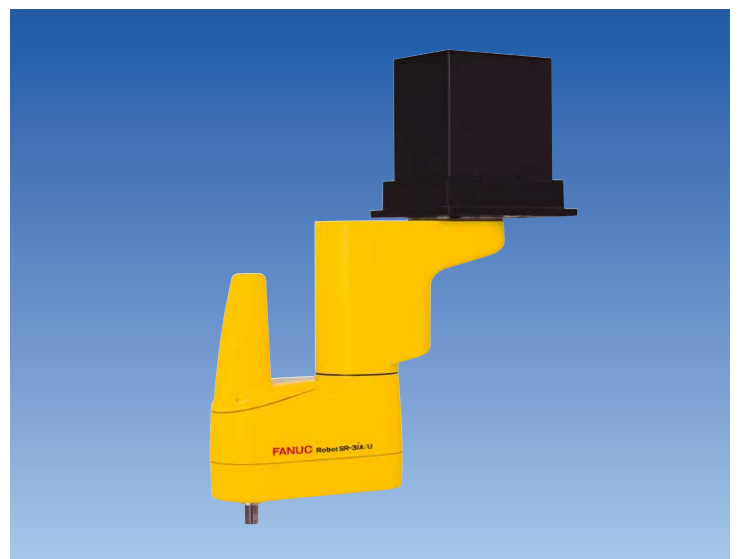


FANUC Robot SR series

FEATURES

FANUC Robot SR-3*i*A, 6*i*A, 12*i*A, 20*i*A is SCARA robot whose payload is 3 to 20kg.

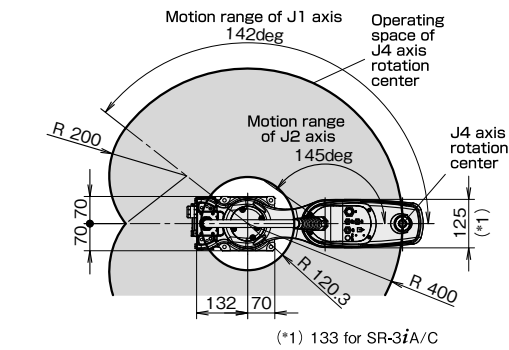
- Nine models are available to meet a variety of payload, motion range and installation requirements.
- A lightweight arm and the most advanced servo technology enables superior accuracy and high duty performance, which improves productivity.
- The SR-3*i*A and 6*i*A offer food grade options. The SR-12*i*A and 20*i*A offer environmental options including white epoxy coating, bellow covers, anti-rust bolts and seals, and IP65 rating to withstand dust and liquids.
- Internal cable routing in the J2 arm eliminates interference, and the hollow arm on the J4 rotation axis allows easy gripper installation.
- SR-3*i*A/U is a ceiling mount type robot. It can use its full 360° envelope to maximize work space, even in limited areas.
- The R-30*i*B Compact Plus controller is significantly smaller than previous controllers with the same functionality and power.
- Easy to use and intuitive robot setup and programming on a PC or Tablet
- Latest intelligent functions are available, such as *i*RVision (integrated vision) and *i*RPickTool.



