Agilebot

# DRIVE THE FACTORIES OF THE FUTURE


GBT202408D-2EN

www.sh-agilebot.com

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# ABOUT AGILEBOT

VISION:
DRIVE THE FACTORIES OF THE FUTURE!
MISSION:
BUILD AN INFRASTRUCTURE ECOSYSTEM
FOR INTELLIGENT MANUFACTURING!

Agilebot Robotics Co., Ltd. is a professional provider of Industrial Robotics (IR) and intelligent Magnetic Transport System (MTS). With a vision of driving the factories of the future, and a mission to build an infrastructure ecosystem for intelligent manufacturing, we are dedicated to pushing the boundaries through the seamless integration of cutting-edge technologies. Our expertise spans motion control, motor control, communication systems, sensor technology, and intelligent algorithms, all meticulously fused into our line of IR and MTS products. We focus on the deep-rooted industry application of these technologies, progressively diversifying, specializing, and nurturing an ecosystem of technological platforms and end products that deliver multifaceted values to our clients.

At Agilebot, we have built a comprehensive infrastructure for manufacturing, testing, and traceability. This commitment to excellence, driven by continuous process innovation and elevated management standards, ensures the prime quality of our products. Beyond developing a wide range of robot categories, MTS and functional software, we extend our commitment to clients through services like training, maintenance, technical support, and solution consulting.

Backed by our advanced Integrated Motion Control technology, Agilebot places independent R&D and control of key technology at the core of our growth approach, with a dedication to fundamentally satisfying market demands as our guiding principle. Our unwavering goal is to consistently provide clients with high performance, top-quality, cost-effective, and user-friendly products that empower their industrial operations.





## Our Values

### Vision

DRIVE THE FACTORIES OF THE FUTURE

### Mission

BUILD AN INFRASTRUCTURE ECOSYSTEM FOR INTELLIGENT MANUFACTURING

Agilebot

### Corporate Philosophy

Excellence
Lean
Collaboration
Precision
Openness
Integrity

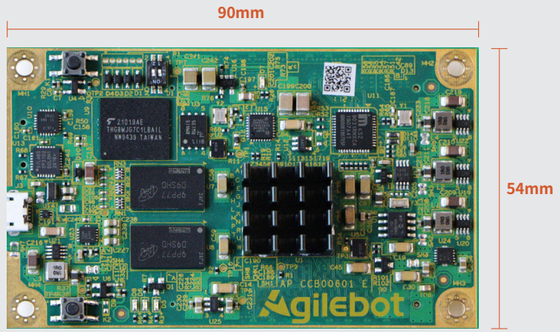
### Core Values

Customer-Centricity
Partnership as the Foundation
Creativity as the Wellspring
Quality as the Lifeblood

## Our Business



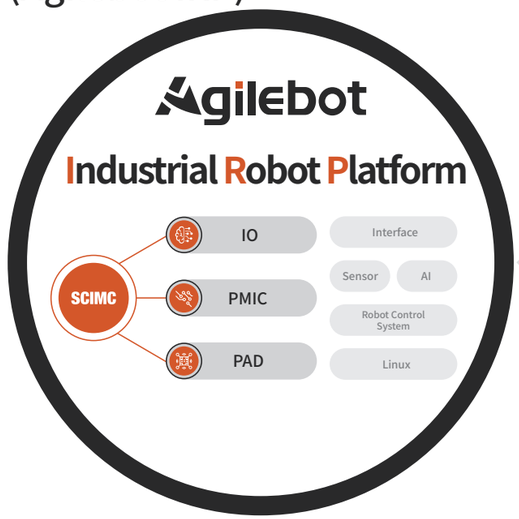

# CORE COMPETENCE




## Single Chip Multiaxis Integrated Motion Controller(SCIMC)

Leveraging the world's first single-chip Integrated multi-axis motion controller, SCIMC, with full intellectual property rights and advanced motion control technology, Agilebot has developed a precision motion control platform specifically tailored for the industrial robotics industry.

## Agilebot Industrial Robot Platform (Agilebot IRP)




### An Open, General-Purpose, and Efficient Platform

- Our in-house developed heterogeneous control system architecture based on ARM cores ensures high real-time and synchronization capabilities.
- Open-source Linux system guarantees platform openness.
- FPGA supports freely defining external interfaces.

### Support for Multiple Robot Configurations

- Based on parametric modeling, our platform supports multiple all-purpose industrial robot configurations and their product lines.

### Substantial Capabilities for Application

- Our independent system architecture and underlying algorithms support the development of various application software
- Easy to integrate vision and force sensors for functions such as welding, cutting, gluing, polishing, and visual tracking.

### Efficient Motion Planning Algorithms

- Efficient motion trajectory planning algorithms enable rapid and smooth robot movements with exceptionally high trajectory precision.

### Advanced Dynamics Algorithms

- Dynamics algorithms ensure that robots operate at high speeds, achieve precise positioning, and exhibit excellent control performance.

### Optimized Servo Motor Control Algorithms

- We have optimized servo motor control algorithms, improving three-loop control performance and enabling precise positioning, speed, and torque control.

### User-Friendly Human-Machine Interface

- Our web-based cross-platform UI design offers a user-friendly human-machine interaction experience.



# PATENTS & CERTIFICATES

Currently, Agilebot has accumulated 65 domestic and international patent applications, including 34 invention patents, 22 utility model patents, 4 design patents, and 5 software copyrights. Additionally, Agilebot has successfully obtained various product certifications, such as Robot CR Certification, CE Certification, IP67 Protection Certification, and ISO Class 4 Cleanroom Certification, through rigorous standards and testing processes.

### SCIMC Core Patents


Single Chip Multiaxis Integrated Motion Controller Patent Certification (China)


Single Chip Multiaxis Integrated Motion Controller Patent Certification (United States)

Single Chip Multiaxis Integrated Motion Controller Patent Certification (Japan)

Single Chip Multiaxis Integrated Motion Controller Patent Certification (Europe)

### Invention patents


Control Unit for a Robot System, Robot System, and Control Method for a Robot System


Method and Apparatus for Identifying the Dynamic Parameters of a Multi-Link Robot


Visual Classification Method, System, Apparatus, and Computer-Readable Medium


Method for Electronic Device and Operating an Electronic Device

### Product Certification


IP67 Protection Certification


CE Certification


MTBF 50,000 Hours Certification


ISO Class 4 Cleanroom Certification

# PRODUCT APPLICATIONS

## Industry Applications

| | | | |
|---|---|---|---|
| Electric Vehicle | Automotive Components | Consumer Electronics | Pharmaceuticals |
| General Components | Semiconductors & Photovoltaics | FMCG | Cosmetics |

## Application Scenarios

- Visual Inspection
- Logistics Packaging
- Loading and Unloading
- Cutting
- Visual Sorting
- Polishing and Buffing
- Assembly
- Cleaning




# SERVICE

We offer a comprehensive service support system.

### 1 Service Hotline

- Technical Support Hotline
- Exclusive Service Window for VIP Clients*1

### 2 Solution Consultation and Design

- Application Consultation
- Solution Consultation and Design

### 3 Installation and Commissioning

- Robot Delivery and Installation
- On-Site Robot Commissioning

### 4 Training Services

- Basic Operation Training
- Electrical and Programming Training
- Process Technology Training

### 5 Robot Maintenance and Service

- Standard Maintenance
- Electrical and Mechanical Repairs
- Response within 12 hours*
- On-site arrival within 24 hours after response
- Inspection and Service available

### 6 Robot Spare Parts or Retrofits

- Robot Spare Parts
- Robot Peripheral Product Spare Parts
- Retrofit or Upgrade Services for Sold Robots

*1 We provide VIP clients with dedicated FAE (Field Application Engineer) services, offering faster response times and personalized value-added services.
*2 "Response" refers to service personnel confirming service requirements with clients and providing solutions.
*3 The 24-hour on-site arrival is applicable during working hours and is limited to the Yangtze River Delta region, except in cases affected by force majeure factors.

# COMPLETE PORTFOLIO


## Model Naming Rules of Agilebot Industrial Robots & Controllers Series

### SCARA Series

| Product Categories | |
|---|---|
| GBT | Agilebot Industrial Robots |

| Product Series | |
|---|---|
| S | SCARA Robot |

| Payload | |
|---|---|
| 3 | 3KG |
| 6 | 6KG |
| 10 | 10KG |
| 20 | 20KG |

| Version | |
|---|---|
| A | 1st Generation |

| Reach | |
|---|---|
| 400 | 400mm |
| 500 | 500mm |
| 600 | 600mm |
| 700 | 700mm |
| 800 | 800mm |
| 1000 | 1000mm |

| Z-Axis Stroke | |
|---|---|
| Blank | Standard stroke |
| .3 | 300mm |

| Branch Version | |
|---|---|
| Blank | Standard Version |
| C | Cleanroom Version |

### PUMA Series

| Product Categories | |
|---|---|
| GBT | Agilebot Industrial Robots |

| Product Series | |
|---|---|
| P | PUMA Robot |

| Payload | |
|---|---|
| 7 | 7KG |
| 20 | 20KG |

| Version | |
|---|---|
| A | 1st Generation |
| B | 2nd Generation |

| Reach | |
|---|---|
| 700 | 721mm |
| 900 | 901mm |
| 1800 | 1805mm |

| Branch Version | |
|---|---|
| Blank | Standard Version |
| C | Cleanroom Version |

### Cobot Series

| Product Categories | |
|---|---|
| GBT | Agilebot Industrial Robots |

| Product Series | |
|---|---|
| C | Cobots |

| Payload | |
|---|---|
| 5 | 5KG |
| 7 | 7KG |
| 12 | 12KG |

| Version | |
|---|---|
| A | 1st Generation |

### Robot Controller Naming Rules

| Product Categories | |
|---|---|
| IRC | Industrial Robot Controller |

| Technical Features | |
|---|---|
| I | Integrated All-in-One Solution |
| D | Drive Distributed |

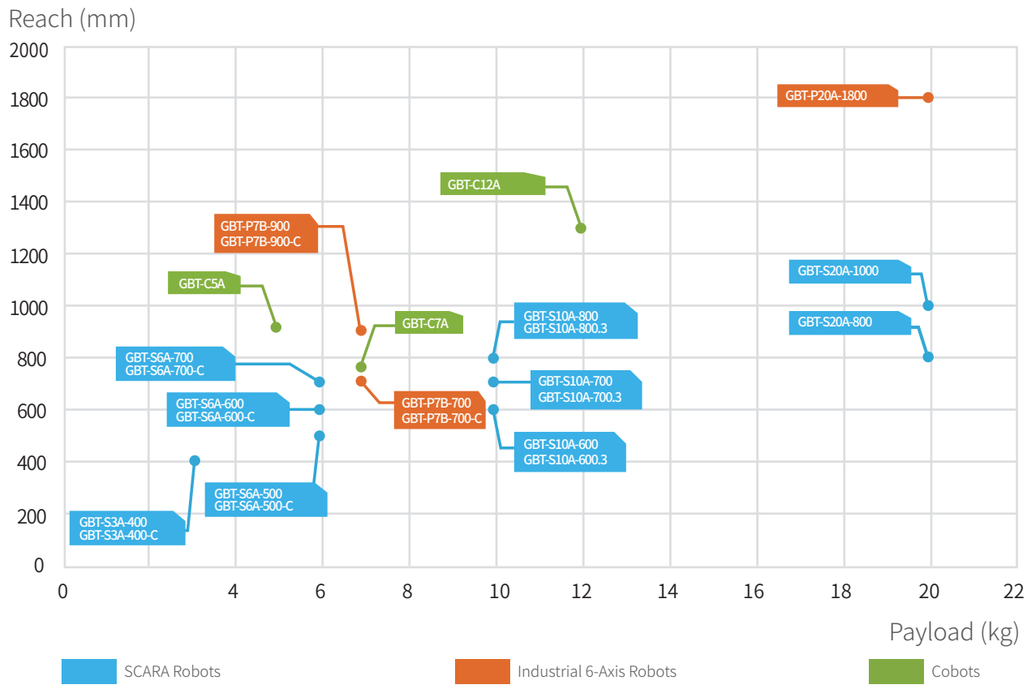
| Standard Axis | |
|---|---|
| 4 | 4 Axes |
| 6 | 6 Axes |
| 8 | 8 Axes |

| Version | |
|---|---|
| A | 1st Generation |
| B | 2nd Generation |

| Controller Type | |
|---|---|
| Blank | Standard |
| S | Small Type |
| C | Compact Type |

# Product Selection

## Robot Models Chart




## Controller Selection

| | IRC-I4A-C | IRC-I6A-C | IRC-I6A | IRC-D6A | IRC-D6B | IRC-D6B-S |
|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |
| Applicable Robot Models | GBT-S3A Series<br>GBT-S6A Series<br>GBT-S10A Series<br>GBT-S20A Series | GBT-P7B Series | GBT-P20A Series | GBT-C5A<br>GBT-C7A | GBT-C12A | GBT-C12A |
| Size | 380mm x 350mm x 182mm | 400 x 380 x 182 mm | 650mm x 483mm x 810mm | 410mm x 260mm x 235mm | 500mm x 330mm x 210mm | 410mm x 161mm x 150mm |
| Weight | 8kg | 12 kg | 85.5kg | 14.5kg | 12kg | 7kg |
| Supported Devices | TP, PC | TP, PC | TP, PC | Mobile, Tablet, PC | Mobile, Tablet, PC | Mobile, Tablet, PC |
| Communication | Supports I/O (24 input, 16 output) as well as communication protocols such as TCP/IP, ModBus TCP. | Supports I/O (48 input, 48 output) as well as communication protocols like TCP/IP and ModBus TCP. | Supports I/O (25 input, 25 output) as well as communication protocols like TCP/IP and ModBus TCP. | Supports I/O (16 digital input, 16 digital output) as well as communication protocols including TCP/IP, ModBus TCP, RS485. | Supports I/O (16 digital input, 16 digital output, 2 analog input, 2 analog output) as well as communication protocols including TCP/IP, ModBus TCP, RS485. | Supports I/O (16 digital input, 16 digital output, 2 analog input, 2 analog output) as well as communication protocols including TCP/IP, ModBus TCP, RS485. |

