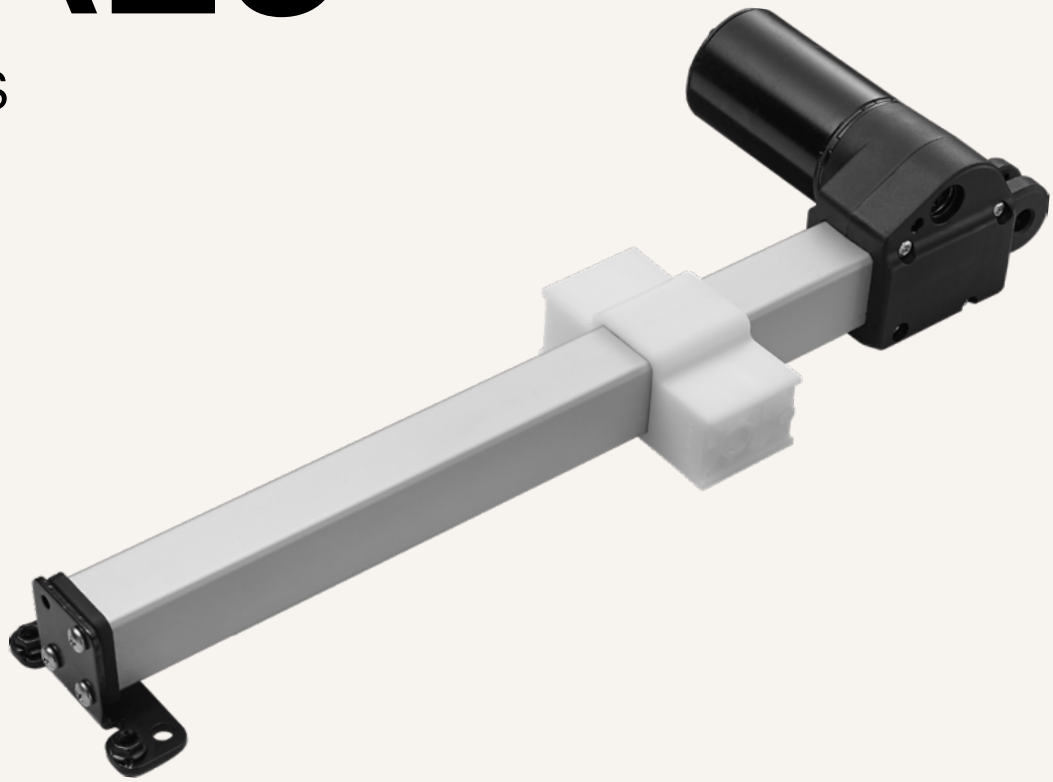
TA25

series



Product Segments

- **Comfort Motion**

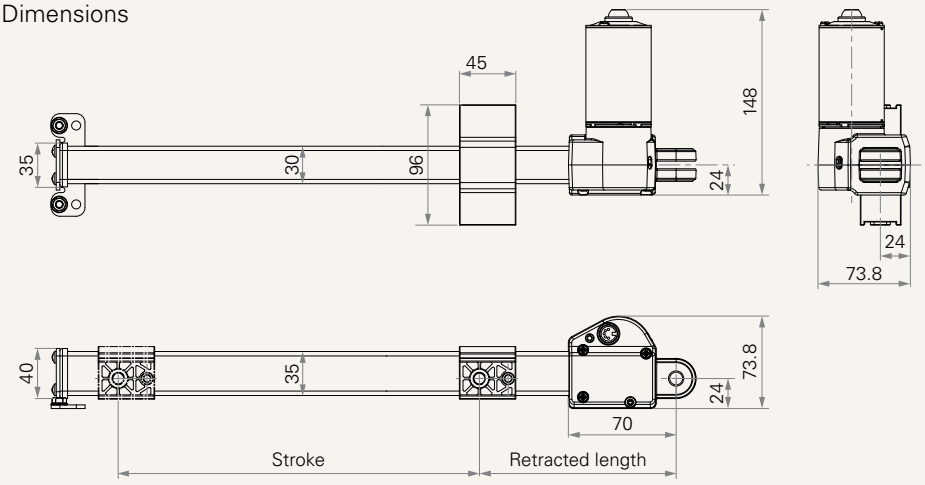
TiMOTION's TA25 series electric linear actuator uses a linear slide to move a load, instead of an extension tube. This linear slide mechanism allows for a significantly shorter retracted length and makes the TA25 a great solution for various furniture applications. The TA25 is designed to function as 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(s)
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
Motor Speed (3800RPM, duty cycle 10%)							
B	1000	1000	100	1.3	4.5	54.0	29.0

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.

