

TA27

series



Product Segments

- **Comfort Motion**

TiMOTION's TA27 series linear actuator is manufactured with a specially formulated plastic material for the upper and lower housing. The patented TA27 linear actuator is designed to work with zero-wall seating frames and is the perfect choice for recliner movement. The TA27 series is designed without a control box connection, but can be directly connected with a hand control, which is a more economic- effective solution.

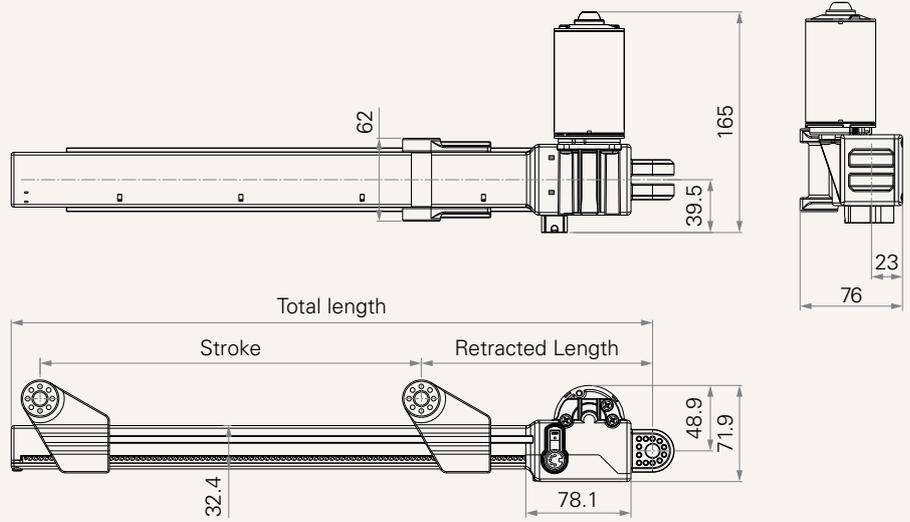
General Features

Voltage of motor	24V DC
Maximum load	750N in push / pull
Maximum speed at full load	32mm/s (with 750N in a push condition)
Minimum installation dimension one	120 or 175mm (upon which fixation type chooses from)
Color	Black
Certificate	UL962, EMC
Operational temperature range	+5°C~+45°C

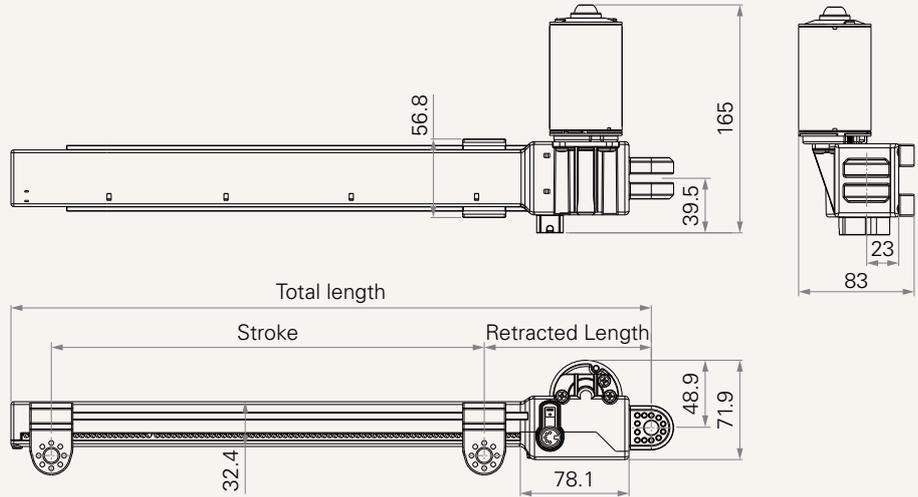
Drawing

Standard Dimensions
(mm)

Type 1
(Nut 31905-167)



Type 2
(Nut 31905-168)



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%)							
B	750	750	100	1.0	3.8	53.0	32.0

