HTA15

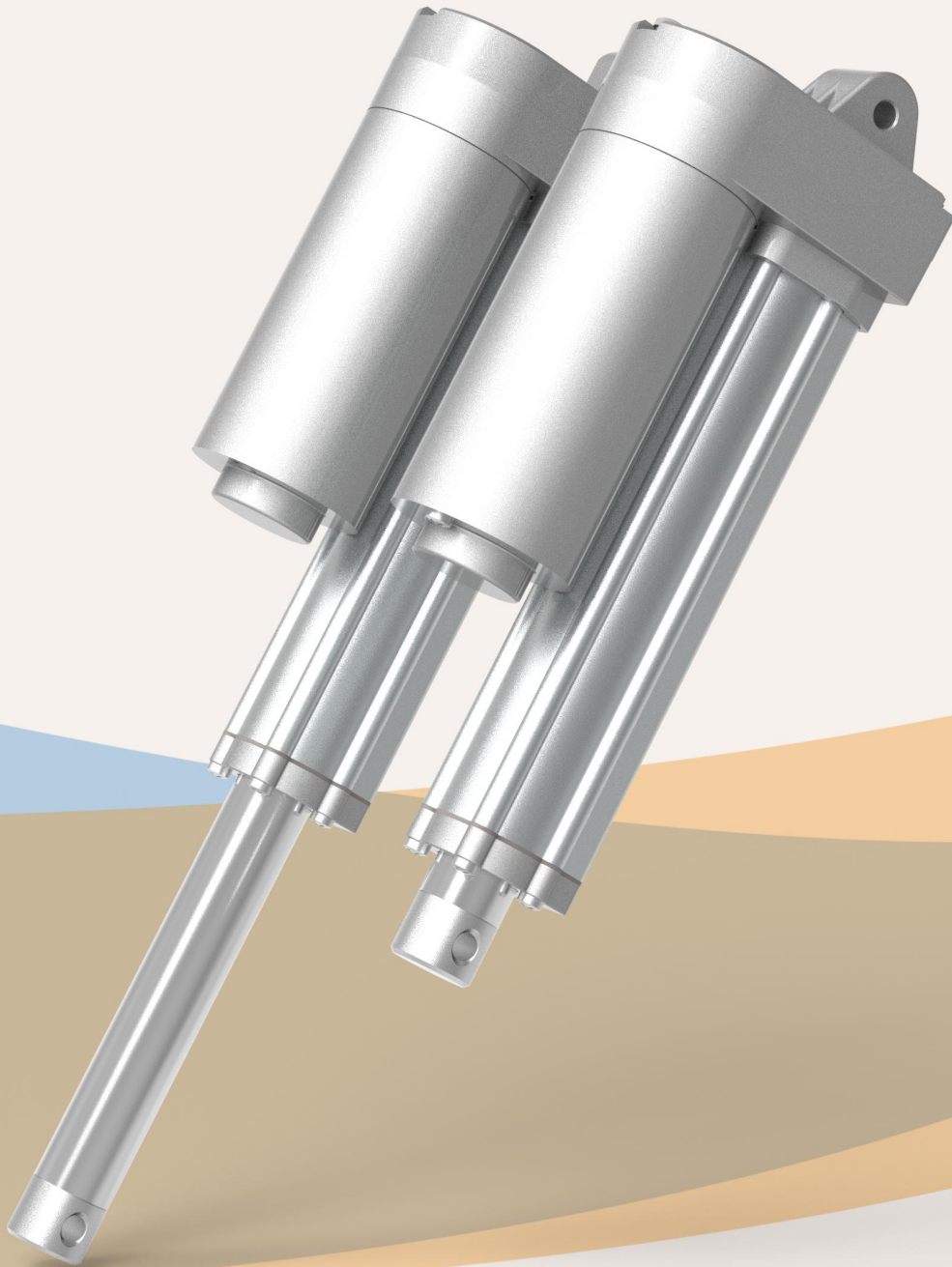