



# Robot seventh axis any collaborative robot

Fully automated solutions become the new standard in packaging handling. Standard collaborative robots do not have such a large vertical working range. With the help of GeMinG's lifting system, the base of the robot can be raised or lowered so that it is in the best working position. Stacking on pallets starts from floor height, and the stacking height can reach 3 M. The GeMinG lifting system improves the work efficiency of packaging stacking. The GeMinG lifting system ensures accuracy and reliability, thereby maximizing work efficiency. Speed and efficiency. GeMinG provides an effective solution for vertical lift adjustment in a smart way. We design for different applications to truly realize Industry 4.0, providing your robots with a greater operating range.

# Palletizing Solutions

Fully automated palletizing solutions are becoming the new standard in packaging stations. The main challenge for packaging system manufacturers is how to design multi-axis systems in a simple and economical way. Palletizing of cartons is a typical application that benefits from additional linear axes. Pallet stacking can start from the ground and extend to a height of more than two meters; therefore, standard collaborative robots will be limited in their ability to work under such a large height range. The seventh axis of the GeMinG chrome transmission robot provides an efficient and intelligent solution for vertical height adjustment.

## Features

- The longest possible height travel can extend the robot's operating range by up to 10 times.
- Rugged design, high strength, suitable for industrial use
- Quiet and smooth operation
- Extends the robot's working range, cost-effective
- Effectively improves the working environment
- Easy to integrate into existing production lines









# **TD3**-18W

# Series model Actuator



## ProductCategories

1, Industrial Applications

2. Automotive Applications

3. Warehousing Applications

Extended working range, collaborative robot vertical lift up to 3000 mm, compact retraction height, sturdy column design for industrial use, vibration-free movement and virtually maintenance-free plug-and-play solution, hardware interface compatible with any robot, Controlling CAN via TCP/IP, saving costs and increasing productivity, the collaborative robot combined with the GeMinG lifting system provides a cost-effective solution to upgrade existing assembly workshops from manual operations to fully automated production lines。

Functional Overview

Voltage range: 48V DC or 220V or 380V AC

Maximum push force (maximum pull 3000N (maximum pulling force 500N) force): 0-200mm / s (load 3000N-500N)

Speed at full load: 500 - 3000 MM

Travel range: Stroke /2+ 300MM

Retract to initial height: 250 Nm

Dynamic lateral moment: 3500 Nm

Static lateral moment: ±0.2~1 MM

Positioning repeatability: Any robot

Robot compatibility: 0 stroke 25KG, @500MM stroke weight +2.5KG

Body weight: Comply with ISO9001-2008,

Security certification:  $-35 \,^{\circ} \,^{\circ}$ 

Full performance temperature range: IP54

Protection level: Default trapezoidal screw, optional ball screw
Screw selection: Feedback - position and status - barrier-free

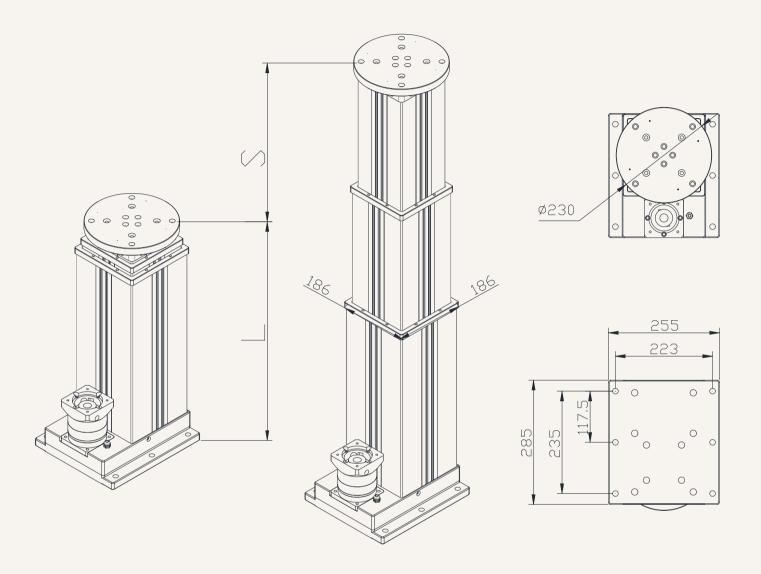
Other options: positi

Control options: Soft start and stop - for smooth operation

Communication protocol: EtherCAN/modbus rtu, (customized)

## Built-in motor-engineering drawing

Standard size(MM)



S: Stroke

L: Minimum heightRetracted length

L=stroke Stroke +300 MM

Greater than 2000MM stroke, installation size L=stroke Stroke +350 MM





height adjustment

Positioning adjustment

More compact design,

making it easier to install in small spaces,

Very suitable for designing different types of automation equipment, unmanned trucks and lifting equipment,

All while retaining many of the benefits that make it so popular!









