

TL31K

series



Product Segments

• Ergo Motion

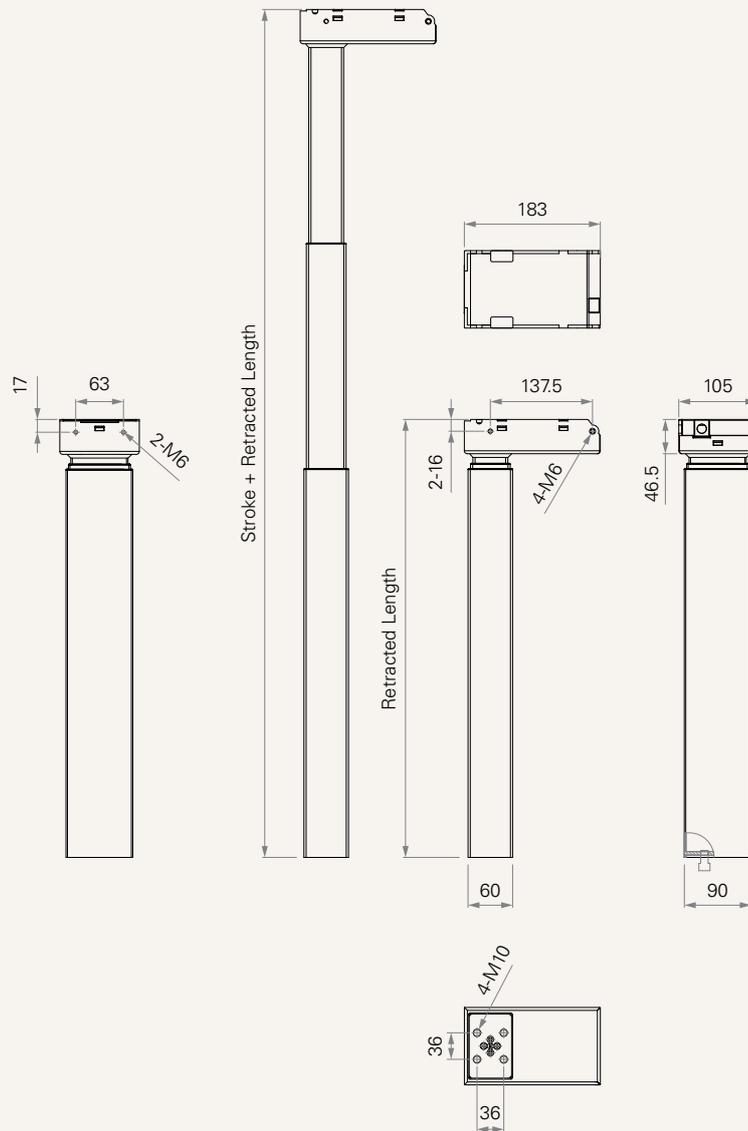
TiMOTION's TL31K series is a high-value, cost-effective lifting column designed explicitly for ergonomic desks, work tables, and other height-adjustable systems. Multiple TL series lifting columns can be easily connected to compatible TC series control boxes, supporting synchronous movement with a press of a button on the supported TH / TDH series controls. All Ergo Motion TC series control boxes have a standby power option of less than 0.1W to reduce power consumption. Our wide range of columns and controls offer modular solutions to satisfy customers' project requirements for a variety of work environments, providing smooth and quiet operation of any worksurface. The TL31K has a rectangular, three-stage telescopic profile, designed with a narrow-top, and wide-bottom.

General Features

| | |
|-------------------------|--|
| Max. load | 600N (push) |
| Max. speed at max. load | 32mm/s |
| Max. speed at no load | 45mm/s |
| Retracted length | Standard (compatible with foot): 590 / 560 (M) / 520 (S) mm Extended (compatible with shoe): 610 / 580 (M) / 540 (S) mm |
| Dimension of outer tube | 90*60mm rectangular |
| Stages | 3-stage |
| Stroke | Standard: 650mm; M/S: 660mm |
| Output signals | Hall sensors |
| Voltage | 24V DC |
| Color | Black, white, grey, or special colors |
| With motor house | |

Drawing

Standard Dimensions
(mm)



Load and Speed

| CODE | Load (N) | Self Locking Force (N) | Typical Current (A) | | Typical Speed (mm/s) | |
|------|----------|------------------------|---------------------|------------------|----------------------|------------------|
| | Push | | No Load 29V DC | With Load 29V DC | No Load 29V DC | With Load 29V DC |

Motor Speed (5200RPM)

| | | | | | | |
|----------|-----|-----|-----|-----|------|------|
| D | 600 | 600 | 2.5 | 6.0 | 45.0 | 32.0 |
|----------|-----|-----|-----|-----|------|------|

