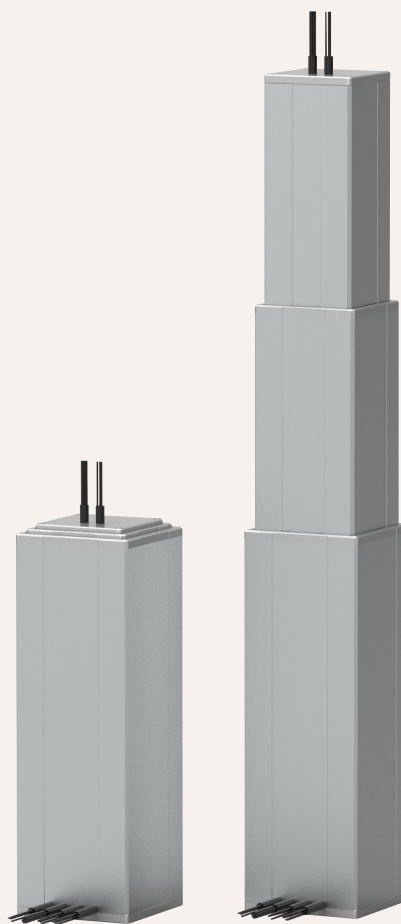


HTB3

Series

SF Rising bollards



Product Category

1、Applications of lifting robots

The HTB3 is a 142x142 square lifting column designed by GeMin for lift robots. It is specifically developed for mobile robots, service robots, and AGV/AMR intelligent equipment, integrating three core advantages: precise lifting motion, high-load stable support, and intelligent adaptive control. It perfectly adapts to the application needs of robots in all scenarios, including walking, operation, obstacle avoidance, and workstation docking. Made of high-strength molded aluminum alloy, it is impact-resistant and wear-resistant. The built-in silent servo lifting system ensures precise and controllable lifting stroke, smooth start and stop without shaking, and low noise operation. Equipped with an intelligent linkage sensing module, it can seamlessly communicate with the lift robot control system, automatically matching the working height, precisely lifting at fixed points, and Collaboration start and stop, achieving fully automated unmanned operation.

Function Overview

Body weight:	14.5KG(500/500)
Voltage:	48V DC,
Motor options:	DC servo motor
Maximum thrust (pull):	1500 N / 1500N
Maximum speed under load:	0-150 mm / s (load 800N)
Minimum initial height:	stroke /2 + 200mm
Dynamic lateral moment:	1000Nm
Static lateral moment:	1800Nm
color:	Silver-gray, black (custom-made)
Voice:	48~70 DB
Temperature range:	-35 ° C ~ + 75 ° C
Protection level:	IP54
Screw selection:	Ball screw lead:20
Reduction ratio:	10: 1,
Limiting options:	Soft limit, mechanical limit
Communication options:	CANopen / EtherCAT , RS485
Wiring method:	Internal cabling (custom cabling required)