# **TD3**-18N

# Series model Actuator



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1, Industrial Applications

2. Automotive Applications

3. Warehousing Applications

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Travel range: Stroke /2+ 300MM

Retract to initial height: 250 Nm

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Positioning repeatability: Any robot

Robot compatibility: 0 stroke 25KG, @500MM stroke weight +2.5KG

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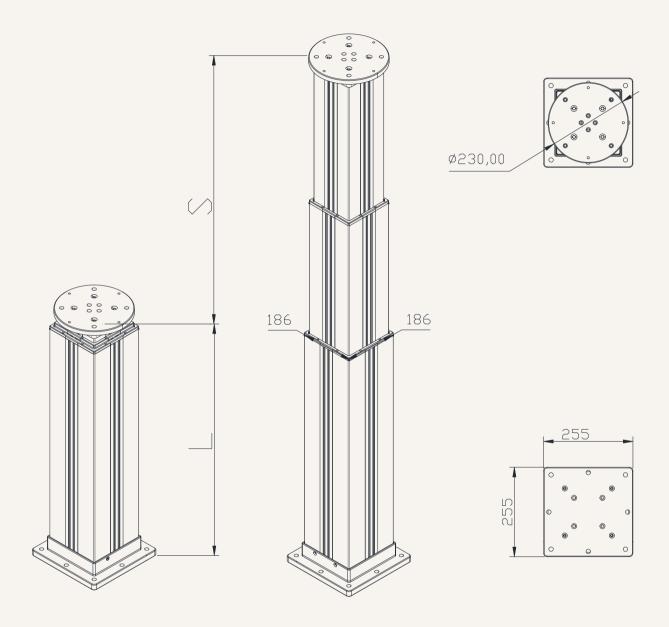
Protection level: Default trapezoidal screw, optional ball screw
Screw selection: Feedback - position and status - barrier-free

Other options: positi

Control options: Soft start and stop - for smooth operation

Communication protocol: EtherCAN/modbus rtu, (customized)

Standard size(MM)



S: Stroke

L: Minimum heightRetracted length

L=stroke Stroke +300 MM

Greater than 2000MM stroke, installation size L=stroke Stroke +350 MM



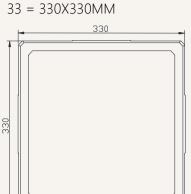
# TD Model Description Selection Code Table

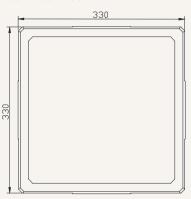
Model Preface	2= Two-stage	3= Three-stage		4= Four-stag	ne	
Woder Fredee	5= Five-stage 6= Six-stage			7= Seven-stage		
Pipe diameter	10= 106X106 tube	12= 125X125 tub	ne	14= 144X144 tube		
	16= 163X163 tube 18= 182X182 tube					
	27= 270X270 tube	10 10271102 100		23 232,123		
Motor Type	S04= 40100W Servo Moto	r S06= 60400W Se	ervo Motor	S08= 80750	Servo Motor	
	S10= 101000WServo Motor	S12= 121800W Se	S12= 121800W Servo Motor		S13= 132500WServo Motor	
	OF = 60F Motor	A3= A3Motor		SK= Provide	d by the customer	
Motor placement	W = External motor	N = Built-in moto	or			
Voltage	12= 12V DC	24= 24V DC		36= 36V DC		
	48= 48V DC	22= 220V AC		38= 380V A	С	
Loading(n)@speed(m m/s)						
stroke(mm)						
Installation dimensions(mm)	NOTE: Please refer to the	valid parameter sheet before	selecting a size! See	page 05		
upper type				= Conventional pipe type, mounting screw M8 ing 30MM, internal wiring		
	K = Customization					
lower type	O1 = Conventional pipe ty	D1 = Conventional pipe type, installation screw M8			al pipe type, mounting screw M8	
	K = Customization		Siriking Solvilvi, inc	erriai wiinig		
Outgoing method	0 = Side, top outlet		1 = Side, bottom outlet (default)			
Outlet type	1 =bare wire		2 = 01Straight plu	g		
	4 =Four-pin straight plug		6 = Six-pin straigh	nt plug		
	7 =Waterproof plug		K = Customization	١	0=Servo convention drive cable	
	T = Trapezoidal screw		G=Ball screw (def	ault preferred)		
Lead screw options						
Lead screw options  Control method	N= No Control	NC = CAN bus			K= Customization	
	N= No Control N = 无	NC = CAN bus	D = Limit switch		K= Customization	

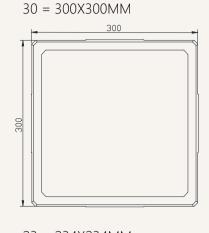


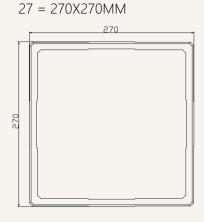
## TD Outer tube size selection code table

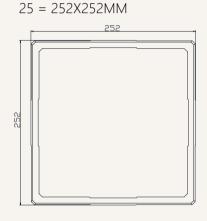
#### Maximum pipe diameter table:

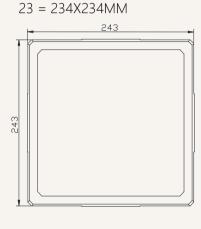


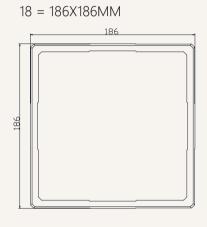


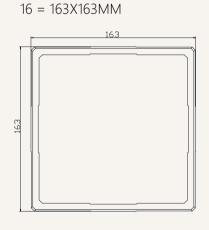


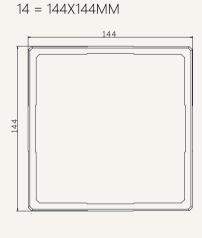


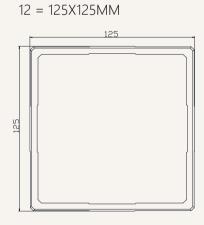




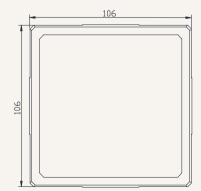














### TL Outer tube size selection code table

#### Maximum pipe diameter table:

