

Electrak 2

12 Vdc - load up to 250 lbf



Standard Features and Benefits

- Economical and robust actuator for medium loads
- Stainless steel extension tube
- Self-locking acme screw drive system
- Overload clutch for mid and end of stroke protection
- Motor with thermal switch
- Maintenance free

General Specifications

Parameter	Electrak 2
Screw type	acme
Internally restrained	no
Manual override	no, optional
Dynamic braking	no
Holding brake	no, self-locking
End of stroke protection	overload clutch
Mid stroke protection	overload clutch
Motor protection	auto reset thermal switch
Motor connection	flying leads and connector
Motor connector	Packard Electric 56 series 2984883 with terminal 2962987. Mating connector: 2973781 with terminal 2962573 (p/n 9100-448-001)
Certificates	CE optional*
Options	<ul style="list-style-type: none"> • potentiometer* • manual override* • limit switches*

* Contact customer support

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» Electric Wiring Diagram - see page 40

Performance Specifications

Parameter	Electrak 2
Maximum load, dynamic / static [lbf]	250 / 1000
Speed, at no load / at maximum load [in/sec] D12-10A5 (high speed) D12-20A5 (standard speed)	1.20 / 1.00 0.61 / 0.55
Available input voltages [Vdc]	12
Standard stroke lengths [in]	4, 8, 12, 18*, 24*
Operating temperature limits [°F]	-15 – +150
Full load duty cycle @ 77 °F [%]	25
End play, maximum [in]	0.08
Restraining torque [lbf-in]	65
Lead cross section [AWG]	14
Lead length [in]	7.5
Protection class	IP66

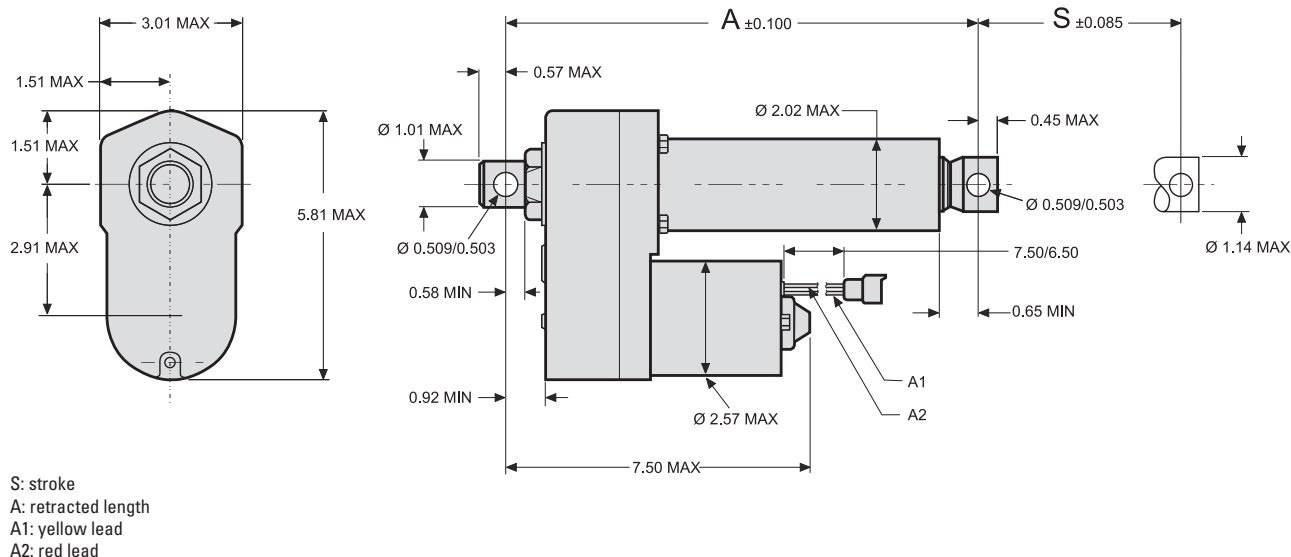
* Contact customer support

Compatible Controls

Control model	See page
DPDT switch	46

Electrak 2

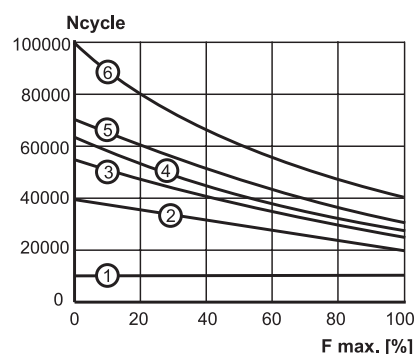
12 Vdc - load up to 250 lbf



Stroke (S)	[inch]	4	8	12
Retracted length (A)	[inch]	10.3	14.3	18.3
Weight	[lb]	10.0	10.7	11.4

