

TL31S

series



Product Segments

• Ergo Motion

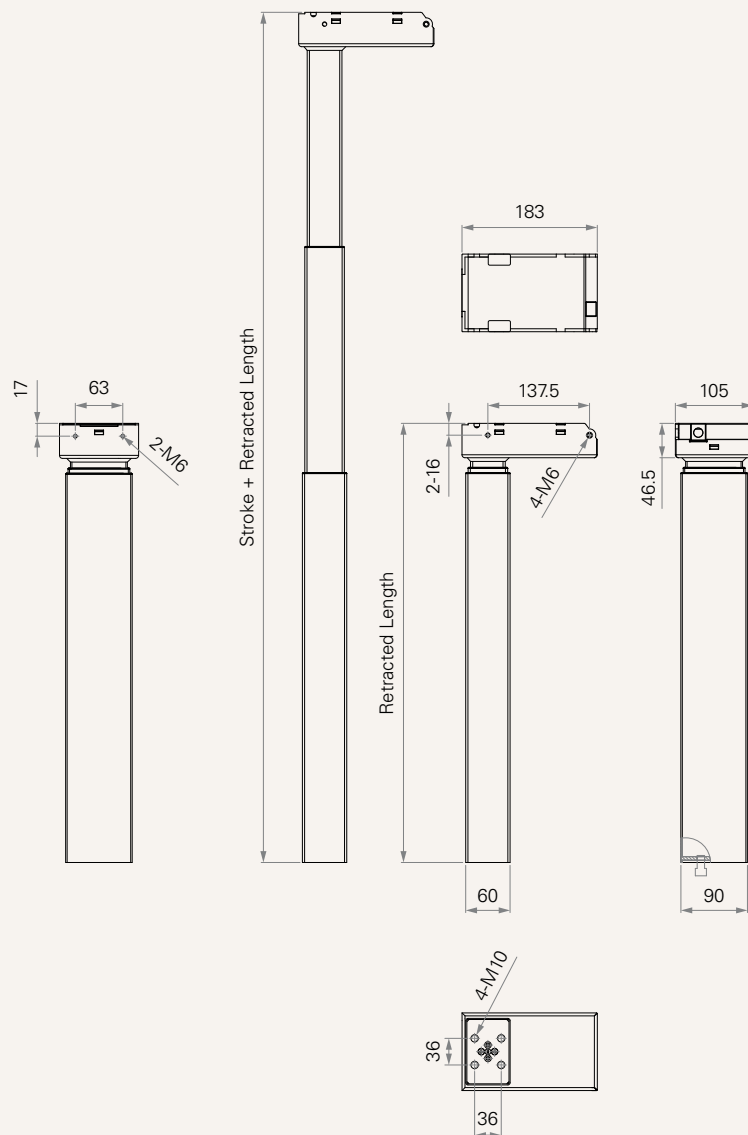
TiMOTION's TL31S series lifting columns are specifically designed for use in ergonomic desks and work tables. Using multiple TL series lifting columns with compatible TC series control boxes and TH / TDH series controls, work surfaces can be controlled quietly and smoothly with synchronous movement. All Ergo Motion TC series control boxes have a less than 0.1W standby power option that reduces power consumption. Our wide range of columns offers customers the solutions they require to satisfy their project requirements. The TL31S has a three stage telescopic outer tube that is designed for a narrow-top, wide-bottom rectangular appearance.

General Features

Max. load	700N (push)
Max. speed at max. load	32mm/s
Max. speed at no load	47mm/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, 24V DC (UL)
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, short motor)						
B	700	700	2.5	5.0	47.0	32.0

