

TL52

series



Product Segments

• Care Motion

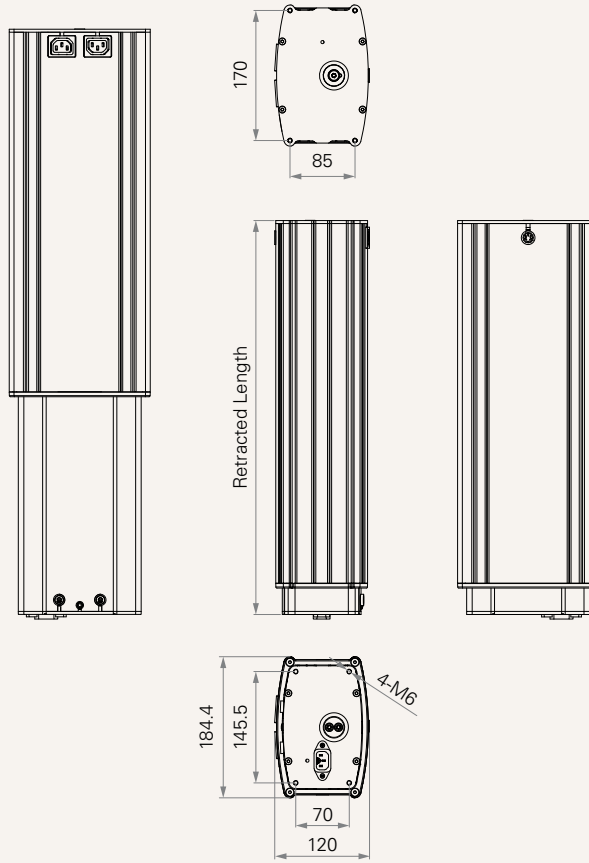
TiMOTION's TL52 series electric lifting column is designed for medical applications, particularly ophthalmic testing equipment or eye examination instruments. It is equipped with three optimally positioned AC plugs that directly connect related devices. The TL52 has a two stage telescopic outer tube designed for a wide-top, narrow-bottom rectangular appearance.

General Features

Max. load	3,300N (push)
Max. load & self –locking force	3,300N
Max. dynamic bending moment	250Nm
Max. static bending moment	500Nm
Max. speed at max. load	6.5mm/s
Max. speed at no load	38mm/s
Retracted length	≥ Stroke + 256mm
Dimension of outer tube	2-stage, 184.4*120mm, rectangular, upside down
Stroke	20~800mm
Options	AC power input / output
Color	Black, silver
Operational temperature range	+5°C~+45°C

Drawing

Standard Dimensions
(mm)



Load and Speed

CODE	Load (N) Push	Self Locking Force (N)	Typical Current (A)		Typical Speed (mm/s)	
			No Load 32V DC	With Load 24V DC	No Load 32V DC	With Load 24V DC
Motor Speed (5600RPM, Duty Cycle 10%)						
G	3300	3300	2.0	4.7	12.0	6.5
J	1800	1800	2.0	3.2	17.0	10.5
L	800	800	2.5	5.0	38.0	22.0

Note

- 1 Please refer to the approved drawing for the final authentic value.
- 2 This self-locking force level is reached only when a short circuit is applied on the terminals of the motor. All the TiMOTION control boxes have this feature built-in.
- 3 The current & speed in table are tested with 24V DC motor.
- 4 Standard stroke: Min. ≥ 20 mm, Max. please refer to below table.

