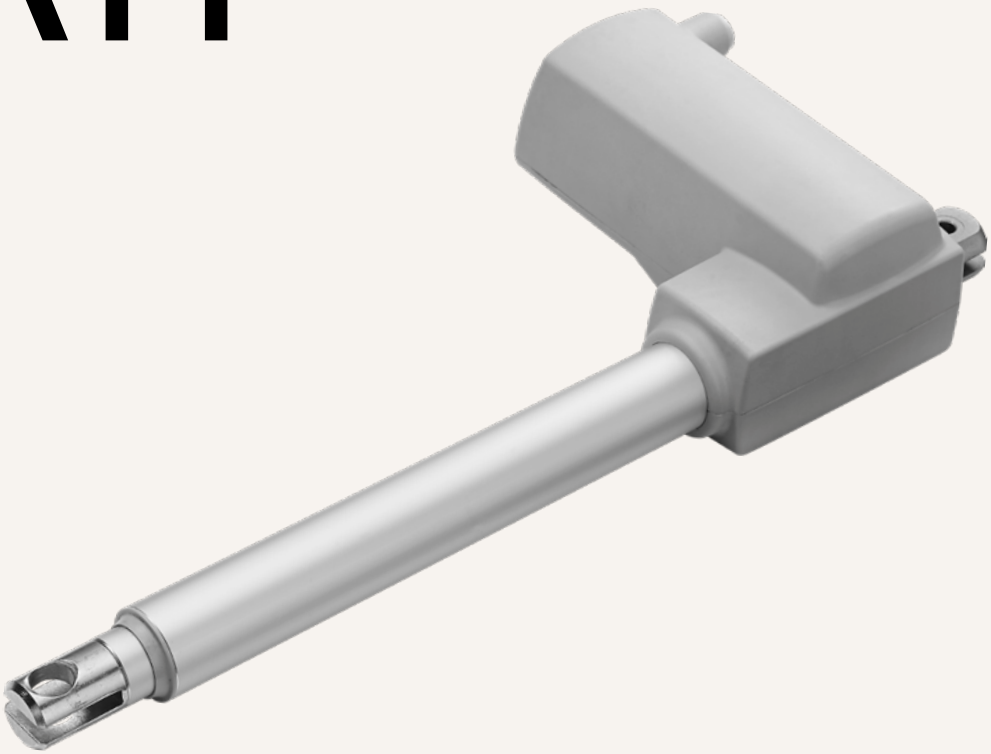
TA11

series



Product Segments

- **Care Motion**

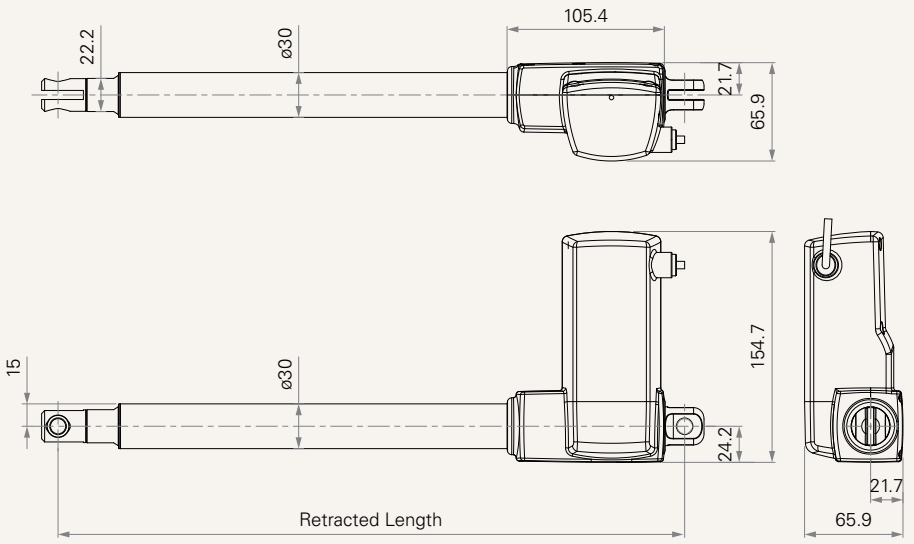
TiMOTION's TA11 series linear actuator is one of our compact medical actuators, suitable for various healthcare applications. Its compact design supports load ratings up to 1500N. TA11 is recommended to be used in bathroom chair applications.