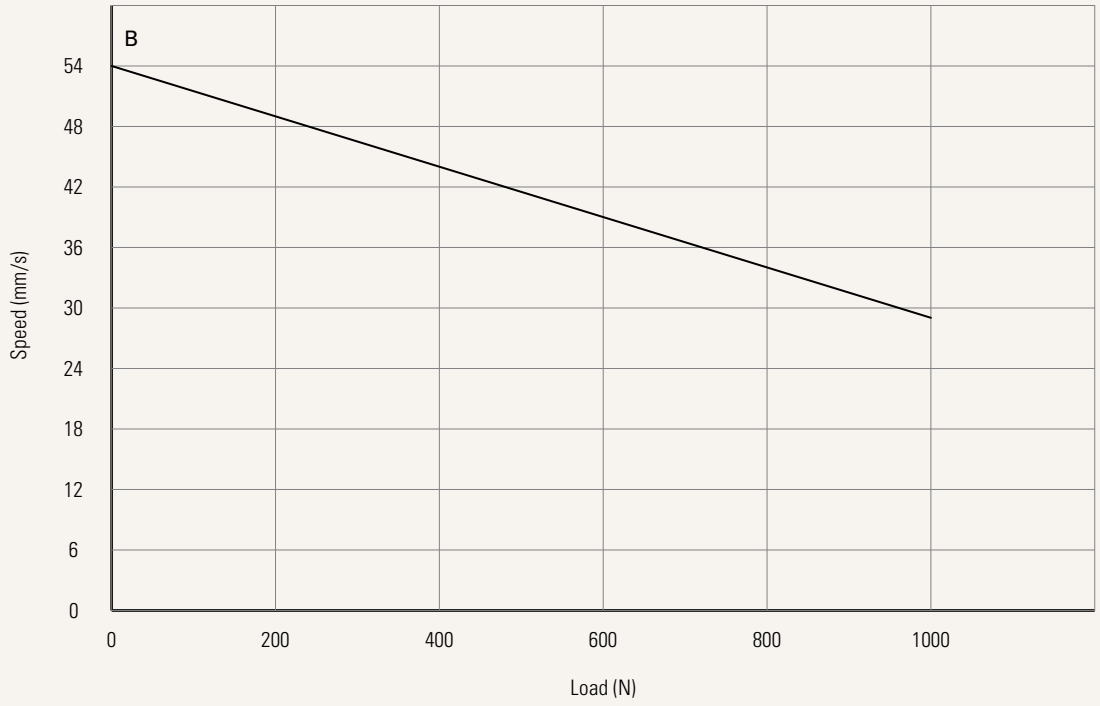
6 The current & speed in table and diagram are tested with TiMOTION control boxes, and there will be around 10% tolerance depending on different models of the control box. (Under no load condition, the voltage is around 32V DC. At rated load, the voltage output will be around 24V DC)

