







# RV APPLICATION

## Freedom on the Move

Powering pop-up roofs and smart RV systems for a more flexible outdoor lifestyle.

### Key Requirements

- High force in limited space
- Quiet operation
- Stable performance
- Water proof
- Synchronized motion









# PERGOLA APPLICATION

## Smart Outdoor Living Solutions

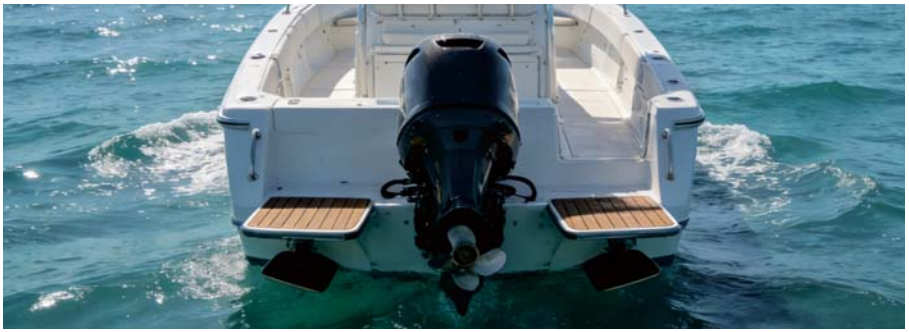
Designed for bioclimatic pergola systems where durability, waterproofing, and silent operation are critical.

### Key Requirements

- Weather resistance (IP69K)
- Smooth & synchronized motion
- Compact installation
- High and low temperature working
- 5 years warranty









# MARINE APPLICATION

## Reliable Marine Motion

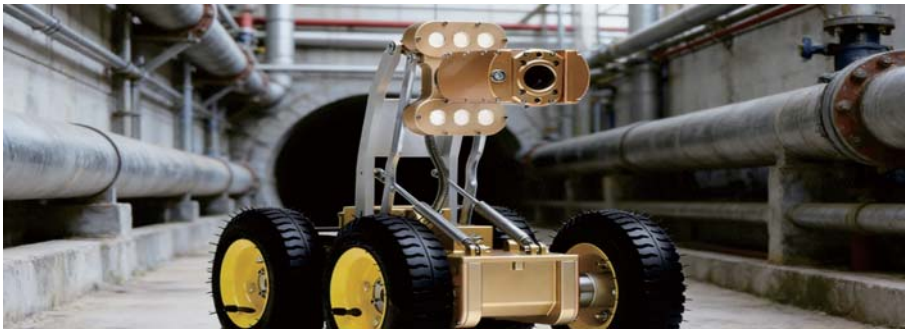
Built for harsh marine environments where corrosion resistance and reliability are essential.

### Key Requirements

- Weather resistance (IP67M/IP69K)
- Corrosion protection (316L stainless steel)
- Smooth & synchronized motion
- Compact installation









# OTHER APPLICATIONS

## Key Requirements

- Water proof
- Smooth& Quiet in motion
- Compact installation
- Reliable performance

SLA-T16 Linear Actuator

# Data Sheet



## Features & benefits

SLA-T16 is a very tiny in-line linear actuator with max diameter 16mm.

It is well suited for the applications where space is limited, such as inspection robots, navigation light.

# Features and options

| | |
|---|---|
| Max Load in push(N): | 50N |
| Max Load in pull (N): | 50N |
| Voltage(V): | 12V |
| No-load current(A): | ⩽0.07A |
| Load current(A): | ⩽0.25A |
| Max. Power(W): | 3W |
| Material of outer tube: | 6063 Aluminium |
| Material of lead screw: | Trapezoid steel |
| Material of piston rod: | 316 stainless steel |
| Material of the nut: | Engineering plastic |
| Protection Class: | IP65 |
| Noise on load (dB): | ⩽65dB |
| Backlash (mm): | ⩽0.4mm |
| Colour: | Black |
| Stroke length(mm): | ⩽100mm |
| Limit switch: | Built-in |
| Options: | Hall sensor |
| Standard cable length(m): | 0.5m (cable length can be customized) |
| On request: | Cable lengths |
| | Other stroke lengths available |
| | Customized front, rear fixture |
| | Installation size |
| | Available in all RAL colours |

## Forces and speeds

| Push force [N] | Pull force [N] | Self-locking force [N] | Speed on load [mm/s] | No load speed [mm/s] |
|---|---|---|---|---|
| 20 | 20 | 30 | 9 | 15 |
| 50 | 50 | 75 | 4.9 | 7.5 |

## Stroke and Weight

| | | | | |
|---|---|---|---|---|
| Stroke(mm) | 50 | 100 | - | - |
| Weight(kg) | 0.1 | 0.2 | - | - |

## Built-in dimensions

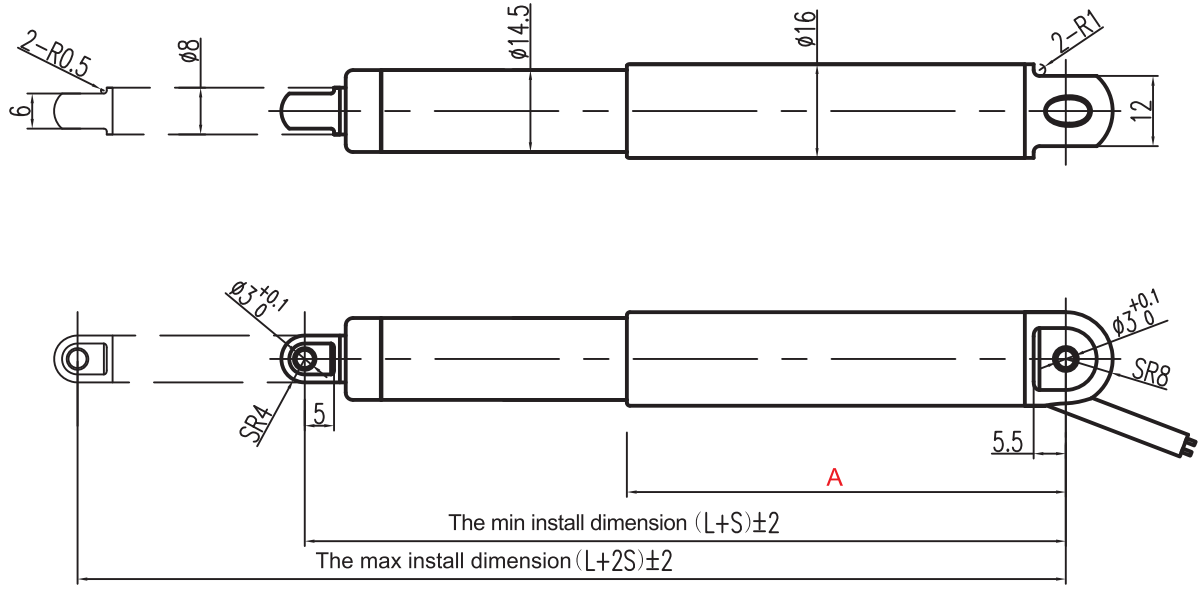
| Option | Minimum BID[mm] | A |
|---|---|---|
| Standard | 105+stroke length | 75 |
| Hall sensor | 125+stroke length | 95 |

Notes: For any special installation size needs, please contact us.

## Usage

| | |
|---|---|
| Operating temperature(℃): | 5°C~40°C |
| Storage temperature(℃): | 5°C~40°C |
| Working duty(S2): | 10%, 2 minutes continuous use followed by 18 minutes in rest |
| Life time(cycles): | ⩾10000 cycles |

# Dimensions



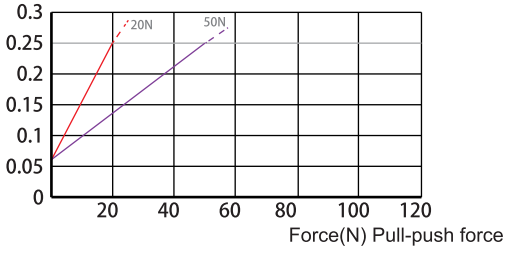

## Standard Dimensional Drawing (mm)

Standard means without any additional function(Over current protection,hall sensor)
The dimensional tolerance not shown in the drawing can refer to ISO2768-mk

# Speed and load curves

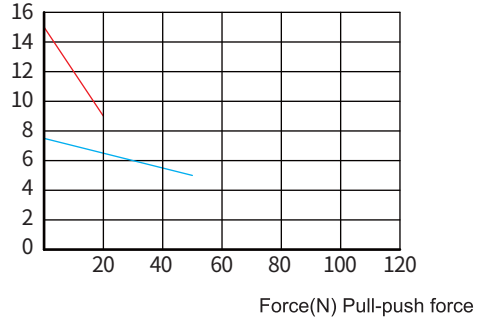
CURVE(Force/ current)

Current（12V）




CURVE(Speed/force)

Speed（mm/s）



# Hall sensor




## Function

Hall sensor can be added to the actuator and the function of hall sensor is to provide a signal feedback to the receiver to judge the motor speed.
If we know how many signals hall sensor can produce in one circle, we will know how many signals the hall sensor can provide to the receiver when the motor runs one circle and then we can control the actuator speed and stroke precisely.

## Wire diagram

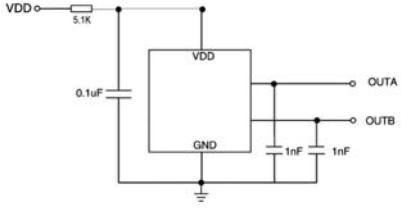
| | |
|---|---|
| White | Hall sensor B Vout |
| Green | Hall sensor A Vout |
| Red | Hall sensor VCC+ |
| Black | Hall sensor GND - |
| Blue | Motor- |
| Brown | Motor+ |

## Calculation

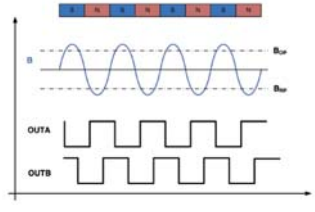
Hall sensor resolution=lead screw pitch/ gear ratio/ pulses per revolution

## Circuit diagram

Output circuit




Output wave



SLA-T26N Linear Actuator

# Data Sheet



## Features & benefits

SLA-T26N is an upgraded version of SLA-T26. It features internal limit switches with either overcurrent protection or a Hall sensor, options not available on the original model.

With a maximum diameter of 26mm and up to 500N push/pull force, it is ideal for space-constrained applications requiring high force.

IP66/IP67M/IP69K protection enables reliable outdoor use, making it perfect for motorized louvre windows, bioclimatic pergolas, power wheelchairs, inspection robots, and more.

# Features and options

| | |
|---|---|
| Max Load in push(N): | 500N |
| Max Load in pull (N): | 500N |
| Voltage(V): | 12V/24V |
| No-load current(A): | ⩽0.4A/⩽0.25A |
| Load current(A): | ⩽1.3A/⩽0.7A |
| Max. Power(W): | 14.5W |
| Material of outer tube: | 6063 Aluminium |
| Material of lead screw: | #45 steel |
| Material of piston rod: | 316 stainless steel |
| Material of the nut: | Engineering plastic |
| Protection Class: | IP66/IP67M/IP69K |
| Noise on load (dB): | ⩽62dB |
| Backlash (mm): | ⩽0.3mm |
| Colour: | Black |
| Stroke length(mm): | ⩽200mm |
| Limit switch: | Built-in |
| Options: | Over current protection |
| | Hall sensor |
| | Limit switch signal line output |
| Standard cable length(m): | 1.5m (cable length can be customized) |
| On request: | Cable lengths |
| | Other stroke lengths available |
| | Customized front, rear fixture |
| | Installation size |
| | Available in all RAL colours |

## Forces and speeds

| Push force [N] | Pull force [N] | Self-locking force [N] | Speed on load [mm/s] | No load speed [mm/s] |
|---|---|---|---|---|
| 100 | 100 | 150 | 9.5 | 16 |
| 250 | 250 | 375 | 6 | 11 |
| 500 | 500 | 500 | 3.2 | 6 |

## Stroke and Weight

| Stroke(mm) | 50 | 100 | 150 | 200 |
|---|---|---|---|---|
| Weight(kg) | 0.3 | 0.35 | 0.4 | 0.45 |

## Built-in dimensions

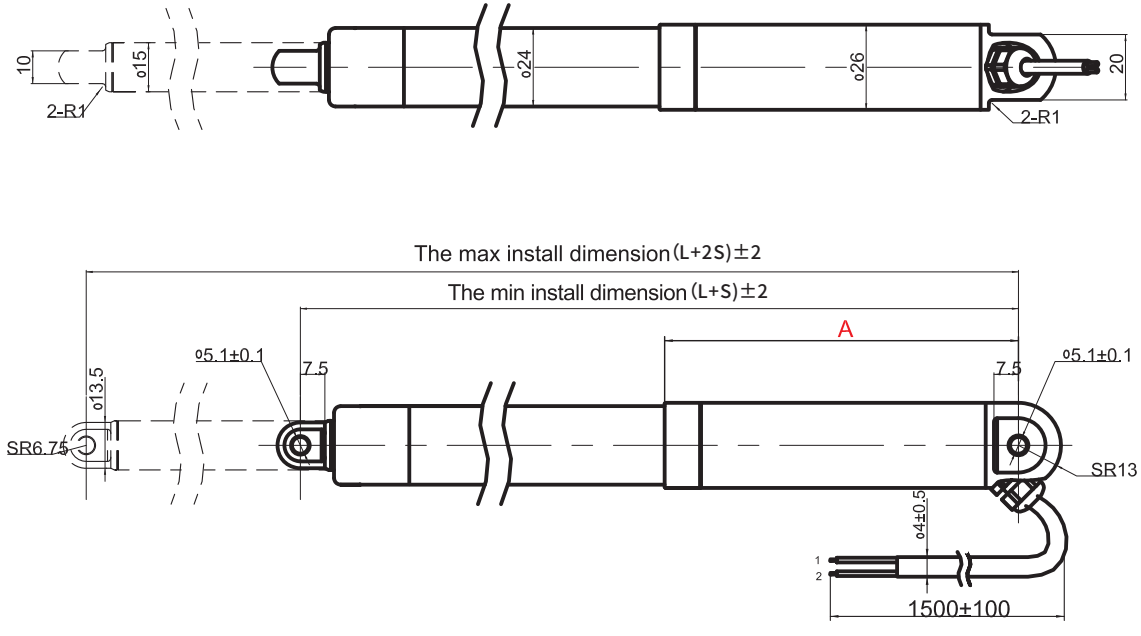
| Option | Minimum BID[mm] | A |
|---|---|---|
| Standard | 170+stroke length | 108.5 |
| IP67M/69K | 185+stroke length | 108.5 |
| Hall sensor | 190+stroke length | 128.5 |
| Over current protection | 190+stroke length | 128.5 |
| Signal line output | 175+stroke length | 113.5 |

Notes: For any special installation size needs, please contact us.