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	IP66W
Stroke	20~700mm
Output signals	Hall sensors
Voltage	12/24V DC
Color	Grey

Drawing

Standard Dimensions
(mm)



Load and Speed

CODE	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 Speed (5200RPM, Duty Cycle 10%)						
B	1500	1500	1.1	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)

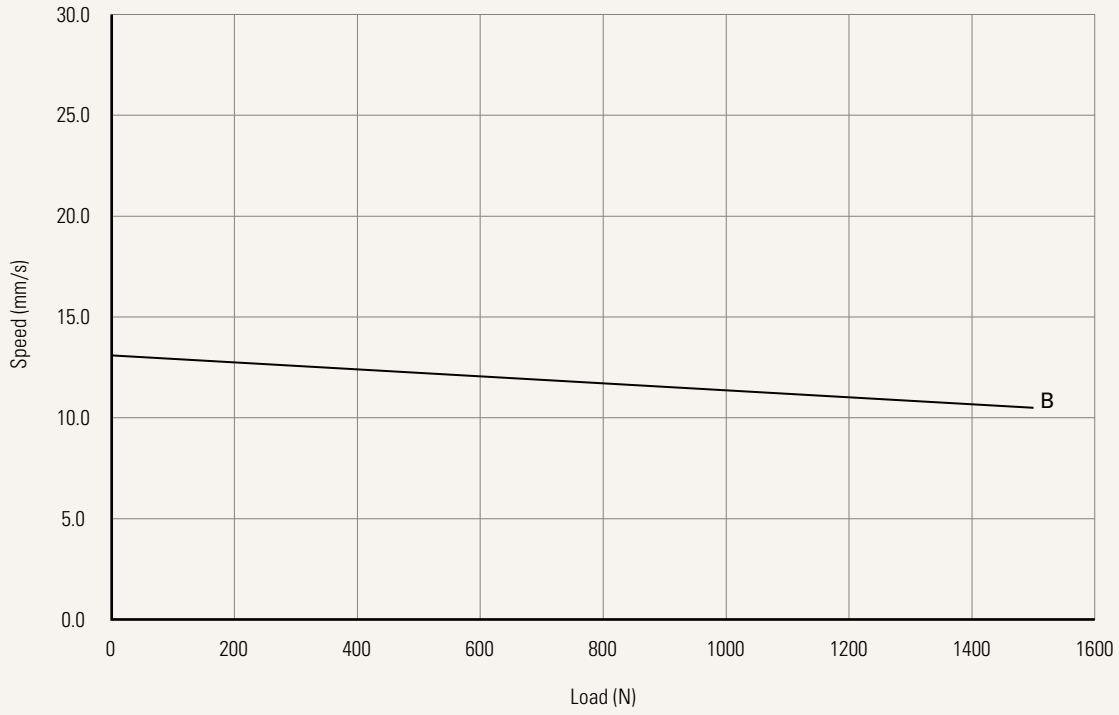
7 Standard stroke: Min. ≥ 20mm, Max. please refer to below table.

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

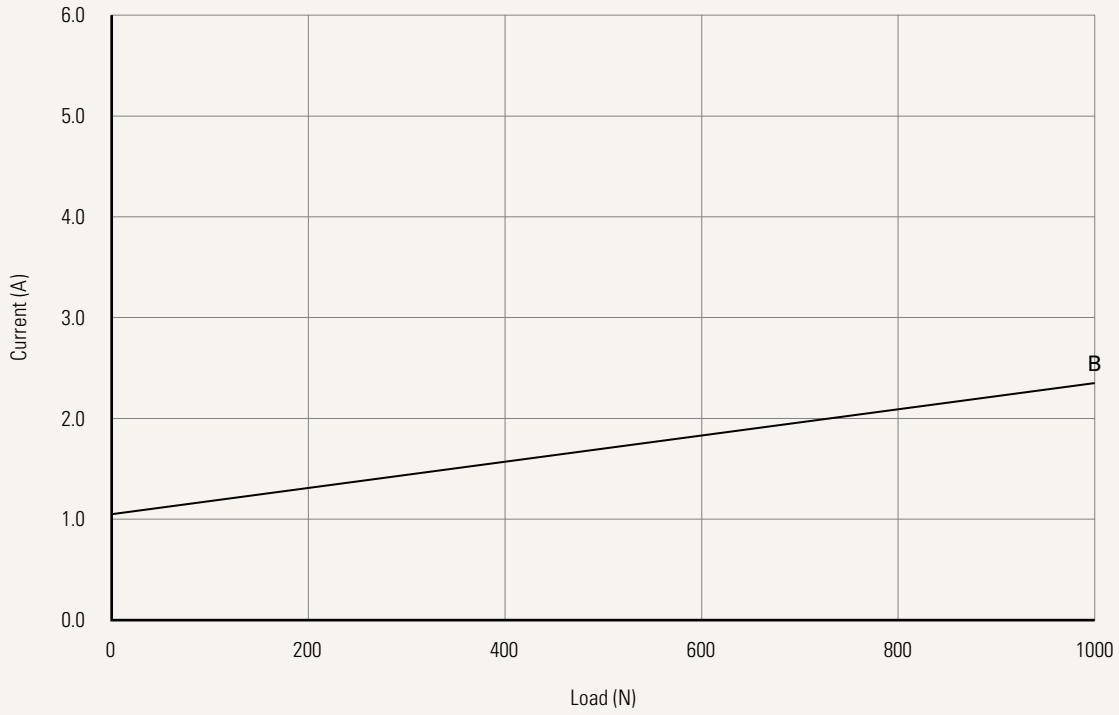
Performance Data (24V DC Motor)