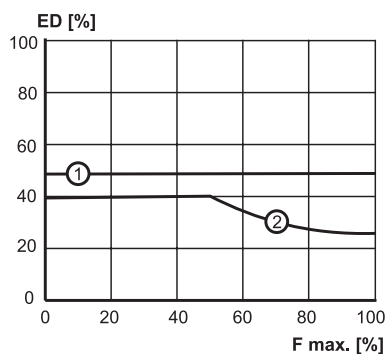
Performance Diagrams

Life vs. Load



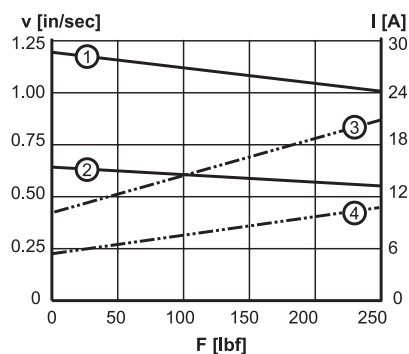
- 1: all models using the clutch at the end of stroke
2: standard speed model, 12 inch stroke
3: standard speed model, 8 inch stroke
4: high speed model, 12 inch stroke
5: high speed model, 8 inch stroke and standard speed model, 4 inch stroke
6: high speed model, 4 inch stroke

Duty Cycle vs. Load



- 1: standard speed model
2: high speed model

Speed and Current vs. Load



- 1: speed high speed model
2: speed standard speed model
3: current high speed model
4: current standard speed model

Electrak 10

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



Standard Features and Benefits

- Robust, strong and reliable
- Withstands very harsh environments
- Stainless steel extension tube
- Highly efficient ball screw drive system
- Overload clutch for mid and end of stroke protection
- Motor with thermal switch
- Maintenance free

General Specifications

Parameter	Electrak 10
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 and connector
Motor connector	Packard Electric 56 series 2984883 with terminal 2962987. Mating connector: 2973781 with terminal 2962573 (p/n 9100-448-001)
Certificates	CE optional*
Options	<ul style="list-style-type: none"> • potentiometer* • manual override* • limit switches*

* Contact customer support

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» Electric Wiring Diagram - see page 40

Performance Specifications

Parameter		Electrak 10
Maximum load, dynamic / static	[lbf]	
D •• -05B5		500 / 3000
D •• -10(20)B5		1000 / 3000
Contact customer support		1500 / 3000
Speed, at no load / at maximum load	[in/sec]	
D •• -05B5		2.40 / 1.40
D •• -10B5 (high speed)		1.30 / 0.80
D •• -20B5 (standard speed)		0.60 / 0.45
Available input voltages	[Vdc]	12, 24, 36
Standard stroke lengths	[in]	4, 8, 12, 18*, 24*
Operating temperature limits	[°F]	-15 – +150
Full load duty cycle @ 77 °F	[%]	25
End play, maximum	[in]	0.04
Restraining torque	[lbf-in]	100
Lead cross section	[AWG]	14
Lead length	[in]	7.5
Protection class		IP66