## Usage

| | |
|---|---|
| Operating temperature(℃): | -20℃~60℃ |
| Storage temperature(℃): | -20℃~60℃ |
| Working duty(S2): | 10%, 2 minutes continuous use followed by 18 minutes in rest |
| Life time(cycles): | ⩾10000 cycles |
| Certification: | CE, RoHS |

# Dimensions



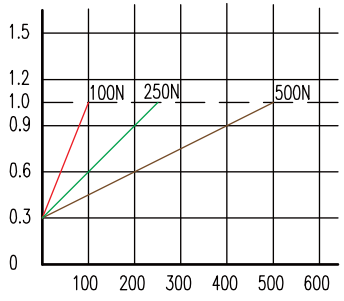

## Standard Dimensional Drawing (mm)

Standard means without any additional function(Over current protection,hall sensor)
The dimensional tolerance not shown in the drawing can refer to ISO2768-mk

# Speed and load curves

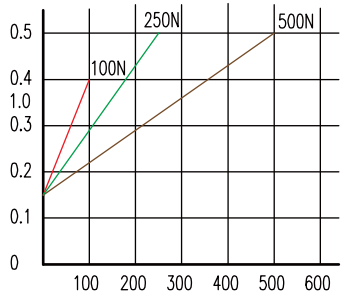
CURVE(Force/ current)

Current(A)-12VDC



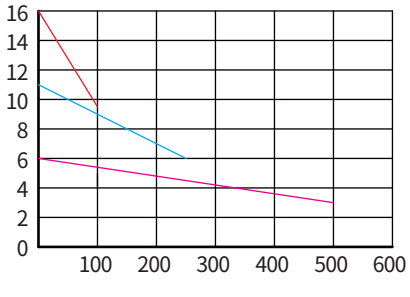

CURVE(Force/ current)

Current(A)-24VDC

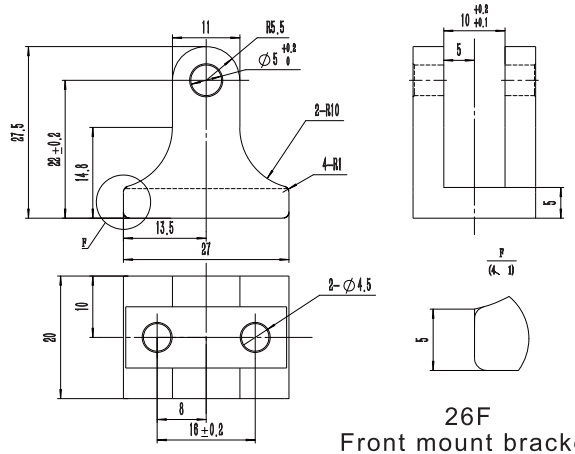



CURVE(Speed/force)

Speed（mm/s）

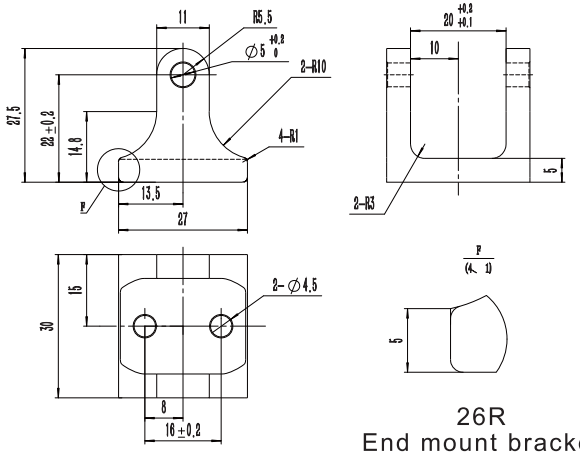



# Mounting bracket




26F

Front mount bracket




26R

End mount bracket

# Over current protection



## Function

Over current protection can be added to the actuator, when the actuator extends to full stroke or overloaded, it will protect the actuator by limiting motors current. The function of over current protection is to protect the actuator from damage.

## Specifications

| Voltage[V] | Circuit breaking current [A] |
|---|---|
| DC12V | 1.5 |
| DC24V | 0.75 |

## Notes:

- The anode(+) and cathode(-) for input and output circuit can be interchangeable, input voltage is DC12V or DC24V.
- The circuit breaking response time is 0.1-0.5s.
- The ambient temperature range must be -20°C to 60°C and storage temperature is -40°C to +70°C
- Max duty cycle is 10% or 2 minutes in use followed by 18 minutes rest.

# Hall sensor



## Function

Hall sensor can be added to the actuator and the function of hall sensor is to provide a signal feedback to the receiver to judge the motor speed.
If we know how many signals hall sensor can produce in one circle, we will know how many signals the hall sensor can provide to the receiver when the motor runs one circle and then we can control the actuator speed and stroke precisely.

## Calculation

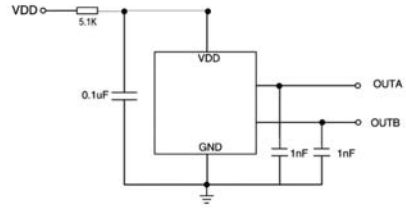
Hall sensor resolution=lead screw pitch/ gear ratio/ pulses per revolution

## Wire diagram

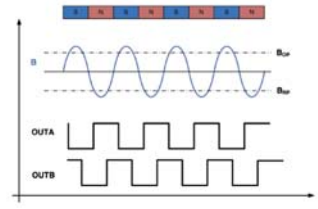
| | |
|---|---|
| White | Hall sensor B Vout |
| Green | Hall sensor A Vout |
| Red | Hall sensor VCC+ |
| Black | Hall sensor GND - |
| Blue | Motor- |
| Brown | Motor+ |

## Circuit diagram

Output circuit



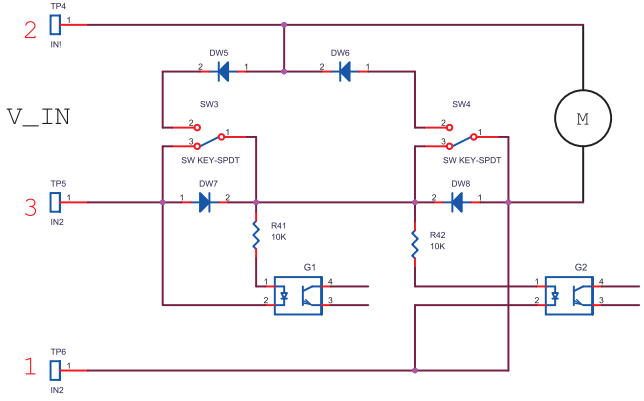

Output wave



# Limit switch wires output

Limit switch can be added to the actuator to test whether the actuator moves to the limit position. The principle is that when the object touches the limit switch, the normally open point of the switch closes and the normally closed point turns off to control circuit or receive signals.

Method 1: Optocoupler Output




Each optocoupler output is activated when the corresponding limit switch is triggered.

SLA-T35 Linear Actuator

# Data Sheet



## Features & benefits

SLA-T35 is a compact in-line linear actuator.

The combination of max load capacity 2300N with its diameter 35mm only, makes SLA-T35 to be the bestseller and a perfect match for various applications.

SLA-T35 also can be in all stainless steel materials,IP6PK protection, which makes it a good choice for harsh environment.

It is approved to be perfect for applications like motorized pergola, yacht automation, special vehicles, rehabilitation equipment.

# Features and options

| | |
|---|---|
| Max Load in push(N): | 2300N |
| Max Load in pull (N): | 2300N |
| Voltage(V): | 12V/24V |
| No-load current(A): | ⩽0.7A/⩽0.35A |
| Load current(A): | ⩽3.8A/⩽1.8A |
| Max. Power(W): | 50W |
| Material of outer tube: | 6063 Aluminium / 316 stainless steel |
| Material of lead screw: | Trapezoid steel |
| Material of piston rod: | 316 stainless steel |
| Material of the nut: | Copper/Engineering plastic |
| Protection Class: | IP66/IP67M/IP69K |
| Noise on load (dB): | ⩽60dB |
| Backlash (mm): | 0.5-1mm |
| Colour: | Black/Silver |
| Stroke length(mm): | ⩽400mm |
| Options: | Over current protection<br>Hall sensor |
| Standard cable length(m): | 1.5m (cable length can be customized) |
| On request: | Cable lengths<br>Other stroke lengths available<br>Customized front, rear fixture<br>Installation size<br>Available in all RAL colours |

## Usage

| | |
|---|---|
| Operating temperature(℃): | -20℃~60℃ |
| Storage temperature(℃): | -40℃~70℃ |
| Working duty(S2): | 10%, 2 minutes continuous use followed by 18 minutes in rest |
| Life time(cycles): | ⩾10000 cycles |
| Certification: | CE, RoHS |

## Forces and speeds

| Push force [N] | Pull force [N] | Self-locking force [N] | Speed on load-Normal [mm/s] | No load speed –Normal [mm/s] | Speed on load -Low noise [mm/s] | No load speed -Low noise [mm/s] |
|---|---|---|---|---|---|---|
| 100 | 100 | 150 | 24 | 35 | 19 | 25 |
| 300 | 300 | 600 | 14 | 25 | 17 | 25 |
| 400 | 400 | 600 | 11.5 | 18 | 11.5 | 16.5 |
| 600 | 600 | 1600 | 7.5 | 12 | 8.5 | 13 |
| 800 | 800 | 1600 | 6.5 | 12 | 5.5 | 8.5 |
| 1200 | 1200 | 1800 | 4 | 6.8 | - | - |
| 1800 | 1800 | 3600 | 2.5 | 4.5 | - | - |
| 2300 | 2300 | 3450 | 2 | 3.5 | - | - |

## Stroke and Weight

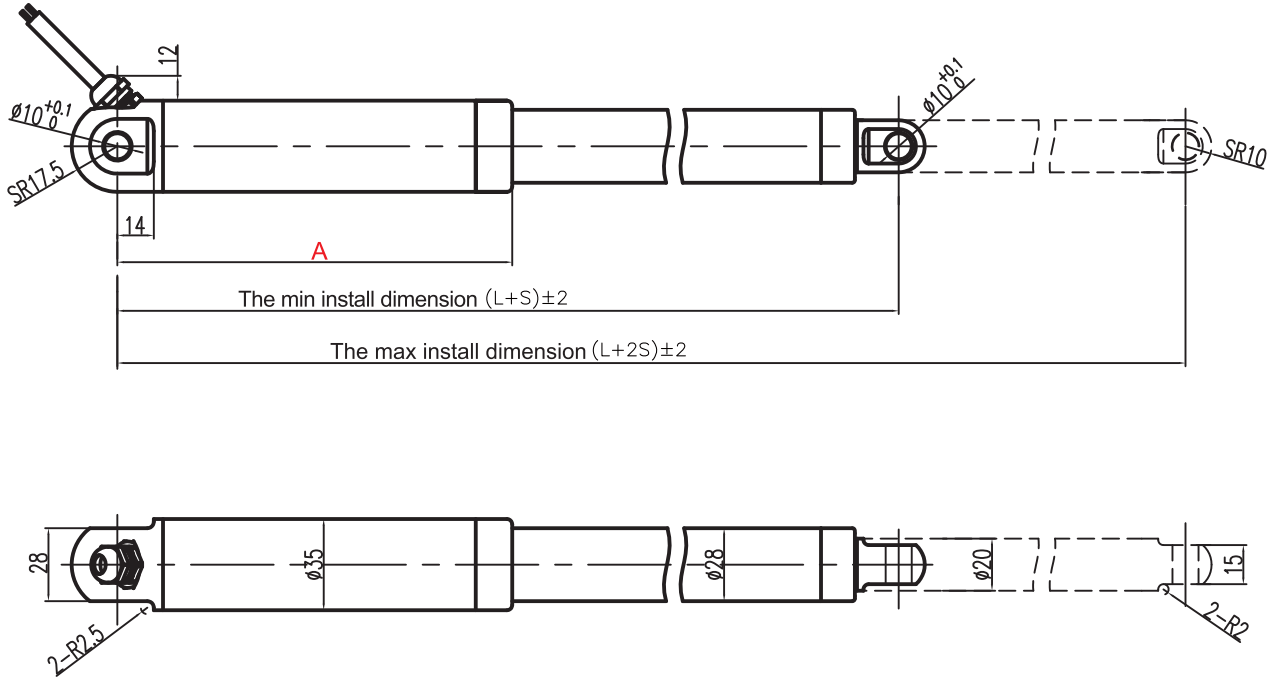
| Stroke(mm) | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 |
|---|---|---|---|---|---|---|---|---|
| AL Weight(kg) | 0.6 | 0.7 | 0.8 | 0.9 | 1 | 1.1 | 1.2 | 1.4 |
| S/S Weight(kg) | 1.1 | 1.2 | 1.3 | 1.4 | 1.5 | 1.6 | 1.7 | 1.8 |

## Built-in dimensions

| Option | | Minimum BID[mm] | | | | |
|---|---|---|---|---|---|---|
| | | Standard | Low noise version | IP67M/69K | Hall sensor | Over current protection |
| Force⩽800N | L+S | 178+S | 188+S | 191+S | 200+S | 200+S |
| | A | 121.5 | 131.5 | 121.5 | 143.5 | 143.5 |
| Force＞800N | L+S | 188+S | - | 201+S | 208+S | 208+S |
| | A | 131.5 | - | 131.5 | 151.5 | 151.5 |

Notes: For any special installation size needs, please contact us.

