

TA3

series



Product Segments

- **Auto Motion**

TA3 is an ideal product especially created for harsh working environment. While working with heavy-duty machinery, such as harvester, construction machinery, and other industrial equipment, we would like to recommend our reliable TA3 to those, who need to meet severe specification and challenges in the extreme working conditions.

General Features

Spindle	ACME or Ball screw
Voltage of motor	12V DC, 24V DC, 36V DC, 110V AC, or 230V AC
Maximum load	4,500N in pull/push
Maximum speed	58.5mm/s
Minimum installation dimension	stroke+160mm (without POT)
Minimum installation dimension	stroke+196mm (with POT)
Color	black
Protection class	IP66 dynamic
Options	Overload clutch, Hall sensor, POT, manual crank function

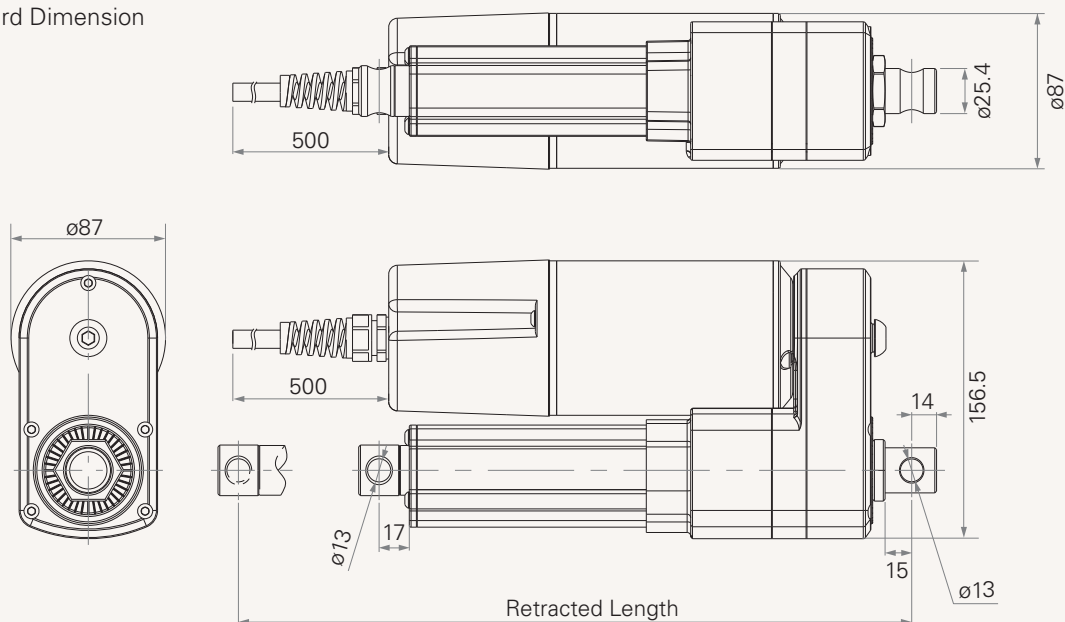
Mechanical or electromagnetic brake

Test under change of temperature, dry heat, salt spray, chemicals, vibration, bump, shock...etc.

Heavy duty cycle (20%), corrosion proof

Drawing

Standard Dimension



Load and Speed

CODE	Gear Ratio	LOAD (N)	Current at Full Load (A)		Speed at No Load (mm/s)		Speed at Full Load (mm/s)	
			12V DC	24V DC	12V DC	24V DC	12V DC	24V DC

ACME Screw, DC Motor (12V DC/24V DC/36V DC)

B	10:1	1500	15.4	7.7	29.5	29.5	27.0	27.0
C	20:1	2500	14.0	7.0	15.8	15.8	14.3	14.3

Ball Screw, DC Motor (12V DC/24V DC/36V DC)

A	5:1	2500	25.0	12.5	58.5	58.5	48.0	48.0
B	10:1	3500	18.0	9.0	29.8	29.8	25.5	25.5
C	20:1	4500	13.0	6.5	16.0	16.0	14.0	14.0

CODE	Gear Ratio	LOAD (N)	Current at Full Load (A)		Speed at No Load (mm/s)		Speed at Full Load (mm/s)	
			115V AC	230V AC	115V DC	230V AC	115V DC	230V AC

ACME Screw, AC Motor (110V AC 60HZ/230V AC 50HZ)

B	10:1	1500	2.0	1.0	26.1	22.5	23.0	21.0
C	20:1	2500	2.0	1.0	14.1	12.0	12.8	11.2

Ball Screw, AC Motor (110V AC 60HZ/230V AC 50HZ)

A	5:1	2500	2.5	1.3	53.0	46.0	38.5	40.0
B	10:1	3500	2.1	1.1	27.0	23.5	22.5	21.5
C	20:1	4500	2.0	1.0	14.5	12.0	13.0	11.5

Note

- 1 Please contact TiMOTION before making an order.
- 2 Push = Pull.
- 3 Rated load = self locking force, if choose mechanical brake.

