

Industrial Robot Series

Faster | More Reliable | More Precise

ROKAE



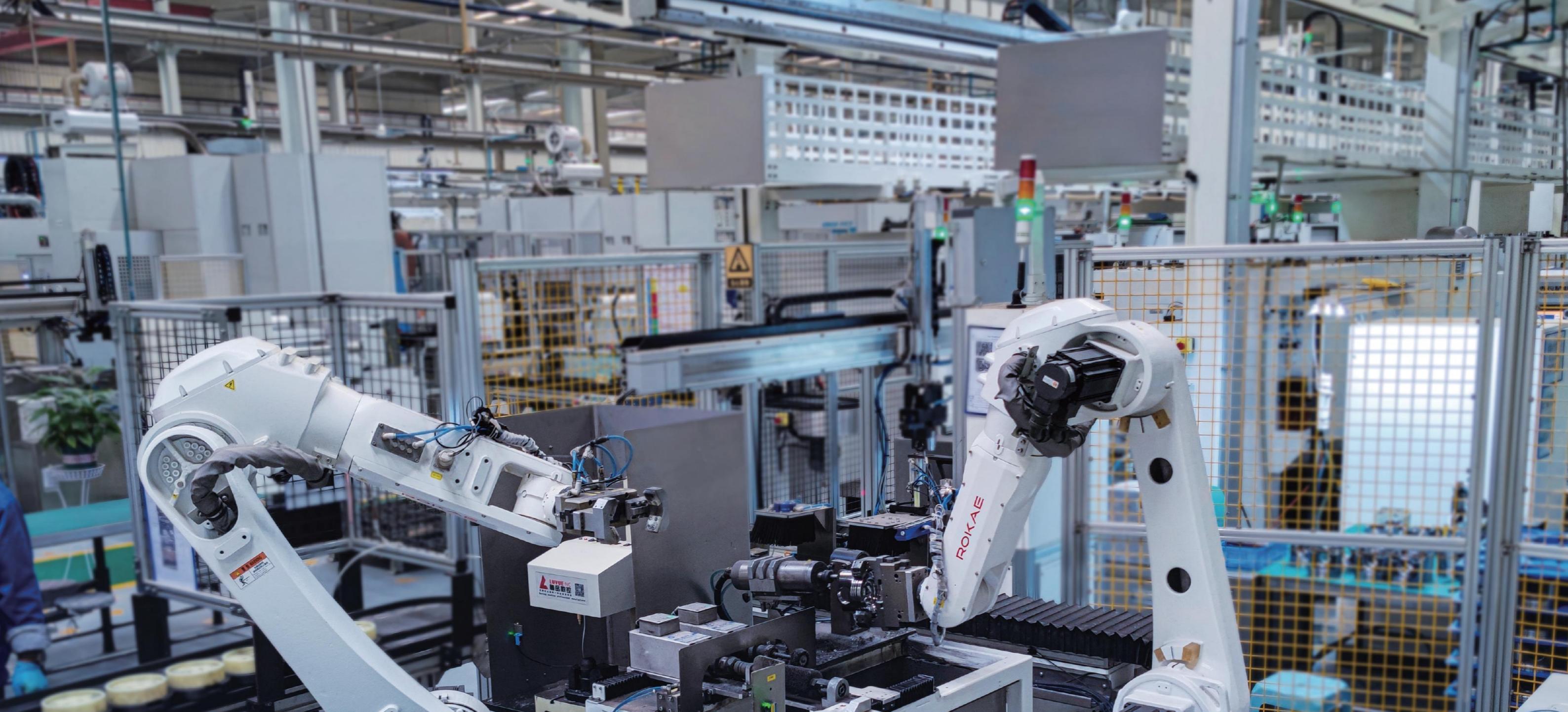
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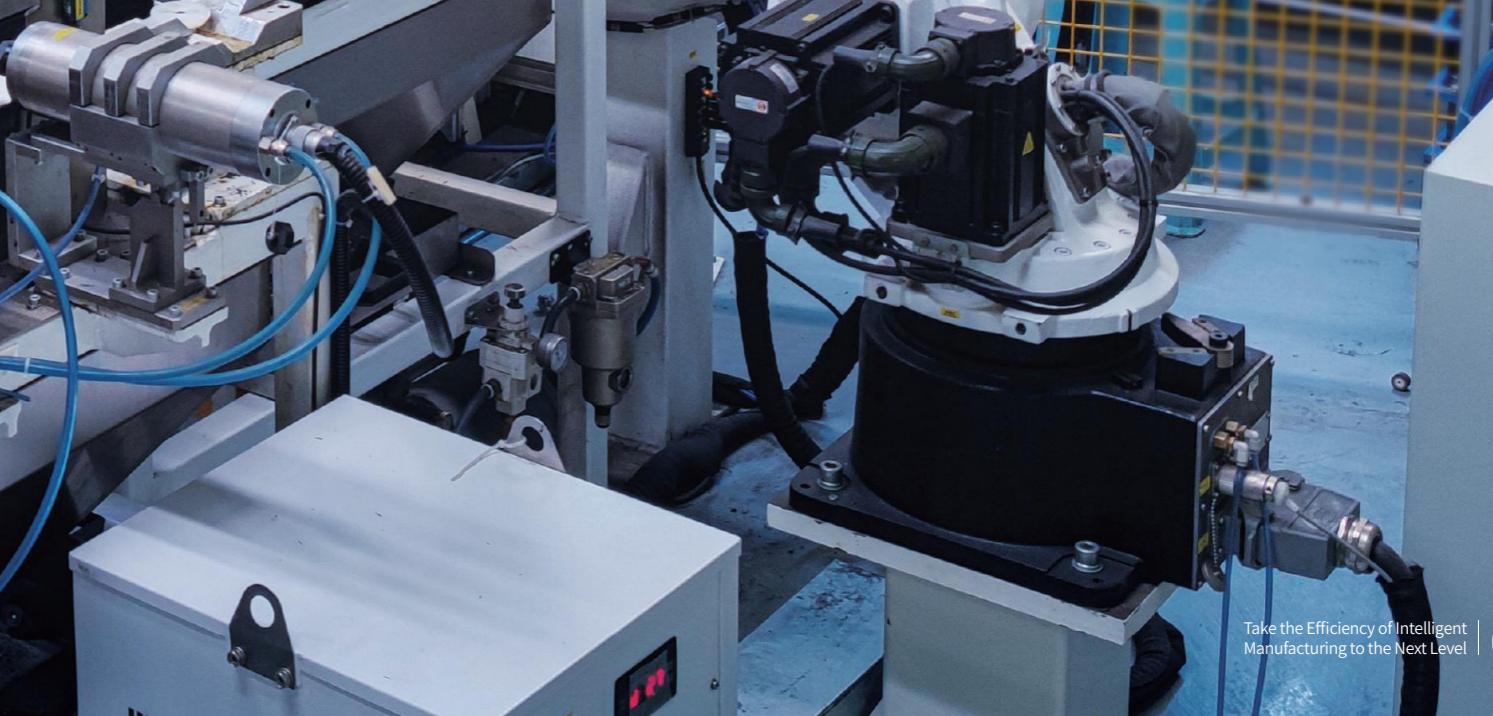
ROKAE

