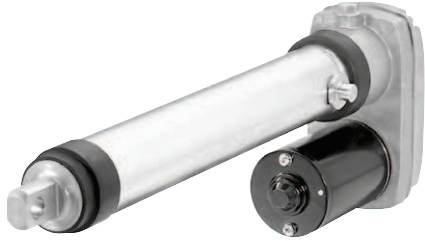


Electrak® PPA-DC

12, 24 and 36 Vdc - load up to 6670 N



» Ordering Key - see page 75

» Glossary - see page 85

» Electric Wiring Diagram - see page 57

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 (914 mm)
- Three 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
Options	<ul style="list-style-type: none"> • end of stroke limit switches • potentiometer • encoder • protective bellows

Performance Specifications

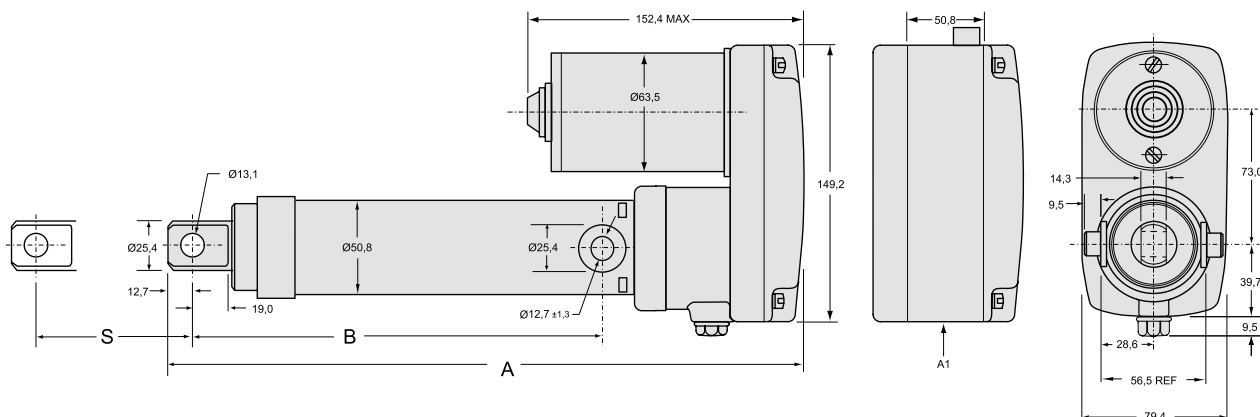
Parameter	PPA-DC
Maximum load, dynamic / static PPA •• -18B65 PPA •• -58B65	[N] 3330 / 13350 6670 / 13350
Speed, at no load / at maximum load PPA12(24/36)-18B65 PPA12(24/36)-58B65	[mm/s] 32 / 28 12 / 9
Available input voltages	[Vdc] 12, 24, 36
Standard stroke lengths	[inch] 4, 8, 12, 18, 24, 36
Operating temperature limits	[°C] -25 – +65
Full load duty cycle @ 25 °C	[%] 30
End play, maximum	[mm] 1
Restraining torque PPA •• -18B65 PPA •• -58B65	[Nm] 11 22
Lead cross section	[mm ²] 2
Lead length	[mm] 420
Protection class	IP52