# Dimensions



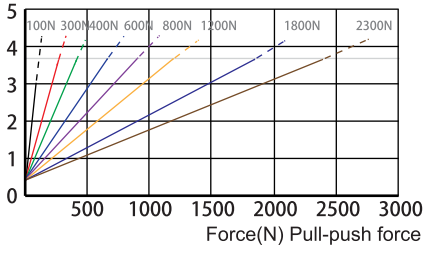

Standard Dimensional Drawing (mm)

Standard means without any additional function(Over current protection,hall sensor,limit switch)

# Speed and load curves

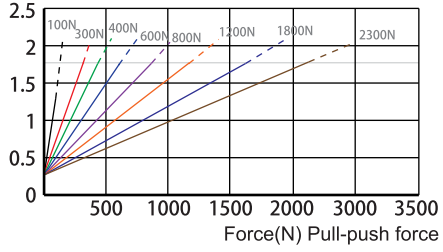
CURVE(Force/ current)

Current(A)-12VDC



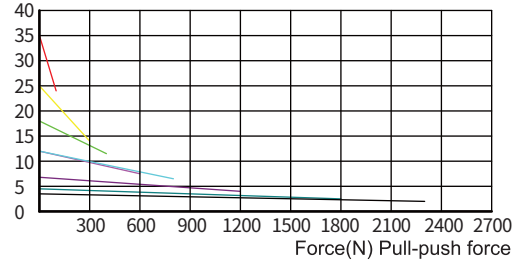

CURVE(Force/ current)

Current(A)-24VDC

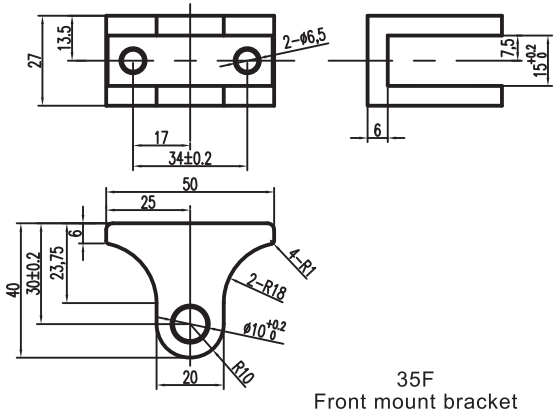



CURVE(Speed/force)

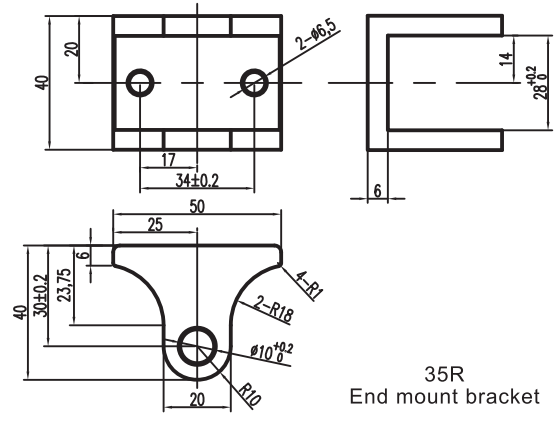
Speed（mm/s）




# Mounting bracket




35F
Front mount bracket




35R
End mount bracket

# Over current protection



## Function

Over current protection can be added to the actuator, when the actuator extends to full stroke or overloaded, it will protect the actuator by limiting motors current. The function of over current protection is to protect the actuator from damage.

## Specifications

| Voltage[V] | Circuit breaking current [A] |
|---|---|
| DC12V | 4.5 |
| DC24V | 2.5 |

## Notes:

- The anode(+) and cathode(-) for input and output circuit can be interchangeable, input voltage is DC12V or DC24V.
- The circuit breaking response time is 0.1-0.5s.
- The ambient temperature range must be -20°C to 60°C and storage temperature is -40°C to +70°C
- Max duty cycle is 10% or 2 minutes in use followed by 18 minutes rest.

# Hall sensor




## Function

Hall sensor can be added to the actuator and the function of hall sensor is to provide a signal feedback to the receiver to judge the motor speed.
If we know how many signals hall sensor can produce in one circle, we will know how many signals the hall sensor can provide to the receiver when the motor runs one circle and then we can control the actuator speed and stroke precisely.

## Calculation

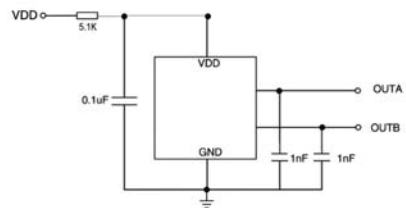
Hall sensor resolution=lead screw pitch/ gear ratio/ pulses per revolution

## Wire diagram

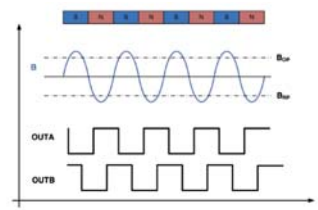
| | |
|---|---|
| White | Hall sensor B Vout |
| Green | Hall sensor A Vout |
| Red | Hall sensor VCC+ |
| Black | Hall sensor GND - |
| Blue | Motor- |
| Brown | Motor+ |

## Circuit diagram

Output circuit




Output wave



# SLA-T38 Linear Actuator

# Data Sheet



## Features & benefits

SLA-T38 is a upgrade version of SLA-T35but with internal limit switches for ends stop.

Thanks to the end limits design, SLA-T38 can make up the inadequacy of SLA-T35 for the two ends protection also a straight moving shaft.

SLA-T38 is a slim in-line actuator with a robust design, high efficiency, hall sensor for positioning and synchronous function.

Also stainless steel version as option for marine and harsh environments.

It's quite suitable for sun shading system, RV, Rehabilitation equipment, industry automation.

# Features and options

| | |
|---|---|
| Max Load in push(N): | 2300N |
| Max Load in pull (N): | 2300N |
| Voltage(V): | 12V/24V |
| No-load current(A): | ⩽0.7A/⩽0.35A |
| Load current(A): | ⩽3.8A/⩽1.8A |
| Max. Power(W): | 50W |
| Material of outer tube: | 6063 Aluminium / 316 stainless steel |
| Material of lead screw: | Trapezoid steel |
| Material of piston rod: | 316 stainless steel |
| Material of the nut: | Engineering plastic |
| Protection Class: | IP66/IP67M/IP69K |
| Noise on load (dB): | ⩽60dB |
| Backlash (mm): | 0.5-1mm |
| Colour: | Black/Silver |
| Stroke length(mm): | ⩽400mm |
| Limit switch: | Built-in |
| Options: | Over current protection<br>Hall sensor<br>Limit switch signal line output<br>Built-in potentiometer |
| Standard cable length(m): | 1.5m (cable length can be customized) |
| On request: | Cable lengths<br>Other stroke lengths available<br>Customized front, rear fixture<br>Installation size<br>Available in all RAL colours |

## Usage

| | |
|---|---|
| Operating temperature(℃): | -20℃~60℃ |
| Storage temperature(℃): | -40℃~70℃ |
| Working duty(S2): | 10%, 2 minutes continuous use followed by 18 minutes in rest |
| Life time(cycles): | ⩾10000 cycles |
| Certification: | CE, RoHS, UL325 |

## Forces and speeds

| Push force [N] | Pull force [N] | Self-locking force [N] | Speed on load-Normal [mm/s] | No load speed –Normal [mm/s] | Speed on load -Low noise [mm/s] | No load speed -Low noise [mm/s] |
|---|---|---|---|---|---|---|
| 100 | 100 | 150 | 24 | 35 | 19 | 25 |
| 300 | 300 | 600 | 14 | 25 | 17 | 25 |
| 400 | 400 | 600 | 11.5 | 18 | 11.5 | 16.5 |
| 600 | 600 | 1600 | 7.5 | 12 | 8.5 | 13 |
| 800 | 800 | 1600 | 6.5 | 12 | 5.5 | 8.5 |
| 1200 | 1200 | 1800 | 4 | 6.8 | 3.5 | 5 |
| 1800 | 1800 | 3600 | 2.5 | 4.5 | 2.5 | 3.3 |
| 2300 | 2300 | 3450 | 2 | 3.5 | 2 | 3.3 |

## Stroke and Weight

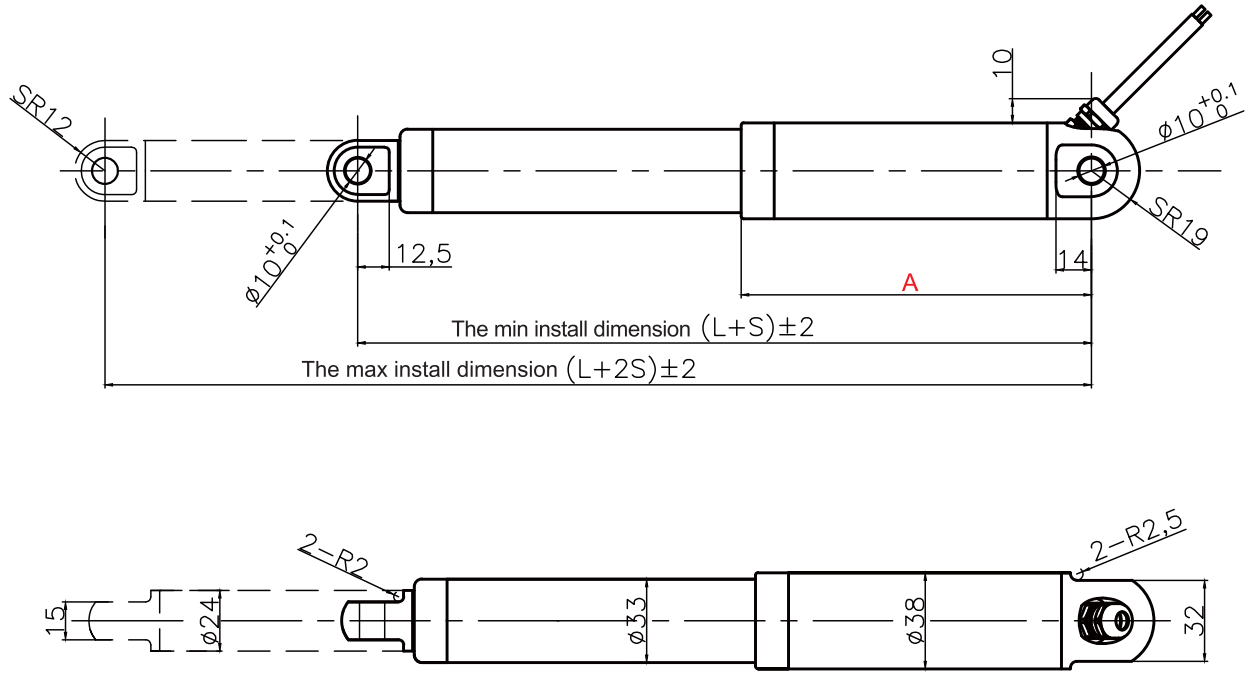
| Stroke(mm) | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 |
|---|---|---|---|---|---|---|---|---|
| AL Weight(kg) | 0.85 | 0.95 | 1.05 | 1.15 | 1.25 | 1.35 | 1.45 | 1.65 |
| S/S Weight(kg) | 1.2 | 1.35 | 1.5 | 1.65 | 1.8 | 1.95 | 2.1 | 2.25 |

## Built-in dimensions

| Option | | Minimum BID[mm] | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Standard | Low noise version | IP67M/ IP69K | Hall sensor | Over current protection | Signal line output | Built-in poten-tiometer |
| Force⩽800N | L+S | 200+S | 210+S | 220+S | 220+S | 220+S | 210+S | 220+S |
| | A | 128.5 | 138.5 | 128.5 | 148.5 | 148.5 | 138.5 | 148.5 |
| Force>800N | L+S | 210+S | 220+S | 230+S | 230+S | 230+S | 220+S | 230+S |
| | A | 138.5 | 148.5 | 138.5 | 158.5 | 158.5 | 148.5 | 158.5 |

Notes: For any special installation size needs, please contact us.

