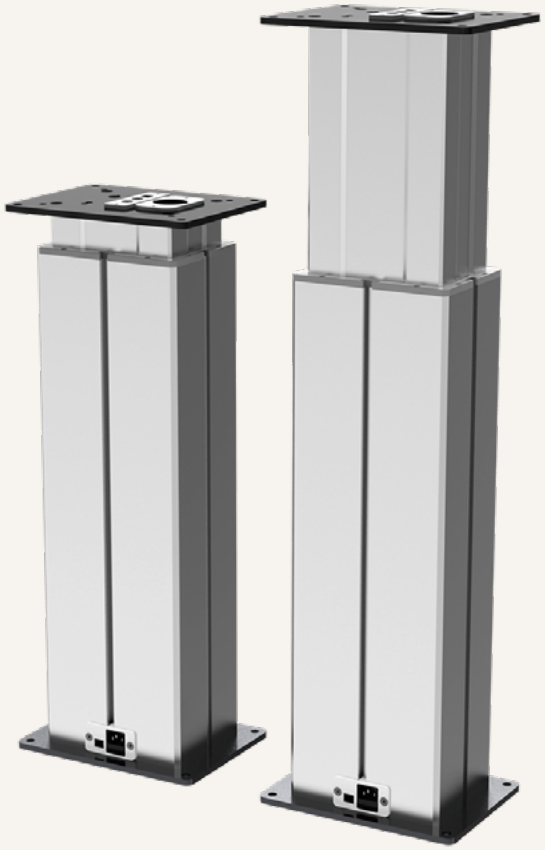
TL18AC

series



Product Segments

- **Care Motion**
- **Comfort Motion**
- **Industrial Motion**

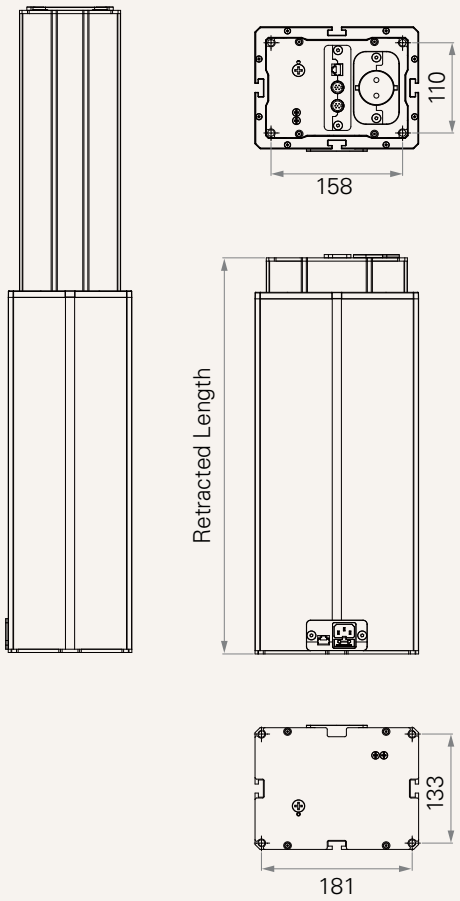
TiMOTION's TL18AC electric lifting column is designed for industrial and medical applications such as height adjustable workstations, screen and lifting tables. The TL18AC features an extruded aluminum rectangular appearance. It is equipped with AC plug to connect the computers, TV or other device directly.