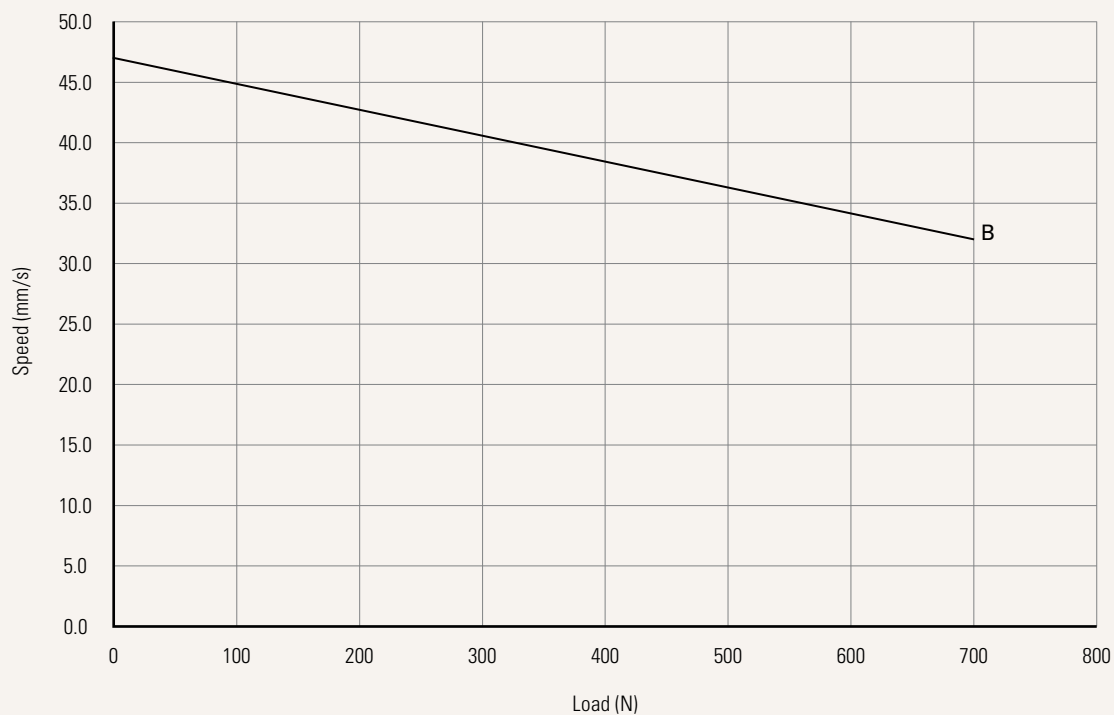
Note

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

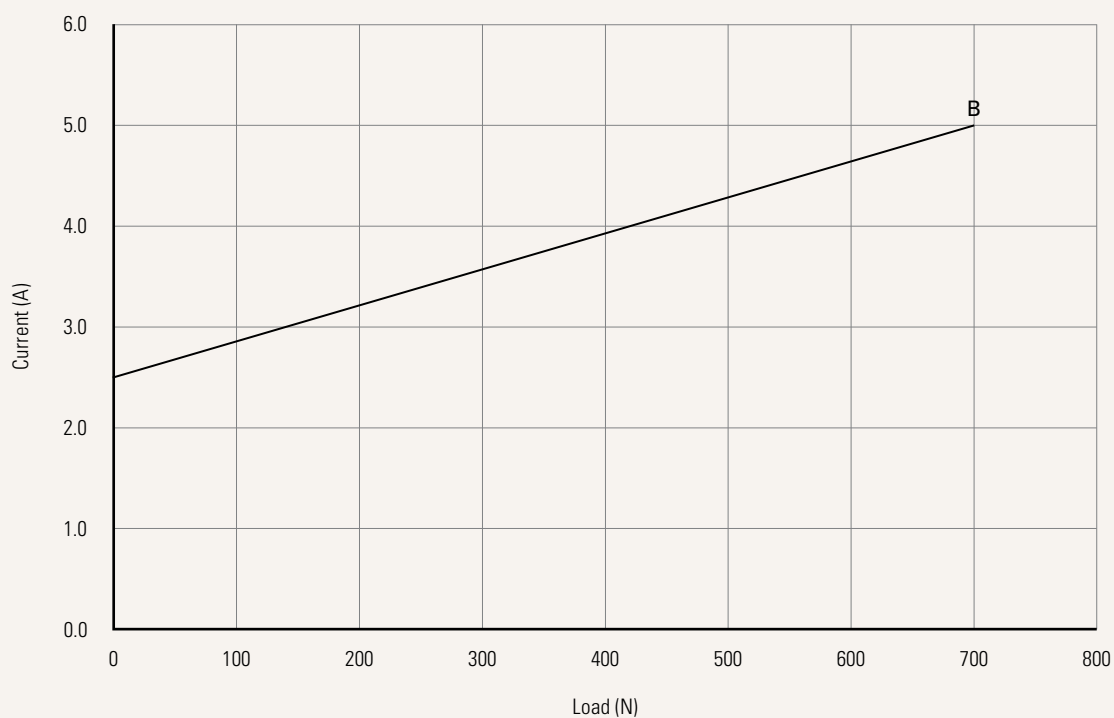
Performance Data (24V DC Motor)

Motor Speed (5200RPM, short motor)

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, Black wiper 2 = Grey, RAL 9006, Black wiper 3 = White, RAL 9016, Black wiper 4 = Special grey, RAL 9022, Black wiper 6 = Grey, RAL 9006, Grey wiper	7 = White, RAL 9016, White wiper 8 = Special grey, RAL 9022, Grey wiper B = Matte black, RAL 7021, Black wiper C = Graphite grey, RAL7024, Black wiper D = Matte black, RAL 7021, Matte Black wiper	
Motor Housing Step	0 = With	1 = Without	
Output Signals	2 = Hall sensor * 2		
Connector See page 5	1 = DIN 6P, 90° plug E = Molex 8P, 180° plug, standard	F = Molex 8P, 90° plug, without anti-clip, for TC22/TC23	
Cable Length (mm)	1 = Straight, 500	3 = Straight, 1000	4 = Straight, 1500
Bracket See page 5	0 = Without	L = Left, Standard bracket	R = Right, Standard bracket

Note

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

Stroke & Retracted Length (mm)

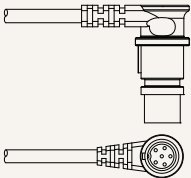
Foot Assembly	Stroke & Retracted Length		
	Standard	M	S
Standard, for Foot (Excluding Foot)	650 / 590	660 / 560	660 / 520
Extended Outer Tube for Shoe (Excluding Shoe)	650 / 610	660 / 580	660 / 540

Note

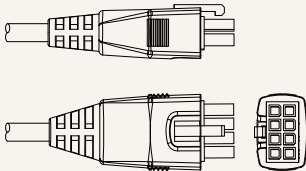
1 Only specific TEK could be with the shoes, please refer to TEK speccode.

Connector

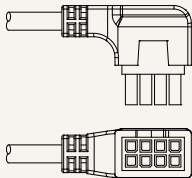
1 = DIN 6P, 90° plug



E = Molex 8P, 180° plug, standard

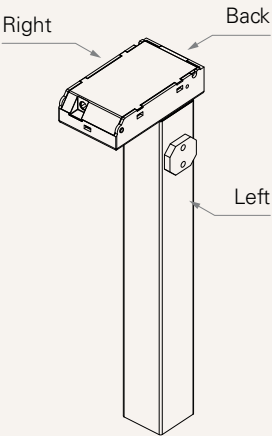


F = Molex 8P, 90° plug, without anti-clip, for TC22/TC23



Bracket

Standard direction



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.