

	SR3-C	SR4-C	SR5-C
<b>Specifications</b>			
Payload	3 kg	4 kg	5 kg
Reach	705 mm	919 mm	919 mm
Weight	About 13.8 kg	About 16.5 kg	About 16.5 kg
Degrees of freedom	6 revolute joints	6 revolute joints	6 revolute joints
MTBF	> 80,000 h	> 80,000 h	> 80,000 h
Power supply	48VDC	48VDC	48VDC
Programming	Direct teaching control and graphical interface	Direct teaching control and graphical interface	Direct teaching control and graphical interface

<b>Performance</b>						
Typical Power	160w		225w		225w	
Safety	Over 21 adjustable safety features including collision detection, virtual walls, and collaboration mode.					
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, x-y-z	Torque, x-y-z	Force, x-y-z	Torque, x-y-z
Force measurement resolution	0.1 N	0.02 Nm	0.1 N	0.02 Nm	0.1 N	0.02 Nm
Relative accuracy of force control	0.5 N	0.1 Nm	0.5 N	0.1 Nm	0.5 N	0.1 Nm
Adjustable range of Cartesian stiffness	0~3000N/m, 0~300Nm/rad		0~3000N/m, 0~300Nm/rad		0~3000N/m, 0~300Nm/rad	

<b>Motion</b>						
Repeatability	±0.03 mm		±0.03 mm		±0.03 mm	
Motion joint	Working range	Maximum speed	Working range	Maximum speed	Working range	Maximum speed
Axis 1	±360°	180°/s	±360°	180°/s	±360°	180°/s
Axis 2	-155°~+140°	180°/s	-160°~+150°	180°/s	-160°~+150°	180°/s
Axis 3	-175°~+135°	180°/s	-170°~+140°	180°/s	-170°~+140°	180°/s
Axis 4	±360°	180°/s	±360°	180°/s	±360°	180°/s
Axis 5	±360°	180°/s	±360°	180°/s	±360°	180°/s
Axis 6	±360°	180°/s	±360°	180°/s	±360°	180°/s
Maximum speed at tool end	≤ 1.5 m/s		≤ 2.0 m/s		≤ 2.0 m/s	

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

<b>Physical properties</b>	
IP rating	IP54
ISO cleanroom class	5
Noise	≤ 70 dB(A)
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
Operating ambient temperature	0°C~50°C
Humidity	≤ 95% RH (non-condensing)

<b>Control cabinet</b>	
Name	LightCab
IP rating	IP20
Operating ambient temperature	0°C~50°C
Humidity	≤93% RH (Non-condensing)
Dimensions	228.5mm x 180mm x 88mm
Weight	About 2.4 kg
User IO	4 Digital outputs, 4 Digital inputs
Communication	2 channels Ethernet
Power output	24V, 1.5A



# SR-C Series

Flexible Cobots

Lightweight & Flexible,  
Extreme Safety



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# SR-C Series

## Flexible Cobots



Expanding upon the distinctive features and core advantages of the xMate SR flexible cobot, the **xMate SR-C** takes it a step further by relocating the controller to create an independent controller cabinet. This design caters to more confined base installation environments. Furthermore, the xMate SR-C undergoes a comprehensive upgrade, now supporting a 5 kg payload capacity.

## Applications



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



**SR3-C**  
 3 kg  
 705 mm



**SR4-C**  
 4 kg  
 919 mm



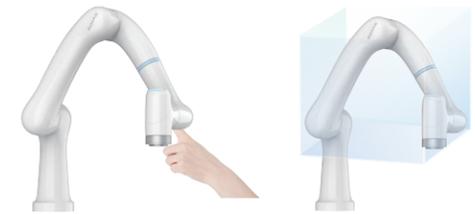
**SR5-C**  
 5 kg  
 919 mm

## 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

