

Industrial Robot Series

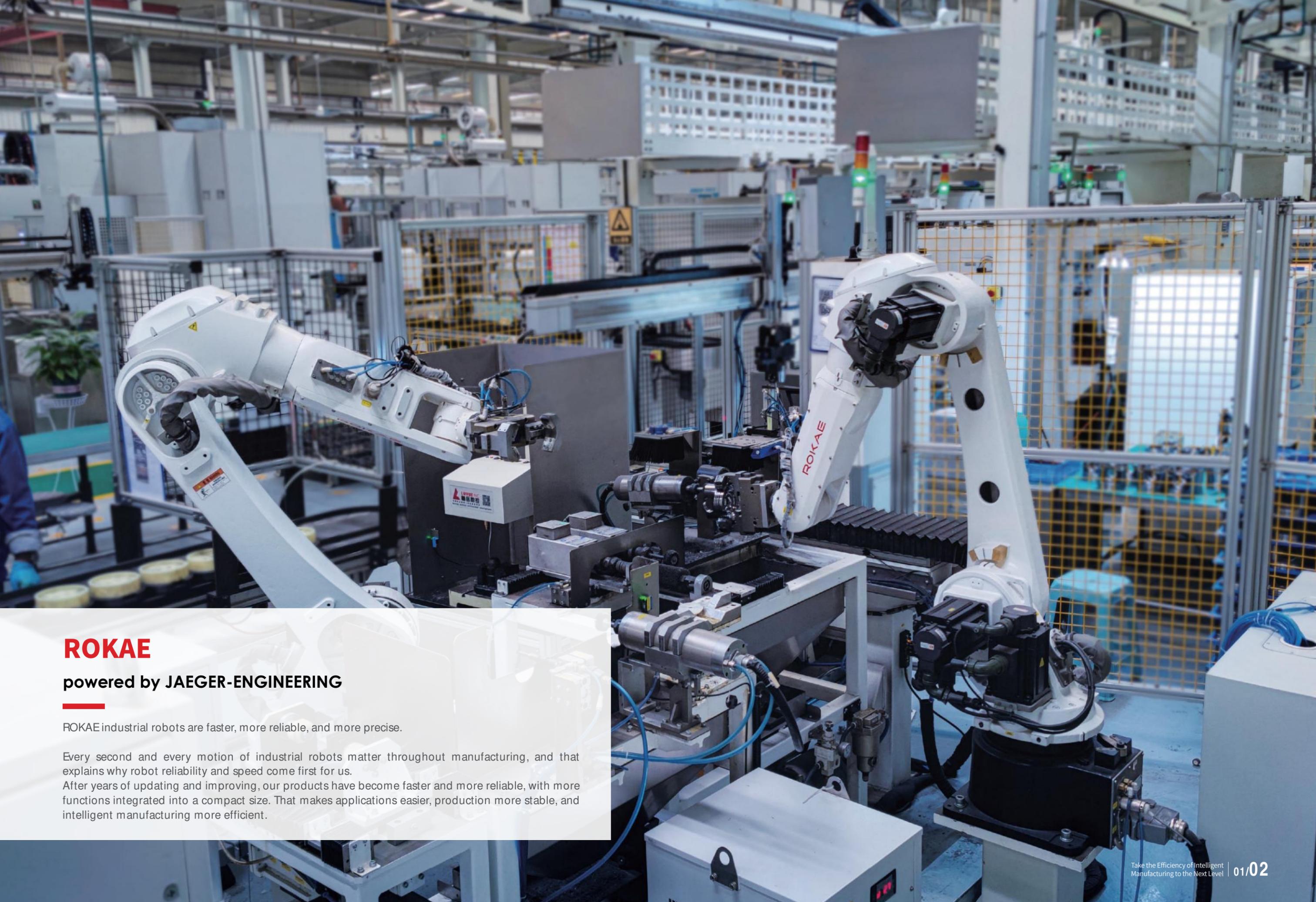
Faster | More Reliable | More Precise

ROKAE
Powered by JAEGER-ENGINEERING



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ROKAE

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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

NB80 series

Payload:	80kg	50kg
Reach:	2200mm	2598mm

NB25 series

Payload:	12kg	20kg	25kg/35kg	30kg
Reach:	2110mm	2013mm	1813mm	1617mm

NB12 series

Payload:	10kg	12kg	16kg
Reach:	1602mm	1442mm	1102mm / 953mm

XB10 series

Payload:	10kg
Reach:	1206mm

XB12 series

Payload:	12kg
Reach:	707mm / 906mm

XB7 series

Payload:	7kg
Reach:	707mm / 906mm / 1206mm

XB4 series

Payload:	4kg
Reach:	596mm

XB4 series

- Easy integration into small automation units to accomplish various tasks efficiently
- Satisfactory quality and takt time thanks to the amazing stability and best-in-class motion control

