

TA13

series



Product Segments

• Care Motion

Among our wide range of medical actuator solutions, the TA13 is especially designed for dentist chair application. With manual release function, the TA13 can turn the inner tube down by hand, in case of emergency, or if electrical power is not available.

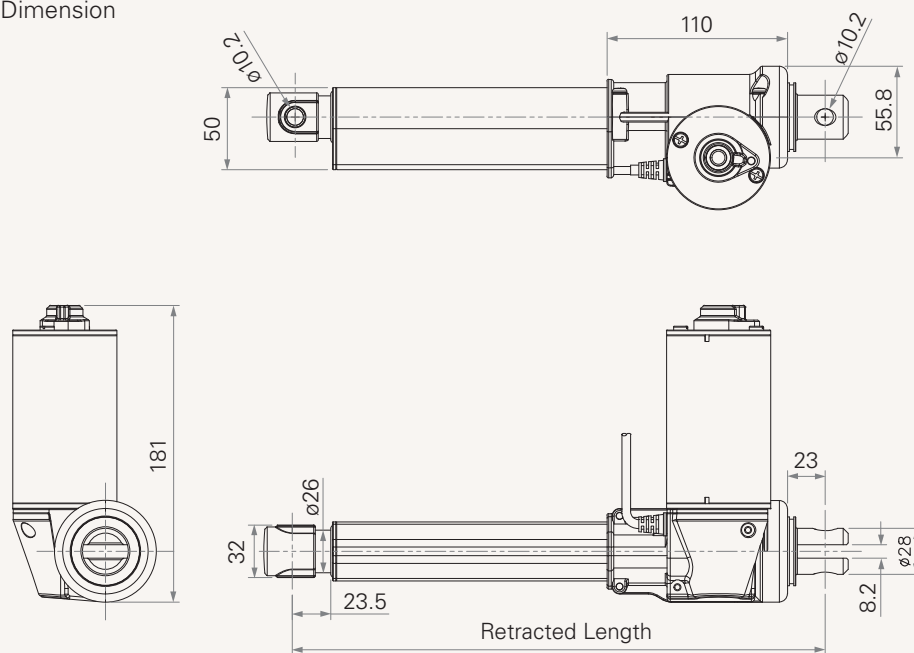
General Features

Voltage of motor	24V DC, or 36V DC
Maximum load	8,000N in push
Maximum load	4,000N in pull
Maximum speed	10.7mm/s
Minimum installation dimension	stroke+185mm
Color	black or grey
Certificate	IEC60601-1
Option	manual release, Hall sensor(s), push only (limited for push application)

Suitable for dentist chair application

Drawing

Standard Dimension



Load and Speed

CODE	Rated Load		Self Locking N (PUSH)	Typical Current at Rated Load (A)	Typical Speed	
	PUSH N	PULL N			No Load (32V DC) mm/s	Rated Load (24V DC) mm/s
Motor Speed (3000RPM)						
T	8000	4000	8000	6.0	8.4	4.4
Motor Speed (4000RPM)						
C	8000	4000	8000	7.5	10.7	6.0

Note

- This chart represents the speed and current figures under pushing condition.

Terms of Use

The user is responsible for determining the suitability of TiMOTION products for a specific application.

Due to continuous development in order to improve our products, TiMOTION products are subject to frequent modifications and changes without prior notice.

TiMOTION reserves the right to discontinue the sale of any products displayed on its website or listed in its catalogue or other written materials drawn up by TiMOTION.

Additional retracted length

TA Series	Safety Stroke Limit (mm)	Additional Stroke (mm)	Additional Invalid Length (mm)
TA1	300	0<additional stroke≤50	5
TA1 (6000N)	200	0<additional stroke≤50	5
TA1 (8000N) up	150	0<additional stroke≤50	5
TA2	300	0<additional stroke≤50	10
TA2P	300	0<additional stroke≤50	10
TA4	200	0<additional stroke≤50	5
TA6	300	0<additional stroke≤50	5
TA6 (6000N)	200	0<additional stroke≤50	5
TA7	300	0<additional stroke≤50	5
TA7 (6000N)	200	0<additional stroke≤50	5
TA7 (8000N) up	150	0<additional stroke≤50	5
TA9	200	0<additional stroke≤50	5
TA10	300	0<additional stroke≤50	5
TA10 (6000N)	200	0<additional stroke≤50	5
TA12	300	0<additional stroke≤50	10
TA12 (7000N)	300	0<additional stroke≤50	10
TA12 (12000N)	300	0<additional stroke≤50	10
TA13	300	0<additional stroke≤50	10
TA16	200	0<additional stroke≤50	5

Note

- 1 Above stroke recommendation is based on safety stroke limit, for each additional 50mm stroke, it needs to add 5mm for the retracted length.

For example

- 1 If TA9's stroke is 201mm, the retracted length = 201mm+invalid length+5mm.
 2 If TA9's stroke is 300mm, the retracted length = 300mm+invalid length+10mm.

TA13

Version: 20130502-C

<input type="checkbox"/>	Voltage	2 = 24V	3 = 36V
<input type="checkbox"/>	Load and Speed	See appendix	
<input type="checkbox"/>	Stroke		
<input type="checkbox"/>	Retracted Length	Stroke+185mm Note1 : before selecting retracted length, please refer to the additional retracted length chart Note2 : if with manual release, it needs to add 78mm retracted length	
<input type="checkbox"/>	Rear Attachment	1 = U clevis, slot 8.2 mm, hole 10.2mm 2 = U clevis, slot 8.2 mm, hole 12.2mm 3 = U clevis, slot 10.2 mm, hole 10.2mm	4 = U clevis, slot 10.2 mm, hole 12.2mm (1~4 by CNC) A = Customized
<input type="checkbox"/>	Front Attachment	1 = U clevis, slot 8.2 mm, hole 10.2mm 2 = U clevis, slot 8.2 mm, hole 12.2mm 3 = U clevis, slot 10.2 mm, hole 10.2mm	4 = U clevis, slot 10.2 mm, hole 12.2mm (1~4 by CNC) A = Customized
<input type="checkbox"/>	Direction of Rear Attachment (Counterclockwise)	1 = 0°	3 = 90°
<input type="checkbox"/>	Color (Cable Cord)	1 = Black	2 = Grey (Pantone 428C)
<input type="checkbox"/>	Manual Release	0 = Without	1 = Manual drive type 2 = Cable pull type
<input type="checkbox"/>	Special Functions for Spindle Sub-Assembly (Only for PUSH Application)	0 = Without (standard) 1 = With Safety nut	2 = Standard push only 3 = Safety nut and standard push only
<input type="checkbox"/>	Functions for Limit Switches	1 = Two switches at the retracted/extended positions to cut current 2 = Two switches at the retracted/extended positions to cut current with the third one in between to send signal	3 = Two switches at the retracted/extended positions to send signal 4 = Two switches at the retracted/extended positions and the third one in between to send signal A = Customized
<input type="checkbox"/>	Output Signals	0 = Without	1 = One Hall sensor 2 = Two Hall sensors 3 = Reed sensor
<input type="checkbox"/>	Plug	1 = TiMOTION's standard 6pin plug	2 = Tinned leads A = Customized
<input type="checkbox"/>	Cable Length	1 = Straight, 500mm 2 = Straight, 750mm 3 = Straight, 1000mm	4 = Straight, 1250mm 5 = Straight, 1500mm 6 = Straight, 2000mm 7 = Coiled, 200mm 8 = Coiled, 400mm A = Customized