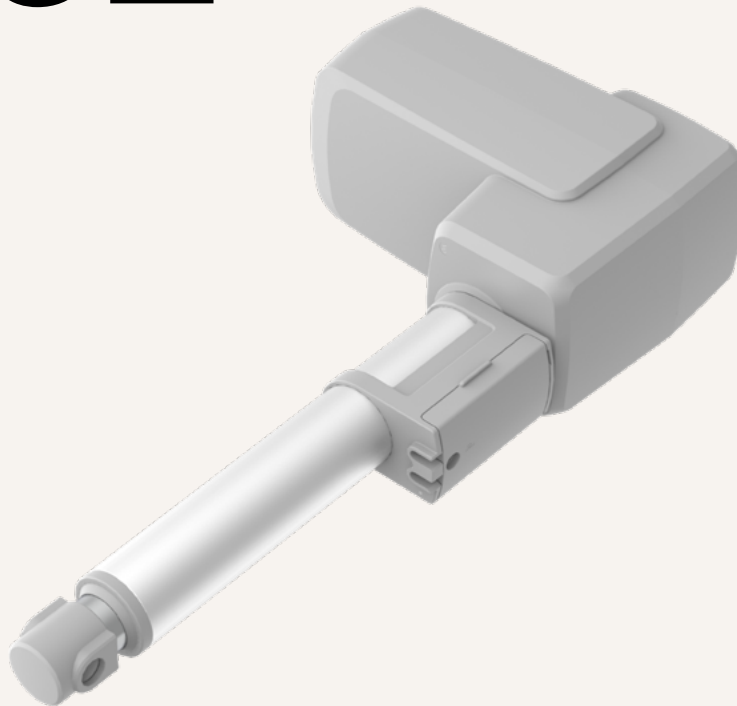


TA52

series



Product Segments

• Care Motion

The TA52 is one of TiMOTION's new-generation medical actuators, built for strength and reliability. It delivers a maximum load capacity of 10,000N and carries an IP rating is up to IP66W, ensuring durability in demanding environments. Equipped with a quick-release function and POT signal output, the TA52 provides safe, precise, and stable operation, making it ideal when immediate adjustment or accurate positioning is required.

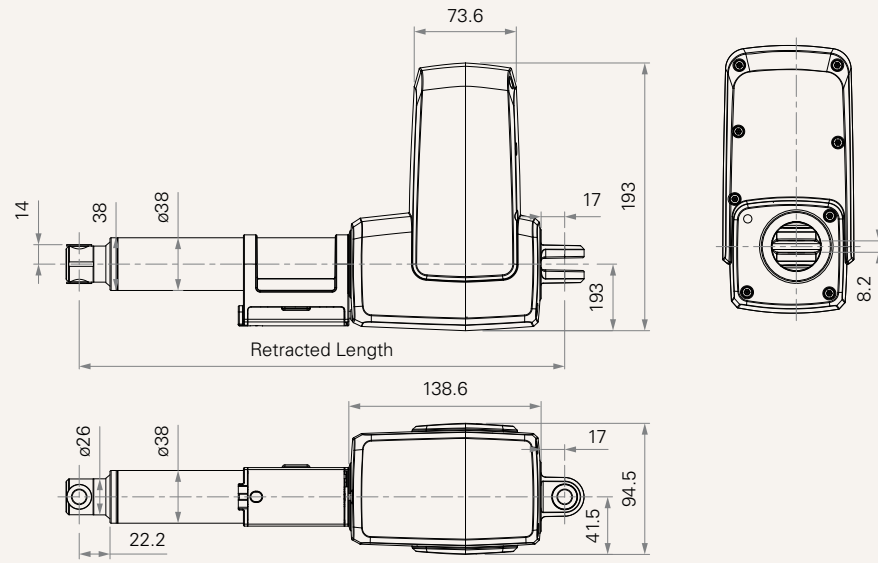
Designed for high-load medical applications such as examination tables and ICU beds, the TA52 balances heavy lifting capacity with enhanced safety, making it a trusted choice for modern healthcare equipment.