General Features

Maximum load & self- locking force	4,500N in push
Maximum dynamic bending moment	250Nm
Maximum static bending moment	500Nm
Maximum speed at full load	28mm/s (with 500N in a push condition)
Minimum installation dimension	Stroke+183mm
Stroke	200~700mm
Operational temperature range	+5°C~+45°C
Options	AC cable exit from top end, top side; Ethernet socket

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		No Load 32V DC	With Load 24V DC	No Load 32V DC	With Load 24V DC
Motor Speed (3800RPM)								
U	4500	250	500	4500	2.5	4.9	11.4	6.6
Z	3000	250	500	3000	2.5	5.5	17.1	9.5
W	2000	250	500	2000	2.5	4.8	22.9	13.1
S	1500	250	500	1500	2.5	4.7	30.0	18.9
V	500	250	500	500	2.5	4.0	45.0	28.0

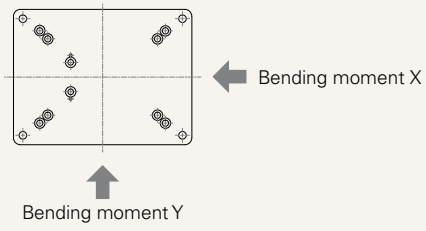
Note

1 Parameters above are from tested average, please refer to approval drawing for final value.

2 With a 12V motor, the current is approximately twice the current measured in 24V; speed will be similar for both voltages.