Dynamic bending moment (Nm)- X direction

Stroke (mm)	S + 256
200-400	250
401-600	250
601-800	250

Note

- 1 Static bending moment = dynamic*2

Dynamic bending moment (Nm)- Y direction

Stroke (mm)	S + 256
200-400	200
401-600	200
601-800	200

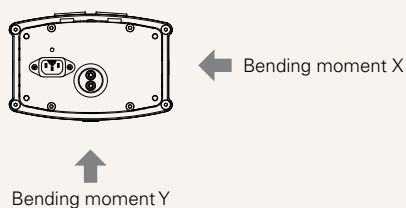
Note

- 1 Static bending moment = dynamic*2

CODE	Load (N)	Max Stroke (mm)
G	≤ 3300	600
J	≤ 1800	800
L	≤ 800	800

Note

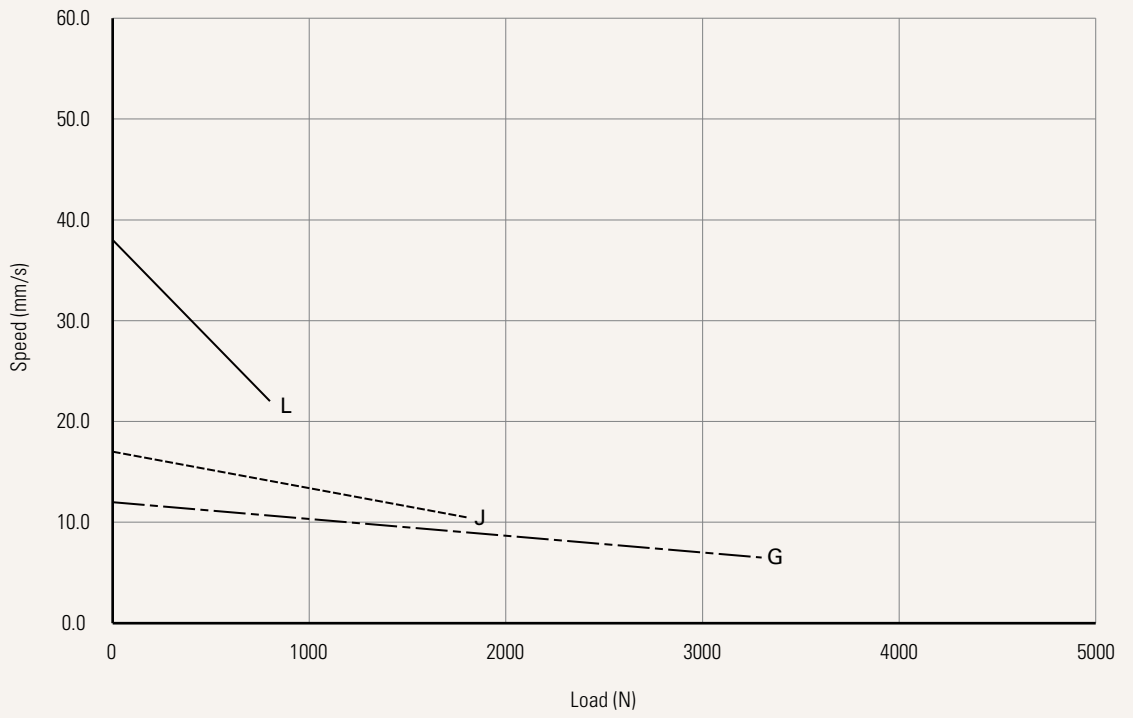
- 1 Select "L", stroke has to be ≥ 38 mm



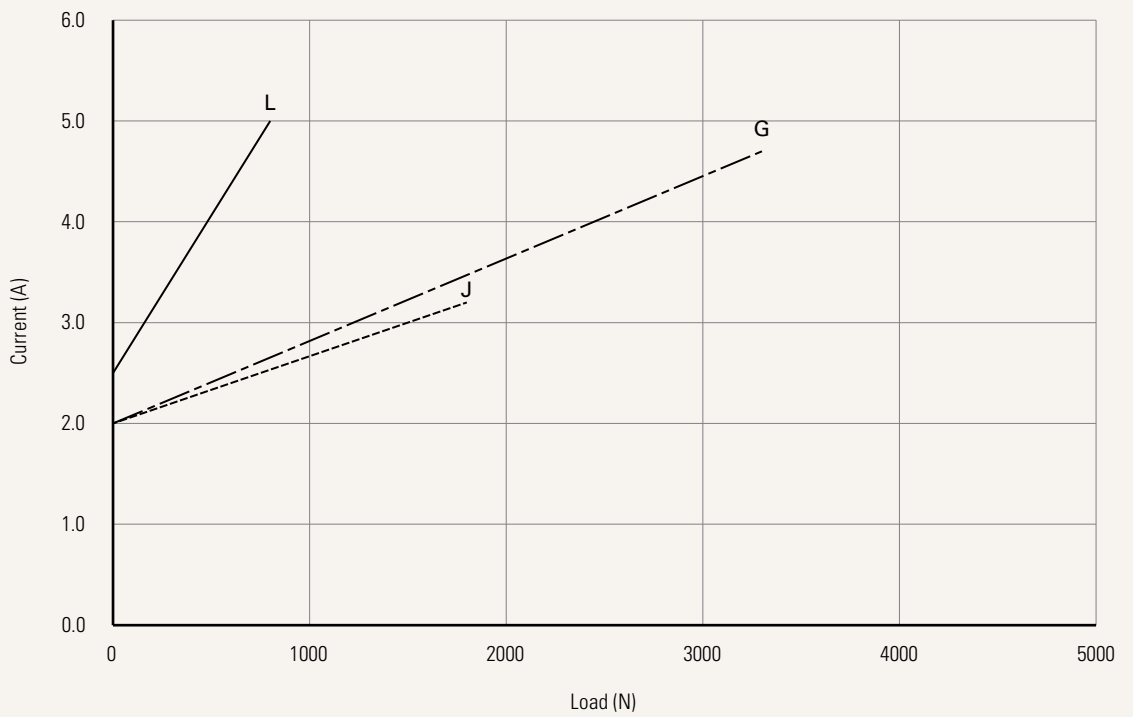
Performance Data (24V DC Motor)

Motor Speed (5600RPM, Duty Cycle 10%)

Speed vs. Load



Current vs. Load



Voltage	U = 100-240VAC, SMPS	
Load and Speed	See page 4	
Stroke (mm)	20-800	
Retracted Length (mm)	≥ S + 256	
Special Functions for Spindle Sub-Assembly	0 = Without (Standard)	
Color	1 = Black	2 = Silver
Tubes & Sockets Position	E = Tubes: thicker on top; Sockets position: top side	
Top Plate	1 = Small plate	
Bottom Plate	1 = Small plate	
AC Input Socket & Input Plug	1 = C13 female plug & EU male plug 2 = C13 female plug & US male plug 3 = C13 female plug & AU male plug 4 = C13 female plug & UK male plug	5 = C13 female plug & JP male plug
AC Cable Length (mm)	5 = Straight, 1500	
AC Output Socket	1 = With (C14 socket)	
Direct Cut	K = 1 motor direct cut system	
Internet Socket	0 = Without	

Note

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

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.