To be a world-leading robot expert

ROKAE industrial robots are faster, more reliable, and more precise.

Every second and every motion of industrial robots matter throughout manufacturing, and that explains why robot reliability and speed come first for us.

After years of updating and improving, our products have become faster and more reliable, with more functions integrated into a compact size. That makes applications easier, production more stable, and intelligent manufacturing more efficient.





Product Advantages



Faster - Efficient Production

- Optimal hardware performance powered by self-developed control systems
- Remarkably adroit motion backed by modularized control architecture



More Reliable - Stable Operation

- Rigorous design and continuous improvement bring you a reliable partner in industrial production
- IP67, CE, CR, KCs, and MTBF certifications



More Precise - Flexible Integration

- Easier deployment thanks to the compact structure and hollow wrist
- Broader application due to various interfaces



Easier to Use - Worry-free Operation

- Simple maintenance with timely, professional, and efficient service



Product series ↴

NB220 series

Payload	Reach
150 kg	3,201 mm
170 kg	2,705 mm
220 kg	2,705 mm

NB80 series

Payload	Reach
50 kg	2,598 mm
80 kg	2,200 mm

NB25h series

Payload	Reach
12 kg	2,258 mm
25 kg	1,836 mm
35 kg	1,836 mm

NB25 series

Payload	Reach
20 kg	2,013 mm
25 kg	1,813 mm
35 kg	1,813 mm
30 kg	1,617 mm

NB12 series

Payload	Reach
10 kg	1,602 mm
12 kg	1,442 mm
16 kg	1,102 mm

XB10 series

Payload	Reach
10 kg	1,206 mm

XB7 series

Payload	Reach
7 kg	707 mm

NB4 series

Payload	Reach
4 kg	475 mm

Payload	Reach
4 kg	580 mm

NB4 series

- Add bottom outlet configuration, can also be installed near the wall
- IP67 rating
- More reliable for applications in tight spaces and harsh environments