General Features

Max. load	10,000N (push); 5,500N (pull)
Max. speed at max. load	8.3mm/s
Max. speed at no load	14.2mm/s
Retracted length	≥ Stroke + 220mm
IP rating	IP66W
Certificate	IEC60601-1, ES60601-1, IEC60601-1-2
Stroke	30~500mm
Output signals	Hall sensors, POT
Options	Safety nut
Voltage	24V DC; 24V DC (PTC)
Color	Grey
Operational temperature range at full performance	+5°C~+45°C

Drawing

Standard Dimensions
(mm)



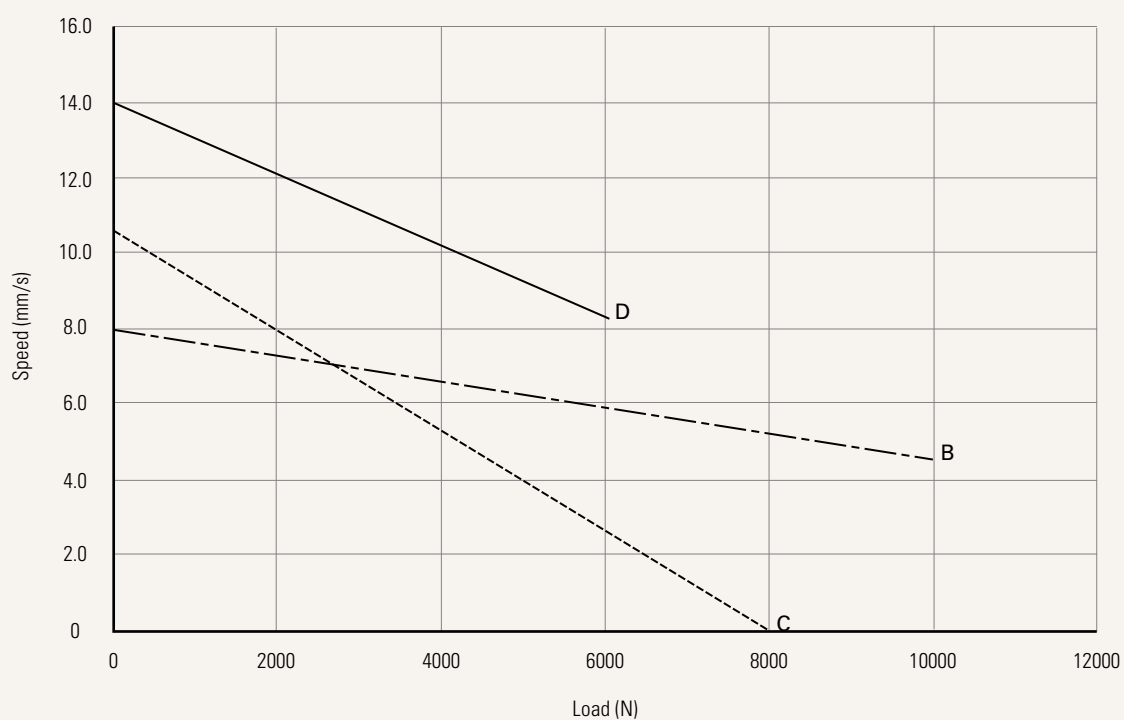
Load and Speed

CODE	Load (N)		Self Locking Force (N)	Typical Current (A)		Typical Speed (mm/s)	
	Push	Pull	Brake	No Load 32V DC	With Load 24V DC	No Load 32V DC	With Load 24V DC
Motor Speed (4300RPM, Duty Cycle 10%)							
B	10000	4000	10000	1.4	7.3	7.9	4.5
C	8000	4000	8000	2.0	7.3	10.6	6.0
D	6000	5500	6000	2.0	6.6	14.2	8.3

