



### **Product Segments**

Ergo Motion

Introducing TiMOTION's TFL41S, a high-speed lifting column designed for a variety of ergonomic height-adjustable applications. Experience swift and seamless position adjustments with unmatched efficiency, enhancing your workspace with a smooth and effortless user experience.

Pair multiple TFL41S lifting columns with the TC control box series to create customized solutions that precisely meet your project's specific requirements. The TFL41S offers synchronized movement that is swift, seamless, and quiet, delivering a superior lifting experience.

- FastRise technology for quick height adjustments
- Three-stage telescopic structure with a rectangular profile

# **TFL41S** series

### Features

• Load and speed per column<sup>12</sup>

| Code                           | Load (N) | Self Locking<br>Force (N) | Current (A) with 29V DC |           | Speed (mm/s) with 29V DC |           |  |
|--------------------------------|----------|---------------------------|-------------------------|-----------|--------------------------|-----------|--|
|                                |          |                           | No Load                 | With Load | No Load                  | With Load |  |
| F                              | 500      | 500                       | 5.0                     | 9.0       | 110.0                    | 72.0      |  |
| Retracted length               |          | 590mm<br>560mm (M)        |                         |           |                          |           |  |
|                                |          | 520mm (S)                 |                         |           |                          |           |  |
| Stroke                         |          | 650mm                     |                         |           |                          |           |  |
|                                |          | 660mm (M/S)               |                         |           |                          |           |  |
| <ul> <li>Outer prof</li> </ul> | ile      | 80*50mm recta             | ngular                  |           |                          |           |  |
| • Stages                       |          | 3-stage                   |                         |           |                          |           |  |
| • Output signals               |          | Hall sensors              |                         |           |                          |           |  |
| <ul> <li>Voltage</li> </ul>    |          | 24V DC                    |                         |           |                          |           |  |
| • Color <sup>3</sup>           |          | RAL9005                   | RAL90                   | 006 RA    | L9016                    | RAL9022   |  |
| • Product W                    | /eight   | 6.3kg /column             |                         |           |                          |           |  |
|                                |          |                           |                         |           |                          |           |  |

### Note

- 1 The self locking force, current, and speed performance are tested with TiMOTION control boxes.
- 2 The parameters are based on average test values; final specifications are subject to the approval drawings.
- 3 For more color options, please consult your sales representative.

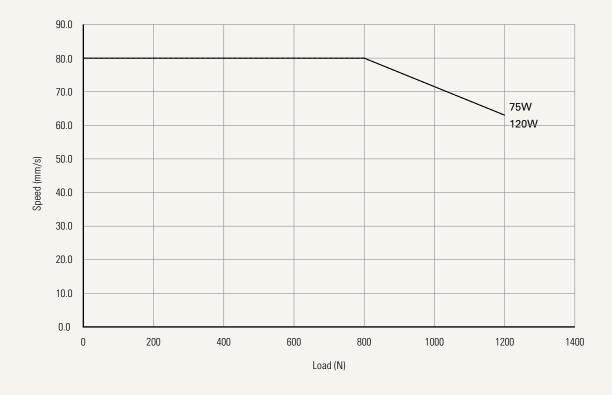




### Performance Data with Control Box

The following is the performance data of two columns driven by an Ergo Motion control box TC15F. The load is evenly distributed on the work surface.<sup>4</sup>

• TFL41S, two columns driven by TC15F



| TC15F Spec | Load (N) | Constant speed (mm/s) with TC15F |
|------------|----------|----------------------------------|
| 400W       | 1200     | 80                               |

### Note

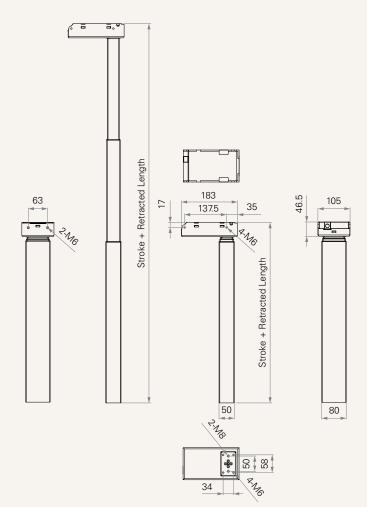
4 The corresponding control box software is required.





