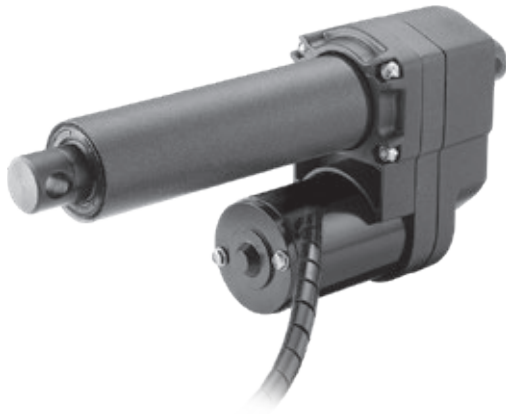




B-Track DC – Technical Features



Standard Features

- Robust and reliable
- 12, 24, 36, 48 and 90 Vdc as standard input voltages
- Acme and ball screw models
- Strokes up to 24 inches
- Load up to 12460 N (2800 lbf)
- IP66/IP69K protection

General Specifications

Screw type	acme or ball
Nut type K2 (acme screw) K2X (ball screw)	self-locking lead nut load lock ball nut
Manual override	yes
Anti-rotation	no
Static load holding brake acme screw models ball screw models	no (self-locking) yes
Safety features	overload clutch motor auto reset thermal switch
Anti coast brake K2 (acme screw) K2X (ball screw)	no no
Electrical connection	flying leads with Packard 56 connector
Compliances	CE, UKCA

Compatible Controls

Contact customer support at www.thomsonlinear.com/cs

B-Track DC – Technical Specifications

Mechanical Specifications		
Max. static load ⁽¹⁾	[N (lbf)]	13345 (3000)
Max. dynamic load (Fx)	[N (lbf)]	
K2G05-		1335 (300)
K2G10-		2670 (600)
K2G20-		5340 (1200)
K2G30-		6675 (1500)
K2XG05-		2670 (600)
K2XG10-		5340 (1200)
K2XG20-		9790 (2200)
K2XG30-		12460 (2800)
Speed @ no load/max. load	[mm/s (in/s)]	
K2G05-		73 (2.85) / 43 (1.7)
K2G10-		37 (1.45) / 15 (0.60)
K2G20-		18 (0.70) / 8 (0.31)
K2G30-		12 (0.48) / 7 (0.27)
K2XG05-		67 (2.65) / 28 (1.10)
K2XG10-		37 (1.45) / 17 (0.65)
K2XG20-		19 (0.75) / 6.5 (0.25)
K2XG30-		11 (0.45) / 9.5 (0.38)
Min. ordering stroke (S) length	[in]	2
Max. ordering stroke (S) length	[in]	24
Operating temperature limits	[°C (F)]	-29 – 65 (-20 – 150)
Full load duty cycle @ 25 °C (77 °F)	[%]	25
End play, maximum	[mm (in)]	1.0 (0.04)
Restraining torque	[Nm (lbf-in)]	11.3 (100)
Protection class - static		IP66/IP69K
Salt spray resistance	[h]	250

