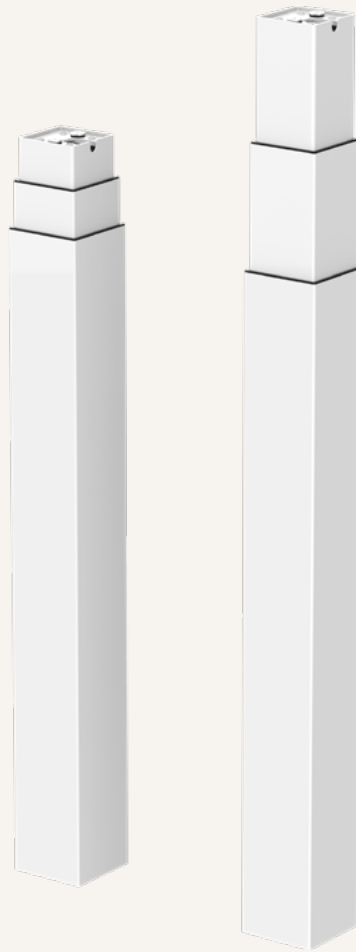# TL20S

series

## Product Segments

- **Ergo Motion**

The TL20S has a three-stage telescopic outer tube design that has a narrow top and wide bottom square appearance, with an embedded inline actuator (TA20). The TL20S is ideally suited for ergonomic furniture applications as it comes without a motor housing. It is the perfect choice for design-oriented lifting furniture that needs a clean appearance while simultaneously optimizing space.

General Features

Max. load	700N (push)
Self-locking force	900N
Max. speed at max. load	35mm/s
Max. speed at no load	46mm/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	70*70mm, square
Stages	3-stage
Stroke	650 / 660 (M, S) mm
Output signals	Hall sensors
Voltage	24V DC
Inline column	

