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

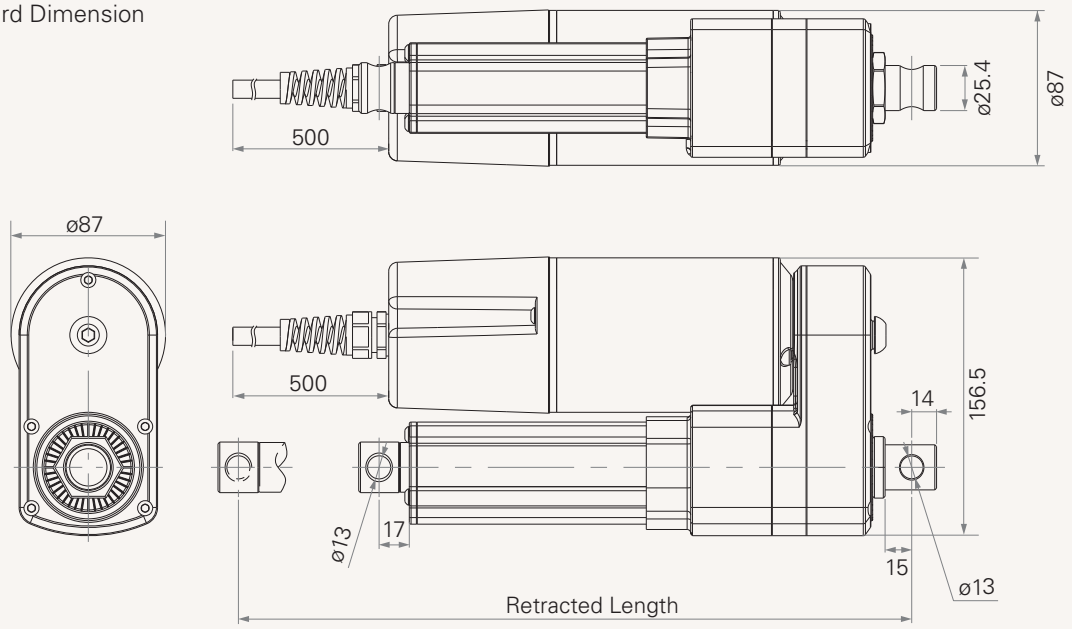
Mechanical or electromagnetic brake

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

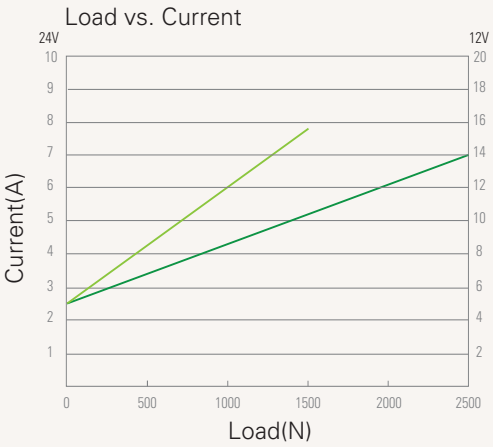
The user is responsible for determining the suitability of TiMOTION products for a specific application.

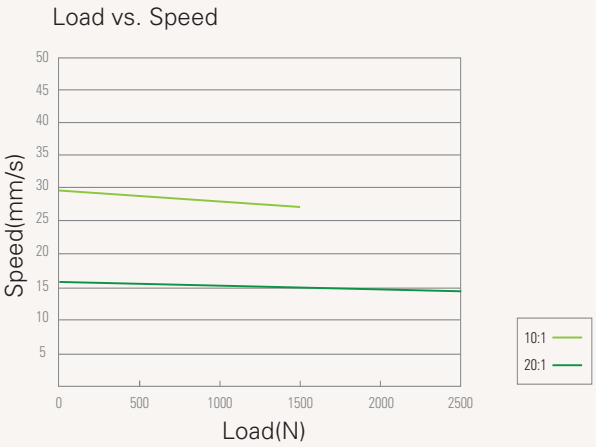
Due to continuous development in order to improve our products, TiMOTION products are subject to frequent modifications and changes without prior notice.

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.

