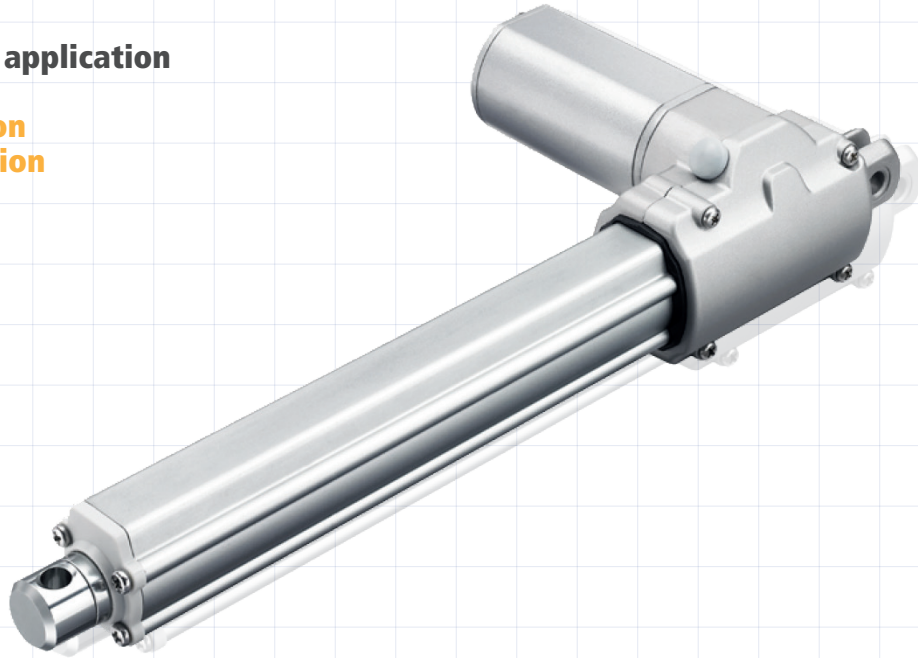


Electric actuator TA4

Typical areas of application

- Comfort motion
- Industrial motion



The TA4 series linear actuator is compact, quiet and powerful. It is designed to fit in an area specifically requiring a right angle motor and can be equipped with a Hall sensor for feedback. Industry certifications for the TA4 linear actuator include EN60601-1 and RoHS. In addition, the TA4 is available with optional IP rating IP54 or IP66.

Key figures

- | | |
|---------------------------------|--|
| • Voltage of motor | 12 V DC or 24 V DC |
| • Max. load | 3500 N in push / 2000 N in pull |
| • Max. speed at full load | 17.0 mm/s (with 800 N in a push or pull condition) |
| • Min. installation dimension | stroke+140 mm |
| • Color | silver |
| • IP rating | up to IP66 |
| • Standards, directives | EN60601-1 and RoHS |
| • Operational temperature range | +5 °C ~ +45 °C |
| • Option | Hall sensor(s) |

Silent and powerful.

Load and speed

CODE	Load		Self locking force 1) [N PUSH]	Typical current 2) with load 24 VDC [A]	Typical speed 2)	
	push [N]	pull (N)			no load (32 VDC) [mm/s]	full load (24 VDC) [mm/s]
Motor speed 4100 min⁻¹						
A	2000	2000	1500	2.8	10.0	4.8
B	1500	1500	800	2.8	14.0	6.0
C	1000	1000	300	3.2	27.0	11.0
D	800	800	200	3.2	40.0	17.0
E	3500	2000	3500	3.2	6.5	3.0
Motor speed 3800 min⁻¹						
G	2500	2000	2500	2.8	9.3	5.2
H	2000	2000	1000	3.0	13.2	6.9
I	1500	1500	500	4.0	26.4	10.8
J	3500	2000	3500	3.2	5.8	2.8
Motor speed 3300 min⁻¹						
M	1500	1500	1500	1.8	7.9	3.8
N	1000	1000	800	1.8	11.2	6.1
O	500	500	300	1.8	23.1	14.5
Motor speed 2200 min⁻¹						
R	1500	1500	1000	1.5	7.8	3.7
S	1000	1000	500	1.5	15.2	6.6
T	800	800	200	1.7	21.5	9.2

Note

- 1) This self-locking force level is reached only when a short circuit is applied on the terminals of the motor. All the control boxes have this feature built-in.
- 2) With a 12 V motor, the current is approximately twice the current measured in 24 V; speed will be similar for both voltages.

