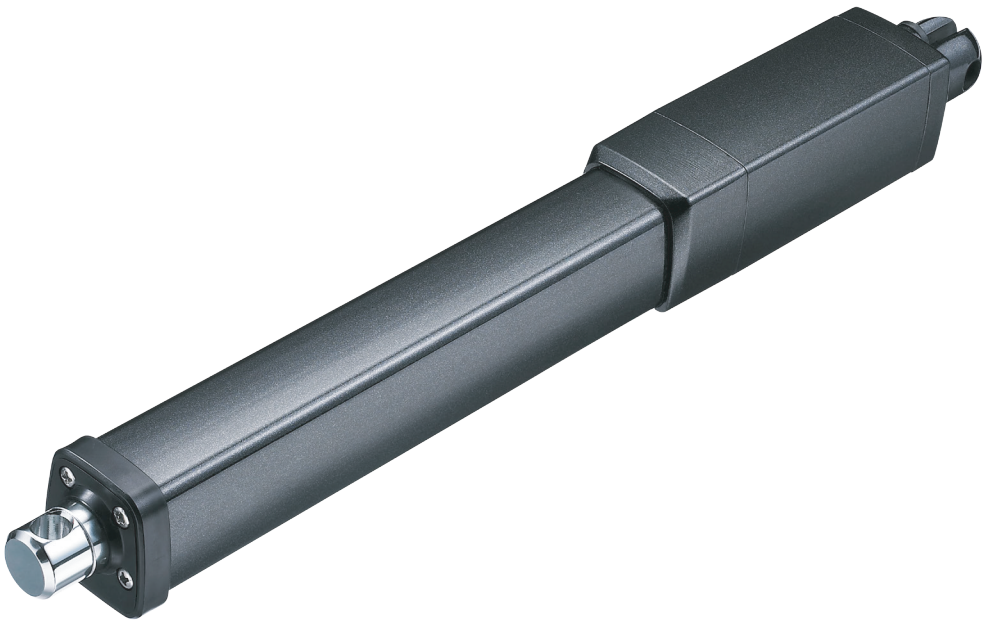
JP4

series



Product Segments

- **Industrial Motion**

TecHome's JP4 series inline linear actuator is most similar to the JP3, but was designed for industrial applications that require higher load and speed. Its IP69K protection ensures it will withstand high temperature, high pressure water jets, and the ingress of dust and other solid contaminants. For synchronization and position feedback, the JP4 can be equipped with Hall sensors.

General Features

Voltage of motor	12V DC or 24V DC
Maximum load	4,500N in push
Maximum load	3,000N in pull
Maximum speed at full load	24.0mm/s (with 500N in a push or pull condition)
Standard stroke	20~500mm
Minimum installation dimension	Stroke+289mm
IP rating	Up to IP69K
Color	Black or grey
Operational temperature range	-5°C~+70°C

An inline actuator designed for small spaces

Load and Speed

CODE	Load (N)		Self Locking Force (N)	Typical Current (A)		Typical Speed (mm/s)	
	Push	Pull		No Load 24V DC	With Load 24V DC	No Load 24V DC	With Load 24V DC
Motor Speed (3800RPM, Duty Cycle 10%)							
B	4500	3000	4500	0.75	3.5	5.1	3.2
C	3500	3000	3000	0.75	3.2	7.3	4.8
D	2500	2500	2000	0.8	3.2	10.0	6.2
E	1500	1500	1000	0.8	2.2	13.0	10.3
F	1000	1000	700	0.8	2.2	19.0	15.5
G	500	500	500	0.8	2.0	29.0	24.0

