ROKAE

New-Generation Flexible Collaborative Robot

xMate SR3-3/0.7

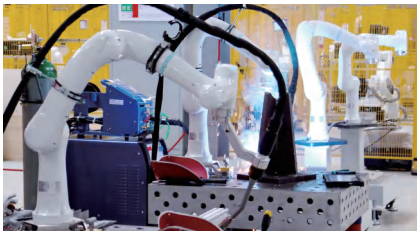
A Powerful Yet Flexible All-Rounder

2025-08-21

SR Series Collaborative Robot

xMate SR,ROKAE's next-generation flexible cobot series that is lightweight, flexible, and great in cost performance, is a good helper for people's work and life.independent controller cabinet caters to more confined baseinstalation environments.

Applications



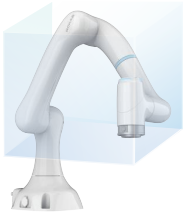
- Unmanned retail
- Automated catering
- Robotic coffee
- Robotic ice cream
- Robotic popcorn
- Robot moxibustion
- Robot massage
- Loading and unloading
- Assembly
- Inspection
- Welding

Features

Extreme Safety, Comprehensive Guarantee

High-precision torque sensors in all joints enable ultra-sensitive force sensing, thus effectively avoiding accidental collisions and injuries and ensuring safe operation.

- Collision sensitivity improved by 5 times
- More than 21 TÜV functional safety features
- Independent RSC design, dual-channel redundant monitoring
- Suction band-type brake for reliable and safe shielding
- Human-machine collaboration for the perfect guarantee of production efficiency
- Compliance with international safety standards for worry-free certification and approval



Lightweight & Flexible Fashionable & Friendly

The innovative design brings superb lightweight flexibility as well as user-friendly human-machine interaction, shattering stereotypes about robots.

- Streamlined shape
- Delicate and delightful color scheme
- Simple and fashionable design

Excellent Reliability Solid Partner

Industry-leading 80,000 hours of MTBF makes it an economical and solid partner

- 100+ design verification experiments, 120-hour 20+ ex-factory tests
- Component-level quality control based on a mature and reliable supply chain
- 30% longer gear reducer life thanks to advanced robot algorithms
- Dynamic modeling based on over 2000 parameters, effectively preventing overload

Excellent Accessibility, Easy to Use

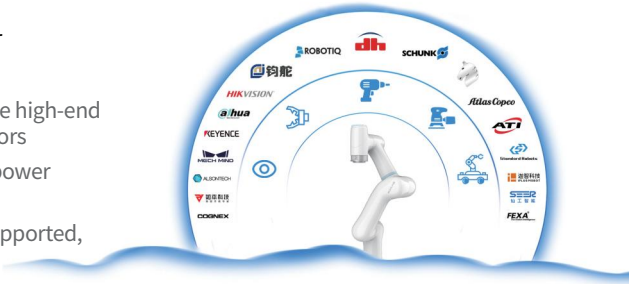
Extremely easy to use and deploy, allowing quick installation and commissioning by beginners

- Only 1N for dragging and direct teaching programming, enabling easy handling of complex paths
- Graphical user interface that can be mastered within one hour
- Extensive SDK interfaces for rapid development of specialized applications

Sound Ecosystem, Full Empowerment

ROKAE versatile one-stop solutions for human-machine collaboration empower partners and fulfill customer goals

- Millisecond-level real-time secondary development interfaces that help customize high-end functions, making it a reliable partner for equipment manufacturers and integrators
- 6 categories of ecosystem extensions and 100+ ecosystem partners that fully empower industrial applications
- Various communication protocols such as Modbus, PROFINET and CC-Link are supported, enabling it to be quickly integrated into the application environment
- The powerful offline simulation software, RokaeStudio, supports users in quickly creating solutions



xMate SR3-3/0.7

Specifications

Payload	3 kg
Reach	705 mm
Weight	About 15 kg
Degrees of freedom	6
MTBF	> 80,000 h
Power supply	90-264VAC，47-63Hz/48VDC
Programming	Direct teaching control and graphical interface