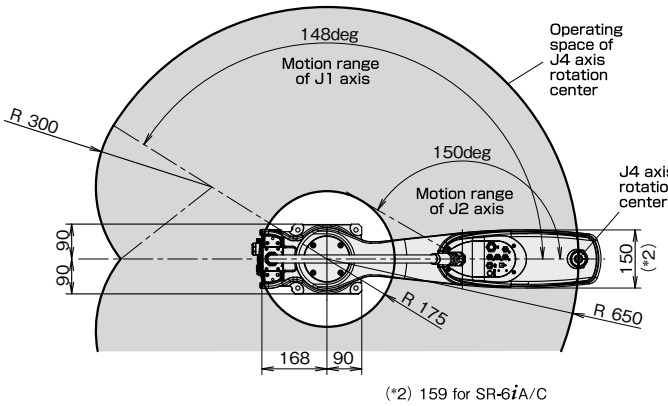
SR-3*i*A/U

Operating Space

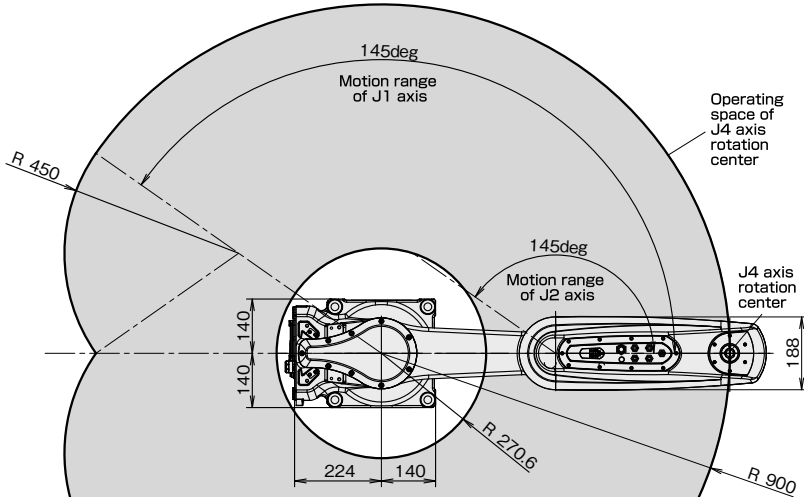
SR-3iA
SR-3iA/C
SR-3iA/H



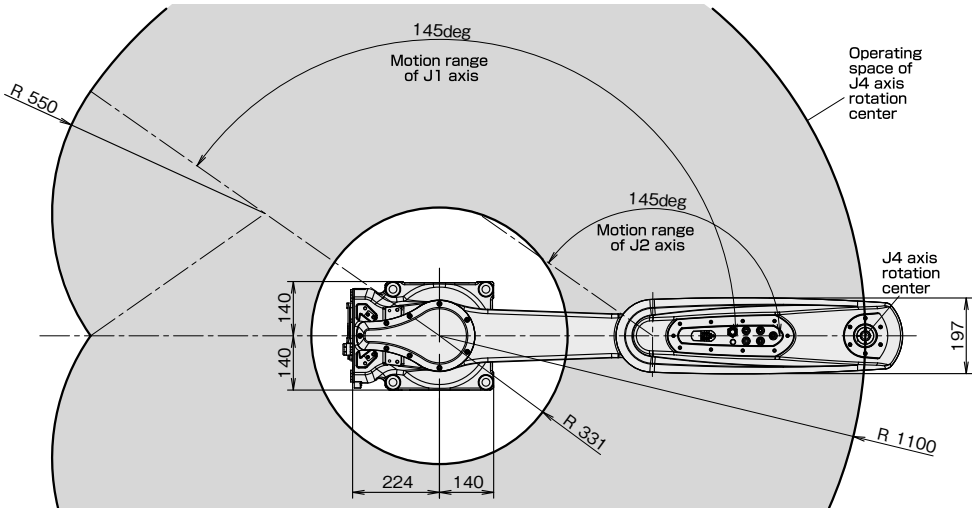
SR-6iA
SR-6iA/C
SR-6iA/H



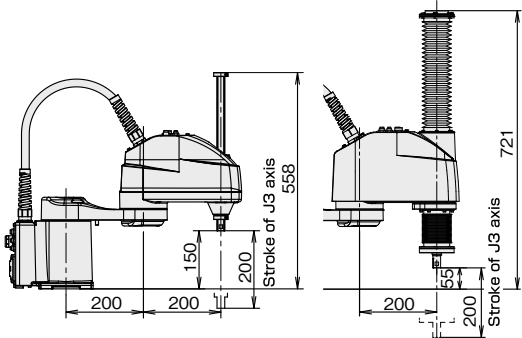
