

Electrak PPA-AC

115 and 230 Vac - load up to 1500 lbf



» Ordering Key - see page 58

» Glossary - see page 61

» Electric Wiring Diagram - see page 42

Standard Features and Benefits

- Strong and versatile heavy duty actuator
- High duty cycle
- Highly efficient ball screw drive system
- Overload clutch for mid and end of stroke protection
- Stroke lengths up to 36 inch
- Motor with thermal switch
- Maintenance free
- Large range of options

General Specifications

Parameter	Electrak PPA-AC
Screw type	ball
Internally restrained	no
Manual override	no, optional
Dynamic braking	no
Holding brake	yes
End of stroke protection	overload clutch
Mid stroke protection	overload clutch
Motor protection	auto reset thermal switch
Motor connection	flying leads
Motor connector	no
Certificates	RoHS compliant
Options	<ul style="list-style-type: none"> • end of stroke limit switches • potentiometer • encoder • protective bellows • anti-coast brake * • electrical brake ** • manual override***

* External capacitor, which is supplied with the actuator, is required to run actuators with anti-coast brake option. See page 47 for capacitor dimensions.

** Only possible on 115 Vac models *** Contact customer support

Performance Specifications

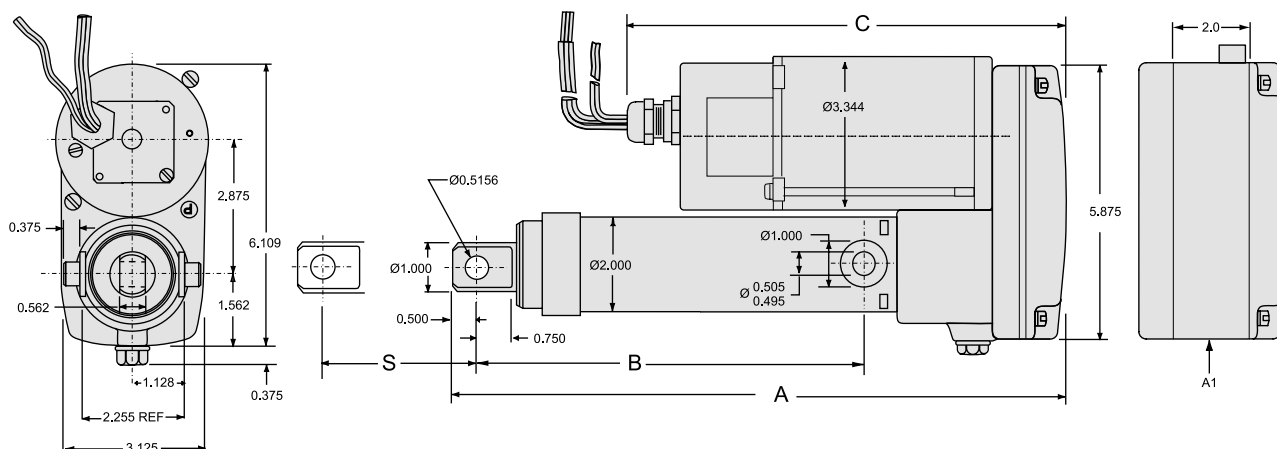
Parameter	PPA-AC
Maximum load, dynamic / static PPA •• -18B65 PPA •• -58B65	[lbf] 500 / 3000 1500 / 3000
Speed, at no load / at maximum load PPA11-18B65 PPA22-18B65 PPA •• -58B65	[in/sec] 0.63 / 0.60 0.55 / 0.50 0.17 / 0.17
Available input voltages Single phase	[Vac] 115, 230
Input frequency 1 × 115 Vac model 1 × 230 Vac model	[Hz] 50/60 50/60
Standard stroke lengths	[in] 4, 8, 12, 18, 24, 36
Operating temperature limits	[°F] -15 – +150
Full load duty cycle @ 77 °F	[%] 30
End play, maximum	[in] 0.040
Restraining torque PPA •• -18B65 PPA •• -58B65	[lbf-in] 100 200
Lead cross section	[AWG] 18
Lead length	[in] 19.5
Protection class	IP22