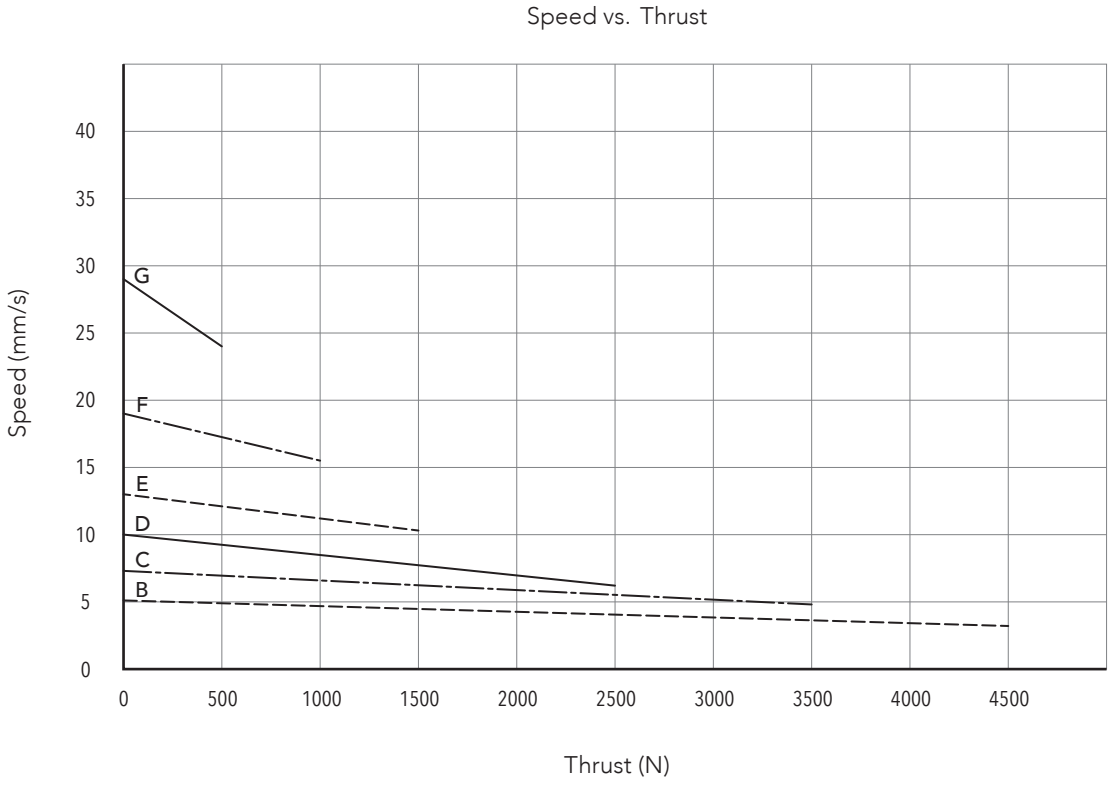
Note

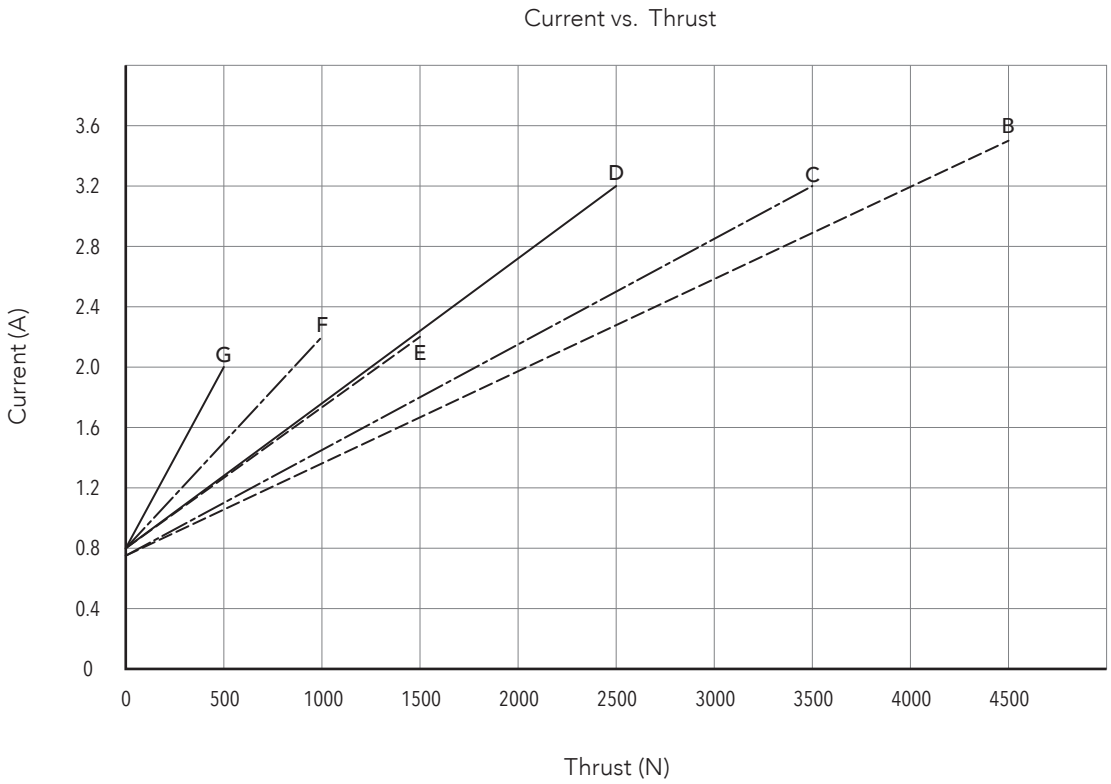
1 With a 12V motor, the current is approximately twice the current measured in 24V; speed will be similar for both voltages.