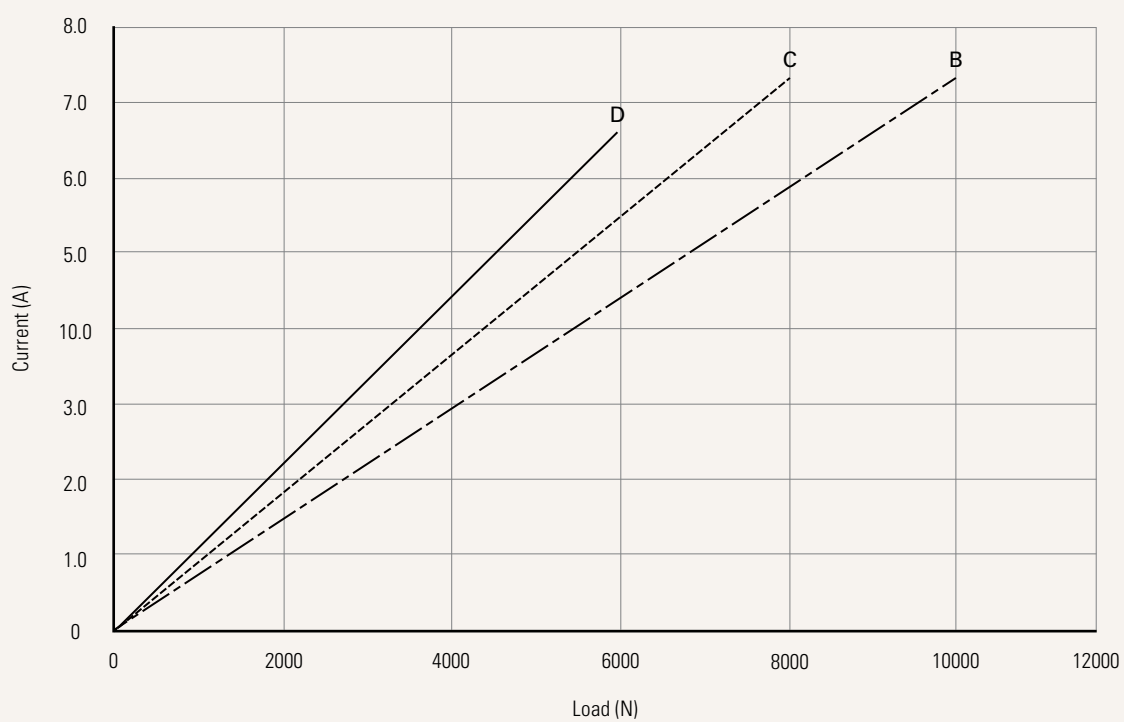
Performance Data (24V DC Motor)

Motor Speed (4300RPM, Duty Cycle 10%)

Speed vs. Load



Current vs. Load



TA52 Ordering Key

TA52

Version: 20240804-E



Voltage	2 = 24V		5 = 24V, thermal protector	
Load and Speed	See page 2			
Stroke (mm)	See page 5			
Retracted Length (mm)	See page 5			
Rear Attachment (mm)	7 = Aluminum casting, clevis U, slot 8.2, depth 17.0, hole 12.2 C = Aluminum casting, clevis U, slot 8.2, depth 17.0, hole 10.2, with plastic T-bushing			
Front Attachment (mm)	1 = Iron CNC, U clevis, slot 8.2, depth 17.0, hole 10.2, T-bushing 2 = Iron CNC, U clevis, slot 8.2, depth 17.0, hole 12.2 3 = Iron CNC, U clevis, slot 10.2, depth 17.0, hole 10.2, T-bushing		4 = Iron CNC, U clevis, slot 10.2, depth 17.0, hole 12.2 J = Aluminum casting, no slot, hole 10.2, T-bushing K = Aluminum casting, no slot, hole 12.2	
Direction of Rear Attachment (Counterclockwise)	1 = 0°		3 = 90°	
Color	2 = Pantone 428C			
IP Rating	1 = Without	2 = IP54	3 = IP66	5 = IP66W
Quick Release	1 = Standard			
Special Function for Spindle Sub-assembly	0 = Without (Standard) 1 = Safety nut		2 = Standard push only 3 = Standard push only + Safety nut	
Function for Limit Switches	1 = Two switches at full retracted / extended positions to cut current			
Output Signals	0 = Without	2 = Hall sensor * 2	4 = POT	
Connector See page 6	1 = DIN 6P, 90° plug 2 = Tinned leads		F = DIN 6P, 180° plug Q = Molex 6P, 90° plug, without anti-clip	
Cable Length (mm)	1 = Straight, 500 3 = Straight, 1000 5 = Straight, 1500		6 = Straight, 2000 7 = Curly, 200 8 = Curly, 400	
Brake	9 = Spindle brake (4.5N) + Motor brake			