Terms of Use

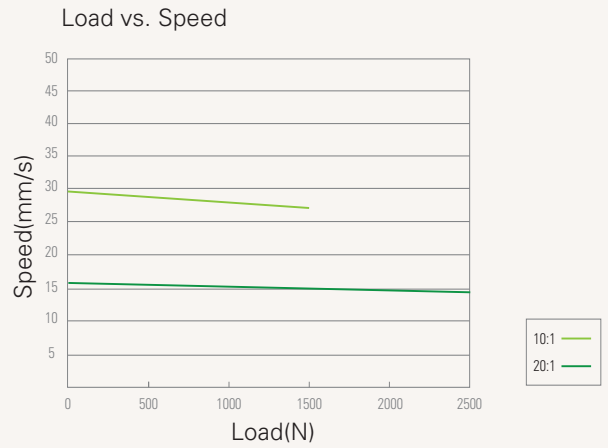
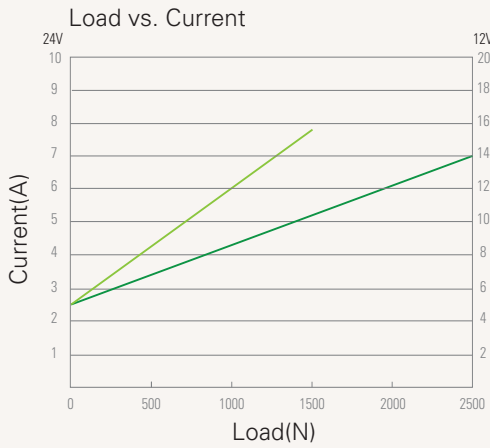
The user is responsible for determining the suitability of TiMOTION products for a specific application.

Due to continuous development in order to improve our products, TiMOTION products are subject to frequent modifications and changes without prior notice.

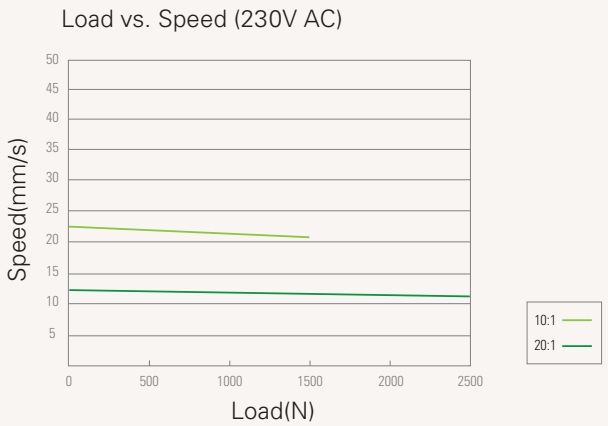
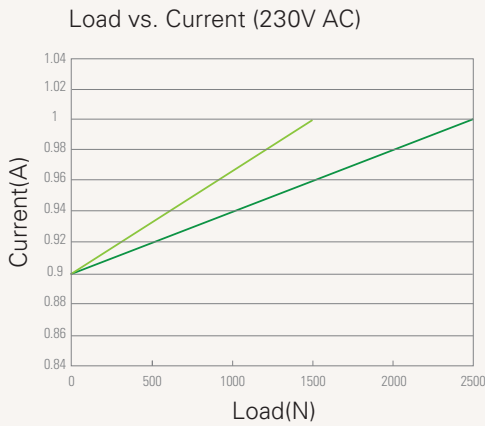
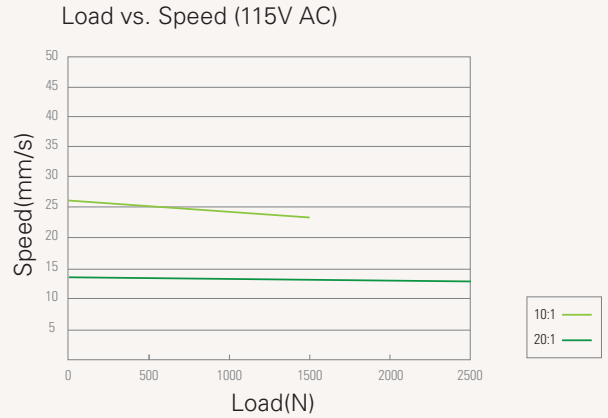
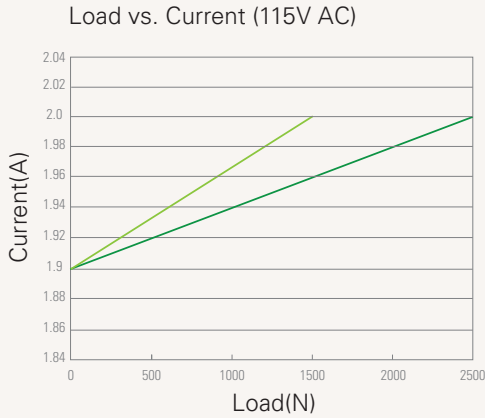
TiMOTION reserves the right to discontinue the sale of any products displayed on its website or listed in its catalogue or other written materials drawn up by TiMOTION.