## Robot Selection

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Model** | GBT-S3A-400 | GBT-S3A-400-C | GBT-S6A-500<br>GBT-S6A-600<br>GBT-S6A-700 | GBT-S6A-500-C<br>GBT-S6A-600-C<br>GBT-S6A-700-C | GBT-S10A-600<br>GBT-S10A-700<br>GBT-S10A-800 | GBT-S10A-600.3<br>GBT-S10A-700.3<br>GBT-S10A-800.3 | GBT-S20A-800<br>GBT-S20A-1000 | GBT-P7B-700<br>GBT-P7B-900 | GBT-P7B-700-C<br>GBT-P7B-900-C | GBT-P20A-1800 | GBT-C5A | GBT-C7A | GBT-C12A |
| **Payload** | 3kg | 3kg | 6kg | 6kg | 10kg | 10kg | 20kg | 7kg | 7kg | 20kg | 5kg | 7kg | 12kg |
| **Reach (max)** | 400mm | 400mm | 500mm<br>600mm<br>700mm | 500mm<br>600mm<br>700mm | 600mm<br>700mm<br>800mm | 600mm<br>700mm<br>800mm | 800mm<br>1000mm | 721mm<br>901mm | 721mm<br>901mm | 1805mm | 933mm | 785mm | 1303mm |
| **Z-Axis Stroke** | 150mm | 120mm | 200mm | 170mm | 200mm | 300mm | 390mm | - | - | - | - | - | - |


# GBT-S3A

**Efficient** The shortest cycle time for the standard Pick & Place operation is approximately 0.41 seconds.

**User-friendly** The Compass platform supports PC-based teaching and programming for SCARA robots.

## Technical Specifications:

| Model | | GBT-S3A-400 |
|---|---|---|
| **Basic Specifications** | | |
| Axes | | 4 |
| Reach (max) | | 400mm |
| Payload | Rated | 1kg |
| | Maximum | 3kg |
| Axis 4 Moment of Inertia | Rated | 0.005kg·m² |
| | Maximum | 0.05kg·m² |
| Axis 3 Down Force | | 100N |
| Mounting | | Floor |
| **Motion Parameters** | | |
| Axis Motion Range | J1 | ±132° |
| | J2 | ±141° |
| | J3 | 150mm |
| | J4 | ±360° |
| Axis Maximum Speed | J1+J2 | 6650mm/s |
| | J3 | 1100mm/s |
| | J4 | 2350° /s |
| Position Repeatability*1 | J1+J2 | 0.01mm |
| | J3 | 0.01mm |
| | J4 | 0.01° |
| Standard Cycle Time*2 | | 0.41s |

| Customer Interface | | |
|---|---|---|
| Air | | ϕ4x1，ϕ6x2 |
| Communication | | D-sub 15 pin<br>RJ45(CAT 5e)8pin |
| **Physical Characteristics** | | |
| Weight | | 13kg |
| Base Mounting Area | | 185mmx140mm |
| **Other Information** | | |
| Applicable Controller | | IRC-I4A-C |
| Power Requirements | Voltage | 220V~ / 50Hz |
| Operating Environment | Temperature | 5° C~40° C |
| | Humidity | Up to 80%RH (non-condensing) |
| | Vibration | 0.5G （⩾ 50Hz） |

*1. Numerical values obtained under constant environmental temperature of 20° C.

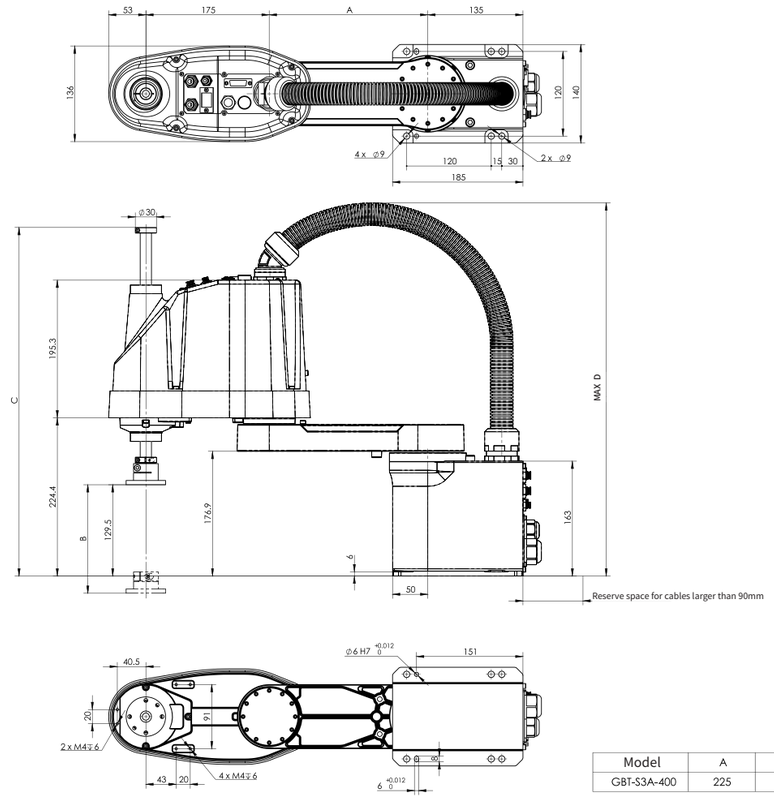
*2. The cycle time of the robot, performing an oscillatory arched motion with a horizontal displacement of 300mm and a vertical displacement of 25mm under 2kg load conditions (maximum speed, optimal trajectory, coarse positioning).





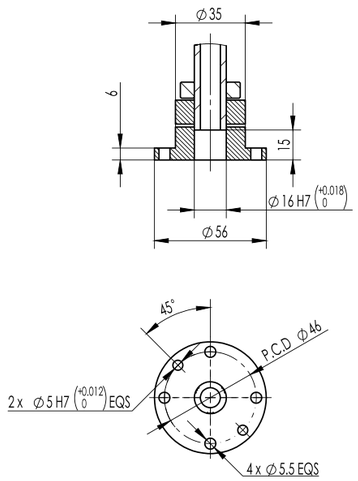
## Main Dimensions

(Unit: mm )

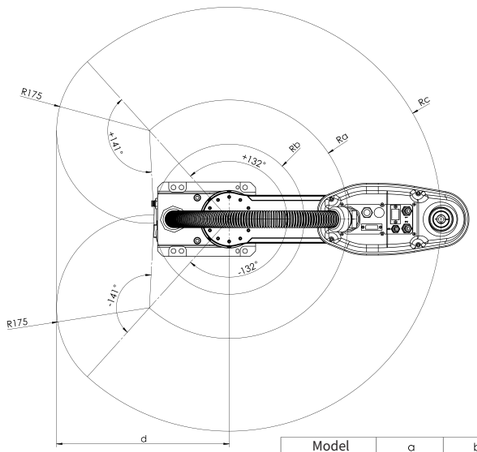



| Model | A | B | C | D |
|---|---|---|---|---|
| GBT-S3A-400 | 225 | 150 | 494.5 | 540 |

## Tool Flange




## Working Range




| Model | a | b | c | d |
|---|---|---|---|---|
| GBT-S3A-400 | 225 | 141.6 | 400 | 326 |

The specifications are subject to change without prior notice.


# GBT-S3A-C

**Efficient** The shortest cycle time for the standard Pick & Place operation is approximately 0.41 seconds.

**User-friendly** The Compass platform supports PC-based teaching and programming for SCARA robots.

## Technical Specifications:

| Model | | GBT-S3A-400-C |
|---|---|---|
| **Basic Specifications** | | |
| Axes | | 4 |
| Reach (max) | | 400mm |
| Payload | Rated | 1kg |
| | Maximum | 3kg |
| Axis 4 Moment of Inertia | Rated | 0.005kg·m² |
| | Maximum | 0.05kg·m² |
| Axis 3 Down Force | | 100N |
| Cleanroom version (ISO 14644) | | Class 4 |
| Mounting | | Floor |
| **Motion Parameters** | | |
| Axis Motion Range | J1 | ±132° |
| | J2 | ±141° |
| | J3 | 120mm |
| | J4 | ±360° |
| Axis Maximum Speed | J1+J2 | 6650mm/s |
| | J3 | 1100mm/s |
| | J4 | 2350° /s |
| Position Repeatability*1 | J1+J2 | 0.01mm |
| | J3 | 0.01mm |
| | J4 | 0.01° |
| Standard Cycle Time*2 | | 0.41s |

| **Customer Interface** | | |
|---|---|---|
| Air | | ϕ4x1，ϕ6x2 |
| Communication | | D-sub 15 pin<br>RJ45(CAT 5e)8pin |
| **Physical Characteristics** | | |
| Weight | | 13kg |
| Base Mounting Area | | 185mmx140mm |
| **Other Information** | | |
| Applicable Controller | | IRC-I4A-C |
| Power Requirements | Voltage | 220V~ / 50Hz |
| Operating Environment | Temperature | 5° C~40° C |
| | Humidity | Up to 80%RH (non-condensing) |
| | Vibration | 0.5G （⩾ 50Hz） |

*1. Numerical values obtained under constant environmental temperature of 20° C.

*2. The cycle time of the robot, performing an oscillatory arched motion with a horizontal displacement of 300mm and a vertical displacement of 25mm under 2kg load conditions (maximum speed, optimal trajectory, coarse positioning).



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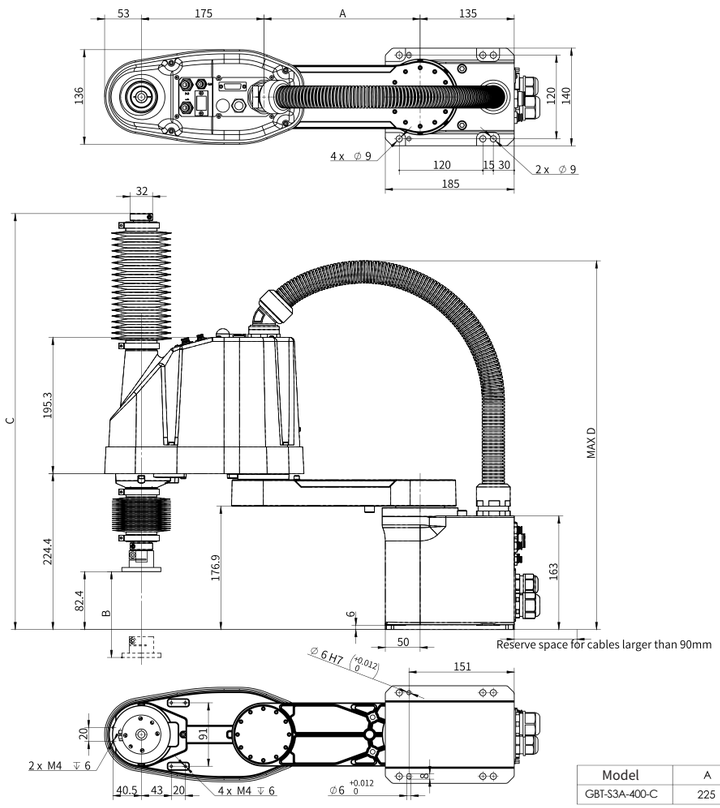
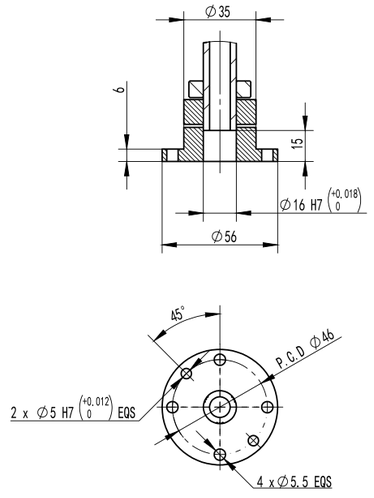
## Main Dimensions

(Unit: mm )

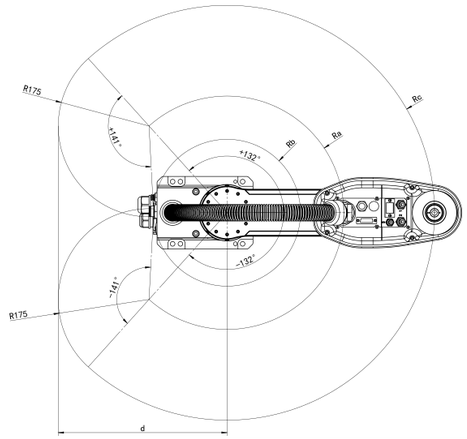



| Model | A | B | C | D |
|---|---|---|---|---|
| GBT-S3A-400-C | 225 | 120 | 597.4 | 540 |

## Tool Flange




## Working Range




| Model | a | b | c | d |
|---|---|---|---|---|
| GBT-S3A-400-C | 225 | 141.6 | 400 | 326 |

The specifications are subject to change without prior notice.


# GBT-S6A

**Efficient** The shortest cycle time for the standard Pick & Place operation is approximately 0.41 seconds.

**User-friendly** The Compass platform supports PC-based teaching and programming for SCARA robots.

## Technical Specifications:

| Model | | GBT-S6A-500 | GBT-S6A-600 | GBT-S6A-700 |
|---|---|---|---|---|
| **Basic Specifications** | | | | |
| Axes | | 4 | | |
| Reach (max) | | 500mm | 600mm | 700mm |
| Payload | Rated | 2kg | 2kg | 2kg |
| | Maximum | 6kg | 6kg | 6kg |
| Axis 4 Moment of Inertia | Rated | 0.01kg·m² | 0.01kg·m² | 0.01kg·m² |
| | Maximum | 0.12kg·m² | 0.12kg·m² | 0.12kg·m² |
| Axis 3 Down Force | | 100N | | |
| Mounting | | Floor | | |
| **Motion Parameters** | | | | |
| Axis Motion Range | J1 | ±132° | ±132° | ±132° |
| | J2 | ±150° | ±150° | ±150° |
| | J3 | 200mm | 200mm | 200mm |
| | J4 | ±360° | ±360° | ±360° |
| Axis Maximum Speed | J1+J2 | 6180mm/s | 6800mm/s | 7100mm/s |
| | J3 | 1100mm/s | 1100mm/s | 1100mm/s |
| | J4 | 2000° /s | 2000° /s | 2000° /s |
| Position Repeatability*1 | J1+J2 | 0.015mm | 0.015mm | 0.015mm |
| | J3 | 0.01mm | 0.015mm | 0.015mm |
| | J4 | 0.01° | 0.01° | 0.01° |
| Standard Cycle Time*2 | | 0.41s | 0.41s | 0.41s |

| Model | | GBT-S6A-500 | GBT-S6A-600 | GBT-S6A-700 |
|---|---|---|---|---|
| **Customer Interface** | | | | |
| Air | | ϕ4x1，ϕ6x2 | ϕ4x1，ϕ6x2 | ϕ4x1，ϕ6x2 |
| Communication | | D-sub15pin RJ45(CAT 5e)8 pin | D-sub15pin RJ45(CAT 5e)8 pin | D-sub15pin RJ45(CAT 5e)8 pin |
| **Physical Characteristics** | | | | |
| Weight | | 16.5kg | 17.3kg | 18kg |
| Base Mounting Area | | 200mmx170mm | 200mmx170mm | 200mmx170mm |
| **Other Information** | | | | |
| Applicable Controller | | IRC-I4A-C | IRC-I4A-C | IRC-I4A-C |
| Power Requirements | Voltage | 220V~ / 50Hz | 220V~ / 50Hz | 220V~ / 50Hz |
| Operating Environment | Temperature | 5° C~40° C | 5° C~40° C | 5° C~40° C |
| | Humidity | Up to 80%RH (non-condensing) | Up to 80%RH (non-condensing) | Up to 80%RH (non-condensing) |
| | Vibration | 0.5G (⩾ 50Hz) | 0.5G (⩾ 50Hz) | 0.5G (⩾ 50Hz) |