Retracted Length (mm)

1. Calculate $A+B+C+D = Y$
2. Retracted length needs to $\geq \text{Stroke}+Y$

A.

Front Attach.

1, 2, 3, 4	+220
B, C	+210
J, K	+207

B.

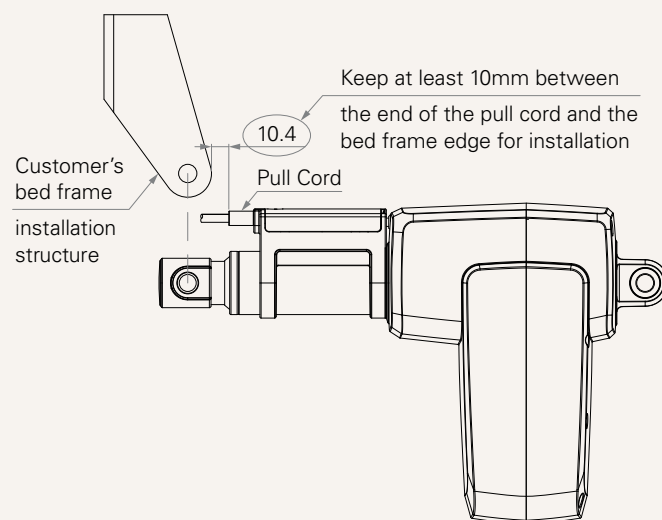
Stroke (mm)	Load (N) General			
	<6000	=6000	=8000	=10000
25~150	-	-	-	+6
151~200	-	-	+5	+11
201~250	-	+5	+10	+16
251~300	-	+10	+15	+21
301~350	+5	+15	+20	+26
351~400	+10	+20	+25	+31
401~450	+15	+25	+30	+36
451~500	+20	+30	+35	+41

C.

Quick Release	Front Attach.	Stroke (mm)	Retracted Length (mm)
1	1, 2, 3, 4	30~74	275
	B, C	30~84	275
	J, K	30~87	275

Note

- 1 If the stroke is within the range of this table, please refer to this table for installation dimensions; if it exceeds this range, please calculate the installation dimensions according to Tables A & B.

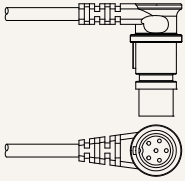


D.

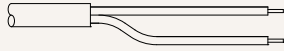
Spindle Functions	Load (N) General			
	< 6000	= 6000	= 8000	= 10000
0	-	-	-	-
1	-	-	-	-
2, 3	+7	+7	+7	+7

Connector

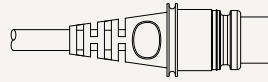
1 = DIN 6P, 90° plug



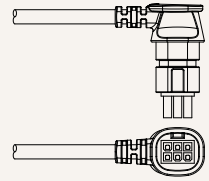
2 = Tinned leads



F = DIN 6P, 180° plug



Q = Molex 6P, 90° plug, without anti-clip



Terms of Use

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