Compatible Controls

Control model	See page
DPDT switch	61
AC-063	62

Electrak® PPA-DC

12, 24 and 36 Vdc - load up to 6670 N



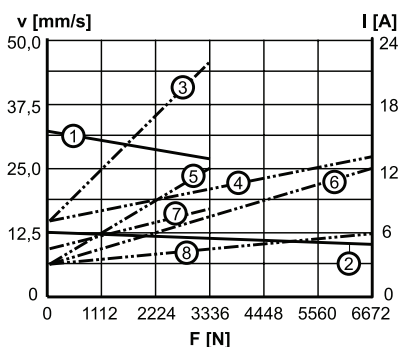
S: stroke
A: retracted length

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

Stroke (S)	[inch (mm)]	4 (101,6)	8 (203,2)	12 (304,8)	18 (457,2)	24 (609,6)	36 (914,4)
Retracted length (A) without options	[mm]	348,0	449,6	551,2	754,4	906,8	1211,6
Retracted length (A) with limit switch, encoder or potentiometer	[mm]	398,8	500,4	602,0	805,2	957,6	1262,4
Retracted length to trunnions (B)	[mm]	223,5	352,1	426,7	629,9	782,3	1087,1
Weight	[kg]	4,5	5,3	6,0	7,2	8,4	10,8
Add on weight for limit switch, encoder or potentiometer	[kg]	0,5	0,5	0,5	0,5	0,5	0,5

Performance Diagrams

Speed and Current vs. Load



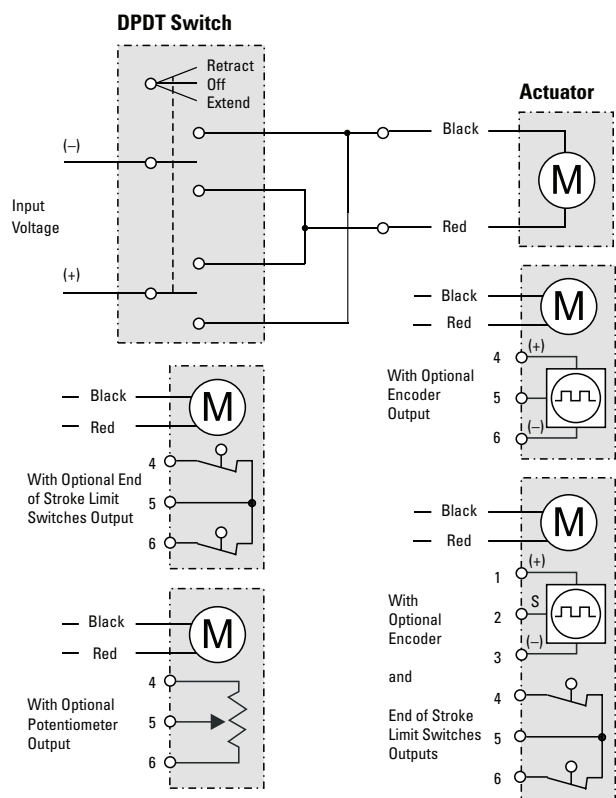
V: speed I: current F: load

- 1: speed PPA •• -18B65
- 2: speed PPA •• -58B65
- 3: current 12 Vdc, PPA12-18B65
- 4: current 12 Vdc, PPA12-58B65
- 5: current 24 Vdc, PPA24-18B65
- 6: current 24 Vdc, PPA24-58B65
- 7: current 36 Vdc, PPA36-18B65
- 8: current 36 Vdc, PPA36-58B65

Electrical Wiring Diagrams

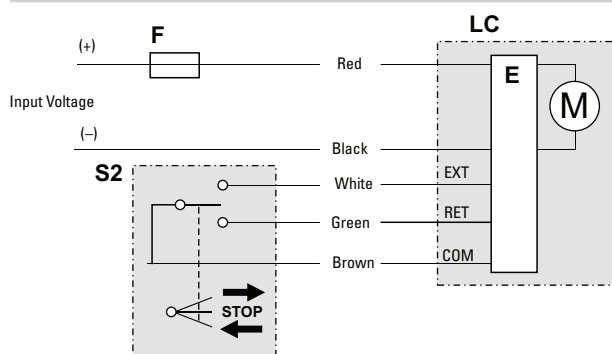
DC-actuators

Electrak PPA-DC



Connect the black lead to positive and red to negative to extend the actuator. Change polarity to retract the actuator. The encoder is supplied with 4,5 - 12 Vdc between terminals 4 or 1 and 6 or 3 and the pulse train signal is generated on terminal 5 or 2. The potentiometer output has 0 ohm between terminal 4 and 5 when the actuator is fully retracted.

