric Cylinder

### 2. Thrust (kgf)

**2500:** 2500kgf

The thrust of jacton electric cylinder ranges from 10kg to 25 tons. Please refer to the technical parameter table of electric cylinders.

### 3. Speed (mm/s)

**M:** Medium speed

**L:** Slow speed

**H:** High speed

The speed of jacton electric cylinder ranges from 21mm/s to 85 mm/s. Please refer to the technical parameter table of electric cylinders. Special travel speed, please contact us.

### 4. Motor Power (kW)

**2.2:** 2.2kW

The motor power of jacton electric cylinder ranges from 0.06kW to 18.5 kW. Please refer to the technical parameter table of electric cylinders.

### 5. Stroke (mm)

**900:** 900mm

For all jacton electric cylinders with no standard stroke, all travel length is built to your specification. Please refer to the technical parameter table of electric cylinders.

### 6. 7. 8. Available Accessories

**TMF:** Trunnion mount feet. If no need, don't mark.

**LS:** External limit switches. If no need, don't mark.

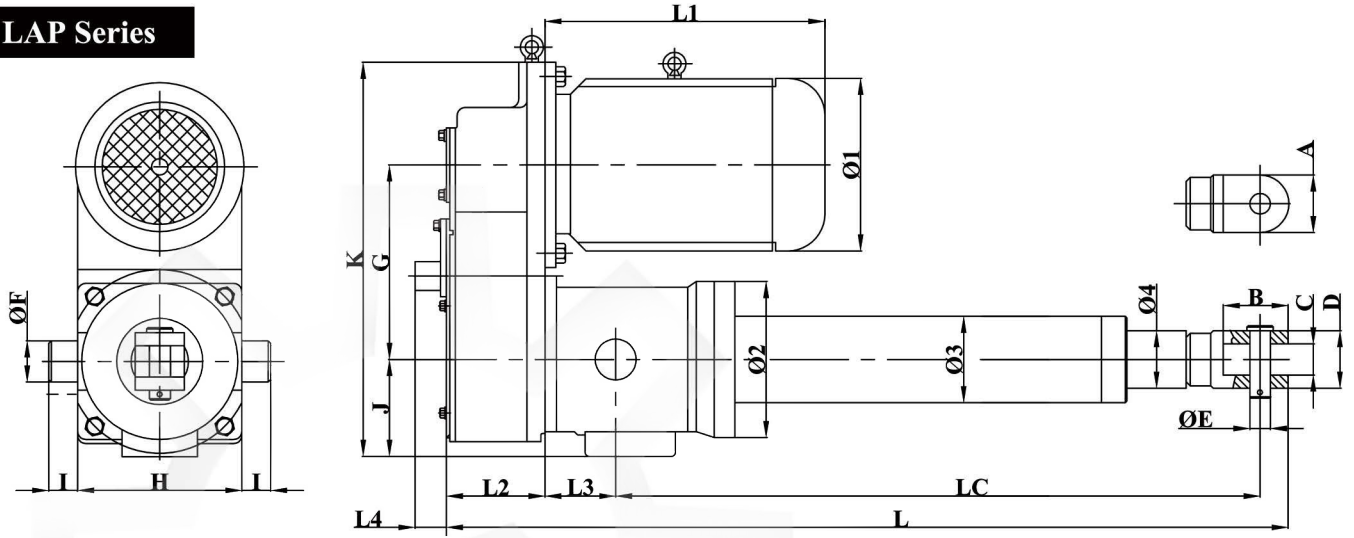
**B:** Brake motor. If normal motor, no need brake, don't mark.

Standard motor voltage is 380V AC, 50Hz, 3-phase, don't mark.

If special voltage, please indicate Voltage: \_\_ V AC, \_\_ Hz, 3-Phase?