Model		XB4
DOF		6
Drive mode		AC servo
Reach		596 mm
Repeatability		±0.02 mm
Payload		4 kg
Range of motion (maximum speed)	Axis 1	-170° to +170° (440°/s)
	Axis 2	-80° to +144° (355°/s)
	Axis 3	-194° to +54° (440°/s)
	Axis 4	-170° to +170° (490°/s)
	Axis 5	-119° to +119° (450°/s)
	Axis 6	-360° to +360° (720°/s)
Operating temperature		0°C to +40°C
Storage temperature		-10°C to +55°C
IP rating		IP67
Mounting method		Floor, Ceiling
Noise level		≤ 70 dB(A)
Weight		About 32 kg
AIR		4-Φ4, 5bar
Signal		8 channels (30V, 0.5A)

Applications



Loading and unloading



Deburring



Inspection



Gluing



Assembly



Handling



XB7 series

- Flexible reach choices: 707/906/1206 mm
- Satisfactory quality and takt time thanks to the amazing stability and best-in-class motion control

Model		XB7	XB7L	XB7XL
DOF		6		
Drive mode		AC servo		
Reach		707 mm	906 mm	1,206 mm
Repeatability		±0.02 mm	±0.03 mm	±0.05 mm
Payload		7 kg		
Range of motion (maximum speed)	Axis 1	-170° to +170° (440°/s)	-170° to +170° (355°/s)	-170° to +170° (297°/s)
	Axis 2	-96° to +135° (355°/s)	-96° to +130° (355°/s)	-95° to +125° (223°/s)
	Axis 3	-195° to +65° (440°/s)	-195° to +65° (355°/s)	-195° to +65° (297°/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	IP54
Mounting method		Floor, Ceiling		
Noise level		≤ 70 dB(A)		
Weight		About 50 kg	About 52 kg	About 76 kg
AIR		4-Φ4, 5bar		
Signal		8 channels (30V, 0.5A)		

Applications



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



Loading and unloading



Deburring



Inspection



Gluing



Sorting



Assembly



Handling



XB12 series

- Customized for special industry with high ROI
- Satisfactory quality and takt time for segment customers thanks to the amazing stability and best-in-class motion speed
- Long-term reliable operation due to high stiffness and high inertia design
- Easy and compact deployment made possible by the fully enclosed arm with internal cables

Model		XB12 R707-3	XB12 R707-4	XB12 R906-3-LAR	XB12 R906-4-LAR
DOF		3	4	3	4
Drive mode		AC servo			
Reach		707 mm		906 mm	
Repeatability		±0.02 mm		±0.03 mm	
Payload		12 kg			
Range of motion (maximum speed)	Axis 1	-96° to +135° (297°/s)		-126° to +100° (297°/s)	
	Axis 2	-195° to +65° (297°/s)			
	Axis 3	-120° to +120° (360°/s)			
	Axis 4	-360° to +360° (356°/s)		-360° to +360° (356°/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 43 kg	About 45 kg	About 44 kg	About 46 kg
Signal		8 channels (30V, 0.5A)			

Applications



Horizontal handling Horizontal handling



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	NB12-16/0.95-3	NB12-16/0.95-4
DOF		6			3	4
Drive mode		AC servo			AC servo	
Reach		1,602 mm	1,442 mm	1,102 mm	953 mm	953 mm
Repeatability		±0.03 mm			±0.03 mm	
Payload		10 kg	12 kg	16 kg	16 kg	16 kg
Range of motion (maximum speed)	Axis 1	-170° to +170° (245°/s)			-125° to +110° (245°/s)	
	Axis 2	-105° to +145° (245°/s)			-210° to +70° (290°/s)	
	Axis 3	-210° to +70° (290°/s)			-135° to +135° (450°/s)	
	Axis 4	-270° to +270° (435°/s)			-360° to +360° (705°/s)	
	Axis 5	-135° to +135° (450°/s)			—	
	Axis 6	-360° to +360° (705°/s)			—	
Operating temperature		0°C to +45°C			0°C to +45°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		≤75 dB(A)			≤75 dB(A)	
Weight		About 117 kg	About 115 kg	About 112 kg	About 67 kg	About 69 kg
AIR		1-Φ8+2-Φ6, 8bar			1-Φ8+2-Φ6, 8bar	
Signal		24 channels (30V, 0.5A)			12 channels (30V, 0.5A)	

Applications



Loading and unloading



Deburring



Inspection



Handling



Sorting



Assembly



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	NB25-12/2.1
DOF	6				
Drive mode	AC servo				
Reach	2,013 mm	1,813 mm	1,617 mm	1,813 mm	2,110 mm
Repeatability	±0.05 mm				
Payload	20 kg	25 kg	30 kg	35 kg	12 kg
Range of motion (maximum speed)	Axis 1	-180° to +180° (204°/s)		-180° to +180° (204°/s)	-180° to +180° (204°/s)
	Axis 2	-99° to +156° (186°/s)		-99° to +156° (186°/s)	-99° to +156° (186°/s)
	Axis 3	-200° to +75° (182°/s)		-200° to +75° (182°/s)	-200° to +85° (182°/s)
	Axis 4	-180° to +180° (492°/s)		-180° to +180° (310°/s)	-180° to +180° (492°/s)
	Axis 5	-135° to +135° (450°/s)		-135° to +135° (360°/s)	-135° to +135° (450°/s)
	Axis 6	-360° to +360° (705°/s)		-360° to +360° (444°/s)	-360° to +360° (705°/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	About 262 kg
AIR	2-Φ8, 8bar				
Signal	24 channels (30V, 0.5A)				

