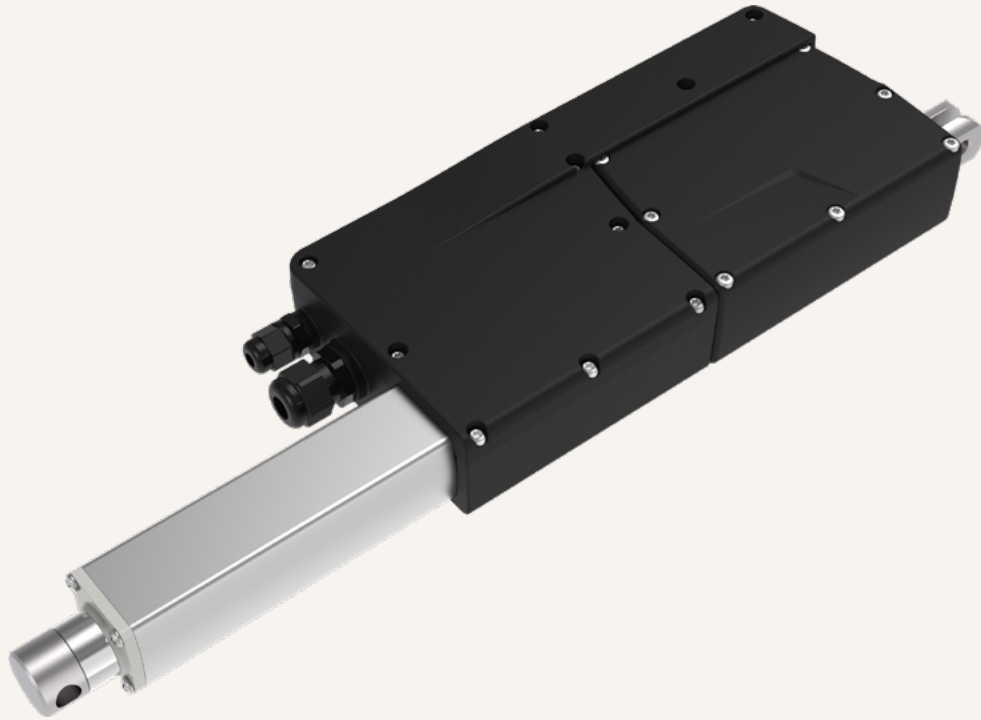


TA29AC

series



Product Segments

- **Industrial Motion**

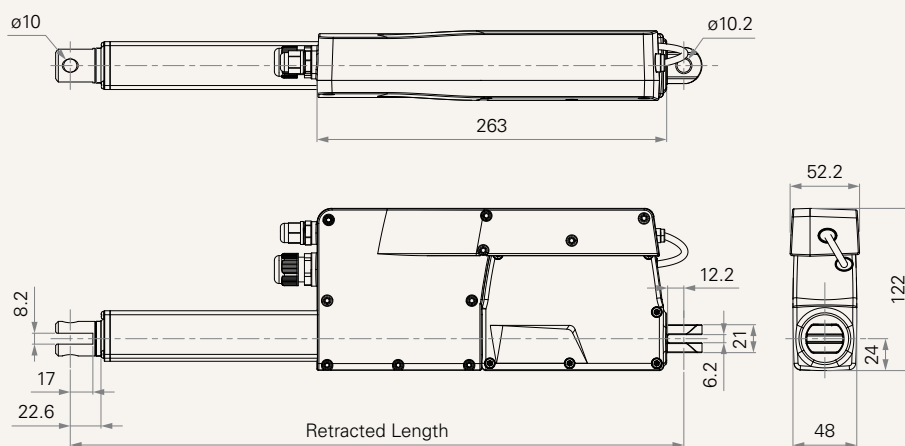
TiMOTION's TA29AC is a linear actuator with an AC/DC power supply integrated into the housing that affords a maximum 4000N force (push/pull). It is controlled by 1 neutral wire and 2 line wires (extension and retraction), making it a powerfully practical means to automate the ventilation system in livestock farming.

General Features

Max. load	4,000N (push/pull)
Max. speed at max. load	4.5mm/s
Max. speed at no load	9.5mm/s
Retracted length	> 302mm (depending on chosen options)
IP rating	IP66W
Stroke	25~1000mm
Output Signals	POT
Voltage	100~240V AC
Color	Black, grey
Operational temperature range	+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			No Load 220V AC	With Load 220V AC	No Load 220V AC	With Load 220V AC
Motor Speed (5200RPM, Duty Cycle 10%)								
M	2500	2500	1000	2500	0.6	1.2	9.5	6.5
N	4000	4000	4000		0.4	1.2	5.5	4.5