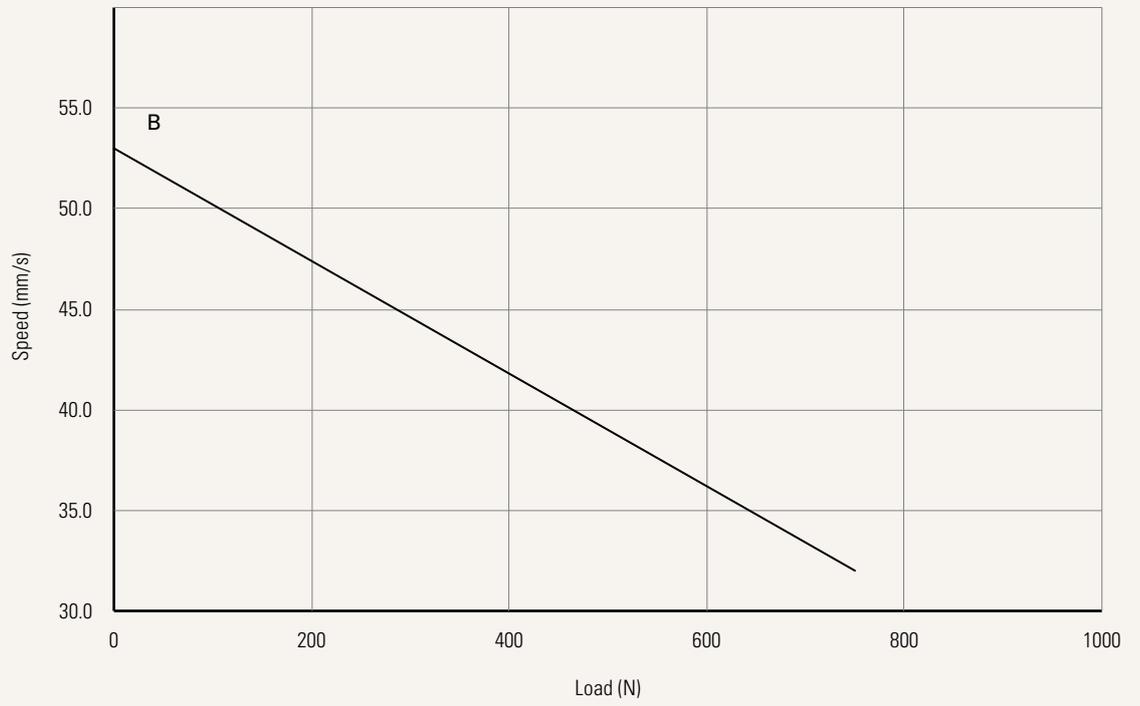
Note

- 1 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.
- 2 The current & speed in table are tested when the actuator is extending under push load.

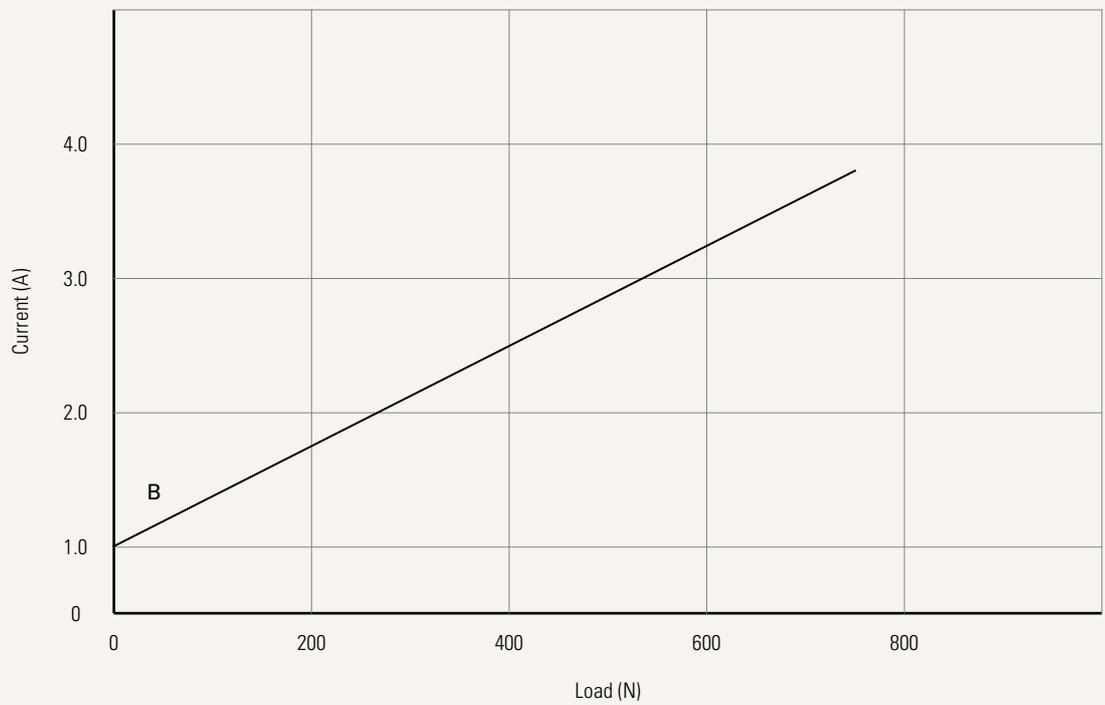
Performance Data (24V DC Motor)