3 Direction of bending moment:

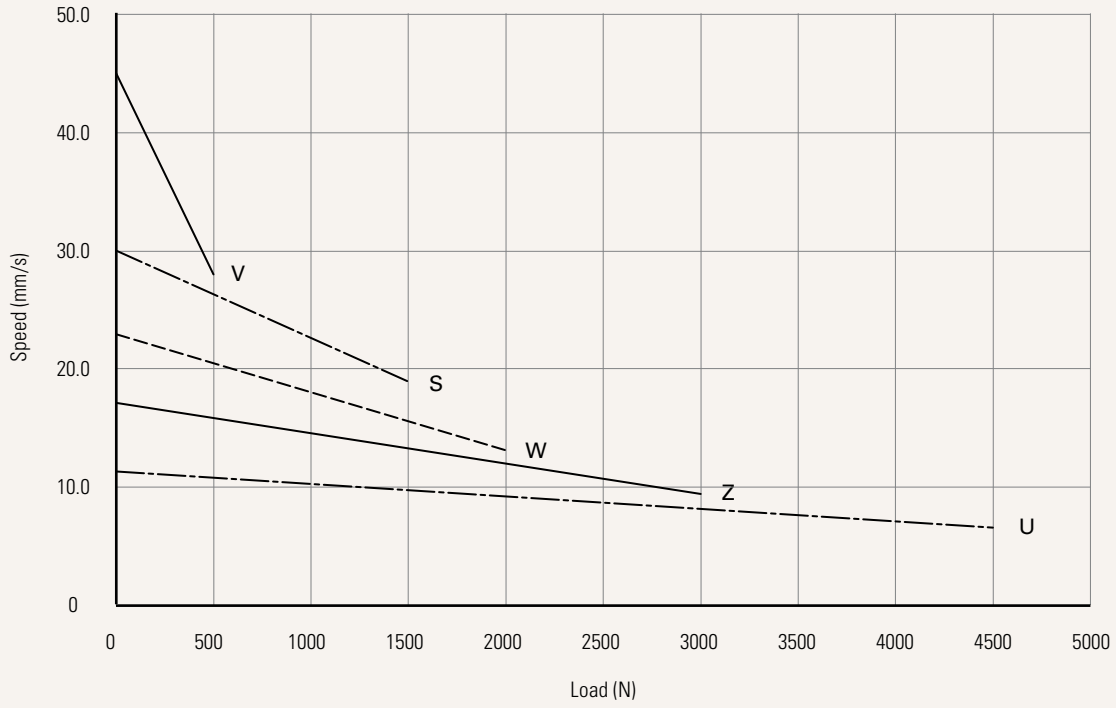
Direction	Value
X	As table
Y	= X*0.8



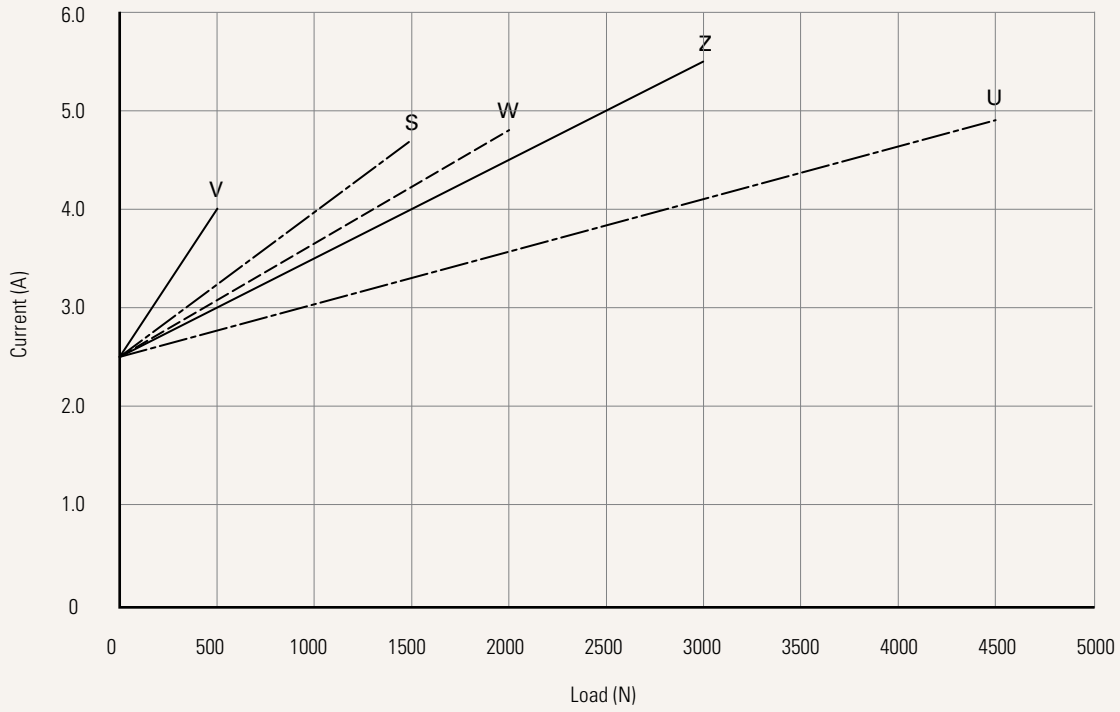
Performance Data (24V DC Motor)

Motor Speed (3800RPM)

Speed vs. Load



Current vs. Load



Note

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

TL18AC Ordering Key

TL18AC

Version: 20180120-B

Voltage	U = 100-240VAC, SMPS		
Load and Speed	See page 2		
Stroke (mm)	200-700		
Retracted Length (mm)	See page 5		
Special Functions for Spindle Sub-Assembly	0 = Without (standard)	1 = Safety nut	
Color	1 = Black	2 = Matte silver	
Tubes & Sockets Position	See page 6		
Top Plate	1 = Small plate	2 = Big plate	
Bottom Plate	1 = Small plate	2 = Big plate	
AC Input Plug & Output Socket	5 = EU	6 = US	8 = UK
AC Cable Length (mm)	5 = Straight, 1500		
AC Output Socket	0 = Without	1 = With	
Direct Cut	K = 1 motor direct cut system	L = 1+1 motor direct cut system	
Internet Socket	0 = Without	1 = With	

Note

1 The TL18AC is designed especially for push applications, not suitable for pull applications.

TL18AC Ordering Key Appendix

Retracted Length (mm)

1. Calculate A+B = Y
2. Retracted length needs to ≥ Stroke + Y

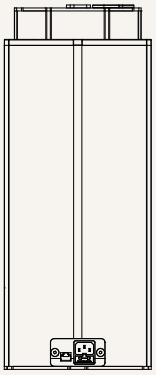
A. Top Plate	Bottom Plate	
	1	2
1	+8	+12
2	+12	+16