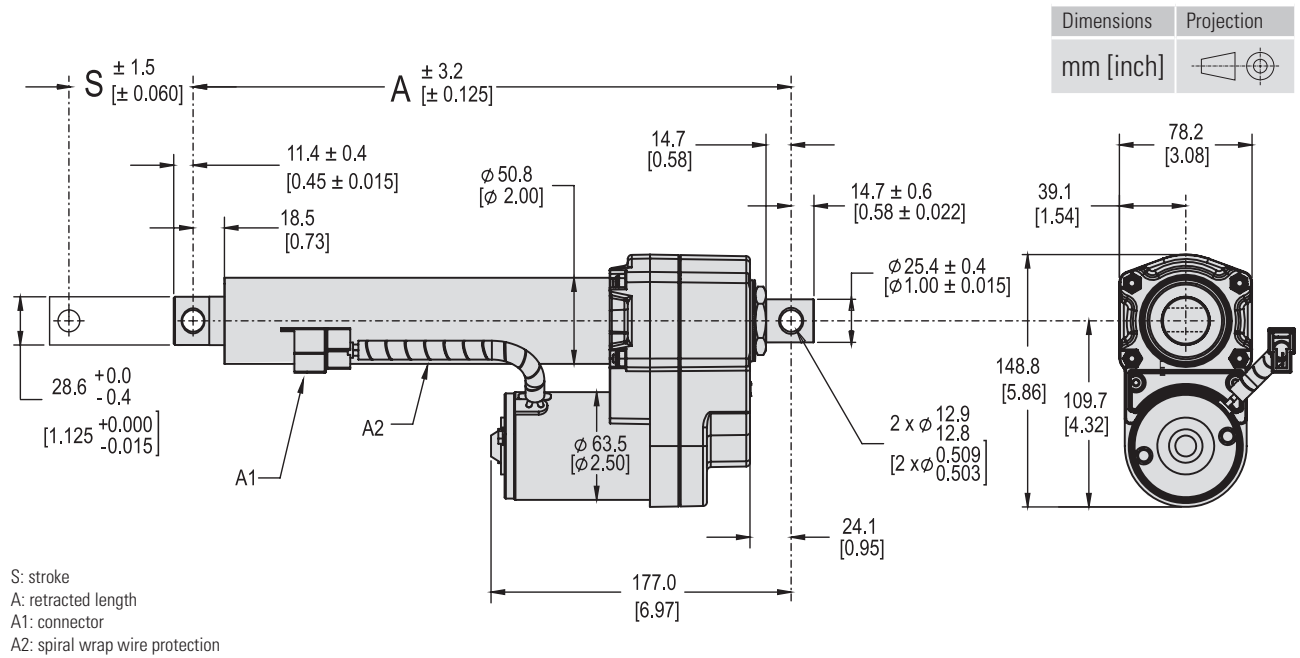
(1) Max. static load at fully retracted stroke

(2) Contact customer support for data on 36, 48 or 90 Vdc models

Electrical Specifications		
Available input voltages ⁽²⁾	[Vdc]	12, 24, 36, 48, 90
Input voltage tolerance	[%]	± 10
Current draw @ no load/max. load	[A]	
K2G05-12V		3.8 / 25
K2G05-24V		2.0 / 12
K2G10-12V		3.8 / 25
K2G10-24V		0.75 / 12
K2G20-12V		2.0 / 25
K2G20-24V		0.75 / 12
K2G30-12V		2.0 / 21
K2G30-24V		0.75 / 11
K2XG05-12V		2.0 / 25
K2XG05-24V		0.75 / 12
K2XG10-12V		2.0 / 25
K2XG10-24V		0.75 / 12.5
K2XG20-12V		2.0 / 23
K2XG20-24V		0.75 / 11
K2XG30-12V		2.0 / 25
K2XG30-24V		0.75 / 12.5
Flying leads length	[mm (in)]	254 (10)
Flying leads spiral wrap diameter	[mm (in)]	11.5 (0.45)
Flying leads cross section	[mm ² (AWG)]	2 (14)