# Dimensions

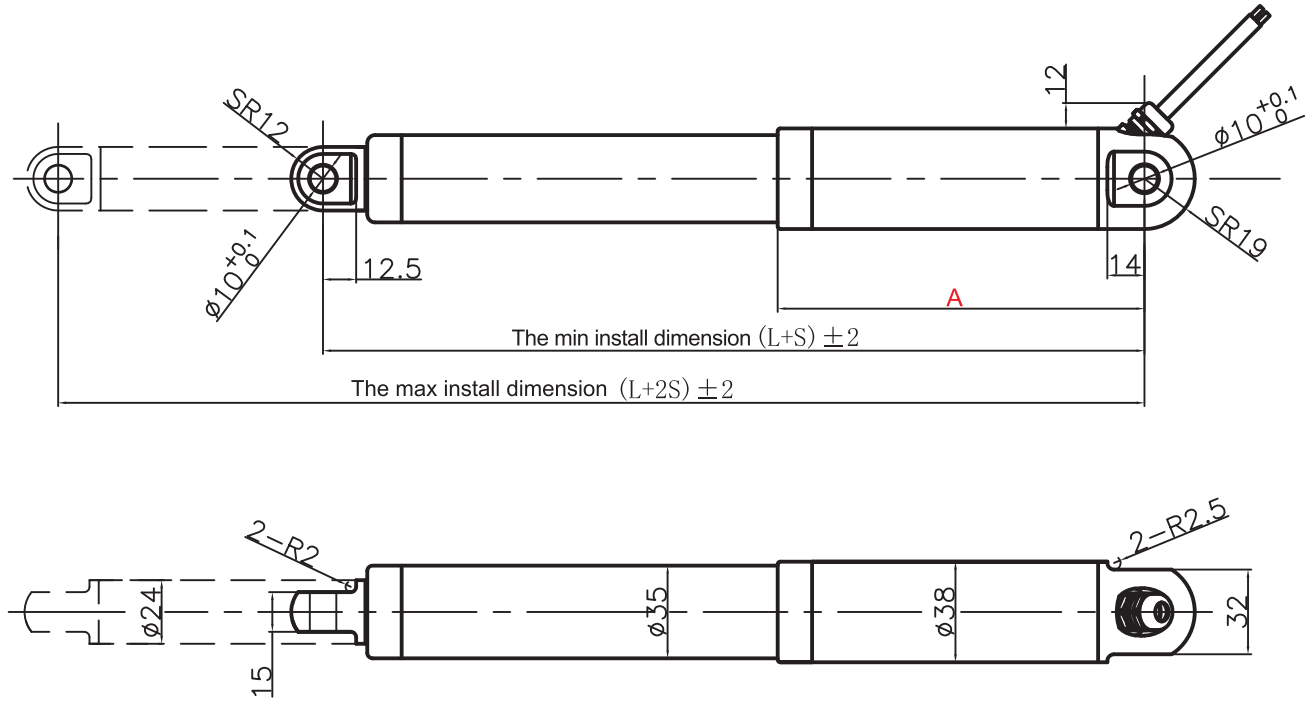



## Aluminum Version (mm)

Standard means without any additional function(Over current protection,hall sensor)

The dimensional tolerance not shown in the drawing can refer to ISO2768-mk

# Dimensions



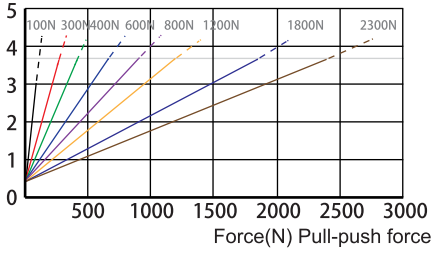

## Stainless Steel Version（mm）

Standard means without any additional function(Over current protection,hall sensor)

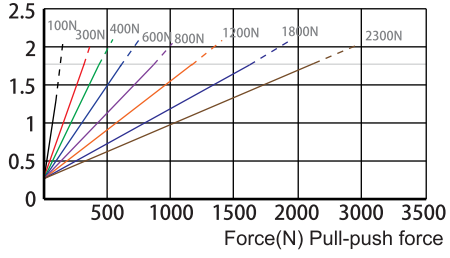
The dimensional tolerance not shown in the drawing can refer to ISO2768-mk

# Speed and load curves

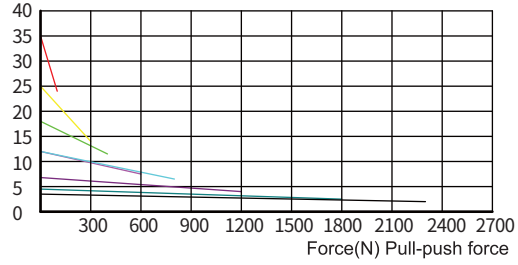
CURVE(Force/ current)



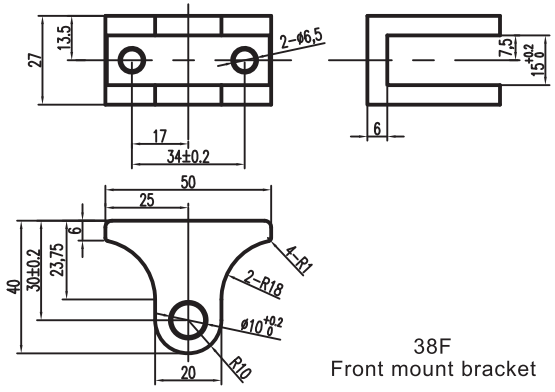

CURVE(Force/ current)



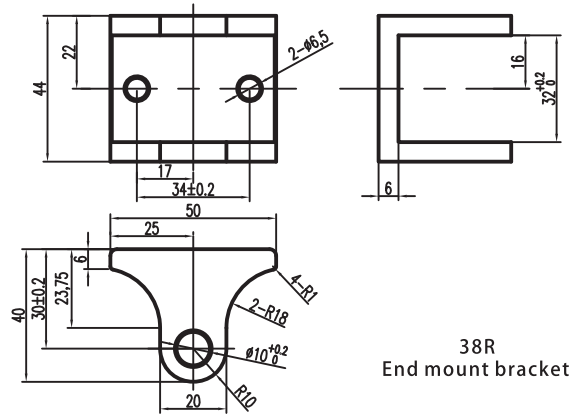

CURVE(Speed/force)




# Mounting bracket




38F
Front mount bracket




38R
End mount bracket

# Over current protection



## Function

Over current protection can be added to the actuator, when the actuator extends to full stroke or overloaded, it will protect the actuator by limiting motors current. The function of over current protection is to protect the actuator from damage.

## Specifications

| Voltage[V] | Circuit breaking current [A] |
|---|---|
| DC12V | 4.5 |
| DC24V | 2.5 |

## Notes:

- The anode(+) and cathode(-) for input and output circuit can be interchangeable, input voltage is DC12V or DC24V.
- The circuit breaking response time is 0.1-0.5s.
- The ambient temperature range must be -20°C to 60°C and storage temperature is -40°C to +70°C
- Max duty cycle is 10% or 2 minutes in use followed by 18 minutes rest.

# Hall sensor




## Function

Hall sensor can be added to the actuator and the function of hall sensor is to provide a signal feedback to the receiver to judge the motor speed.
If we know how many signals hall sensor can produce in one circle, we will know how many signals the hall sensor can provide to the receiver when the motor runs one circle and then we can control the actuator speed and stroke precisely.

## Calculation

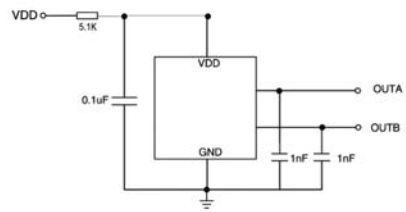
Hall sensor resolution=lead screw pitch/ gear ratio/ pulses per revolution

## Wire diagram

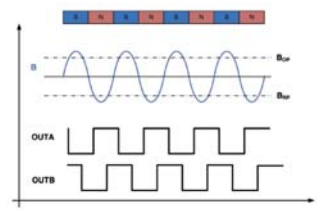
| | |
|---|---|
| White | Hall sensor B Vout |
| Green | Hall sensor A Vout |
| Red | Hall sensor VCC+ |
| Black | Hall sensor GND - |
| Blue | Motor- |
| Brown | Motor+ |

## Circuit diagram

Output circuit



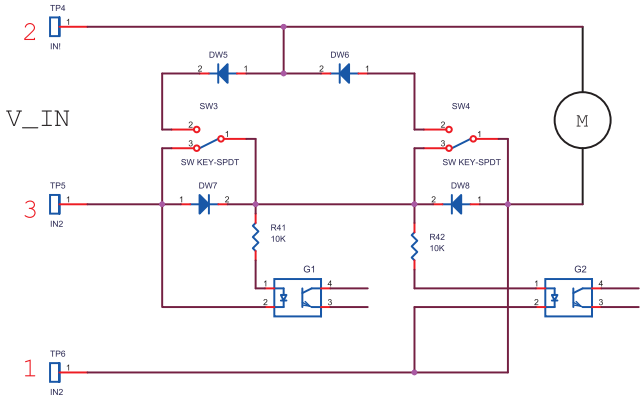

Output wave



# Limit switch wires output

Limit switch can be added to the actuator to test whether the actuator moves to the limit position. The principle is that when the object touches the limit switch, the normally open point of the switch closes and the normally closed point turns off to control circuit or receive signals.

Method 1: Optocoupler Output

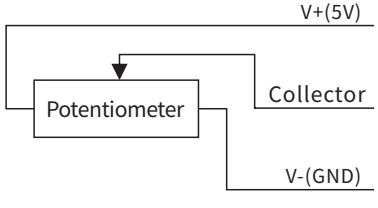



Each optocoupler output is activated when the corresponding limit switch is triggered.

# Potentiometer

Potentiometer Function:

The actuator can be equipped with a potentiometer to feedback the actual stroke position in real time. It outputs an accurate signal to reflect the extension and retraction status of the push rod, helping to realize precise position control and stable operation of the actuator.




Potentiometer Wiring Diagram

SLA-T38P Linear Actuator

# Data Sheet



## Features & benefits

SLA-T38P is created specially for the bioclimatic pergola, where the water proof, elegant design, trouble free, compact size are crucial.

With max load capacity 2500N, customized stroke length and forces, the SLA-T38P can be used for different types and sizes of the bioclimatic pergolas.

SLA-T38P can withstand very harsh environments because of its IP67M, IP69K protection design and special materials used to fit the pergola market.

Maintenance-free, Easy Installation, Trouble free are also the main features.

SLA-T38P can work smoothly, quietly and precisely to guarantee its excellent performance on world famous brands pergola.

5 years warranty is offered.

# Features and options

| | |
|---|---|
| Max Load in push(N): | 2500N |
| Max Load in pull (N): | 2500N |
| Voltage(V): | 12V/24V |
| No-load current(A): | ⩽1.2A/⩽0.6A |
| Load current(A): | ⩽3.8A/⩽1.8A |
| Max. Power(W): | 50W |
| Material of outer tube: | 6063 Aluminium / 316 stainless steel |
| Material of lead screw: | #45 steel |
| Material of piston rod: | 304/316 stainless steel |
| Material of the nut: | Engineering plastic |
| Protection Class: | IP67M/IP69K |
| Noise on load (dB): | ⩽56dB |
| Backlash (mm): | 0.5-1mm |
| Colour: | Black/Silver/Metal colour |
| Stroke length(mm): | ⩽500mm |
| Limit switch: | Built-in |
| Options: | Over current protection<br>Hall sensor<br>Limit switch signal line output |
| Standard cable length(m): | 1.5m (cable length can be customized) |
| On request: | Cable lengths<br>Other stroke lengths available<br>Customized front, rear fixture<br>Installation size<br>Available in all RAL colours |

## Usage

| | |
|---|---|
| Operating temperature(℃): | -20℃~60℃ |
| Storage temperature(℃): | -40℃~70℃ |
| Working duty(S2): | 10%, 2 minutes continuous use followed by 18 minutes in rest |
| Life time(cycles): | ⩾10000 cycles |
| Certification: | CE, RoHS, UL325 |

## Forces and speeds

| Push force [N] | Pull force [N] | Self-locking force [N] | Speed on load [mm/s] | No load speed [mm/s] |
|---|---|---|---|---|
| 600 | 600 | 600 | 8.5 | 13 |
| 800 | 800 | 800 | 5.5 | 8.5 |
| 1200 | 1200 | 1200 | 3.5 | 5 |
| 1500 | 1500 | 1500 | 3 | 5 |
| 2000 | 2000 | 2000 | 2.3 | 3.3 |
| 2500 | 2500 | 2500 | 1.9 | 3.3 |

## Stroke and Weight

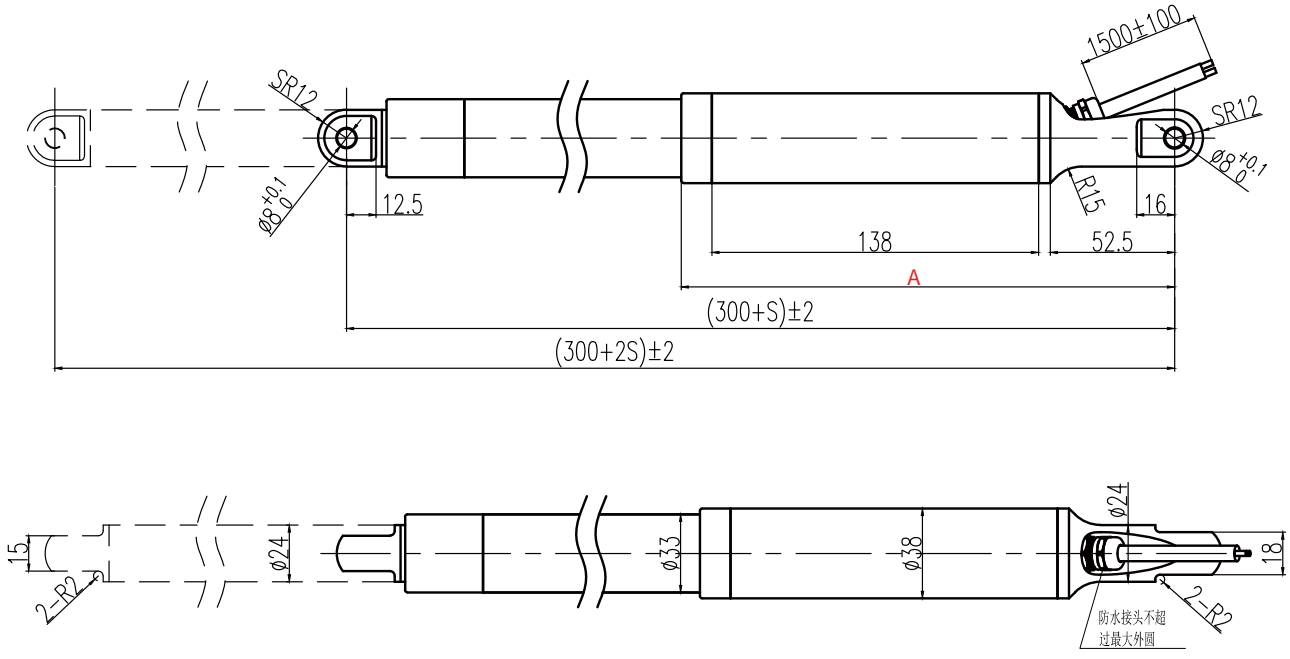
| Stroke(mm) | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 |
|---|---|---|---|---|---|---|---|---|
| AL Weight(kg) | 0.9 | 1 | 1.1 | 1.2 | 1.3 | 1.4 | 1.5 | 1.6 |
| S/S Weight(kg) | 1.5 | 1.65 | 1.8 | 1.95 | 2.1 | 2.25 | 2.4 | 2.55 |

## Built-in dimensions

| Option | Minimum BID[mm] | A |
|---|---|---|
| Standard | 300+stroke length | 208.5 |
| IP67M/69K | 300+stroke length | 208.5 |
| Hall sensor | 300+stroke length | 208.5 |
| Over current protection | 300+stroke length | 208.5 |
| Signal line output | 300+stroke length | 208.5 |

Notes: For any special installation size needs, please contact us.