Download 3D model

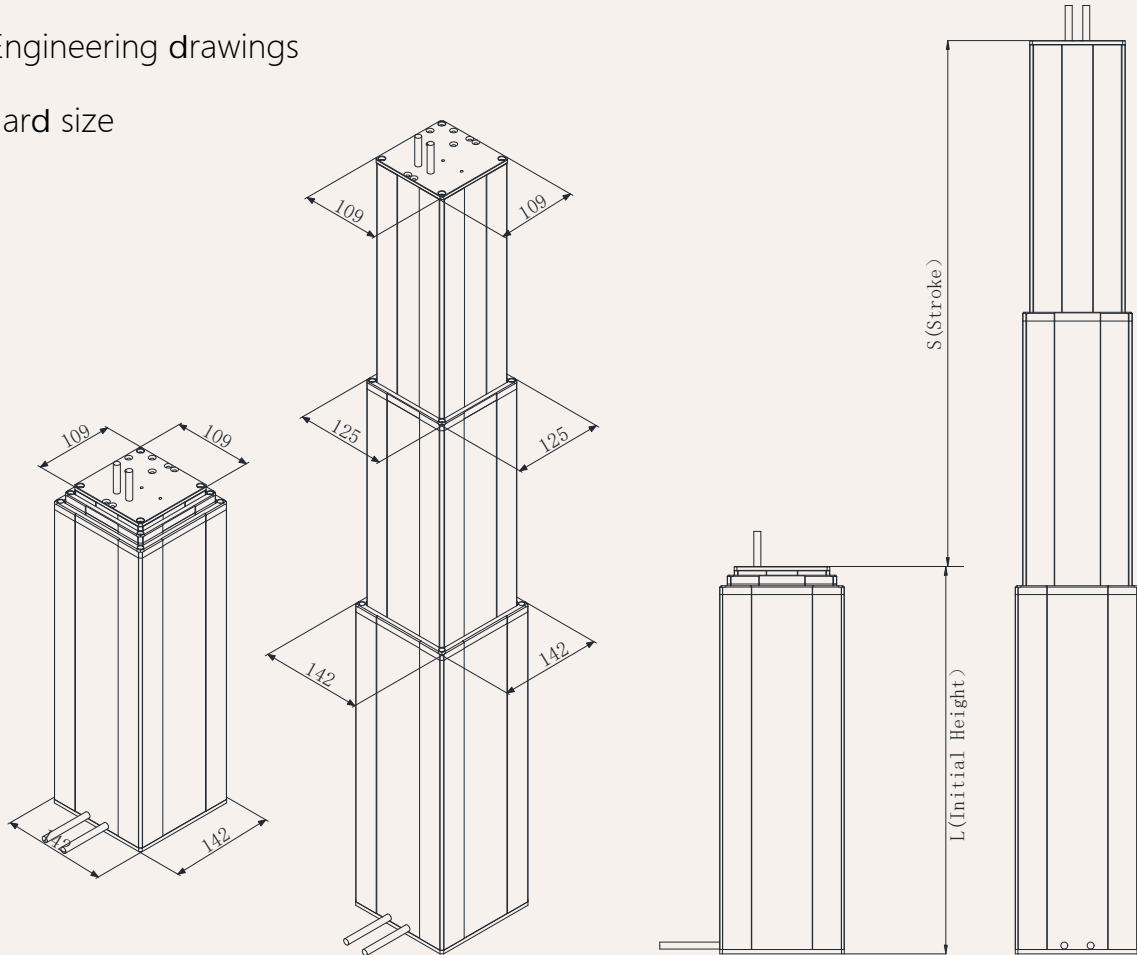


Initial height and unfolded height selection

S stroke MM	300	400	500	600	700	800
L Installation dimensions	350	400	450	550	600	700
S+L unfolding height	650	800	950	1150	1300	1500

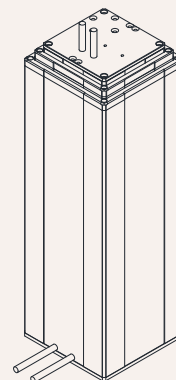
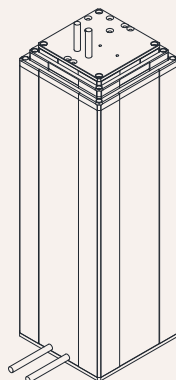
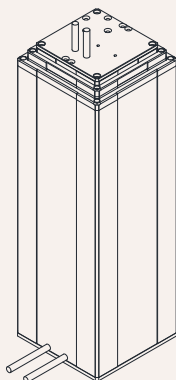
TB3-Engineering drawings

Standard size
MM



Motor cable exit point:

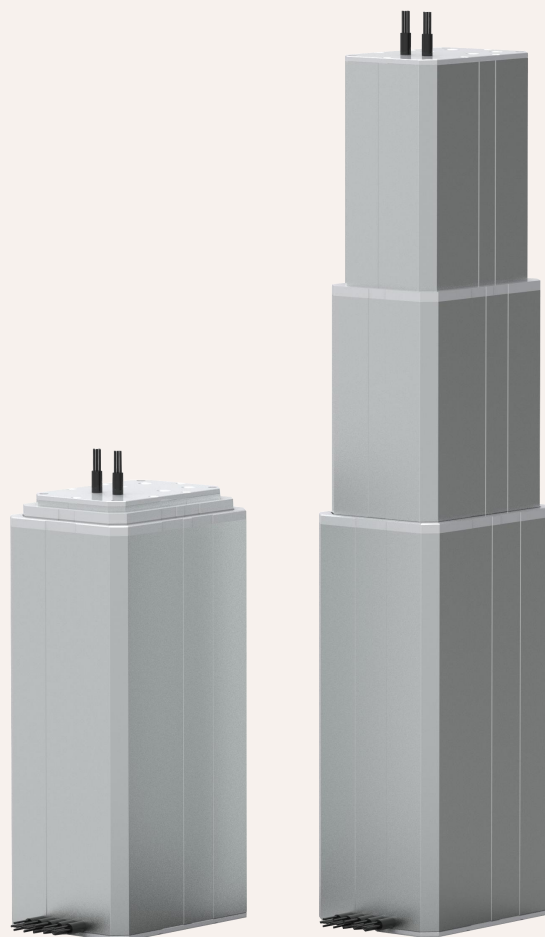
0 = upper plate, top exit wire 1 = Side, upper part out of bounds 2 = Side, lower part of the line



