

Product Segments

Care Motion

TiMOTION's TA11 series linear actuator is one of our compact medical actuators, suitable for various healthcare applications. Its compact design supports load ratings up to 1500N. TA11 is recommended to be used in bathroom chair applications.

General Features

Max. load 1,500N (push / pull)

Max. speed at max. load 10.5mm/s Max. speed at no load 13.1mm/s

Retracted length ≥ Stroke + 155mm

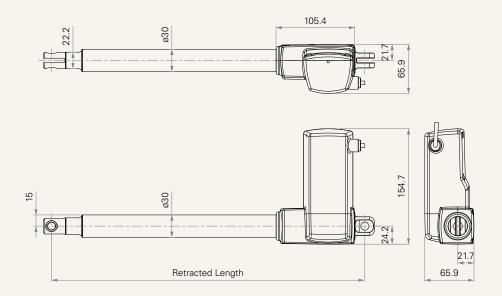
IP rating IP66D
Stroke 20~700mm
Options Hall sensors
Voltage 12 / 24V DC

Color Grey

1

Drawing

Standard Dimensions (mm)



Load and Speed

CODE	Load (N)	Load (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 Spec	ed (5200RPM, Dut	y Cycle 10%)					
В	1500	1500	1.05	3	13.1	10.5	

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 Standard stroke: Min. ≥ 20mm, Max. please refer to below table.

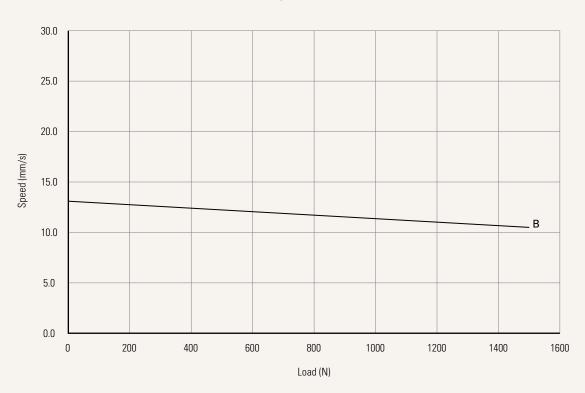
CODE	Load (N)	Max Stroke (mm)
В	≤ 1500	700



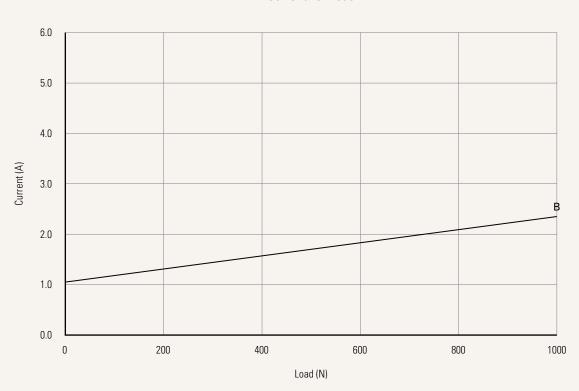
Performance Data (24V DC Motor)

Motor Speed (5200RPM)

Speed vs. Load



Current vs. Load





TA11 Ordering Key



Version: 20200211-D

TA11

Voltage	1 = 12V DC	2 = 24V DC		
Load and Speed	See page 2			
Stroke (mm)	See page 2			
Retracted Length (mm)	See page 5			
Rear Attachment (mm) See page 6	1 = U casting clevis, slot 6 2 = U casting clevis, slot 6		3 = U casting clevis, slot 6, hole 10	
Front Attachment (mm) See page 6	1 = Casting, width 21.9, slo	ot 6.1, hole 12.2		
Direction of Rear Attachment (Counterclockwise) See page 6	1 = 0°	3 = 90°		
Color	2 = Grey (Pantone 428C)			
IP Rating	3 = IP66	5 = IP66W	6 = IP66D	
Special Functions for Spindle Sub-Assembly	0 = Without (Standard)	1 = Safety nut		
Output Signal	0 = Without	2 = Hall sensor * 2		
Plug See page 6	1 = DIN 6P, 90° plug	2 = Tinned leads		
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	
For Pull / Push Application	T = Push only application	n P = Pull only application		

TA11 Ordering Key Appendix



Retracted Length (mm)

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

A.	
Front Attach.	Rear Attach.
Attach.	1, 2, 3
1	+155

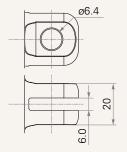
В.	
Stroke (mm)	Load (N)
20~150	-
151~200	-
201~250	+5
251~300	+10
301~350	+15
351~400	+20
401~450	+25
451~500	+30
501~550	+35
551~600	+40
601~650	+45
651~700	+50

TA11 Ordering Key Appendix

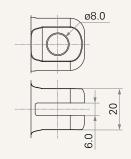


Rear Attachment (mm)

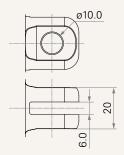
1 = U casting clevis, slot 6, hole 6.4



2 = U casting clevis, slot 6, hole 8

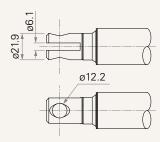


3 = U casting clevis, slot 6, hole 10



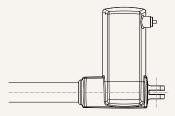
Front Attachment (mm)

1 = Casting, width 21.9, slot 6.1, hole 12.2

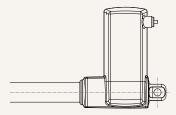


Direction of Rear Attachment (Counterclockwise)

1 = 0°

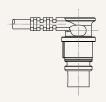


3 = 90°

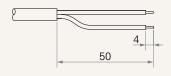


Plug

1 = DIN 6P, 90° plug



2 = Tinned leads



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.