Compatible Controls

Control model	See page
DPDT switch	46

Electrak PPA-AC

115 and 230 Vac - load up to 1500 lbf

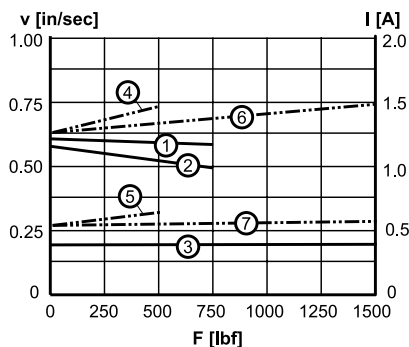


S: stroke
 A: retracted length
 B: retracted length to trunnions
 C: motor length
 A1: housing dimensions for limit switch, encoder or potentiometer options

Stroke (S)	[inch]	4	8	12	18	24	36
Retracted length (A) without options	[inch]	13.7	17.7	21.7	29.7	35.7	47.7
Retracted length (A) with limit switch, encoder or potentiometer	[inch]	15.7	19.7	23.7	31.7	37.7	49.7
Retracted length (B)	[inch]	8.8	12.8	16.8	24.8	30.8	42.8
Motor length (C) without brake	[inch]	9.5	9.5	9.5	9.5	9.5	9.5
Motor length (C) with anti-coast brake	[inch]	7.5	7.5	7.5	7.5	7.5	7.5
Motor length (C) with electrical brake	[inch]	11.0	11.0	11.0	11.0	11.0	11.0
Weight	[lb]	13.2	14.8	16.5	19.1	21.6	27.0
Weight with electrical brake	[lb]	14.6	16.2	17.9	20.5	23.0	28.4
Add on weight for limit switch, encoder or potentiometer	[lb]	1.7	1.7	1.7	1.7	1.7	1.7

Performance Diagrams

Speed and Current vs. Load



V: speed I: current F: load

- 1: speed 500 lbf, 115 Vac
- 2: speed 500 lbf, 230 Vac
- 3: speed 1500 lbf
- 4: current 500 lbf, 115 Vac
- 5: current 500 lbf, 230 Vac
- 6: current 1500 lbf, 115 Vac
- 7: current 1500 lbf, 230 Vac

Electrak PPA-DC

12, 24, 36 and 90 Vdc - load up to 1500 lbf

» Ordering Key - see page 57

» Glossary - see page 61

» Electric Wiring Diagram - see page 41



Standard Features and Benefits

- Strong and versatile heavy duty actuator
- High duty cycle
- Highly efficient ball screw drive system
- Overload clutch for mid and end of stroke protection
- Stroke lengths up to 36 inch
- Four different input voltages to choose from
- Motor with thermal switch
- Maintenance free
- Large range of options

General Specifications

Parameter	Electrak PPA-DC
Screw type	ball
Internally restrained	no
Manual override	no, optional
Dynamic braking	no
Holding brake	yes
End of stroke protection	overload clutch
Mid stroke protection	overload clutch
Motor protection	auto reset thermal switch
Motor connection	flying leads
Motor connector	no
Certificates	CE optional*
Options	<ul style="list-style-type: none"> • end of stroke limit switches • potentiometer • encoder • protective bellows • manual override*