Note

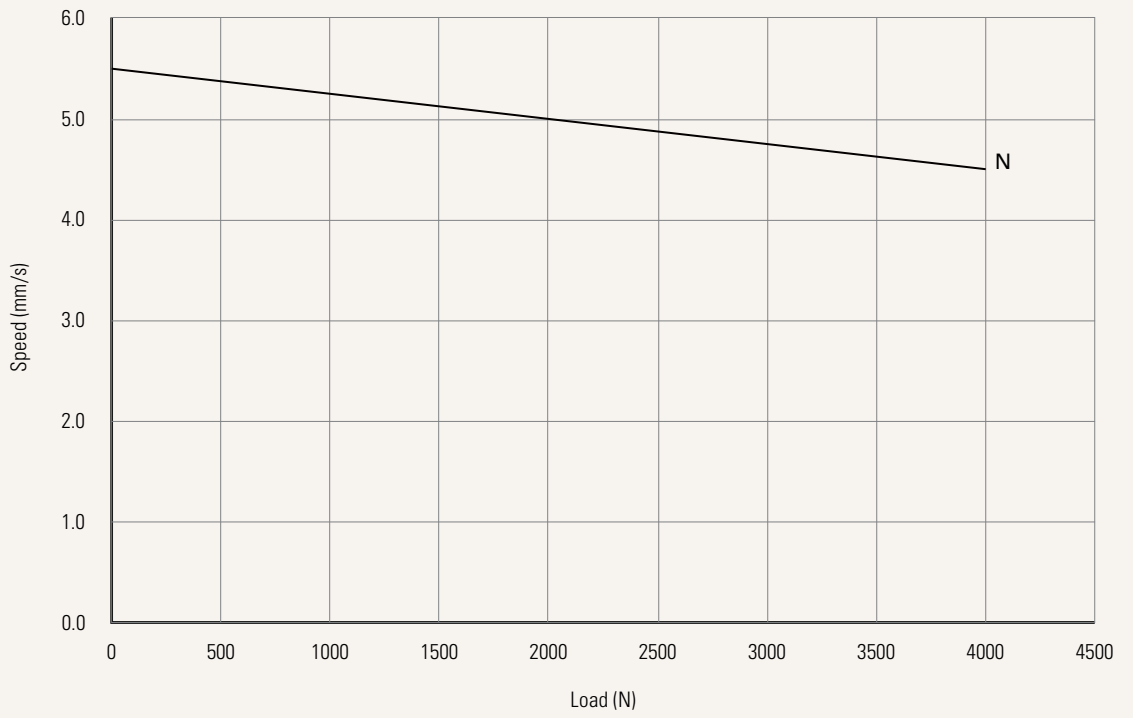
- 1 Please refer to the approved drawing for the final authentic value.
- 2 The current & speed in table are tested when the actuator is extending under push load.
- 3 Standard stroke: Min. 25mm, Max. please refer to below table.

CODE	Load (N)	Max Stroke (mm)
M	≤ 2500	1000
N	≤ 4000	600

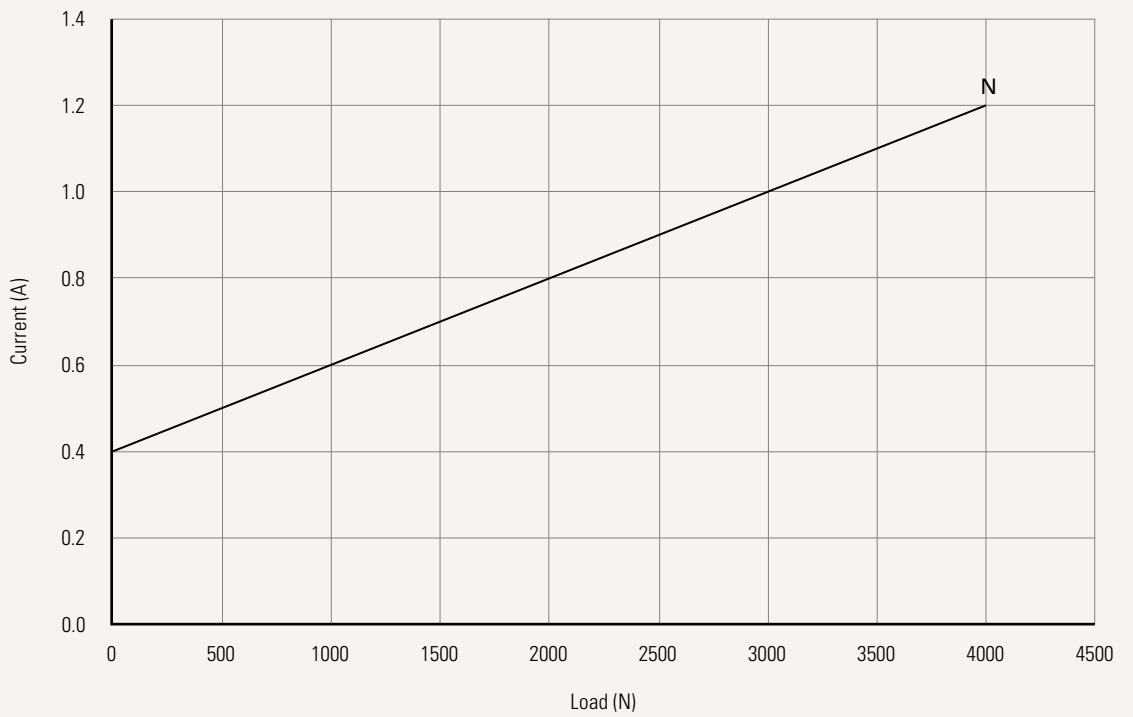
Performance Data (220V AC Motor)

