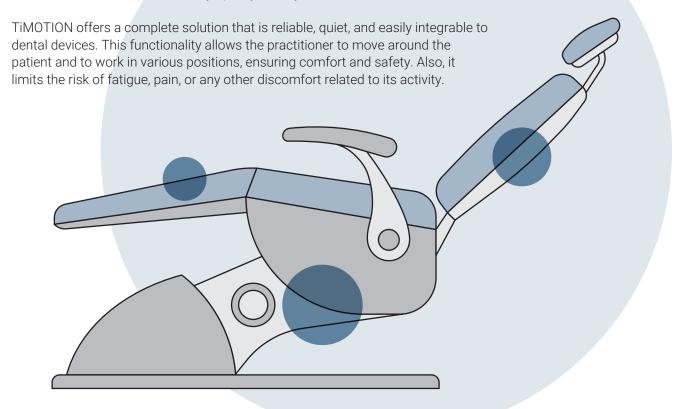
# ACTUATION SYSTEMS FOR DENTAL DEVICES

TiMOTION offers a complete solution that is reliable, quiet, and easy to integrate into dental devices.



# Complete Solution for Dental Devices

The dental chair is a piece of medical equipment used for oral surgery, disease examination, and treatment. Ergonomic and adjustable dental chairs are essential to meet the rising demand for care. Actuators are the core technology of this electrical product, which can make the patient feel comfortable when they are lying on this chair. It's also for the dentist to be able to perform proper treatment. The mobility of the dental chair involves several elements - height, inclination, and position of headrest - and requires the operation of different electric actuators that must operate fluidly, quietly, and synchronized.



## Lifting Columns



TL3

Max. load 4,000N (push) Self-locking force 4,000N

**Max. dynamic bending moment** 1,000Nm

**Max. speed at no load** 39mm/s

Max. speed at max. load 13.7mm/s

**Retracted length** ≥ Stroke/2 + 150mm



**TL17** 

Max. load 2,000N (push)

Max. dynamic bending moment

**Max. speed at no load** 41mm/s

Max. speed at max. load

11.5mm/s

Retracted length
≥ Stroke/2 + 150mm

## Linear **Actuators**



#### TA1

Max. load 10,000N (push) / 4,000N (pull) Max. speed at no load 39mm/s

Max. speed at max. load 3.2mm/s

Retracted length ≥ Stroke + 163mm



#### **TA12**

Max. load 12,000N (push) / 6,000N (pull) Max. speed at no load

57.3mm/s

Max. speed at max. load 4mm/s

Retracted length ≥ Stroke + 210mm

IP rating IP66W



#### **TA13**

Max. load 10,000N (push) / 5,500N (pull)

Max. speed at no load 49.4mm/s

Max. speed at max. load 4.5mm/s

**Retracted length** ≥ Stroke + 180mm



3.2mm/s

IP66W



#### **TA31**

Max. load 8,000N (push) / 3,000N (pull) Max. speed at no load

Max. speed at max. load 3.5mm/s

**Retracted length** ≥ Stroke + 157mm

IP rating IP66W

26.6mm/s



## **TA37**

Max. load 12,000N (push)

Max. speed at no load 31.1mm/s

Max. speed at max. load 5.3mm/s

Retracted length

≥ Stroke + 170mm

IP rating IP66W



#### **TA7**

Max. load 10,000N (push) / 4,000N (pull) Max. speed at no load 39mm/s

Max. speed at max. load 3.2mm/s

Retracted length ≥ Stroke + 171mm

IP rating IP66W



Max. load 10,000N (push) / 4,000N (pull) Max. speed at no load 39mm/s Max. speed at max. load

**Retracted length** ≥ Stroke + 163mm IP rating



#### **TA38M**

Max. load 2,000N (push) / 1,500N (pull) Max. speed at no load 20mm/s Max. speed at max. load

Retracted length

≥ 160mm (depending on chosen options)

IP rating **IP66** 

6.2mm/s



### **Vertical Integration**

**Design** → **Components** → **Final Assembly** → **Quality Control** → **After-sale Service**TiMOTION operates under a vertically integrated business model, which gives total control to offer the highest possible quality standards. While competing products are limited in design and integration features, TiMOTION specializes in complete customizable solutions based on the needs of the individual customer.



#### Customization

With a vertically integrated business model, TiMOTION offers total solutions that are high-quality and highly customizable to meet the various needs of software, hardware, or user interfaces.



### **Global Service Office**

TiMOTION has seven corporate offices and numerous sales agents, making TiMOTION well-positioned to provide global engineering and sales support.

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