

TB60E

Series model

Linear Actuator



Applications

1. Medical

Medical bed
Nursing chair
Dental chair

2. Furniture

Electric bed
Kitchen cabinet lift
Recliners and sofas
Massage chair

HTB60E is one of the new generations linear actuators developed by GeMinG for medical and furniture applications. It has a waterproof rating of up to IP43 and a silent treatment of less than 50dB. Other options include Hall sensor signal output and synchronous control.

| Features | |
|---|---|
| Voltage: | 12V, 24V DC |
| Max Push/Pull Force: | 6000N (Push) 4000N (Pull) |
| Speed @ Full load: | 4-30mm / s (Load 6000N) |
| Retracted Length: | Stroke + 175mm Stroke + 190mm(S >300 MM) |
| Dynamic Torque: | 50Nm |
| Static Torque: | 80Nm |
| Color: | Black/Grey White |
| Quality Management: | ISO9001-2008, certified by CE and ROHS |
| Ambient temp. Range: Operating Temp. Range: | 15 ° C ~ 45 ° C |
| Protection Level: Screw Type: | IP43 Trapezoidal |
| Option for Signal Output: Option for Control System: | Hall sensor Synchronous Control(100%), Separate Control |
| Material: Limit Switches: | High-strength metal zinc alloy gear box and housing Built-in, but not adjustable |



KNOWLEDGE



GLOBAL
PRESENCE



INNOVATION



PARTNERSHIP



LEAN
WORLD-CLASS
PRODUCTION

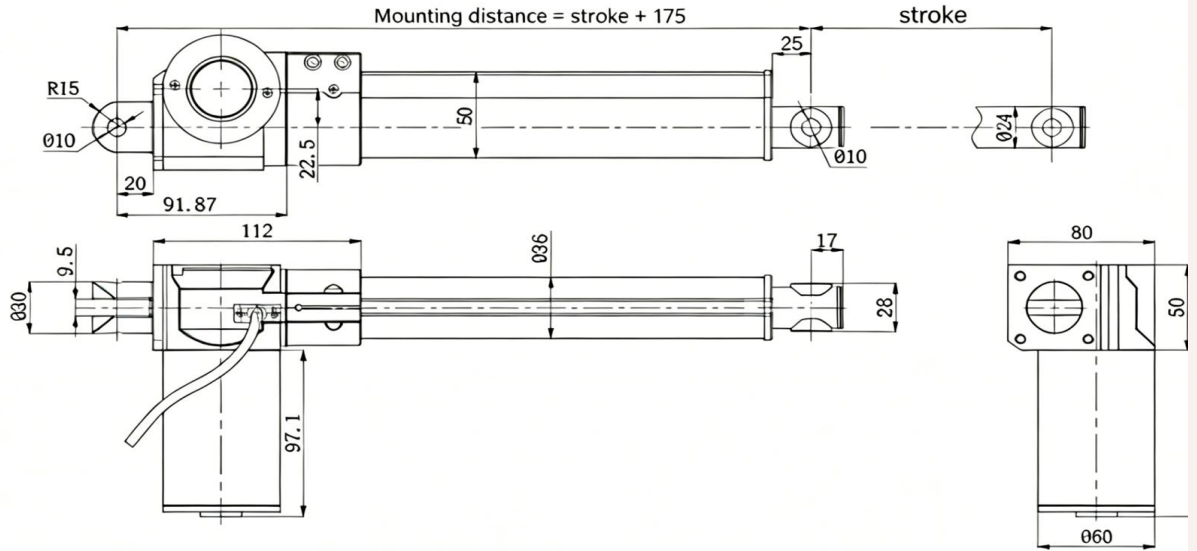


SAFETY

Drawing

Dimensions
(MM)

