

TA26

series



Product Segments

- **Comfort Motion**

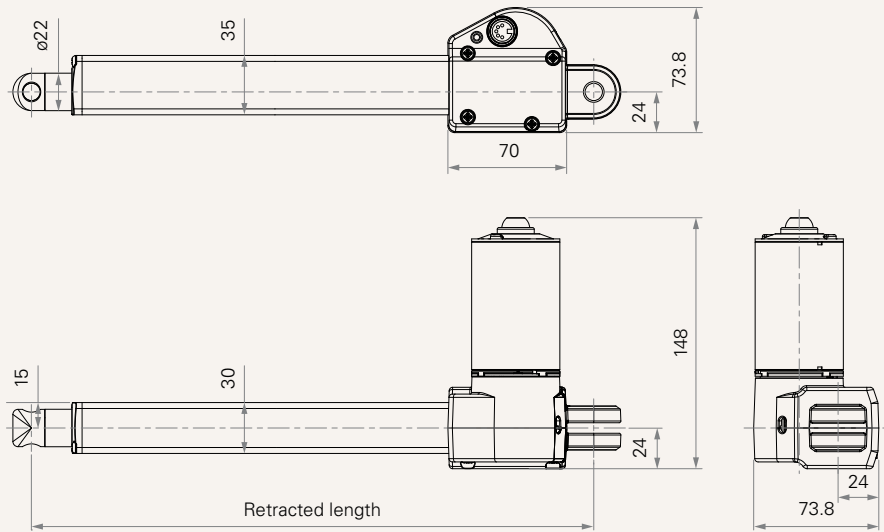
TiMOTION's TA26 series electric linear actuator is designed for furniture applications such as recliners or lift chairs. This linear actuator is designed to function as a direct cut system, eliminating the need for a control box, offering a straightforward and cost effective alternative to complex electric actuation systems.

General Features

Max. load	4,000N (push); 2,000N (pull)
Max. speed at max. load	6.1mm/s
Max. speed at no load	24mm/s
Retracted length	≥ Stroke + 120mm
Certificate	UL962
Output signals	Hall sensor(s)
Voltage	12/24V DC; 24V DC (PTC)
Color	Black
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%)								
A	4000	2000	3000	4000	1.0	5.0	12.0	6.1
B	3000	2000	500	2500	1.0	4.5	18.0	7.5
C	2000	2000	350	1500	1.0	4.0	24.0	12.8

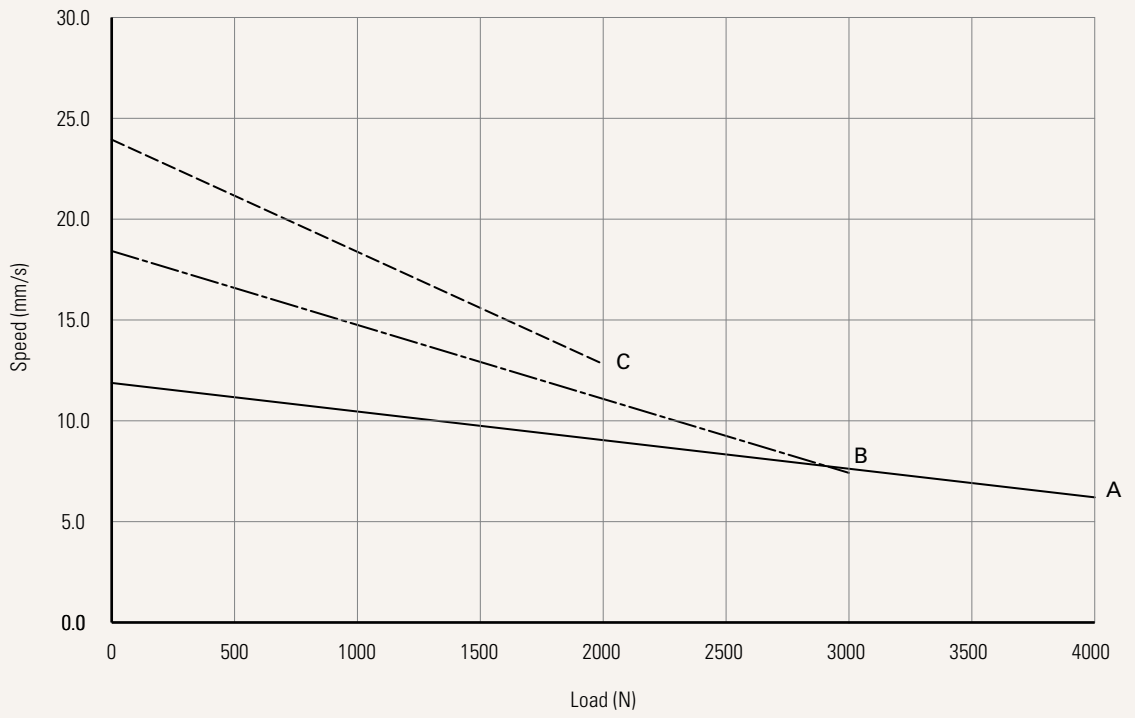
Note

- 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; speed will be similar for both 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.

