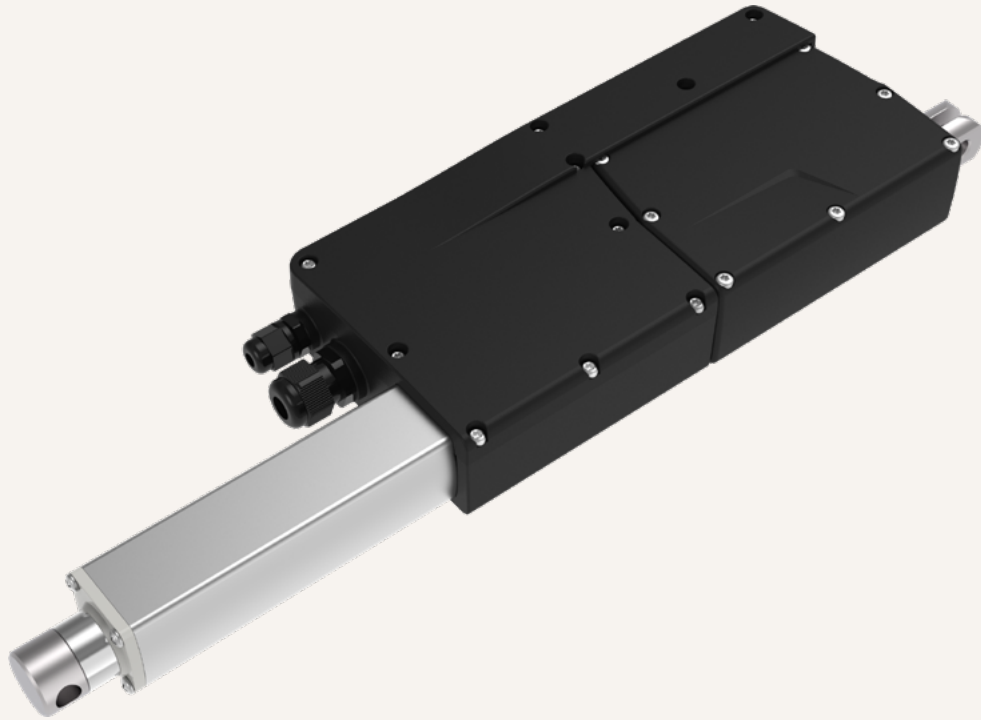


TA29AC

series



Product Segments

- **Industrial Motion**

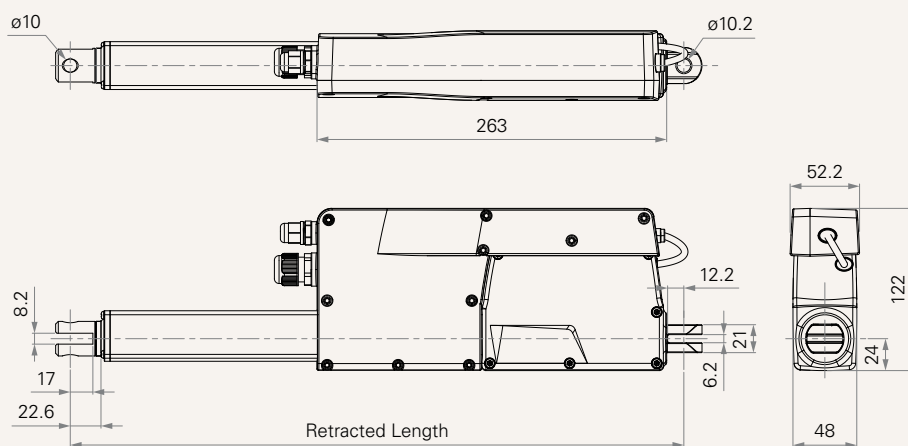
TiMOTION's TA29AC is a linear actuator with an AC/DC power supply integrated into the housing that affords a maximum 4000N force (push/pull). It is controlled by 1 neutral wire and 2 line wires (extension and retraction), making it a powerfully practical means to automate the ventilation system in livestock 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	No Load	With Load	With Load	No Load	No Load	With Load	With Load
					100V AC	220V AC	100V AC	220V AC	100V AC	220V AC	100V AC	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	-	0.9	0.4	2.6	1.2	6	5.5	4.5	4.5