Applications



Loading and unloading



Deburring



Inspection



Photovoltaic typesetting



Sorting



Assembly



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)	-185°~+185°(170°/s)
	Axis 2	-90°~+155°(145°/s)	-90°~+155°(180°/s)
	Axis 3	-210°~+80°(170°/s)	-210°~+80°(180°/s)
	Axis 4	-200°~+200°(285°/s)	-200°~+200°(285°/s)
	Axis 5	-130°~+130°(285°/s)	-130°~+130°(285°/s)
	Axis 6	-360°~+360°(285°/s)	-360°~+360°(360°/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



Loading and unloading



Soldering



Deburring



Handling



Gluing



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%
Rated power	1.6kW (XB4) , 1.7kW (XB12 series) , 2.5kW (XB7, XB7L, XB7XL) , 2.7kW (XB10 R1206)	1.6kW (XB4) , 1.7kW (XB12 series) , 2.5kW (XB7, XB7L, XB7XL) , 2.7kW (XB10 R1206) , 4.7kW(NB12-12/1.4, NB12-10/1.6, NB12-16/1.1), 2.8kW(NB12-16/0.95-3), 3kW(NB12-16/0.95-4), 9.1kW (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.

XBC5E

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



Controller	XBC5E
Dimensions (W× D× H)	690 mm× 680 mm× 882 mm
Weight	102 kg
Standard I/O	Input: 16; Output: 16
IP rating	IP54
Power supply	3x380VAC(3L+PE); voltage fluctuation within -10%-10%, frequency variation within ±2%
Rated power	17.5kW (NB80 series)
Operating temperature	0°C ~ +45°C
Storage temperature	-10°C ~ +55°C
Maximum humidity for operation/storage	≤95% (non-condensing)

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



FlexPendant

xPad2

xPad

Dimensions	290 mm × 190 mm × 80 mm	9.7 inches
Weight	840 g	1.15 kg (without cable)
Connection	Wired	Wired
Display	10.1-in LCD with a resolution of 1,920×1,200	Resolution 1,024×768
IP rating	IP54	IP65

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 & 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.



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.

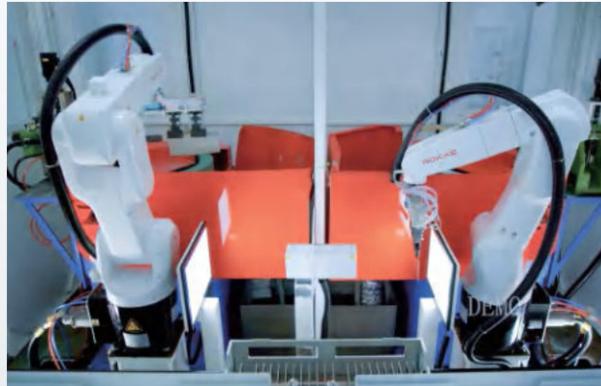
Wet sanding

Chamfering

Blade cutting

Deburring

Automatic Loading & Unloading for Wet Sanding



Automatic Blade Cutting



Automatic Chamfering



Automatic Deburring



Automatic Sewing

Thanks to the proprietary control system and intelligent vision planning system, ROKAE robots have addressed the challenges of flexible cloth gripping and sewing machine speed coordination. They have been widely adopted for sweatshirt pocket, shirt sleeve kerf, and 3D non-woven sewing, promoting more efficient intelligent manufacturing in the traditional sewing industry.

Overlock sewing

Flat sewing

Loading and unloading

Sweatshirt Pocket Sewing



Shirt Sleeve Kerf Sewing



Sofa Cover Sewing



3D Non-woven Sewing

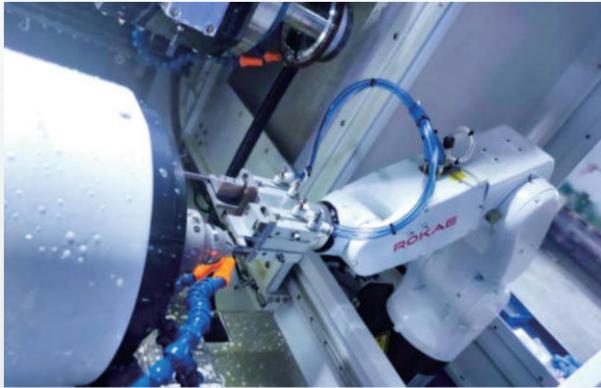


Machine Tending

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



Loading and Unloading for
Injection Moulding Machine



Loading and Unloading for Water Truck



With its cutting-edge expertise, reliable products, comprehensive solutions, and professional support and services, ROKAE empowers thousands of enterprises in their automated and intelligent manufacturing transformation. By constantly creating new values for customers, it plays a vital role in driving and accelerating the development of intelligent manufacturing.