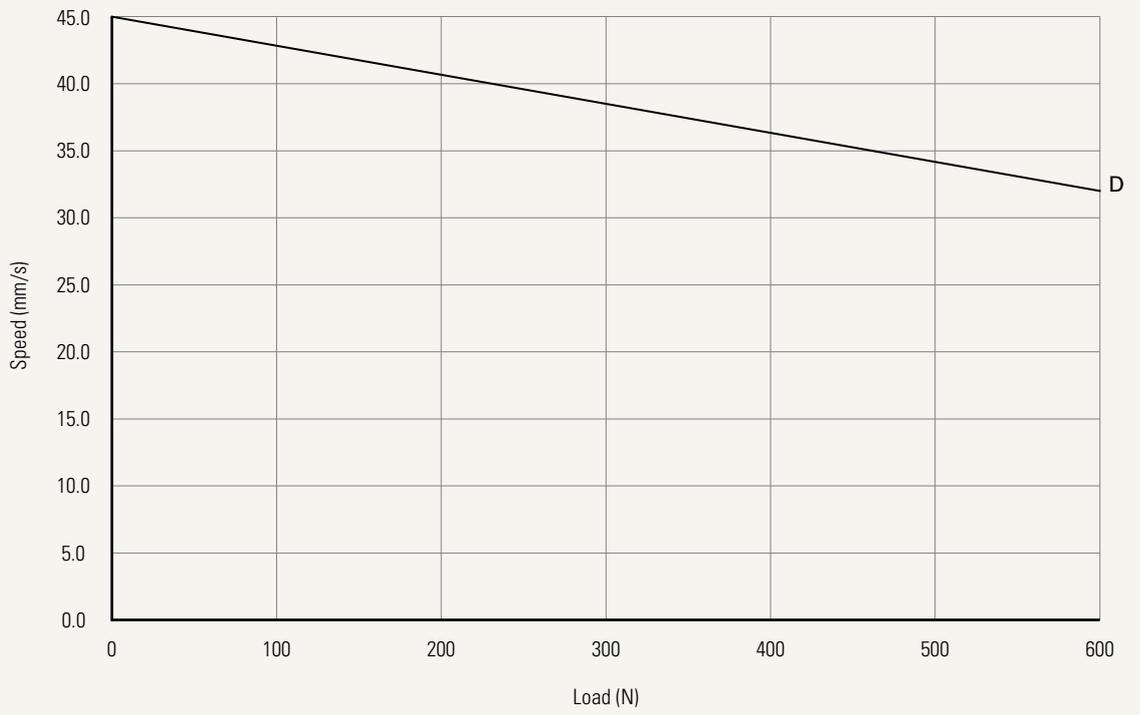
Note

- 1 Above self lock performance needs working with Timotion control system.
- 2 Parameters above are from tested average, please refer to approval drawing for final value.

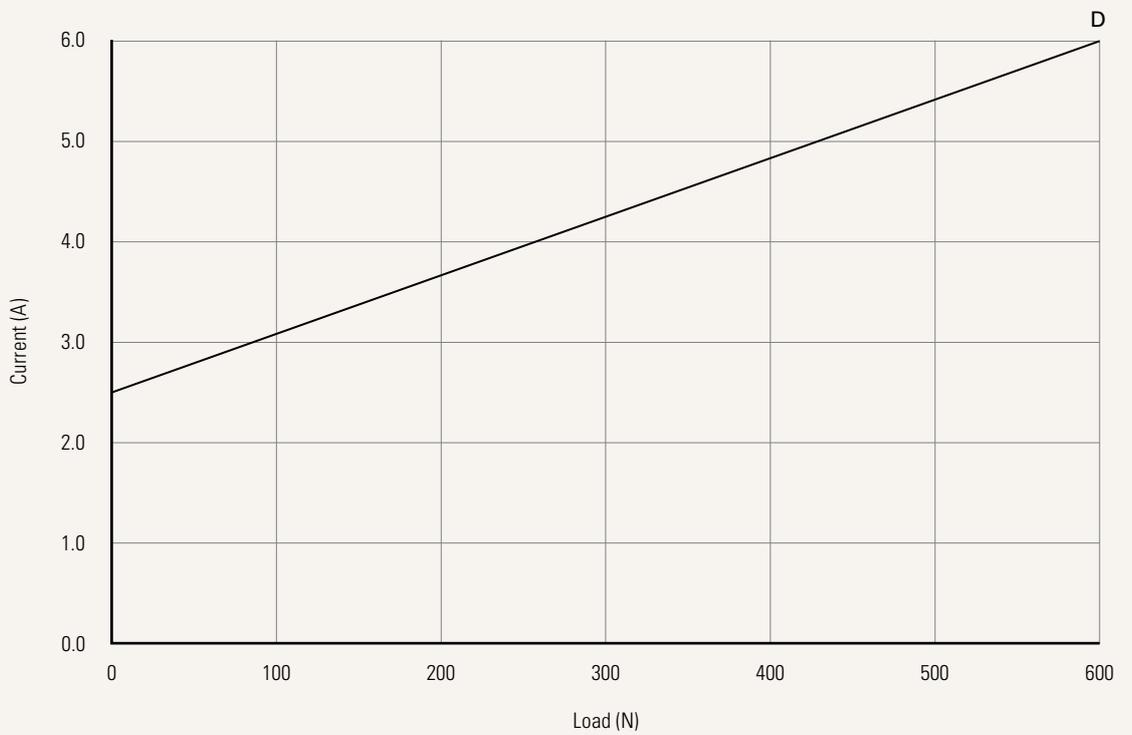
Performance Data (24V DC Motor)