B. AC Output Socket	AC Output & Socket Position	
	Top End	Top Side
	B, C	D, E
Without 0	+175	+209
With 1	+175	+229

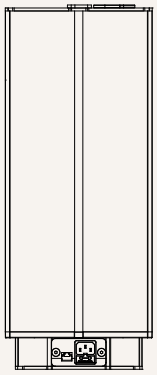
TL18AC Ordering Key Appendix

Tube & Socket Position

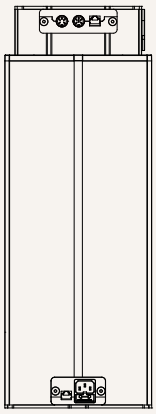
B = Tube: Thinner on top
Sockets: Top end



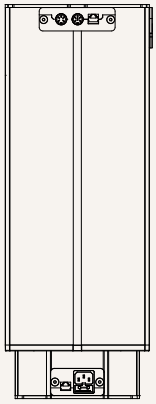
C = Tube: Thicker on top
Sockets: Top end



D = Tube: Thinner on top
Sockets: Top side

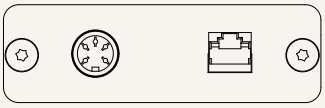


E = Tube: Thicker on top
Sockets: Top side

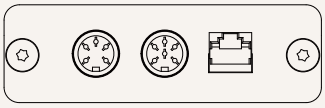


Direct Cut

K = 1Motor direct cut. Control socket - Without motor socket. Top end or top side - AC output & control socket

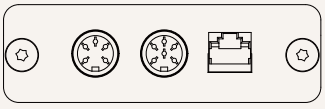


L = 1+1 motor direct cut. Control socket - With motor socket. Top end or top side - AC output & control socket

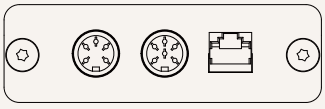


Ethernet Socket

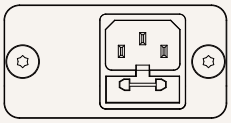
0 = Without Ethernet socket
Top end or top side- AC output & control socket



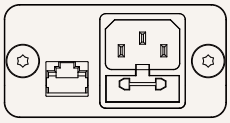
1 = With Ethernet socket
Top end or top side- AC output & control socket