Wire definitions

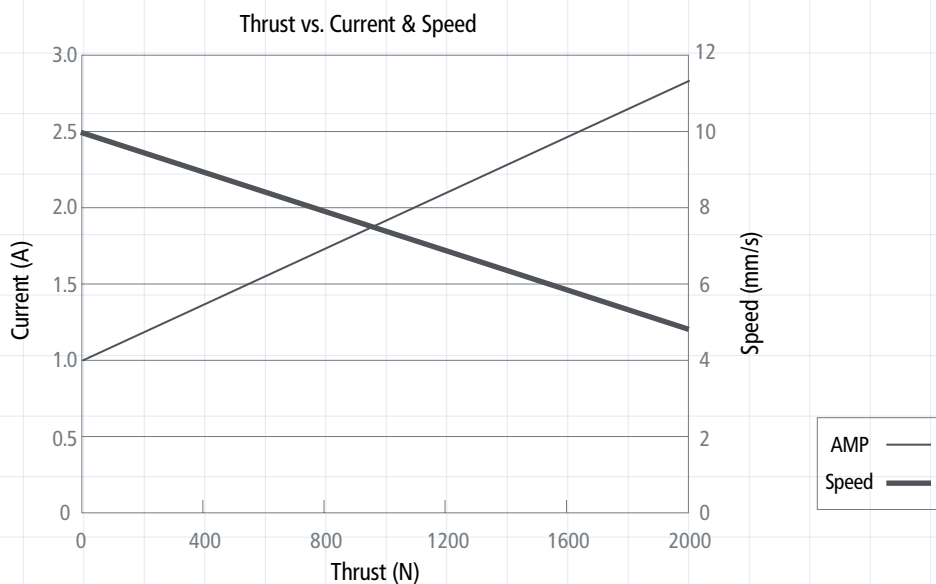
CODE*	Pin 1 ● (green)	Pin 2 ● (red)	Pin 3 ○ (white)	Pin 4 ● (black)	Pin 5 ● (yellow)	Pin 6 ● (blue)
1	extend (VDC+)	N/A	N/A	N/A	retract (VDC+)	N/A
2	extend (VDC+)	N/A	middle switch pin B	middle switch pin A	retract (VDC+)	N/A
3	extend (VDC+)	common	upper limit switch	N/A	retract (VDC+)	lower limit switch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

Note

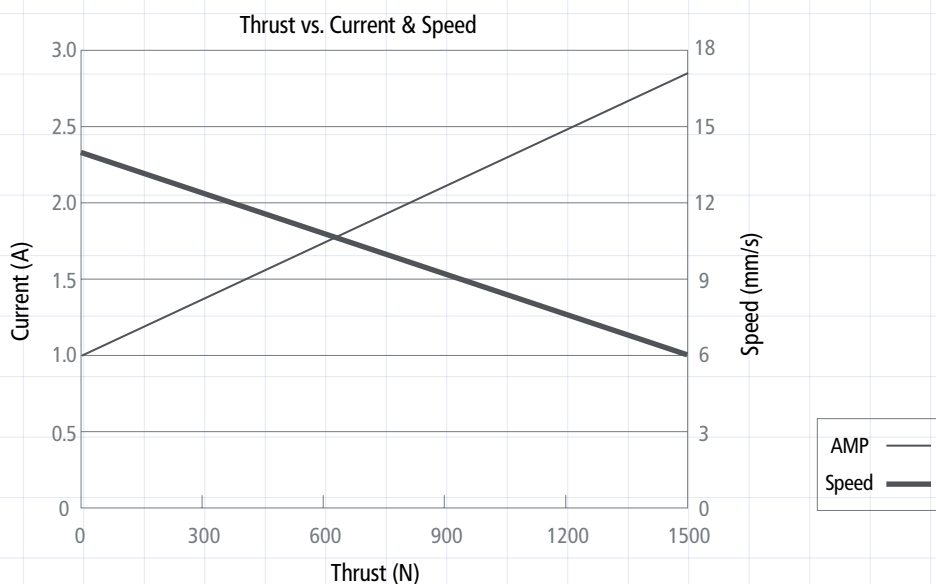
* See ordering key – functions for limit switches.

Performance data (24 VDC motor)