Graph Chart

ACME Screw, DC Motor

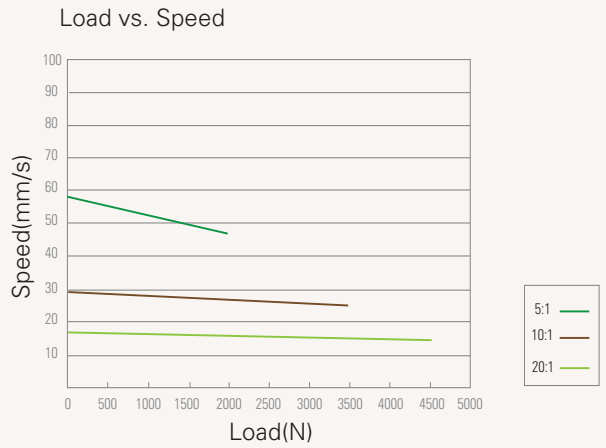
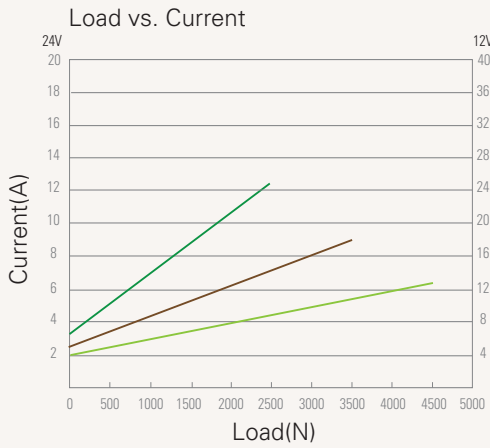