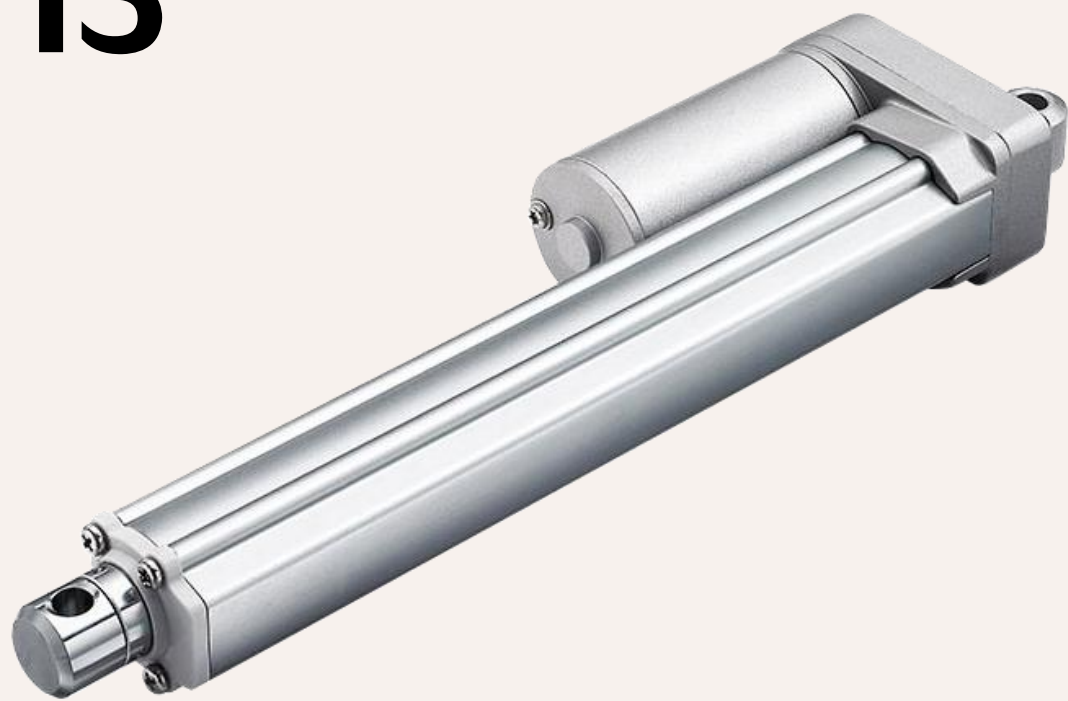## Series
Actuators