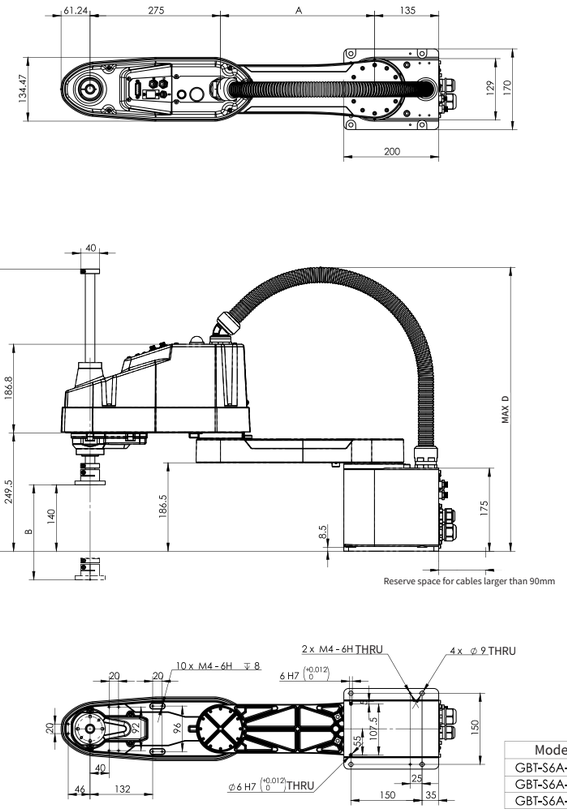
*1. Numerical values obtained under constant environmental temperature of 20° C.
*2. The cycle time of the robot, performing an oscillatory arched motion with a horizontal displacement of 300mm and a vertical displacement of 25mm under 2kg load conditions (maximum speed, optimal trajectory, coarse positioning).





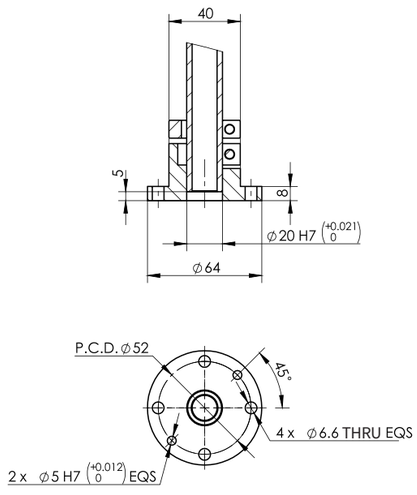
## Main Dimensions

(Unit: mm )

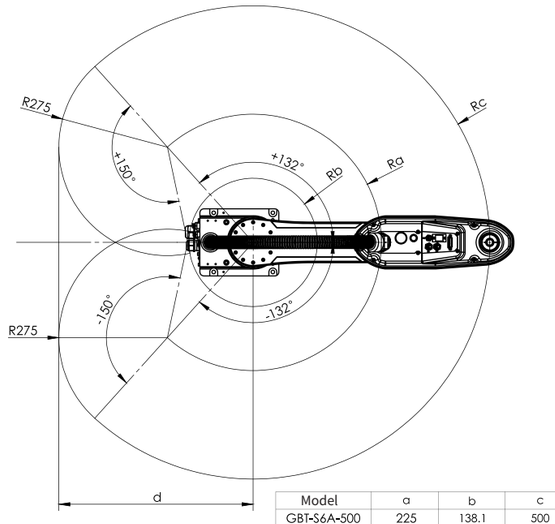



| Model | A | B | C | D |
|---|---|---|---|---|
| GBT-S6A-500 | 225 | 200 | 595 | 580 |
| GBT-S6A-600 | 325 | 200 | 595 | 590 |
| GBT-S6A-700 | 425 | 200 | 595 | 600 |

## Tool Flange




## Working Range




| Model | a | b | c | d |
|---|---|---|---|---|
| GBT-S6A-500 | 225 | 138.1 | 500 | 425.5 |
| GBT-S6A-600 | 325 | 162.6 | 600 | 492.5 |
| GBT-S6A-700 | 425 | 232.0 | 700 | 559.4 |

The specifications are subject to change without prior notice.


# GBT-S6A-C

**Efficient** The shortest cycle time for the standard Pick & Place operation is approximately 0.41 seconds.

**User-friendly** The Compass platform supports PC-based teaching and programming for SCARA robots.

## Technical Specifications:

| Model | | GBT-S6A-500-C | GBT-S6A-600-C | GBT-S6A-700-C |
|---|---|---|---|---|
| **Basic Specifications** | | | | |
| Axes | | 4 | | |
| Reach (max) | | 500mm | 600mm | 700mm |
| Payload | Rated | 2kg | 2kg | 2kg |
| | Maximum | 6kg | 6kg | 6kg |
| Axis 4 Moment of Inertia | Rated | 0.01kg·m² | 0.01kg·m² | 0.01kg·m² |
| | Maximum | 0.12kg·m² | 0.12kg·m² | 0.12kg·m² |
| Axis 3 Down Force | | 100N | | |
| Cleanroom version (ISO 14644) | | Class 4 | | |
| Mounting | | Floor | | |
| **Motion Parameters** | | | | |
| Axis Motion Range | J1 | ±132° | ±132° | ±132° |
| | J2 | ±150° | ±150° | ±150° |
| | J3 | 170mm | 170mm | 170mm |
| | J4 | ±360° | ±360° | ±360° |
| Axis Maximum Speed | J1+J2 | 6180mm/s | 6800mm/s | 7100mm/s |
| | J3 | 1100mm/s | 1100mm/s | 1100mm/s |
| | J4 | 2000° /s | 2000° /s | 2000° /s |
| Position Repeatability*1 | J1+J2 | 0.015mm | 0.015mm | 0.015mm |
| | J3 | 0.01mm | 0.015mm | 0.015mm |
| | J4 | 0.01° | 0.01° | 0.01° |
| Standard Cycle Time*2 | | 0.41s | 0.41s | 0.41s |

| Model | | GBT-S6A-500-C | GBT-S6A-600-C | GBT-S6A-700-C |
|---|---|---|---|---|
| **Customer Interface** | | | | |
| Air | | ϕ4x1，ϕ6x2 | ϕ4x1，ϕ6x2 | ϕ4x1，ϕ6x2 |
| Communication | | D-sub15pin RJ45(CAT 5e)8 pin | D-sub15pin RJ45(CAT 5e)8 pin | D-sub15pin RJ45(CAT 5e)8 pin |
| **Physical Characteristics** | | | | |
| Weight | | 16.5kg | 17.3kg | 18kg |
| Base Mounting Area | | 200mmx170mm | 200mmx170mm | 200mmx170mm |
| **Other Information** | | | | |
| Applicable Controller | | IRC-I4A-C | IRC-I4A-C | IRC-I4A-C |
| Power Requirements | Voltage | 220V~ / 50Hz | 220V~ / 50Hz | 220V~ / 50Hz |
| Operating Environment | Temperature | 5° C~40° C | 5° C~40° C | 5° C~40° C |
| | Humidity | Up to 80%RH (non-condensing) | Up to 80%RH (non-condensing) | Up to 80%RH (non-condensing) |
| | Vibration | 0.5G （⩾ 50Hz） | 0.5G （⩾ 50Hz） | 0.5G （⩾ 50Hz） |

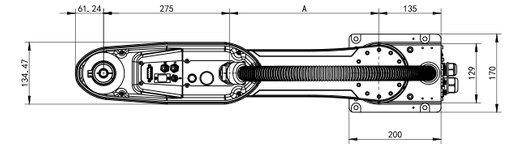
*1. Numerical values obtained under constant environmental temperature of 20° C.
*2. The cycle time of the robot, performing an oscillatory arched motion with a horizontal displacement of 300mm and a vertical displacement of 25mm under 2kg load conditions (maximum speed, optimal trajectory, coarse positioning).

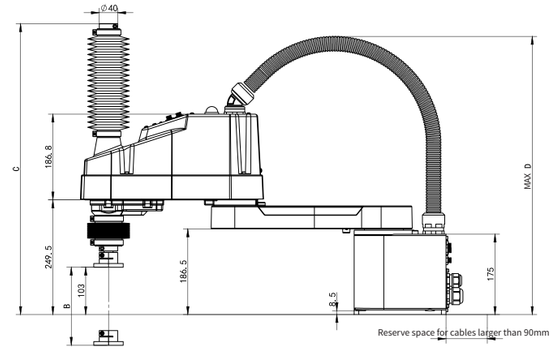


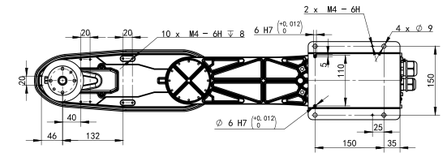
Agilebot

## Main Dimensions

(Unit: mm )

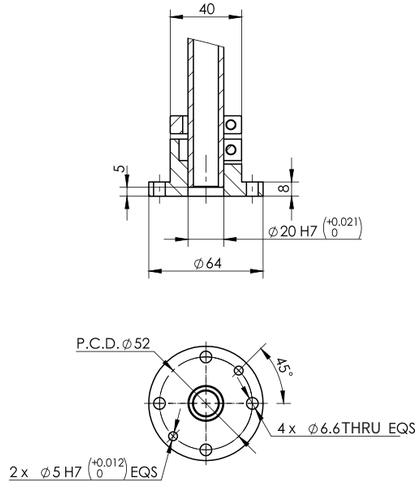


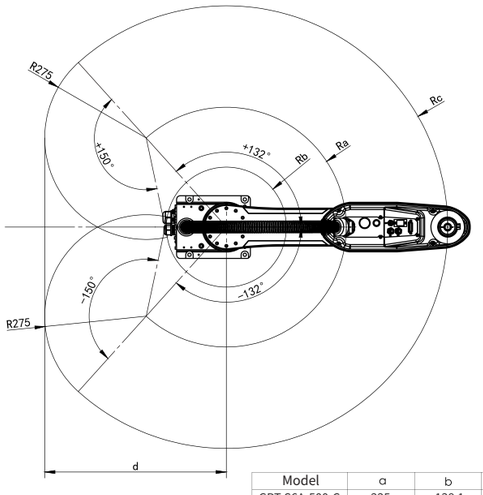




| Model | A | B | C | D |
|---|---|---|---|---|
| GBT-S6A-500-C | 225 | 170 | 633.5 | 580 |
| GBT-S6A-600-C | 325 | 170 | 633.5 | 590 |
| GBT-S6A-700-C | 425 | 170 | 633.5 | 600 |

## Tool Flange




## Working Range




| Model | a | b | c | d |
|---|---|---|---|---|
| GBT-S6A-500-C | 225 | 138.1 | 500 | 425.5 |
| GBT-S6A-600-C | 325 | 162.6 | 600 | 492.5 |
| GBT-S6A-700-C | 425 | 232 | 700 | 559.4 |

The specifications are subject to change without prior


# GBT-S10A

**Efficient** The shortest cycle time for the standard Pick & Place operation is approximately 0.40 seconds.

**User-friendly** The Compass platform supports PC-based teaching and programming for SCARA robots.

## Technical Specifications:

| Model | | GBT-S10A-600 | GBT-S10A-600.3 | GBT-S10A-700 | GBT-S10A-700.3 | GBT-S10A-800 | GBT-S10A-800.3 |
|---|---|---|---|---|---|---|---|
| **Basic Specifications** | | | | | | | |
| Axes | | 4 | | | | | |
| Reach (max) | | 600mm | 600mm | 700mm | 700mm | 800mm | 800mm |
| Payload | Rated | 5kg | 5kg | 5kg | 5kg | 5kg | 5kg |
| | Maximum | 10kg | 10kg | 10kg | 10kg | 10kg | 10kg |
| Axis 4 Moment of Inertia | Rated | 0.02kg·m² | 0.02kg·m² | 0.02kg·m² | 0.02kg·m² | 0.02kg·m² | 0.02kg·m² |
| | Maximum | 0.3kg·m² | 0.3kg·m² | 0.3kg·m² | 0.3kg·m² | 0.3kg·m² | 0.3kg·m² |
| Axis 3 Down Force | | 200N | | | | | |
| Mounting | | Floor | | | | | |
| **Motion Parameters** | | | | | | | |
| Axis Motion Range | J1 | ±132° | ±132° | ±132° | ±132° | ±132° | ±132° |
| | J2 | ±150° | ±150° | ±150° | ±150° | ±150° | ±150° |
| | J3 | 200mm | 300mm | 200mm | 300mm | 200mm | 300mm |
| | J4 | ±360° | ±360° | ±360° | ±360° | ±360° | ±360° |
| Axis Maximum Speed | J1+J2 | 9100mm/s | 9100mm/s | 9800mm/s | 9800mm/s | 10600mm/s | 10600mm/s |
| | J3 | 1100mm/s | 1100mm/s | 1100mm/s | 1100mm/s | 1100mm/s | 1100mm/s |
| | J4 | 2700° /s | 2700° /s | 2700° /s | 2700° /s | 2700° /s | 2700° /s |
| Position Repeatability *1 | J1+J2 | 0.015mm | 0.015mm | 0.015mm | 0.015mm | 0.015mm | 0.015mm |
| | J3 | 0.015mm | 0.015mm | 0.015mm | 0.015mm | 0.015mm | 0.015mm |
| | J4 | 0.01° | 0.01° | 0.01° | 0.01° | 0.01° | 0.01° |
| Standard Cycle Time *2 | | 0.40s | 0.40s | 0.42s | 0.42s | 0.42s | 0.42s |
| **Physical Characteristics** | | | | | | | |
| Weight | | 22.5kg | 22.5kg | 23kg | 23kg | 23.5kg | 23.5kg |
| Base Mounting Area | | 195mmx169mm | | | | | |

| Customer Interface | | |
|---|---|---|
| Air | | ϕ4x1，ϕ6x2 |
| Communication | | D-sub15 pin<br>RJ45(CAT 5e)8 pin |
| **Other Information** | | |
| Applicable Controller | | IRC-I4A-C |
| Power Requirements | Voltage | 220V~ / 50Hz |
| Operating Environment | Temperature | 5° C~40° C |
| | Humidity | Up to 80%RH (non-condensing) |
| | Vibration | 0.5G （⩾ 50Hz） |

