

TB60F

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

HTB60F is one of the new generations linear actuators developed by GeMinG for medical and furniture applications. It has a waterproof rating of up to IP66 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)
Stroke range:	20~900mm
Retracted Length:	Stroke + 175mm Stroke + 195mm(S >300 MM)
Dynamic Torque:	50Nm
Static Torque:	80Nm
Color:	White or Black
Low Noise:	45DB
Quality Management:	ISO9001-2008, certified by CE and ROHS
Ambient temp. Range:	-25 ° C ~ + 65 ° C
Operating Temp. Range:	+5 ° C ~ + 45 ° C
Protection Level:	IP66
Screw Type:	Trapezoidal
Option for Signal Output:	Hall sensor
Option for Control System:	Synchronous Control(100%),Separate Control
Material:	High-strength metal zinc alloy gear box and housing
Limit Switches:	Built-in, but not adjustable



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GLOBAL
PRESENCE



INNOVATION



PARTNERSHIP



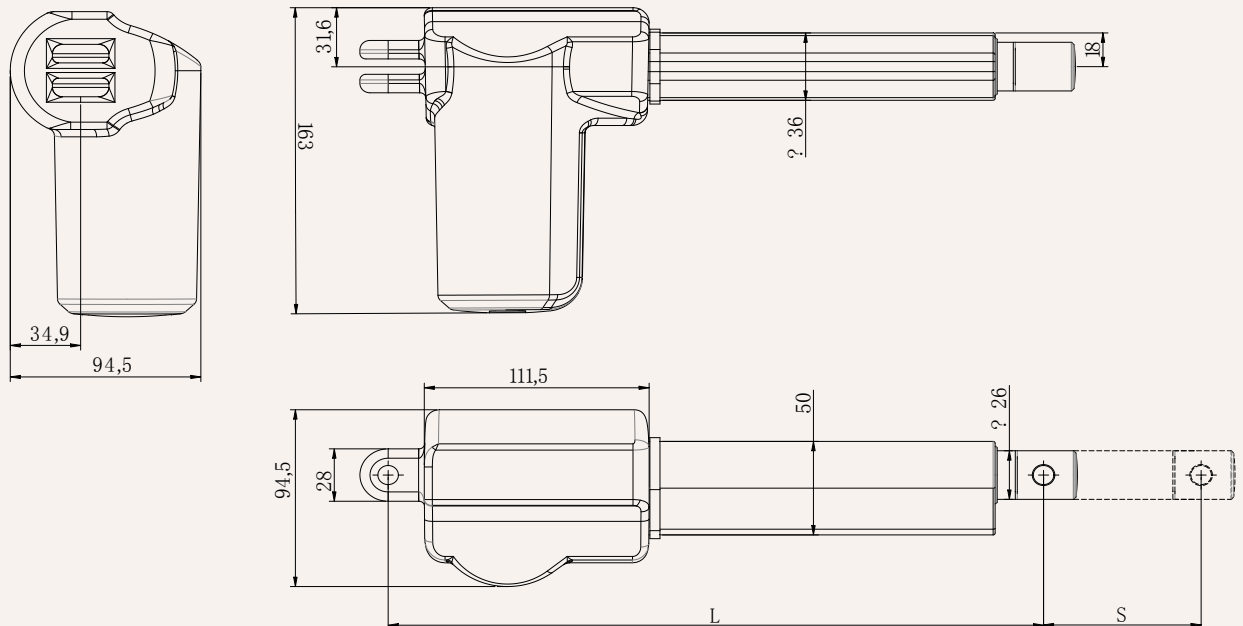
LEAN
WORLD-CLASS
PRODUCTION



SAFETY

Drawing

Dimensions
(MM)



S: Stroke

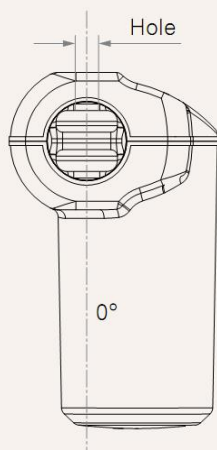
L: Retracted length

L = Stroke + 175mm

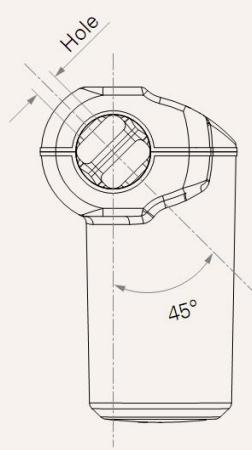
>=300MM, L=Stroke + 195MM

Mounting Angle (Counterclockwise):

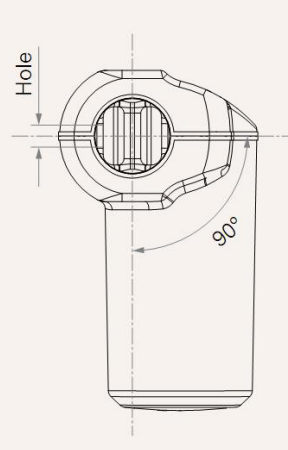
1 = 0°



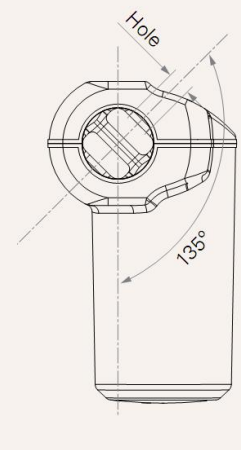
2 = 45°



3 = 90°



4 = 135°



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	4.8	4.3	3.5
B	5000	4000	5000	4.8	5.7	4.5
C	4000	2000	4000	4.8	8.7	6.9
D	3000	2000	3000	3.5	11.3	9.2
E	2500	2000	2500	3.5	17.2	13
F	1500	1000	1500	3.5	23	18

