GeMinG
Linear Drive

# TG2/TG3

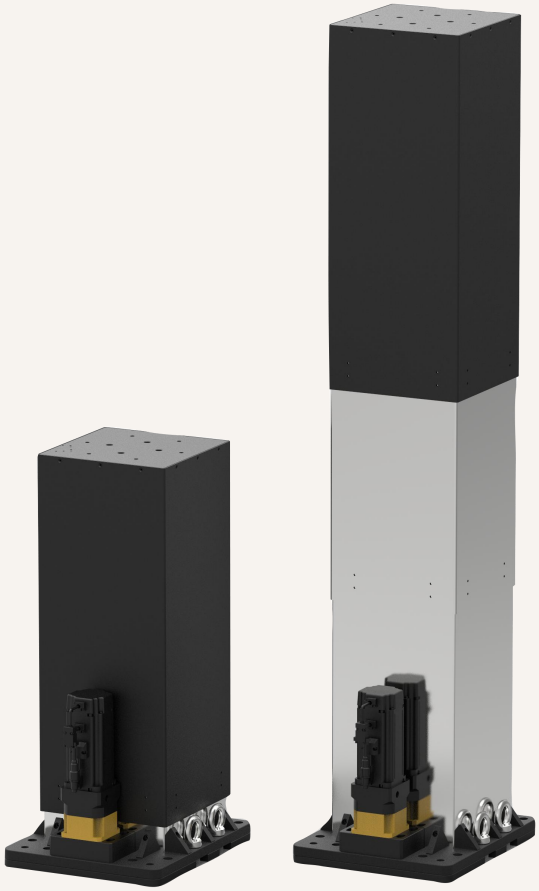
## Series

Rising bollards

# TG3

## Series

The seventh axis of an industrial robot arm



### Product Category

1、Industrial applications

2、Medical applications

3、Furniture application

The HTG series is designed specifically for industrial robotic arms, offering vertical lifting up to 3000 mm. With a compact retracted height, it features a robust column design suitable for industrial applications, vibration-free movement, and a plug-and-play solution requiring virtually no maintenance. It boasts a hardware interface compatible with any robot, CAN control via TCP/IP, cost savings, and increased productivity. Combined with the GeMin lifting system, collaborative robots provide a cost-effective solution for upgrading existing assembly lines, transitioning from manual operation to fully automated production lines.