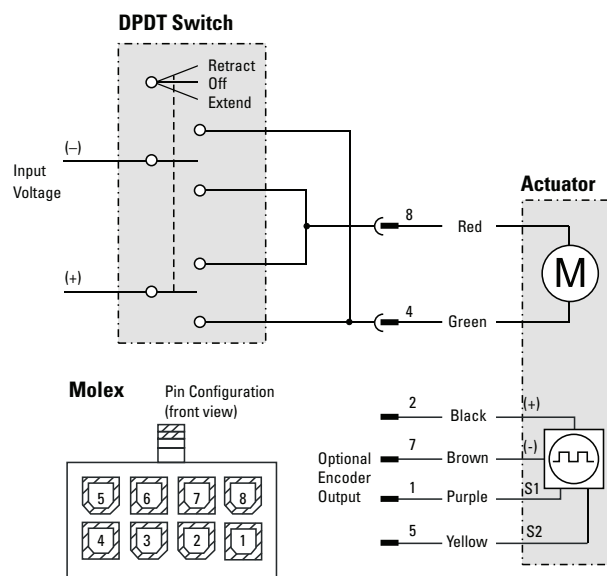
LC1600



Connect the white (EXT) and brown (COM) leads to extend the actuator. To retract the actuator connect the green (RET) and brown (COM) leads. The actuator will automatically switch off when reaching the ends of stroke or a mid-stroke overload.

With encoder feedback (NE) or with no feedback options (NX): For the LC1600, only use the NE and NX versions with the DCG control.

LC2000 / 3000, LM80-H/ -V / -I



Connect the green lead to positive and red to negative to extend the actuator. Change polarity to retract the actuator. The encoder is supplied with 5 - 18 Vdc on pin 2 and 7 and the two pulse train signals are generated on pin 1 and 5.

Ordering Keys

Electrak DC-actuators

Electrak 050			
1	2	3	4
DE24 -	17W44M	15	FS
1. Model and input voltage DE12 - = Electrak 050, 12 Vdc DE24 - = Electrak 050, 24 Vdc DE36 - = Electrak 050, 36 Vdc DE24Q = Electrak 050, 24 Vdc, Q-version ¹		3. Stroke 02 = 25 mm 05 = 50 mm 07 = 75 mm 10 = 100 mm 12 = 125 mm 15 = 150 mm 17 = 175 mm 20 = 200 mm	
2. Dynamic load capacity and color 17W41M = 510 N, black housing 17W42M = 275 N, black housing 17W44M = 140 N, black housing 17W41W = 510 N, white housing ¹ 17W42W = 275 N, white housing ¹ 17W44W = 140 N, white housing ¹		4. End of stroke limit switches and potentiometer FS = limit switches and no potentiometer PO = potentiometer ² PF = limit switches and potentiometer ² MF = crossholes rotated 90° and limit switches MP = crossholes rotated 90° and potentiometer ²	
		¹ White housing is standard for the Q-version. ² Not possible in combination with 200 mm stroke.	

Electrak PPA-DC					
1	2	3	4	5	6
PPA24 -	58B65 -	18	N -	LS	X
1. Model and input voltage PPA12 - = Electrak PPA-DC, 12 Vdc PPA24 - = Electrak PPA-DC, 24 Vdc PPA36 - = Electrak PPA-DC, 36 Vdc		3. Stroke 04 = 4 inch (101,6 mm) 08 = 8 inch (203,2 mm) 12 = 12 inch (304,8 mm) 18 = 18 inch (457,2 mm) 24 = 24 inch (609,6 mm) 36 = 36 inch (914,4 mm)		5. Feedback option XX = no feedback option LS = end of stroke limit switches PO = potentiometer ¹ HS = encoder HL = encoder + end of stroke limit switches	
2. Dynamic load capacity 18B65 - = 3330 N 58B65 - = 6670 N		4. Brake option N - = no brake option		6. Bellows option X = no bellows C = bellows	
				¹ Not available with limit switches.	