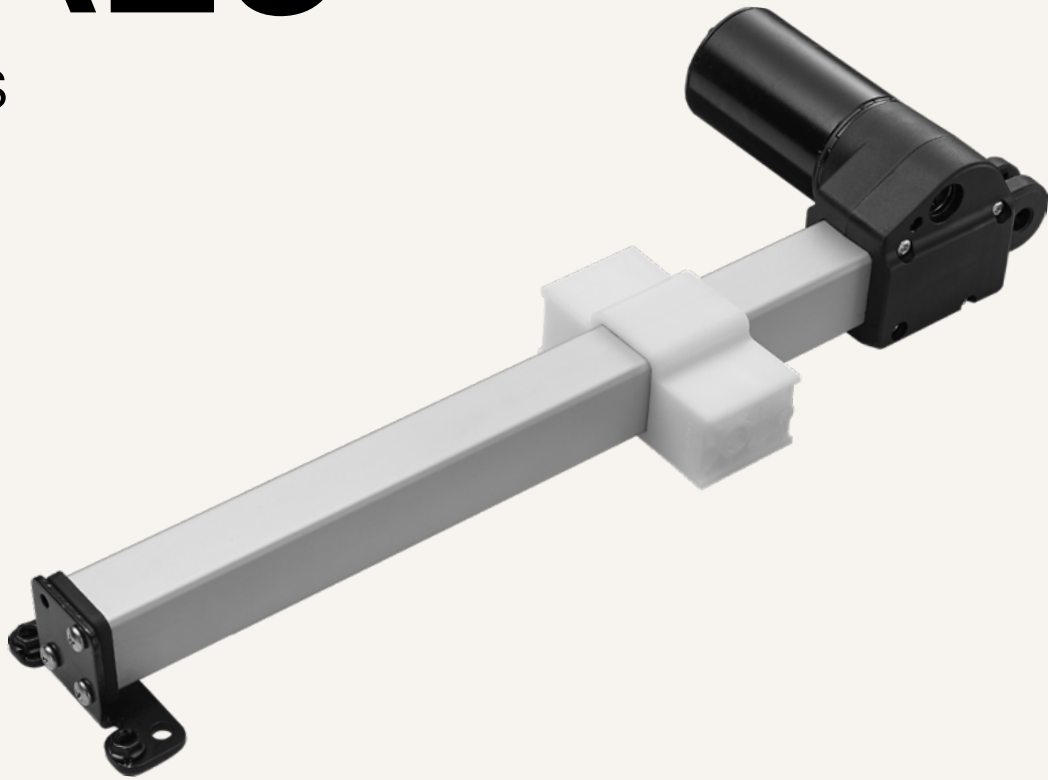


TA25

series



Product Segments

- **Comfort Motion**

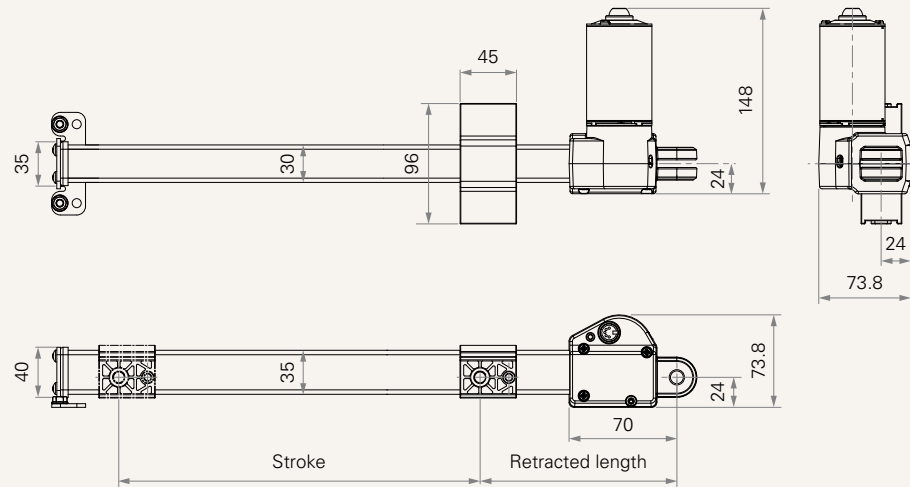
TiMOTION's TA25 series electric linear actuator uses a linear slide to move a load, instead of an extension tube. This linear slide mechanism allows for a significantly shorter retracted length and makes the TA25 a great solution for various furniture applications. The TA25 is designed to function as a direct cut system, eliminating the need for a control box, offering a simple and economical solution. Available options are Hall sensors and a special L-shaped mounting bracket.