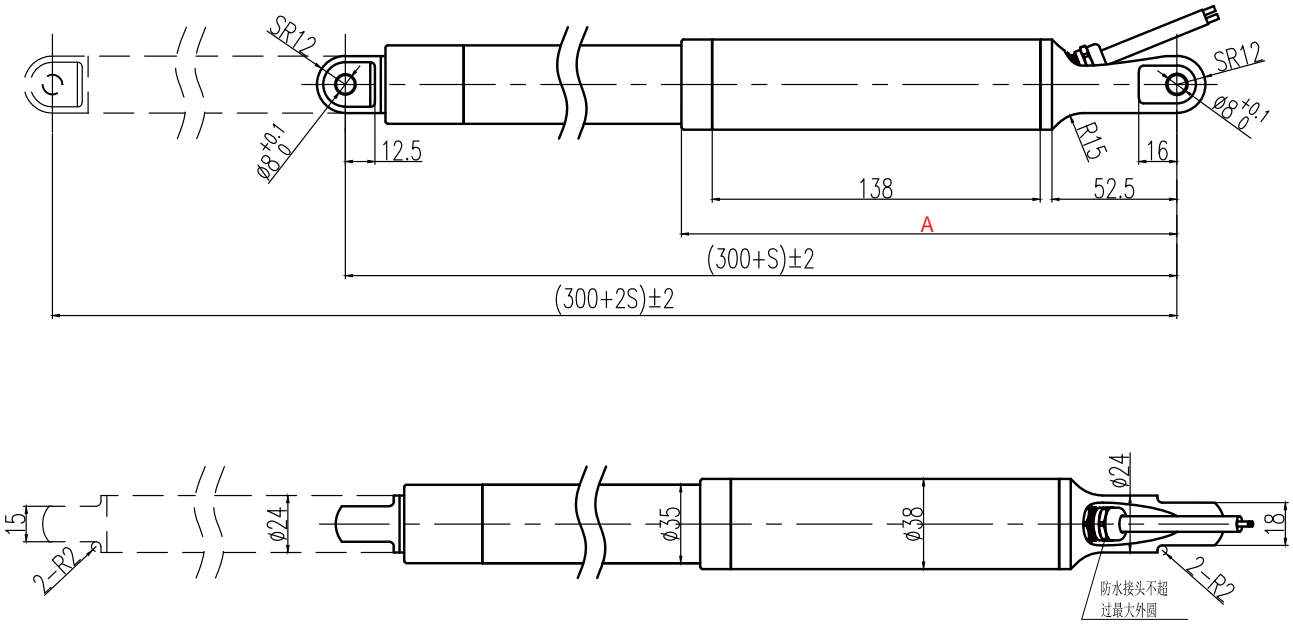
# Dimensions




## Aluminum Version (mm)

The dimensional tolerance not shown in the drawing can refer to ISO2768-mk

# Dimensions



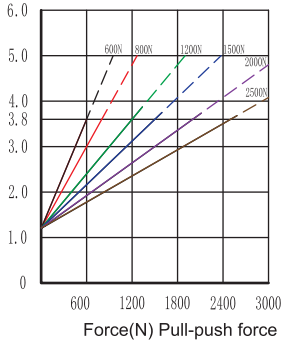

Stainless Steel Version（mm）

The dimensional tolerance not shown in the drawing can refer to ISO2768-mk

# Speed and load curves

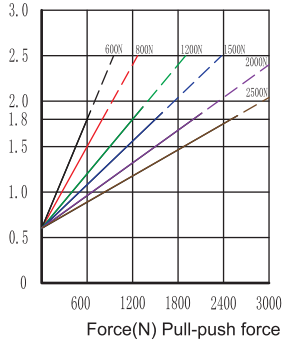
CURVE(Force/ current)

Current(A)-12VDC



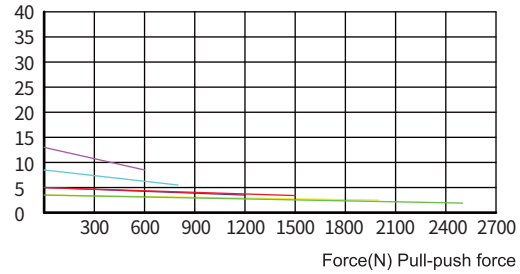

CURVE(Force/ current)

Current(A)-24VDC

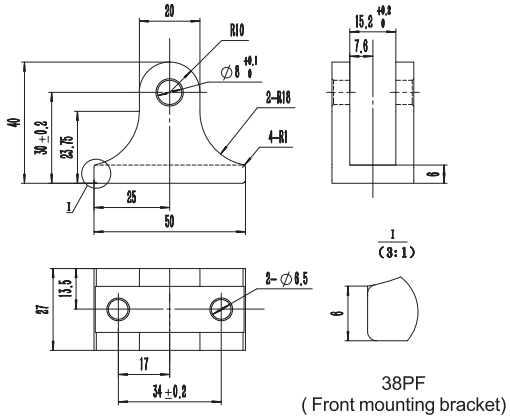



CURVE(Speed/force)

Speed （mm/s）

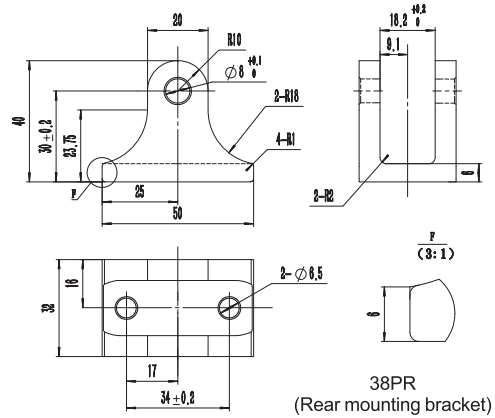



# Mounting bracket




38PF

( Front mounting bracket)




38PR

(Rear mounting bracket)

# Over current protection



## Function

Over current protection can be added to the actuator, when the actuator extends to full stroke or overloaded, it will protect the actuator by limiting motors current. The function of over current protection is to protect the actuator from damage.

## Specifications

| Voltage[V] | Circuit breaking current [A] |
|---|---|
| DC12V | 4.5 |
| DC24V | 2.5 |

## Notes:

- The anode(+) and cathode(-) for input and output circuit can be interchangeable, input voltage is DC12V or DC24V.
- The circuit breaking response time is 0.1-0.5s.
- The ambient temperature range must be -20°C to 60°C and storage temperature is -40°C to +70°C
- Max duty cycle is 10% or 2 minutes in use followed by 18 minutes rest.

# Hall sensor




## Function

Hall sensor can be added to the actuator and the function of hall sensor is to provide a signal feedback to the receiver to judge the motor speed.
If we know how many signals hall sensor can produce in one circle, we will know how many signals the hall sensor can provide to the receiver when the motor runs one circle and then we can control the actuator speed and stroke precisely.

## Calculation

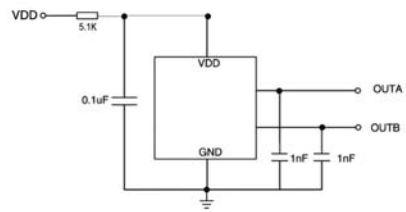
Hall sensor resolution=lead screw pitch/ gear ratio/ pulses per revolution

## Wire diagram

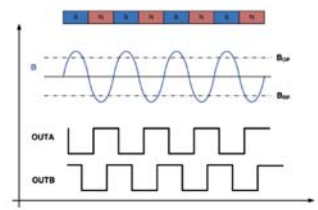
| | |
|---|---|
| White | Hall sensor B Vout |
| Green | Hall sensor A Vout |
| Red | Hall sensor VCC+ |
| Black | Hall sensor GND - |
| Blue | Motor- |
| Brown | Motor+ |

## Circuit diagram

Output circuit



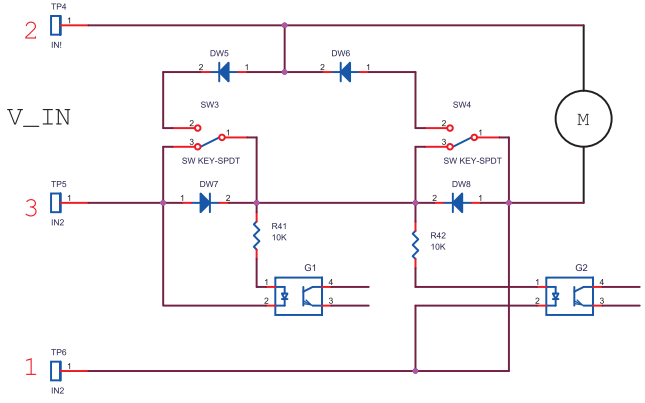

Output wave



# Limit switch wires output

Limit switch can be added to the actuator to test whether the actuator moves to the limit position. The principle is that when the object touches the limit switch, the normally open point of the switch closes and the normally closed point turns off to control circuit or receive signals.

Method 1: Optocoupler Output




Each optocoupler output is activated when the corresponding limit switch is triggered.

SLA-T45 Linear Actuator

# Data Sheet

## Features & benefits

230VAC input power that enables a constant speed.

Very slim in-line design for limited space installation, water proof with IP67M protection for outdoor applications.

Stainless steel version as option for harsh environments.

It's quite suitable for dynamic facades, sun shading system, window adjustment, ventilation systems.



# Features and options

| | |
|---|---|
| Max Load in push(N): | 1500N |
| Max Load in pull (N): | 1500N |
| Voltage(V): | 230VAC |
| No-load current(A): | ⩽0.7A |
| Load current(A): | ⩽0.7A |
| Max. Power(W): | 160W |
| Material of outer tube: | 6063 Aluminium |
| Material of lead screw: | #45 steel |
| Material of piston rod: | 316 stainless steel |
| Material of the nut: | Engineering plastic |
| Protection Class: | IP66/IP67M |
| Noise on load (dB): | ⩽60dB |
| Backlash (mm): | 0.5-1mm |
| Colour: | Black/Silver |
| Stroke length(mm): | ⩽300mm |
| Limit switch: | Built-in |
| Standard cable length(m): | 1.5m (cable length can be customized) |
| On request: | Cable lengths<br>Other stroke lengths available<br>Customized front, rear fixture<br>Installation size<br>Available in all RAL colours |

## Forces and speeds

| Push force [N] | Pull force [N] | Self-locking force [N] | Speed on load [mm/s] | No load speed [mm/s] |
|---|---|---|---|---|
| 400 | 400 | 400 | 7 | 9 |
| 650 | 650 | 650 | 6.5 | 9 |
| 800 | 800 | 800 | 6 | 9 |
| 1500 | 1500 | 1500 | 3.5 | 4.5 |

## Stroke and Weight

| Stroke(mm) | 50 | 100 | 150 | 200 | 250 | 300 | - | - |
|---|---|---|---|---|---|---|---|---|
| AL Weight(kg) | 1.35 | 1.55 | 1.75 | 1.95 | 2.15 | 2.35 | - | - |

## Built-in dimensions

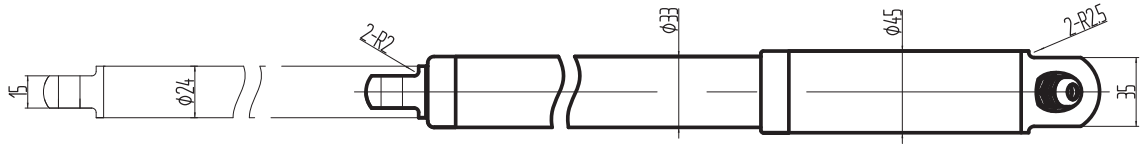
| Option | Minimum BID[mm] | A |
|---|---|---|
| Standard | 410+stroke length | 338.5 |
| IP66/IP67M | 430+stroke length | 338.5 |

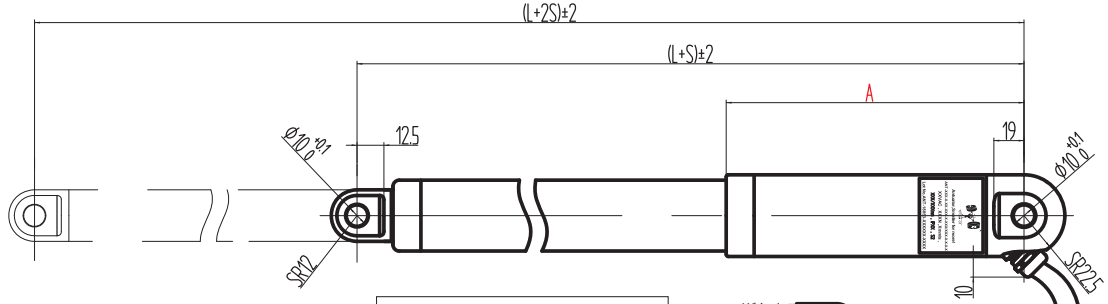
Notes: For any special installation size needs, please contact us.