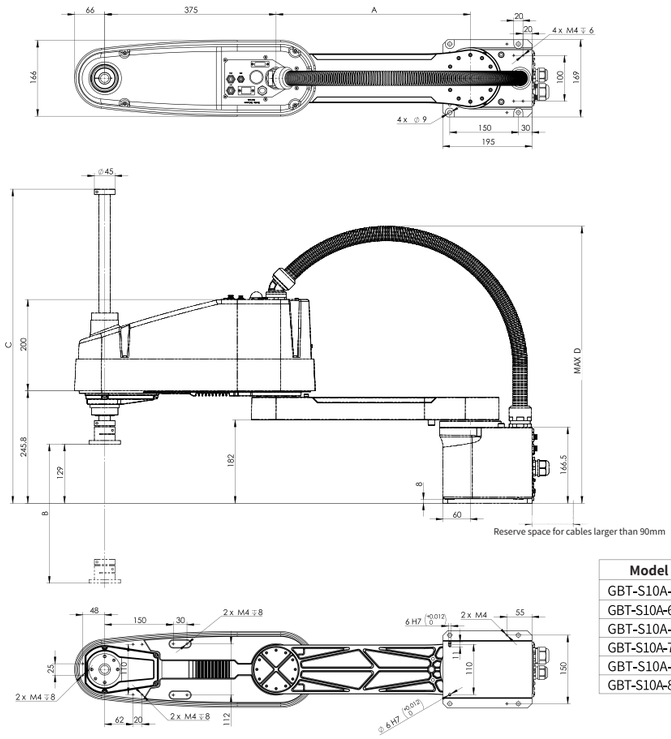
*1. Numerical values obtained under constant environmental temperature of 20° C.
*2. The cycle time of the robot, performing an oscillatory arched motion with a horizontal displacement of 300mm and a vertical displacement of 25mm under 2kg load conditions (maximum speed, optimal trajectory, coarse positioning).



Agilebot

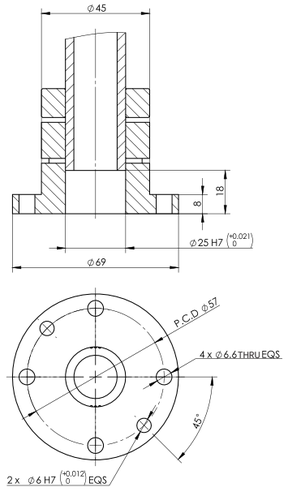
## Main Dimensions

(Unit: mm )

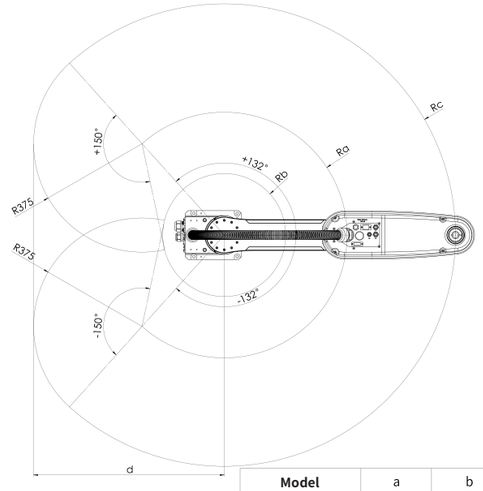



| Model | A | B | C | D |
|---|---|---|---|---|
| GBT-S10A-600 | 225 | 200 | 587 | 565 |
| GBT-S10A-600.3 | 225 | 300 | 687 | 565 |
| GBT-S10A-700 | 325 | 200 | 587 | 575 |
| GBT-S10A-700.3 | 325 | 300 | 687 | 575 |
| GBT-S10A-800 | 425 | 200 | 587 | 580 |
| GBT-S10A-800.3 | 425 | 300 | 687 | 580 |

## Tool Flange




## Working Range




| Model | a | b | c | d |
|---|---|---|---|---|
| GBT-S10A-600 | 225 | 212.4 | 600 | 542.1 |
| GBT-S10A-600.3 | 225 | 212.4 | 600 | 542.1 |
| GBT-S10A-700 | 325 | 187.5 | 700 | 609 |
| GBT-S10A-700.3 | 325 | 187.5 | 700 | 609 |
| GBT-S10A-800 | 425 | 212.6 | 800 | 659.4 |
| GBT-S10A-800.3 | 425 | 212.6 | 800 | 659.4 |

The specifications are subject to change without prior notice.


# GBT-S20A

**Efficient** The shortest cycle time for the standard Pick & Place operation is approximately 0.41 seconds.

**User-friendly** The Compass platform supports PC-based teaching and programming for SCARA robots.

## Technical Specifications:

| Model | | GBT-S20A-800 | GBT-S20A-1000 |
|---|---|---|---|
| **Basic Specifications** | | | |
| Axes | | 4 | 4 |
| Reach (max) | | 800mm | 1000mm |
| Payload | Rated | 10kg | 10kg |
| | Maximum | 20kg | 20kg |
| Axis 4 Moment of Inertia | Rated | 0.05kg·m² | 0.05kg·m² |
| | Maximum | 1kg·m² | 1kg·m² |
| Axis 3 Down Force | | 250N | 250N |
| Mounting | | Floor | Floor |
| **Motion Parameters** | | | |
| Axis Motion Range | J1 | ±132° | ±132° |
| | J2 | ±152° | ±152° |
| | J3 | 390mm | 390mm |
| | J4 | ±360° | ±360° |
| Axis Maximum Speed | J1+J2 | 10250mm/s | 11750mm/s |
| | J3 | 1800mm/s | 1800mm/s |
| | J4 | 1400° /s | 1400° /s |
| Position Repeatability*1 | J1+J2 | 0.015mm | 0.015mm |
| | J3 | 0.015mm | 0.015mm |
| | J4 | 0.01° | 0.01° |
| Standard Cycle Time*2 | | 0.41s | 0.44s |

| Model | | GBT-S20A-800 | GBT-S20A-1000 |
|---|---|---|---|
| **Customer Interface** | | | |
| Air | | ϕ8x2，ϕ6x2 | |
| Communication | | D-sub15pin、D-sub 9pin<br>RJ45 (CAT 5e) 8pin | |
| **Physical Characteristics** | | | |
| Weight | | 47kg | 50kg |
| Base Mounting Area | | 257mmx230mm | |
| **Other Information** | | | |
| Applicable Controller | | IRC-I4A-C | |
| Power Requirements | Voltage | 220V~ / 50Hz | |
| Operating Environment | Temperature | 5° C~40° C | |
| | Humidity | Up to 80%RH (non-condensing) | |
| | Vibration | 0.5G （⩾ 50Hz） | |

*1. Numerical values obtained under constant environmental temperature of 20° C.

*2. The cycle time of the robot, performing an oscillatory arched motion with a horizontal displacement of 300mm and a vertical displacement of 25mm under 2kg load conditions (maximum speed, optimal trajectory, coarse positioning).



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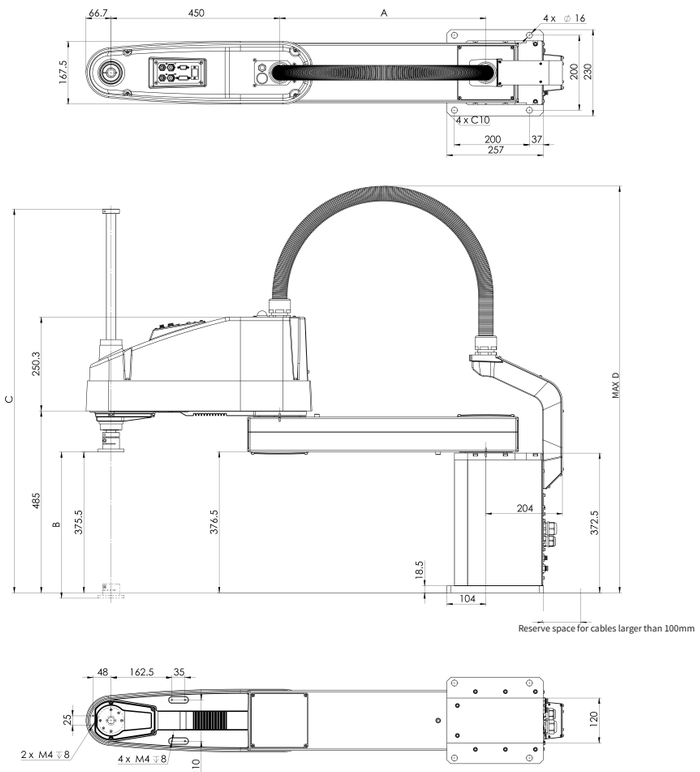
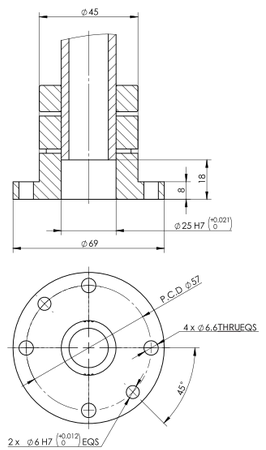
## Main Dimensions

(Unit: mm )

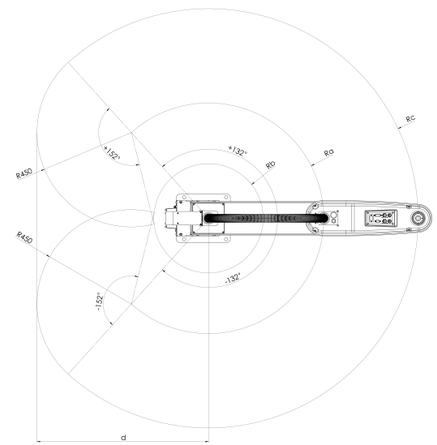



| Model | A | B | C | D |
|---|---|---|---|---|
| GBT-S20A-800 | 350 | 390 | 1023.5 | 1100 |
| GBT-S20A-1000 | 550 | 390 | 1023.5 | 1100 |

## Tool Flange




## Working Range




| Model | a | b | c | d |
|---|---|---|---|---|
| GBT-S20A-800 | 350 | 216.5 | 800 | 684.2 |
| GBT-S20A-1000 | 550 | 260.7 | 1000 | 818 |

The specifications are subject to change without prior notice.

# GBT-P7B

**Efficient** Position repeatability is 0.02mm.

**User-friendly** The robot body is equipped with various electrical interfaces, making cable deployment hassle-free.

**Versatile** It offers a maximum IP67 protection level, meeting the application requirements in various challenging production environments.

## Technical Specifications:

| | | GBT-P7B-700 | GBT-P7B-900 |
|---|---|---|---|
| **Basic Specifications** | | | |
| Axes | | 6 | 6 |
| Reach (max) | | 721mm | 901mm |
| Payload | Rated | 3.5kg | 3.5kg |
| | Maximum | 7kg | 7kg |
| Degree of Protection | | IP67 | IP67 |
| Mounting | | Ground<br>Ceiling mounted<br>Wall mounted | Ground<br>Ceiling mounted<br>Wall mounted |
| **Motion Parameters** | | | |
| Axis Motion Range | J1 | 340° (- 170° /+170° ) | 340° (- 170° /+170° ) |
| | J2 | 235° (- 135° /+100° ) | 235° (- 135° /+100° ) |
| | J3 | 270° (- 70° /+200° ) | 270° (- 70° /+200° ) |
| | J4 | 380° (- 190° /+190° ) | 380° (- 190° /+190° ) |
| | J5 | 230° (- 115° /+115° ) | 230° (- 115° /+115° ) |
| | J6 | 720° (- 360° /+360° ) | 720° (- 360° /+360° ) |
| Axis Maximum Speed | J1 | 333° /s | 333° /s |
| | J2 | 267° /s | 267° /s |
| | J3 | 333° /s | 333° /s |
| | J4 | 450° /s | 450° /s |
| | J5 | 405° /s | 405° /s |
| | J6 | 605° /s | 605° /s |
| Position Repeatability | | 0.02mm | 0.02 mm |

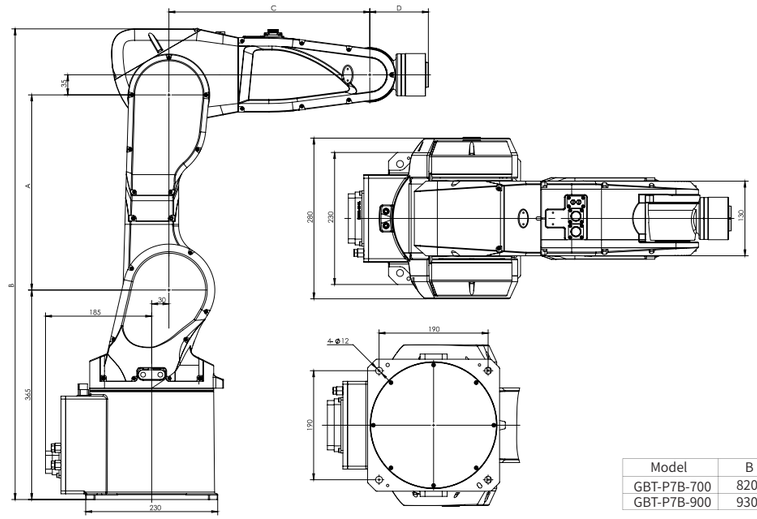
| Model | | GBT-P7B-700 | GBT-P7B-900 |
|---|---|---|---|
| **Customer Interface** | | | |
| Standard configuration | | ϕ4×2，6RI/6RO，<br>24V×2，0V×2 | |
| Optional configuration | | 6RI/6RO，24V×1，0V×1<br>4 Port Solenoid Valve × 2 | |
| **Physical Characteristics** | | | |
| Weight | | 51kg | 54.5kg |
| Base Mounting Area | | 230mmx230mm | 230mmx230mm |
| **Other Information** | | | |
| Applicable Controller | | IRC-I6A-C | |
| Power Requirements | Voltage | 220V~ / 50Hz | |
| Operating Environment | Temperature | 0° C~45° C | |
| | Humidity | Up to 90%RH (non-condensing ) | |
| | Vibration | 0.5G( ⩾ 100Hz) | |