Motor Speed (5200RPM)

Speed vs. Load



Current vs. Load



Voltage	U = 100-240V AC			
Load and Speed	See page 2			
Stroke (mm)	See page 2			
Retracted Length (mm)	See page 5			
Rear Attachment (mm)	3 = Aluminum, U clevis, slot 6.2, depth 12.2, hole 10.2 4 = Aluminum, U clevis, slot 6.2, depth 12.2, hole 12.2 See page 6			
Front Attachment (mm)	3 = Aluminum, slotless, hole 10.2		4 = Aluminum, slotless, hole 12.2 See page 6	
Direction of Rear Attachment (Counterclockwise)	1 = 90°		2 = 0° See page 6	
Color	1 = Black		2 = Pantone 428C	
IP Rating	1 = Without		2 = IP54	
			3 = IP66	
			5 = IP66W	
Special Functions for Spindle Sub-Assembly	0 = Without (Standard)		2 = Standard push only	
Functions for Limit Switches	1 = Two switches at full retracted / extended positions to cut current See page 7			
Output Signals	0 = Without		1 = POT See page 7	
Connector	2 = Tinned leads See page 7			
Cable Length (mm)	0 = Straight, 100		2 = Straight, 750	
	1 = Straight, 500		3 = Straight, 1000	
			4 = Straight, 1250	
			5 = Straight, 1500	
Brake	M = Motor brake			

Retracted Length (mm)

1. Calculate $A+B+C+D = Y$
2. Retracted length needs to $\geq \text{Stroke}+Y$
3. Retracted length needs to $> 302\text{mm}$

A.	
Front Attach.	Rear Attach.
3, 4	+112

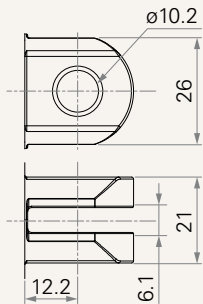
B.	
Stroke (mm)	Load (N)
25~150	+10
151~200	+18
201~250	+18
251~300	+23
301~350	+23
351~400	+28
401~450	+33
451~500	+38
501~550	+43
551~600	+48
601~650	+53
651~700	+58
701~750	+63
751~800	+68
801~850	+73
851~900	+78
901~950	+83
951~1000	+88

C. Special Bunctions for Spindle Sub-Assembly	
0	-
2	+6

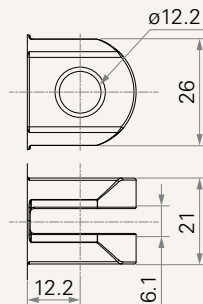
D. Output Signal	
0	-
1	+20

Rear Attachment (mm)

3 = Aluminum, U clevis, slot 6.2, depth 12.2, hole 10.2

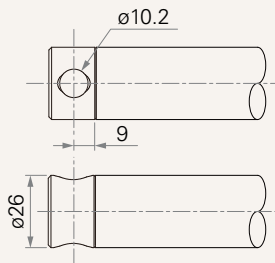


4 = Aluminum, U clevis, slot 6.2, depth 12.2, hole 12.2

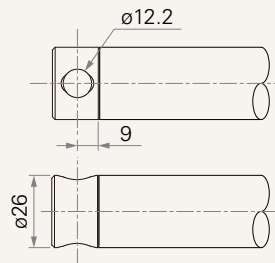


Front Attachment (mm)

3 = Aluminum, slotless, hole 10.2

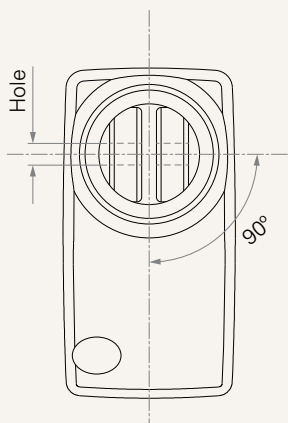


4 = Aluminum, slotless, hole 12.2

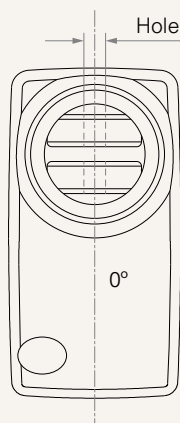


Direction of Rear Attachment (Counterclockwise)

1 = 90°



2 = 0°



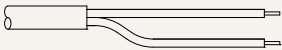
Wire Definition

Without T-Smart

Port Number	Functions for Limit Switches	Wire Color	Wire Gauge (AWG)	Position Feedback	
				0. Without	1. POT
P1 (Power)	Limit switches cut off the acutator	● Black	18	Live (EXT+)	Live (EXT+)
		○ White	18	Live (RET+)	Live (RET+)
		● Green	18	Neutral	Neutral
P2 (POT)	Limit switches cut off the acutator	○ White	26	-	V-in
		● Grey	26	-	V-out (signal)
		● Brown	26	-	GND

Connector

2 = Tinned leads



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.