**Dimensions and Specifications**

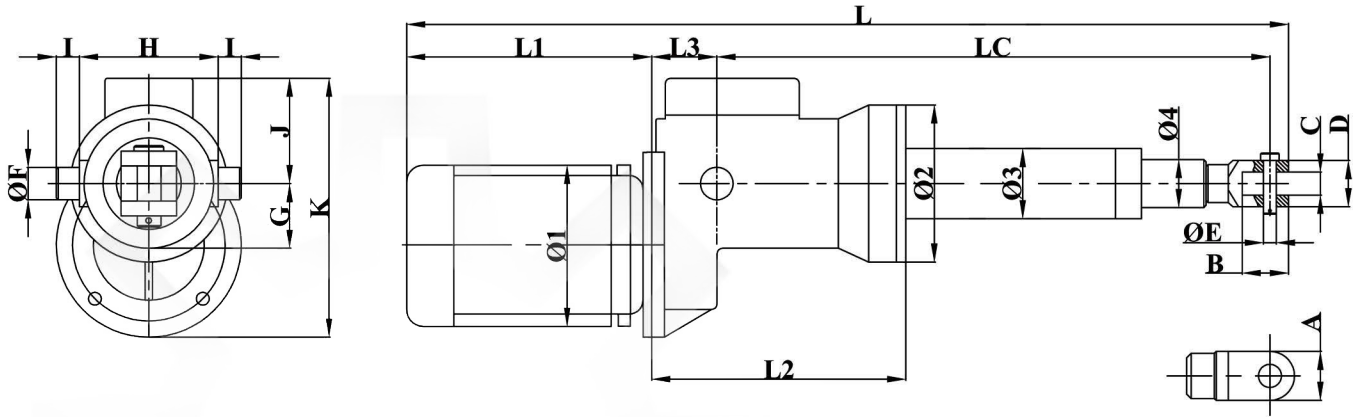
**LAP Series**



Model	Thrust (Kgf)	Speed (mm/s)			Motor Power (kw)	Stroke (mm)	Length (mm)				Retract (mm)		Extend (mm)				Fork Head (mm)				Trunnion Mount (mm)					Cylinder (mm)			
		L	M	H			L1	L2	L3	L4	L	LC	LC	A	B	C	D	ØE	ØF	G	H	I	J	K	Ø1	Ø2	Ø3	Ø4	
LAP100	100	28			0.18	≤800	227	70	25	40	420+S	310+S	310+2S	30	40	20	40	14	25	126	105	20	70	276	140	100	64	40	
		42			0.25																								
			84		0.37																								
LAP250	250	28			0.25	≤800	227	70	25	40	420+S	310+S	310+2S	30	40	20	40	14	25	126	105	20	70	276	140	100	64	40	
		42			0.37																								
			84		0.55																								
LAP500	500	28			0.55	≤800	227	70	25	40	420+S	310+S	310+2S	30	40	20	40	14	25	126	105	20	70	276	140	100	64	40	
		42			0.75																								
			65		0.75																								
LAP630	630	28			0.55	≤1000	250	90	40	40	550+S	400+S	400+2S	40	50	25	50	14	35	180	150	25	100	390	160	128	76	52	
		42			0.75																								
			65		1.1																								
LAP1000	1000	28			0.75	≤1000	250	90	40	40	550+S	400+S	400+2S	40	50	25	50	14	35	180	150	25	100	390	160	128	76	52	
		42			1.1																								
			65		1.5																								
LAP1600	1600	28			1.5	≤1200	260	90	40	40	550+S	400+S	400+2S	40	50	25	50	14	35	180	150	25	100	390	160	128	76	52	
		42			2.2																								
			84		3																								
LAP2500	2500	28			1.5	≤1200	320	130	86	46	700+S	450+S	450+2S	68	80	38	70	25	50	237	200	35	116	480	170	102	70		
		42			2.2																								
			84		4																								
LAP4000	4000	28			2.2	≤1200	340	130	86	46	700+S	450+S	450+2S	68	80	38	70	25	50	237	200	35	116	480	170	102	70		
		42			4																								
LAP6300	6300	21			3	≤1600	435	164	114	46	820+S	492+S	492+2S	100	120	50	100	50	50	268	240	50	120	560	270	250	130	92	
		42			5.5																								
			60		7.5																								
LAP8000	8000	28			5.5	≤1600	435	164	114	46	820+S	492+S	492+2S	100	120	50	100	50	50	268	240	50	120	560	270	250	130	92	
		42			7.5																								
LAP10000	10000	21			5.5	≤2000	490	195	145	48	1020+S	620+S	620+2S	120	180	80	140	60	60	332	300	60	150	710	325	280	150	105	
		42			11																								
					15																								
LAP15000	15000	21			7.5	≤2000	535	195	145	48	1020+S	620+S	620+2S	120	180	80	140	60	60	332	300	60	150	710	325	280	150	105	
		42			15																								
LAP20000	20000	21			7.5	≤2000	660	200	190	50	1130+S	680+S	680+2S	120	180	80	140	60	70	413	300	60	200	800	360	320	168	124	
		42			15																								
LAP25000	25000	21			11	≤2000	760	200	190	50	1130+S	680+S	680+2S	120	180	80	140	60	70	413	300	60	200	800	360	320	168	124	
		42			18.5																								