Agilebot

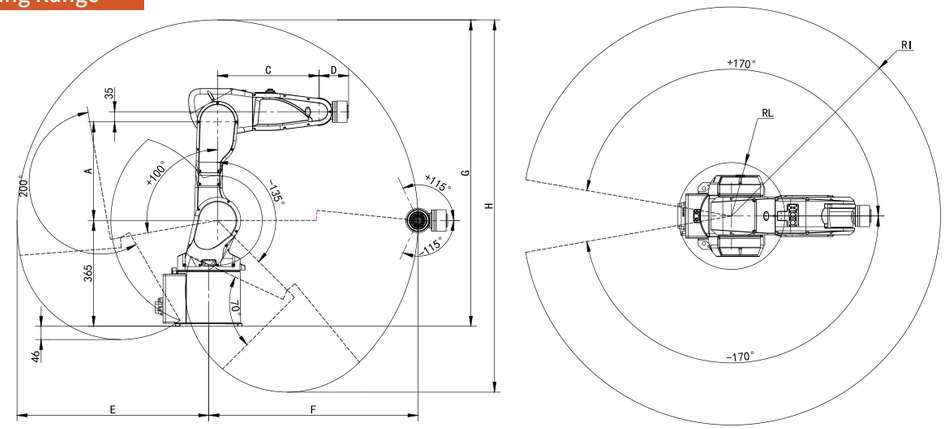
## Main Dimensions

(Unit: mm )



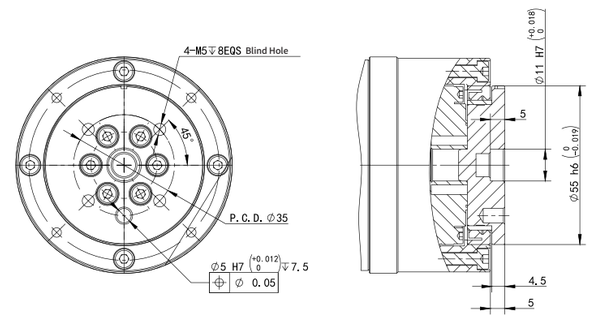

| Model | B | A | C | D |
|---|---|---|---|---|
| GBT-P7B-700 | 820 | 340 | 350 | 102 |
| GBT-P7B-900 | 930 | 450 | 420 | 102 |

## Working Range




| Model | E | F | G | H | RL | RI |
|---|---|---|---|---|---|---|
| GBT-P7B-700 | 662 | 721 | 1056 | 1284 | 184 | 721 |
| GBT-P7B-900 | 842 | 901 | 1236 | 1611 | 219 | 901 |

## Tool Flange




The specifications are subject to change without prior notice.

# GBT-P7B-C

**Efficient** Position repeatability is 0.02mm.

**User-friendly** The robot body is equipped with various electrical interfaces, making cable deployment hassle-free.

**Versatile** It offers a maximum IP67 protection level, meeting the application requirements in various challenging production environments.

## Technical Specifications:

| | | GBT-P7B-700-C | GBT-P7B-900-C |
|---|---|---|---|
| **Basic Specifications** | | | |
| Axes | | 6 | 6 |
| Reach (max) | | 721mm | 901mm |
| Payload | Rated | 3.5kg | 3.5kg |
| | Maximum | 7kg | 7kg |
| Degree of Protection | | IP67 | IP67 |
| Cleanroom version (ISO 14644) | | Class 4 | Class 4 |
| Mounting | | Ground<br>Ceiling mounted<br>Wall mounted | Ground<br>Ceiling mounted<br>Wall mounted |
| **Motion Parameters** | | | |
| Axis Motion Range | J1 | 340° (- 170° /+170° ) | 340° (- 170° /+170° ) |
| | J2 | 235° (- 135° /+100° ) | 235° (- 135° /+100° ) |
| | J3 | 270° (- 70° /+200° ) | 270° (- 70° /+200° ) |
| | J4 | 380° (- 190° /+190° ) | 380° (- 190° /+190° ) |
| | J5 | 230° (- 115° /+115° ) | 230° (- 115° /+115° ) |
| | J6 | 720° (- 360° /+360° ) | 720° (- 360° /+360° ) |
| Axis Maximum Speed | J1 | 333° /s | 333° /s |
| | J2 | 267° /s | 267° /s |
| | J3 | 333° /s | 333° /s |
| | J4 | 450° /s | 450° /s |
| | J5 | 405° /s | 405° /s |
| | J6 | 605° /s | 605° /s |
| Position Repeatability | | 0.02mm | 0.02 mm |

| Model | | GBT-P7B-700-C | GBT-P7B-900-C |
|---|---|---|---|
| **Customer Interface** | | | |
| Standard configuration | | ϕ4×2，6RI/6RO，<br>24V×2，0V×2 | |
| Optional configuration | | 6RI/6RO，24V×1，0V×1<br>4 Port Solenoid Valve × 2 | |
| **Physical Characteristics** | | | |
| Weight | | 51kg | 54.5kg |
| Base Mounting Area | | 230mmx230mm | 230mmx230mm |
| **Other Information** | | | |
| Applicable Controller | | IRC-I6A-C | |
| Power Requirements | Voltage | 220V~ / 50Hz | |
| Operating Environment | Temperature | 0° C~45° C | |
| | Humidity | Up to 90%RH (non-condensing ) | |
| | Vibration | 0.5G( ⩾ 100Hz) | |



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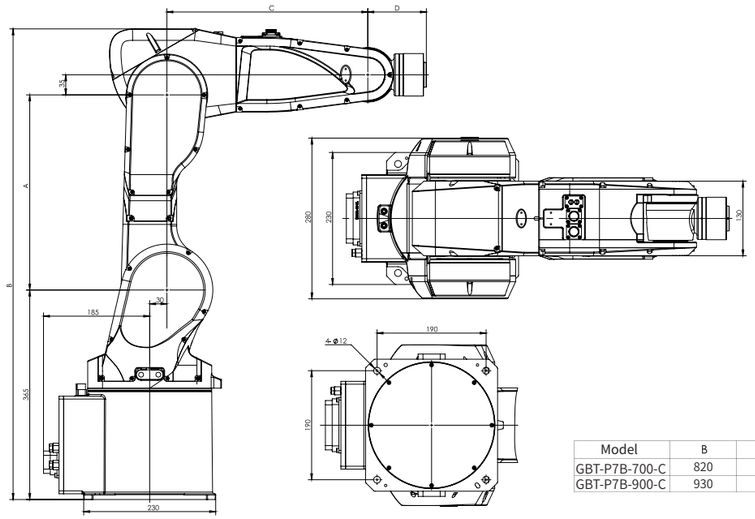
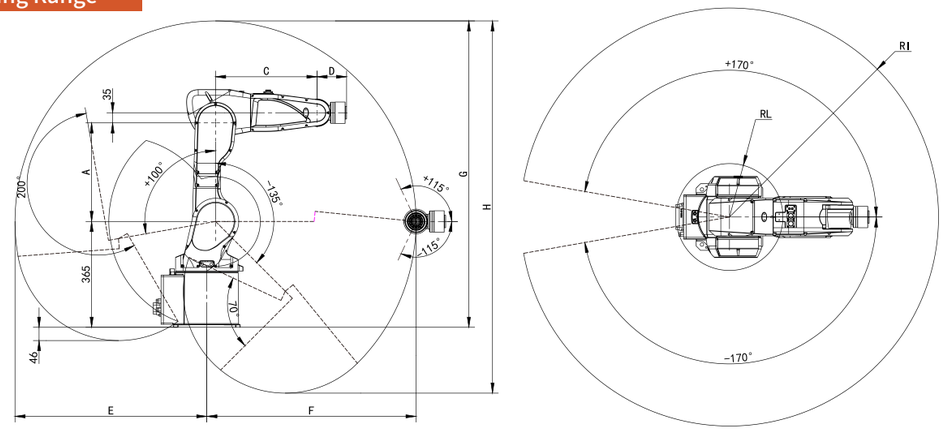
## Main Dimensions

(Unit: mm )



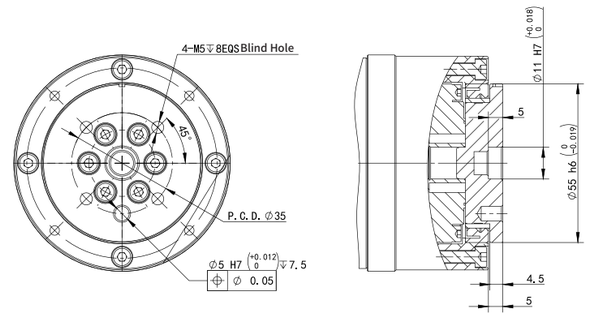

| Model | B | A | C | D |
|---|---|---|---|---|
| GBT-P7B-700-C | 820 | 340 | 350 | 102 |
| GBT-P7B-900-C | 930 | 450 | 420 | 102 |

## Working Range




| Model | E | F | G | H | RL | RI |
|---|---|---|---|---|---|---|
| GBT-P7B-700-C | 662 | 721 | 1056 | 1284 | 184 | 721 |
| GBT-P7B-900-C | 842 | 901 | 1236 | 1611 | 219 | 901 |

## Tool Flange




The specifications are subject to change without prior notice.

# GBT-P20A

**Precision** Position repeatability is 0.04mm.

**Range** Reach is 1805mm.

## Technical Specifications:

| Models | | GBT-P20A-1800 |
|---|---|---|
| **Basic Specifications** | | |
| Axes | | 6 |
| Reach (max) | | 1805mm |
| Payload | Rated | 20kg |
| | Maximum | 20kg |
| Degree of Protection | | Overall IP65, Wrist IP67 |
| Mounting | | Ground |
| **Motion Parameters** | | |
| Axis Motion Range | J1 | 370° (- 185° / +185° ) |
| | J2 | 260° (- 160° / +100° ) |
| | J3 | 243.5° (- 83.5° / +160° ) |
| | J4 | 400° (- 200° / +200° ) |
| | J5 | 274° (- 137° / +137° ) |
| | J6 | 900° (- 450° / +450° ) |
| Axis Maximum Speed | J1 | 195° /s |
| | J2 | 168° /s |
| | J3 | 180° /s |
| | J4 | 400° /s |
| | J5 | 400° /s |
| | J6 | 600° /s |
| Position Repeatability | | 0.04mm |

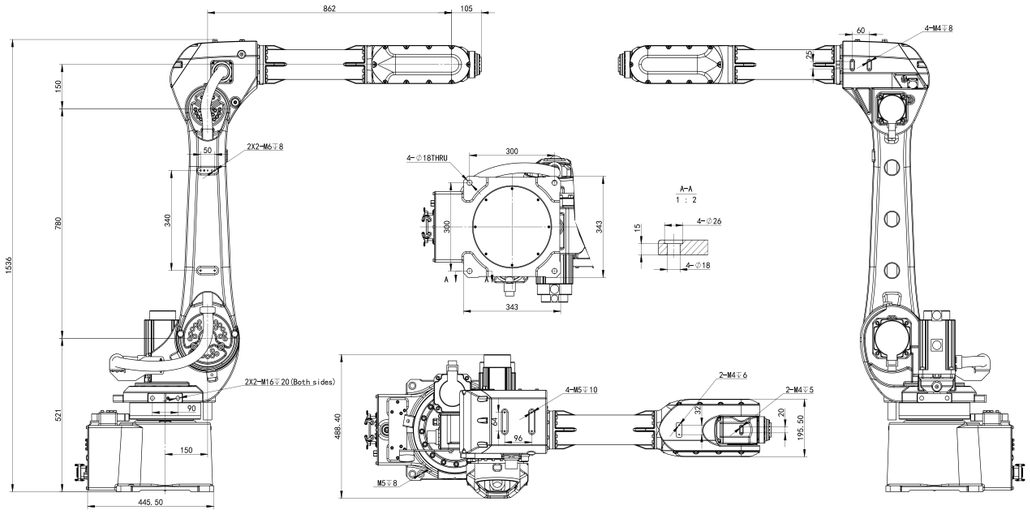
| Customer Interface | | |
|---|---|---|
| Standard configuration | | ϕ8x1<br>8RI/8RO,24V×4,0V×4 |
| **Physical Characteristics** | | |
| Weight | | 245kg |
| Base Mounting Area | | 446mmx343mm |
| **Other Information** | | |
| Applicable Controller | | IRC-I6A |
| Power Requirements | Voltage | 380V3~ / 50Hz |
| Operating Environment | Temperature | 0°C ~55°C |
| | Humidity | Up to 90%RH (non-condensing) |
| | Vibration | 0.5G( ⩾ 100Hz) |



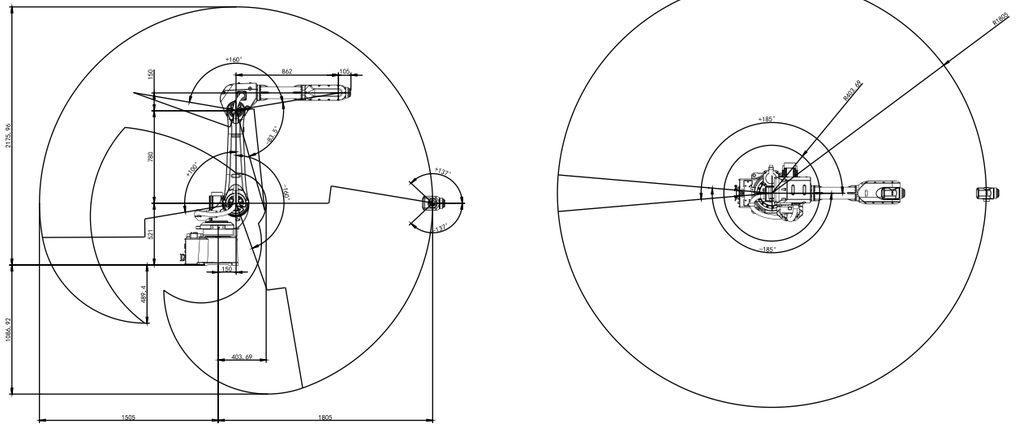
Agilebot

(Unit: mm )

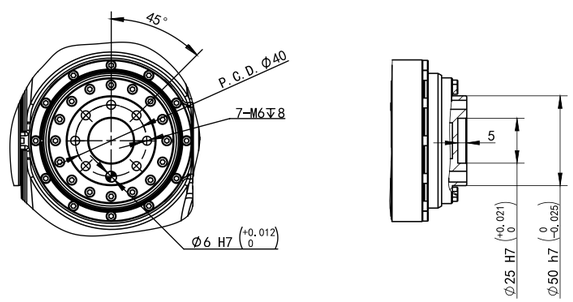
## Main Dimensions




## Working Range




## Tool Flange




The specifications are subject to change without prior notice.