Model

	NB4-4/0.47	NB4h-4/0.58
DOF	6	6
Drive mode	AC servo	AC servo
Reach	475 mm	580 mm
Repeatability	±0.02 mm	±0.02 mm
Payload	4 kg	4 kg
Range of motion (maximum speed)	Axis 1	-170° to +170° (450°/s)
	Axis 2	-90° to +130° (360°/s)
	Axis 3	-200° to +55° (360°/s)
	Axis 4	-170° to +170° (550°/s)
	Axis 5	-120° to +120° (450°/s)
	Axis 6	-360° to +360° (860°/s)
Operating temperature	0°C to +40°C	0°C to +40°C
Storage temperature	-10°C to +55°C	-10°C to +55°C
IP rating	IP67	IP67
Mounting method	Floor, Ceiling	Floor, Ceiling
Noise level	≤70 dB(A)	≤75 dB(A)
Weight	About 21 kg	About 22 kg
AIR	4-Φ4, 5bar	4-Φ4, 5bar
Signal	8 channels (30V, 0.5A)	8 channels (30V, 0.5A)

Applications



XB7 series

- Flexible reach choices: 707/906 mm
- Satisfactory quality and takt time thanks to the amazing stability and best-in-class motion control

Model	XB7	XB7L
DOF		6
Drive mode		AC servo
Reach	707 mm	906 mm
Repeatability	±0.02 mm	±0.03 mm
Payload		7 kg
Range of motion (maximum speed)	Axis 1	-170° to +170° (440°/s)
	Axis 2	-96° to +135° (355°/s)
	Axis 3	-195° to +65° (440°/s)
	Axis 4	-170° to +170° (480°/s)
	Axis 5	-120° to +120° (450°/s)
	Axis 6	-360° to +360° (705°/s)
Operating temperature		0°C to +40°C
Storage temperature		-10°C to +55°C
IP rating	IP67	IP67
Mounting method		Floor, Ceiling
Noise level	≤ 70 dB(A)	≤ 80 dB(A)
Weight	About 50 kg	About 52 kg
AIR		4-Φ4, 5bar
Signal		8 channels (30V, 0.5A)



XB10 series

- All-cast aluminum body for the lightest weight and highest speed in its class
- Easy and compact deployment made possible by the fully enclosed arm with internal cables

Model

XB10 R1206	
DOF	6
Drive mode	AC servo
Reach	1,206 mm
Repeatability	±0.05 mm
Payload	10 kg
Range of motion (maximum speed)	Axis 1 -170° to +170° (297°/s)
	Axis 2 -95° to +125° (223°/s)
	Axis 3 -195° to +65° (223°/s)
	Axis 4 -170° to +170° (480°/s)
	Axis 5 -120° to +120° (360°/s)
	Axis 6 -360° to +360° (705°/s)
Operating temperature	0°C to +40°C
Storage temperature	-10°C to +55°C
IP rating	IP54
Mounting method	Floor, Ceiling
Noise level	≤ 70 dB(A)
Weight	About 76 kg
AIR	4-Φ4, 5bar
Signal	8 channels (30V, 0.5A)

Applications



NB12 series

- Full-cast aluminum alloy body for 20% weight reduction compared with products of the same class. Running speed that is 20% faster for efficient and precise operation.
- Compact design with built-in motor and cable for easier and more flexible deployment
- IP67 protection that endures harsh environments

Model	NB12-10/1.6	NB12-12/1.4	NB12-16/1.1
DOF		6	
Drive mode		AC servo	
Reach	1,602 mm	1,442 mm	1,102 mm
Repeatability		±0.03 mm	
Payload	10 kg	12 kg	16 kg
Range of motion (maximum speed)	Axis 1	-170° to +170° (245°/s)	
	Axis 2	-105° to +145° (245°/s)	
	Axis 3	-210° to +70° (290°/s)	
	Axis 4	-200° to +200° (435°/s)	
	Axis 5	-135° to +135° (450°/s)	
	Axis 6	-360° to +360° (705°/s)	
Operating temperature		0°C to +45°C	
Storage temperature		-10°C to +55°C	
IP rating		IP67	
Mounting method		Floor, Ceiling	
Noise level		≤75 dB(A)	
Weight	About 117 kg	About 115 kg	About 112 kg
AIR		1-Φ8+2-Φ6, 8bar	
Signal		24 channels (30V, 0.5A)	