Performance

Typical Power	160 w	
Safety	Over 21 adjustable safety features including collision detection, virtual walls, and collaboration mode (Optional for models 35kg and above)	
Certification	EN ISO 13849-1, EN ISO 10218-1/ PL d, Cat. 3; ISO 15066, and EU CE marking requirements, KCs marking requirements,EAC marking requirements	
Force sensing(tool flange)	Force，x-y-z	Torque，x-y-z
Force measurement resolution	0.1N	0.02Nm
Relative accuracy of force control	0.5 N	0.1 Nm
Adjustable range of Cartesian stiffness	0~3000N/m，0~300Nm/rad	

Motion

Repeatability	±0.03 mm	
Motion joint	Working range	Maximum speed
Axis 1	±360°	180°/s
Axis 2	-135°~+130°	180°/s
Axis 3	-175°~ +135°	180°/s
Axis 4	±360°	180°/s
Axis 5	±360°	180°/s
Axis 6	±360°	180°/s
Maximum speed at tool end	≤1.5m/s	

Physical properties

IP rating	IP54
ISO cleanroom class	5
Noise	≤ 70 dB(A)
Operating ambient temperature	0℃~50℃
Humidity	≤ 93% RH (non-condensing)
Robot installation	At any angle
Tool I/O ports	2 Digital outputs, 2 Digital inputs, 2 Analog inputs
Tool communication interface	One 100-megabit Ethernet port with RJ45 interface on the connection base
Tool I/O power supply	(1) 24V/12V, 1A (2) 5V, 1.5A

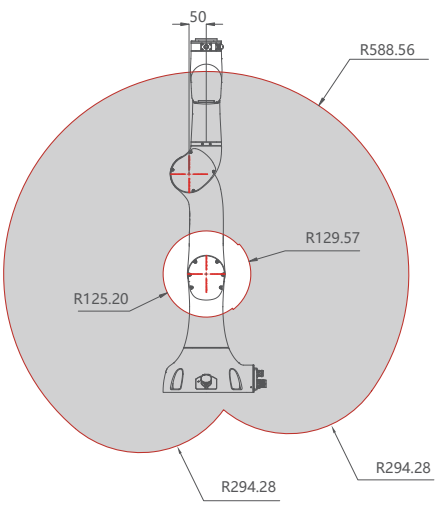
Considering the upgrade of the product, the actual parameters of the product shall be subject to the corresponding hardware installation manual

Robot-Integrated Controller

Controller	Built-in controller
Operator interface	Notebook/PAD/Drag Interactive Module
Safety protection device	1 handheld enable / 1 handheld emergency stop
Communication protocols	TCP/IP 1000Mbit, Modbus TCP, Profinet, Ethernet/IP,DeviceNet, CC-Link, CC-Link IE Field Basic
External control interface	Highly dynamic external control; low-level force/position control;robot model library and API
Input power	48VDC
Base I/O ports	4 Digital outputs, 4 Digital inputs, 2 safety input, 1 safety output
Base communication interface	2 channel Ethernet
Base output power supply	24V,1.5A

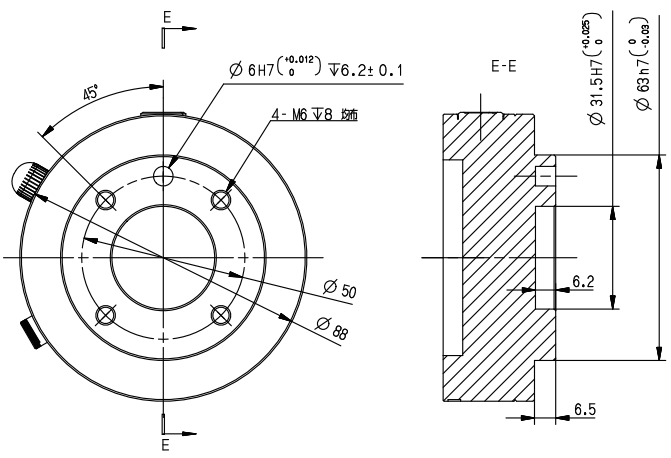
Working range

Dimensions: mm



Output flange

Dimensions: mm



Wrist load curve