## Dimensions and Specifications

### LA Series

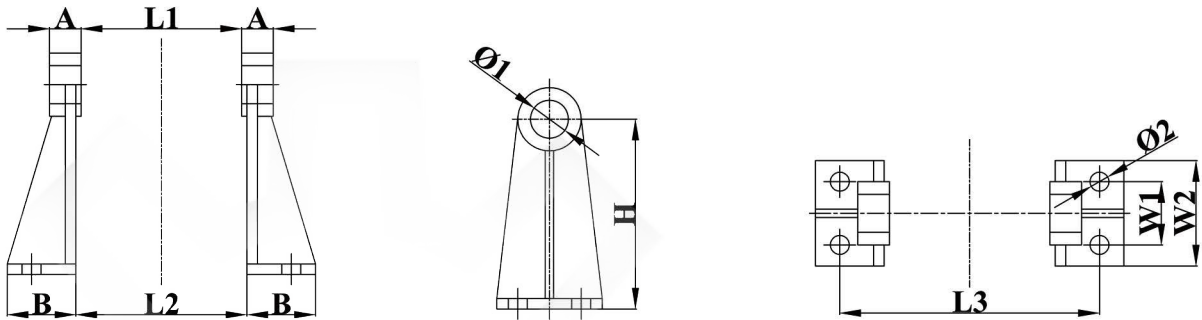


Model	Thrust (Kgf)	Speed (mm/s)			Motor Power (kw)	Stroke S (mm)	Length (mm)				Retract (mm)		Extend d (mm)	Fork Head (mm)				Trunnion Mount (mm)						Cylinder (mm)				
		L	M	H			L1	L2	L3	L4	L	LC		LC	A	B	C	D	ØE	ØF	G	H	I	J	K	Ø1	Ø2	Ø3
LA10	10	30			0.06	≤400	145	125	55		330+S	120+S	120+2S	20	25	15	25	10	20	23	90	15	70	148	95	84	42	22
		60	0.06																									
LA25	25	30			0.06	≤400	145	125	55		330+S	120+S	120+2S	20	25	15	25	10	20	23	90	15	70	148	95	84	42	22
		60	0.09																									
LA63	63	38			0.09	≤600	193	157	62		430+S	165+S	165+2S	20	25	15	25	10	25	35	100	20	80	180	115	106	54	30
		76	0.12																									
LA90	90	38			0.12	≤600	193	157	62		430+S	165+S	165+2S	20	25	15	25	10	25	35	100	20	80	180	115	106	54	30
		76	0.18																									
LA100	100	28			0.18	≤800	227	232	65		560+S	253+S	253+2S	30	40	20	40	14	25	48	130	20	97	225	140	130	64	40
		42	0.25																									
		84	0.37																									
LA300	300	28			0.25	≤800	227	232	65		560+S	253+S	253+2S	30	40	20	40	14	25	48	130	20	97	225	140	130	64	40
		42	0.37																									
		84	0.55																									
LA500	500	40			0.75	≤1000	250			621+S	281+S	281+2S	40	50	25	50	14	35	66	150	25	114	280	160	170	76	52	
		60	0.75	260			631+S	175																				
		85	1.1																									
LA700	700	40			0.75	≤1000	250	279	70	621+S	281+S	281+2S	40	50	25	50	14	35	66	150	25	114	280	160	170	76	52	
		60	0.75																									
LA1000	1000	40			0.75	≤1000	285			656+S	281+S	281+2S	40	50	25	50	14	35	66	150	25	114	280	175	170	76	52	
		60	1.1																									
		85	1.5																									



