

Electrak® HD with Rear Mounting Flange

Electric Linear Actuator Ideal for Automated Guided Vehicles, Mobile Equipment and Industrial Automation



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Electrak® HD with Rear Mounting Flange

Electrak HD is now available with a rear mounting flange option that reduces its overall length vs. stroke length ratio. The more compact design makes it easier to fit into tight spaces and is ideal when designing different types of automation equipment, automated guided vehicles (AGVs) and lifting devices — all while maintaining the many popular advantages of Electrak HD.

Performance, Features and Control Options

There are no changes in the performance, features or control options when Electrak HD actuators are equipped with the rear mounting flange option, except for the limitation of maximum stroke to 300 mm. You can still take advantage of benefits such as standard manual override, vast onboard control options and long, maintenance-free life.

The Electrak HD Platform

Electrak HD is a state-of-the-art actuator platform with onboard electronics that eliminate the need for standalone controls. It has higher power than any other similar actuator, which opens a new, wider range of hydraulic-to-electric application conversions. Electrak HD meets the most extreme OEM component environmental acceptance tests, including IP69K, ensuring long and trouble-free operation.

General Specifications		
Screw type	ball	
Nut type	load lock ball nut	
Manual override	yes	
Anti-rotation	yes	
Dynamic braking	yes ⁽¹⁾	
Static load holding brake	yes	
End-of-stroke protection	internal end-of-stroke limit switches	
Overload protection	yes	
Temperature monitoring	yes	
Temperature compensation	yes	
Voltage monitoring	yes	
Electrical connections (2)	cable(s) with flying leads	
Compliance	CE	

⁽¹⁾ Dynamic braking is included at the ends of stroke for all Electrak HD actuators. Dynamic braking offered throughout the entire stroke length only on low-level switching and J1939 options.

⁽²⁾ There are one or two cables depending on the control option used. The cable(s) enters the actuator via a connector. The replacement of an actuator can be completed by unplugging the old actuator and plugging in the new one.

Technical Specifications				
Available input voltages	[Vdc]	12, 24		
Max. static load (1)	[N (lbs)]	18000 (4050)		
Max. dynamic load (Fx)	[N (lbs)]	10000 (2248)		
Max. speed @ no load/max. load	[mm/s (in/s)]	71/58 (2.80/2.28)		
Max. ordering stroke (S) length	[mm]	300		
Restraining torque	[Nm (lbf)]	0		
Operating temperature limits	[°C (F)]	- 40 – 85 (- 40 – 185)		
Full load duty cycle @ 25 °C (77 °F	[%]	25		
Ingress protection rating - static		IP67 / IP69K		
Compliances		CE		

Ordering

Ordering Key 1 2 3 4 5 6 7 8 HD12 B026 0300 LXX 2 A M S

1. Model and input voltage

HD12 = Electrak HD, 12 Vdc

HD24 = Electrak HD, 24 Vdc

2. Screw type, dynamic load capacity

B017- = ball screw, 1.7 kN (382 lbs)

B026- = ball screw, 2.6 kN (585 lbs)

B045- = ball screw, 4.5 kN (1012 lbs)

B068- = ball screw, 6.8 kN (1529 lbs)

B100- = ball screw, 10 kN (2248 lbs)