# GBT-C5A

**Precision** Position repeatability is 0.02mm.

**Range** Reach is 933mm.

## Technical Specifications:

| Model | | GBT-C5A |
|---|---|---|
| **Basic Specifications** | | |
| Axes | | 6 |
| Reach | | 933mm |
| Payload | | 5kg |
| Degree of Protection | | IP67 |
| Cleanroom version（ISO 14644） | | Class 4 |
| Mounting | | Mounting at Any Angle |
| Teaching method | | Mobile, Tablet, PC |
| **Motion Parameters** | | |
| Axis Motion Range | J1 | 720° (- 360° / +360° ) |
| | J2 | 720° (- 360° / +360° ) |
| | J3 | 720° (- 360° / +360° ) |
| | J4 | 720° (- 360° / +360° ) |
| | J5 | 720° (- 360° / +360° ) |
| | J6 | 720° (- 360° / +360° ) |
| Axis Maximum Speed | J1 | 180° /s |
| | J2 | 180° /s |
| | J3 | 180° /s |
| | J4 | 180° /s |
| | J5 | 180° /s |
| | J6 | 180° /s |
| TCP Maximum Speed | | 3m/s |
| Position Repeatability | | 0.02mm |

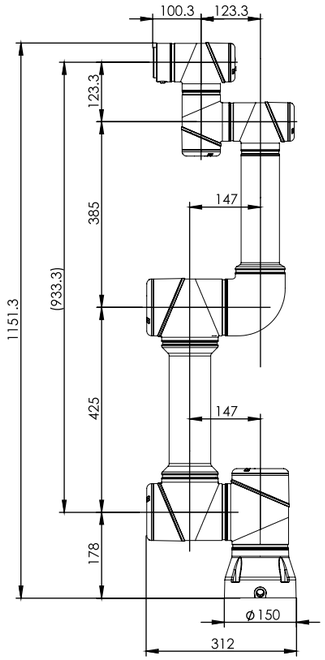
| Customer Interface | | |
|---|---|---|
| Tool I/O | | Digital I/O：2RI(NPN)、2RO(PNP)<br>Analog input：2AI |
| Tool I/O power supply | | 0/24VDC，1A |
| Tool Communication | | RS485 |
| **Physical Characteristics** | | |
| Weight | | 23.5kg |
| Base Mounting Area | | ϕ150mm |
| **Other Information** | | |
| Applicable Controller | | IRC-D6A |
| Operating Environment | Temperature | 0° C~50° C |
| | Humidity | Up to 90%RH (non-condensing ) |

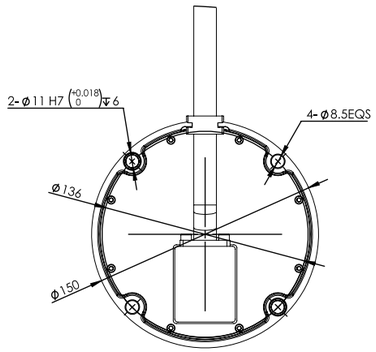


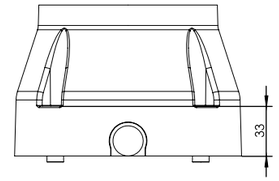
Agilebot

(Unit: mm )

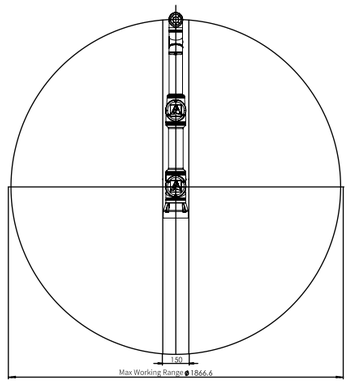
## Main Dimension

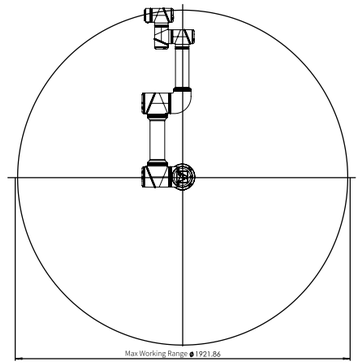


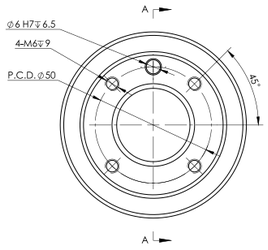



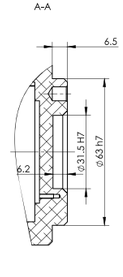

## Working Range




## Tool Flange




The specifications are subject to change without prior notice.

# GBT-C7A

**Precision** Position repeatability is 0.02mm.

**Range** Reach is 785mm.

## Technical Specifications:

| Model | GBT-C7A | |
|---|---|---|
| **Basic Specifications** | | |
| Axes | | 6 |
| Reach | | 785mm |
| Payload | | 7kg |
| Degree of Protection | | IP67 |
| Cleanroom version (ISO 14644) | | Class 4 |
| Mounting | | Mounting at Any Angle |
| Teaching method | | Mobile, Tablet, PC |
| **Motion Parameters** | | |
| Axis Motion Range | J1 | 720° (- 360° / +360° ) |
| | J2 | 720° (- 360° / +360° ) |
| | J3 | 720° (- 360° / +360° ) |
| | J4 | 720° (- 360° / +360° ) |
| | J5 | 720° (- 360° / +360° ) |
| | J6 | 720° (- 360° / +360° ) |
| Axis Maximum Speed | J1 | 180° /s |
| | J2 | 180° /s |
| | J3 | 180° /s |
| | J4 | 180° /s |
| | J5 | 180° /s |
| | J6 | 180° /s |
| TCP Maximum Speed | | 2.5m/s |
| Position Repeatability | | 0.02mm |

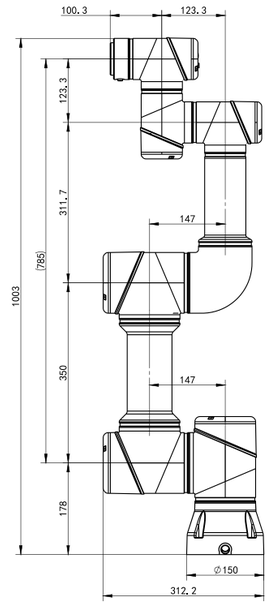
| Customer Interface | | |
|---|---|---|
| Tool I/O | | Digital I/O：2RI(NPN)、2RO(PNP)<br>Analog input：2AI |
| Tool I/O power supply | | 0/24VDC，1A |
| Tool Communication | | RS485 |
| **Physical Characteristics** | | |
| Weight | | 22.5kg |
| Base Mounting Area | | ϕ150mm |
| **Other Information** | | |
| Applicable Controller | | IRC-D6A |
| Operating Environment | Temperature | 0° C~50° C |
| | Humidity | Up to 90%RH (non-condensing) |

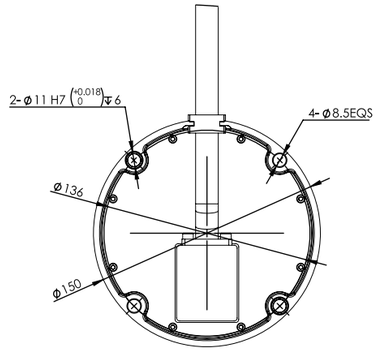


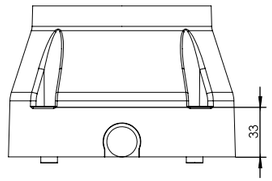
Agilebot

(Unit: mm )

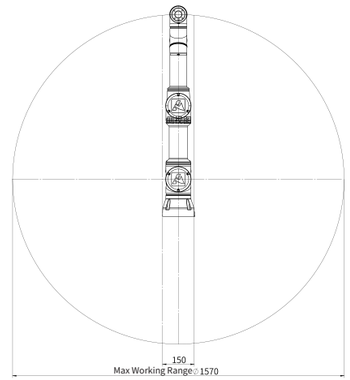
## Main Dimension

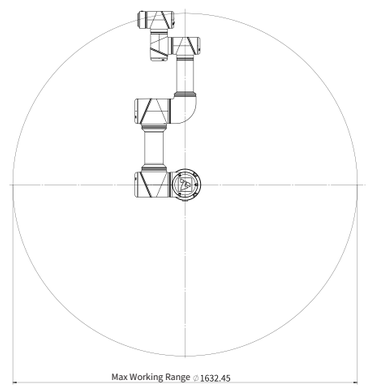


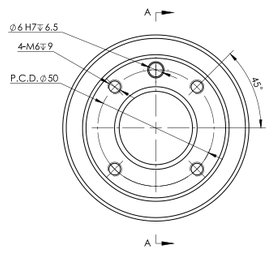



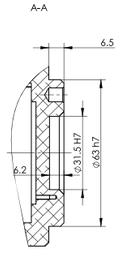

## Working Range




## Tool Flange




The specifications are subject to change without prior notice.

# GBT-C12A

**Precision** Position repeatability is 0.02mm.

**Range** Reach is 1303mm.

## Technical Specifications:

| Model | | GBT-C12A |
|---|---|---|
| **Basic Specifications** | | |
| Axes | | 6 |
| Reach | | 1303mm |
| Payload | | 12kg |
| Degree of Protection | | IP67 |
| Cleanroom version（ISO 14644） | | Class 4 |
| Mounting | | Mounting at Any Angle |
| Teaching method | | Mobile, Tablet, PC |
| **Motion Parameters** | | |
| Axis Motion Range | J1 | 720° (- 360° / +360° ) |
| | J2 | 720° (- 360° / +360° ) |
| | J3 | 720° (- 360° / +360° ) |
| | J4 | 720° (- 360° / +360° ) |
| | J5 | 720° (- 360° / +360° ) |
| | J6 | 720° (- 360° / +360° ) |
| Axis Maximum Speed | J1 | 120° /s |
| | J2 | 120° /s |
| | J3 | 150° /s |
| | J4 | 180° /s |
| | J5 | 180° /s |
| | J6 | 180° /s |
| TCP Maximum Speed | | 3m/s |
| Position Repeatability | | 0.02mm |

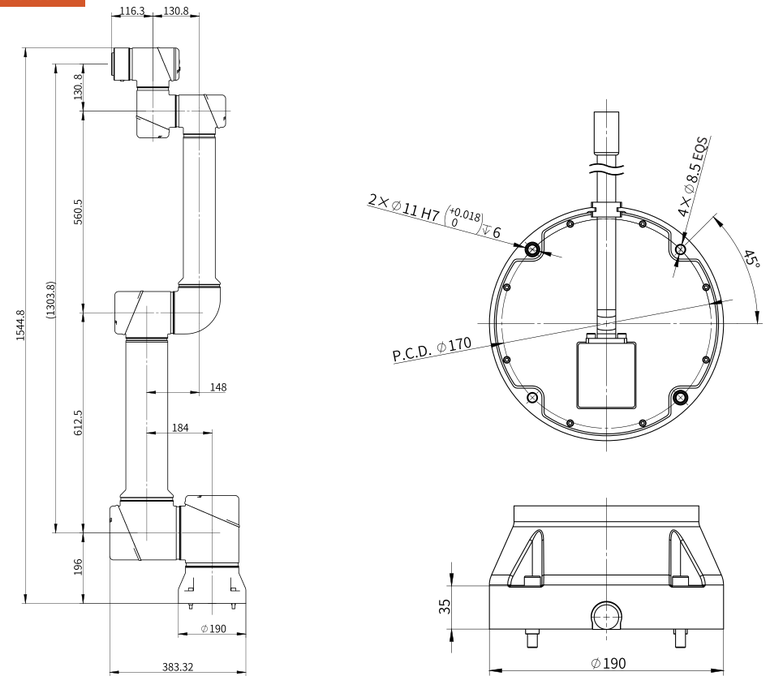
| Customer Interface | | |
|---|---|---|
| Tool I/O | | Digital I/O：4RIO(NPN/PNP)<br>Analog input：2AI |
| Tool I/O power supply | | 0/12/24VDC，2A |
| Tool Communication | | RS485 |
| **Physical Characteristics** | | |
| Weight | | 37kg |
| Base Mounting Area | | ϕ190mm |
| **Other Information** | | |
| Applicable Controller | | IRC-D6B、IRC-D6B-S |
| Operating Environment | Temperature | 0° C~50° C |
| | Humidity | Up to 90%RH (non-condensing) |



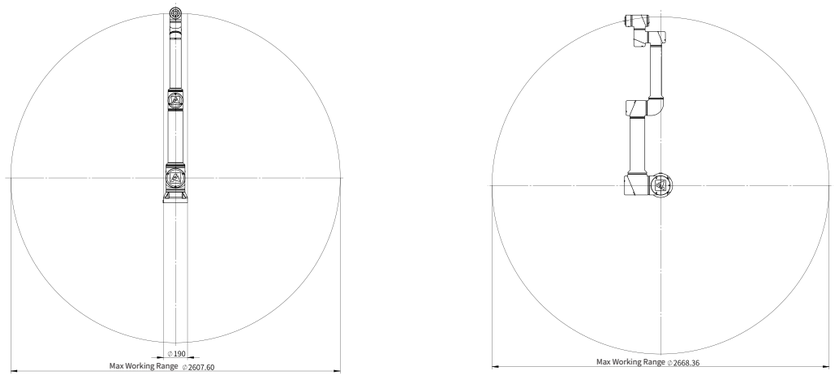
Agilebot

(Unit: mm )

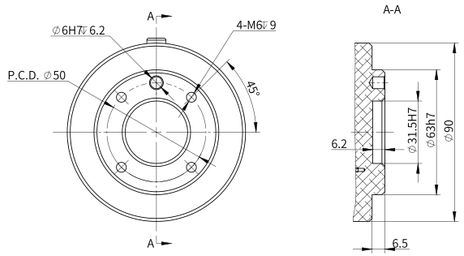
## Main Dimension




## Working Range




## Tool Flange




The specifications are subject to change without prior notice.