HTA15

Series
Linear Actuators

Product Category

1、 Industrial applications

2、 Automotive

3、 Fire application

HTA15 series micro electric actuator is a actuator designed for various applications such as industry, agricultural machinery, construction projects, cleaning sweepers, ships, automatic window control goods, etc. This product has small volume and capacity, compact design, and a protection level of IP65. It can be installed regardless of terrain. Distance limitation is an ideal product to replace hydraulic and pneumatic pressure. It not only saves energy consumption, but also can be controlled by a microcomputer to easily realize automation. Existing furniture, seats, actuators used in various equipment

Functional Overview

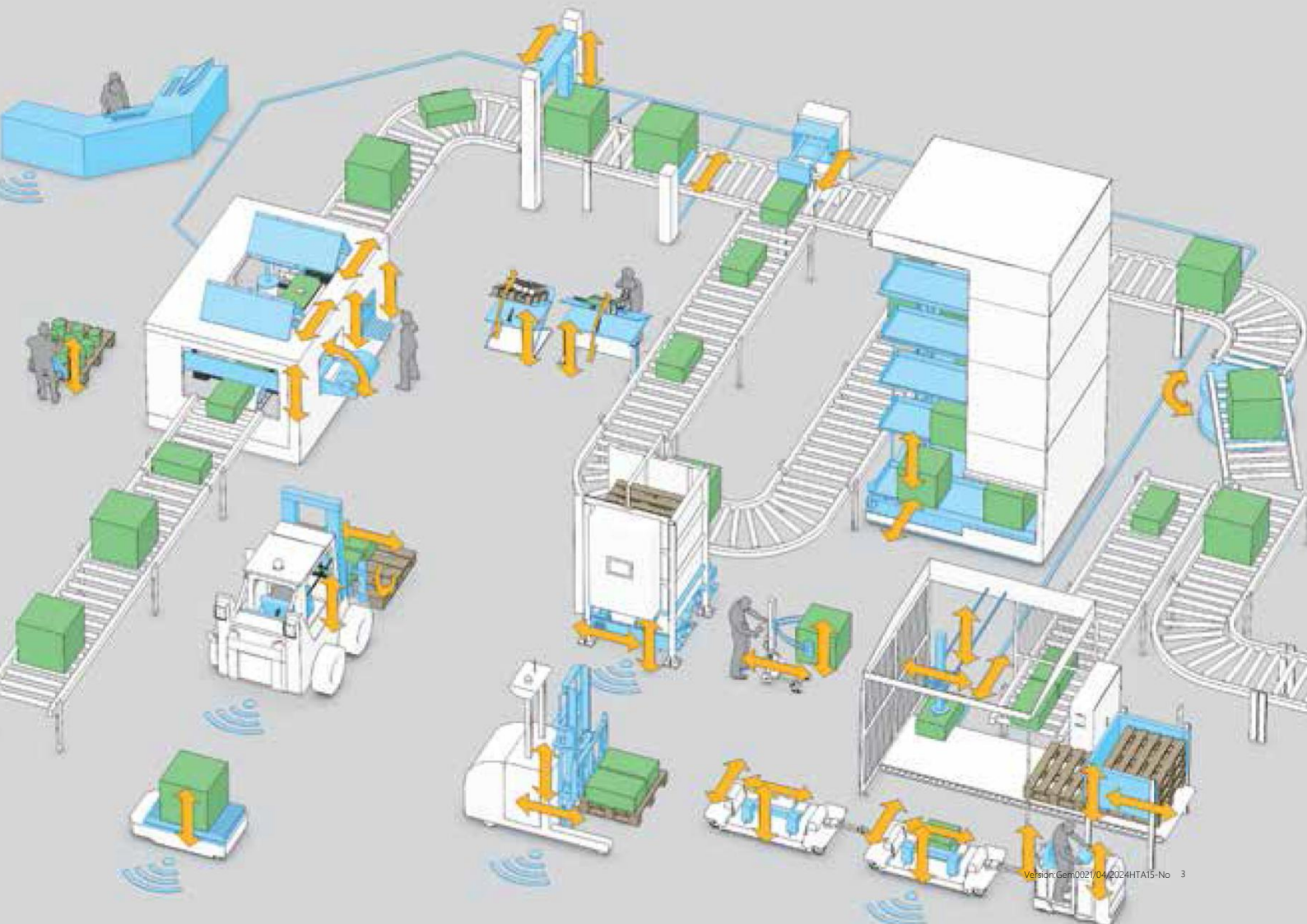|	
Voltage:	12V, 24V,36V,48V DC
Motor options:	DC brush motor
Maximum thrust (pull force):	1,400N / 1,400N
Slowest speed under load:	5.0mm/s (load 1,400N)
Maximum speed under load:	80mm/s (load 80N)
Minimum installation size:	Stroke + 105mm
Dynamic lateral moment:	50Nm
Static lateral moment:	80Nm
color:	Silver gray, black
Voice:	55~68 DB
Adaptable temperature range:	-35°C ~ +75°C
Protection level:	IP66
Screw selection:	Trapezoidal screw
Switch type:	Built-in limit switch,
Signal options:	Potentiometer, Hall sensor, endpoint signal
safety certificate:	Comply with ISO9001-2008, CE and RoHS regulations,

Intelligent drive

As the industrial world becomes increasingly connected, designers are increasingly

demanding smart devices

Interactions between components that communicate and operate with each other

without manual intervention are growing. Technology (GeMinG) is meeting this need