SR-12iA



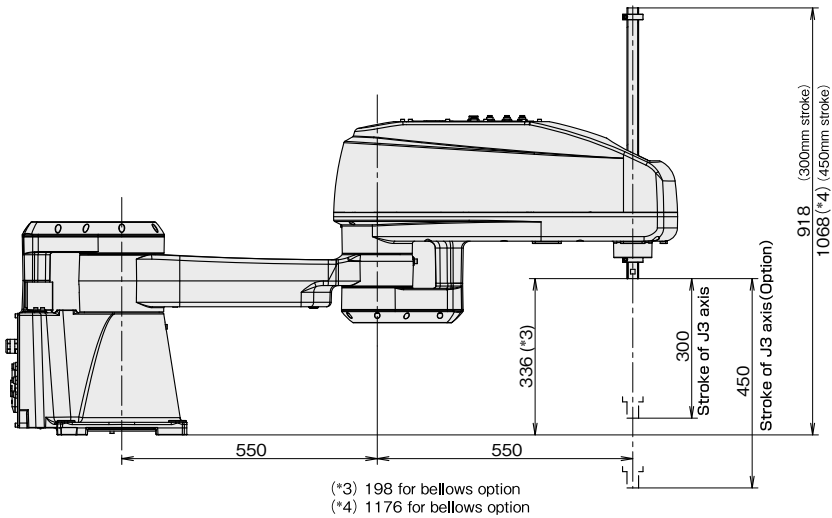
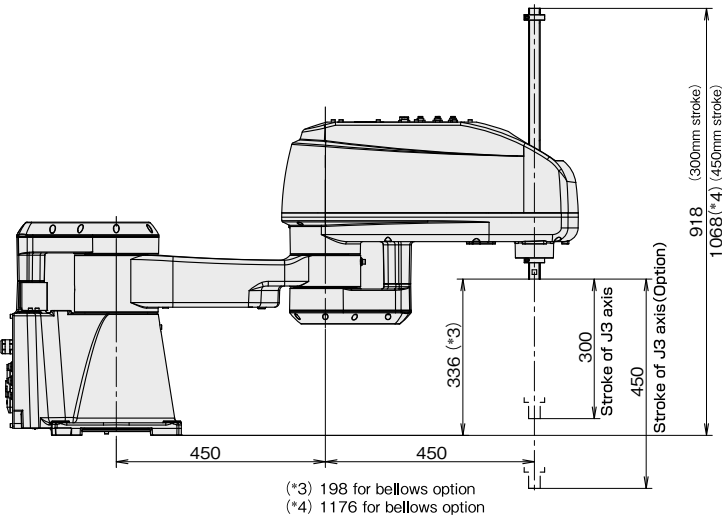
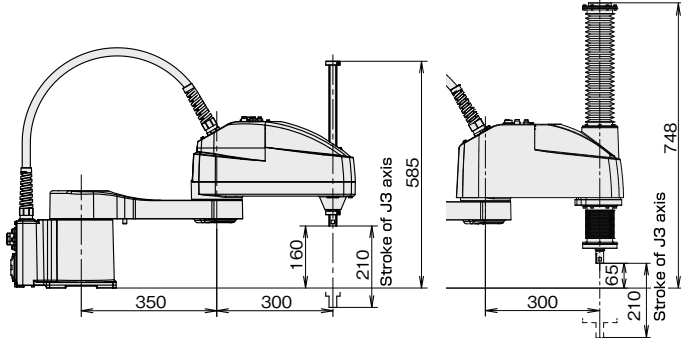
SR-20iA



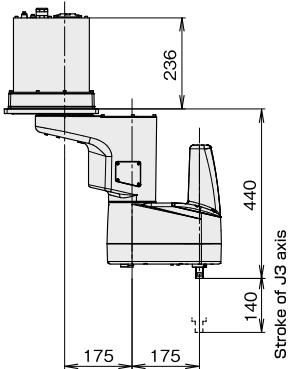
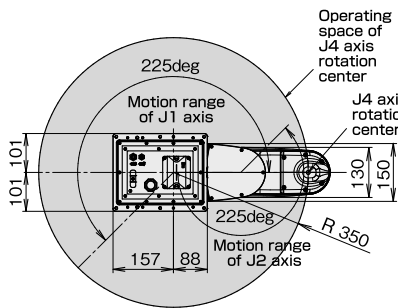
SR-3iA/C



