

TL56

series



Product Segments

• Comfort Motion

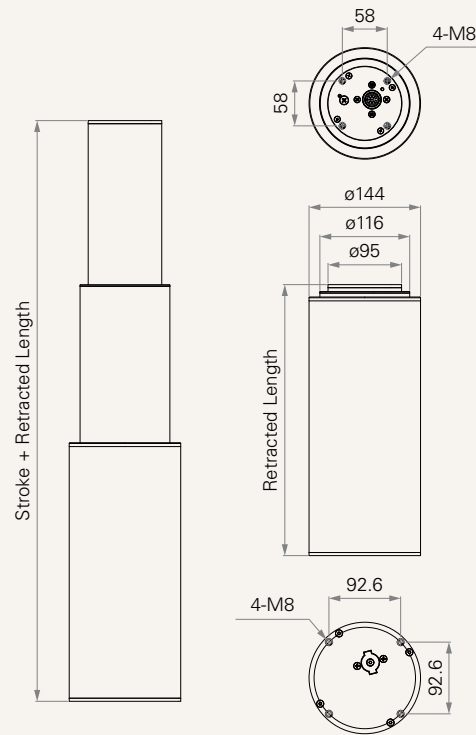
The TL56 is part of TiMOTION's medical lifting column range , designed with a three-stage telescopic structure and round profile , making it ideal for medical applications. It's design ensures stable vertical lifting, with smooth and reliable operation throughout . Particularly suited for surgical and examination tables, the TL56 offers two cable exit options: from the top or bottom socket, enhancing installation flexibility.

General Features

Max. load	2,000N (push)
Self-locking force	2,000N
Max. dynamic bending moment	500Nm
Max. static bending moment	1000Nm
Max. speed at max. load	9.6mm/s
Max. speed at no load	32.6mm/s
Retracted length	$\geq \text{Stroke}/2 + 150\text{mm}$
IP rating	IPX6
Outer profile	Ø144mm round
Stages	3-stage
Stroke	250~400mm
Output signals	Hall sensor * 2
Voltage	12/24V DC, 24V DC (thermal control)
Color	Silver
Operational temperature range	+5°C~+45°C

Drawing

Standard Dimensions
(mm)



Load and Speed

CODE	Push (N)	Bending Moment (Nm)		Self Locking Force (N)	Typical Current (A)		Typical Speed (mm/s)	
		Dynamic	Static		Brake #0	No Load 32V DC	With Load 24V DC	No Load 32V DC
Motor Speed (5200RPM)								
B	1000	250	500	1000	1.7	3.6	32.6	19.9
C	2000	500	1000	2000	2.3	4.3	16.5	9.6