Drawing

Standard Dimensions
(mm)
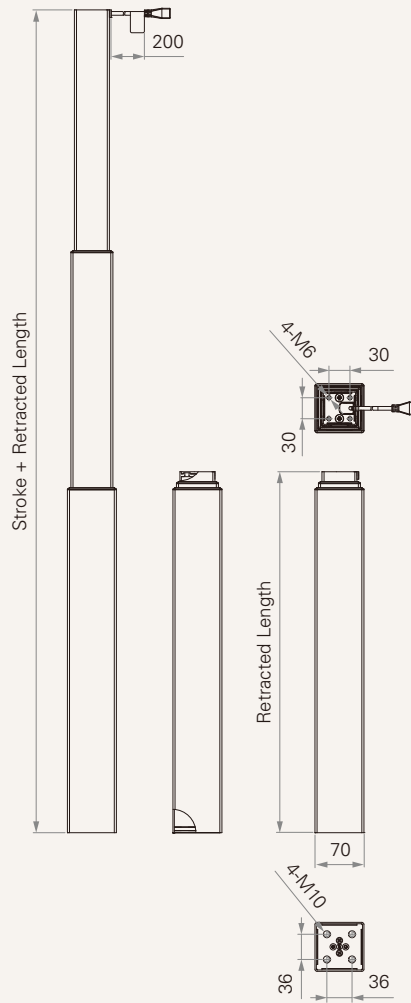
Load and Speed

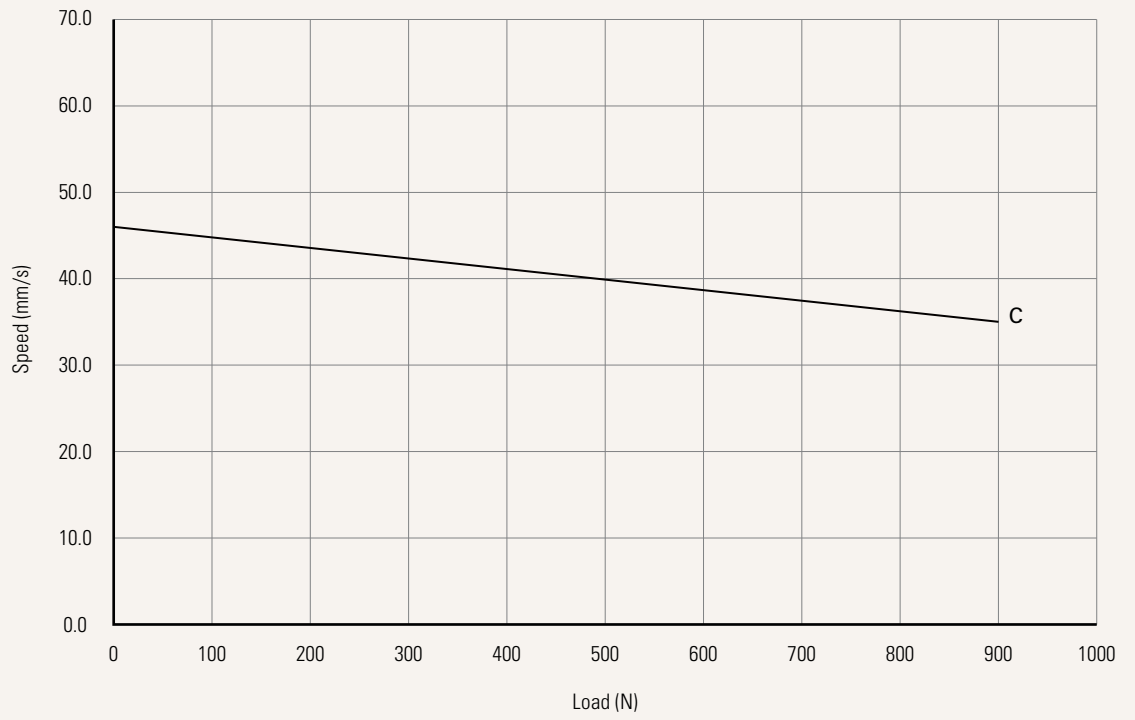| CODE	Load (N)	Self Locking Force (N)	Typical Current (A)		Typical Speed (mm/s)	
	Push		No Load 29V DC	With Load 29V DC	No Load 29V DC	With Load 29V DC
Motor Speed (5200RPM)						
C	700	900	≤ 2.5	≤ 5.5	46	35

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.
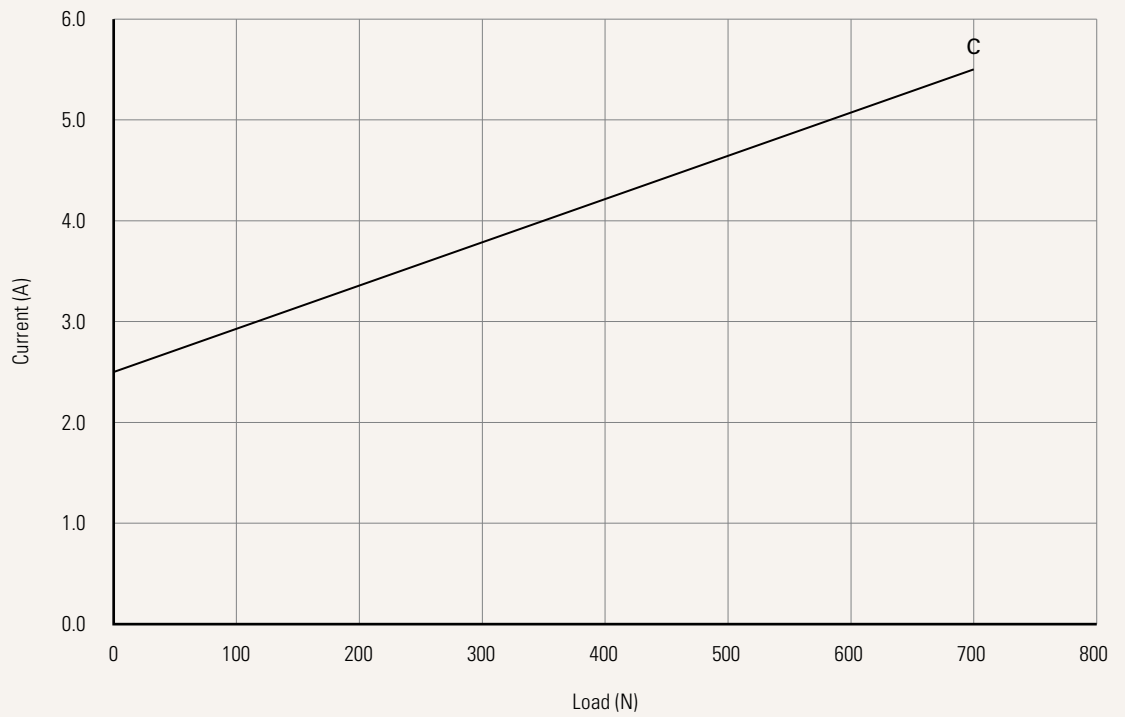
TiMOTION