Note

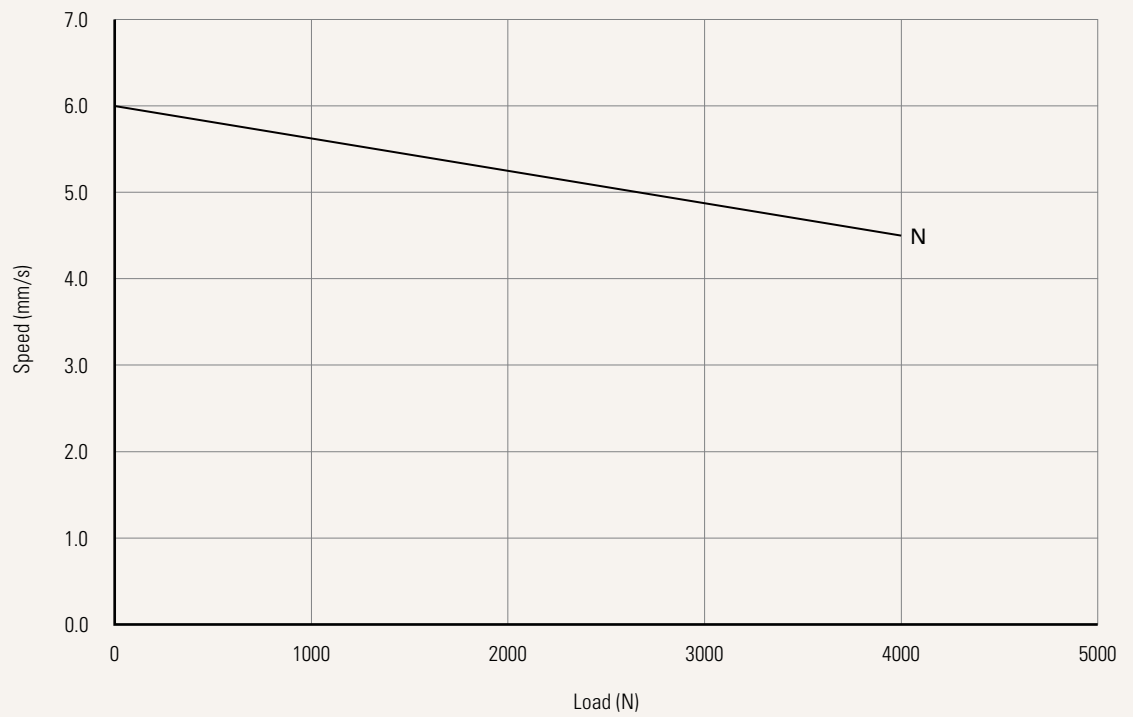
- 1 Please refer to the approved drawing for the final authentic value.
- 2 The current & speed in table are tested when the actuator is extending under push load.
- 3 Standard stroke: Min. 25mm, Max. please refer to below table.

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

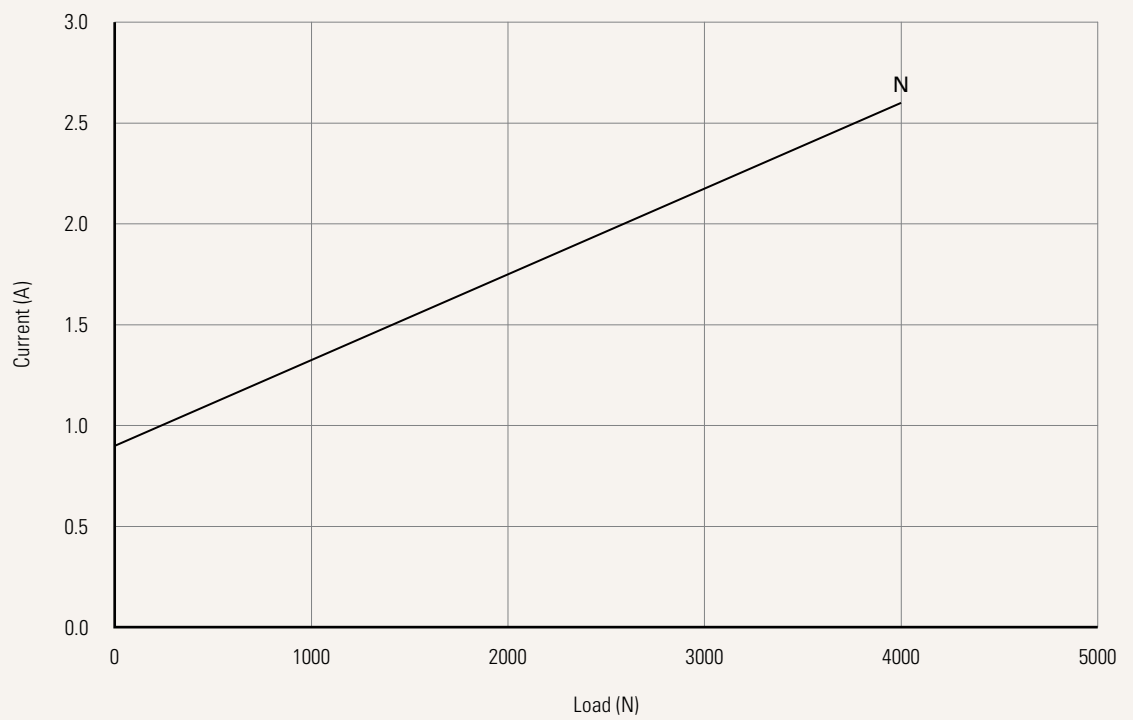
Performance Data (100V AC Motor)