Motor Speed (3800RPM, Duty cycle 10%)

Speed vs. Load



Current vs. Load

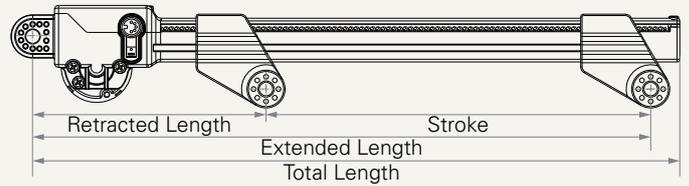


Voltage	2 = 24VDC		
Load and Speed	See page 2		
Stroke & Retracted length (mm)	XXX 175 = Installation type 1: Stroke 274 / 294 / 298 / 300, retracted length 175 XXX 120 = Installation type 2: Stroke 251 / 272 / 280 / 284 / 289, retracted length 120 See page 5		
Functions for Limit Switches	1 = Two switches at full retracted / extended positions to cut current See page 5		
Output Signals	0 = Without	1 = Hall sensor * 1	2 = Hall sensor * 2
Connector	0 = DIN 6P, on gear box (Hall sensor) See page 6 H = 1 motor direct cut system (For TP-small 01P, on gear box; ForTH-Short DIN 5P, on gear box)		
Brake	0 = Without	4 = Spindled brake (4.5N)	
Load Type	T = Push	P = Pull	
Installation Type	1 = Type 1 (Nut 31905-167) 2 = Type 2 (Nut 31905-168) See page 6		

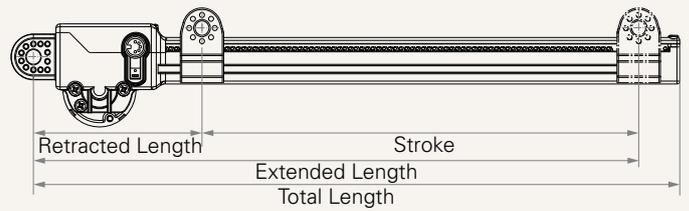
Stroke & Retracted length (mm)

Installation	Stroke	Retracted length	Total length
1	274	175	476
1	294	175	476
1	298	175	476
1	300	175	476
1	320	175	496
2	251	120	440
2	272	120	440
2	280	120	440
2	284	120	440
2	289	120	440
2	311	120	476

1 = Type 1 (Nut 31905-167)



2 = Type 2 (Nut 31905-168)



Functions for Limit Switches

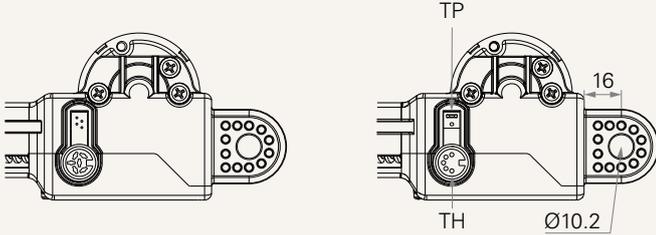
Wire Definitions

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

Connector

0 = DIN 6P, on gear box (Hall sensor)

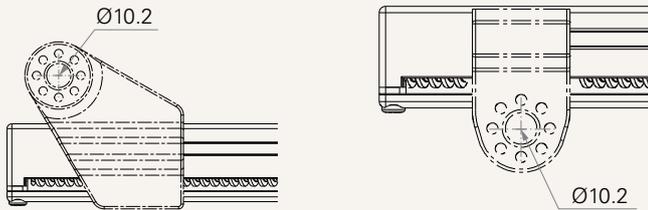
H = 1 motor direct cut system (For
TP-small 01P, on gear box; For TH
- Short DIN 5P, on gear box)



Installation Type

1 = Type 1 (Nut 31905-167)

2 = Type 2 (Nut 31905-168)



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.