General Features

Max. load	1,000N (push/pull)
Max. speed at max. load	29mm/s
Max. speed at no load	54mm/s
Retracted length	≥ 98mm
Certificate	UL962
Output signals	Hall sensor * 2
Voltage	12/24V DC
Operational temperature range	+5°C~+45°C

Drawing

Standard Dimensions
(mm)



Load and Speed

CODE	Load (N)		Self Locking Force (N)	Typical Current (A)		Typical Speed (mm/s)	
	Push	Pull		No Load 32V DC	With Load 24V DC	No Load 32V DC	With Load 24V DC
B	1000	1000	100	1.3	4.5	54.0	29.0

Motor Speed (3800RPM, Duty Cycle 10%)

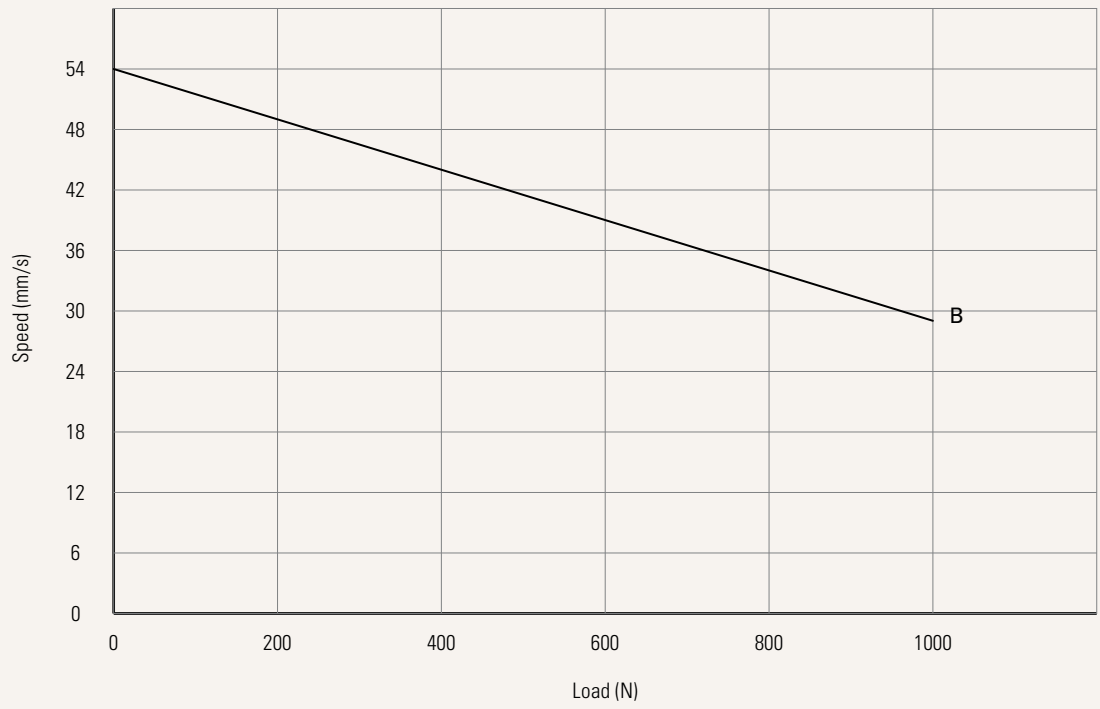
Note

- 1 Please refer to the approved drawing for the final authentic value.
- 2 This self-locking force level is reached only when a short circuit is applied on the terminals of the motor. All the TiMOTION control boxes have this feature built-in.
- 3 Operational temperature range at full performance: +5°C~+45°C.
- 4 The current & speed in table are tested with 24V DC motor. With a 12V DC motor, the current is approximately twice the current measured in 24V DC. With a 36V DC motor, the current is approximately two-thirds the current measured in 24V DC. With a 48V DC motor, the current is approximately half the current measured in 24V DC. Speed will be similar for all the voltages.
- 5 The current & speed in table are tested when the actuator is extending under push load.
- 6 The current & speed in table and diagram are tested with TiMOTION control boxes, and there will be around 10% tolerance depending on different models of the control box. (Under no load condition, the voltage is around 32V DC. At rated load, the voltage output will be around 24V DC)
- 7 The current & speed in table and diagram are tested with a stable 24V DC power supply.