HTA3

Series

SF Rising bollards



Product Category

1、Applications of lifting robots

The HTA3 is a 193x141 rectangular lifting column designed by GeMin for lift robots. Specifically developed for mobile robots, service robots, and AGV/AMR intelligent equipment, it integrates three core advantages: precise lifting motion, high-load stable support, and intelligent adaptive control. It perfectly adapts to the application needs of robots in all scenarios, including walking, operation, obstacle avoidance, and workstation docking. Made of high-strength molded aluminum alloy, it is impact-resistant and wear-resistant. The built-in silent servo lifting system ensures precise and controllable lifting stroke, smooth start and stop without shaking, and low noise operation. Equipped with an intelligent linkage sensing module, it can seamlessly communicate with the lift robot control system, automatically matching the working height, precisely lifting at fixed points, and linkage start and stop, achieving fully automated unmanned operation.

Download 3D model



Function Overview

Body weight:	17KG (400/400)
Voltage:	48V DC,
Motor options:	DC servo motor
Maximum thrust (pull):	1500 N / 1500N
Maximum speed under load:	0-150 mm / s (load800N)
Minimum initial height:	stroke/2 + 200mm
Dynamic lateral moment:	1800Nm
Static lateral moment:	2000Nm
color:	Silver-gray, black (custom-made)
Voice:	48~70 DB
Temperature range:	-35 ° C ~ + 75 ° C
Protection level:	IP54
Screw selection:	Ball screw lead:20
Reduction ratio:	10: 1,
Limiting options:	Soft limit, mechanical limit
Communication options:	CANopen / EtherCAT, RS485内Cable
Wiring method:	routing (custom cable requirements)

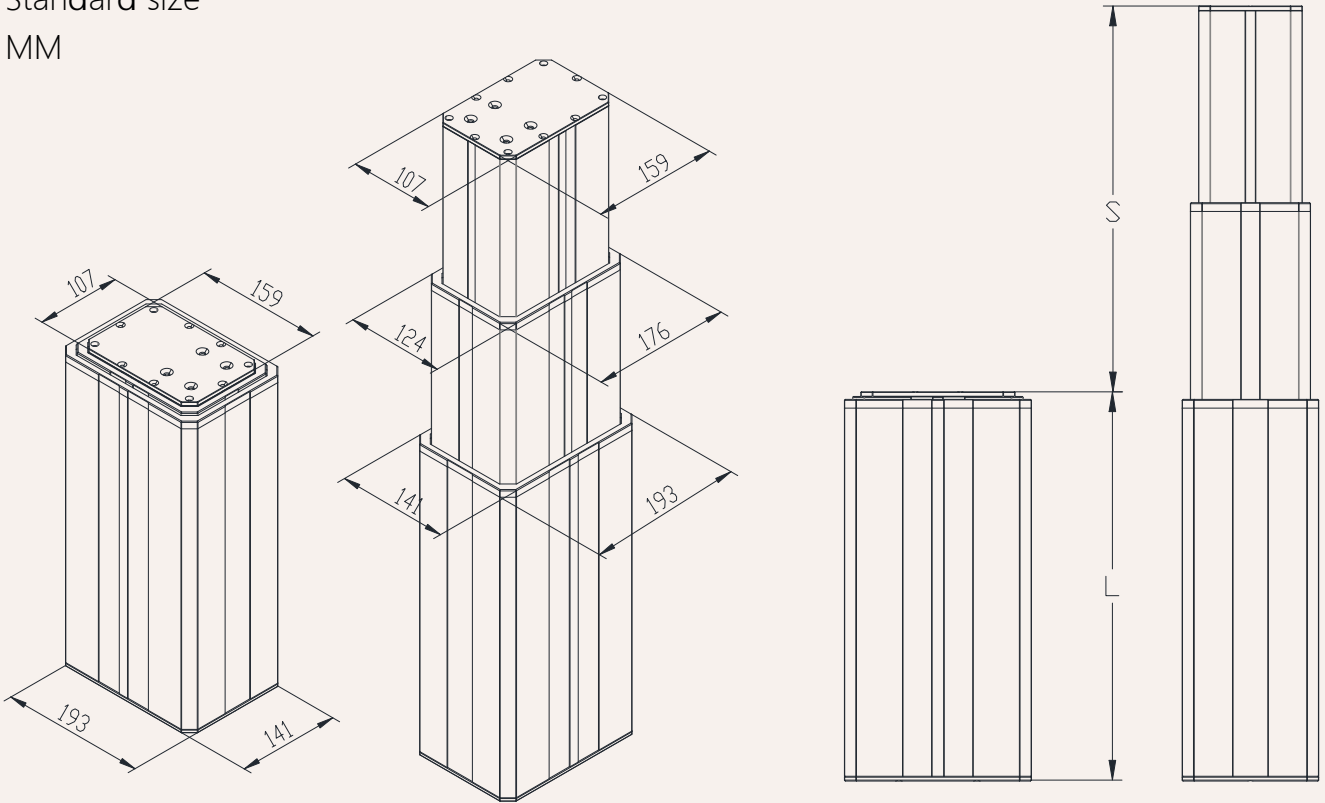
Initial height and unfolded height selection