## Usage

| | |
|---|---|
| Operating temperature(℃): | -20℃~85℃ |
| Storage temperature(℃): | -40℃~70℃ |
| Working duty(S2): | 10%, 2 minutes continuous use followed by 18 minutes in rest |
| Life time(cycles): | ⩾10000 cycles |
| Certification: | CE |

# Dimensions




| 4-core Cable Parameters (bare wires) | | | |
|---|---|---|---|
| NO. | Wire color | Wire diagram | Conductor size |
| 1 | White | Common Line | 0.68mm² |
| 2 | Red | Turn around | 0.68mm² |
| 3 | Black | Reverses | 0.68mm² |
| 4 | Yellow | Earthing wire | 0.68mm² |
| Extend | | Turn around | |
| Retract | | Reverses | |

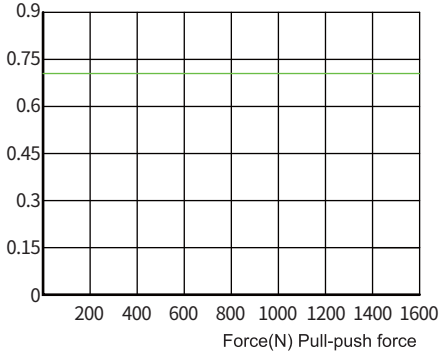
## Standard Dimensional Drawing (mm)

Standard means without any additional function(Over current protection,hall sensor)
The dimensional tolerance not shown in the drawing can refer to ISO2768-mk

# Speed and load curves

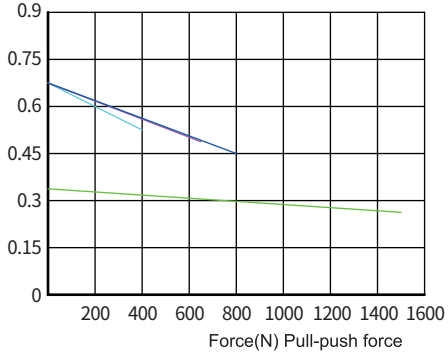
CURVE(Force/ current)

Current(A)-230VAC




CURVE(Speed/force)

Speed（mm/s）



SLA-T52 Linear Actuator

# Data Sheet

## Features & benefits

SLA-T52is a powerful in-line linear actuator with max load capacity 6000N.

Thanks to its clean design, high load capacity, IP67M protection, synchronous working.

SLA-T52 is ideal for outdoor applications where the actuators will be visible, such as skylight, smoke vent system, yacht automation, agricultural machine.



# Features and options

| | |
|---|---|
| Max Load in push(N): | 6000N |
| Max Load in pull (N): | 6000N |
| Voltage(V): | 12V/24V |
| No-load current(A): | ⩽1.6A/⩽0.8A |
| Load current(A): | ⩽10A/⩽5A |
| Max. Power(W): | 120W |
| Material of outer tube: | 6063 Aluminium / 316 stainless steel |
| Material of lead screw: | Trapezoid steel |
| Material of piston rod: | 316 stainless steel |
| Material of the nut: | Engineering plastic |
| Protection Class: | IP66/IP67M/IP69K |
| Noise on load (dB): | ⩽75dB |
| Backlash (mm): | 0.5-1mm |
| Colour: | Black/Silver |
| Stroke length(mm): | ⩽500mm |
| Limit switch | Built-in |
| Options: | Over current protection |
| | Hall sensor |
| | Limit switch signal line output |
| Standard cable length(m): | 1.5m (cable length can be customized) |
| On request: | Cable lengths |
| | Other stroke lengths available |
| | Customized front, rear fixture |
| | Installation size |
| | Available in all RAL colours |

## Usage

| | |
|---|---|
| Operating temperature(℃): | -20℃~60℃ |
| Storage temperature(℃): | -40℃~70℃ |
| Working duty(S2): | 10%, 2 minutes continuous use followed by 18 minutes in rest |
| Life time(cycles): | ⩾10000 cycles |
| Certification: | CE, RoHS |

## Forces and speeds

| Push force [N] | Pull force [N] | Self-locking force [N] | Speed on load [mm/s] | No load speed [mm/s] |
|---|---|---|---|---|
| 300 | 300 | 600 | 50 | 88 |
| 1200 | 1200 | 2400 | 13 | 24 |
| 1800 | 1800 | 3600 | 9.5 | 16 |
| 3000 | 3000 | 6000 | 5.5 | 9.6 |
| 4500 | 4500 | 8000 | 3.5 | 6.4 |
| 5000 | 5000 | 7500 | 2.8 | 4.8 |
| 6000 | 6000 | 8000 | 2.5 | 4.8 |

## Stroke and Weight

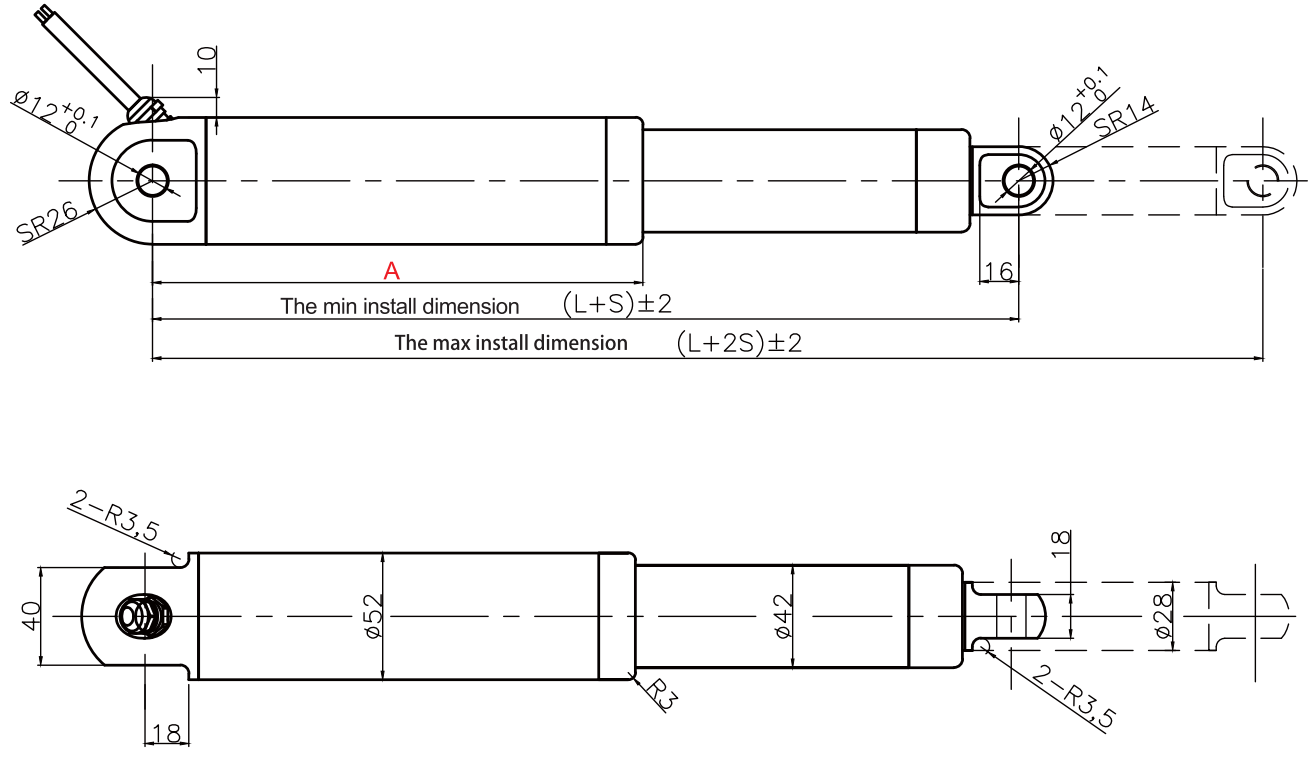
| Stroke(mm) | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 |
|---|---|---|---|---|---|---|---|---|
| AL Weight(kg) | 1.8 | 1.9 | 2 | 2.1 | 2.2 | 2.3 | 2.4 | 2.5 |
| S/S Weight(kg) | 3.95 | 4.15 | 4.35 | 4.55 | 4.75 | 4.95 | 5.15 | 5.35 |

## Built-in dimensions

| Option | Minimum BID[mm] | A |
|---|---|---|
| Standard | 305+stroke length | 201 |
| IP67M/69K | 325+stroke length | 221 |
| Hall sensor | 325+stroke length | 221 |
| Over current protection | 325+stroke length | 221 |
| Signal line output | 325+stroke length | 221 |

Notes: For any special installation size needs, please contact us.

# Dimensions

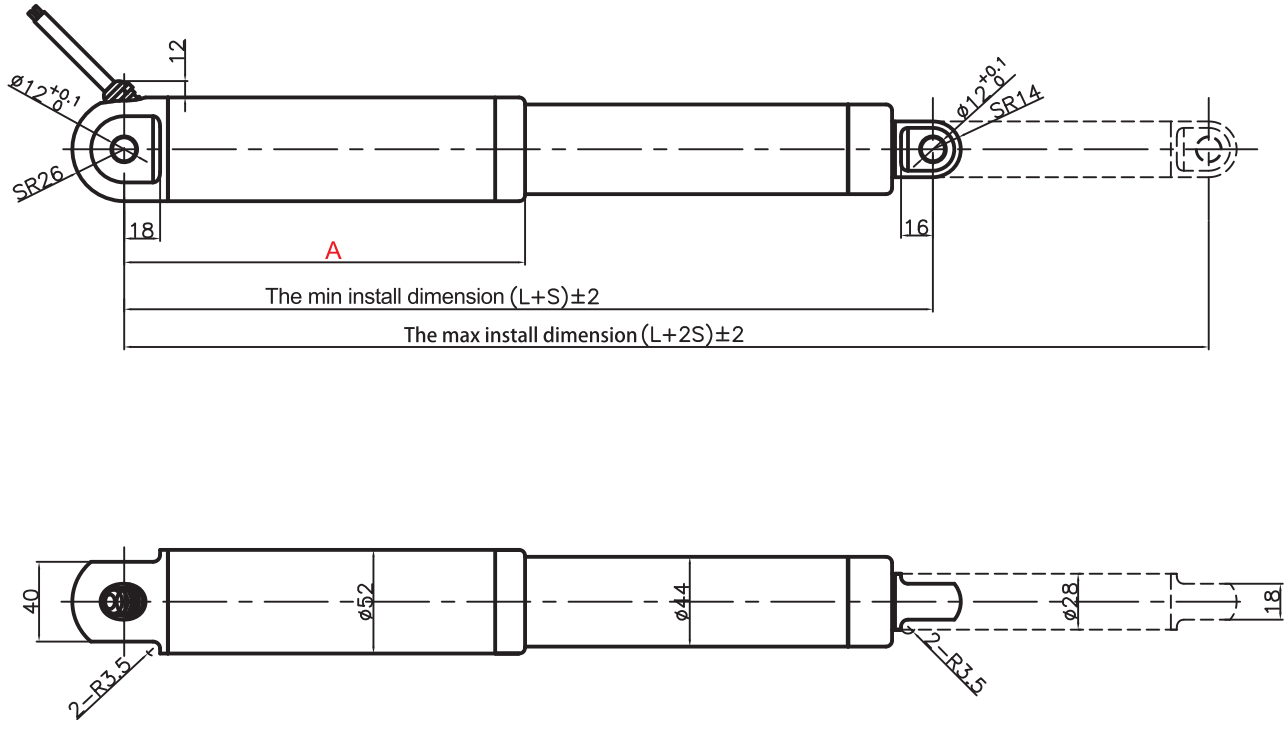



## Aluminum Version (mm)

Standard means without any additional function(Over current protection,hall sensor)

The dimensional tolerance not shown in the drawing can refer to ISO2768-mk

# Dimensions




## Stainless Steel Version（mm）

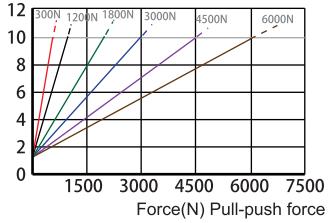
Standard means without any additional function(Over current protection,hall sensor)

The dimensional tolerance not shown in the drawing can refer to ISO2768-mk

# Speed and load curves

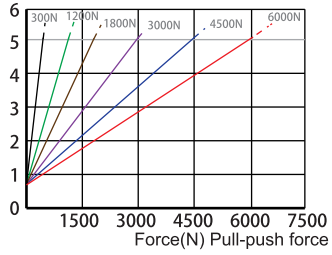
CURVE(Force/ current)

Current(A)-12VDC



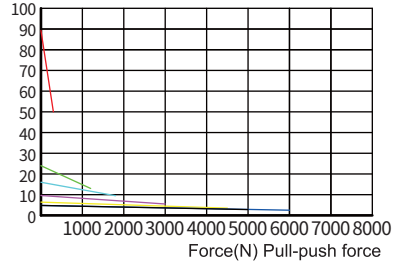

CURVE(Force/ current)

Current(A)-24VDC




CURVE(Speed/force)

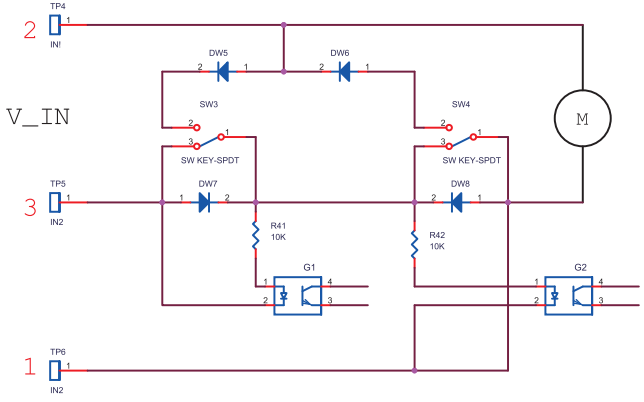
Speed （mm/s）




# Limit switch wires output

Limit switch can be added to the actuator to test whether the actuator moves to the limit position. The principle is that when the object touches the limit switch, the normally open point of the switch closes and the normally closed point turns off to control circuit or receive signals.