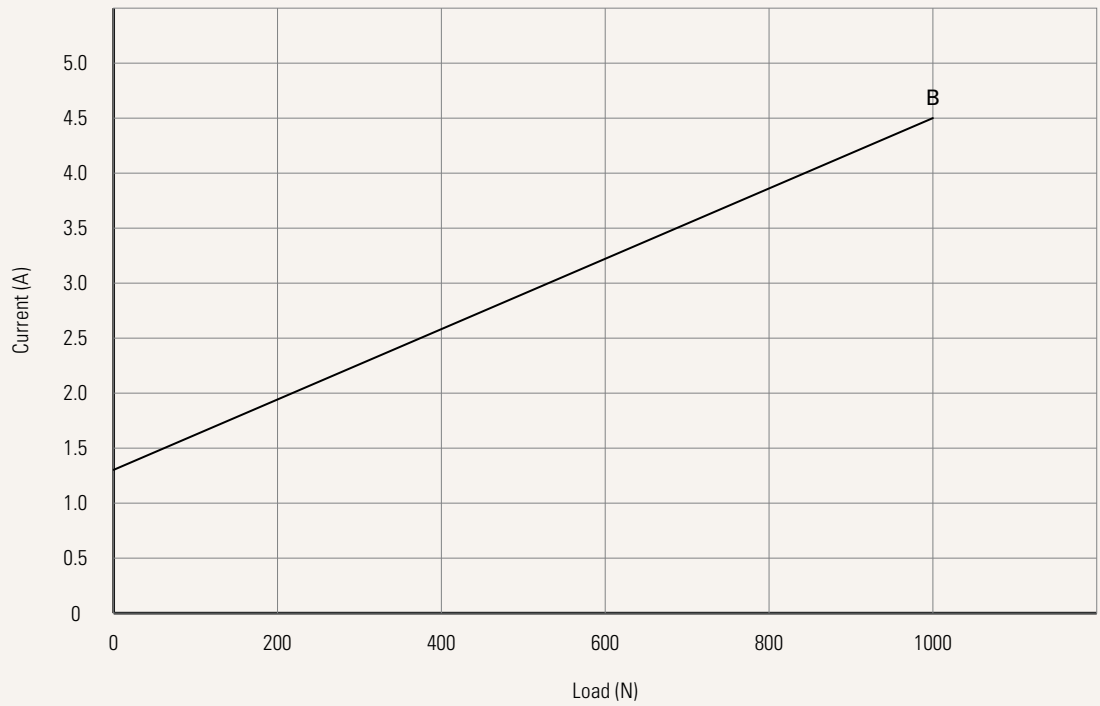
Performance Data (24V DC Motor)

Motor Speed (3800RPM, duty cycle 10%)

Speed vs. Load



Current vs. Load



Voltage	1 = 12V	2 = 24V
Load and Speed	See page 2	
Stroke (mm)	See page 5	
Retracted Length (mm)	122 = Bracket on the front & rear end #0 122 = Bracket on the front & rear end #1	099 = Bracket on the front & rear end #2
Bracket on The Front & Rear End See page 5	0 = Without	1 = Style A: Iron bracket 2 = Style B: Plastic bracket
IP Rating	1 = Without	
Functions for Limit Switches See page 6	1 = Two switches at full retracted / extended positions to cut current 2 = Two switches at full retracted / extended positions to cut current + third one in between to send signal 3 = Two switches at full retracted / extended positions to send signal 4 = Two switches at full retracted / extended positions to send signal + third one in between to send signal	
Output Signals	0 = Without	2 = Hall sensors * 2
Connector See page 6	1 = DIN 6P, 90° plug 2 = Tinned leads 3 = Small 01P, plug P = Molex 8P, 90° plug, without anti-clip Q = Molex 6P, 90° plug	J = 1 motor direct cut system, with anti-pull cover K = 1 motor direct cut system L = 1+1, 2 motors direct cut system S = 1+1, 2 motors direct cut system, with anti-pull cover U = Molex 6P 3.0 pitch, 180° plug
Cable Length (mm)	0 = Straight, 100 1 = Straight, 500 2 = Straight, 750 3 = Straight, 1000 4 = Straight, 1250 5 = Straight, 1500	6 = Straight, 2000 7 = Curly, 200 8 = Curly, 400 K = 1 motor direct cut system. See page 6 L = 1+1, 2 motors direct cut system. See page 6

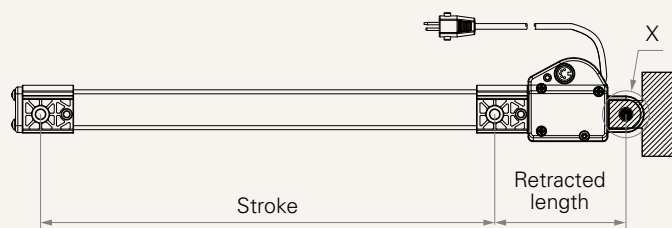
Retracted Length (mm)

1. Minimum retracted length is according to bracket on the front & rear end.

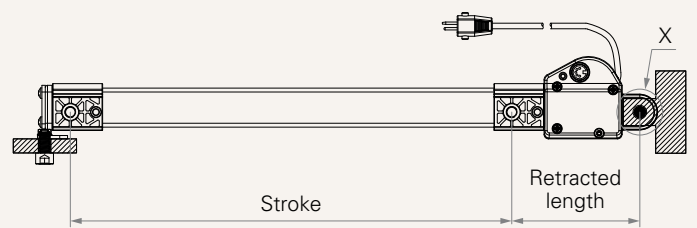
Bracket On The Front & Rear End	Minimum Retracted Length
0	122
1	122
2	99
3	98