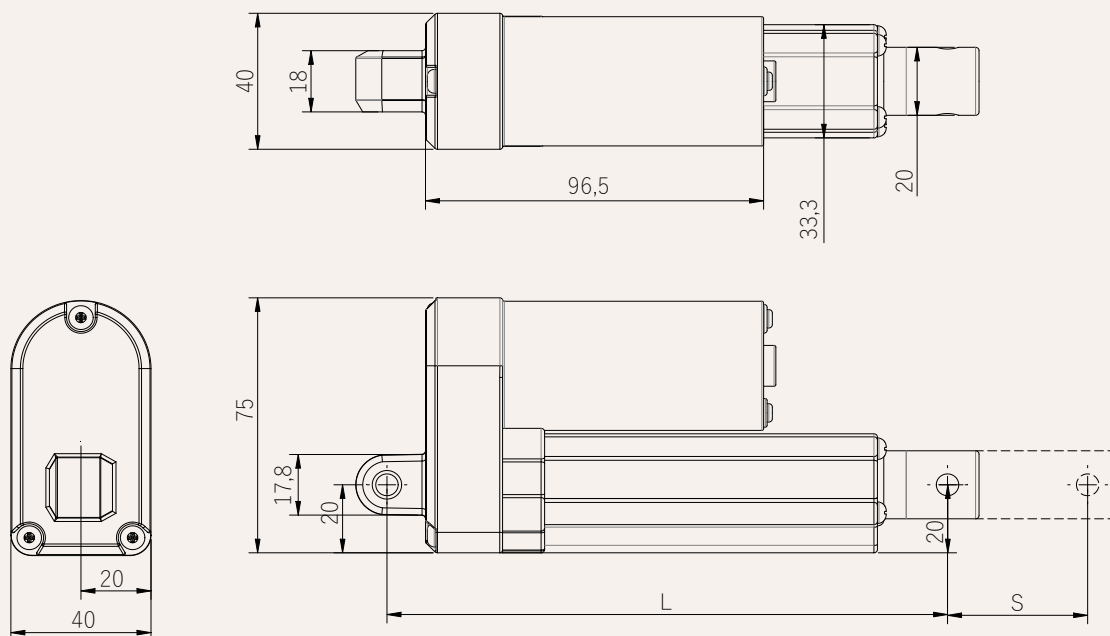and helping to usher in new possibilities

One of GeMinG's product actuators must be what you need.

Please visit: www.Gemingtech.com

Drawings

Standard size
MM

40
18
96,5
33,3
20

75
17,8
20
20
L
S
20
40

S: Stroke

L: Retracted length

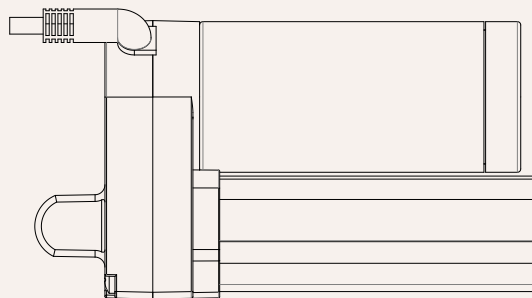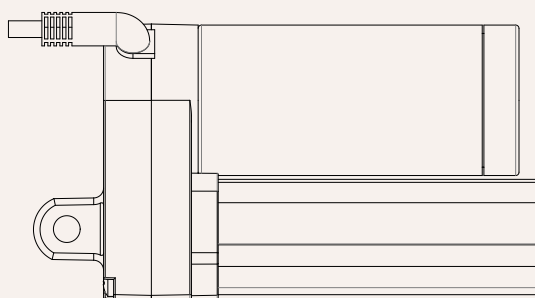L=   Stroke +105mm

Greater than 300MM stroke, installation dimensions L=   Stroke +120MM

Installation angle (counterclockwise):

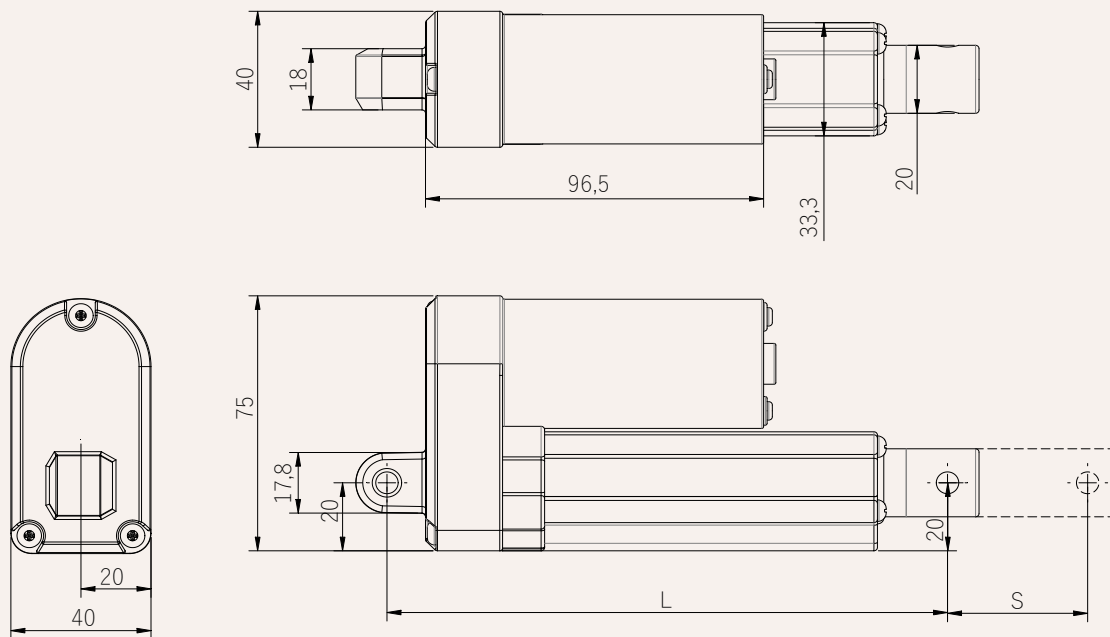0 =0 Degrees   9 =90 Degrees   G=Adjust at will

