

# TA21

series



## Product Segments

- **Care Motion**
- **Ergo Motion**
- **Industrial Motion**

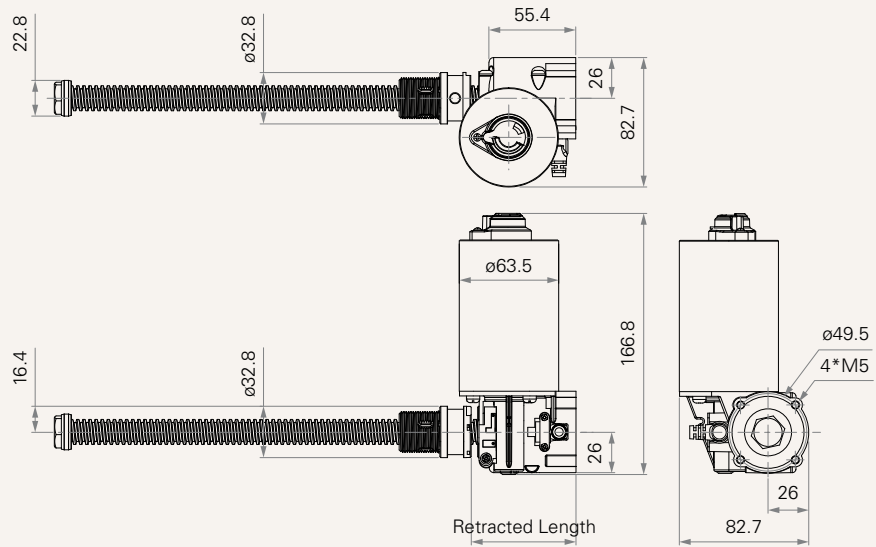
TiMOTION's TA21 electric linear actuator was designed for use in height adjustable medical and industrial workstations. Customers have a high degree of design flexibility with this actuator as it does not include a standard outer tube. This allows manufacturers to decide on the exact aesthetic and ingress specifications for their electric lifting column and overall application.

### General Features

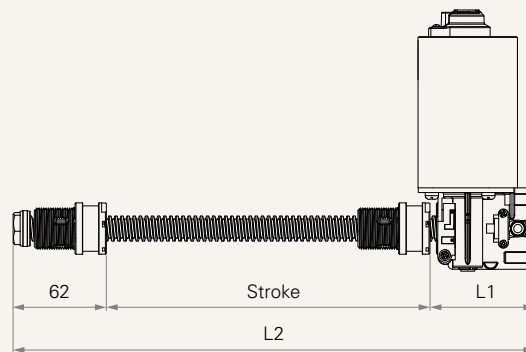
Max. load	10,000N (push); 6,000N (pull)
Max. speed at max. load	6.3mm/s
Max. speed at no load	24.7mm/s
Retracted length	≥ 67mm
Certificate	UL962
Stroke	25~400mm
Output signals	Hall sensors, Reed sensor
Voltage	24V DC; 24V DC (UL)
Color	Black, grey
High design flexibility	

**Drawing**

Standard Dimensions  
(mm)



Retracted length L1, Min ≥ 67mm (NO need to add stroke length)



**Load and Speed**

CODE	Load (N)		Self Locking Force (N)	Typical Current (A)		Typical Speed (mm/s)	
	Push	Pull		No Load 24V DC	With Load 24V DC	No Load 24V DC	With Load 24V DC
<b>Motor Speed (3800RPM, duty cycle 10%)</b>							
<b>A</b>	10000	6000	10000	2.0	15.0	12.1	6.3
<b>C</b>	7000	6000	6000	2.0	9.0	12.3	8.3
<b>D</b>	4000	4000	3000	2.0	9.5	24.7	16.2