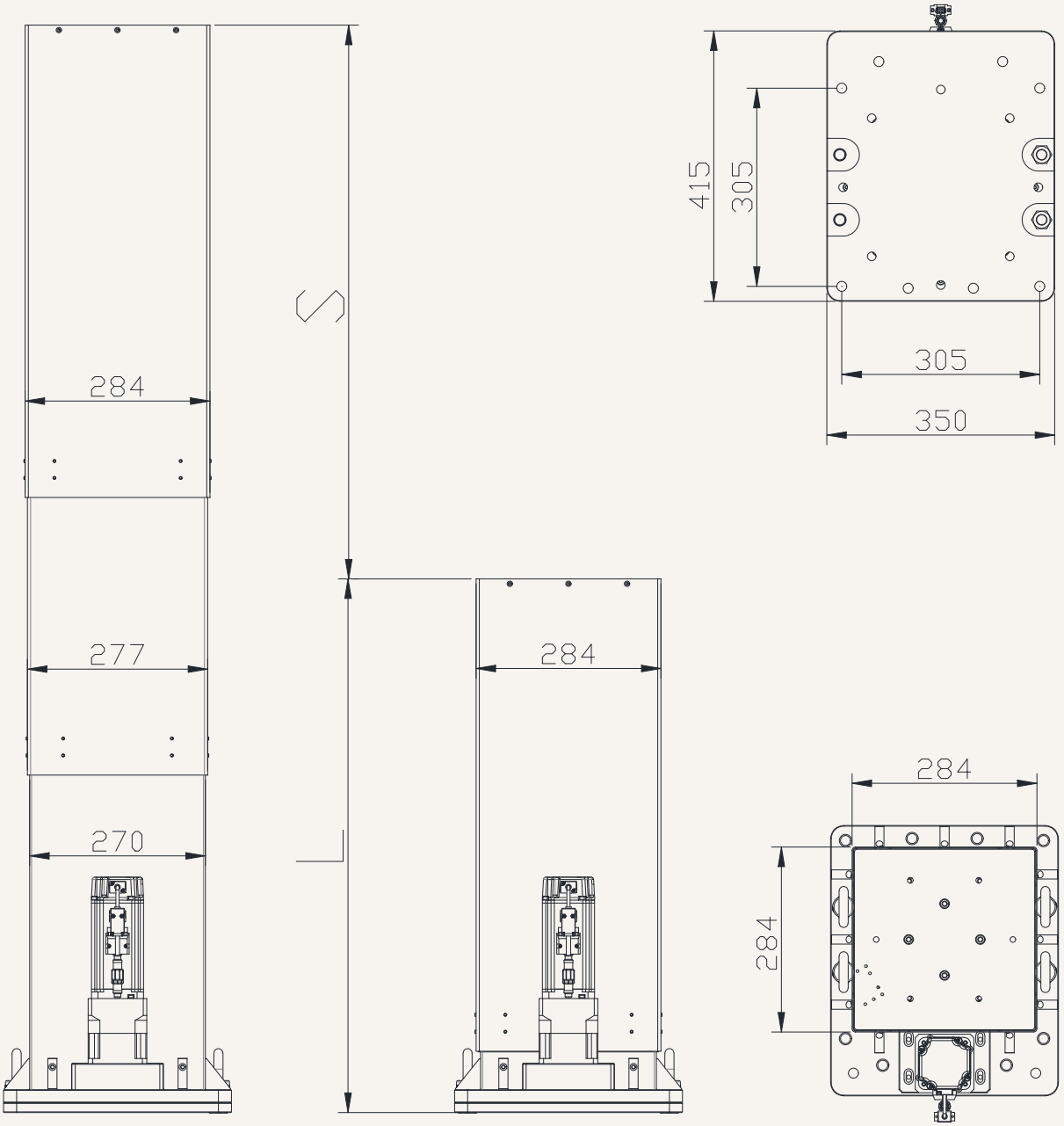
| Function Overview | |
|---|---|
| Voltage range: | 48V DC or 220V or 380V AC |
| Maximum load: | 15KN |
| Speed at full load: | 0-200mm / s (load 15KN-5KN) |
| Itinerary range: | 600 - 3000 MM |
| Retract to initial height: | stroke/2+ 350MM(stroke>2000 MM+400MM) |
| Dynamic lateral moment: | 5500 Nm |
| Static lateral moment: | 8000 Nm |
| Positioning repeatability accuracy: | ±0.2~1 MM |
| Robot compatibility: | Any robot |
| Body weight: | 0 stroke 460KG,@100MM stroke weight+25KG |
| Security Certification: | obey ISO9001-2008, |
| Operating temperature range: | -35 ° C ~ + 75 ° C |
| Integrity performance temperature range: | +5 ° C ~ + 45 ° C |
| Screw selection: | High-precision ball screw |
| Lead screw: | 20MM or 40MM |
| Limit function: | Mechanical self-locking limit switches at upper and lower origins |
| Control options: | Soft start and stop - for smooth operation |
| Communication protocol: | EtherCAN/modbus rtu, (Customization) |
| Origin signal: | Built-in high and low limit signals (PNP) |