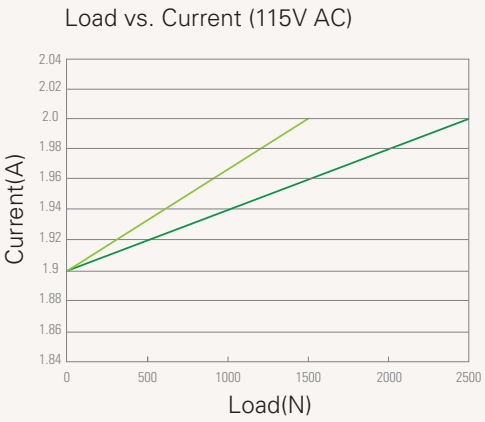
Graph Chart

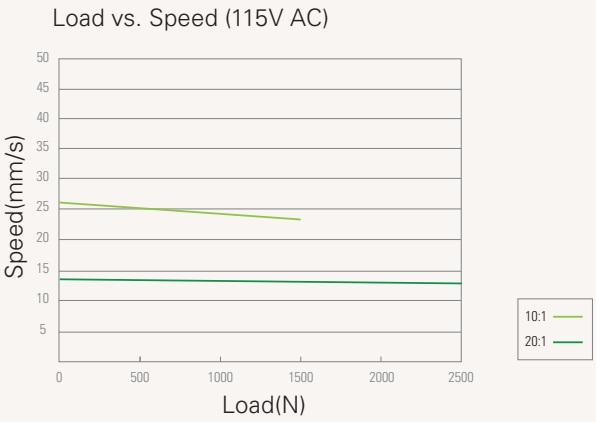
ACME Screw, DC Motor

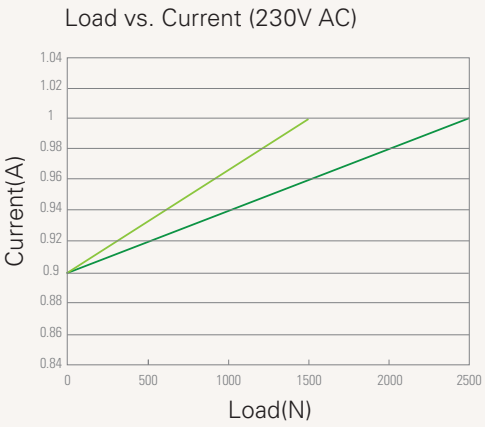


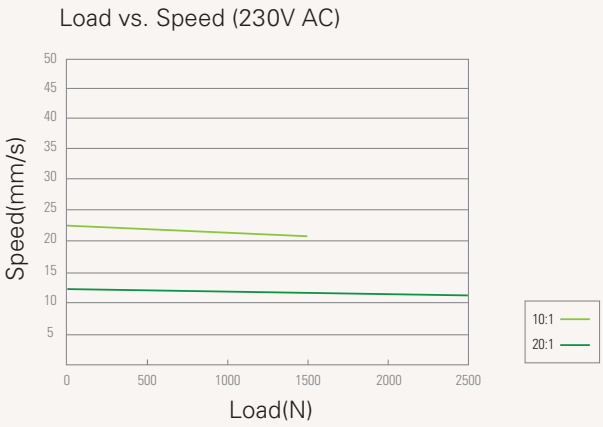


ACME Screw, AC Motor



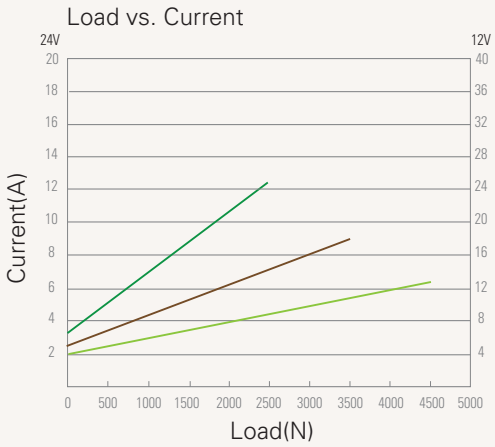


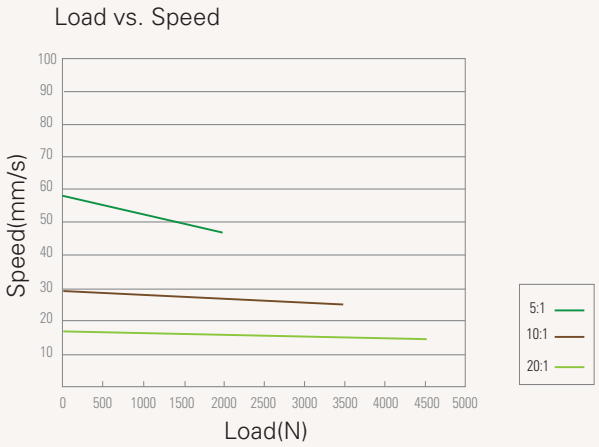




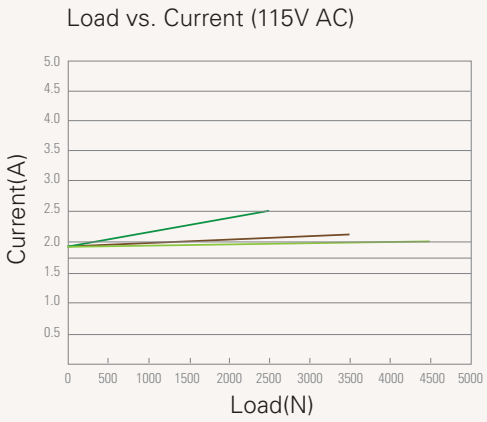
Graph Chart

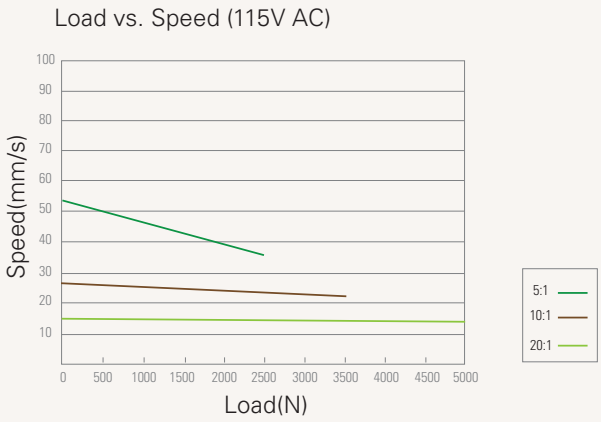
BALL Screw, DC Motor

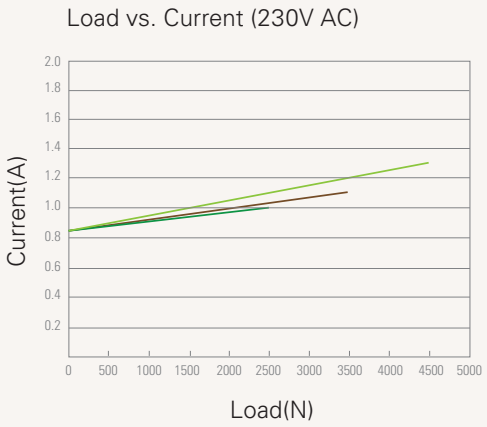


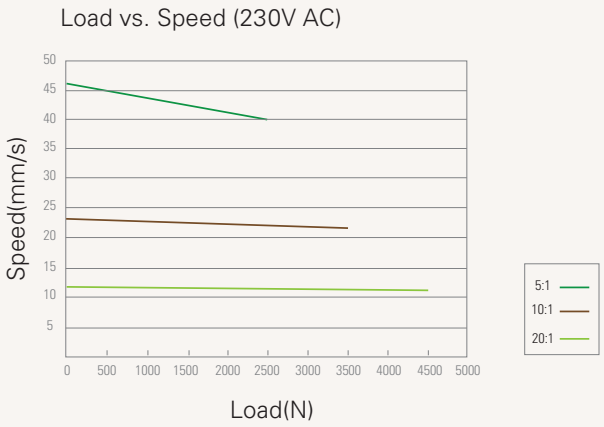


BALL Screw, AC Motor









Minimun 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

TiMOTION

TA3

Version: 20130715-H

	Spindle Type	A = ACME screw	B = Ball screw			
	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				
	Load and Speed	See appendix				
	Stroke					
	Retracted Length	See appendix				
	Rear Attachment	1 = Hole 13mm	A = Customized			
	Front Attachment	1 = Hole 13mm	A = Customized			
	Direction of Rear Attachment (Counterclockwise)	1 = 90° (standard)	2 = 0°			
	Overload Clutch	0 = Without	1 = With (standard)			
	Mechanical Brake	0 = Without	1 = With (Ball screw's standard option)			
		Note : choose #1, rated load = self locking force				
	Electromagnetic Brake	0 = Without (standard)	1 = With			
	IP Protection	6 = IP66 dynamic				
	Manual Crank	0 = Without	1 = With			
	Output Signals	0 = Without	1 = POT	4 = One Hall sensor	5 = Two Hall sensors	
	Plug	1 = Stripped wires	A = Customized			
	Cable Length	1 = Straight, 500mm	A = Customized			