

# **Industrial Robot Series**

Faster | More Reliable | More Precise



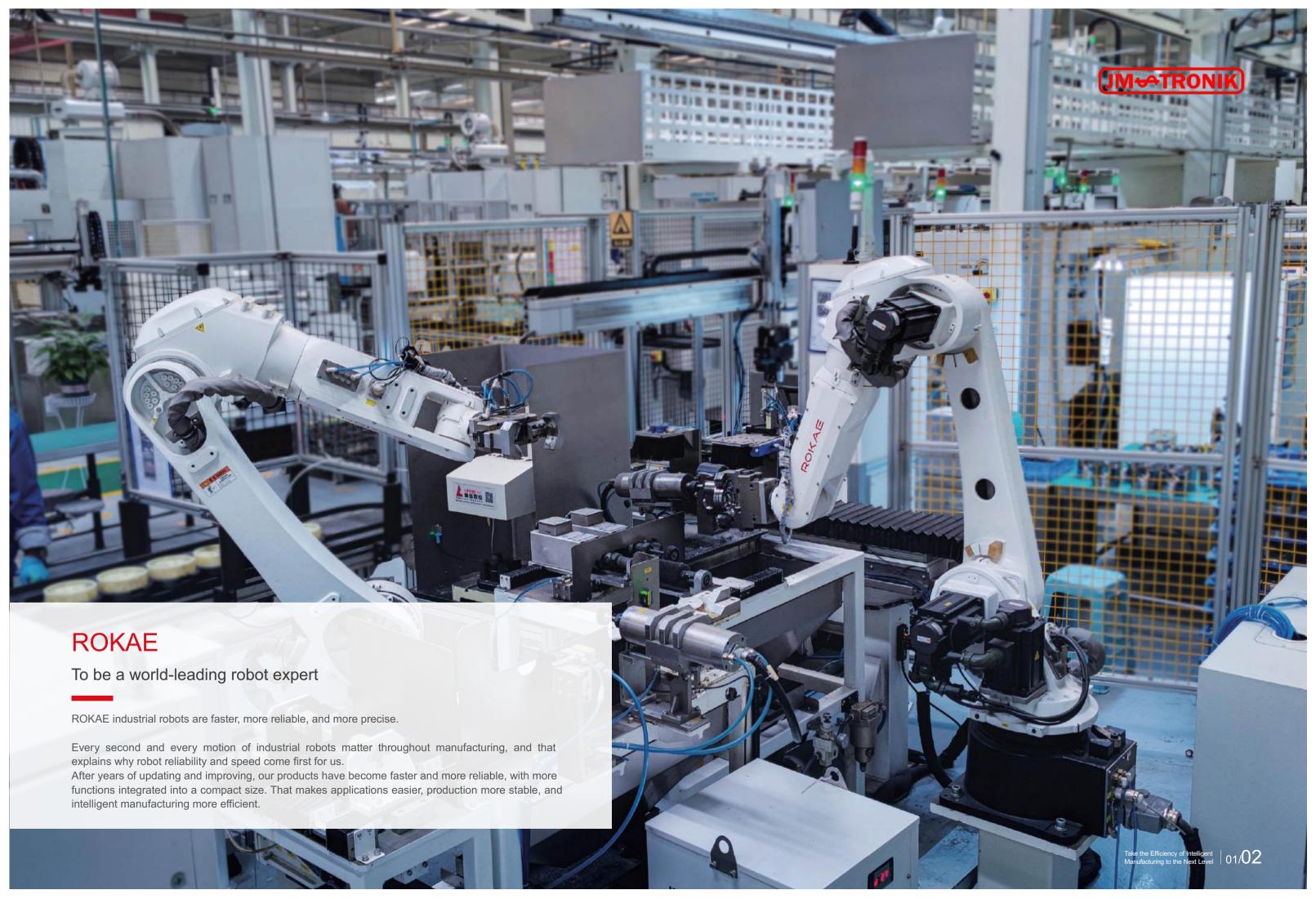


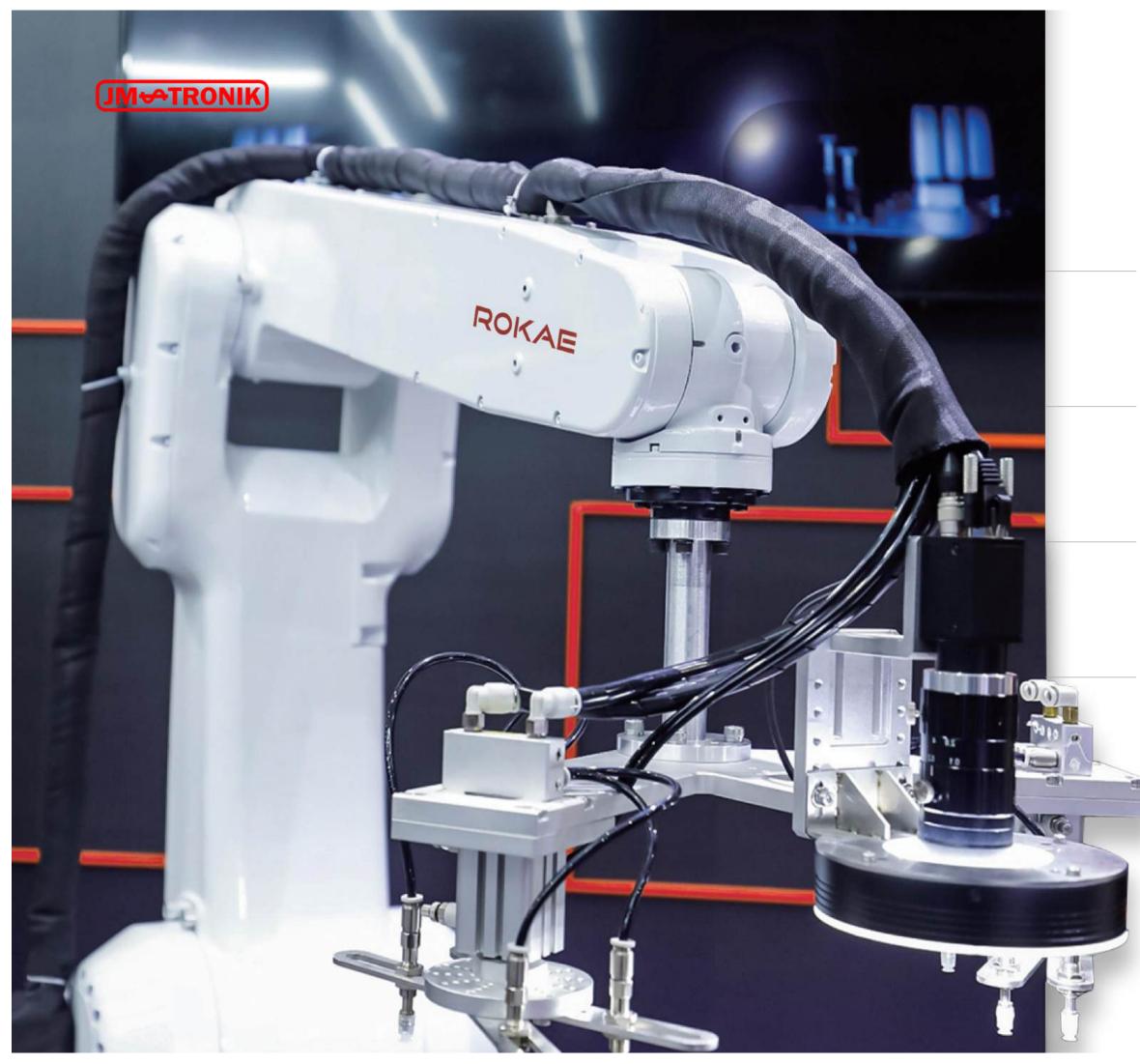
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### **Product Advantages**



#### Faster - Efficient Production

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



#### More Reliable - Stable Operation

- Rigourous 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

 $\left(\frac{150 \text{kg}}{3201 \text{mm}}\right) \left(\frac{170 \text{kg}}{2705 \text{mm}}\right) \left(\frac{220 \text{kg}}{2705 \text{mm}}\right)$ 

NB80 series

NB25 series

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

NB12 series

XB10 series

Payload : 10kg
Reach : 1206mm

XB7 series

7kg 707mm NB4 series



# **NB4** series

- Lighter, faster, and more compact compared to XB4
- 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	
	Axis 1	-170° to +170° (450°/s)	-170° to +170° (450°/s)	
	Axis 2	-90° to +130° (360°/s)	-90° to +130° (318°/s)	
Range of motion	Axis 3	-200° to +55° (360°/s)	-200° to +55° (288°/s)	
(maximum speed)	Axis 4	-170° to +170° (550°/s)	-170° to +170° (550°/s)	
	Axis 5	-120° to +120° (450°/s)	-120° to +120° (450°/s)	
	Axis 6	-360° to +360° (860°/s)	-360° to +360° (612°/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	
P 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-Ф4, 5bar	4-Ф4, 5bar	
Signal	8 channels (30V, 0.5A)		8 channels (30V, 0.5A)	