Method 1: Optocoupler Output




Each optocoupler output is activated when the corresponding limit switch is triggered.

# Over current protection



## Function

Over current protection can be added to the actuator, when the actuator extends to full stroke or overloaded, it will protect the actuator by limiting motors current. The function of over current protection is to protect the actuator from damage.

## Specifications

| Voltage[V] | Circuit breaking current [A] |
|---|---|
| DC12V | 12 |
| DC24V | 6 |

## Notes:

- The anode(+) and cathode(-) for input and output circuit can be interchangeable, input voltage is DC12V or DC24V.
- The circuit breaking response time is 0.1-0.5s.
- The ambient temperature range must be -20°C to 60°C and storage temperature is -40°C to +70°C
- Max duty cycle is 10% or 2 minutes in use followed by 18 minutes rest.

# Hall sensor



## Function

Hall sensor can be added to the actuator and the function of hall sensor is to provide a signal feedback to the receiver to judge the motor speed.
If we know how many signals hall sensor can produce in one circle, we will know how many signals the hall sensor can provide to the receiver when the motor runs one circle and then we can control the actuator speed and stroke precisely.

## Calculation

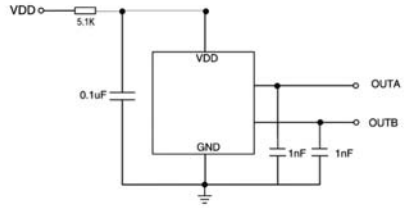
Hall sensor resolution=lead screw pitch/ gear ratio/ pulses per revolution

## Wire diagram

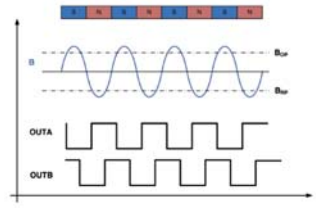
| | |
|---|---|
| White | Hall sensor B Vout |
| Green | Hall sensor A Vout |
| Red | Hall sensor VCC+ |
| Black | Hall sensor GND - |
| Blue | Motor- |
| Brown | Motor+ |

## Circuit diagram

Output circuit




Output wave



SLA-T52M Linear Actuator

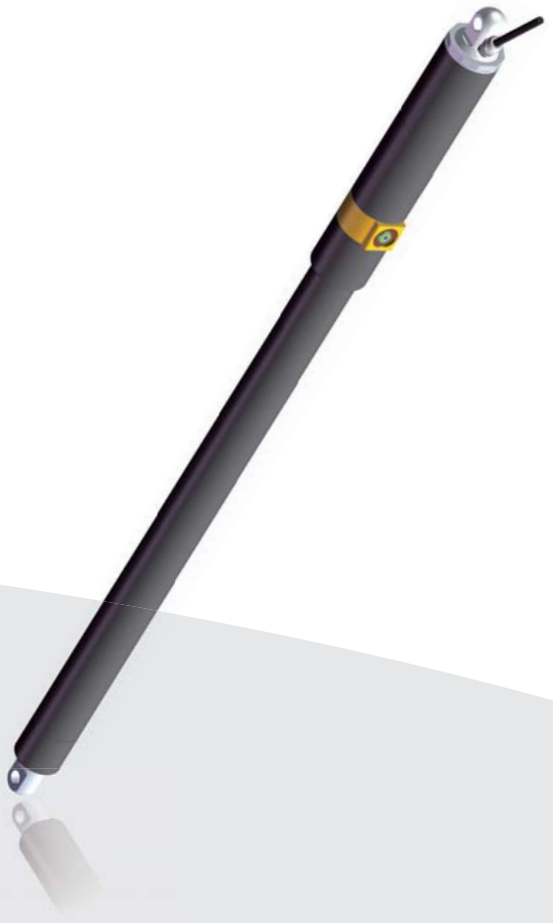
# Data Sheet

## Features & benefits

SLA-T52M is an in-line linear actuator with an integrated manual emergency override.

Thanks to its built-in hand crank, compact design, IP67M protection and reliable performance, the actuator can still be operated manually during power outages, ensuring equipment remains accessible when needed.

SLA-T52M is ideal for camper van pop-up roofs, motorhome roof lift systems, skylights, roof vents, yacht hatches, marine equipment, industrial access covers and other emergency opening applications.



# Features and options

| | |
|---|---|
| Max Load in push(N): | 1800N |
| Max Load in pull (N): | 1800N |
| Voltage(V): | 12V/24V |
| No-load current(A): | ⩽2A/⩽0.8A |
| Load current(A): | ⩽11A/⩽5A |
| Max. Power(W): | 160W |
| Material of outer tube: | 6063 Aluminium |
| Material of lead screw: | #45 steel |
| Material of piston rod: | 316 stainless steel |
| Material of the nut: | Engineering plastic |
| Protection Class: | IP66/IP67M |
| Noise on load (dB): | ⩽65dB |
| Backlash (mm): | 0.5-1mm |
| Colour: | Black |
| Stroke length(mm): | ⩽600mm |
| Options: | Hall sensor |
| Standard cable length(m): | ⩾300mm(cable length can be customized) |
| On request: | Cable lengths |
| | Other stroke lengths available |
| | Customized front, rear fixture |
| | Installation size |
| | Available in all RAL colours |

## Usage

| | |
|---|---|
| Operating temperature(℃): | -20℃~60℃ |
| Storage temperature(℃): | -40℃~70℃ |
| Working duty(S2): | 11%, 2 minutes continuous use followed by 18 minutes in rest |
| Life time(cycles): | ⩾200 hours |

## Forces and speeds

| Push force [N] | Pull force [N] | Self-locking force [N] | Speed on load [mm/s] | No load speed [mm/s] |
|---|---|---|---|---|
| 300 | 300 | 600 | 47 | 88 |
| 1200 | 1200 | ⩾2000 | 14 | 23 |
| 1800 | 1800 | ⩾2000 | 10 | 15 |

## Stroke and Weight

| Stroke(mm) | 200 | 300 | 400 | 500 | 600 |
|---|---|---|---|---|---|
| AL Weight(kg) | 3.5 | 3.7 | 3.9 | 4.1 | 4.3 |

## Built-in dimensions

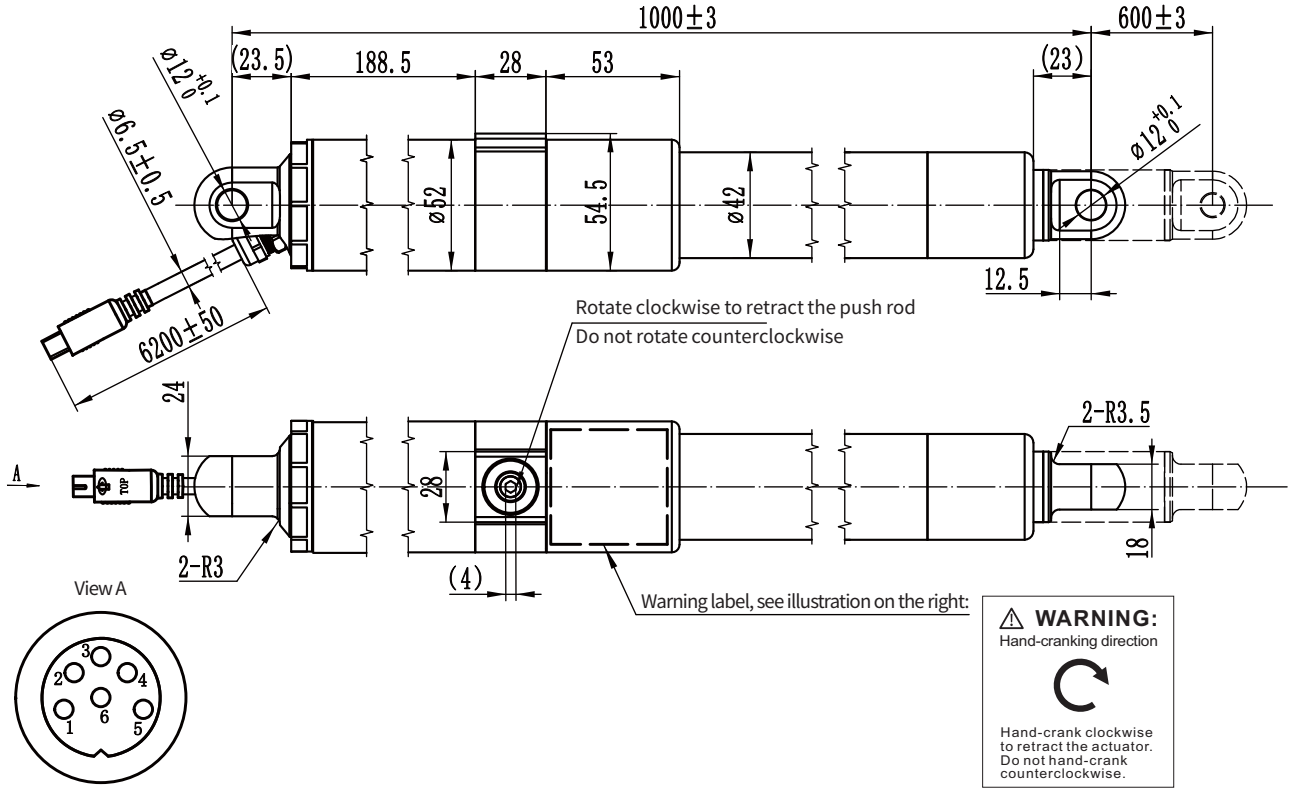
| Option | Minimum BID[mm] |
|---|---|
| Standard | 400+stroke length |
| Hall sensor | 400+stroke length |

Notes: For any special installation size needs, please contact us.

## Manual Override Performance

| Operating Tool | Input Speed | Retraction Speed | Time to Fully Retract (500 mm Stroke) |
|---|---|---|---|
| Electric Drill | 1600 rpm | 9.64 mm/s | 51 s |
| Wrench | — | Approx. 3 mm/s | Approx. 3 min |

# Dimensions



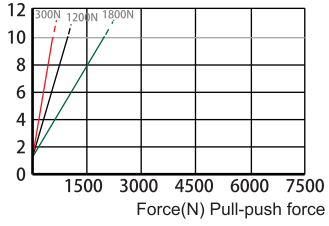

## Standard Dimensional Drawing (mm)

Standard means without any additional function(Over current protection,hall sensor)
The dimensional tolerance not shown in the drawing can refer to ISO2768-mk

# Speed and load curves

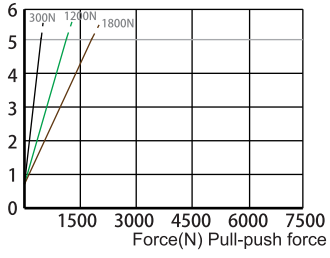
CURVE(Force/ current)

Current(A)-12VDC



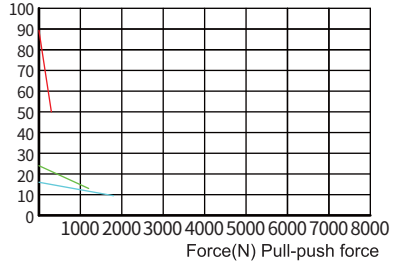

CURVE(Force/ current)

Current(A)-24VDC




CURVE(Speed/force)

Speed（mm/s）



# Hall sensor



## Function

Hall sensor can be added to the actuator and the function of hall sensor is to provide a signal feedback to the receiver to judge the motor speed.
If we know how many signals hall sensor can produce in one circle, we will know how many signals the hall sensor can provide to the receiver when the motor runs one circle and then we can control the actuator speed and stroke precisely.

## Calculation

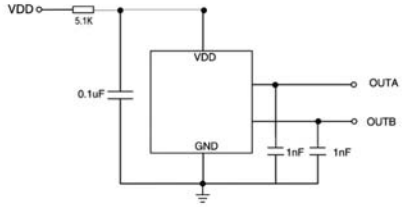
Hall sensor resolution=lead screw pitch/ gear ratio/ pulses per revolution

## Wire diagram

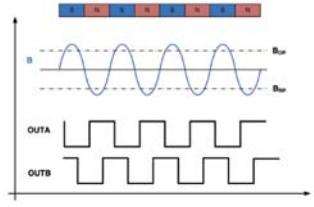
| | |
|---|---|
| White | Hall sensor B Vout |
| Green | Hall sensor A Vout |
| Red | Hall sensor VCC+ |
| Black | Hall sensor GND - |
| Blue | Motor- |
| Brown | Motor+ |

## Circuit diagram

Output circuit




Output wave



SLA-T63 Linear Actuator

# Data Sheet



## Features & benefits

This trim tab actuators are precision-engineered to combine quiet operation with a non-hydraulic, maintenance free design.

A strong planetary gearbox is used to guarantee the life time of the actuator when a high load on the trim tab.

