

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.

1

Features

• Load and speed per column¹²

Code	Load (N) Push	Self Locking Force (N)	Current (A) with 24V DC		Speed (mm	Speed (mm/s) with 24V DC	
			No Load	With Load	No Load	With Load	
D	600	600	2.5	6.0	38.0	24.0	
Retracted length		Standard (compatible with foot): 590 / 560(M) / 520(S)mm Extended (compatible with shoe): 610 / 580(M) / 540(S)mm					
• Stroke		Standard: 650mm M/S: 660mm					
Outer profile		90*60mm rectangular					
• Stages		3-stage					
Output signals		Hall sensors					
 Voltage 		24V DC					
• Color³		RAL9005	RAL90	06 RA	AL9016	RAL9022	
• Product weight		7.9Kg /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.

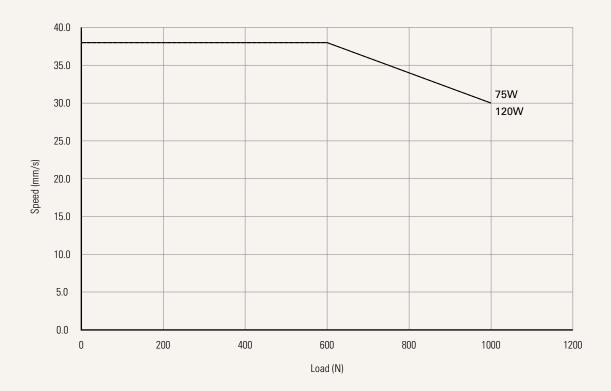


Series

Performance Data with Control Box

The following is the performance data of two columns driven by an Ergo Motion control box TC15S. The load is evenly distributed on the work surface.⁴

• TL31K, two columns driven by TC15S



TC15S Spec	Load (N)	Constant Speed (mm/s) with TC15S
75W	1000	38
120W	1000	38

Note

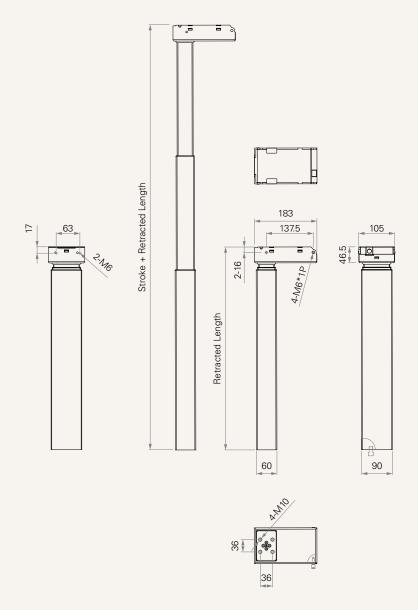
4 The corresponding control box software is required.



Series

Drawing

Standard Dimensions (mm)



Stroke & Retracted Length					
Standard Outer Tube Compatible	Options	Stroke (mm)	Retracted Length (mm)		
with Foot (Excluding Foot)	Standard	650	590		
	M	660	560		
	S	660	520		
Extended Outer Tube Compatible	Standard	650	610		
with Shoe (Excluding Shoe)	M	660	580		
	S	660	540		

Note

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



TL31K Ordering Key



Version: 20250220-E

TL31K

				VC131011. 20230220 L	
Appearance of Motor House	C = TiMOTION standard	N = Style N			
Voltage	2 = 24V DC				
Load and Speed	See page 2				
Stroke & Retracted Length (mm)	650 590 = <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 L = Left, Standard bracket		R = Right, Standard bracket		
Bottom Plate Type See page 6	1 = M10, 36*36, TiMOTION standard		2 = M6, 36*36, TiMOTION standard		
Bottom Plate Height	1 = Standard		2 = Extended outer tube for shoe		
Output Signals	2 = Hall sensor * 2				
Connector	1 = DIN 6P, 90° plug E = Molex 8P, 180° plug, standard		F = Molex 8P, 90° plug, without anti-clip, for TC22/TC23 G = Molex 6P, 180° plug		
Cable Length (mm)	1 = Straight, 500	3 = Straight, 1000	4 = Straight, 1500		

Note

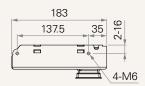
¹ The TL is designed especially for push applications, not suitable for pull applications.

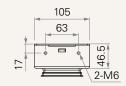
TL31K Ordering Key Appendix

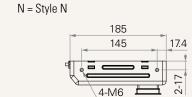


Appearance of Motor House (mm)

C = TiMOTION standard





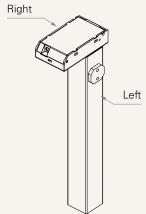


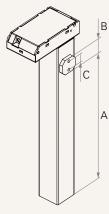


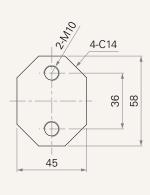
Bracket / Bracket (Standard)

Direction





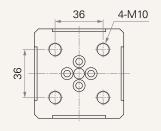


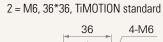


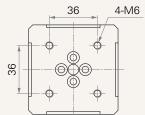
Standard Outer Tube Compatible		A (mm)	B (mm)	C (mm)
with Foot (Excluding Foot)	Standard	430.5	58	36
	М	404.5	58	36
	S	364.5	58	36
Extended Outer Tube Compatible	Standard	450.5	58	36
with Shoe (Excluding Shoe)	М	424.5	58	36
	S	384.5	58	36

Bottom Plate Type (mm)

1 = M10, 36*36, TiMOTION standard





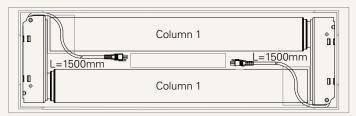


TL31K Ordering Key Appendix



Package

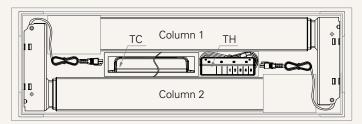
Package of one TL part number



Column: 2pcs TL/box (Same PN& cable length)

Electronic control system: Without Weight with package: 16KG

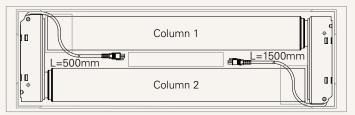
Package of MP part number set-TL in pairs + electronic control system



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