

Electrak[®] HD with Rear Mounting Flange

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



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

| ball |
|---------------------------------------|
| load lock ball nut |
| yes |
| yes |
| yes ⁽¹⁾ |
| yes |
| internal end-of-stroke limit switches |
| yes |
| yes |
| yes |
| yes |
| cable(s) with flying leads |
| CE |
| i |

(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 | Α | М | S | |
| 1. | HD12 = Elect | input voltage trak HD, 12 Vdc trak HD, 24 Vdc | | | 5. Cable length 1 = 0.3 m long cables 2 = 1.5 m long cables 3 = 5.0 m long cables | | | | |
| 2. | B017- = ball B026- = ball B045- = ball B068- = ball | e, dynamic load screw, 1.7 kN (382 screw, 2.6 kN (585 screw, 4.5 kN (101 screw, 6.8 kN (152 screw, 10 kN (224 | 2 lbs) 5 lbs) 12 lbs) 29 lbs) | | 6. Rear adap A = rear mon 7. Front adap A = metric N | ter options unting flange oter options A16 male thread | | | |
| 3. | Ordering si 0050 = 50 m 0100 = 100 r 0150 = 150 r 0200 = 200 r 0250 = 250 r 0300 = 300 r | nm nm nm nm |) | | 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 ½ inch pin P = metric M12 female thread G = inch 1/2-20 UNF-2B female thread 8. Adapter orientation | | | | |
| 4. | EXX = ElectricELX = EXX +EXP = EXX +EXD = EXX +ELP = ELX +ELD = ELX +LXX = EXX +LXX = EXX +LXP = LXX +CNO = J1935 | digital position ou analog (potention digital position ou low-level signal m end-of-stroke indic analog (potentione | ackage only cation output neter) position outp itput eter) position output tput notor switching cation output eter) position outpu- loop speed control | ıt | (2) Max. ordering stro | rned n options | g flange type A is 300 m | nm. | |





Dimensions



| Rear and Front Adapter Dimensions [mm] | | | | | | | | | |
|--|-------------------|----|------------------------|------------------------|------|------|------------|---------------|-------|
| | Rear Adapter Type | | Front Adapter Types | | | | | | |
| | A ⁽³⁾ | | М | E | Ν | F | Р | G | А |
| B1 | - | C1 | | see table on next page | | | | | 16.5 |
| B2 | 7.8 | C2 | 10.9 | 10.9 | 12.9 | 12.9 | 30.0 | 30.0 | 20.0 |
| B3 | 95.0 | C3 | see table on next page | | | | | | |
| B4 | 6.6 | C4 | 12.2 | 12.8 | 12.2 | 12.8 | M12 × 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.

(2) All adapters shown in the standard orientation.

(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.

Dimensions

Maximum Dynamic Load and Stroke Relationships

| Maximum | | Length (Ltot), | Ordering stroke (S) [mm] | | |
|-------------------------------------|-------|--|--------------------------|--|--|
| Dynamic Load (Fx) - kN (Ibs.) | and A | cted Length (A) dapter nsions [mm] | 100 - 300 | | |
| | Ltot | | A + B1 + C2 | | |
| 1.7 | А | | S + 150.9 + B2 + C1 | | |
| | C1 | Type M, E | 17.5 | | |
| (382) | | Type N, F | 26.5 | | |
| | | Type P, G | 23.9 | | |
| | C3 | | 30.2 | | |
| | Ltot | | A + B1 + C2 | | |
| | А | | S + 150.9 + B2 + C1 | | |
| 2.6 | C1 | Type M, E | 17.5 | | |
| (585) | | Type N, F | 26.5 | | |
| | | Type P, G | 23.9 | | |
| | C3 | | 30.2 | | |
| | Ltot | | A + B1 + C2 | | |
| | А | | S + 150.9 + B2 + C1 | | |
| 4.5 | C1 | Type M, E | 17.5 | | |
| (2012) | | 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 | C1 | Type M, E | 17.5 | | |
| (1529) | | Type N, F | 26.5 | | |
| | | Type P, G | 23.9 | | |
| | С3 | | 30.2 | | |
| 10 | Ltot | | A + B1 + C2 | | |
| | А | | S + 180.9 + B2 + C1 | | |
| | C1 | Type M, E | 17.5 | | |
| (2248) | | Type N, F | 26.5 | | |
| | | Type P, G | 23.9 | | |
| | C3 | | 30.2 | | |
| | | | | | |

Performance Diagrams



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



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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