Performance Data (24V DC Motor)

Motor Speed (5200RPM)

Speed vs. Load

Current vs. Load

TL20S Ordering Key

TiMOTION

TL20S

Appearance of Tubes	C = Without wiper fixing holes at sides
Voltage	2 = 24V DC
Load and Speed	See page 2
Stroke & Retracted Length (mm)	See page 5

Column Color		
	1 = Black, RAL 9005, Black wiper	7 = White, RAL 9016, White wiper
	2 = Grey, RAL 9006, Black wiper	8 = Special grey, RAL 9022, Grey wiper
	3 = White, RAL 9016, Black wiper	B = Matte black, RAL 7021, Black wiper
	4 = Special grey, RAL 9022, Black wiper	C = Graphite grey RAL7024, Black wiper
	6 = Grey, RAL 9006, Grey wiper	D = Matte black, RAL 7021, Matte Black wiper

Output Signals	2 = Hall sensor * 2
Connector	H = Molex 6P, socket, standard
Cable Length (mm) See page 5	1 = Straight, 200, standard
Extension Cable Connector See page 5	0 = Without 1 = Molex 6 pin (plug) to Molex 8 pin (plug), 180° plug, standard 2 = Molex 6 pin (plug) to Din 6 pin (plug) 3 = Molex 6 pin (plug) to Molex 8 pin (plug), 90° plug, without anti-clip

Extension Cable Length (mm) See page 6			
	1 = Straight, 500	3 = Straight, 1000	4 = Straight, 1500

Bracket	0 = Without

Note

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

TL20S Ordering Key Appendix

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

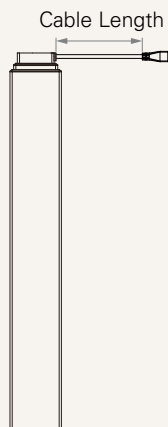**1** Only specific TEK could be with the shoes, please refer to TEK speccode

Foot Assembly

Standard, for foot (excluding foot)

Retracted length

Extended outer tube for shoe (excluding shoe)

Retracted length
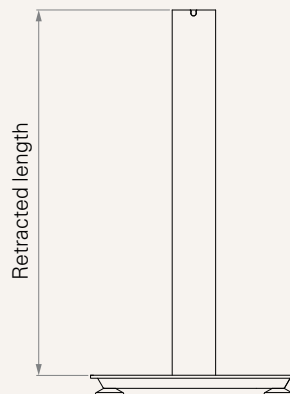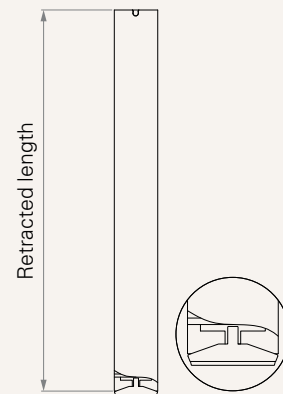
Cable Length (mm)

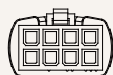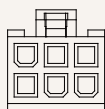Cable Length

Extension Cable Connector

1 = Molex 6 pin (plug) to Molex 8 pin (plug), 180°plug, standard
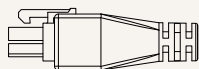
Molex 6 pin, plug
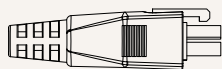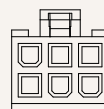
Molex 8 pin, plug

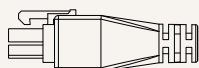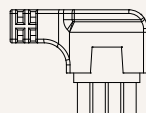2 = Molex 6 pin (plug) to Din 6 pin (plug)

Molex 6 pin, plug

Din 6 pin, plug

3 = Molex 6 pin (plug) to Molex 8 pin (plug), 90°plug, without anti-clip
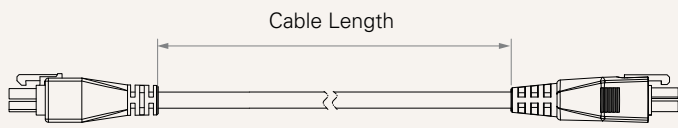

Molex 6 pin, plug

Molex 8 pin, plug

Extension Cable Length

Cable Length

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.