Motor Speed (5200RPM)

Speed vs. Load



Current vs. Load



| | | | | |
|---|-----------------------------------|----------------------------|--|----------------------------|
| Appearance of Motor House | C = TiMOTION standard | | | |
| Voltage | 2 = 24V DC | | | |
| Load and Speed | See page 2 | | | |
| Stroke & Retracted Length (mm) | See page 5 | | | |
| Color | 1 = Black, RAL 9005 | 2 = White, RAL 9016 | 3 = Grey, RAL 9006 | 4 = Special grey, RAL 9022 |
| Wiper Color | 1 = Black | 1 = White | 3 = Grey | 4 = Matte black |
| Bracket | 0 = Without | L = Left, Standard bracket | R = Right, Standard bracket | |
| Bottom Plate Type | 1 = M10 | 2 = M6 | | |
| Bottom Plate Height | 1 = Standard | | 2 = Extended outer tube for shoe | |
| Output Signals | 2 = Hall sensor * 2 | | | |
| Connector | 1 = DIN 6P, 90° plug | | F = Molex 8P, 90° plug, without anti-clip, for TC22/TC23 | |
| See page 5 | E = Molex 8P, 180° plug, standard | | | |
| Cable Length (mm) | 1 = Straight, 500 | 3 = Straight, 1000 | 4 = Straight, 1500 | |

Note

¹ The TL is designed especially for push applications, not suitable for pull applications.

Stroke & Retracted Length (mm)

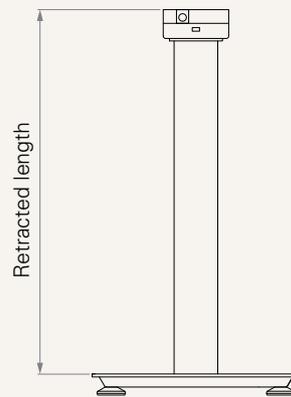
| Foot Assembly | Stroke & Retracted Length | | |
|--|---------------------------|-----------|-----------|
| | Standard | M | S |
| Standard, for Foot (Excluding Foot) | 650 / 590 | 660 / 560 | 660 / 520 |
| Extended Outer Tube for Shoe (Excluding Shoe) | 650 / 610 | 660 / 580 | 660 / 540 |

Note

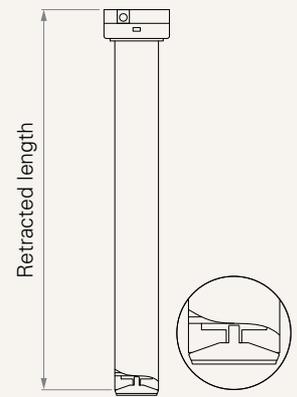
1 Only specific TEK could be with the shoes, please refer to TEK speccode.

Foot Assembly

Standard, for foot (excluding foot)

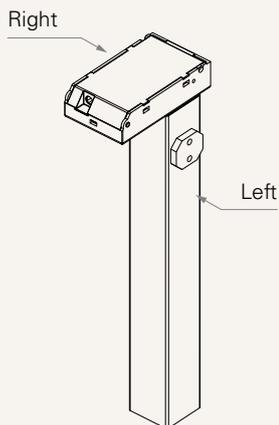


Extended outer tube for shoe (excluding shoe)



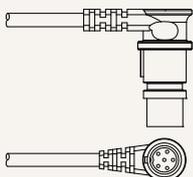
Bracket

Standard direction

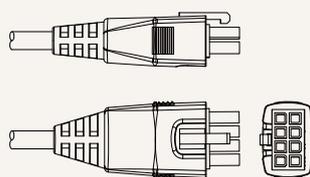


Connector

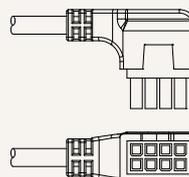
1 = DIN 6P, 90° plug



E = Molex 8P, 180° plug, standard



F = Molex 8P, 90° plug, without anti-clip, for TC22/TC23



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.