NB25 series

- Longer reach than products of the same class helps easily address a wide range of automation requirements
- ROKAE self-developed control system maximizes production efficiency while ensuring the service life
- A 25% increase in payload over the previous model on average
- High inertia motion characteristics optimized for high inertia and fast beat applications
- IP67 high protection rating of wrists allows working in extreme environments thanks to the newly optimized sealing design

Model	NB25-20/2.0	NB25-25/1.8	NB25-30/1.6	NB25-35/1.8		
DOF			6			
Drive mode			AC servo			
Reach	2,013 mm	1,813 mm	1,617 mm	1,813 mm		
Repeatability			±0.05 mm			
Payload	20 kg	25 kg	30 kg	35 kg		
Range of motion (maximum speed)	Axis 1	-180° to +180° (204°/s)		-180° to +180° (204°/s)		
	Axis 2	-99° to +156° (186°/s)		-99° to +156° (186°/s)		
	Axis 3	-200° to +75° (182°/s)		-200° to +75° (182°/s)		
	Axis 4	-180° to +180° (492°/s)		-180° to +180° (310°/s)		
	Axis 5	-135° to +135° (450°/s)		-135° to +135° (360°/s)		
	Axis 6	-360° to +360° (705°/s)		-360° to +360° (444°/s)		
Operating temperature	0°C to +40°C					
Storage temperature	-10°C to +55°C					
IP rating	IP65 (Wrist IP67)					
Mounting method	Floor, Ceiling					
Noise level	≤75 dB(A)					
Weight	About 264 kg	About 256 kg	About 252 kg	About 256 kg		
AIR	2-Φ8, 8bar					
Signal	24 channels (30V, 0.5A)					



NB25h series

- Quasi-hypoid-gear for higher joint rigidity, ideal for high-rigidity operational scenarios.
- 57mm large hollow diameter for easier cabling and more convenient deployment.
- Smooth quasi-hypoid gear meshing ensures better precision retention, longer lifespan, and lower maintenance costs.
- IP67-wrist and IP65-body are designed to handle harsh environments with ease.

Model	NB25h-12/2.2	NB25h-25/1.8	NB25h-35/1.8
DOF		6	
Drive mode		AC servo	
Reach	2,258 mm	1,836 mm	1,836 mm
Repeatability	±0.04 mm	±0.03 mm	±0.04 mm
Payload	12 kg	25 kg	35 kg
Range of motion (maximum speed)	Axis 1	-180° to +180° (200°/s)	-180° to +180° (200°/s)
	Axis 2	-99° to +156° (185°/s)	-99° to +156° (185°/s)
	Axis 3	-200° to +75° (180°/s)	-200° to +75° (180°/s)
	Axis 4	-215° to +215° (430°/s)	-215° to +215° (430°/s)
	Axis 5	-225° to +225° (460°/s)	-225° to +225° (430°/s)
	Axis 6	-450° to +450° (730°/s)	-450° to +450° (730°/s)
Operating temperature	0°C to +40°C	0°C to +40°C	0°C to +40°C
Storage temperature	-10°C to +55°C	-10°C to +55°C	-10°C to +55°C
IP rating	IP65 (Wrist IP67)	IP65 (Wrist IP67)	IP65 (Wrist IP67)
Mounting method	Floor, Ceiling	Floor, Ceiling	Floor, Ceiling
Noise level	≤75 dB(A)	≤75 dB(A)	≤75 dB(A)
Weight	About 276 kg	About 272 kg	About 273 kg
AIR	2-Φ12, 8bar	2-Φ12, 8bar	2-Φ12, 8bar
Signal	2-12 channels (30V, 0.5A)	2-12 channels (30V, 0.5A)	2-12 channels (30V, 0.5A)



NB80 series

- Highest payload and longest reach among products of the same class helps easily address a wide range of automation needs
- High inertia motion characteristics optimized for high inertia applications
- Higher protection level against even the most demanding environments