# Controller

**Efficient** The SCIMC Universal Platform ensures high real-time performance and synchronization.

**User-friendly** Standard IO, TCP/IP, and ModBus TCP meet the integration requirements of routine applications

**Compact** Small in size, suitable for deployment in various dense environments.


## Product Specifications:

| Models | | IRC-I4A-C | IRC-I6A-C | IRC-I6A | IRC-D6A | IRC-D6B | IRC-D6B-S |
|---|---|---|---|---|---|---|---|
| Size | | 380mm x 350mm x 182mm | 400mm x 380mm x 182mm | 650mm x 483mm x 810mm | 410mm x 260mm x 235mm | 500mm x 330mm x 210mm | 410mm x 161mm x 150mm |
| Weight | | 8kg | 12kg | 85.5kg | 14.5kg | 12kg | 7kg |
| Degree of Protection | | IP20 | IP20 | IP54 | IP54 | IP54 | IP20 |
| Power Requirements | Voltage | 220V~ / 50Hz | 220V~ / 50Hz | 380V3~ / 50Hz | 100-240 VAC / 50-60 Hz | 100-240V AC / 50-60 Hz | 100-240V AC / 50-60 Hz or 30-56V DC |
| Communication | Standard Configuration I/O | Input：24<br>Output：16<br>（NPN or PNP） | Input：48<br>Output：48<br>（NPN or PNP） | Input：25<br>Output：25<br>（NPN） | Digital input (NPN or PNP):16<br>Digital output (NPN or PNP):16 | Digital input (NPN or PNP):16<br>Digital output (NPN or PNP):16<br>Analog input (Voltage or Current):2<br>Analog output (Voltage or Current):2<br>ABZ encoder | Digital input (NPN or PNP):16<br>Digital output (NPN or PNP):16<br>Analog input (Voltage or Current):2<br>Analog output (Voltage or Current):2<br>ABZ encoder |
| | Standard Communication | TCP/IP、Modbus TCP | TCP/IP、Modbus TCP | TCP/IP 、Modbus TCP | TCP/IP、Modbus TCP、RS485 | TCP/IP、ModbusTCP、RS485 | TCP/IP、ModbusTCP、RS485 |
| Operating Environment | Temperature | 5° C~40° C | 0° C~45° C | 0° C~45° C | 0° C~50° C | 0° C~50° C | 0° C~50° C |
| | Humidity | Up To 80%RH<br>（non-condensing） | Up To 90%RH<br>（non-condensing） | Up To 90%RH<br>（non-condensing） | Up To 90%RH<br>（non-condensing） | Up To 90%RH<br>（non-condensing） | Up To 90%RH<br>（non-condensing） |
| Applicable Robot Models | | GBT-S3A Series<br>GBT-S6A Series<br>GBT-S10A Series<br>GBT-S20A Series | GBT-P7B Series | GBT-P20A Series | GBT-C5A<br>GBT-C7A | GBT-C12A | GBT-C12A |



Agilebot

## General Software and Instruction Set


### Universal TP Software and Instruction Set

- User-friendly human-machine interface, menu-based programming for quick adaptation by new users
- Universal TP software and instruction set for industrial six-axis, SCARA, and cobots

### Compass Universal Platform

Supports PC for robot teaching and programming


### Visionplus 2D visual software

- 2D vision software,specifically designed for industrial robotic applications,offers simple and flexible feature configuration along with intuitive flowchart programming.
- Enables fast implementation of visual positioning and multi-workpiece recognition functionalities.
- With internal integrated communication, there is no need for additional custom protocol parsing, reducing your learning effort.


### Features of Agilebot TP：

- 8-inch screen
- User-friendly human-machine interface
- Quick physical buttons
- Menu-based programming
- Multiple cable length options：5m /10m/20m
- Compact, sturdy,durable

# SUCCESS CASES

## Application of Agilebot Robots in the Semiconductor Industry

**Device Purpose:**

This equipment utilizes multiple Agilebot robots, advanced laser sensors, CCD camera auto-detection system, and industry-innovative disk edge finders, all operated by an intelligent control system. It efficiently and precisely handles tasks such as automatic wafer loading and unloading, wafer edge detection, and automatic reading and verification of wafer IDs.

Wafer loading capacity: 288 wafer per hour

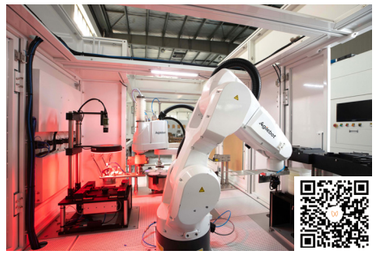
Yield rate: >=99.5%

### Advantages and Features of Agilebot Robots:

- High position repeatability to avoid wafer damage during uploading and unloading
- Jitter-free in high-speed handling to ensure high-speed wafer uploading and unloading
- High flexibility, compatibility, stability and ease of operation

Applied Project: Shanghai ForeSight PVD Wafer Automatic Loading & Unloading Machine

Models used: GBT-P7A-700
GBT-S3A-400
GBT-S6A-600



WeChat Video ▲

## Application of Agilebot Robots in the Electric Vehicle Industry

**Device Purpose:**

This equipment employs an Agilebot 6-axis industrial robot, integrating deep visual perception with key robot motion control technology. During high-speed operation, the robot utilizes the optical module lens at its end effector for precise image capture, ensuring clear imaging. This meets the visual defect inspection requirements for different materials, specifications, and sizes of automotive components.

High Precision: Detection rate exceeds 95%, with no misses for critical defects

High Efficiency: terminal linear velocity of 1000mm/s, each point shooting: CT0.3s

### Advantages and Features of Agilebot Robots:

- Independent and autonomous system architecture and underlying algorithms support various software development, particularly integration with visual systems.
- High precision and high-speed IO for precise image capture during high-speed motion (repeatability error less than 2 pixels).
- A self-developed heterogeneous control system based on ARM cores guarantees high real-time performance and high synchronization.

Applied Project: Micro-Intelligence Stator Inspection of Drive Motors in Electric Vehicle

Model used: GBT-P7A-900

WeChat Video ▲

## Application of Agilebot Robots in the Auto Parts Industry

**Device Purpose:**

This device employs one SCARA robot in conjunction with a servo glue gun to seal the car heater. Through precise trajectory movement speed control, the glue trajectory is uniformly and stably applied, ensuring even glue volume. The robot and adhesive system have achieved high-precision and uniform velocity trajectory planning in the coating process, greatly improving the efficiency and yield of glue coating.

### Advantages and Features of Agilebot Robots:

- High precision, position repeatability: 0.015mm
- Smooth trajectory and uniform glue application

Applied Project:
Applied Project: Heater Gluing

Model used: GBT-S6A-600

WeChat Video ▲



## Application of Agilebot Robots in the Cosmetics Industry

**Device Purpose:**

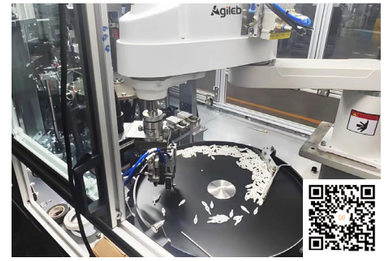
This device employs one Agilebot 4-axis industrial robot in combination with dual grippers for handling lipstick fuzzy heads. Using intelligent visual algorithms, it addresses issues such as near-distance or overlapping materials to enhance equipment stability. Additionally, it captures multiple material positions in a single photo, effectively reducing the production cycle. When combined with a robot and a circular material tray, it achieves a high-precision and high-speed flexible loading and unloading process.

### Advantages and Features of Agilebot Robots:

- High position repeatability, minimizing downtime due to errors, and enhancing product yield.
- Efficiency at its peak with a production cycle of 2.3 seconds per 2 pieces, increasing output.

Applied Project: Lipbrush Flexible Loading & Unloading

Model used: GBT-S6A-600



WeChat Video ▲

## Application of Agilebot Robots in the Food Industry

**Device Purpose:**

The station employs six 6-axis robots and one 4-axis robot to complete the full process automation of plastic basket loading, fresh milk box inspection and packing through the collaboration of high-speed and high-precision packing systems, flexible loading systems, and visual AI detection systems. It also collaborates with palletizing systems, last-mile delivery of logistics systems, and other systems for overall intelligent logistics control, ensuring the continuity and safety of production.

High integration: 7 robots and other equipment are integrated in a narrow space

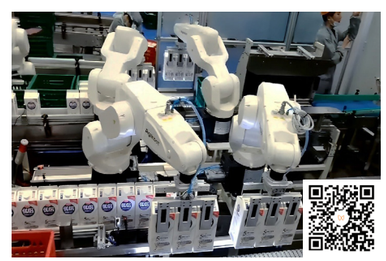
High efficiency: Production CT as low as 20 seconds per workbin

### Advantage and Features of Agilebot Robots:

- High cost-effectiveness
- High protection: IP67，no worry about bottle damage and splashing
- P7A position repeatability：0.02mm, S6A position repeatability: 0.015mm

Applied Project: Pasteur Milk Visual Inspection & Packaging

Model used: GBT-P7A-700
GBT-S6A-600



WeChat Video ▲

## Application of Agilebot Robots in the Consumer Electronics Industry

**Device Purpose:**

This device utilizes one Agilebot six-axis industrial robot in conjunction with four screen printers for the loading and unloading of mobile phone midframes. It employs a visual system to automatically identify the material status within the tray, followed by a secondary positioning using visual feedback to correct any material misalignment before the screen printing process.

### Advantages and Features of Agilebot Robots:

- High speed and high stability, ensuring stable production even at high speeds.
- High position repeatability, enabled by the visual system for precise loading and unloading.
- High efficiency, with a production cycle of 10 seconds per rotation; one robot serves multiple workstations, enhancing productivity.

Applied Project: Mobile Frame Photocopying Machine Loading and Unloading

Model used: GBT-P7A-700

WeChat Video ▲

# Product Specifications Overview

| Models | | GBT-S3A-400 | GBT-S3A-400-C | GBT-S6A-500 | GBT-S6A-500-C | GBT-S6A-600 | GBT-S6A-600-C | GBT-S6A-700 | GBT-S6A-700-C | GBT-S10A-600 | GBT-S10A-600.3 | GBT-S10A-700 | GBT-S10A-700.3 | GBT-S10A-800 | GBT-S10A-800.3 | GBT-S20A-800 | GBT-S20A-1000 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Basic Specifications** | | | | | | | | | | | | | | | | | |
| Axes | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| Reach (max) | | 400mm | 400mm | 500mm | 500 mm | 600mm | 600 mm | 700mm | 700 mm | 600mm | 600 | 700mm | 700mm | 800mm | 800mm | 800mm | 1000mm |
| Payload | Rated | 1kg | 1kg | 2kg | 2 kg | 2kg | 2 kg | 2kg | 2 kg | 5kg | 5 kg | 5kg | 5 kg | 5kg | 5kg | 10 kg | 10kg |
| | Maximum | 3kg | 3kg | 6kg | 6 kg | 6kg | 6 kg | 6kg | 6 kg | 10kg | 10 kg | 10kg | 10 kg | 10kg | 10kg | 20 kg | 20kg |
| Axis 4 Moment of Inertia | Rated | 0.005kg·$m^2$ | 0.005kg*$m^2$ | 0.01kg·$m^2$ | 0.01 kg·$m^2$ | 0.01kg·$m^2$ | 0.01 kg·$m^2$ | 0.01kg·$m^2$ | 0.01 kg·$m^2$ | 0.02kg·$m^2$ | 0.02kg*$m^2$ | 0.02kg·$m^2$ | 0.02kg*$m^2$ | 0.02kg·$m^2$ | 0.02kg·$m^2$ | 0.05kg*$m^2$ | 0.05kg·$m^2$ |
| | Maximum | 0.05kg·$m^2$ | 0.05kg*$m^2$ | 0.12kg·$m^2$ | 0.12 kg·$m^2$ | 0.12kg·$m^2$ | 0.12 kg·$m^2$ | 0.12kg·$m^2$ | 0.12 kg·$m^2$ | 0.3kg·$m^2$ | 0.3kg*$m^2$ | 0.3kg·$m^2$ | 0.3kg*$m^2$ | 0.3kg·$m^2$ | 0.3kg·$m^2$ | 1kg*$m^2$ | 1kg·$m^2$ |
| Axis 3 Down Force | | 100N | 100N | 100N | 100 N | 100N | 100 N | 100N | 100 N | 200N | 200 N | 200N | 200 N | 200N | 200N | 250 N | 250N |
| Mounting | | Floor | Floor | Floor | Floor | Floor | Floor | Floor | Floor | Floor | Floor | Floor | Floor | Floor | Floor | Floor | Floor |
| **Motion Parameters** | | | | | | | | | | | | | | | | | |
| Axis Motion Range | J1 | ±132° | ±132° | ±132° | ±132° | ±132° | ±132° | ±132° | ±132° | ±132° | ±132° | ±132° | ±132° | ±132° | ±132° | ±132° | ±132° |
| | J2 | ±141° | ±141° | ±150° | ±150° | ±150° | ±150° | ±150° | ±150° | ±150° | ±150° | ±150° | ±150° | ±150° | ±150° | ±152° | ±152° |
| | J3 | 150mm | 120mm | 200mm | 170mm | 200mm | 170mm | 200mm | 170mm | 200mm | 300mm | 200mm | 300mm | 200mm | 300mm | 390mm | 390mm |
| | J4 | ±360° | ±360° | ±360° | ±360° | ±360° | ±360° | ±360° | ±360° | ±360° | ±360° | ±360° | ±360° | ±360° | ±360° | ±360° | ±360° |
| Axis Maximum Speed | J1+J2 | 6650mm/s | 6650 mm/s | 6180mm/s | 6180 mm/s | 6800mm/s | 6800 mm/s | 7100mm/s | 7100mm/s | 9100mm/s | 9100 mm/s | 9800mm/s | 9800 mm/s | 10600 mm/s | 10600 mm/s | 10250 mm/s | 11750mm/s |
| | J3 | 1100mm/s | 1100 mm/s | 1100mm/s | 1100 mm/s | 1100mm/s | 1100 mm/s | 1100mm/s | 1100 mm/s | 1100mm/s | 1100 mm/s | 1100mm/s | 1100 mm/s | 1100mm/s | 1100mm/s | 1800 mm/s | 1800mm/s |
| | J4 | 2350° /s | 2350 ° /s | 2000° /s | 2000 ° /s | 2000° /s | 2000 ° /s | 2000° /s | 2000 ° /s | 2700° /s | 2700 ° /s | 2700° /s | 2700 ° /s | 2700° /s | 2700° /s | 1400 ° /s | 1400° /s |
| Position Repeatability*1 | J1+J2 | 0.01mm | 0.01 mm | 0.015mm | 0.015mm | 0.015mm | 0.015 mm | 0.015mm | 0.015 mm | 0.015mm | 0.015mm | 0.015mm | 0.015mm | 0.015mm | 0.015mm | 0.015mm | 0.015mm |
| | J3 | 0.01mm | 0.01 mm | 0.01mm | 0.01mm | 0.015mm | 0.015mm | 0.015mm | 0.015mm | 0.015mm | 0.015 mm | 0.015mm | 0.015 mm | 0.015mm | 0.015mm | 0.015 mm | 0.015mm |
| | J4 | 0.01° | 0.01 ° | 0.01° | 0.01 ° | 0.01° | 0.01 ° | 0.01° | 0.01 ° | 0.01° | 0.01 ° | 0.01° | 0.01 ° | 0.01° | 0.01° | 0.01 ° | 0.01° |
| Standard Cycle Time *2 | | 0.41s | 0.41s | 0.41s | 0.41s | 0.41s | 0.41s | 0.41s | 0.41s | 0.40s | 0.40s | 0.42s | 0.42s | 0.42s | 0.42s | 0.41s | 0.44s |
| **Customer Interface** | | | | | | | | | | | | | | | | | |
| Air | | ϕ4x1，ϕ6x2 | ϕ4×1，ϕ6×2 | ϕ4x1，ϕ6x2 | ϕ4×1，ϕ6×2 | ϕ4x1，ϕ6x2 | ϕ4×1，ϕ6×2 | ϕ4x1，ϕ6x2 | ϕ4×1，ϕ6×2 | ϕ4x1，ϕ6x2 | ϕ4×1，ϕ6×2 | ϕ4x1，ϕ6x2 | ϕ4×1，ϕ6×2 | ϕ4x1，ϕ6x2 | ϕ4x1，ϕ6x2 | ϕ8×2，ϕ6×2 | ϕ8x2，ϕ6x2 |
| Communication | | D-sub15pin RJ45（CAT5e) 8pin | D-sub15pin RJ45（CAT5e) 8pin | D-sub15 pin RJ45 (CAT 5e) 8 pin | D-sub15pin RJ45 (CAT 5e) 8 pin | D-sub15 pin RJ45(CAT 5e)8 pin | D-sub15pin RJ45(CAT 5e) 8 pin | D-sub15 pin RJ45(CAT 5e)8 pin | D-sub15pin RJ45 (CAT 5e) 8 pin | D-sub15 pin RJ45 (CAT 5e) 8 pin | D-sub15 pin RJ45 (CAT 5e) 8 pin | D-sub15 pin RJ45 (CAT 5e) 8 pin | D-sub15 pin RJ45 (CAT 5e) 8 pin | D-sub15 pin RJ45 (CAT 5e) 8 pin | D-sub15 pin RJ45 (CAT 5e) 8 pin | D-sub 15pin、D-sub 9pin RJ45（CAT 5e） 8 pin | D-sub15pin、D-sub9pin RJ45 (CAT 5e) 8 pin |
| **Physical Characteristics** | | | | | | | | | | | | | | | | | |
| Weight | | 13kg | 13kg | 16.5kg | 16.5kg | 17.3kg | 17.3kg | 18kg | 18kg | 22.5kg | 22.5kg | 23kg | 23kg | 23.5kg | 23.5kg | 47kg | 50kg |
| Base Mounting Area | | 185mmx140mm | 185mmx140mm | 200mmx170mm | 200mmx170mm | 200mmx170mm | 200mmx170mm | 200mmx170mm | 200mmx170mm | 195mmx169mm | 195mmx169mm | 195mmx169mm | 195mmx169mm | 195mm*169mm | 195mmx169mm | 257mmx230mm | 257mmx230mm |
| **Other Information** | | | | | | | | | | | | | | | | | |
| Applicable Controller | | IRC-I4A- C | IRC-I4A-C | IRC-I4A-C | IRC-I4A-C | IRC-I4A-C | IRC-I4A-C | IRC-I4A-C | IRC-I4A-C | IRC-I4A-C | IRC-I4A-C | IRC-I4A-C | IRC-I4A-C | IRC-I4A-C | IRC-I4A-C | IRC-I4A-C | IRC-I4A-C |
| Power Requirements | Voltage | 220V~ / 50Hz | 220V~ / 50Hz | 220V~ / 50Hz | 220V~ / 50Hz | 220V~ / 50Hz | 220V~ / 50Hz | 220V~ / 50Hz | 220V~ / 50Hz | 220V~ / 50Hz | 220V~ / 50Hz | 220V~ / 50Hz | 220V~ / 50Hz | 220V~ / 50Hz | 220V~ / 50Hz | 220V~ / 50Hz | 220V~ / 50Hz |
| Operating Environment | Temperature | 5° C~40° C | 5°C ~40°C | 5° C~40° C | 5°C ~40°C | 5° C~40° C | 5°C ~40°C | 5° C~40° C | 5°C ~40°C | 5° C~40° C | 5°C ~40°C | 5° C~40° C | 5°C ~40°C | 5° C~40° C | 5° C~40° C | 5°C ~40°C | 5° C~40° C |
| | Humidity | Up to 80%RH (non-condensing) | | | | | | | | Up to 80%RH (non-condensing) | | | | | | | |
| | Vibration | 0.5G（⩾ 50Hz） | | | | | | | | 0.5G（⩾ 50Hz） | | | | | | | |
| **Adapter Options** | | | | | | | | | | | | | | | | | |
| Cleanroom version (ISO 14644) | | - | ISO Class 4 | - | ISO Class 4 | - | ISO Class 4 | - | ISO Class 4 | - | - | - | - | - | - | - | - |