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	30-900

Reference Chart

TB60F Model	Load±10% (N)					Speed ± 2 (mm / sec)	
Load	6000	5000	4000	3000	2500	1500	
Speed	4	6	8	12	18	18	

TB60F 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:

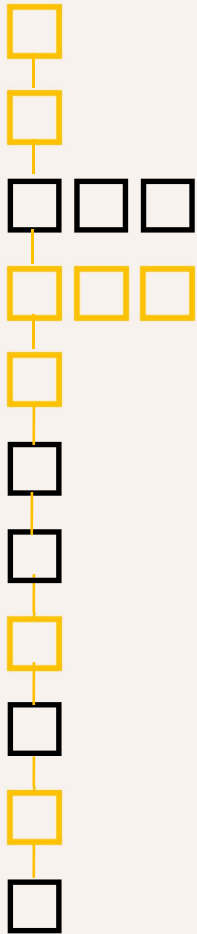
If stroke <300mm, Retracted length = stroke +175mm

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.

TB60F



Voltage	12=12V DC	24=24V DC		
Speed(mm/s)	Refer to page 4			
Stroke(mm)				
Retracted L(mm)	Refer to page 4			
Load(n)	Refer to page 4			
Front Attachment	1 = Normal, dia 10.5mm Refer to P6	2 = Normal, dia 12.5mm	3 = U-shaped clevis, dia 10.5mm	4 = U-shaped clevis, dia 12.5mm
Rear Attachment	1 = 0°, dia 10mm Refer to P6	2 = 0°, dia 12mm	3 = 90°, dia 10mm	4 = 90°, dia 12mm
Wire/Plug	1 = stripped wire Refer to P6	2 = 4 pin 90° curved plug	3 = 4 pin 0° straight 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 4MM / S, load 6000N,

Code: HTB60F-12-5-100-275 / 375-A-1-1-1-P-N-1

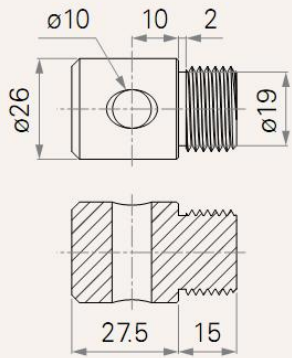
Statement

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HTB60F Reference Chart for Attachment

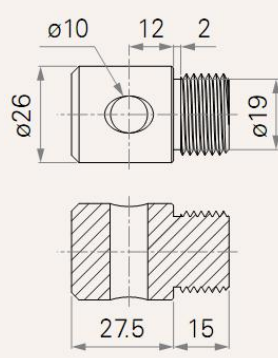
Front Attachment

1=Normal, dia 10.5



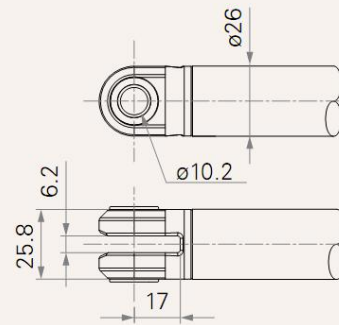
5=

2=Normal, dia 12.5



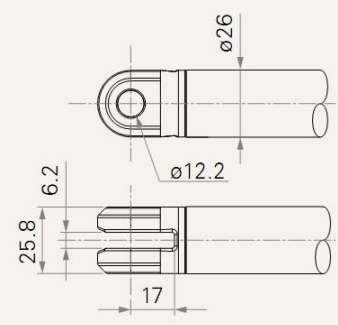
6=

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



7=

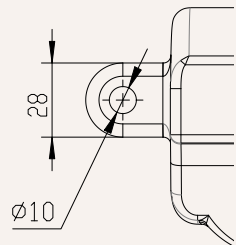
4=U-shaped clevis, width 6.2, depth 17, dia 12.5



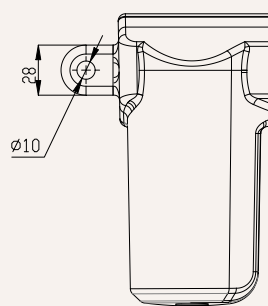
8=

Rear Attachment

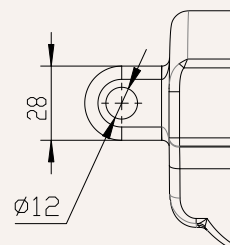
1=0 degree, Aperture 10mm



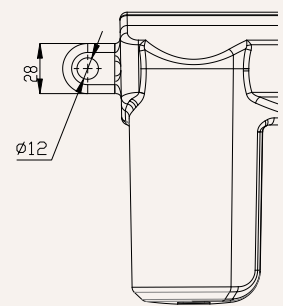
2=90 degree, Aperture 10mm



3=0 degree, Aperture 12mm

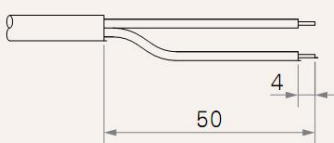


4=90 degree, Aperture 12mm

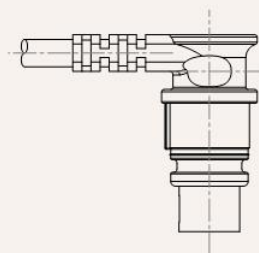


Wire / Plug

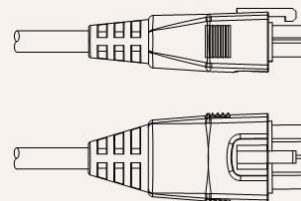
1= stripped wire



2 = 4 pin 90° curved plug



3 = 4 pin 0° straight plug



4 = 6 pin 0° straight plug