Model	NB80-80/2.2	NB80-50/2.6
DOF		6
Drive mode		AC servo
Reach	2200 mm	2598 mm
Repeatability	±0.06 mm	±0.08 mm
Payload	80 kg	50 kg
Range of motion (maximum speed)	Axis 1	-185° ~ +185°(170°/s)
	Axis 2	-90° ~ +155°(145°/s)
	Axis 3	-210° ~ +80°(170°/s)
	Axis 4	-200° ~ +200°(285°/s)
	Axis 5	-130° ~ +130°(285°/s)
	Axis 6	-360° ~ +360°(285°/s)
Operating temperature	0°C to +45°C	
Storage temperature	-10°C to +55°C	
IP rating	IP65 (Wrist IP67)	
Mounting method	Floor, Ceiling	
Weight	About 635 kg	About 645 kg
AIR	2-Φ12, 8bar	
Signal	24 channels (30V, 0.5A)	

Applications



NB220 series

- Payload of 220 kg, with greater operating capacity under the same working conditions
- Reach of 3200 mm, cope with more application needs easily
- The whole machine IP65, wrist IP67 protection, deal with harsh environment freely

Model	NB220-220/2.7	NB220-170/2.7	NB220-150/3.2
DOF		6	
Drive mode	AC servo		
Reach	2705 mm	2705 mm	3201 mm
Repeatability	±0.07 mm	±0.07 mm	±0.08 mm
Payload	220 kg	170 kg	150 kg
Range of motion (maximum speed)	Axis 1	-185°~+185°(120°/s)	-185°~+185°(130°/s)
	Axis 2	-65°~+85°(110°/s)	-65°~+85°(115°/s)
	Axis 3	-185°~+80°(110°/s)	-185°~+80°(120°/s)
	Axis 4	-200°~+200°(150°/s)	-200°~+200°(180°/s)
	Axis 5	-130°~+130°(150°/s)	-130°~+130°(180°/s)
	Axis 6	-360°~+360°(220°/s)	-360°~+360°(260°/s)
Operating temperature	0°C to +45°C		
Storage temperature	-10°C to +55°C		
IP rating	IP65 (Wrist IP67)		
Mounting method	Floor		
Weight	About 1138 kg	About 1138 kg	About 1165 kg
AIR	2-Φ12, 8bar		
Signal	24 channels (30V, 0.5A)		



XBC5M

- Compact design and small footprint
- Flexible deployment through vertical/horizontal installation

XBC5

- More convenient deployment with a size only 50% that of the previous generation
- Suitable for wet, acidic, and alkaline gas environment thanks to internal and external dual cycle cooling system and IP54 protection



Controller

	XBC5M	XBC5
Dimensions (W×D×H)	448 mm x 446 mm x 268 mm	522 mm x 408 mm x 425 mm
Weight	28 kg	35 kg
Standard I/O	Input: 16; Output: 16	Input: 16; Output: 16
IP rating	IP40	IP54
Power supply	230VAC, voltage fluctuation within -15% to +10%, frequency variation within ±2%	230VAC or 3 x 380VAC(3L+N+PE)*1, voltage fluctuation within -15% to +10%, frequency variation within ±2%
Typical scenario Average power consumption	0.22kW (NB4 series) 0.52kW (XB7 series) 0.27kW (XB10 R1206)	0.22kW (NB4 series) 、 0.52kW (XB7 series) 0.27kW (XB10 R1206) 、 0.63kW (NB12 series) 1.5kW (NB25 series)
Operating temperature	0°C to +45°C	0°C to +45°C
Storage temperature	-10°C~+55°C	-10°C~+55°C
Maximum humidity for operation/storage	≤ 80% (non-condensing)	≤ 95% (non-condensing)

*1: 3x380VAC power supply for NB12 Series, NB25 Series, and 230VAC power supply for the rest.

xPad2

- Modern ergonomic design
- Large multi-touch HD Screen,easier human-machine interaction
- Plug & play connection and shareable between robots
- Intuitive UI layout allowing quick start within 10 minutes



XBC5E

- Compact design and easy installation
- IP54 protection level against metal dust
- Rich interface, support multiple communication methods