S stroke MM	300	400	500	600	700	800
L Installation dimensions	350	400	450	550	600	700
S+L unfolding height	650	800	950	1150	1300	1500

TA3-Engineering drawings

Standard size

MM

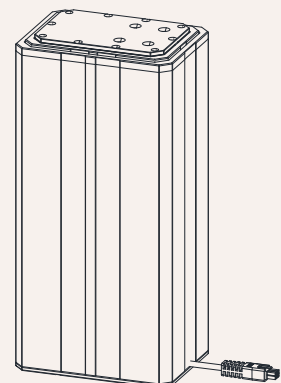
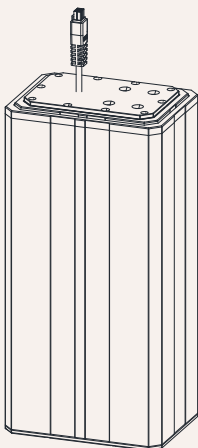


Motor cable exit point:

0 =upper plate, Top of the table

1 =Side, upper part out of bounds

2=Side, lower part of the line

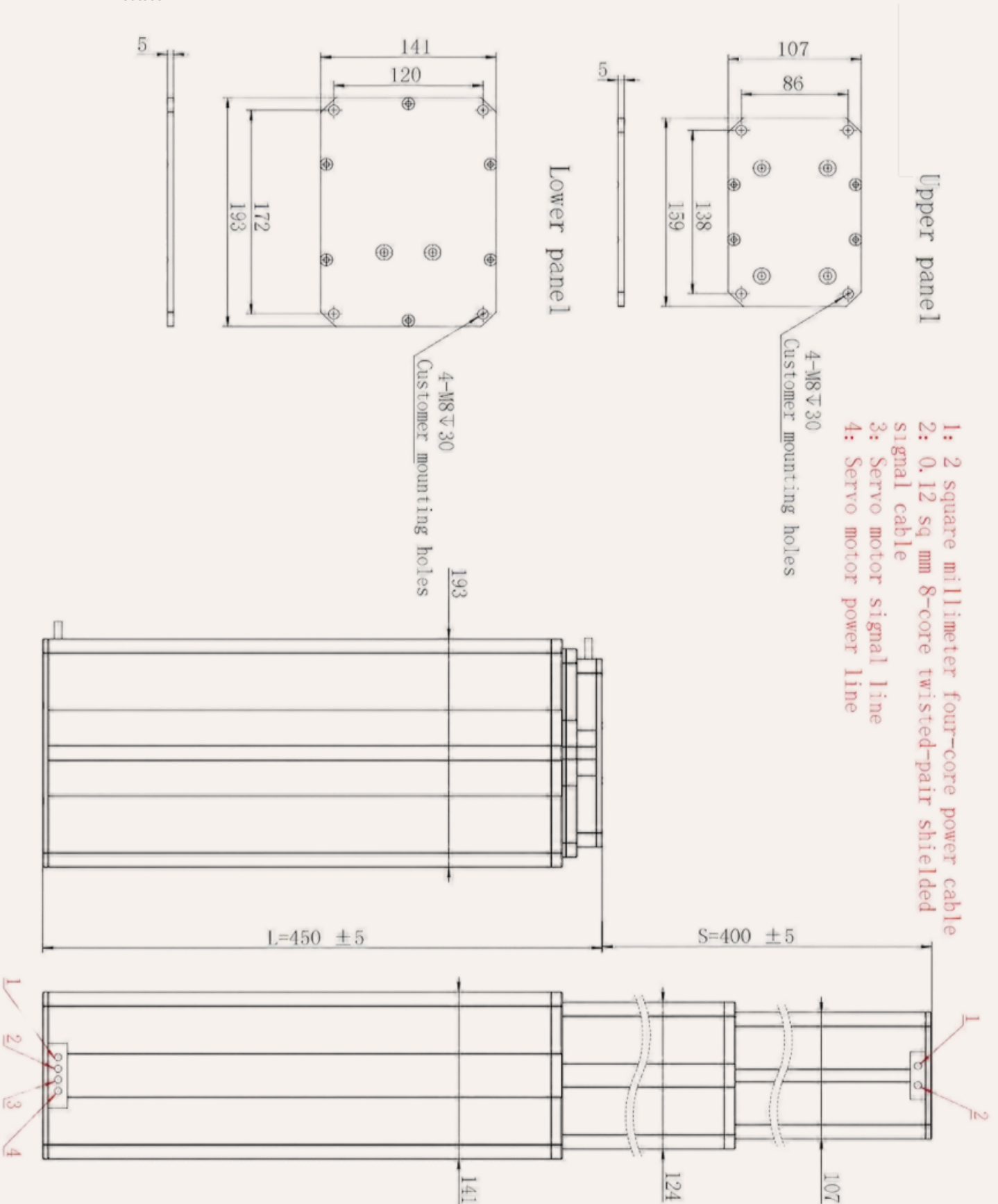


HTA3

Series model

TA3-Customer confirms engineering drawings

Standard size
MM



HTA3

Series
Embodied Intelligence

Intelligent lifting column

Height Adjustment

Positioning Adjustment

A more compact design

makes it easier to install in tight spaces

ideal for designing various types of automated equipment,

unmanned transport vehicles, and lifting equipment,

while retaining many of its popular advantages!

高清双目相机

可更换多款末端

单自由度头爪
三指/五指灵巧手

可升降身高调节

身高范围约1260-1880mm

可选配移动底盘

移动速度 $\leq 1.5\text{m/s}$

HT Model Explanation Selection Code Table

HTB3 - 48 A *** *** - O1 O1 0 1 T N N 30
 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫ ⑬

①	Model Prefix	HTB3= HTB3 Three-section	HTA3 = HTA3 Three-section			