# Application system of the seventh lifting axis of industrial robotic arm

Precise, powerful, fast, and flexible operation

# External motor - Engineering

## Standard dimensions (MM)



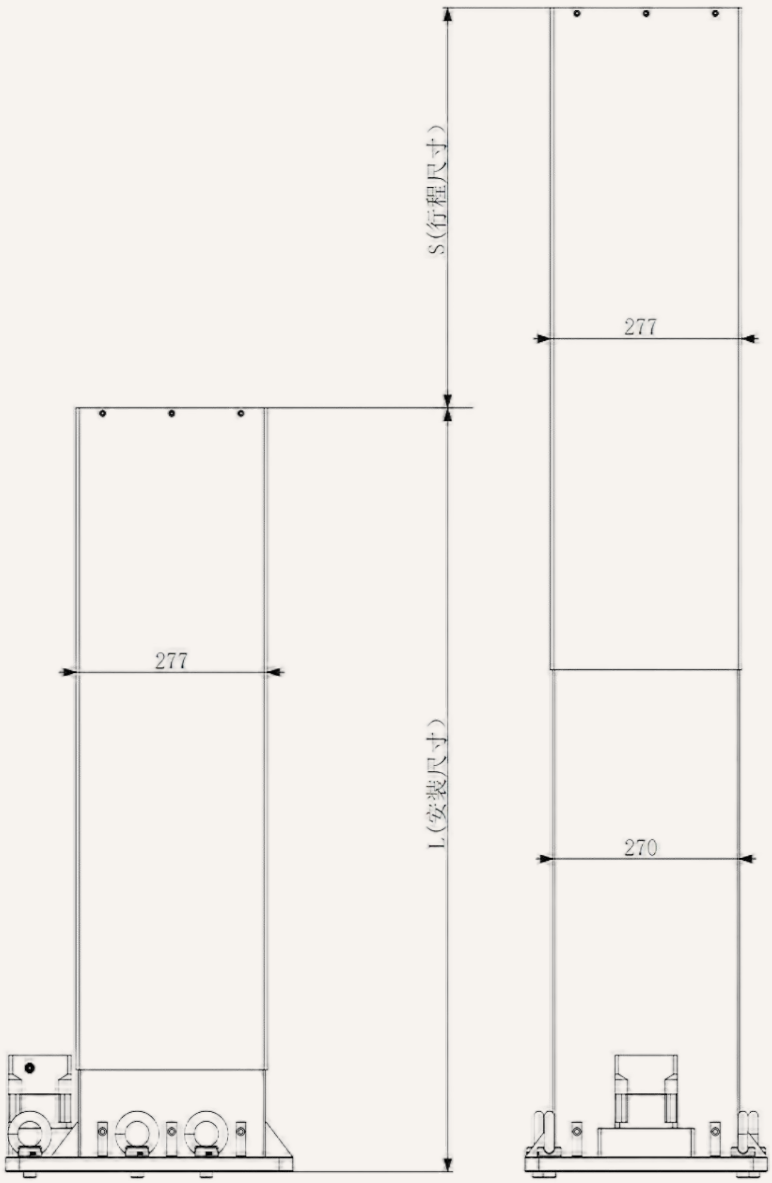

S: Stroke

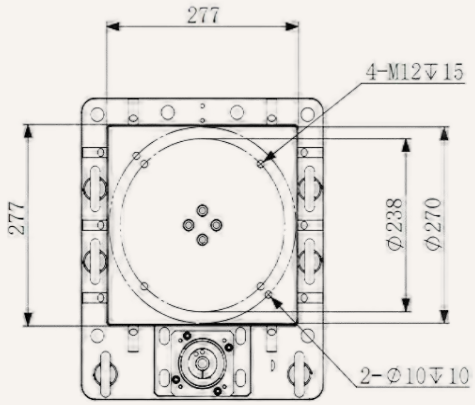
L: Retracted length

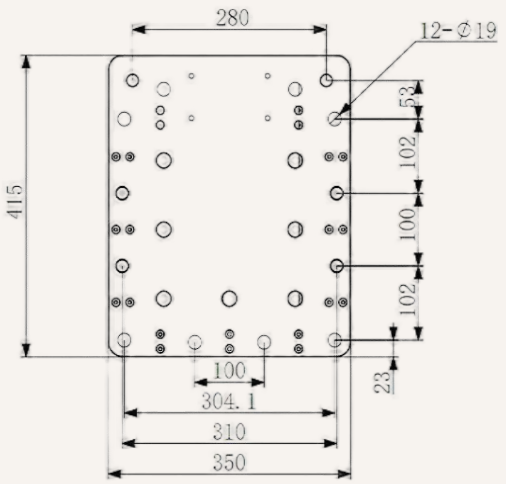
L=Stroke / 2 +350 MM

Greater than 900mm stroke, installation dimensionsL=Stroke / 2 +400 MM

# External motor -EngineeringStandard dimensions(MM)

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Greater than 900mm stroke, installation dimensionsL=Stroke +400 MM

# HTG3 Model Explanation Selection Code Table

| TG | - | 19 | N | 6F | - | 24 | A | *** | *** | - | O1 | O1 | 0 | 1 | T | N | N | 30 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ① | | ② | ③ | ④ | | ⑤ | ⑥ | ⑦ | ⑧ | | ⑨ | ⑩ | ⑪ | ⑫ | ⑬ | ⑭ | ⑮ | ⑯ |

| | | | | |
|---|---|---|---|---|
| ① | Model Prefix | TG2 = Two-stage | TG3 = Three-section | |
| ② | Pipe diameter | 28= 284X284 MM Pipes | 27= 277X277 MM Pipes | |
| ③ | Motor placement | N = Built-in motor | W = External motor | |
| ④ | Motor type | S08= 80 flange 750 servo motor | S09= 80 flange 1000W servo motor | S10= 120 flange 1800W servo motor |
| | | S11= 120 flange 2500W servo motor | | |
| | | | | SK = Customization (customer provides the motor) |
| ⑤ | Voltage | 48= 48V DC | 22= 220V AC | 38= 380V AC |
| ⑥ | Loading (n) @ Speed (mm/s) | | | |
| ⑦ | stroke(mm) | | | |
| ⑧ | Installation dimensions(mm) | Note: Please refer to the valid parameter table before selecting a size! | | |
