

## How To Select

### Step 1 – Determine Load and Stroke length requirements

Use the Quick Selection guide to identify the model family that will provide the load capacity and stroke length needed for your application.

### Step 2 – Determine Gear Ratio

Select gear ratio from performance charts for allowable current draw and needed load.

### Step 3 – Identify motor type and voltage

Select DC motor and motor voltage.

### Step 4 – Motor Type

Select M for ignition protected motor (12 VDC only).  
Select needed motor voltage.

### Step 5 – Confirm the application Duty Cycle

At full load capacity, actuators have a 25% duty cycle. Duty cycle is the amount of 'on-time' compared to cooling time. A unit that runs for 15 seconds should be off for 45 seconds.

### Step 6 – Select Nut Type

Select nut for unit selected. (K2x are all ball bearing).

### Step 7 – Select Stroke Length

Choose standard lengths from chart. For special length consult factory.

### Step 8 – Select end fitting orientation

Leave blank for standard orientation.

### Important Unit Restrictions

Side loading and shock loads must be considered in actuator applications. Side loading and cantilevered mounting should be eliminated through proper machine design. Side loading will dramatically reduce unit life. While actuators can withstand limited shock loads, it is recommended that shock loading be avoided wherever possible. (See page 71)

## B-Track Configurator

**K2x**    **P1.x**    **G20**    **12V**    **M**    **BR**    **04**    **R120**

**Actuator Model No.**

K2x  
K2  
K2vL

**Gear Ratio**

G30 = 30:1  
G20 = 20:1  
G10 = 10:1  
G05 = 5:1

**Motor Voltage**

12V – 12 volts  
24V – 24 volts  
36V – 36 volts  
48V – 48 volts  
90V – 90 volts  
**115V – 115 volts**  
230V – 230 volts

**Nut Type\***

Blank – K2x  
BR – Bronze Nut  
BRL – Bronze Nut - Long  
DN – Delrin® Nut

\*BRL matches K2x pin to pin

**Stroke Length**

04 – 4.00 (100 mm)  
06 – 6.00 (150 mm)  
08 – 8.00 (200 mm)  
12 – 12.00 (300 mm)  
18 – 18.00 (450 mm)  
24 – 24.00 (600 mm)

**Base Fitting Alignment**

Blank – Standard  
R30 – 30° Fitting  
R60 – 60° Fitting  
R90 – 90° Fitting  
R120 – 120° Fitting  
R150 – 150° Fitting

**Control Model**

P1.x Fixed Limit Switch  
P2.x Position Feedback  
EP1.x Adjustable Limit Switches  
RP Low Switching (K2vL Not Available)

**Note:** See control pages for full listing of model numbers.

**Motor Type**

M – Ignition Protected Motor  
For standard motor, leave blank.



Scan to watch!  
**Linear Actuator Basic Selection Video**  
<https://p.widencdn.net/ydtpk6>