Motor Speed (5200RPM)

Speed vs. Load



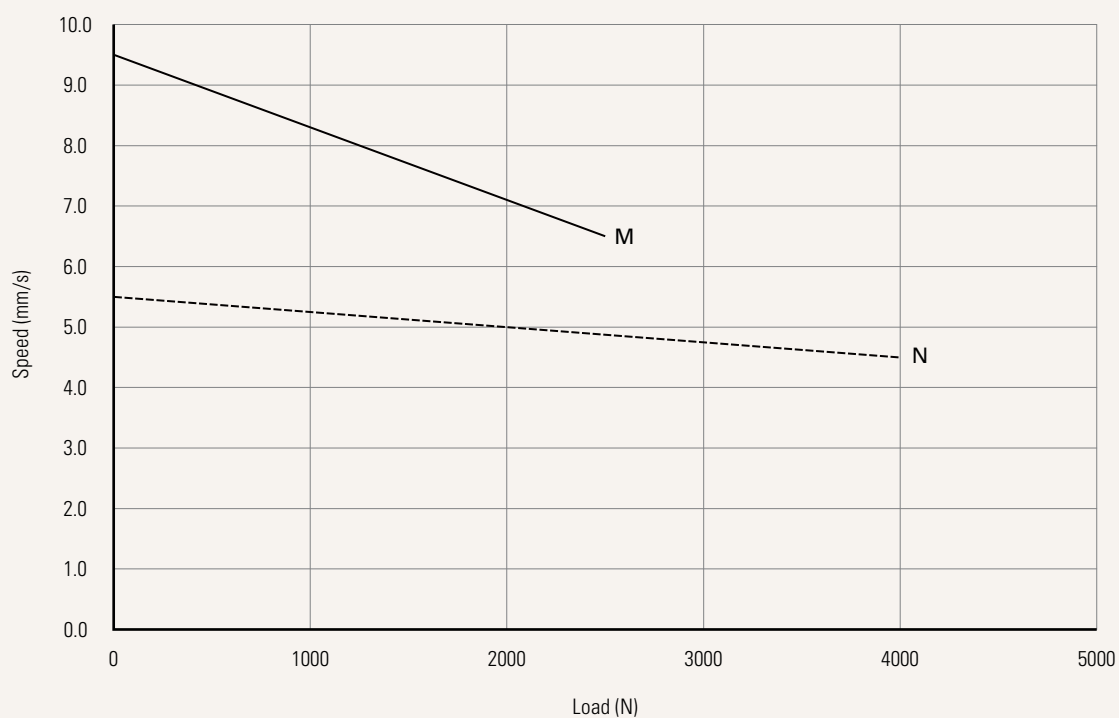
Current vs. Load



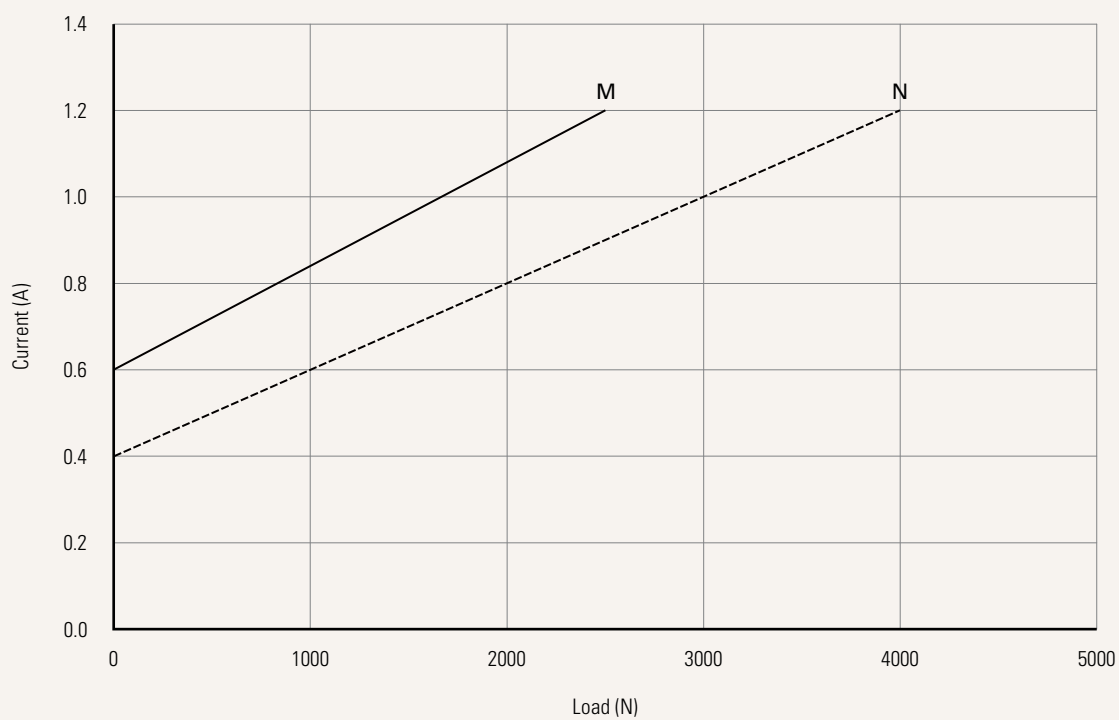
Performance Data (220V AC Motor)

Motor Speed (5200RPM)

Speed vs. Load



Current vs. Load



TA29AC Ordering Key

TA29AC

Version: 20260309-F

Voltage	U = 100-240V AC			
Load and Speed	See page 2			
Stroke (mm)	See page 2			
Retracted Length (mm)	See page 6			
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 7			
Front Attachment (mm)	3 = Aluminum, slotless, hole 10.2		4 = Aluminum, slotless, hole 12.2 See page 7	
Direction of Rear Attachment (Counterclockwise)	1 = 90°		2 = 0° See page 7	
Color	1 = Black		2 = Pantone 428C	
IP Rating	1 = Without		2 = IP54 3 = IP66	
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 8			
Output Signals	0 = Without		1 = POT See page 8	
Connector	2 = Tinned leads See page 8			