SR-6iA/C



SR-3iA/U

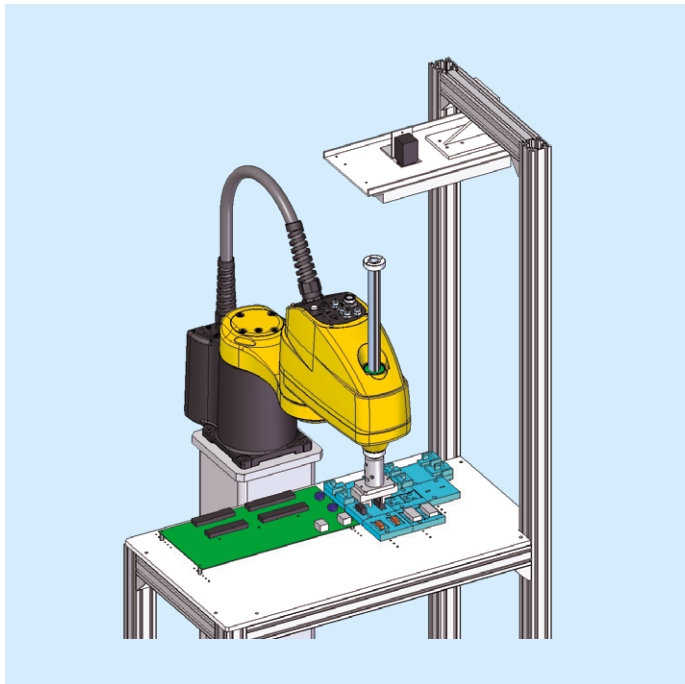


Specifications

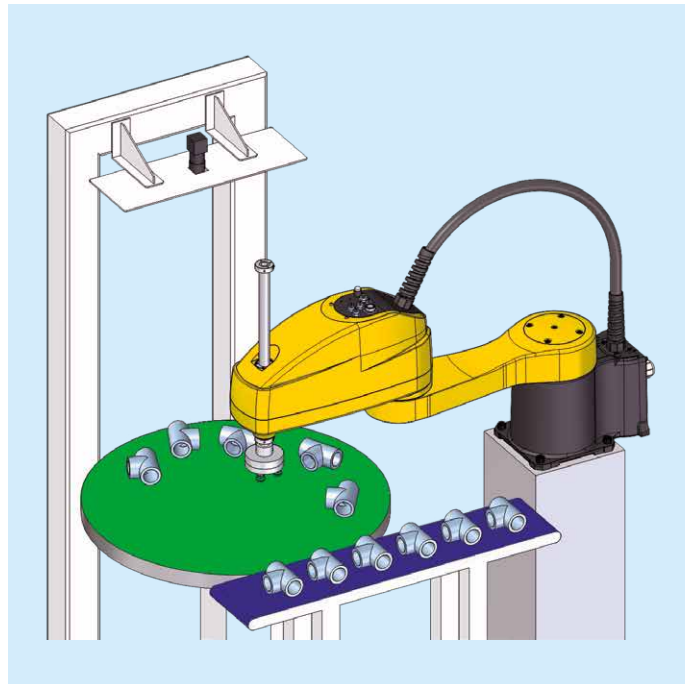
Model		SR-3iA/U	SR-3iA	SR-3iA/C	SR-3iA/H	SR-6iA	SR-6iA/C	SR-6iA/H	SR-12iA	SR-20iA
Type		SCARA Type								
Controlled axes		4 axes (J1, J2, J3, J4)			3 axes (J1, J2, J3)	4 axes (J1, J2, J3, J4)		3 axes (J1, J2, J3)	4 axes (J1, J2, J3, J4)	
Reach		350 mm	400 mm			650 mm			900 mm	1100 mm
Installation		Ceiling				Floor, Wall				
Motion range (Maximum speed) (Note 1)	J1 axis	± 225deg (610deg/s) ± 3.93 rad (10.65 rad/s)	± 142deg (720deg/s) ± 2.48 rad (12.57 rad/s)			± 148deg (440deg/s) ± 2.58 rad (7.68 rad/s)			± 145deg (440deg/s) ± 2.53 rad (7.68 rad/s)	
	J2 axis	± 225deg (840deg/s) ± 3.93 rad (14.66 rad/s)	± 145deg (780deg/s) ± 2.53 rad (13.61 rad/s)			± 150deg (700deg/s) ± 2.62 rad (12.22 rad/s)			± 145deg (510deg/s) ± 2.53 rad (8.90 rad/s)	± 145deg (500deg/s) ± 2.53 rad (8.73 rad/s)
	J3 stroke	140 mm (1500 mm/s)	200 mm (1800 mm/s)			210 mm (2000 mm/s)			300 mm (2800 mm/s) 450 mm (Option) (2800 mm/s)	
	J4 axis	± 720deg (3000deg/s) ± 12.57 rad (52.36 rad/s)				± 720deg (2500deg/s) ± 12.57 rad (43.63 rad/s)			± 720deg (2500deg/s) ± 12.57 rad (43.63 rad/s)	± 720deg (1700deg/s) ± 12.57 rad (29.67 rad/s)
Max. load capacity at wrist		3 kg				6 kg			12 kg	20 kg
Allowable load inertia at wrist		0.06 kg·m²				0.12 kg·m²			0.30 kg·m²	0.45 kg·m²
Repeatability	J4 axis	± 0.01 mm								
	J1 + J2 axis	± 0.01 mm								
	J3 axis	± 0.01 mm								
	J4 axis	± 0.004deg				± 0.004deg			± 0.005deg	
J3 axis maximum push down force (Note 2)		150 N				200 N			250 N	
Cables and air for user	Standard	RI × 4 / RO × 4, Φ6 mm × 1, Φ4 mm × 2							RI × 4 / RO × 4, Φ6 mm × 3	
	Option	RI × 4, Φ6 mm × 1, Solenoid valve × 2								
Mass (Note 3)		27 kg	19 kg	21 kg	17 kg	30 kg	32 kg	28 kg	53 kg	64 kg
Installation environment		Ambient temperature : 0 to 45°C								
		Ambient humidity : Normally 75%RH or less (No dew nor frost allowed)								
		Short term (within one month) 95%RH or less (No dew nor frost allowed)								
		Vibration acceleration : 4.9m/s² (0.5G) or less								
Matching controller R-30iB Compact Plus	Rated Voltage	AC 200-240V Single phase +10%–15%, 50/60Hz ±1Hz								
	Mass of controller	9 kg								
	Dimensions (W×D×H)	440 × 260 × 85.5 mm								
	Degree of protection	Conforming to IP20								