B-Track DC – Dimensions

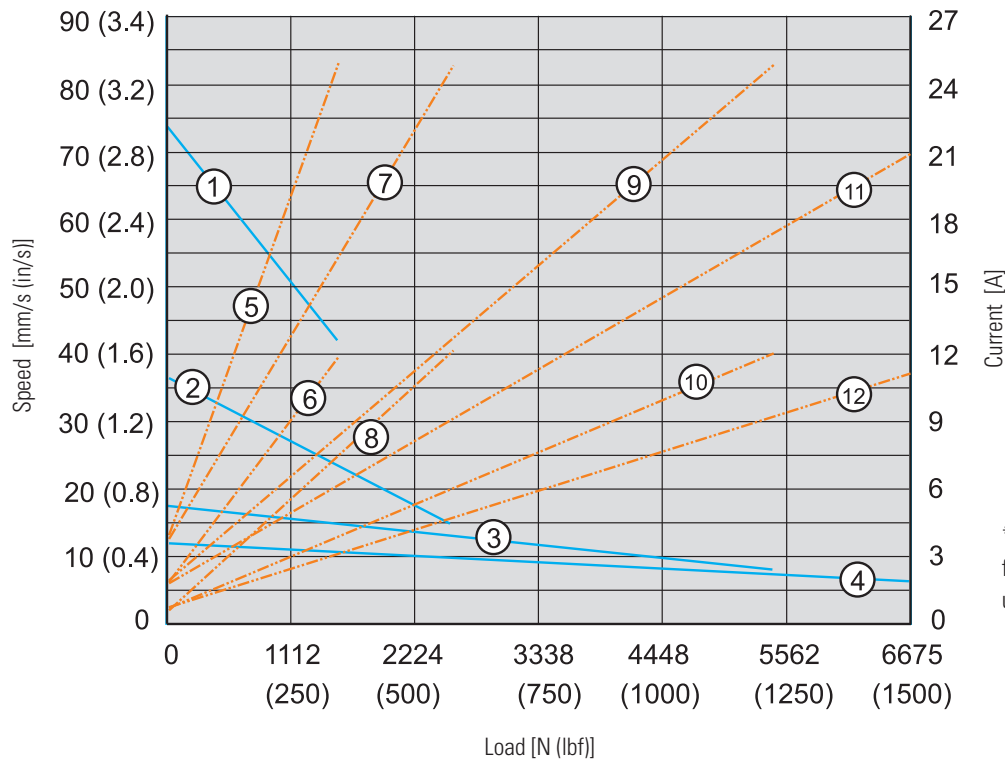


Stroke, Retracted Length and Weight Relationships

Ordering stroke (S)	[in]	2	4	6	8	10	12	14	16	18	20	22	24
Retracted length acme screw models (A)	[mm]	211.3	262.1	312.9	363.7	414.5	465.3	516.1	566.9	617.7	744.7	795.5	846.3
	[in]	8.32	10.32	12.32	14.32	16.32	18.32	20.32	22.32	24.32	29.32	31.32	33.32
Weight acme screw models	[kg]	4.0	4.2	4.4	4.6	6.4	6.7	6.9	7.1	7.3	8.0	8.2	8.4
	[lbs]	8.8	9.3	9.7	10.2	14.2	14.7	15.2	15.7	16.1	17.6	18.1	18.5
Retracted length ball screw models and acme screw models with long nut (A)	[mm]	251.2	302.0	352.8	403.6	454.4	505.2	556.0	606.8	657.6	784.6	835.4	886.2
	[in]	9.89	11.89	13.89	15.89	17.89	19.89	21.89	23.89	25.89	30.89	32.89	34.89
Weight ball screw models	[kg]	4.2	4.4	4.6	4.9	6.7	6.9	7.1	7.3	7.5	8.2	8.4	8.6
	[lbs]	9.3	9.8	10.2	10.7	14.7	15.2	15.7	16.2	16.6	18.1	18.6	19.0