7 The current & speed in table and diagram are tested with a stable 24V DC power supply.

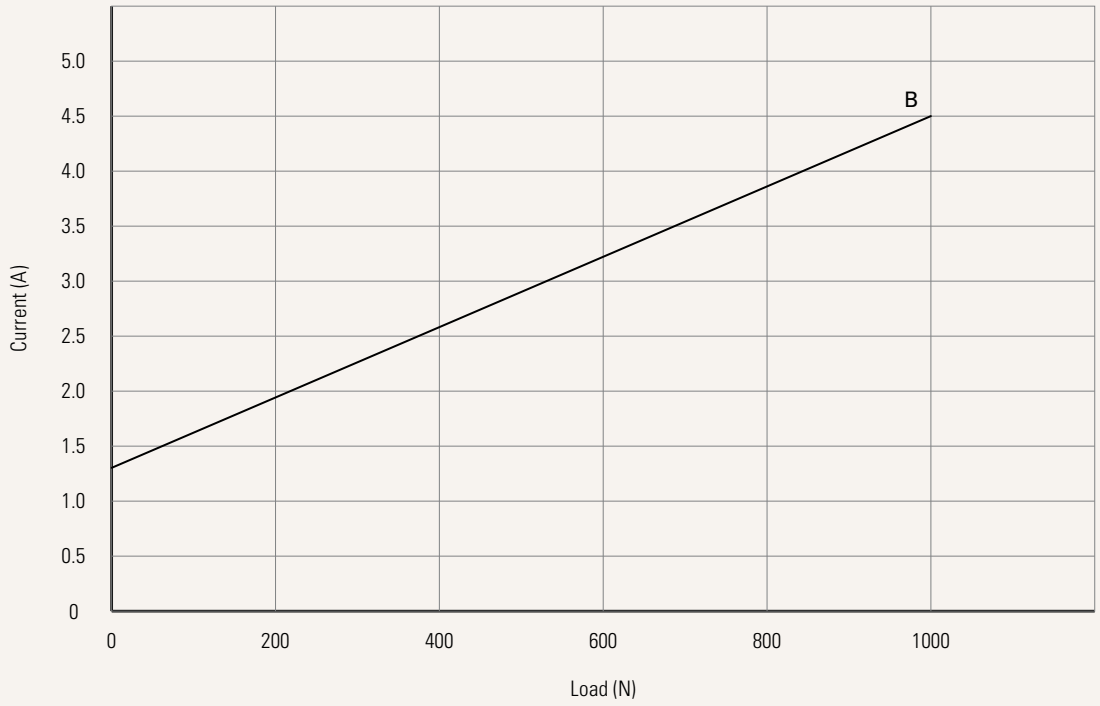
Performance Data (24V DC Motor)

Motor Speed (3800RPM, duty cycle 10%)

Speed vs. Load



Current vs. Load



TA25 Ordering Key

TiMOTION

TA25

Version: 20240905-G

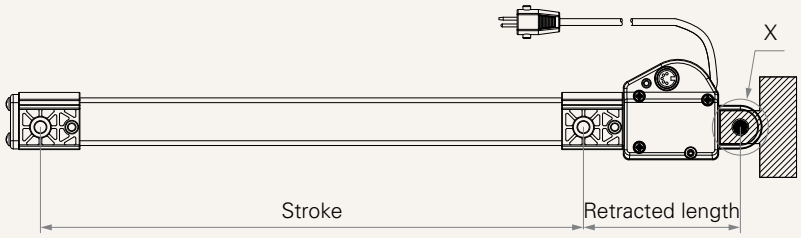
Voltage	1 = 12V	2 = 24V		
Load and Speed	See page 2			
Stroke (mm)	See page 5			
Retracted Length (mm)	122 = Bracket on the front & rear end #0 122 = Bracket on the front & rear end #1		099 = Bracket on the front & rear end #2	
Bracket on The Front & Rear End See page 5	0 = Without	1 = Style A: Iron 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 (40511-123)		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	
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 7 L = 1+1, 2 motors direct cut system. See page 7

TA25 Ordering Key Appendix

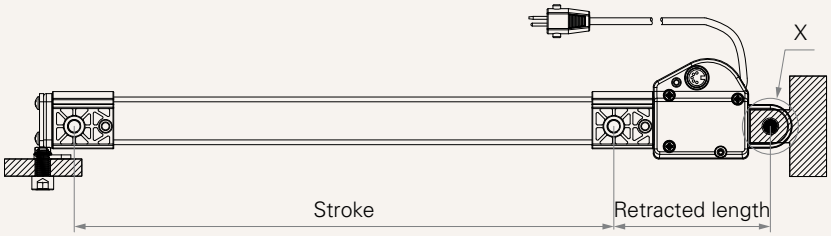
Minimum Retracted Length Is According To Bracket On The Front & Rear End (Mm)

Bracket On The Front & Rear End	Minimum Retracted Length (mm)
0	122
1	122
2	99

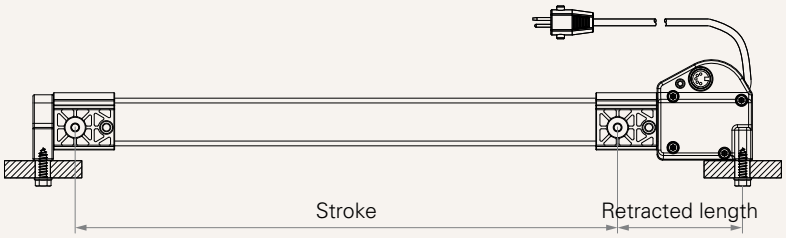
0 = Without



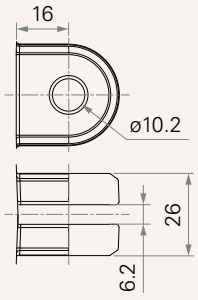
1 = Style A: Iron bracket



2 = Style B: Plastic bracket



X = Rear attachment dimensions (mm)