**Trunnion Mounting Feet Dimensions**

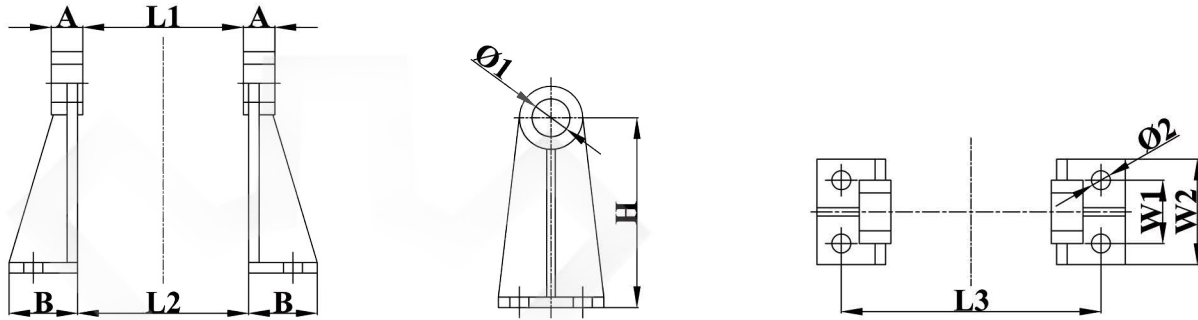
**LAP Series**



Model	Thrust (Kgf)	Trunnion Mount Feet (mm)									
		L1	L2	L3	W1	W2	H	Φ1	Φ2	A	B
LAP100	100	107	117	170	80	120	130	26	14	20	45
LAP250	250	107	117	170	80	120	130	26	14	20	45
LAP500	500	152	162	195	100	140	150	36	18	25	60
LAP630	630	152	162	195	100	140	150	36	18	25	60
LAP1000	1000	152	162	195	100	140	150	36	18	25	60
LAP1600	1600	202	220	310	120	180	180	51	18	35	65
LAP2500	2500	202	220	310	120	180	180	51	18	35	65
LAP4000	4000	202	220	310	120	180	180	51	18	35	65
LAP6300	6300	242	260	350	120	180	180	51	22	50	70
LAP8000	8000	242	260	350	120	180	180	51	22	50	70

## Trunnion Mounting Feet Dimensions

### LA Series



Model	Thrust (Kgf)	Trunnion Mount Feet (mm)									
		L1	L2	L3	W1	W2	H	Φ1	Φ2	A	B
LA10	10	92	102	145	60	85	100	21	10	15	30
LA25	25	92	102	145	60	85	100	21	10	15	30
LA63	63	102	112	165	60	90	120	26	10	20	40
LA90	90	102	112	165	60	90	120	26	10	20	40
LA100	100	132	142	195	60	100	150	26	14	20	45
LA300	300	132	142	195	60	100	150	26	14	20	45
LA500	500	152	162	225	60	100	180	36	18	25	60
LA700	700	152	162	225	60	100	180	36	18	25	60
LA1000	1000	152	162	225	60	100	180	36	18	25	60

**Wiring Diagram For Stroke Limit Switches**

**External Limit Switches**

**Internal Limit Switches**

Red, Yellow	Red	Yellow
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Blue	Red	Yellow
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Common terminal

Extend

Retract

Common terminal

Extend

Retract

All switches are normally closed contacts

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