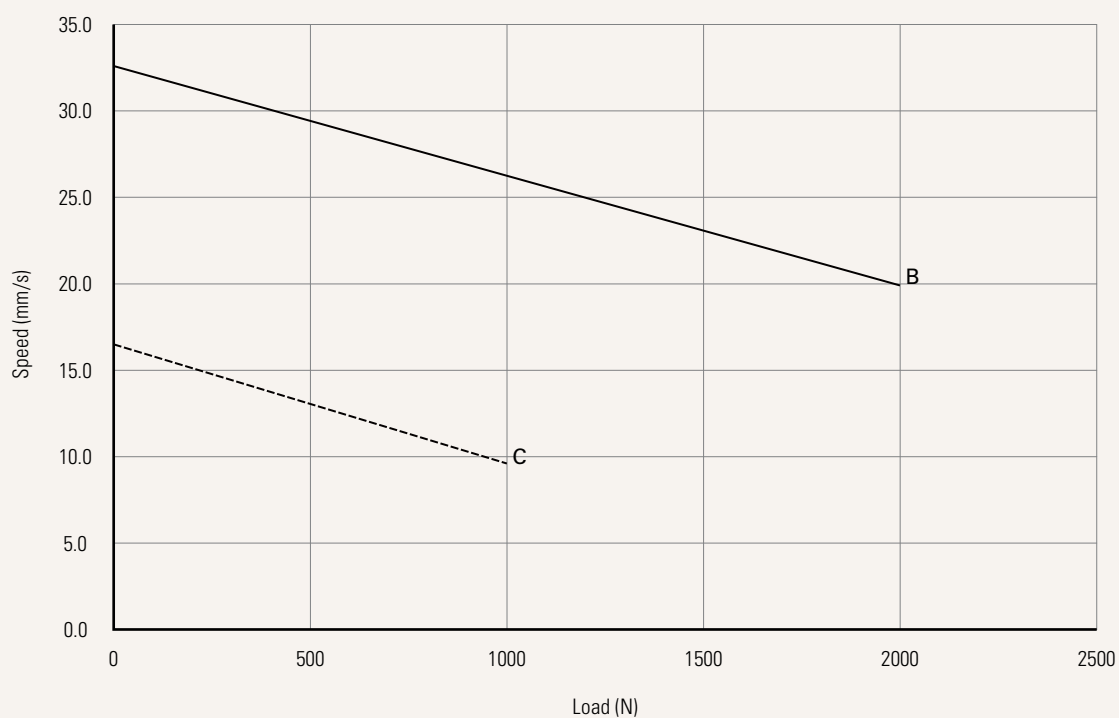
Note

- Parameters above are from tested average, please refer to approval drawing for final value.
- The current & speed are tested with 24VDC motor.

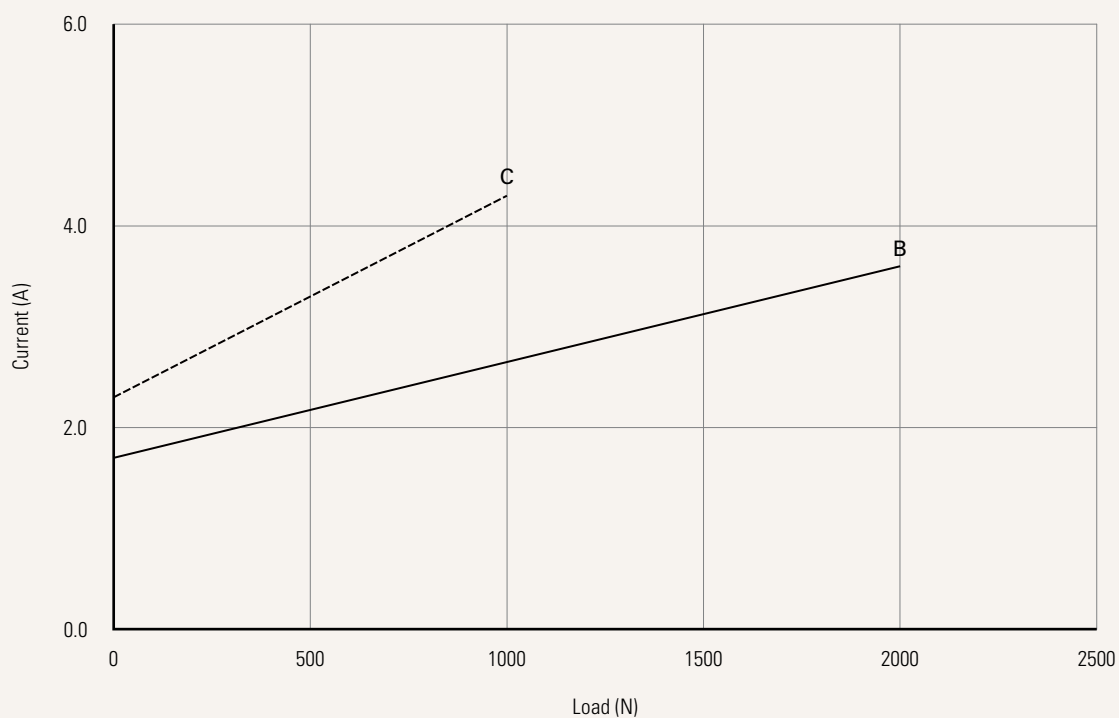
Performance Data (24V DC Motor)

Motor Speed (5200RPM)