Installation Dimension >>>



S: Stroke

L: Retracted length

L = Stroke + 175mm

≥ 300 MM, L = Stroke + 190MM

LOAD & SPEED

| Code | Rated Load Push (N) | Rated Load Pull (N) | Self-locking Static (N) | Rated Current Full-load (A) | Rated Speed No-load (mm/s) | Rated Speed Full-load (mm/s) |
|---------------------------------------|------------------------|------------------------|----------------------------|--------------------------------|-------------------------------|---------------------------------|
| Motor Speed (2600RPM, duty cycle 10%) | | | | | | |
| A | 6000 | 4000 | 6000 | 3.5 | 5 | 4 |
| B | 4000 | 4000 | 4000 | 3.5 | 10 | 6 |
| C | 2000 | 2000 | 2000 | 3.5 | 22 | 12 |
| D | 1000 | 1000 | 1000 | 3.5 | 30 | 20 |
| E | 500 | 500 | 500 | 3.5 | 42 | 30 |

Remark

1. The current and speed in the table are the averages tested when using push force.
2. With a 12V motor, the speed is about the same and the current is about twice.
3. The current & speed results in the table are based on the use of a GeMinG brand control box, and there will be an error of about 10% depending on different types of the control box.
3. 29V DC @ no-load, 24V DC @ rated load
4. Stroke & Load:

| Load(N) | Stroke Range (mm) |
|---------|-------------------|
| 6000 | 30-400 |
| 3000 | 30-600 |
| <=2000 | 30-800 |

Reference Chart

| TB60E Model | Load±10% (N) | | | | | Speed ± 2 (mm / sec) | | | | |
|-------------|--------------|------|------|------|-----|----------------------|--|--|--|--|
| Load | 6000 | 4000 | 2000 | 1000 | 500 | | | | | |
| Speed | 5 | 10 | 22 | 30 | 42 | | | | | |

| TB60E Model | Stroke ± 2 (mm) | | | | | Retracted Length ± 2 (mm) | | | | |
|-------------|-----------------|-----|-----|-----|-----|---------------------------|-----|-----|-----|--|
| Stroke | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | |
| L | 225 | 275 | 325 | 375 | 425 | 495 | 545 | 595 | 645 | |

Stroke & Retracted length:

If stroke <300mm, Retracted length = stroke +175mm

Eg. Stroke 100mm, retracted length=275mm, extended length=375mm

If stroke >=300mm, Retracted length = stroke +195mm

Eg. Stroke 400mm, retracted length=595mm, extended length=995mm.

TB60E



| | | | | |
|--|---|--------------------------------|---------------------------|---------------------------------|
| Voltage | 12=12V DC | 24=24V DC | Customized | |
| Speed(mm/s) | 5-60mm/s | | | |
| Stroke(mm) | Customize | | | |
| Retracted L(mm) | Refer to page 4 | | | |
| Load(n) | | | | |
| Front Attachment | 1 = Normal, dia 10.5mm Refer to P6 | 3= U-shaped clevis, dia 10.5mm | 2 = Normal, dia 12.5mm | 4 = U-shaped clevis, dia 12.5mm |
| Rear Attachment | 1 = 0°, dia 10mm Refer to P6 | 3 = 90°, dia 10mm | 2 = 0°, dia 12mm | 4 = 90°, dia 12mm |
| Wire/Plug | 1 = stripped wire Refer to P6 | 3 = 4 pin 0° straight plug | 2 = 4 pin 90° curved plug | 4 = 6 pin 0° straight plug |
| Screw | P = Trapezoidal | | | |
| Signal Output | N = NO | H = HALL SENSOR | | |
| Wire Length | 1 = 600mm | 2 = 1000mm | 3 = 1500mm | 4 = Customized |
| Eg. Voltage 12V DC, stroke 100MM, speed 5MM / S, load 6000N, Code: HTB60E-12-5-100-275 / 375-A-1-1-1-P-N-1 | | | | |

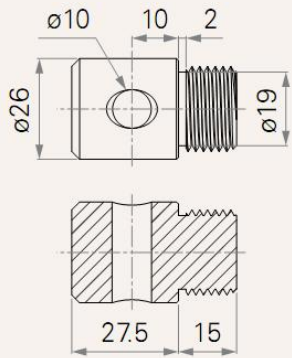
Statement

It is the user's responsibility to determine whether the licensed application is suitable for a particular product. However, as the research and development process continues to improve its product performance, GEMING can make modifications or changes without prior notice. Therefore, GEMING reserves the right to stop sales on the company's website, product catalog, terms of use or all other written information. All kinds of physical and chemical information can maintain the most accurate and true state.