Drawings - Potentiometer

Standard size
MM

S: Stroke

L: Retracted length

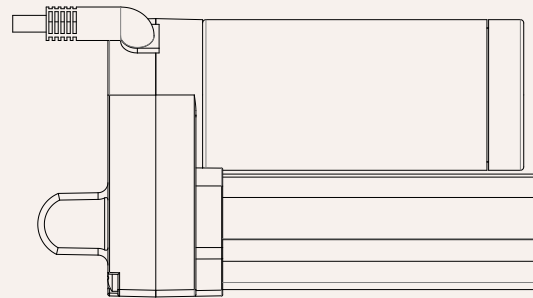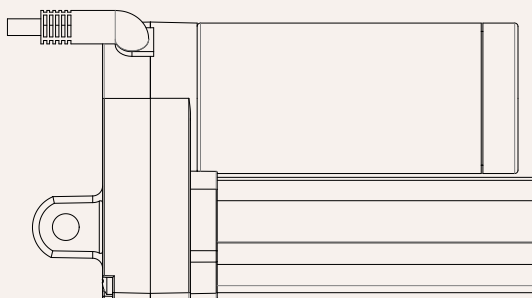L=   Stroke +125mm

Greater than 300MM stroke, installation dimensions L=   Stroke +140MM

Installation angle (counterclockwise):

0 =0 Degrees   9 =90 Degrees   G=Adjust at will

load and speed

Code	Rated load Thrust N	Pull N	Self-locking force static conditions static N	Rated load current A	Output speed no load 24V DC mm/s	Rated load 24V DC mm/s
Motor voltage (24V DC)						
A	1,400	1,400	1,400	1.7	5.0	4.0
B	800	800	1000	1.7	10	8.9
C	500	500	100	1.7	15	12
D	350	350	350	1.7	22	18
E	260	260	300	1.7	26	21
F	210	210	100	1.7	33	26
G	130	130	200	1.7	53	42
H	88	88	000	1.7	80	64

Remark

1. The speed and current on the upper side are the materials that extend when pushed.

2. For 12V motor, the speed is about the same and the current is about 2 times higher.

3. The current & speed in the table are the test average values in the extension direction under thrust application.

4. The current & speed in the table and graph are the test average values of the GeMinG control box

configuration, and there is an error of about 10% depending on the control box model.

 (The voltage is about 29V DC at no load, and drops to about 24V DC at rated load)

Stroke: minimum value ≥ 20mm, please refer to the table below for the maximum value of load and stroke

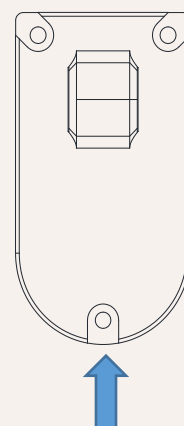| load (N)	Maximum stroke (mm)
2,000	50-200
1,200	201-300
1,000	301-400
800	401-600
600	601-900

Remark:

Lateral moment Y direction = X*0.8

Static lateral moment = dynamic*2

Dynamic lateral moment (Nm)-X direction

stroke	S+230	S+250
100-200	50	80
300-500	40	60
500-700	30	50
700-900	20	40

Torque X

Lateral moment Y

Stroke installation size reference chart

HTA15 Series	stroke ± 2 (mm)					Install ± 2 (mm)			
strokeMM	100	150	200	250	300	350	400	450	500
Install MM	205	255	305	355	420	470	520	570	620
weight KG	1,2	1.4	1.6	1.8	2.1	2.3	2.5	2.7	3.2

Actuator wiring diagram

No signal feedback wiring diagram
Code：N

M

Brown line

Blue Line

COM　CN　　CN　COM

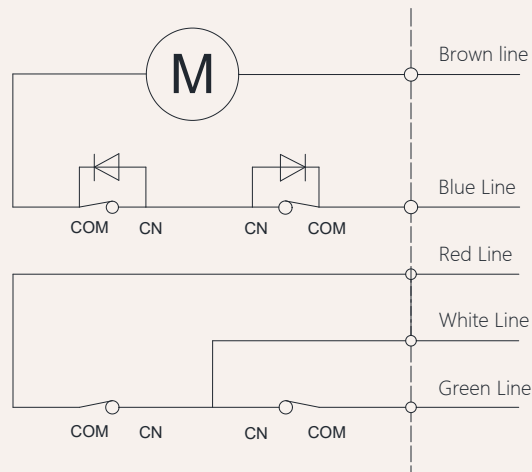**Wiring Instructions:**

1】Brown lead: motor positive +

2】Blue lead: motor negative pole -

3】When the push rod is extended: the brown wire is positive +, the blue wire is negative -

4】When the push rod is retracted: the blue line is positive +, the brown line is negative -

Actuator wiring diagram Built-in control module

Built-in controller wiring diagram
Code：NY

M

Brown line

Blue Line

COM　CN　　CN　COM

Red Line

White Line

Green Line

COM　CN　　CN　COM

Wiring Instructions:

1】Brown lead: motor positive +

2】Blue lead: motor negative pole -

3】When the push rod is extended: white line + red line

4】When the push rod retracts: white line + green line

5】White line: control output common line.

6】White and red lines: stretch out,

7】White and green lines: retract,

8】Wireless remote control, use wired control simultaneously.
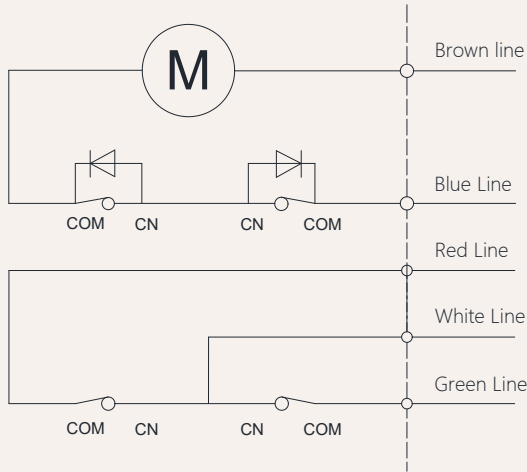
Other signal descriptions

Feedback signal	Description	Function
Active endpoint feedback signal	Voltage with this model	When the push rod reaches the end point, a signal will be fed back. This signal will always exist and will disappear during the operation of the push rod.,
Passive endpoint feedback signal	No voltage	When the push rod reaches the end point, it will feedback a signal. This signal always exists when the input power is not turned off. When the input power is turned off, the signal disappears. The signal will also disappear during the operation.
Note: For other needs, please contact the GeMinG team		

Signal feedback Passive or active

Passive or active endpoint signal wiring diagram
Code: N passive signal, Code: Y active signal
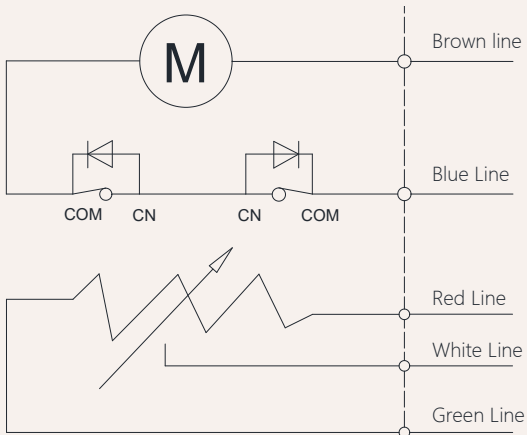