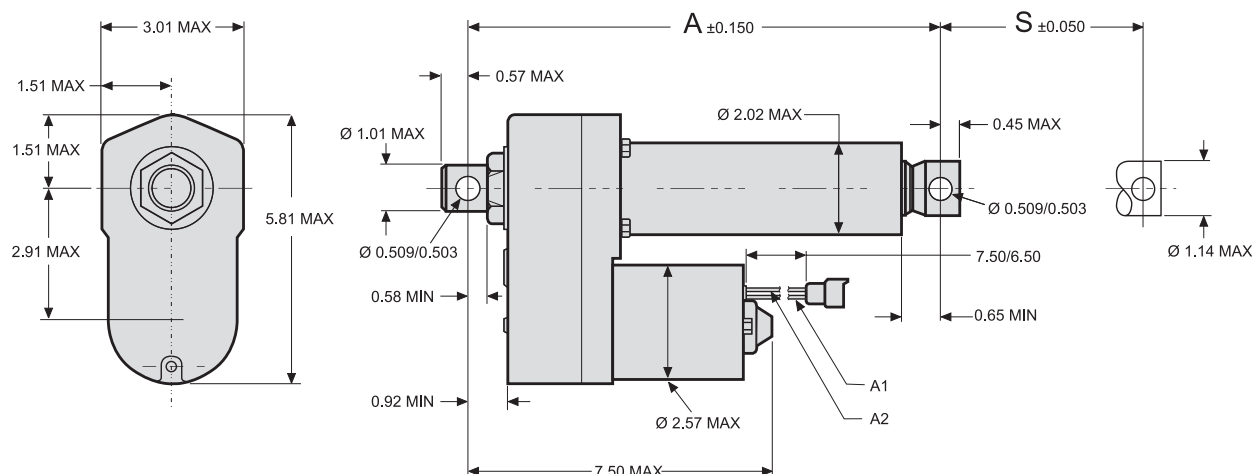
* Contact customer support

Compatible Controls

Control model	See page
DPDT switch	46

Electrak 10

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



S: stroke

A: retracted length

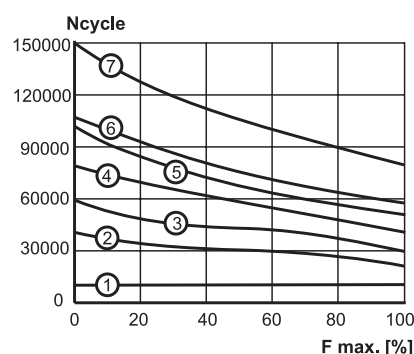
A1: yellow lead

A2: red lead

Stroke (S)	[inch]	4	8	12
Retracted length (A)	[inch]	11.9	15.9	19.9
Weight	[lb]	11.3	12.0	12.7

Performance Diagrams

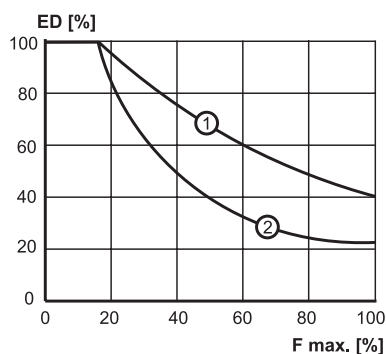
Life vs. Load



Ncycle: life in number of cycles
(one cycle = extend and retract)
F max: percent of maximum rated load

- 1: all models using the clutch at the end of stroke
- 2: 1000 lbf, 12 inch stroke
- 3: 1000 lbf, 8 inch stroke
- 4: 500 lbf, 12 inch stroke
- 5: 1000 lbf, 4 inch stroke
- 6: 500 lbf, 8 inch stroke
- 7: 500 lbf, 4 inch stroke

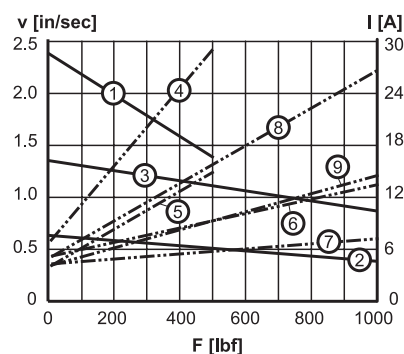
Duty Cycle vs. Load



ED: duty cycle in percent at 77° F
F max: percent of maximum rated load

- 1: 1000 lbf, standard speed
- 2: 500 lbf

Speed and Current vs. Load



V: speed I: current F: load

- 1: speed 500 lbf
- 2: speed 1000 lbf, standard speed
- 3: speed 1000 lbf, high speed
- 4: current 500 lbf, 12 Vdc
- 5: current 500 lbf, 24 Vdc
- 6: current 1000 lbf, 12 Vdc, standard speed
- 7: current 1000 lbf, 24 Vdc, standard speed
- 8: current 1000 lbf, 12 Vdc, high speed
- 9: current 1000 lbf, 24 Vdc, high speed

Electrak 5

115 and 230 Vac - load up to 1500 lbf



Standard Features and Benefits

- Robust, strong and reliable
- Stainless steel extension tube
- Highly efficient ball screw drive system
- Overload clutch for mid and end of stroke protection
- Heavy duty motor with thermal switch
- Anti-coast brake for repeatable positioning
- Maintenance free

General Specifications

Parameter	Electrak 5
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
Certificates	UL, CSA, CE optional*
Options	<ul style="list-style-type: none"> • potentiometer* • manual override* • limit switches*

* Contact customer support

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Performance Specifications

Parameter	Electrak 5
Maximum load, dynamic / static [lbf] A •• -05B5 A •• -10B5 Contact customer support	500 / 2500 1000 / 2500 1500 / 2500
Speed, at no load / at maximum load [in/sec] A •• -05B5 A •• -10B5	2.10 / 1.70 1.10 / 1.00
Available input voltages** [Vac] Single phase	115, 230
Input frequency [Hz] 1 × 120 Vac model 1 × 230 Vac model	60 50/60
Standard stroke lengths [in]	4, 8, 12, 18, 24
Operating temperature limits [°F]	-15 – +150
Full load duty cycle @ 77 °F [%]	25
Maximum on time [sec]	45
End play, maximum [in]	0.04
Restraining torque [lbf-in]	100
Lead cross section [AWG]	18
Cable length [in]	23
Protection class	IP55