### Drawing

Standard Dimensions (mm)



| Stroke & Retracted Length |             |                       |  |  |  |
|---------------------------|-------------|-----------------------|--|--|--|
| Options                   | Stroke (mm) | Retracted Length (mm) |  |  |  |
| Standard                  | 650         | 590                   |  |  |  |
| М                         | 660         | 560                   |  |  |  |
| S                         | 660         | 520                   |  |  |  |
|                           |             |                       |  |  |  |



## TFL41S Ordering Key

# **1** T*i* MOTION

| FL41S |                                   |                                  |                     |   | Version: 20240731-         |  |
|-------|-----------------------------------|----------------------------------|---------------------|---|----------------------------|--|
|       | Appearance of<br>Motor House (mm) | C = TiMOTION standard            | N = Style N         |   |                            |  |
|       | <u>See page 6</u>                 |                                  |                     |   |                            |  |
|       | Voltage                           | 2 = 24V DC                       |                     |   |                            |  |
|       | Load and Speed                    | <u>See page 2</u>                |                     |   |                            |  |
|       | Stroke & Retracted<br>Length (mm) | <u>See page 4</u>                |                     |   |                            |  |
|       |                                   |                                  |                     |   |                            |  |
|       | Color                             | 1 = Black, RAL 9005              | 2 = White, RAL 9016 | 3 = Grey, RAL 9006                                      | 4 = Special grey, RAL 9022 |  |
|       | Wiper Color                       | 1 = Black                        | 2 = White           | 3 = Grey  | 4 = Matte black            |  |
|       | Bracket                           | 0 = Without                      |                     |   |                            |  |
|       | Bottom Plate Type<br>(mm)         | 2 = M6, 36*36, TiMOTION standard |                     | N = M6, 58*34, for style                                | P N                        |  |
|       | <u>See page 6</u>                 |                                  |                     |   |                            |  |
|       | Bottom Plate Height               | 1 = Standard                     |                     |   |                            |  |
|       |                                   |                                  |                     |   |                            |  |
|       | Output Signals                    | 2 = Hall sensor * 2              |                     |   |                            |  |
|       | Connector                         | 1 = DIN 6P, 90° plug             |                     | F = Molex 8P, 90°plug, without anti-clip, for TC22/TC23 |                            |  |

3 = Straight, 1000

4 = Straight, 1500

### Note

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

Cable Length (mm)

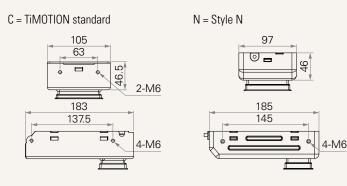
E = Molex 8P,  $180^{\circ} plug$ , standard

1 = Straight, 500

### TFL41S Ordering Key Appendix

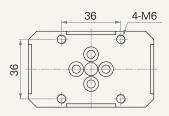


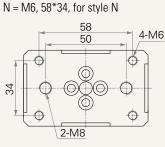
### Appearance of Motor House (mm)



### Bottom Plate Type (mm)

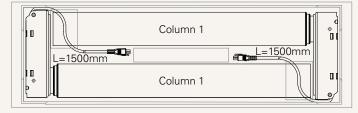
2 = M6, 36\*36, TiMOTION standard





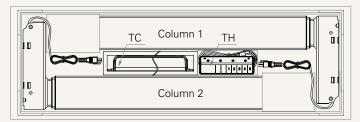
### Package

Package of one TL part number



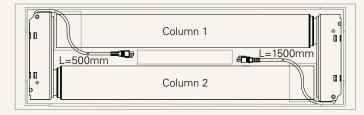
Column: 2pcs TL/box (Same PN& cable length) Electronic control system: Without Weight with package: 16KG

Package of MP part number set-TL in pairs + electronic control system



Column: 2pcs TL/box (Different PN, cable length, for pair use) Electronic control system: TC + TH Weight with package: 17KG

### Package of two TL part numbers in pairs



Column: 2pcs TL/box (Different PN, cable length, for pair use) Electronic control system: Without Weight with package: 16KG

#### **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.