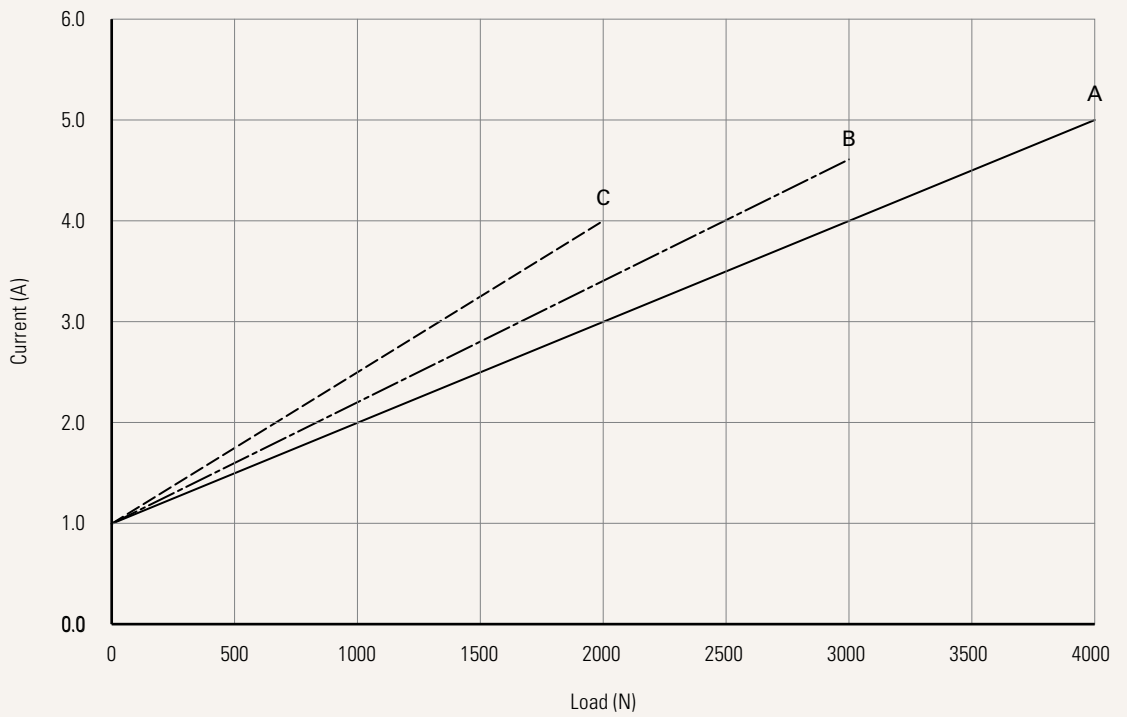
Performance Data (24V DC Motor)

Motor Speed (3800RPM, Duty Cycle 10%)

Speed vs. Load



Current vs. Load



Voltage	1 = 12V	2 = 24V	5 = 24V, PTC
Load and Speed	See page 2		
Stroke (mm)	See page 5		
Retracted Length (mm)	See page 5		
Rear Attachment (mm)	1 = Plastic, clevis U, slot 6.2, depth 16.0, hole 10.2		
	See page 5		
Front Attachment (mm)	1 = Plastic, no slot, hole 8.2	4 = Aluminum casting, clevis U, slot 6.2, depth 17.0, hole 10.2	
	2 = Plastic, no slot, hole 10.2		
	3 = Aluminum casting, clevis U, slot 6.2, depth 17.0, hole 8.2		
Special Functions for Spindle Sub-Assembly	0 = Without		
Functions for Limit Switches	1 = Two switches at full retracted / extended positions to cut current		
	2 = Two switches at full retracted / extended positions to cut current + 3rd LS 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 + 3rd LS to send signal		
Output Signals	0 = Without	1 = Hall sensor * 1	2 = Hall sensor * 2
Connector	1 = DIN 6P, 90° plug	K = 1 motor direct cut system	
	2 = Tinned leads	J = 1 motor direct cut system, with anti-pull cover	
	3 = Small 01P, plug	L = 1+1, 2 motors direct cut system	
	P = Molex 8P, 90° plug, without anti-clip	S = 1+1, 2 motors direct cut system, with anti-pull cover	
	Q = Molex 6P, 90° plug (40511-123)		
Cable Length (mm)	0 = Straight, 100	4 = Straight, 1250	8 = Curly, 400
	1 = Straight, 500	5 = Straight, 1500	K = Direct cut operation with single actuator.
	2 = Straight, 750	6 = Straight, 2000	L = Direct cut operation with two actuators.
	3 = Straight, 1000	7 = Curly, 200	See page 6

Retracted Length (mm)

1. Calculate $A+B = Y$
2. Retracted length needs to \geq Stroke + Y

A. Front Attach.

1, 2	+120
3, 4	+150

B.