ACME Screw, AC Motor

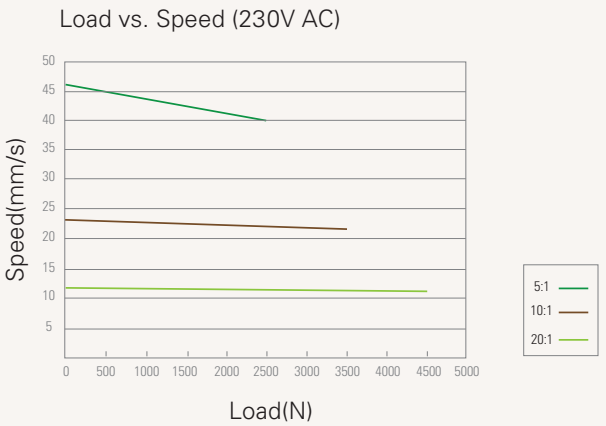
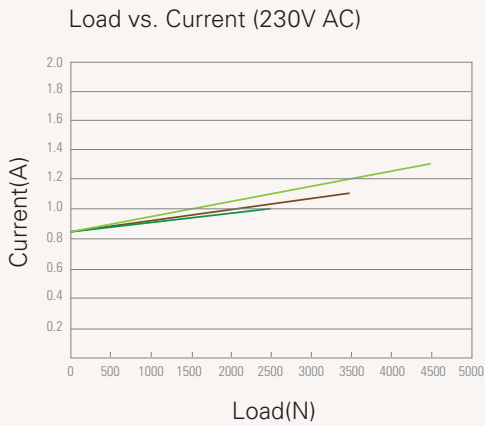
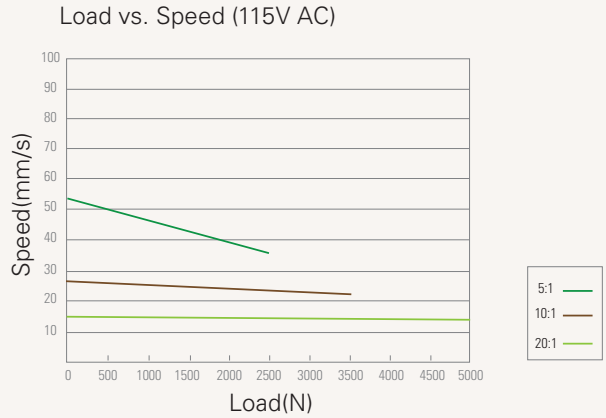
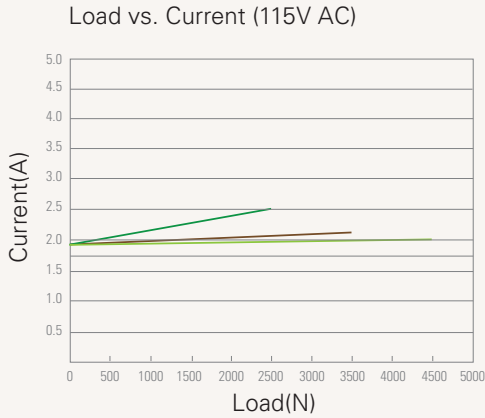


Graph Chart

BALL Screw, DC Motor



BALL Screw, AC Motor



Minimum Retracted Length

Spindle Type	Mechanical Brake	Without POT	With POT
DC Motor (12V DC/24V DC/36V DC)			
ACME screw	Without	Stroke+160mm	Stroke+196mm
ACME screw	With	Stroke+195mm	Stroke+231mm
Ball screw	With	Stroke+201mm	Stroke+241mm
AC Motor (110V AC 60HZ/230V AC 50HZ)			
ACME screw	Without	Stroke+160mm	Stroke+196mm
ACME screw	With	Stroke+195mm	Stroke+231mm
Ball screw	With	Stroke+201mm	Stroke+241mm

TA3 Ordering Key

TA3

Version: 20130715-H

<input type="checkbox"/>	Spindle Type	A = ACME screw	B = Ball screw			
<input type="checkbox"/>	Voltage	1 = 12V DC	2 = 24V DC	3 = 36V DC	4 = 110V AC 60HZ	5 = 230V AC 50HZ
		Note : #3 please contact TiMOTION before making an order				
<input type="checkbox"/>	Load and Speed	See appendix				
<input type="checkbox"/>	Stroke					
<input type="checkbox"/>						
<input type="checkbox"/>						
<input type="checkbox"/>	Retracted Length	See appendix				
<input type="checkbox"/>						
<input type="checkbox"/>						
<input type="checkbox"/>	Rear Attachment	1 = Hole 13mm	A = Customized			
<input type="checkbox"/>	Front Attachment	1 = Hole 13mm	A = Customized			
<input type="checkbox"/>	Direction of Rear Attachment (Counterclockwise)	1 = 90° (standard)	2 = 0°			
<input type="checkbox"/>	Overload Clutch	0 = Without	1 = With (standard)			
<input type="checkbox"/>	Mechanical Brake	0 = Without	1 = With (Ball screw's standard option)			
		Note : choose #1, rated load = self locking force				
<input type="checkbox"/>	Electromagnetic Brake	0 = Without (standard)	1 = With			
<input type="checkbox"/>	IP Protection	6 = IP66 dynamic				
<input type="checkbox"/>	Manual Crank	0 = Without	1 = With			
<input type="checkbox"/>	Output Signals	0 = Without	1 = POT	4 = One Hall sensor	5 = Two Hall sensors	
<input type="checkbox"/>	Plug	1 = Stripped wires	A = Customized			
<input type="checkbox"/>	Cable Length	1 = Straight, 500mm	A = Customized			