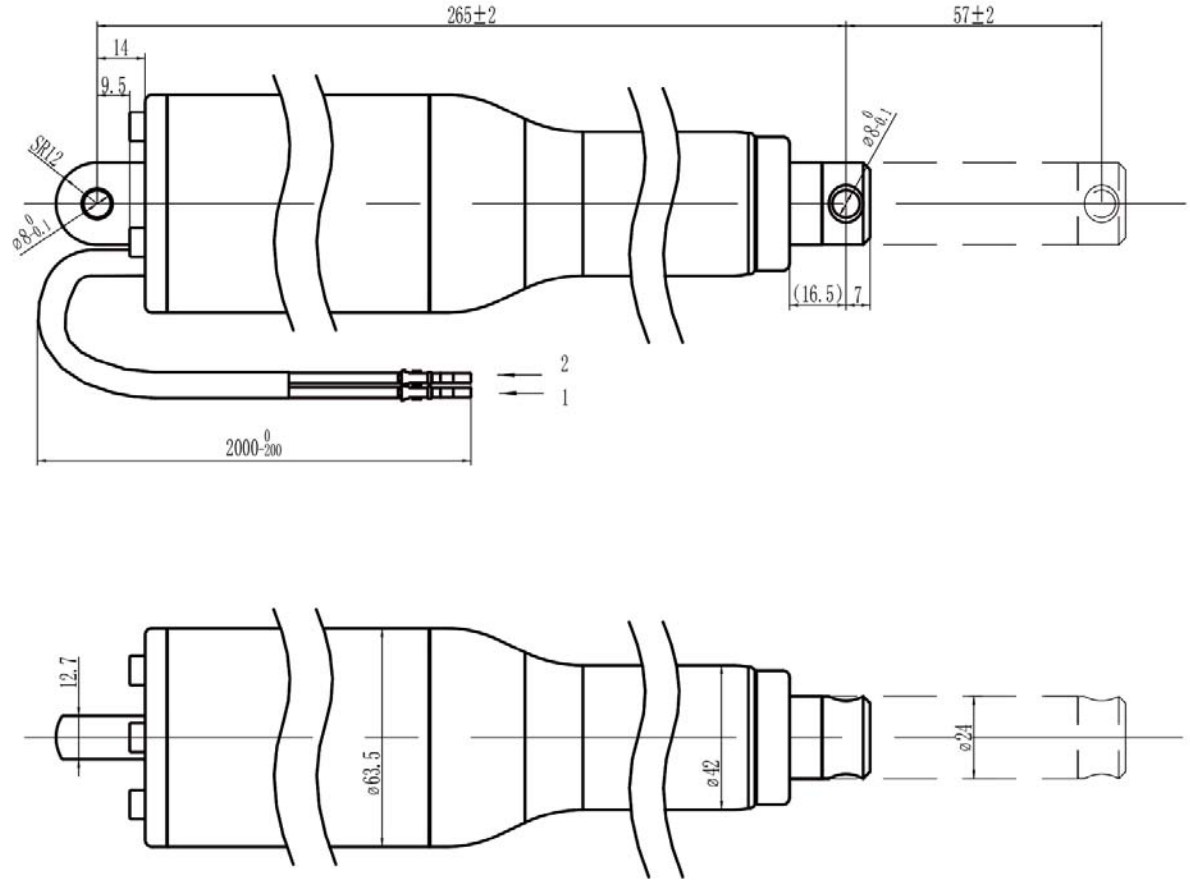
Internal limit switches for both ends as the protection to ensure reliable performance.

The unit is totally corrosion free and water proof with IP67M.Unlike hydraulic trim tabs, there is no oil to leak out with ANTUATOR trim tab actuators.

5 years warranty is offered.

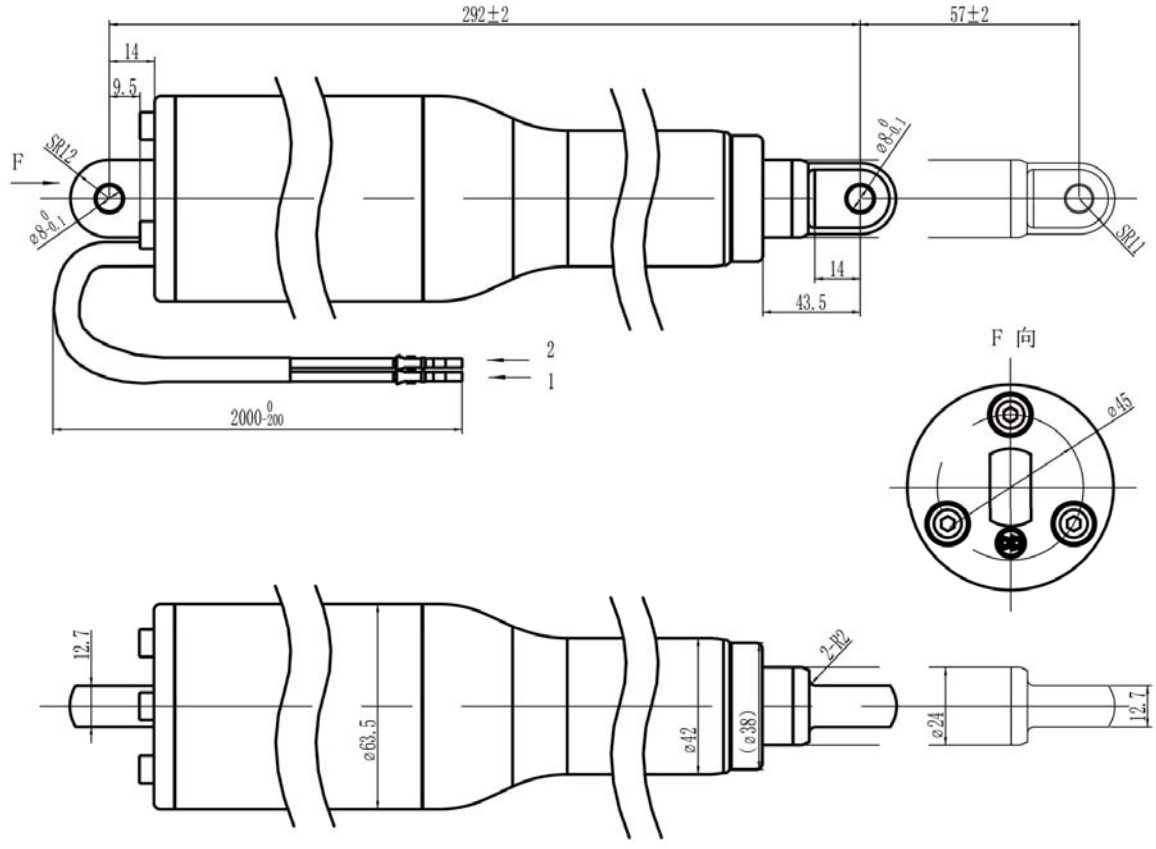
# Dimensions

SLA-T63AL-01



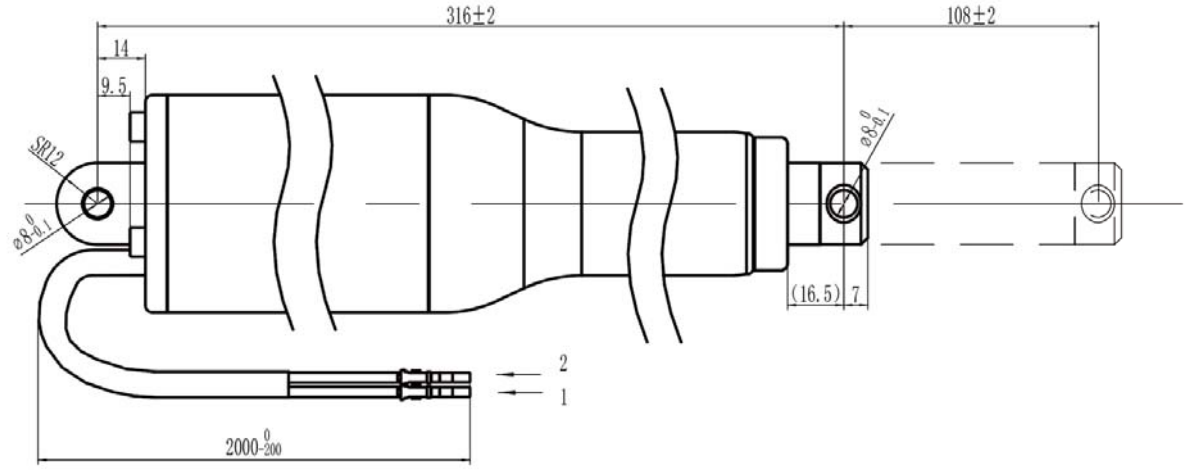
# Dimensions

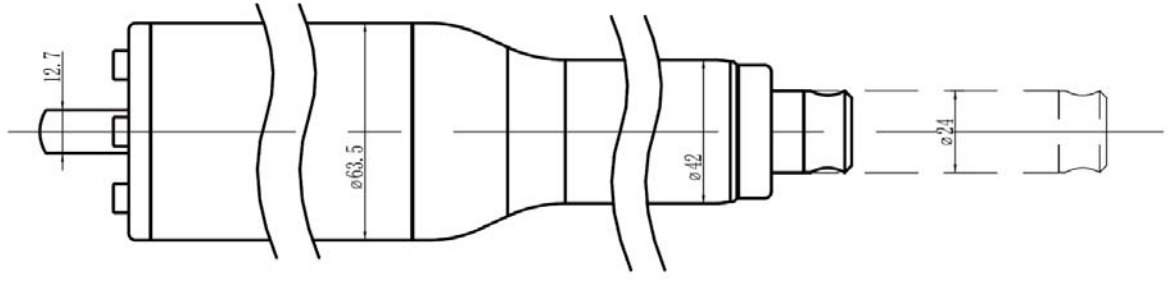
SLA-T63AL-02



# Dimensions

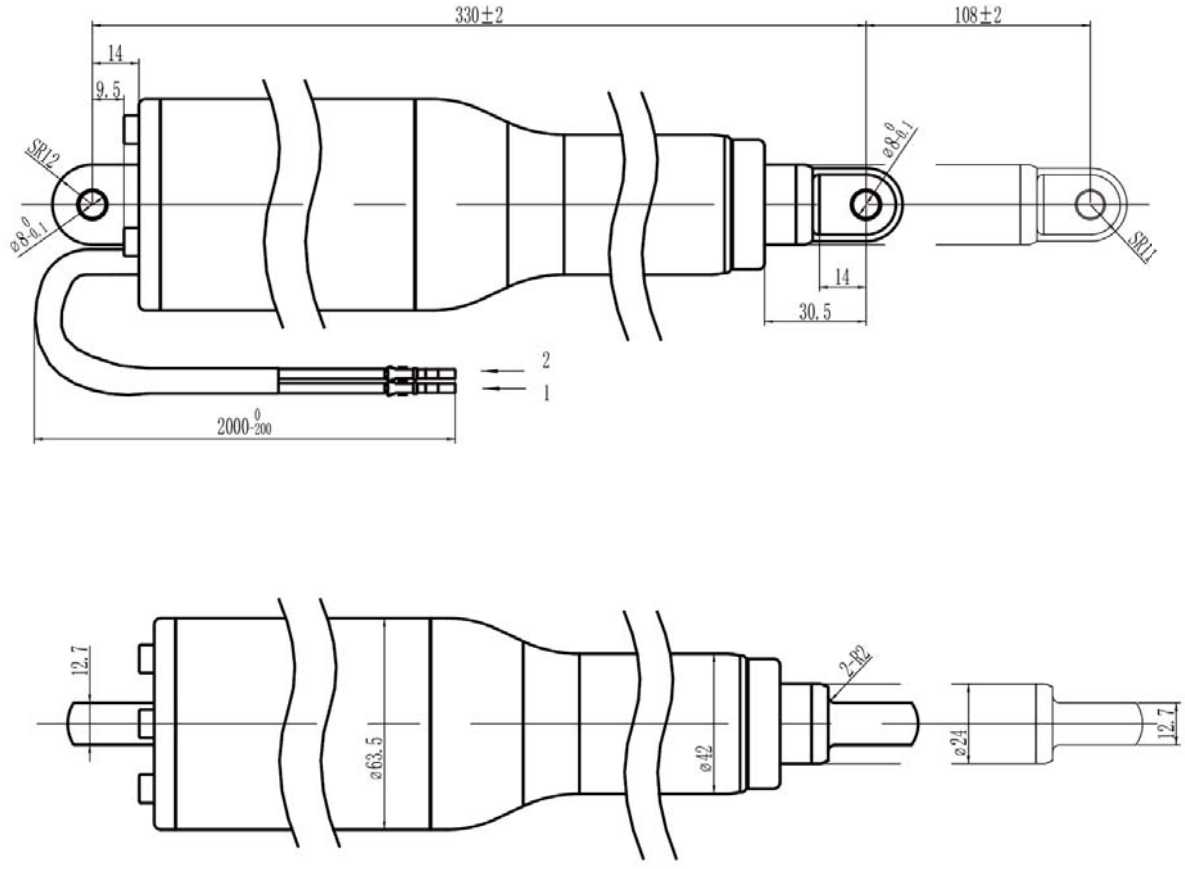
SLA-T63AL-03



# Dimensions

SLA-T63AL-04



# Specifications

| Model | SLA-T63AL-01 | SLA-T63AL-02 | SLA-T63AL-03 | SLA-T63AL-04 |
|---|---|---|---|---|
| Voltage(DC) | 12v/24v | 12v/24v | 12v/24v | 12v/24v |
| Stroke | 57mm (2-1/4") | 57mm (2-1/4") | 108mm (4-1/4") | 108mm (4-1/4") |
| Length from hole to hole | 265mm(10-1/2") | 292mm(11-1/2") | 316mm(12-1/2") | 330mm(13") |
| Load capacity | 2300N/507lbs | 2300N/507lbs | 2300N/507lbs | 2300N/507lbs |
| Speed | 12mm/s(0.47"/s) | 12mm/s(0.47"/s) | 12mm/s(0.47"/s) | 12mm/s(0.47"/s) |
| Top hole size | 8mm(5/16") or 9.5mm(3/8") | 8mm(5/16") | 8mm(5/16") or 9.5mm(3/8") | 8mm(5/16") |
| End hole size | 8mm(5/16") | 8mm(5/16") | 8mm(5/16") | 8mm(5/16") |
| Standard cable length | 2000mm(79") | 2000mm(79") | 2000mm(79") | 2000mm(79") |

Please note that Linear actuator is able to customize any trim tab actuator according to your special needs.
If any customization needed, please contact our team by email.