| ⑨ | Upper type | O1 = Standard panel, 8mm mounting holes | O2 = For standard pipe types, use M8 mounting screws with a 30mm countersunk setting. | |
| | | K = Customization | | |
| ⑩ | Lower type | O1 = Standard panel, 8mm mounting holes | O2 = For standard pipe types, use M8 mounting screws with a 30mm countersunk setting. | |
| | | K = Customization | | |
| ⑪ | Qualifying Position | 0=upper plate top | 1=upper side | 2=lower side 3=Internal wiring panel |
| | | 4=Side of the inner wiring | 5=inner side of the line | |
| ⑫ | Type of qualification | 1 =bare wire | 2 = 01 Straight plug | 4 =Four-pin straight insertion 6 = Six-pin straight insertion |
| | | 7 =Waterproof plug | 0=Servo standard drive cable | K =Customization |
| ⑬ | Screw options | T = Trapezoidal Screw (Default preferred) | G=ball screw | |
| ⑭ | Control method | N= No control required | C = CAN communication control | T = Synchronization control |
| | | Y =Built-in controller with wired control | W=Built-in controller for wireless remote control remote control | K= Customization |
| ⑮ | Signal output options | N = 0 | H =Hall sensor | D = potentiometer signal U=Active signal |
| ⑯ | Line length | 07 =Line length 0.7 M | 10 = Line length 1.0 M | 15 =Line length 1.5 M 20= Line length 2.0 M |
| | | 30 =Line length 3.0 M | 40 =Line length 4.0M | 50 =Line length 5.0 M 60= Line length 6.0M |
| | | 70 =Line length 7.0 M | 70 =Line length 8.0 M | 90 =Line length 9.0 M 00 =Customization |