Code A



Code B

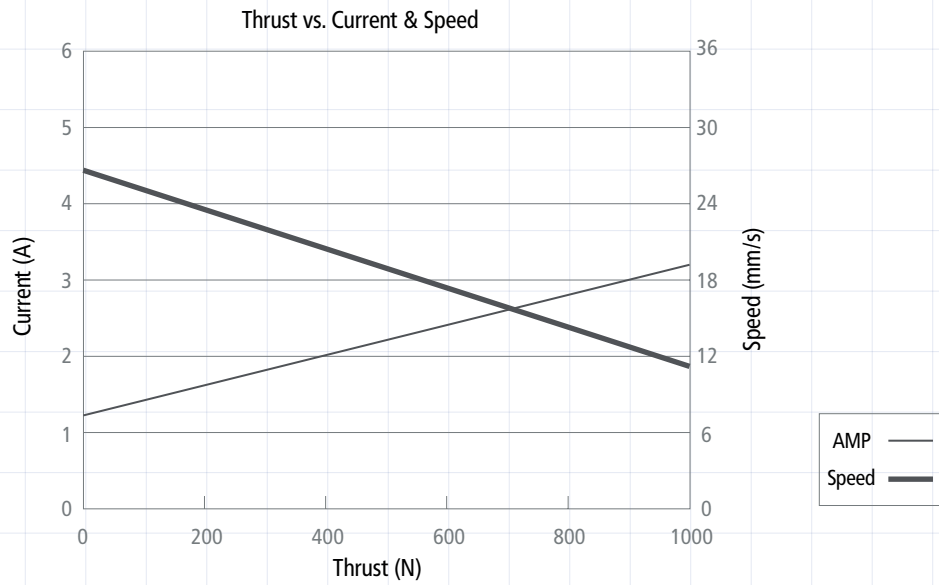


Note

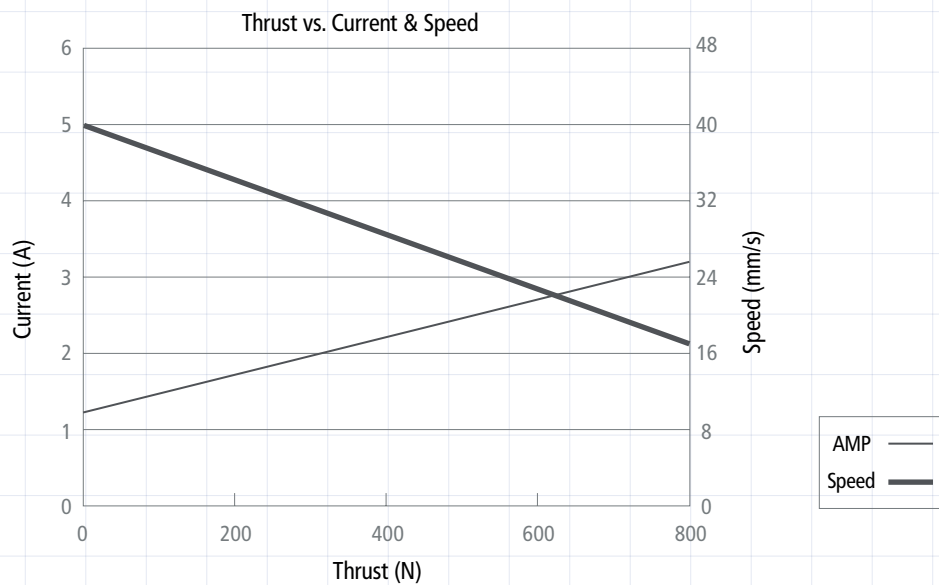
- The performance data in the curve charts shows theoretical value.

Performance data (24 VDC motor)

