## 🔓 T‡MOTION

# **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.

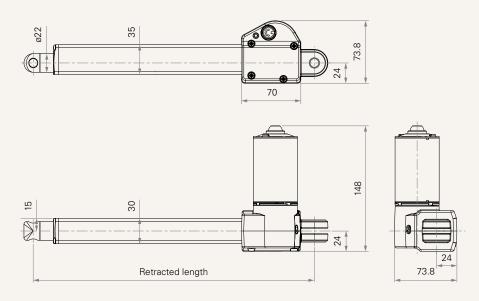
### **General Features**

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
Options	Hall sensor(s)
Voltage	12/24V DC; 24V DC (PTC)
Color	Black
Operational temperature range	+5°C~+45°C

### TA26 series

### Drawing

Standard Dimensions (mm)



### Load and Speed

CODE	Load (N)	_oad (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 Spee	ed (3800RPM,	duty cycle 10	%)						
Α	4000	2000	3000	4000	1.0	5.0	12.0	6.1	
В	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

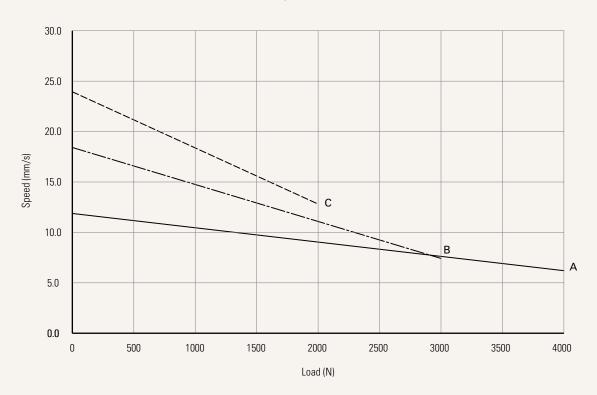
- 1 Please refer to the approved drawing for the final authentic value.
- 2 This self-locking force level is reached only when a short circuit is applied on the terminals of the motor. All the TiMOTION control boxes have this feature built-in.
- 3 Operational temperature range: -25°C~+65°C
- 4 The current & 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.





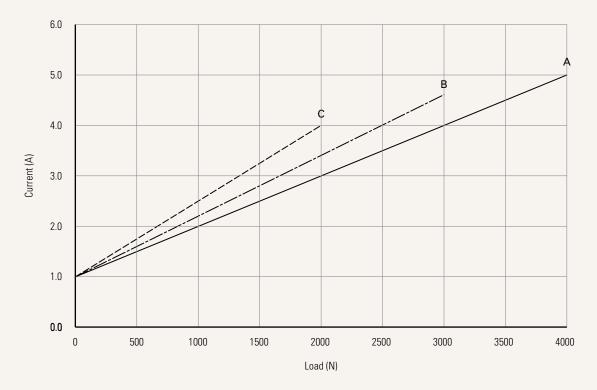
### Performance Data (24V DC Motor)

Motor Speed (3800RPM)





Current vs. Load





### TA26 Ordering Key

### **1** T*i* MOTION

TA26

				Version: 2020100		
Voltage	1 = 12V	2 = 24V	5 = 24V, PTC			
Load and Speed	<u>See page 2</u>					
Stroke (mm)	<u>See page 5</u>					
Retracted Length (mm)	<u>See page 5</u>					
Rear Attachment (mm) See page <u>5</u>	1 = Plastic, clevis U, slo	t 6.2, depth 16.0, hole 10.2				
Front Attachment (mm) See page <u>5</u>	1 = Plastic, no slot, hole 2 = Plastic, no slot, hole 3 = Aluminum casting, c hole 8.2		hole 10.2	clevis U, slot 6.2, depth 17.0,		
Special Functions for Spindle Sub- Assembly	0 = Without					
Functions for Limit Switches See page <u>6</u>	<ul> <li>1 = Two switches at full retracted / extended positions to cut current</li> <li>2 = Two switches at full retracted/extended positions to cut current + 3rd LS to send signal</li> <li>3 = Two switches at full retracted / extended positions to send signal</li> <li>4 = Two switches at full retracted/extended positions to send signal + 3rd LS to send signal</li> </ul>					
Output Signals	0 = Without	1 = Hall sensor * 1	2 = Hall sensor * 2	2 = Hall sensor * 2		
Connector See page 6	1 = DIN 6P, 90° plugP = Molex 8P, 90° plug, without anti-clip2 = Tinned leadsK = Single motor, direct cut system3 = Small 01P, plugL = 1+1, 2 motors direct cut system					
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 = Direct cut operation with single actuator L = Direct cut operation with two actuators		



### **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

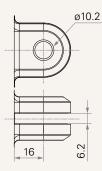
B. Stroke (mm)				
0~150	-			
151~200	-			
201~250	+5			
251~300	+10			
301~350	+15			
351~400	+20			

### Note

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

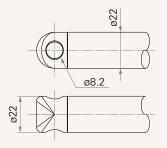
### **Rear Attachment (mm)**

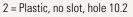
1 = Plastic, clevis U, slot 6.2, depth 16.0, hole 10.2

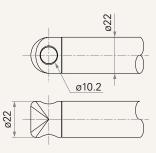


### Front Attachment (mm)

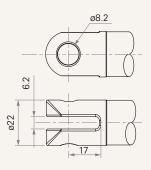
1 = Plastic, no slot, hole 8.2



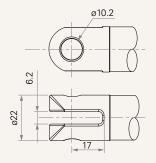




3 = Aluminum casting, clevis U, slot 6.2, depth 17.0, hole 8.2



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



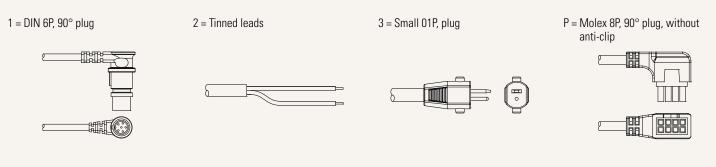
### TA26 Ordering Key Appendix



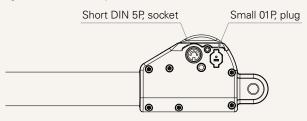
### **Functions for Limit Switches**

Wire Definitions							
CODE	Pin						
	🛑 1 (Green)	🛑 2 (Red)	🔵 3 (White)	4 (Black)	😑 5 (Yellow)	<b>6</b> (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	

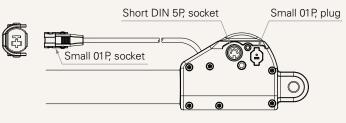
### Connector



K = Single motor, direct cut system



L = 1+1, 2 motors direct cut system



#### **Terms of Use**