Cable Length (mm)	0 = Straight, 100 1 = Straight, 500	2 = Straight, 750 3 = Straight, 1000	4 = Straight, 1250 5 = Straight, 1500	6 = Straight, 2000
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
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

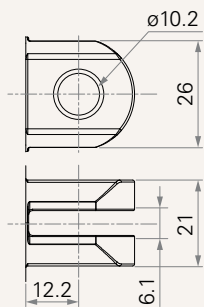
0	-
2	+6

D. Output Signal

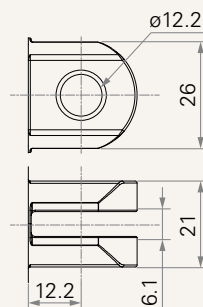
0	-
1	+20

Rear Attachment (mm)

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

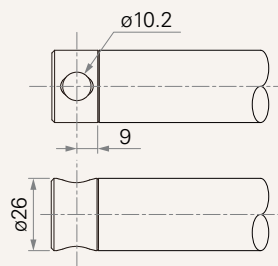


4 = Aluminum, U clevis, slot 6.2, depth 12.2, hole 12.2

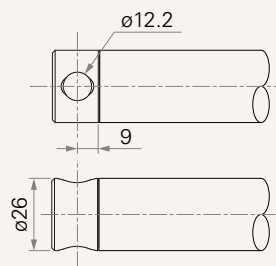


Front Attachment (mm)

3 = Aluminum, slotless, hole 10.2

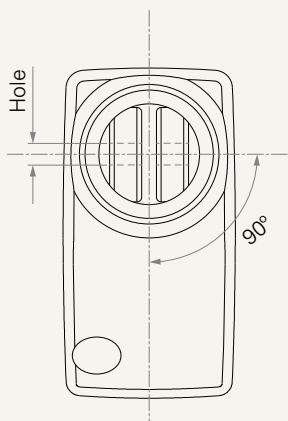


4 = Aluminum, slotless, hole 12.2

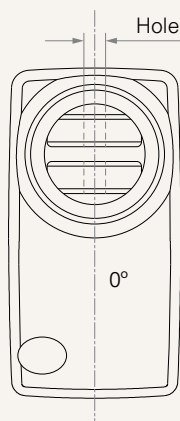


Direction of Rear Attachment (Counterclockwise)

1 = 90°



2 = 0°



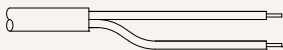
Wire Definition

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.