Code C



Code D

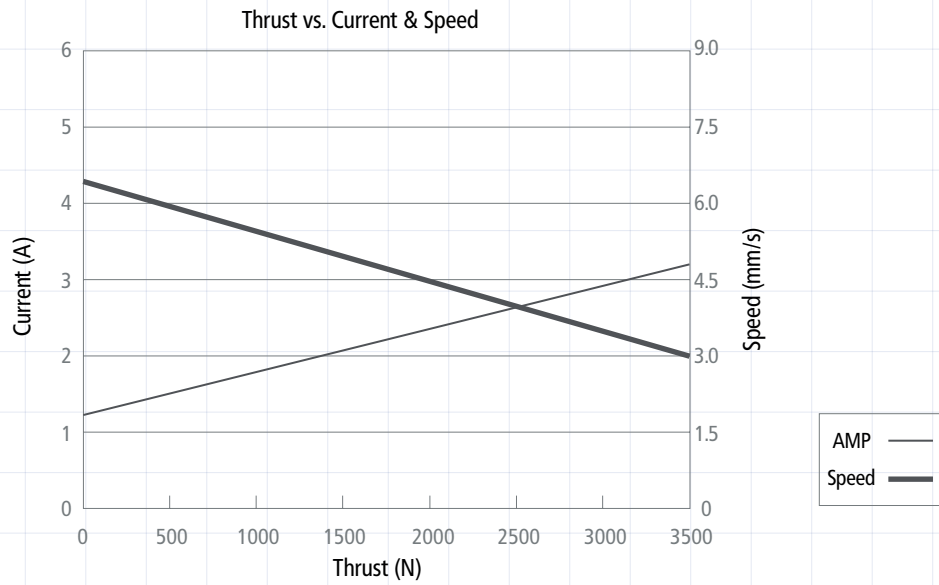


Note

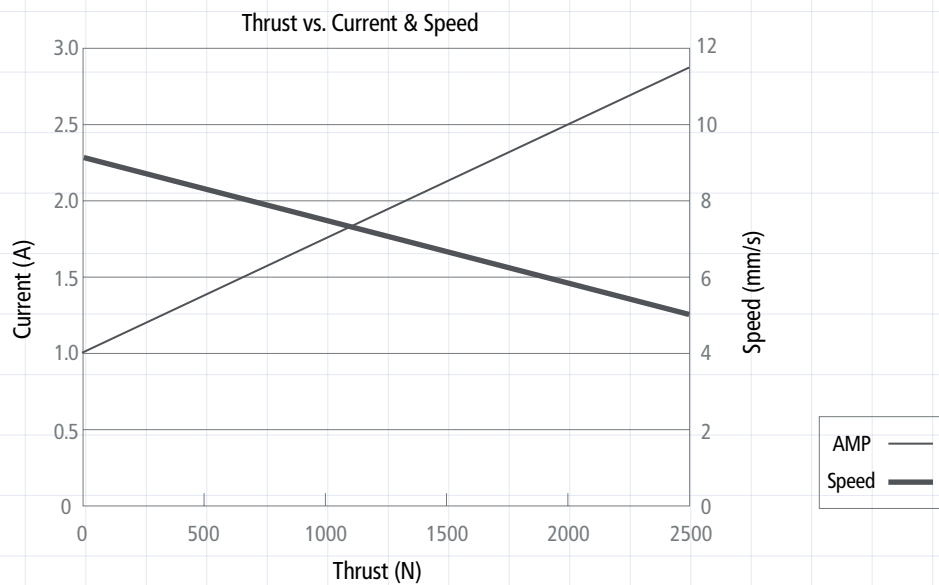
- The performance data in the curve charts shows theoretical value.

Performance data (24 VDC motor)

Code E



Code G

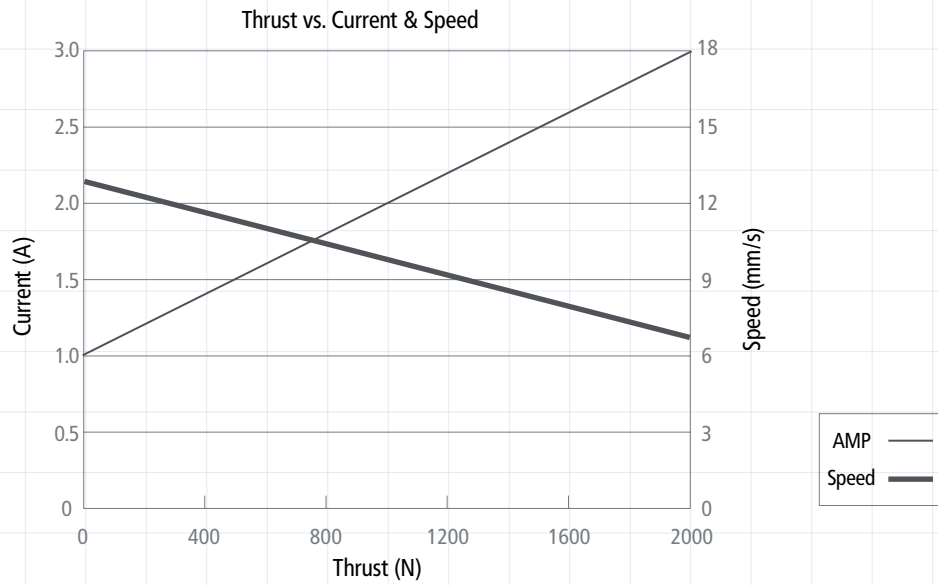


Note

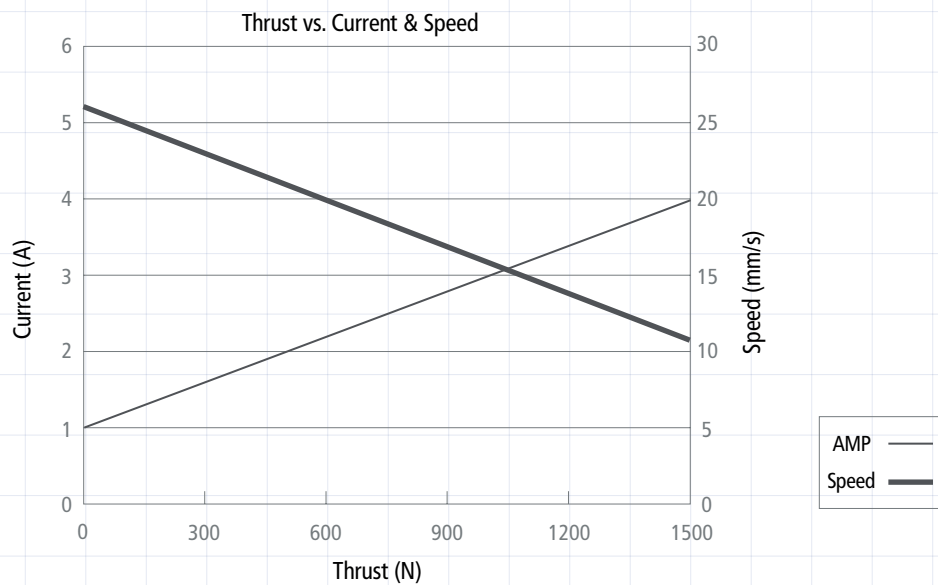
- The performance data in the curve charts shows theoretical value.

Performance data (24 VDC motor)

Code H



Code I

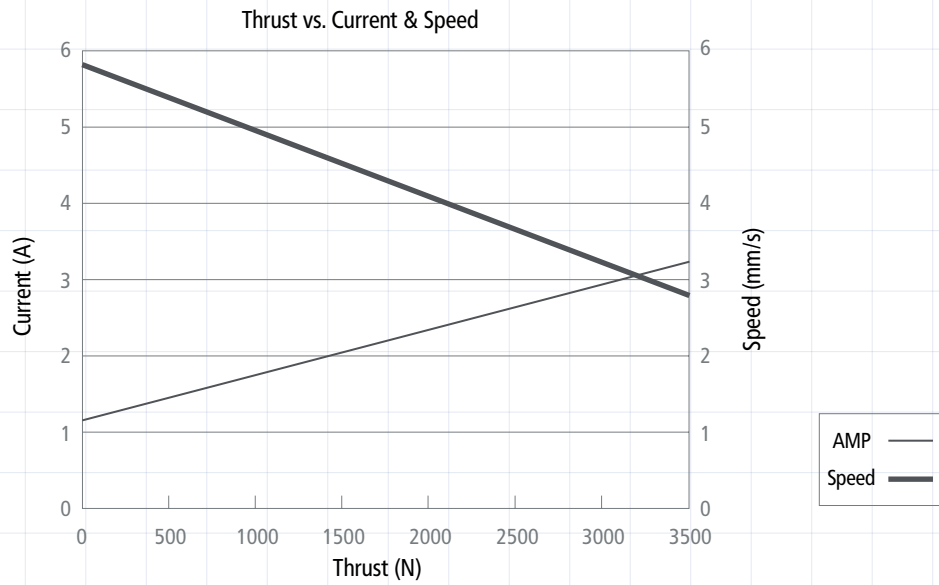


Note

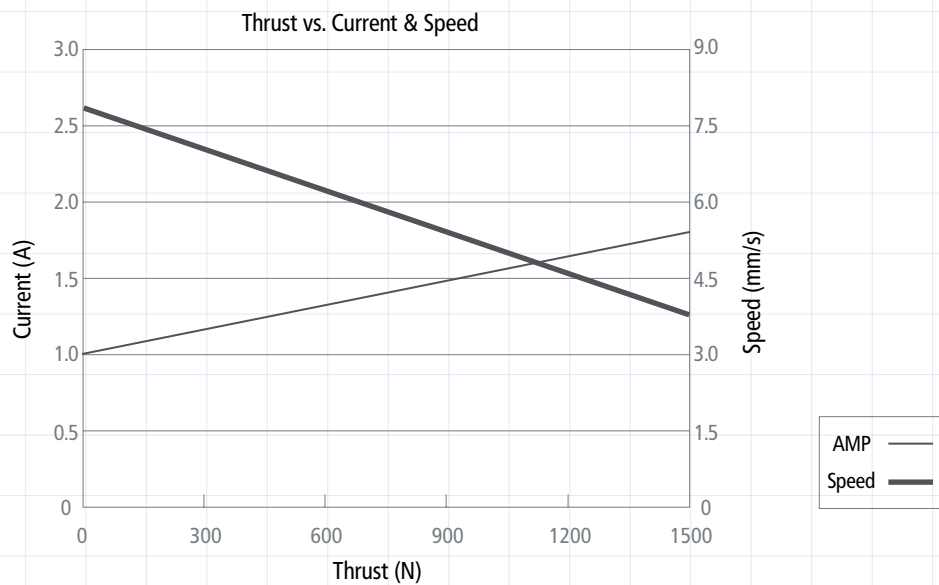
- The performance data in the curve charts shows theoretical value.

Performance data (24 VDC motor)

Code J



Code M

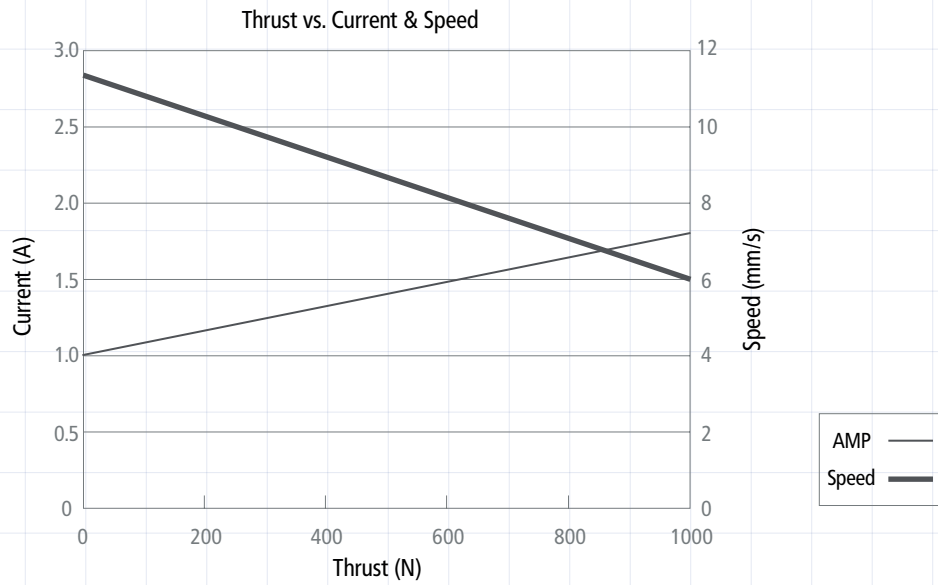


Note

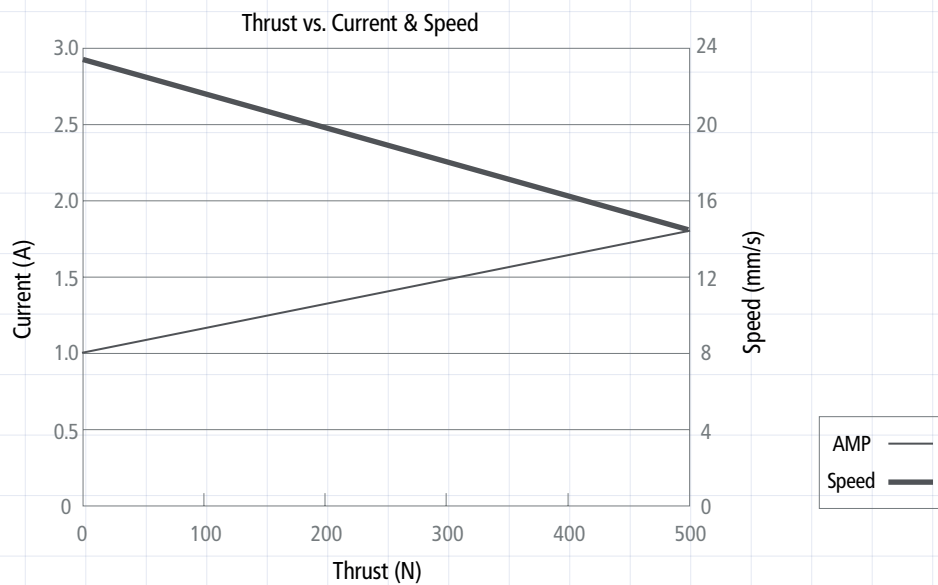
- The performance data in the curve charts shows theoretical value.

Performance data (24 VDC motor)

Code N



Code O

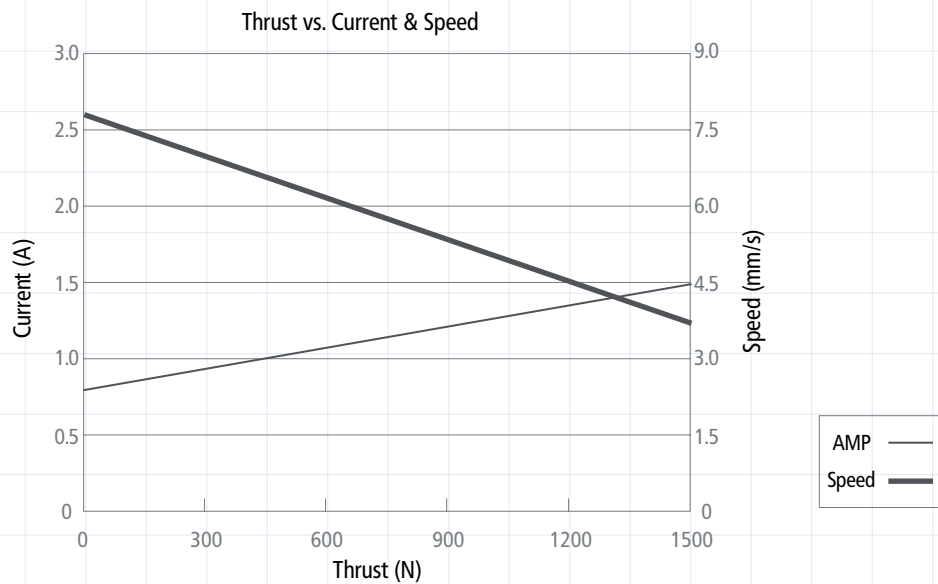


Note

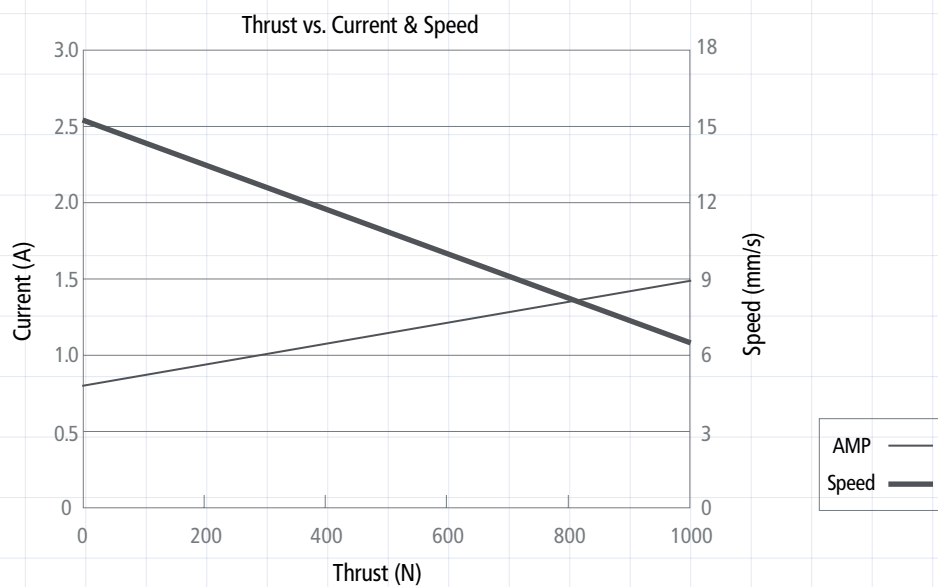
- The performance data in the curve charts shows theoretical value.

Performance data (24 VDC motor)

Code R



Code S

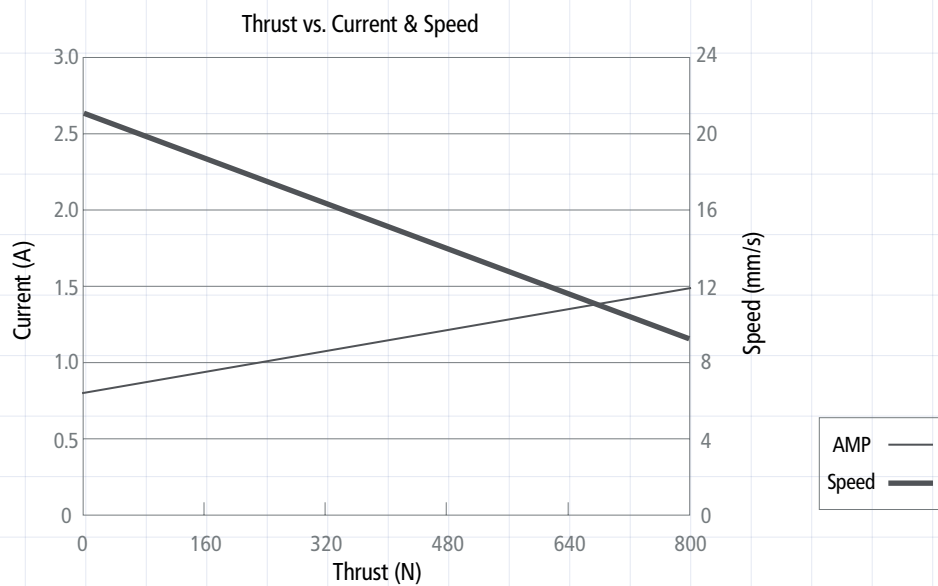


Note

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

Performance data (24 VDC motor)