TA25 Ordering Key Appendix

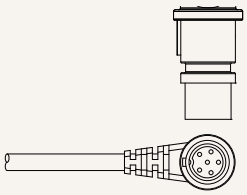
Functions for Limit Switches

Wire Definitions

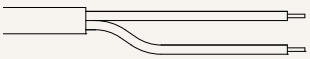
CODE	Pin					
	1 (Green)	2 (Red)	3 (White)	4 (Black)	5 (Yellow)	6 (Blue)
1	extend (VDC+)	N/A	N/A	N/A	retract (VDC+)	N/A
2	extend (VDC+)	N/A	middle switch pin B	middle switch pin A	retract (VDC+)	N/A
3	extend (VDC+)	common	upper limit switch	N/A	retract (VDC+)	lower limit switch
4	extend (VDC+)	common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

Connector

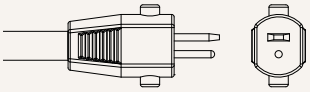
1 = DIN 6P, 90° plug



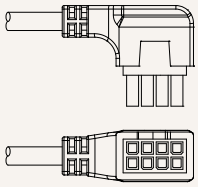
2 = Tinned leads



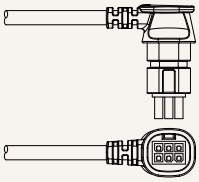
3 = Small 01P, plug



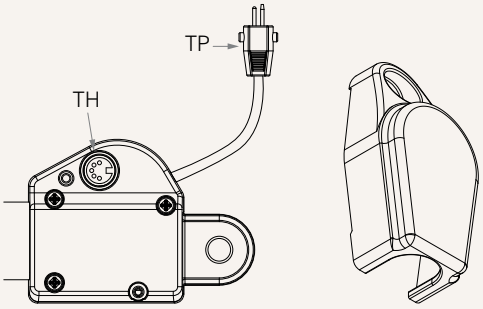
P = Molex 8P, 90°plug, without anti-clip



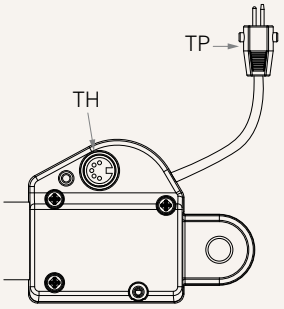
Q = Molex 6P, 90°plug (40511-123)



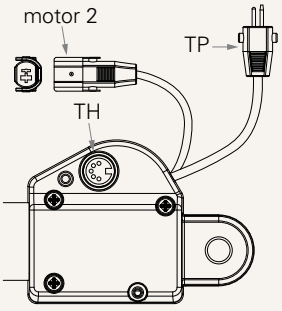
J = 1 motor direct cut system, with anti-pull cover



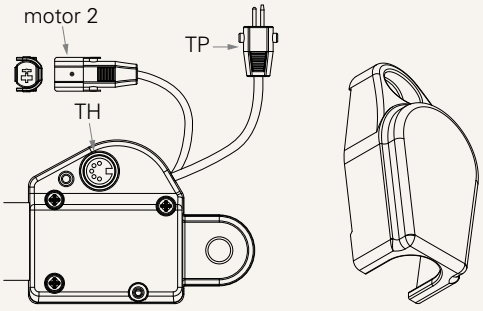
K = 1 motor direct cut system



L = 1+1, 2 motors direct cut system

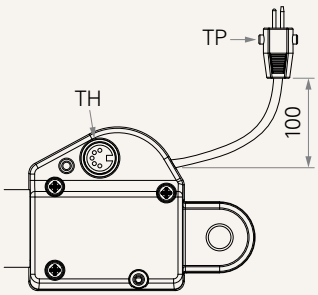


S = 1+1, 2 motors direct cut system, with anti-pull cover

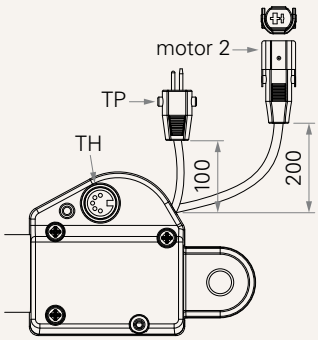


Cable Length (mm)

K = 1 motor direct cut system



L = 1+1, 2 motors direct cut system



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