Controller

	XBC5E	XBC6M
Dimensions (W×D×H)	690 mm x 514 mm x 835 mm	420 mm x 317 mm x 120 mm
Weight	102 kg	10 kg
Standard I/O	Input: 16; Output: 16	Input: 16; Output: 16
IP rating	IP54	IP40
Power supply	3x380VAC(3L+PE); voltage fluctuation within -10%~10%, frequency variation within ±2%	230VAC, voltage fluctuation within -15% to +10%, frequency variation within ±2%
Rated power	2.1kW (NB80 series) 2.6kW (NB220 series)	0.22kW (NB4 series) 0.52kW (XB7 series) 0.27kW (XB10 R1206)
Operating temperature	0°C ~ +45°C	0°C ~ +50°C
Storage temperature	-10°C~ +55°C	-10°C~ +55°C
Maximum humidity for operation/storage	≤95% (non-condensing)	≤80% (non-condensing)



FlexPendant

Dimensions	290 mm x 190 mm x 80 mm
Weight	840 g
Connection	Wired
Display	10.1-in LCD with a resolution of 1,920x1,200
IP rating	IP54

Applications

ROKAE has built high-quality industrial robot platforms on modular technology. By satisfying the market needs with multi-function products that are more efficient, reliable, and compact, ROKAE empowers efficient intelligent manufacturing and drives innovations in different industries.



Electronics

Outperforming competitors in speed, reliability, and size, ROKAE industrial robots have found wide applications in consumer electronics, glass cover, PCB, and other segments.

Loading and unloading

Assembly

Gluing

Inspection

Loading & Unloading for Mobile Phone Inspection



Loading and unloading for inspection equipment of mobile phones and other electronic products

Notebook Package Labeling



Labeling on the outer package of notebooks

Loading & Unloading for Mobile Phone Screen Processing



Loading and unloading for CNC engraving machine to process the glass cover of electronic products

Mobile Phone Backboard Polishing



Grinding and polishing of the metal backboards of mobile phones and other electronic products

Relay Gluing



Encapsulating and gluing of relays and other electronic components

PCB Board Handling



Handling of large inertia PCB boards in the PCB industry

Auto Parts

ROKAE serves Tier 1 auto part suppliers and their factories across the globe. Thanks to superior trajectory accuracy and stiffness, ROKAE robots ensure consistent trajectory in automated applications such as part grinding and gluing.

Loading and unloading

Gluing

Grinding

Rail Grinding



Chamfering and deburring of different end surfaces of auto linear guides

Piston Grinding & Deburring



Fine grinding and deburring of piston products (including valves, oil holes, inner pin holes, and other complex parts)

Plastic Part Grinding



Grinding and polishing of interior and exterior plastic trims, such as door handles and three-spoke steering wheels

Lock Gluing



Plasma cleaning and sealant application for car locks

Casting Grinding



Grinding and deburring of cast iron parts, aluminum and magnesium alloy die-cast parts, and steel machined parts

Front-End Module Inspection



Flexible automatic inspection of different types of automotive front-end modules

Metals

Equipped with proprietary control systems, constant force control software process kit, and intelligent vision planning system, the IP67 protected ROKAE robots automate most of the tool production processes with improved productivity and quality. ROKAE has now grown into one of the best robot brands for manufacturing hardware including knife and shear.

Wet sanding



Chamfering



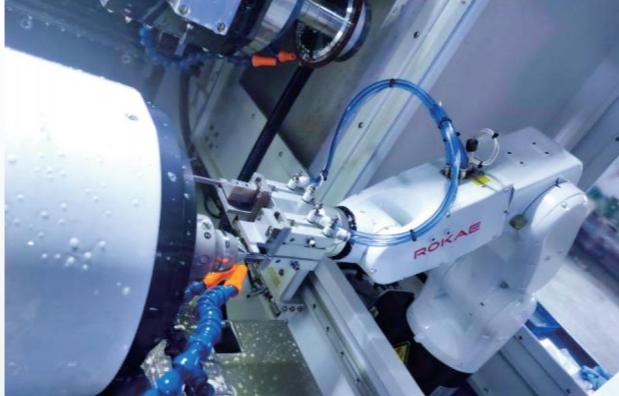
Blade cutting

Deburring

Machine Tending

Powered by high-performance motion control and other platform-based technologies, the IP67 protected ROKAE robots have become the ideal choice for the machine tool industry due to their high protection level, compact design, and outstanding precision. Equipped with the hollow wrist, they allow for long-term stable loading and unloading inside and outside machine tools. That wins it the reputation of the No. 1 domestic brand in the segment.

Loading and Unloading



Loading and Unloading for Tool Grinding Machine

Loading and Unloading for CNC Engraving Machine



Automatic Chamfering



Automatic Deburring



Loading and Unloading for Injection Moulding Machine



Loading and Unloading for Water Truck