Code T

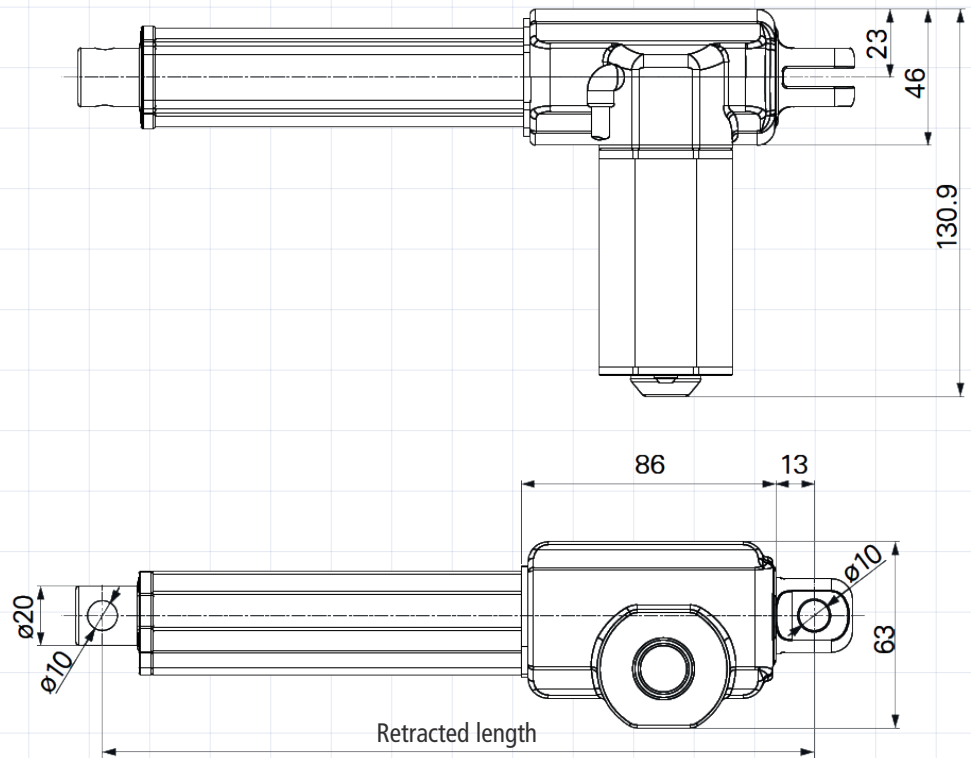


Note

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

Drawing

Standard dimensions (mm)



Retracted length (mm)

Retracted length \geq Stroke+A+B

A		
Code rear attachment	Code front attachment 1, 2	Code front attachment 3, 4, 5
1, 2, 3	140 mm	160 mm

B	
Stroke (mm)	B
0~200	-
>200	For stroke over 200 mm + 5 mm for each incremental 50 mm stroke

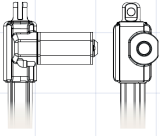
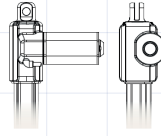
C		
Motor Code	all except E + J	E + J
	0 mm	5 mm

Example

For example, if the TA4 stroke is 230 mm with front and rear attachment 1, motor code E:
 $230 \text{ mm} + 140 \text{ mm} + 5 \text{ mm} + 5 \text{ mm} = 380 \text{ mm}$.

Ordering key (e. g.: TA4-1G-250395-11110-1021)

TA4-

<input type="checkbox"/>	Voltage	1 = 12 V	2 = 24 V
<input type="checkbox"/>	Load and speed	see page 2	
-			
<input type="checkbox"/>	Stroke (mm)		
<input type="checkbox"/>			
<input type="checkbox"/>			
<input type="checkbox"/>	Retracted length (mm)	see page 12	
<input type="checkbox"/>			
-			
<input type="checkbox"/>	Rear attachment	1 = slot 6.0 mm, hole 6.4 mm 2 = slot 6.0 mm, hole 8.0 mm	3 = slot 6.0 mm, hole 10.0 mm A = customized
<input type="checkbox"/>	Front attachment	1 = hole 6.4 mm 2 = hole 8.0 mm 3 = U clevis, slot 6.0 mm, hole 10.0 mm	4 = U clevis, slot 6.0 mm, hole 6.4 mm 5 = U clevis, slot 6.0 mm, hole 8.0 mm A = customized
<input type="checkbox"/>	Direction of rear attachment	1 = 0° 	2 = 90° 
<input type="checkbox"/>	IP rating	1 = without	2 = IP54 3 = IP66
<input type="checkbox"/>	Special functions for spindle sub-assembly	0 = without (standard) 2 = push only Note : if choose #2 (ST-ST inner tube), it can't choose load & speed option #E or #J	
-			
<input type="checkbox"/>	Functions for limit switches	1 = two switches at the retracted/extended positions to cut current 2 = two switches at the retracted/extended positions to cut current + 3rd LS in between to send signal 3 = two switches at the retracted/extended positions to send signal 4 = two switches at the retracted/extended positions to send signal + 3rd LS in between to send signal A = customized	
<input type="checkbox"/>	Output signals	0 = without	4 = one Hall sensor 5 = two Hall sensors
<input type="checkbox"/>	Connector	1 = DIN 6pin plug	2 = tinned leads A = customized
<input type="checkbox"/>	Cable length	1 = straight, 300 mm 2 = straight, 600 mm	3 = straight, 1000 mm A = customized

Terms of use

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