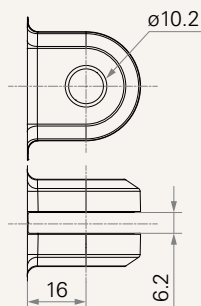
Stroke (mm)	Load (N)		
	4000	3000	2000
0~150	-	-	+5
151~200	-	-	+5
201~250	+5	+5	+10
251~300	+10	+10	+15
301~350	+15	+15	+20
351~400	+20	+20	+25

Note

1 For stroke over 200mm, +5mm for each increment of 50mm stroke .

Rear Attachment (mm)

1 = Plastic, clevis U, slot 6.2, depth 16.0, hole 10.2



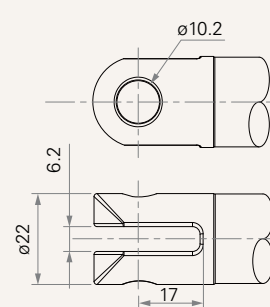
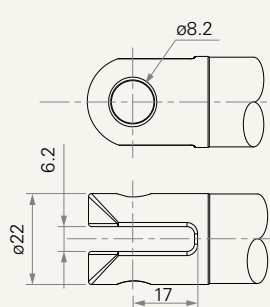
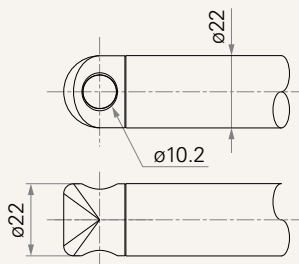
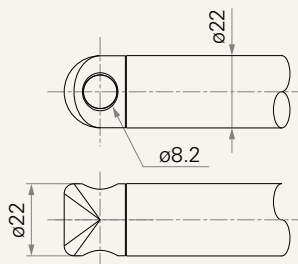
Front Attachment (mm)

1 = Plastic, no slot, hole 8.2

2 = Plastic, no slot, hole 10.2

3 = Aluminum casting, clevis U, slot 6.2, depth 17.0, hole 8.2

4 = Aluminum casting, clevis U, slot 6.2, depth 17.0, hole 10.2



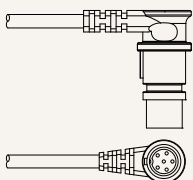
Functions for Limit Switches

Wire Definitions

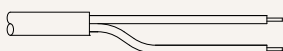
CODE	Pin					
	● 1 (Green)	● 2 (Red)	○ 3 (White)	● 4 (Black)	● 5 (Yellow)	● 6 (Blue)
1	extend (VDC+)	N/A	N/A	N/A	retract (VDC+)	N/A
2	extend (VDC+)	N/A	middle switch pin B	middle switch pin A	retract (VDC+)	N/A
3	extend (VDC+)	common	upper limit switch	N/A	retract (VDC+)	lower limit switch
4	extend (VDC+)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

Connector

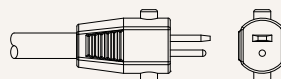
1 = DIN 6P, 90° plug



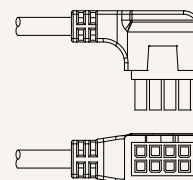
2 = Tinned leads



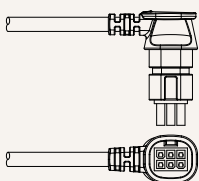
3 = Small 01P, plug



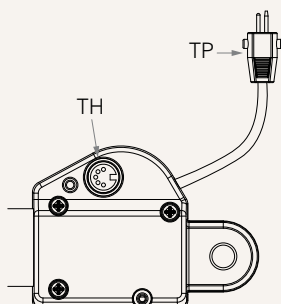
P = Molex 8P, 90° plug, without anti-clip



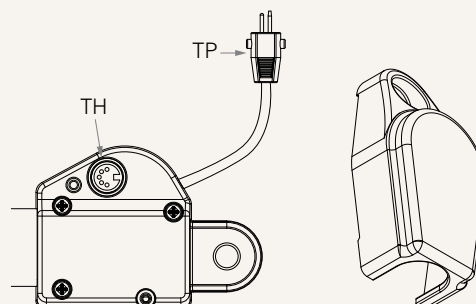
Q = Molex 6P, 90° plug (40511-123)



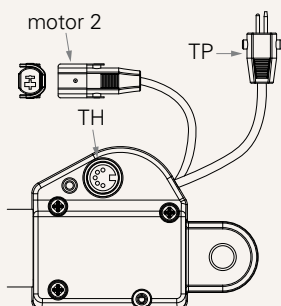
K = 1 motor direct cut system



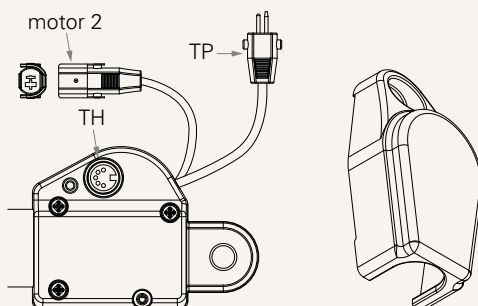
J = 1 motor direct cut system, with anti-pull cover



L = 1+1, 2 motors direct cut system



S = 1+1, 2 motors 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.