B-Track DC – Performance Diagrams

Acme Screw Models
Speed and Current vs. Load*

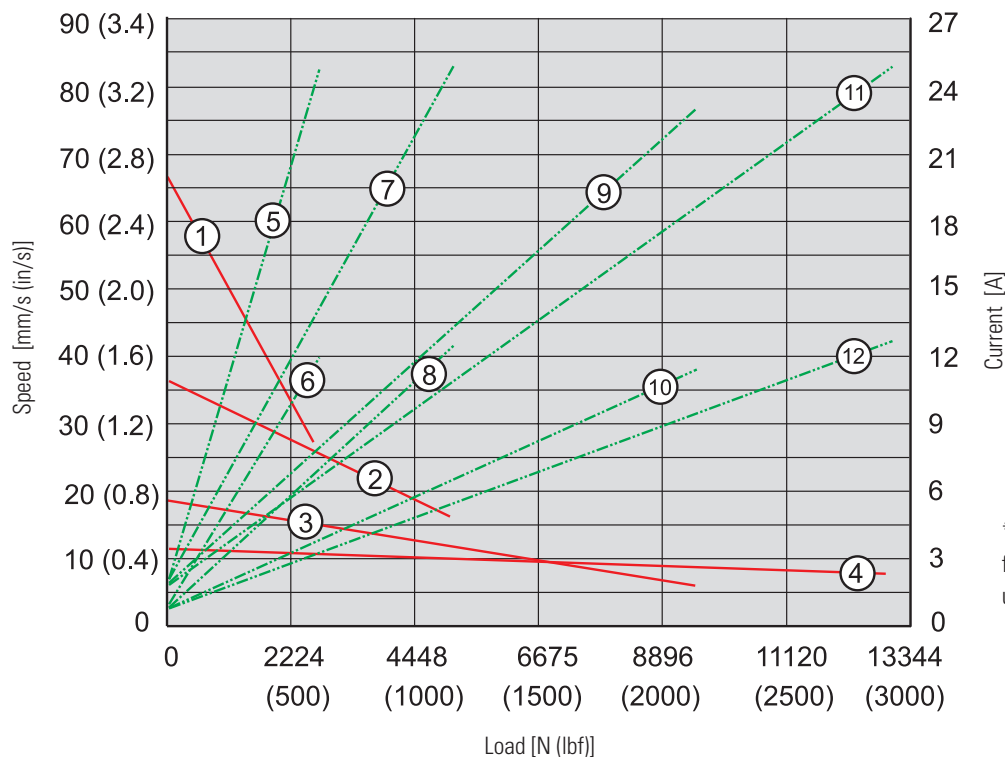


Speed
1: K2G05-
2: K2G10-
3: K2G20-
4: K2G30-

Current
5: K2G05-12V
6: K2G05-24V
7: K2G10-12V
8: K2G10-24V
9: K2G20-12V
10: K2G20-24V
11: K2G30-12V
12: K2G30-24V

* Contact customer support for data on 36, 48 and 90 Vdc units.

Ball Screw Models
Speed and Current vs. Load*



Speed
1: K2XG05-
2: K2XG10-
3: K2XG20-
4: K2XG30-

Current
5: K2XG05-12V
6: K2XG05-24V
7: K2XG10-12V
8: K2XG10-24V
9: K2XG20-12V
10: K2XG20-24V
11: K2XG30-12V
12: K2XG30-24V

* Contact customer support for data on 36, 48 and 90 Vdc units.



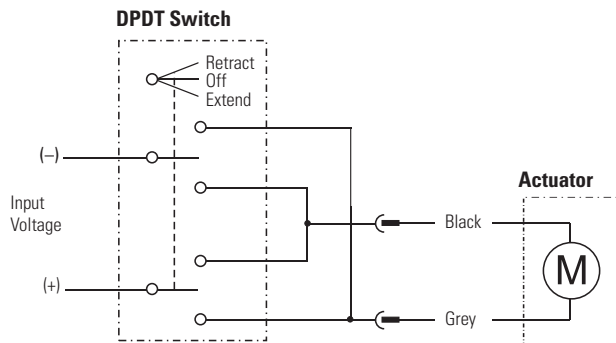
B-Track DC – Ordering Key

Ordering Key					
1	2	3	4	5	6
K2	G05-	12V	BR-	-04	
<p>1. Model and screw type K2 = B-Track, acme K2X = B-Track, ball</p> <p>2. Dynamic load capacity (acme screw / ball screw models) G05- = 1335 N (300 lbf) / 2670 N (600 lbf) G10- = 2670 N (600 lbf) / 5340 N (1200 lbf) G20- = 5340 N (1200 lbf) / 9790 N (2200 lbf) G30- = 6675 N (1500 lbf) / 12460 N (2800 lbf) ⁽¹⁾</p> <p>3. Supply voltage 12V = 12 Vdc 24V = 24 Vdc 36V = 36 Vdc 48V = 48 Vdc 90V = 90 Vdc</p> <p>4. Nut type BR- = Acme screw nut (for K2 models only) BRL- = Long acme screw nut (for K2 models only) ⁽²⁾ - = Ball screw nut (for K2X models only)</p>			<p>5. Ordering stroke length ⁽³⁾ 02 = 2 inch 04 = 4 inch 06 = 6 inch 08 = 8 inch 10 = 10 inch 12 = 12 inch 14 = 14 inch 16 = 16 inch 18 = 18 inch 20 = 20 inch 22 = 22 inch 24 = 24 inch</p> <p>6. Rear adapter orientation blank = standard R30 = 30 ° turned R60 = 60 ° turned R90 = 90 ° turned R120 = 120 ° turned R150 = 150 ° turned</p> <p>(1) Not possible with nut type BR (2) An acme screw unit with long nut has the same retracted length (distance A) as a unit of the same stroke with a ball screw. (3) Other stroke lengths possible on request, please contact customer support.</p>		

B-Track DC – Electrical Connections

Standard

Actuator supply voltage	[Vdc]	
K2xxxx12V		12
K2xxxx24V		24
K2xxxx36V		36
K2xxxx48V		48
K2xxxx90V		90



Connect the grey lead to positive and black to negative to extend the actuator. Change polarity to retract the actuator.