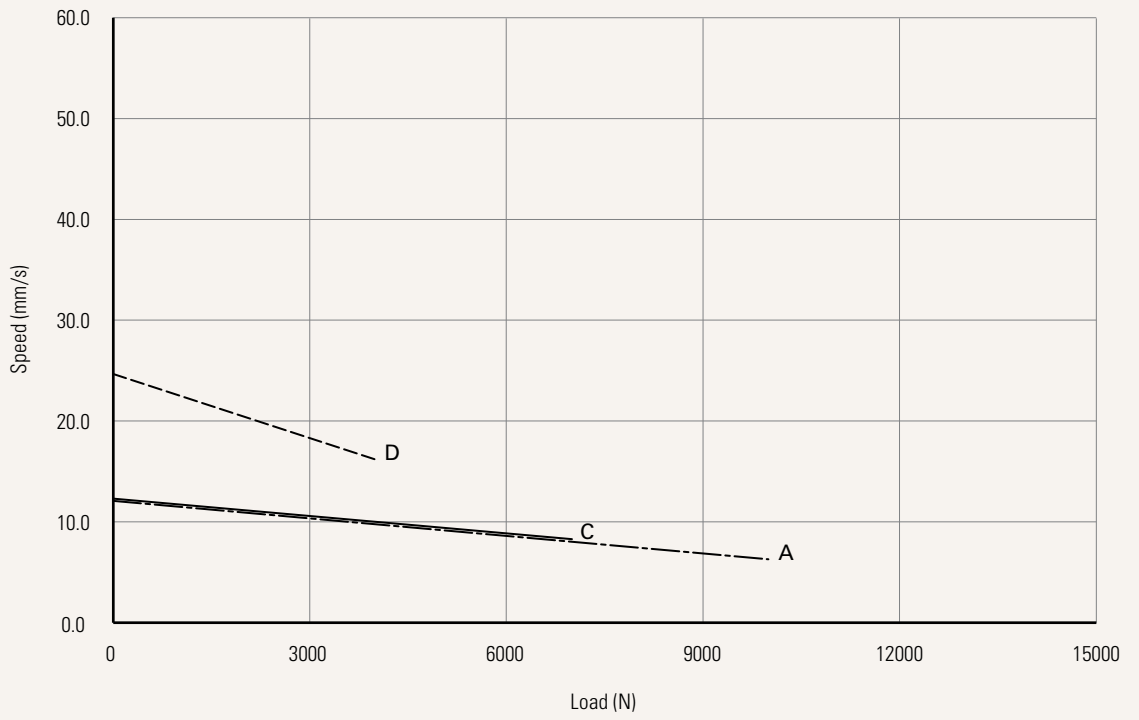
**Note**

- 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: +5°C~+45°C
- 4 The current & speed in table are tested when the actuator is extending under push load.
- 5 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)

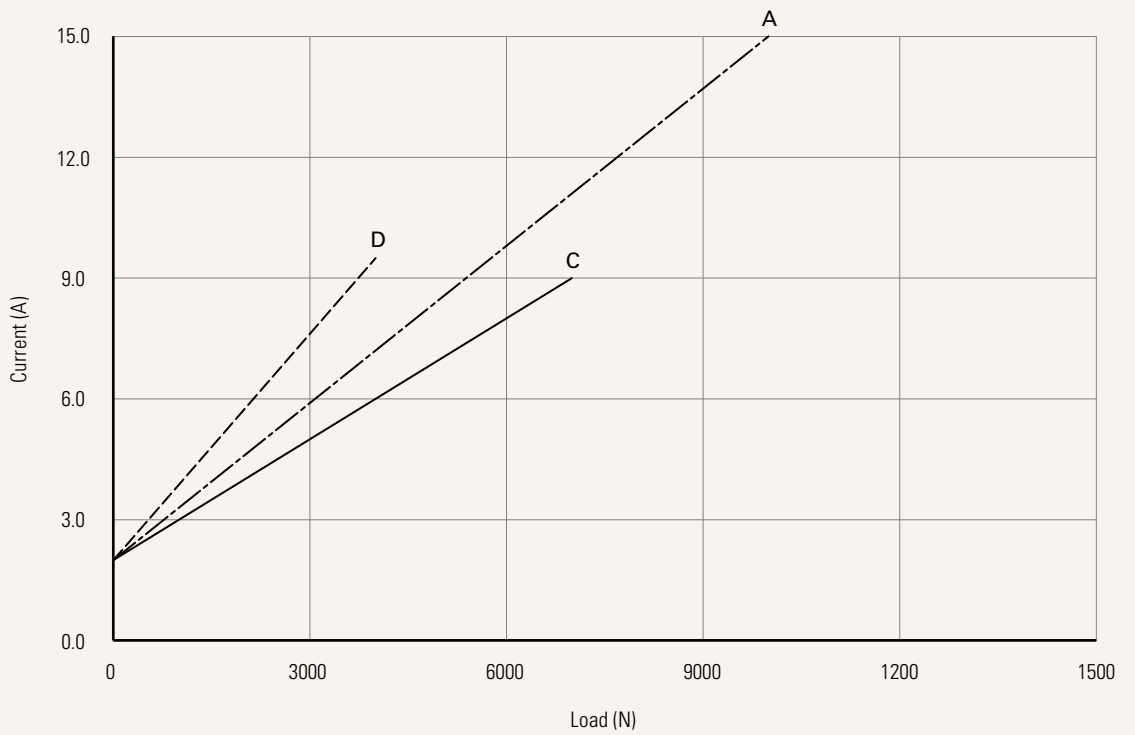
**Performance Data (24V DC Motor)**

Motor Speed (3800RPM)

Speed vs. Load



Current vs. Load

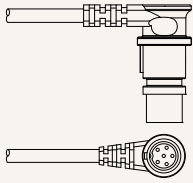


<b>Voltage</b>	2 = 24V DC	5 = 24V DC, UL		
<b>Load and Speed</b>	<a href="#">See page 2</a>			
<b>Stroke (mm)</b>				
<b>Retracted Length (mm)</b>	<a href="#">See page 2</a>			
<b>Motor Cable Color</b>	1 = Black	2 = Grey (Pantone 428C)		
<b>Special Functions for Spindle Sub-Assembly</b>	1 = Safety nut			
<b>Signal Output</b>	0 = Without	2 = Hall sensors*2	3 = Reed Sensor	
<b>Connector</b> <a href="#">See page 5</a>	1 = DIN 6P, 90° plug	2 = Tinned leads	F = DIN 6P, 180° plug	
<b>Cable Length (mm)</b>	1 = Straight, 500	3 = Straight, 1000	5 = Straight, 1500	7 = Curly, 200
	2 = Straight, 750	4 = Straight, 1250	6 = Straight, 2000	8 = Curly, 400

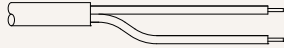
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## Connector

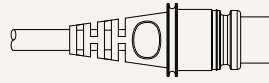
1 = DIN 6P, 90° plug



2 = Tinned leads



F = DIN 6P, 180° plug



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## 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.