Speed vs. Load



Current vs. Load



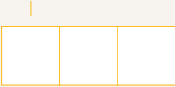
Note

1 The performance data in the curve charts shows theoretical value.

TL56 Ordering Key - Top End Socket

TL56

Version: 20251224-E

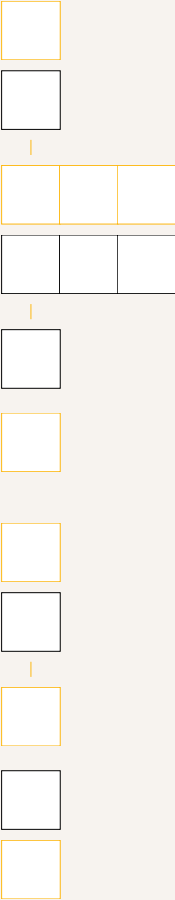


Voltage	1 = 12V	2 = 24V	5 = 24V, PTC
Load and Speed	See page 2		
Stroke (mm)	250-400		
Retracted Length (mm)	See page 6		
Cable Exit See page 6	1 = Top end socket		
Functions for Limit Switches See page 6	1 = Two switches at full retracted / extended positions to cut current 3 = Two switches at full retracted / extended positions to send signal		
IP Rating	1 = Without	2 = IPX4	3 = IPX6
Output Signals	0 = Without	2 = Hall sensor * 2	
Connector See page 6	1 = DIN 6P socket		
Cable Length (mm)	0 = Without		
Color	1 = Black	2 = Silver	

TL56 Ordering Key - Side Cable

TL56

Version: 20251224-E



Voltage	1 = 12V	2 = 24V	5 = 24V, PTC	
Load and Speed	See page 2			
Stroke (mm)	250-400			
Retracted Length (mm)	See page 6			
Cable Exit See page 6	2 = Bottom side cable	3 = Top side cable		
Functions for Limit Switches See page 6	1 = Two switches at full retracted / extended positions to cut current 3 = Two switches at full retracted / extended positions to send signal			
IP Rating	1 = Without	2 = IPX4	3 = IPX6	
Output Signals	0 = Without	2 = Hall sensor * 2		
Connector See page 6	1 = DIN 6P, 90° socket	2 = Tinned leads	Q = Molex 6P, 90° socket	F = DIN 6P, 180° socket
Cable Length (mm)	1 = Straight, 500	3 = Straight, 1000	5 = Straight, 1500	7 = Straight, 2000
Color	1 = Black (With black cable set) 2 = Matte silver (With Pantone 428C cable set)		3 = Matte silver (With black cable set) 4 = Black (With Pantone 428C cable set)	

Retracted Length (mm)

1. Minimum retracted length needs to $\geq A+B$

A. Load (N)		
CODE	B	C
	1000	2000
	S / 2+150	S / 2+150

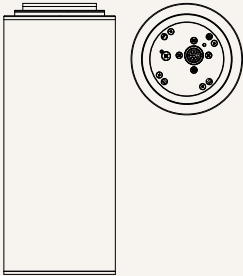
B. Cable Exit			
CODE	1	2	3
	Top End Socket	Bottom Side Cable	Top Side Cable
	-	+20	+15

Note

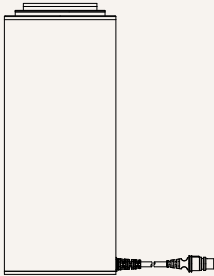
1 Different retracted length is relative to different bending moment, [See page 2](#).

Cable Exit

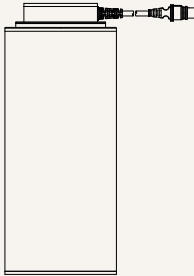
1 = Top end socket



2 = Bottom side cable

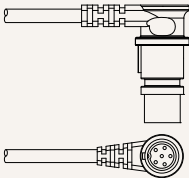


3 = Top side cable

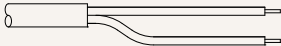


Connector

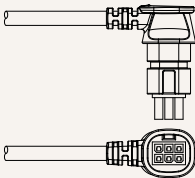
1 = DIN 6P, 90° socket



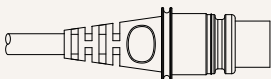
2 = Tinned leads



Q = Molex 6P, 90° socket



F = DIN 6P, 180° socket



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