Bottom side - AC input



Bottom side - AC input

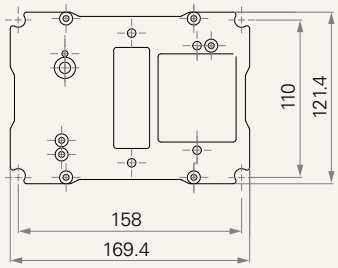


TL18AC Ordering Key Appendix

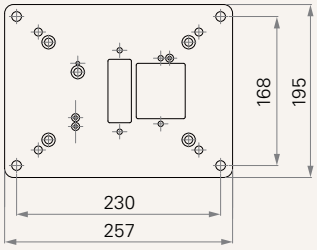
Top Plate

Tubes & socket position B

1 = Small plate

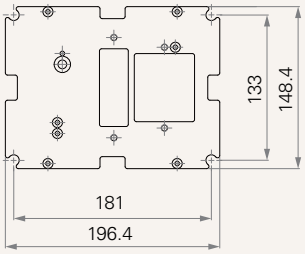


2 = Big plate

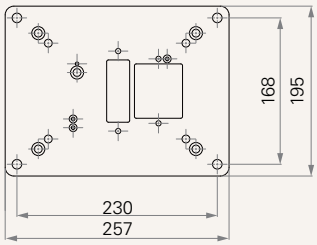


Tubes & socket position C

1 = Small plate

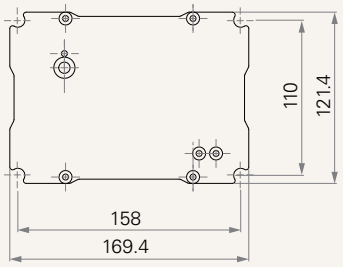


2 = Big plate

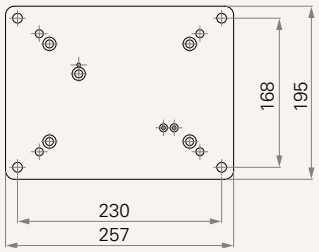


Tubes & socket position D

1 = Small plate

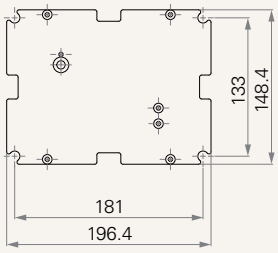


2 = Big plate

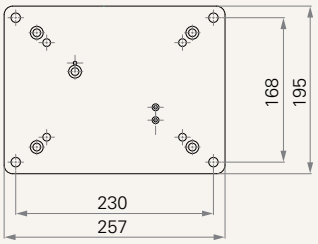


Tubes & socket position E

1 = Small plate



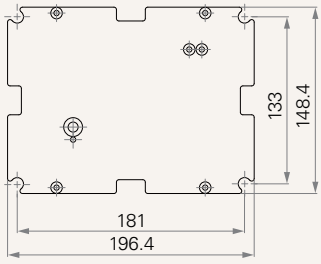
2 = Big plate



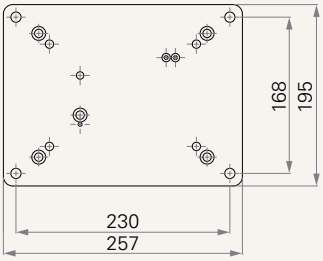
Bottom Plate

Tubes & socket position B

1 = Small plate

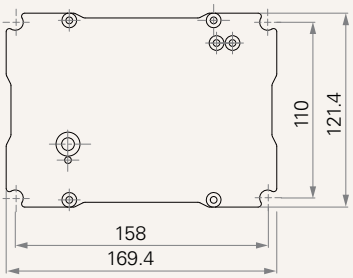


2 = Big plate

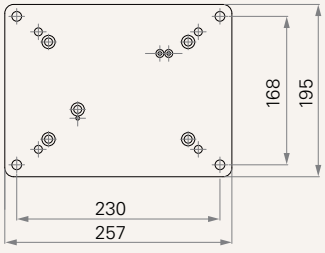


Tubes & socket position C

1 = Small plate

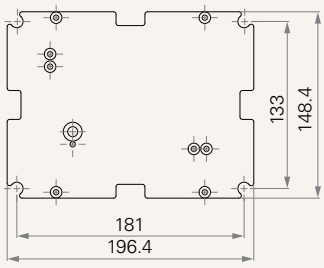


2 = Big plate

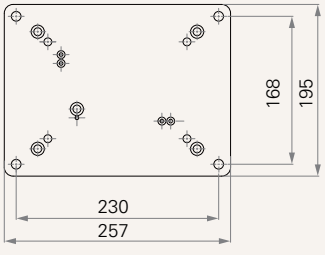


Tubes & socket position D

1 = Small plate

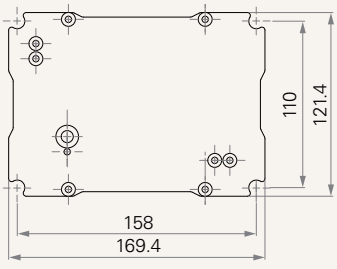


2 = Big plate

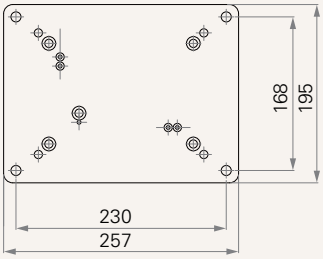


Tubes & socket position E

1 = Small plate



2 = Big plate



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