# **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			
	Axis 1	-170° to +170° (440°/s)	-170° to +170° (355°/s)			
	Axis 2	-96° to +135° (355°/s)	-96° to +130° (355°/s)			
Range of motion	Axis 3	-195° to +65° (440°/s)	-195° to +65° (355°/s)			
(maximum speed)	Axis 4	-170° to +1	70° (480°/s)			
	Axis 5	-120° to +1	20° (450°/s)			
	Axis 6	-360° to +36	60° (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)				
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

XB10 R1206
7.2 10 11121

	6		
	AC servo		
	1,206 mm		
	±0.05 mm		
nyload 10 kg			
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)		
	0°C to +40°C		
	-10°C to +55°C		
	IP54		
	Floor, Ceiling		
	≤ 70 dB(A)		
	About 76 kg		
	4-Ф4, 5bar		
	8 channels (30V, 0.5A)		
	Axis 2  Axis 3  Axis 4  Axis 5		





### **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				
	Axis 1		-170° to +170° (245°/s)					
Range of motion	Axis 2		-105° to +145° (245°/s)					
	Axis 3	-210° to +70° (290°/s)						
(maximum speed)	Axis 4	-270° to +270° (435°/s)						
	Axis 5		-135° to +135° (450°/s)					
	Axis 6	-360° to +360° (705°/s)						
Operating temperature			0°C to +45°C					
Storage temperatur	е		-10℃ to +55℃	-10°C to +55°C				
IP rating			IP67					
Mounting method			Floor, Ceiling					
Noise level			≤75 dB(A)					
Weight About 117 kg		About 117 kg	About 115 kg About 112					
AIR			1-Ф8+2-Ф6, 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	5-20/2.0 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	2,013 mm 1,813 mm		1,813 mm	2,110 mm			
Repeatability				±0.05 mi	m				
Payload		20 kg	25 kg	30 kg	35 kg	12 kg			
	Axis 1		-180° to +180° (20	4°/s)	-180° to +180° (204°/s)	-180° to +180° (204°/s)			
	Axis 2		-99° to +156° (186	6°/s)	-99° to +156° (186°/s)	-99° to +156° (186°/s)			
Range of motion	Axis 3		-200° to +75° (182	2°/s)	-200° to +75° (182°/s)	-200° to +85° (182°/s)			
(maximum speed)	Axis 4		-180° to +180° (49	2°/s)	-180° to +180° (310°/s)	-180° to +180° (492°/s)			
	Axis 5		-135° to +135° (45	50°/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 temperatu	re			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 264 kg About 256 kg About 252 kg About 256 kg About 2						
AIR		2-Ф8, 8bar							
Signal 24 channels (30V, 0.5A)									



#### JM**↔**TRONIK

### **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			
	Axis 1	-185°~+185°(170°/s)	-185°~+185°(170°/s)			
	Axis 2	-90°~+155°(145°/s)	-90°~+155°(180°/s)			
Range of motion	Axis 3	-210°~+80°(170°/s)	-210°~+80°(180°/s)			
(maximum speed)	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)				



# **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			
		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			
	Axis 1	-185°~+185°(120°/s)	-185°~+185°(130°/s)	-185°~+185°(130°/s)			
	Axis 2	-65°~+85°(110°/s)	-65°~+85°(115°/s)	-65°~+85°(115°/s)			
Range of motion	Axis 3	-185°~+80°(110°/s)	-185°~+80°(120°/s)	-185°~+80°(120°/s)			
(maximum speed)	Axis 4	-200°~+200°(150°/s)	-200°~+200°(180°/s)	-200°~+200°(180°/s)			
	Axis 5	-130°~+130°(150°/s)	-130°~+130°(180°/s)	-130°~+130°(180°/s)			
	Axis 6	-360°~+360°(220°/s)	-360°~+360°(260°/s)	-360°~+360°(260°/s)			
perating temperature		0°C to +45°C					
Storage temperature		-10°C to +55°C					
P rating		IP65 (Wrist IP67)					
Mounting method		Floor					
Weight		About 1138 kg About 1138 kg About 1165 kg					
AIR		2-Ф12, 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%			
Rated power	1.3kW (NB4 series) 2.5kW (XB7、XB7L) 2.7kW (XB10 R1206)	1.3kW (NB4 series) , 2.5kW (XB7、XB7L) , 2.7kW (XB10 R1206) , 4.7kW(NB12-12/1.4、NB12-10/1.6、NB12-16/1.1), 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)			

<sup>\*1: 3</sup>x380VAC 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

	7200	
Dimensions (W×D×H)	690 mm× 514 mm× 835 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) 、32.6kW (NB220 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



Н	Ц	е	X	Р	е	n	d	a	n	t

Weight

Display

IP rating

Connection



290 mm × 190 mm × 80 mm Dimensions

840 g

Wired

10.1-in LCD with a resolution of 1,920×1,200

IP54