Note 1) In case of short distance motion, the axis speed may not reach the maximum value stated.
Note 2) Alarms may be occurred if push down for a long time.
Note 3) Without controller.

Application Examples



Circuit board assembly by SR-3iA

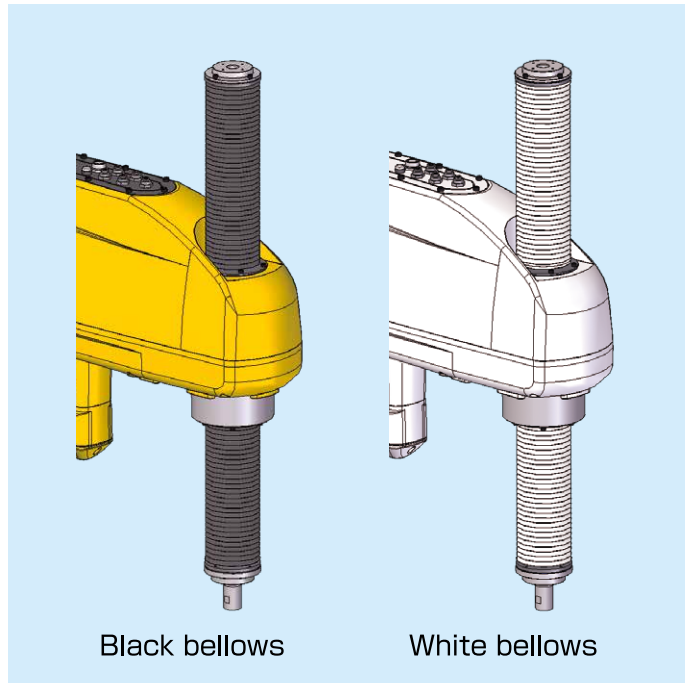


Visual circular tracking by SR-6iA

Option



SR-12iA water proof



Black bellows

White bellows

Example of bellows option

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FANUC SOUTH AFRICA (PROPRIETARY) LIMITED

Phone: (+1)248-377-7000
Phone: (+352)727777-1
Phone: (+86)21-5032-7700
Phone: (+82)55-278-1200
Phone: (+886)4-2359-0522
Phone: (+91)80-2852-0057
Phone: (+65)6567-8566
Phone: (+66)2-714-6111
Phone: (+60)3-3082-1222
Phone: (+62)21-4584-7285
Phone: (+61)2-8822-4600
Phone: (+27)11-392-3610

●Headquarters 3580, Shibokusa, Oshino-mura, Minamitsuru-gun
Yamanashi, 401-0597, JAPAN
Phone: (+81)555-84-5555 <https://www.fanuc.co.jp/>

<https://www.fanucamerica.com/>
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