Bracket on The Front & Rear End

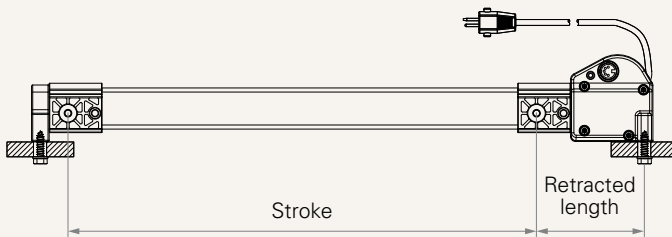
0 = Without



1 = Style A: Iron bracket

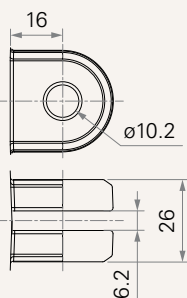


2 = Style B: Plastic bracket



Rear Attachment (mm)

Bracket on the front & rear end #0 & 1



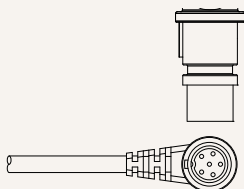
Functions for Limit Switches

Wire Definitions

CODE	Pin					
	● 1 (Green)	● 2 (Red)	○ 3 (White)	● 4 (Black)	● 5 (Yellow)	● 6 (Blue)
1	extend (VDC+)	N/A	N/A	N/A	retract (VDC+)	N/A
2	extend (VDC+)	N/A	middle switch pin B	middle switch pin A	retract (VDC+)	N/A
3	extend (VDC+)	common	upper limit switch	N/A	retract (VDC+)	lower limit switch
4	extend (VDC+)	common	upper limit switch	medium limit switch	retract (VDC+)	lower limit switch

Connector

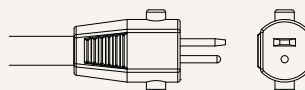
1 = DIN 6P, 90° plug



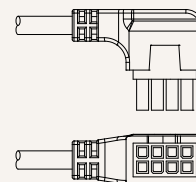
2 = Tinned leads



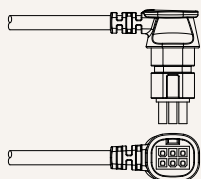
3 = Small 01P, plug



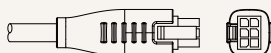
P = Molex 8P, 90° plug, without anti-clip



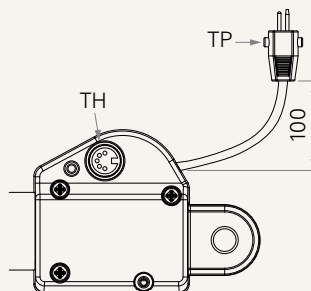
Q = Molex 6P, 90° plug



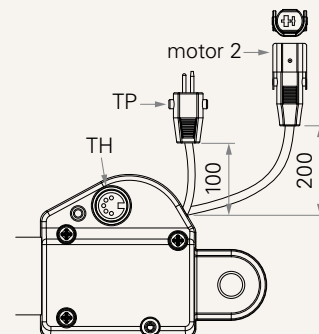
U = Molex 6P 3.0 pitch, 180° plug



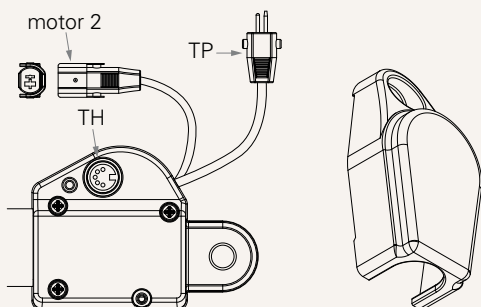
K = 1 motor direct cut system



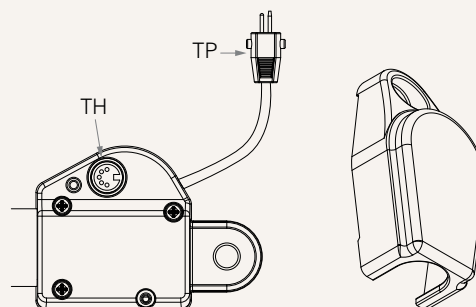
L = 1+1, 2 motors direct cut system



S = 1+1, 2 motors direct cut system, with anti-pull cover



J = 1 motor direct cut system, with anti-pull cover



Terms of Use

The user is responsible for determining the suitability of TiMOTION products for a specific application. TiMOTION products are subject to change without prior notice.