2 This self-locking force level is reached only when a short circuit is applied on the terminals of the motor.
All the TecHome control boxes have this feature built-in.

Performance Data (24V DC Motor)

Motor Speed (3800RPM, Duty Cycle 10%)



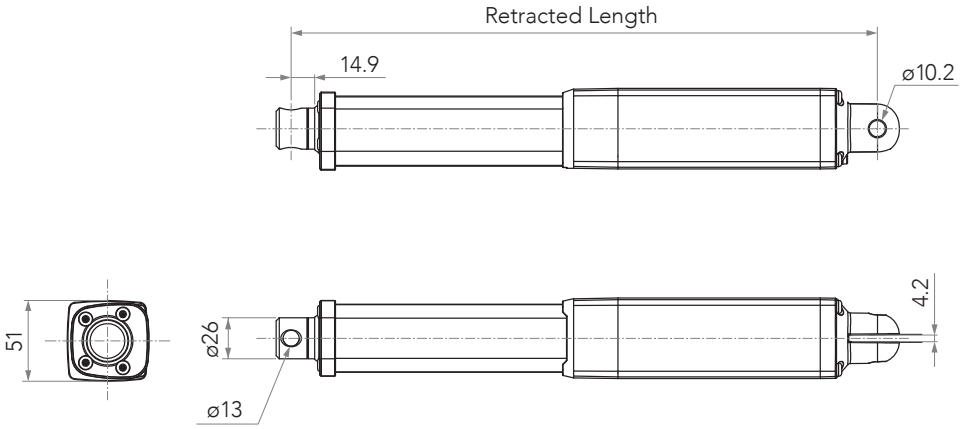


Note

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

Drawing

Standard Dimensions
(mm)



Wire Definitions

CODE*	Pin					
	1	2	3	4	5	6
	(green)	(red)	(white)	(black)	(yellow)	(blue)
1	extend (VDC+)	N/A	N/A	N/A	retract (VDC+)	N/A
2	extend (VDC+)	N/A	middle switch pin B	middle switch pin A	retract (VDC+)	N/A
3	extend (VDC+)	common	upper limit switch	N/A	retract (VDC+)	lower limit switch
4	extend (VDC+)	common	upper limit switch	medium limit switch	retract (VDC+)	lower limit switch

Note

* See ordering key - functions for limit switches

Retracted length (mm)

1. Calculate A+B = Y

2. Retracted length needs to ≥ Stroke+Y

A. Attachment	Rear Attachment Code
Front Attachment Code	1
1	+289

B. Stroke (mm)	
20~150	-
151~200	-
201~250	+10
251~300	+20
301~350	+30
351~400	+40

For stroke over 400mm, +10mm for each incremental 50mm stroke.

JP4 Ordering Key

JP4

Version: 20161101-B

Voltage	1 = 12V	2 = 24V	5 = 24V, PTC	
Load and Speed	See page 2.			
Stroke (mm)				
Retracted Length (mm)	See page 5.			
Rear Attachment	1 = Aluminum casting, U clevis, slot 4.2mm, depth 18.0mm, hole 10.2mm			
Front Attachment	1 = #45 Steel CNC, no slot, hole 13.0mm			
Direction of Rear Attachment (Counterclockwise)	1 = 0°			
Color	1 = Black		2 = Grey (Pantone 428C)	
IP Rating	1 = Without 2 = IP54	3 = IP66 5 = IP66W	6 = IP66D 7 = IP68	8 = IP69K
Special Functions for Spindle Sub-Assembly	0 = Without (standard)			
Functions for Limit Switches	1 = Two switches at full retracted/extended positions to cut current 2 =Two switches at full retracted/extended positions to cut current + 3rd LS to send signal 3 =Two switches at full retracted/extended positions to send signal 4 =Two switches at full retracted/extended positions to send signal + 3rd LS to send signal			
Output Signals	0 = Without	1 = One Hall sensor	2 = Two Hall sensors	
Connector	1 = DIN 6pin, 90° plug		2 = Tinned leads	
Cable Length	0 =Straight, 100mm 1 =Straight, 500mm		3 =Straight, 1000mm B~H = For direct cut system, please contact TecHome	