** Capacitor required to run the actuator. 115 Vac = 35 µF, p/n 9200-448-002,
230 Vac = 10 µF, p/n 9200-448-003.

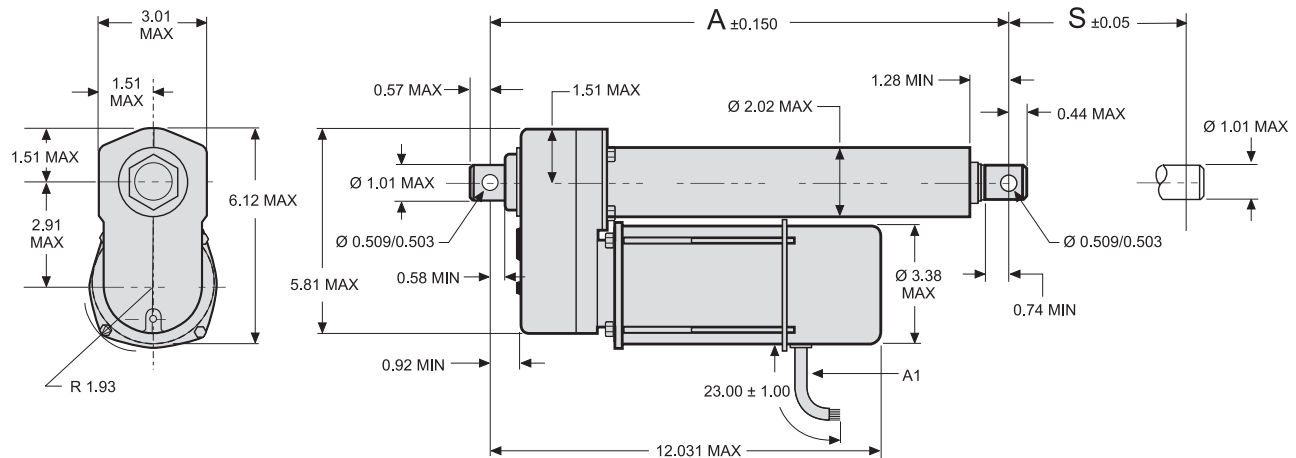
Compatible Controls

Control model	See page
DPDT switch	46
MCS-2041***	48

*** This control include a capacitor making an external capacitor redundant.

Electrak 5

115 and 230 Vac - load up to 1500 lbf

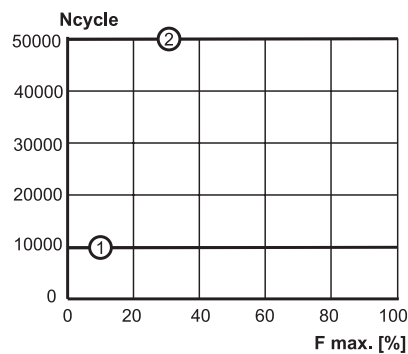


S: stroke
A: retracted length
A1: cable

Stroke (S)	[inch]	4	8	12	18	24
Retracted length (A)	[inch]	15.0	19.0	23.0	29.0	35.0
Weight	[lb]	14.4	15.2	16.1	17.3	18.6

Performance Diagrams

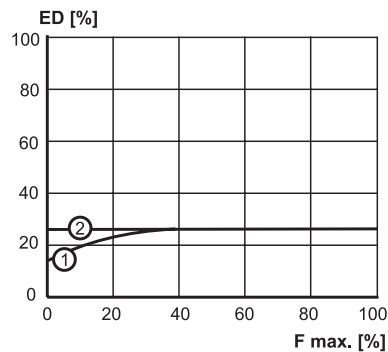
Life vs. Load



Ncycle: life in number of cycles
(one cycle = extend and retract)
F max: percent of maximum rated load

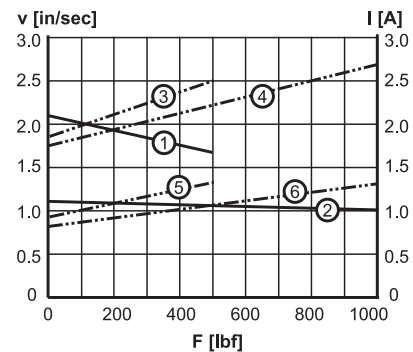
- 1: all models using the clutch at the end of stroke
- 2: all models using the anti-coast brake at the end of stroke only

Duty Cycle vs. Load



ED: duty cycle in percent at 77° F
F max: percent of maximum rated load
1: 50 Hz input frequency
2: 60 Hz input frequency

Speed and Current vs. Load



V: speed I: current F: load
1: speed 500 lbf
2: speed 1000 lbf
3: current 500 lbf, 115 Vac
4: current 1000 lbf, 115 Vac
5: current 500 lbf, 230 Vac
6: current 1000 lbf, 230 Vac