HTB60E Reference Chart for Attachment

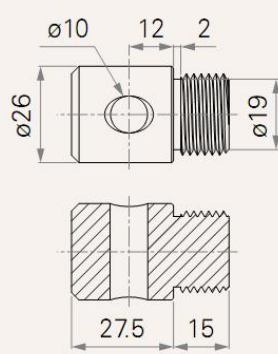
Front Attachment

1=Normal, dia 10.5



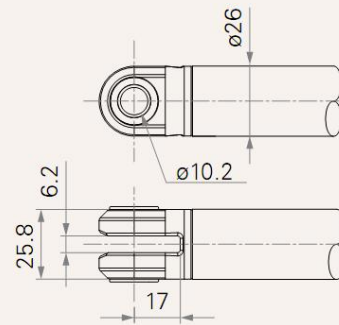
5=

2=Normal, dia 12.5



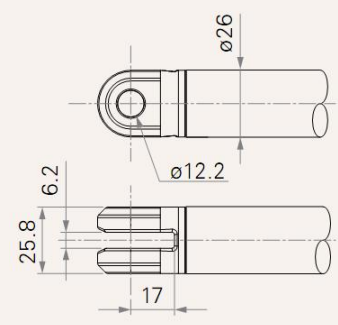
6=

3=U-shaped clevis, width 6.2, depth 17, dia 10.5



7=

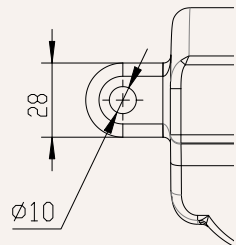
4=U-shaped clevis, width 6.2, depth 17, dia 12.5



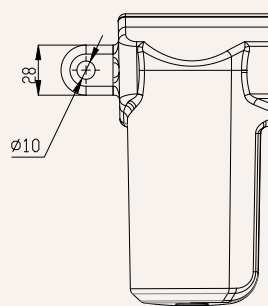
8=

Rear Attachment

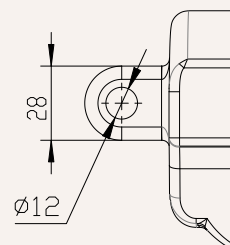
1=0 degree, Aperture 10mm



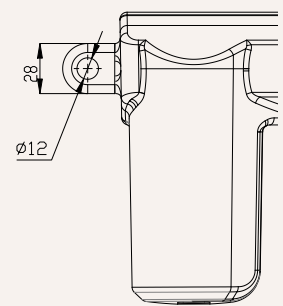
2=90 degree, Aperture 10mm



3=0 degree, Aperture 12mm

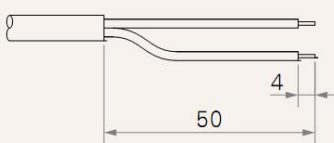


4=90 degree, Aperture 12mm

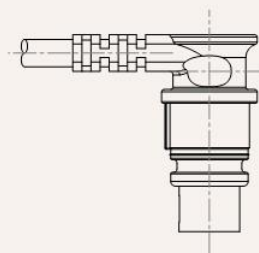


Wire / Plug

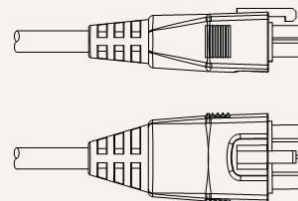
1= stripped wire



2 = 4 pin 90° curved plug



3 = 4 pin 0° straight plug



4 = 6 pin 0° straight plug