3. Ordering stroke length (1)(2)

 $0050 = 50 \text{ mm}^{(3)}$

0100 = 100 mm

0150 = 150 mm

0200 = 200 mm

0250 = 250 mm

0300 = 300 mm

4. Electrak Modular Control System options

EXX = Electronic Monitoring Package only

ELX = EXX + end-of-stroke indication output

EXP = EXX + analog (potentiometer) position output

EXD = EXX + digital position output

ELP = ELX + analog (potentiometer) position output

ELD = ELX + digital position output

LXX = EXX + low-level signal motor switching

LLX = LXX + end-of-stroke indication output

LXP = LXX +analog (potentiometer) position output

CNO = J1939 CAN bus + open-loop speed control

SYN = LXX + Synchronization option

5. Cable length

1 = 0.3 m long cables

2 = 1.5 m long cables

3 = 5.0 m long cables

6. Rear adapter options

A = rear mounting flange

7. Front adapter options

A = metric M16 male thread

M = cross hole for 12 mm pin

E = cross hole for ½ inch pin

N = forked cross hole for 12 mm pin

F =forked cross hole for $\frac{1}{2}$ inch pin

P = metric M12 female thread

G = inch 1/2-20 UNF-2B female thread

8. Adapter orientation

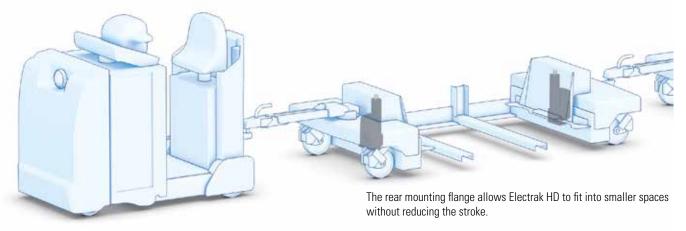
S = standard

M = 90 ° turned

9. Connection options

D = flying leads

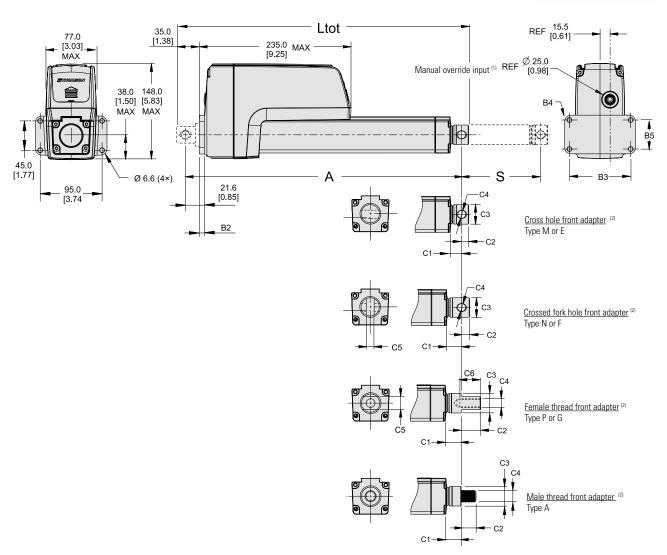
- (1) Other stroke lengths available upon request. Please contact customer support.
- (2) Max. ordering stroke for the rear mounting flange type A is 300 mm.
- (3) 50 mm stroke units will have same retracted length and envelope size as a 100 mm unit.





Dimensions





Rear and Front Adapter Dimensions [mm]									
	Rear Adapter Type		Front Adapter Types						
	A (3)		M	E	N	F	Р	G	А
B1	-	C1	see table on next page 16.5				16.5		
B2	7.8	C2	10.9	10.9	12.9	12.9	30.0	30.0	20.0
В3	95.0	C3	see table on next page						
B4	6.6	C4	12.2	12.8	12.2	12.8	$M12 \times 1.75$	1/2-20 UNF-2B	M16×2
B5	45.0	C5	-	-	8.2	8.2	19.0	19.0	-
C6		-	-	-	-	35.0	35.0	-	

⁽¹⁾ The input hole is covered with a plastic threaded plug. When removed, a 6 mm socket can be inserted and used as a crank.

⁽³⁾ Rear mounting flange type A can not be ordered with a higher maximum static load capacity than 10 kN or/and a maximum stroke of 300 mm.



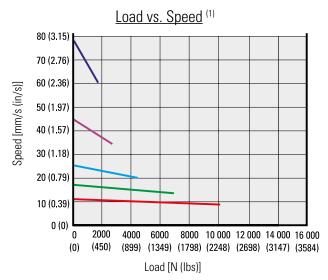
⁽²⁾ All adapters shown in the standard orientation.

Dimensions

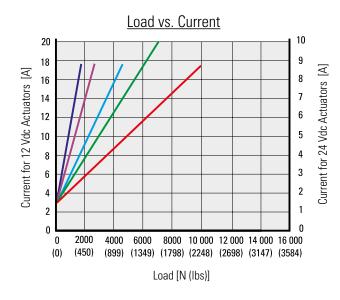
Maximum Dynamic Load and Stroke Relationships

Maximum	c Retracted Length (A) and Adapter		Ordering stroke (S) [mm]		
Dynamic Load (Fx) - kN (Ibs.)			100 – 300		
	Ltot		A + B1 + C2		
	Α		S + 150.9 + B2 + C1		
1.7	C1	Type M, E	17.5		
(382)		Type N, F	26.5		
		Type P, G	23.9		
	C3		30.2		
	Ltot		A + B1 + C2		
2.6 (585)	А		S + 150.9 + B2 + C1		
	C1	Type M, E	17.5		
		Type N, F	26.5		
		Type P, G	23.9		
	C3		30.2		
	Ltot		A + B1 + C2		
4.5 (2012)	А		S + 150.9 + B2 + C1		
	C1	Type M, E	17.5		
		Type N, F	26.5		
		Type P, G	23.9		
	C3		30.2		
	Ltot		A + B1 + C2		
	А		S + 150.9 + B2 + C1		
6.8 (1529)	C1	Type M, E	17.5		
		Type N, F	26.5		
		Type P, G	23.9		
	C3		30.2		
	Ltot		A + B1 + C2		
10 (2248)	Α		S + 180.9 + B2 + C1		
	C1	Type M, E	17.5		
		Type N, F	26.5		
		Type P, G	23.9		
	C3		30.2		

Performance Diagrams



¹ Curves valid for all units except those with the synchronization option, where the speed at any load is 25% lower than for those without.



Screw Type and Dynamic Load Capacity

ball screw, 1.7 kN (382 lbs)
ball screw, 2.6 kN (585 lbs)
ball screw, 4.5 kN (1012 lbs)
ball screw, 6.8 kN (1529 lbs)
ball screw, 10 kN (2248 lbs)

Note: Curves were generated at an ambient temperature of 21°C (70°F). Different ambient temperature and individual actuator characteristics can produce slightly different values.

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