Wiring Instructions:

1】 Brown lead: positive pole of motor +
2】 Blue lead: negative pole of motor -
3】 When the push rod is extended: brown wire positive pole +, blue wire negative pole -
4】 When the push rod is retracted: blue wire positive pole +, brown wire negative pole -
5】 White wire: signal output common line.
6】 White and red wire: extension end signal,
7】 White and green wire: retraction end signal,

Signal feedback Potentiometer

Potentiometer wiring diagram
Code：K

Wiring Instructions:

1】 Brown lead: positive pole of motor +
2】 Blue lead: negative pole of motor -
3】 When the push rod is extended: brown wire positive pole +, blue wire negative pole -
4】 When the push rod is retracted: blue wire positive pole +, brown wire negative pole -
5】 White and yellow leads: variable resistance signal output.
6】 When the push rod is extended: red and white leads-resistance value gradually increases,
---------red and yellow leads-resistance value gradually decreases.
7】 When the push rod is retracted: red and white leads-resistance value gradually decreases,
---------red and yellow leads-resistance value gradually increases.

Potentiometer Configuration Form

Transmission Code (See page 5)	Limit travel range	Resistance range unit （KΩ）	
A,C,E,G	50-350MM	50-200Stroke range5.0	50-300Stroke range7.5
B,D,F	50-550MM	50-200Stroke range3.17	50-400Stroke range6.35

Note: Potentiometer resistance is 10KΩ, actual output resistance depends on specific stroke

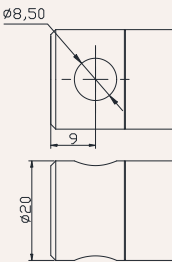# HTA15 Model Description Selection Code Table

HTA15   -   24   -   A   -   100   -   205   -   O2   -   O2   -   0   -   1   -   T   -   A   -   N   -   07

①   ②   ③   ④   ⑤   ⑥   ⑦   ⑧   ⑨   ⑩   ⑪   ⑫   ⑬

①	Product number	HTA15		
②	Voltage	12=12V DC, 24=24V DC,	36=36V DC	48= 48V DC
③	Load(n)@Speed (mm/s)	See page 06		
④	Stroke(mm)	See page 06		
⑤	Installation size(mm)	Note: Before selecting a size, please refer to the valid data sheet! See page 05		
⑥	Upper type See page 13	O1 =Conventional ordinary type, hole diameter 6.5mm U1 = U-shaped, groove width 6mm, hole diameter 6.5mm M1 = Type M, M12 thread, depth 20 mm T1 = T-type, M12 thread, length 20mm L1 =L shape, width 8mm, aperture 6.5mm G1 = Spherical bearing, bore 10mm, model GS10	O2 = Conventional ordinary type, hole diameter 8.5mm U2 = U-shaped, groove width 6mm, hole diameter 8.5mm M2 = MType M, M14 thread, depth20 mm T2 = T-type, M14 thread, length 20mm L2 = L shape, width 8mm, aperture 8.5mm G2 = Spherical bearing, bore 12mm, modelGS12	
⑦	lower type See page 14	O1 =Conventional ordinary type, hole diameter 6.5mm U1 = U-shaped, groove width 6mm, hole diameter 6.5mm	O2 = Conventional ordinary type, hole diameter 8.5mm U2 = U-shaped, groove width 6mm, hole diameter 8.5mm	
⑧	Installation angle (counterclockwise)	0 =0˚, Degree	9 =90˚, Degree	
⑨	Please refer to the outlet type	1 = Dare wire 4 = Four-pin straight plug 7 = Waterproof plug	2 = 01 Straight plug 6 = Six-pin straight plug 0 = Customized	
⑩	Lead screw options	T = Trapezoidal screw (default preferred)	G= Ball screw rod	

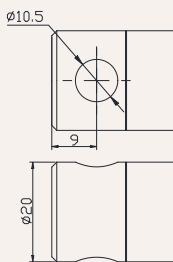| ⑪	Control method	A = No Control	NY =Integrated wired control NW=Integrated wireless control	NT = Synchronous control NC = CAN bus	D= Customized
⑫	Signal output options	N = No	H =Hall sensor	D = Potentiometer	W=passive signal U=active signal
⑬	Cable length	07 = 700mm 30 = 300mm	10 = 1000mm 40 = 4000mm	15 = 1500mm 70 = 7000mm	20= 2000mm 00 =Customized

