DC Linear Actuator P5H-10-150mm

The Sinokoko P5H series of linear actuators are high-torque DC motors geared to push or pull a load along the stroke of the actuator. This actuator comes with a built-in potentiometer, allowing your application to monitor the actuator’s position.

The 3546 linear actuator has a stroke length of 150mm, can move at a rate of 10 mm/s and can extert up to 750N of force at lower speeds.

Product Specifications

Motor Properties	
Motor Type	DC Linear Actuator
Stroke Length	150 mm
Maximum Speed	10 mm/s
Peak Power Point	750 N
Electrical Properties	
Rated Voltage	24 V DC
Potentiometer Impedance	5 kO©
Physical Properties	
Material	Aluminium Alloy
Gear Train Material	Powder Metallurgy
IP Rating	IP56
Weight	1 kg
Operating Temperature Min	-25 B°C
Operating Temperature Max	65 B°C

Documents

- Manufacturer Data Sheet and Graphs
- PID Control Loop Application Guide
- Download 3D Step File

DC Motor Controllers

You'll need a motor controller to get control of the position of this actuator. In order to connect it to a controller, attach the red wire to the ""+"" terminal on the controller, and the black wire to the ""-"" terminal.

If you decide to use a motor controller with an analog input, you can connect the integrated potentiometer by soldering the wires to a Phidget cable and connecting it to the input. If you decide to use a stand-alone motor controller, you'll also need a device with an analog input to read the potentiometer.

Controller Properties	Board Properties				
Part Number	**Number of Motor Ports**	**Velocity Resolution**	**Acceleration Resolution**	**Continuous Motor Current Max**	**Controlled By**
1064_1B	2	0.79 % Duty Cycle	1.9 % Duty Cycle/s	(per motor) 14 A	USB (Mini-USB)
1065_0B	1	0.39 % Duty Cycle	24.5 % Duty Cycle/s	5 A	USB (Mini-USB)
DCC1000_0	1	0.001 % Duty Cycle	1 % Duty Cycle/s	25 A	VINT

Phidget Cables

To easily connect the internal potentiometer to an IO board we recommend you use a Phidget cable. You can solder multiple cables together in order to make even longer Phidget cables, but you should be aware of the effects of having long wires in your system. The following table describes how to wire the

potentiometer to the Phidget cable:

Wire Color	Function
White	Potentiometer Ground
Blue	Potentiometer Wiper
Red	Actuator Motor Power
Black	Actuator Motor Ground
Yellow	Potentiometer Power

Physical Properties

Part Number	Cable Length
3002_0	600 mm
3003_0	100 mm
3004_0	3.5 m
3034_0	150 mm
3038_0	1.2 m
3039_0	1.8 m