②	voltage	48= 48V DC	24= 24V DC			
③	Loading(n)@Speed(mm/s)	0-100MM/S	0-200MM/S			
④	stroke(mm)					
⑤	Installation dimensions(mm)	Please refer to page 4. Note: Please refer to the valid parameter table before selecting a size!				
⑥	Upper type	O1 = Standard pipe type, M8 mounting screws, 30mm recess. O2 = Enlarged panel type, 8mm mounting holes. K = Customization				
⑦	Lower type	O1 = For standard pipe types, M8 mounting screws are countersunk by 30mm. O2 = Enlarged panel type, 8mm mounting holes. K = Customization				
⑧	Qualifying Position	0=upper plate top	1=upper side	2=lower side	3=Internal wiring upper plate 4=Side of the inner wiring 5=inner side of the line	
⑨	Type of qualification	1 =bare wire	7 =Waterproof plug	0=Servo standard drive cable	K =Customization	
⑩	Screw options	G=ball screw				
⑪	Control method	N= Uncontrolled				
⑫	Communication Protocol	C = CANopen	E =EtherCAT	R= RS485		
⑬	Line length	07 =Line length 0.7 M 30 =Line length 3.0 M 70 =Line lengt 7.0 M	10 = Line length1.0 M 40 =Line length 4.0M 70 =Line length 8.0 M	15 =Line length 1.5 M 50 =Line length 5.0 M 90 =Line length 9.0 M	20= Line length2.0 M 60= Line length 6.0M 00 =Customization	