## TA26

## series



## Product Segments

## - Comfort Motion

TiMOTION's TA26 series electric linear actuator is designed for furniture applications such as recliners or lift chairs. This linear actuator is designed to function as a direct cut system, eliminating the need for a control box, offering a straightforward alternative to complex electric actuation systems.

## General Features

| Voltage of motor | 12 V DC or 24 V DC |
| :--- | :--- |
| Maximum load | $4,000 \mathrm{~N}$ in push |
| Maximum load | $2,000 \mathrm{~N}$ in pull |
| Maximum speed at full load | $12.8 \mathrm{~mm} / \mathrm{s}$ |
|  | (with $2,000 \mathrm{~N}$ in a push or pull condition) |
| Minimum installation dimension | $\geq$ Stroke +120 mm |
| Color | Black |
| Certificate | $\mathrm{UL962}$ |
| Operational temperature range | $+5^{\circ} \mathrm{C} \sim+45^{\circ} \mathrm{C}$ |
| Options | $\mathrm{Hall} \mathrm{sensor}^{\text {(s) }}$ |

Drawing
Standard Dimensions (mm)


## Load and Speed

| CODE | Load (N) |  | Self Locking | Typical Current (A) | Typical Speed (mm/s) |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | Push | Pull | Force (N) | No Load | With Load | No Load | With Load

Motor Speed (3800RPM, duty cycle 10\%)

| A | 4000 | 2000 | 4000 | 1.0 | 5.0 | 12.0 | 6.1 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| B | 3000 | 2000 | 2500 | 1.0 | 4.5 | 18.0 | 7.5 |
| C | 2000 | 2000 | 1500 | 1.0 | 4.0 | 24.0 | 12.8 |

## Note

1 The current \& speed in table are tested with 24 V DC motor. With a 12 V DC motor, the current is approximately twice the current measured in 24 V DC; 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 TiMOTION control boxes have this feature built-in.

3 The current \& speed in table are tested when the actuator is extending under push load.

Motor Speed (3800RPM)

Speed vs. Load


Current vs. Load


TA26

| Voltage | $1=12 \mathrm{~V}$ | $2=24 \mathrm{~V}$ | $5=24 \mathrm{~V}, \mathrm{PTC}$ |
| :--- | :--- | :--- | :--- |
| Load and Speed | See page 2 |  |  |

## Stroke (mm)

## Retracted Length See page 5

(mm)
Rear Attachment $\quad 1=$ Plastic, clevis $U$, slot 6.2 , depth 16.0 , hole 10.2
$(\mathbf{m m})$

See page 5

| Front Attachment (mm) | $1=$ Plastic, no slot, hole 8.2 $4=$ Aluminum casting, clevis $U$, slot 6.2, depth 17.0, <br> $2=$ Plastic, no slot, hole 10.2 hole 10.2 |
| :---: | :---: |
| See page 5 | $\begin{aligned} & 3=\text { Aluminum casting, clevis } U \text {, slot } 6.2 \text {, depth } 17.0 \text {, } \\ & \text { hole } 8.2 \end{aligned}$ |
| Special Functions for Spindle SubAssembly | $0=$ Without |
| Functions for Limit Switches | $1=$ Two switches at full retracted / extended positions to cut current |
| See page 6 | $3=$ Two switches at full retracted / extended positions to send signal <br> 4 = Two switches at full retracted/extended positions to send signal +3 rd LS to send signal |
| Output Signals | $0=$ Without $\quad 1=$ Hall sensor * $1 \quad 2=$ Hall sensor *2 |


| Connector | $1=$ DIN $6 P, 90^{\circ}$ plug | K = Single motor, direct cut system |  |
| :--- | :--- | :--- | :--- |
| See page 6 | $2=$ Tinned leads | $L=1+1,2$ motors direct cut system |  |
|  | $3=$ Small 01P, plug |  |  |
| Cable Length (mm) | $0=$ Straight, 100 | $3=$ Straight, 1000 | $6=$ Straight, 2000 |
|  | $1=$ Straight, 500 | $4=$ Straight, 1250 | $7=$ Curly, 200 |
|  | $2=$ Straight, 750 | $5=$ Straight, 1500 | $8=$ Curly, 400 |

## Note

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## TA26 Ordering Key Appendix

## Retracted Length (mm)

1. Calculate $A+B=Y$
2. Retracted length needs to $\geq$ Stroke $+Y$

## A. Front Attachment

| $\mathbf{1 , 2}$ | +120 |
| :--- | :--- |
| $\mathbf{3 , 4}$ | +150 |

B. Stroke (mm)

0~150
151~200
201~250 +5
251~300 +10

301~350 +15
351~400 +20

## Note

1 For stroke over $200 \mathrm{~mm},+5 \mathrm{~mm}$ for each increment of 50 mm stroke

## Rear Attachment (mm)

1 = Plastic, clevis U, slot 6.2 , depth
16.0, hole 10.2


## Front Attachment (mm)

1 = Plastic, no slot, hole 8.2
2 = Plastic, no slot, hole 10.2
3 = Aluminum casting, clevis $U$, slot 6.2, depth 17.0, hole 8.2

4 = Aluminum casting, clevis $U$, slot 6.2 , depth 17.0, hole 10.2

$\varnothing 8.2$

ø10.2



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## TA26 Ordering Key Appendix

## Functions for Limit Switches

| Wire Definitions |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CODE | Pin |  |  |  |  |  |
|  | 1 (Green) | 2 (Red) | 3 (White) | 4 (Black) | 5 (Yellow) | 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 |

## Connector



## 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.


[^0]:    1 The TL is designed especially for push applications, not suitable for pull applications