Motor Speed (5200RPM)

Speed vs. Load



Current vs. Load



TA11 Ordering Key

TiMOTION

TA11

Version: 20240516-E

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, hole 6.4 2 = U casting clevis, slot 6, hole 8		3 = U casting clevis, slot 6, hole 10
Front Attachment (mm) See page 6	1 = Casting, width 21.9, slot 6.1, hole 12.2		
Direction of Rear Attachment (Counterclockwise) See page 6	1 = 0°	3 = 90°	
Color	2 = Pantone 428C		
IP Rating	3 = IP66	5 = IP66W	
Special Functions for Spindle Sub-Assembly	0 = Without (Standard)	1 = Safety nut	
Output Signal	0 = Without	2 = Hall sensor * 2	
Plug See page 7	1 = DIN 6P, 90° plug	2 = Tinned leads	Q = Molex 6P, 90° plug
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	P = Pull only application	

TA11 Ordering Key Appendix

Retracted Length (mm)

1. Calculate A+B = Y
2. Retracted length needs to ≥ Stroke+Y

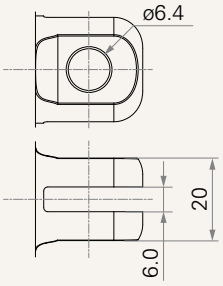
A.	
Front Attach.	Rear Attach.
	1, 2, 3
1	+155

B.	
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

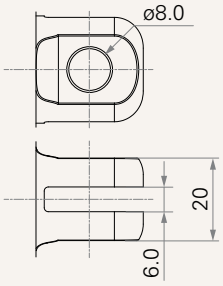
TA11 Ordering Key Appendix

Rear Attachment (mm)

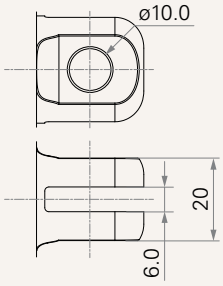
1 = U casting clevis, slot 6, hole 6.4



2 = U casting clevis, slot 6, hole 8

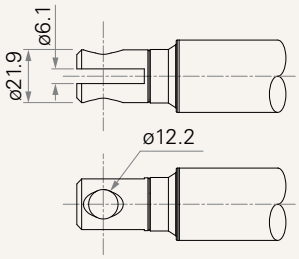


3 = U casting clevis, slot 6, hole 10



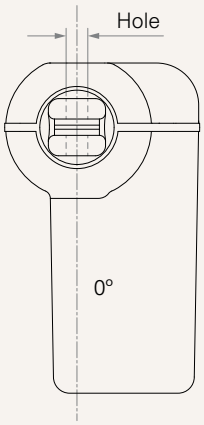
Front Attachment (mm)

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

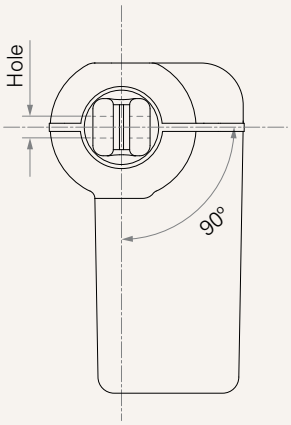


Direction of Rear Attachment (Counterclockwise)

1 = 0°

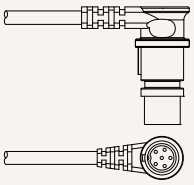


3 = 90°

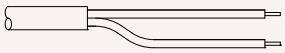


Plug

1 = DIN 6P, 90° plug



2 = Tinned leads



Q = Molex 6P, 90° plug