

DC Linear Actuator P5H-24-150mm



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 3545 linear actuator has a stroke length of 150mm, can move at a rate of 24 mm/s and can exert up to 350N of force at lower speeds.

Product Specifications

Motor Properties

Motor Type	DC Linear Actuator
Stroke Length	150 mm
Maximum Speed	24 mm/s
Peak Power Point	350 N

Electrical Properties

Rated Voltage	24 V DC
Potentiometer Impedance	5 k Ω

Physical Properties

Material	Aluminium Alloy
Gear Train Material	Powder Metallurgy
IP Rating	IP56
Weight	995 g
Operating Temperature Min	-25 $^{\circ}$ C
Operating Temperature Max	65 $^{\circ}$ 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.

Product		Controller Properties		Electrical 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

Product	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

If you want an actuator with different specifications you can compare them all below:

Product	Motor Properties			Electrical Properties	Physical Properties
Part Number	Stroke Length	Maximum Speed	Peak Power Point	Rated Voltage	Weight
3545_0	150 mm	24 mm/s	350 N	24 V DC	995 g
3546_0	150 mm	10 mm/s	750 N	24 V DC	1 kg
3547_0	300 mm	24 mm/s	350 N	24 V DC	1.2 kg
3548_0	300 mm	10 mm/s	750 N	24 V DC	1.2 kg
3570_0	50 mm	32 mm/s	(@ 16 mm/s) 50 N ¹		