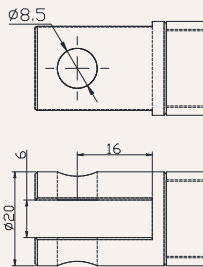# HTA15 Attachment Description Selection Code Table

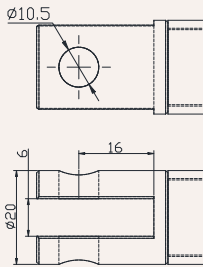Extended upper form:

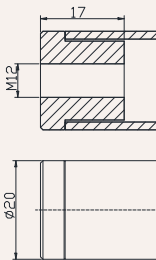O1=No slot, aperture 6.5MM

O2=No slot, aperture 8.5MM

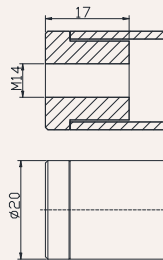U1 = U-shaped, groove width 8mm, hole diameter 6.5mm

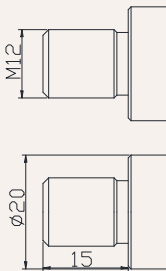U2 = U-shaped, groove width 8mm, hole diameter 8.5mm
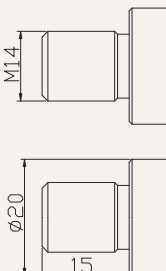
M1 = Type M, M12 thread, depth 15 mm
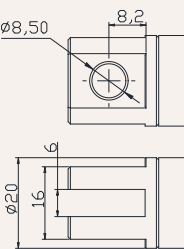
M2 = Type M, M14 thread, depth 15 mm

T1 = T-type, M12 thread, length 15mm

T2 = T-type, M14 thread, length 15mm
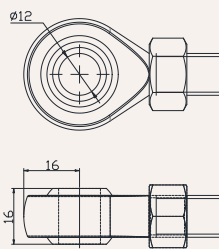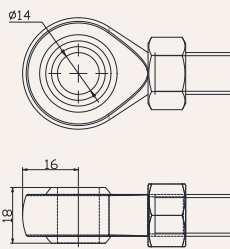
L1 = L shape, width 6mm, aperture 6.5mm

L2 = L shape, width 6mm, aperture 8.5mm

G1 = Spherical bearing, bore 12mm, model GS12

G2 = Spherical bearing, bore 14mm, model GS14
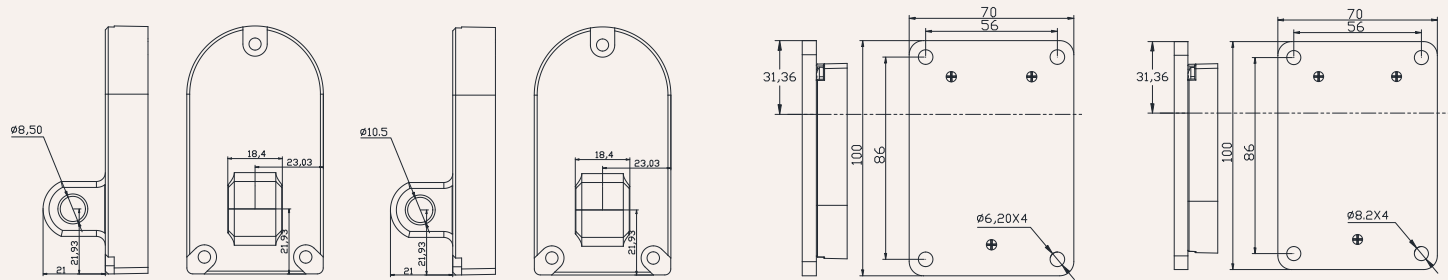
HTA15 Attachment Description Selection Code Table

Tail lower end form：

O1 = No slot, aperture 6.5mm

O2= No slot, aperture 8.5mm

P1 = T-type, four mounting holes 6.5 mm

P2 = T-type, four mounting holes 8.5 mm

Power cord type:

1 =Dare wire

2 = 01 Straight plug

4 =Four-pin straight plug

6 = Six-pin straight plug