* Contact customer support

Performance Specifications

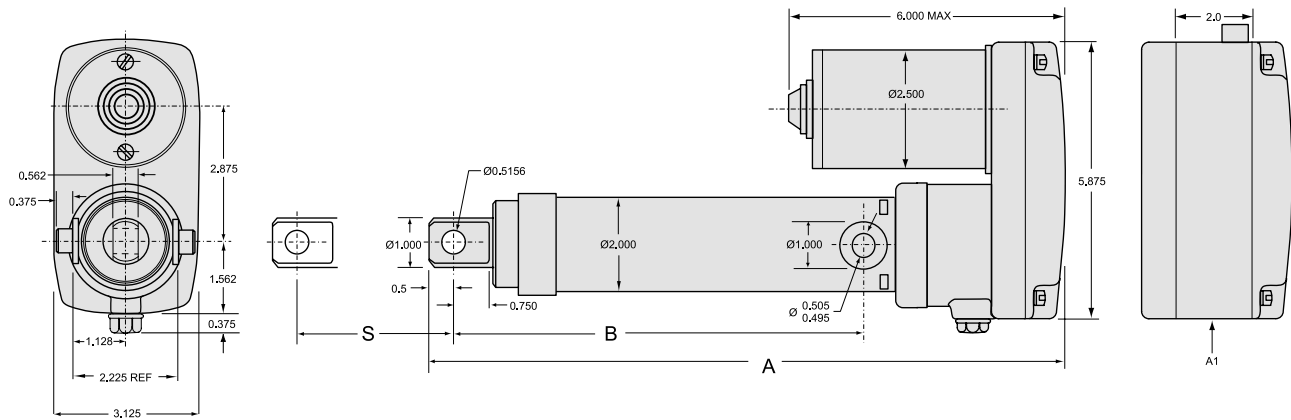
Parameter	PPA-DC
Maximum load, dynamic / static PPA •• -18B65 PPA •• -58B65	[lbf] 750 / 3000 1500 / 3000
Speed, at no load / at maximum load PPA12(24)-18B65 PPA12(24)-58B65 PPA90-18B65 PPA90-58B65	[in/sec] 1.26 / 1.10 0.49 / 0.37 0.80 / 0.63 0.17 / 0.17
Available input voltages	[Vdc] 12, 24, 36, 90
Standard stroke lengths	[in] 4, 8, 12, 18, 24, 36
Operating temperature limits	[°F] -15 – +150
Full load duty cycle @ 77 °F	[%] 30
End play, maximum	[in] 0.040
Restraining torque PPA •• -18B65 PPA •• -58B65	[lbf-in] 100 200
Lead cross section	[AWG] 14
Lead length	[in] 16.5
Protection class	IP54

Compatible Controls

Control model	See page
DPDT switch	46

Electrak PPA-DC

12, 24, 36 and 90 Vdc - load up to 1500 lbf



S: stroke
A: retracted length

B: retracted length to trunnions
A1: housing dimensions for limit switch, encoder or potentiometer options

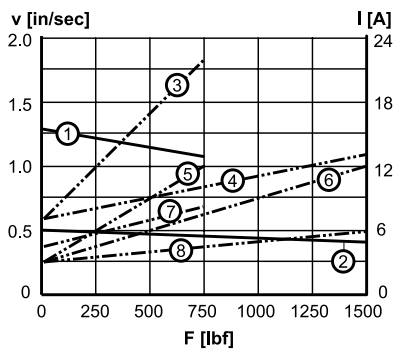
Stroke (S)	[inch]	4	8	12	18	24	36
Retracted length (A) without options	[inch]	13.7	17.7	21.7	29.7	35.7	47.7
Retracted length (A) with limit switch, encoder or potentiometer	[inch]	15.7	19.7	23.7	31.7	37.7	49.7
Retracted length to trunnions (B)	[inch]	8.8	12.8	16.8	24.8	30.8	42.8
Weight	[lb]	10	11.6	13.3	15.9	18.5	23.8
Add on weight for limit switch, encoder or potentiometer	[lb]	1.7	1.7	1.7	1.7	1.7	1.7

Performance Diagrams

Speed and Current vs. Load

12, 24 and 36 Vdc models

90 Vdc model



Contact the factory for 90VDC applications.

V: speed I: current F: load

- 1: speed 750 lbf
- 2: speed 1500 lbf
- 3: current 750 lbf, 12 Vdc
- 4: current 1500 lbf, 12 Vdc
- 5: current 750 lbf, 24 Vdc
- 6: current 1500 lbf, 24 Vdc
- 7: current 750 lbf, 36 Vdc
- 8: current 1500 lbf, 36 Vdc