*1. Numerical values obtained under constant environmental temperature of 20° C.

*2. The cycle time of the robot, performing an oscillatory arched motion with a horizontal displacement of 300mm and a vertical displacement of 25mm under 2kg load conditions (maximum speed, optimal trajectory, coarse positioning).

The specifications are subject to change without prior notice.

# Product Specifications Overview

| Models | | GBT-P7B-700 | GBT-P7B-700-C | GBT-P7B-900 | GBT-P7B-900-C | GBT-P20A-1800 | GBT-C5A | GBT-C7A | GBT-C12A |
|---|---|---|---|---|---|---|---|---|---|
| **Basic Specifications** | | | | | | | | | |
| Axes | | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| Reach (max) | | 721mm | 721mm | 901mm | 901mm | 1805mm | 933mm | 785mm | 1303mm |
| Payload | Rated | 3.5kg | 3.5kg | 3.5kg | 3.5kg | 20kg | 5kg | 7kg | 12kg |
| | Maximum | 7kg | 7.0kg | 7kg | 7.0kg | 20kg | 5kg | 7kg | 12kg |
| Degree of Protection | | IP67 | IP67 | IP67 | IP67 | Overall IP65, Wrist IP67 | IP67 | IP67 | IP67 |
| Mounting | | Ground<br>Ceiling mounted<br>Wall mounted | Ground<br>Ceiling mounted<br>Wall mounted | Ground<br>Ceiling mounted<br>Wall mounted | Ground<br>Ceiling mounted<br>Wall mounted | Ground | Mounting at Any Angle | Mounting at Any Angle | Mounting at Any Angle |
| **Motion Parameters** | | | | | | | | | |
| Axis Motion Range | J1 | 340° (- 170° /+170° ) | 340° (-170° /+170°) | 340° (- 170° /+170° ) | 340° (-170° /+170°) | 370° (- 185° /+185° ) | 720° (- 360° /+360° ) | 720° (- 360° /+360° ) | 720° (- 360° /+360° ) |
| | J2 | 235° (- 135° /+100° ) | 235° (-135° /+100° ) | 235° (- 135° /+100° ) | 235° (-135° /+100° ) | 260° (- 160° /+100° ) | 720° (- 360° /+360° ) | 720° (- 360° /+360° ) | 720° (- 360° /+360° ) |
| | J3 | 270° (- 70° /+200° ) | 270° (-70° /+200° ) | 270° (- 70° /+200° ) | 270° (-70° /+200° ) | 243.5°(-83.5° /+160°) | 720° (- 360° /+360° ) | 720° (- 360° /+360° ) | 720° (- 360° /+360° ) |
| | J4 | 380° (- 190° /+190° ) | 380° (-190° /+190°) | 380° (- 190° /+190° ) | 380° (-190° /+190°) | 400° (- 200° /+200° ) | 720° (- 360° /+360° ) | 720° (- 360° /+360° ) | 720° (- 360° /+360° ) |
| | J5 | 230° (- 115° /+115° ) | 230° (-115° /+115°) | 230° (- 115° /+115° ) | 230° (-115° /+115°) | 274° (- 137° /+137° ) | 720° (- 360° /+360° ) | 720° (- 360° /+360° ) | 720° (- 360° /+360° ) |
| | J6 | 720° (- 360° /+360° ) | 720° (-360° /+360°) | 720° (- 360° /+360° ) | 720° (-360° /+360°) | 900° (- 450° /+450° ) | 720° (- 360° /+360° ) | 720° (- 360° /+360° ) | 720° (- 360° /+360° ) |
| Axis Maximum Speed | J1 | 333° /s | 333° /s | 333° /s | 333° /s | 195° /s | 180° /s | 180° /s | 120° /s |
| | J2 | 267° /s | 267° /s | 267° /s | 267° /s | 168° /s | 180° /s | 180° /s | 120° /s |
| | J3 | 333° /s | 333° /s | 333° /s | 333° /s | 180° /s | 180° /s | 180° /s | 150° /s |
| | J4 | 450° /s | 450° /s | 450° /s | 450° /s | 400° /s | 180° /s | 180° /s | 180° /s |
| | J5 | 405° /s | 405° /s | 405° /s | 405° /s | 400° /s | 180° /s | 180° /s | 180° /s |
| | J6 | 605° /s | 605° /s | 605° /s | 605° /s | 600° /s | 180° /s | 180° /s | 180° /s |
| Position Repeatability | | 0.02mm | 0.02mm | 0.02mm | 0.02mm | 0.04mm | 0.02mm | 0.02mm | 0.02mm |
| **Customer Interface** | | | | | | | | | |
| Standard configuration | | ϕ4×2，6RI/6RO，<br>24V×2，0V×2 | | | | ϕ8x1，8RI/8RO，<br>24V×4,0V×4 | 2RI/2RO/2AI,<br>0/24VDC, 1A, RS485 | 2RI/2RO2AI,<br>0/24VDC, 1A, RS485 | 4RIO(NPN/PNP)/2AI，<br>0/12/24VDC,2A，RS485 |
| Optional configuration | | 6RI/6RO，24V×1，0V×1<br>4 Port Solenoid Valve × 2 | | | | - | - | - | - |
| **Physical Characteristics** | | | | | | | | | |
| Weight | | 51kg | 51kg | 54.5kg | 54.5kg | 245kg | 23.5kg | 22.5kg | 37kg |
| Base Mounting Area | | 230mm×230mm | 230mmX230mm | 230mm×230mm | 230mmX230mm | 446mm×343mm | ϕ150mm | ϕ150mm | ϕ190mm |
| **Other Information** | | | | | | | | | |
| Applicable Controller | | IRC-I6A-C | IRC-I6A-C | IRC-I6A-C | IRC-I6A-C | IRC-I6A | IRC-D6A | IRC-D6A | IRC-D6B、IRC-D6B-S |
| Power Requirements | Voltage | 220V~ / 50Hz | 220V~ / 50Hz | 220V~ / 50Hz | 220V~ / 50Hz | 380V3~ / 50Hz | 100-240 VAC / 50-60 Hz | 100-240 VAC / 50-60 Hz | 100-240V AC / 50-60 Hz or 30-56V DC |
| Operating Environment | Temperature | 0° C~45° C | 0°C ~45°C | 0°C ~45°C | 0°C ~45°C | 0°C ~45°C | 0°C ~50°C | 0°C ~50°C | 0°C ~50°C |
| | Humidity | Up to 90%RH (non-condensing ) | | | | | | | |
| | Vibration | 0.5G( ⩾ 100Hz) | 0.5G( ⩾ 100Hz) | 0.5G( ⩾ 100Hz) | 0.5G( ⩾ 100Hz) | 0.5G( ⩾ 100Hz) | - | - | - |
| **Adapter Options** | | | | | | | | | |
| Cleanroom version (ISO 14644) | | - | ISO Class 4 | - | ISO Class 4 | - | ISO Class 4 | ISO Class 4 | ISO Class 4 |

| Models | | IRC-I4A-C | IRC-I6A-C | IRC-I6A | IRC-D6A | IRC-D6B | IRC-D6B-S |
|---|---|---|---|---|---|---|---|
| Size | | 380mmx350mmx182mm | 400mmx380mmx182mm | 650mmx483mmx810mm | 410mmx260mmx235mm | 500mmx330mmx210mm | 410mmx161mmx150mm |
| Weight | | 8kg | 12 kg | 85.5kg | 14.5kg | 12kg | 7kg |
| Degree of Protection | | IP20 | IP20 | IP54 | IP54 | IP54 | IP20 |
| Power Requirements | Voltage | 220V~ / 50Hz | 220V~ / 50Hz | 380V3~ / 50Hz | 100-240 VAC / 50-60 Hz | 100-240V AC / 50-60 Hz | 100-240V AC / 50-60 Hz or 30-56V DC |
| Communication | Standard Configuration I/O | Input：24<br>Output：16<br>( NPN or PNP ) | Input：48<br>Output：48<br>( NPN or PNP ) | Input：25<br>Output：25<br>( NPN) | Digital input (NPN or PNP):16<br>Digital output (NPN or PNP):16 | Digital input (NPN or PNP):16<br>Digital output (NPN or PNP):16<br>Analog input (Voltage or Current):2<br>Analog output (Voltage or Current):2<br>ABZ encoder | Digital input (NPN or PNP):16<br>Digital output (NPN or PNP):16<br>Analog input (Voltage or Current):2<br>Analog output (Voltage or Current):2<br>ABZ encoder |
| | Standard Communication | TCP/IP、Modbus TCP | TCP/IP、Modbus TCP | TCP/IP 、Modbus TCP | TCP/IP、Modbus TCP、RS485 | TCP/IP、ModbusTCP、RS485 | TCP/IP、ModbusTCP、RS485 |
| Operating Environment | Temperature | 5° C~40° C | 0° C~45° C | 0° C~45° C | 0° C~50° C | 0° C~50° C | 0° C~50° C |
| | Humidity | Up To 80%RH ( non-condensing ) | Up To 90%RH ( non-condensing ) | Up To 90%RH ( non-condensing ) | Up To 90%RH ( non-condensing ) | Up To 90%RH ( non-condensing ) | Up To 90%RH ( non-condensing ) |
| Applicable Robot Models | | GBT-S3A Series<br>GBT-S6A Series<br>GBT-S10A Series<br>GBT-S20A Series | GBT-P7B Series | GBT-P20A Series | GBT-C5A<br>GBT-C7A | GBT-C12A | GBT-C12A |



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# BUILD AN INFRASTRUCTURE ECOSYSTEM FOR INTELLIGENT MANUFACTURING

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