

FANUC Robot SR-3*i*A, 6*i*A, 12*i*A, 20*i*A

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.

- Three models are available to meet a variety of payload and motion area.

-SR-3 <i>i</i> A	Payload : 3kg	Reach : 400mm
-SR-6 <i>i</i> A	Payload : 6kg	Reach : 650mm
-SR-12 <i>i</i> A	Payload : 12kg	Reach : 900mm
-SR-20 <i>i</i> A	Payload : 20kg	Reach : 1100mm
- The lightweight arm and the most advanced servo technology enable high accuracy and high duty performance, which improves the productivity.
- Environmental options, such as white paint, bellows cover, and water proof (IP65) are available for SR-12*i*A, 20*i*A.
- Solenoid valve, air tube and I/O cable for the device control are integrated in the J2 arm. The hollow arm on the J4 rotation axis realizes easy wiring for a gripper.
- The R-30*i*B Compact Plus controller is greatly reduced in size while it keeps the same function as the previous controller.
- Simple teaching can be conducted on the PC or Tablet PC by newly developed teaching interface, which improves ease of use.
- Latest intelligent functions are available, such as *i*RVision (integrated vision) and *i*RPickTool.
- The high reliability is realized based on the longtime accumulated reliability design technologies.



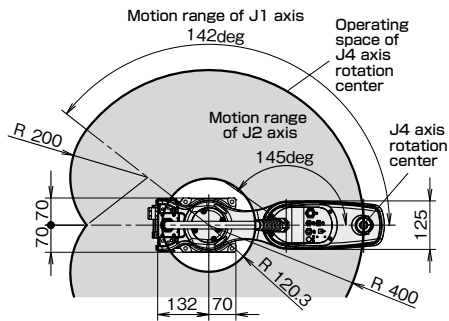
R-30*i*B Compact Plus



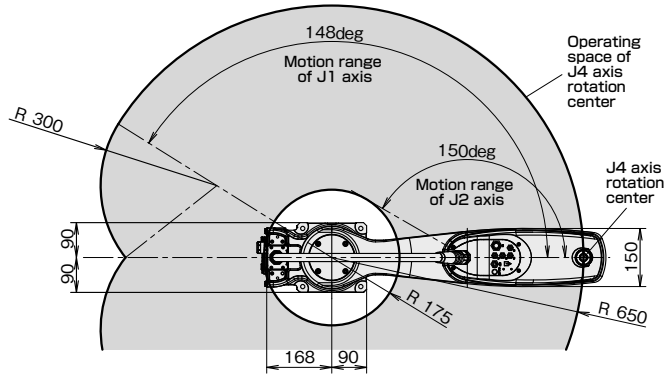
SR-12*i*A water proof

Operating Space

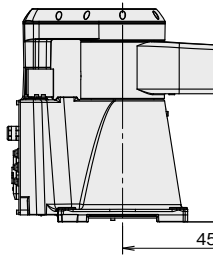
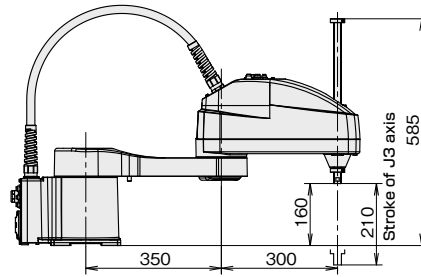
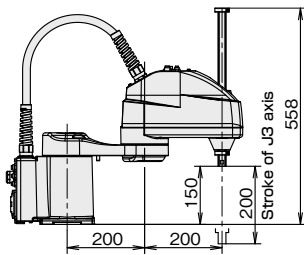
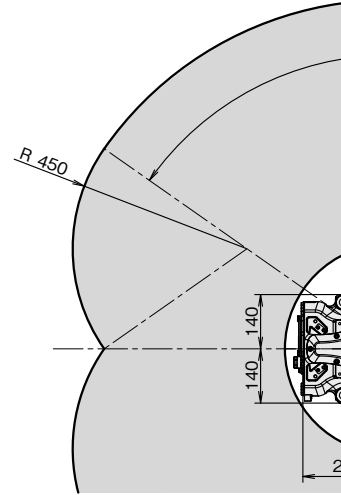
SR-3iA SR-3iA/H



SR-6iA SR-6iA/H



SR



Specifications

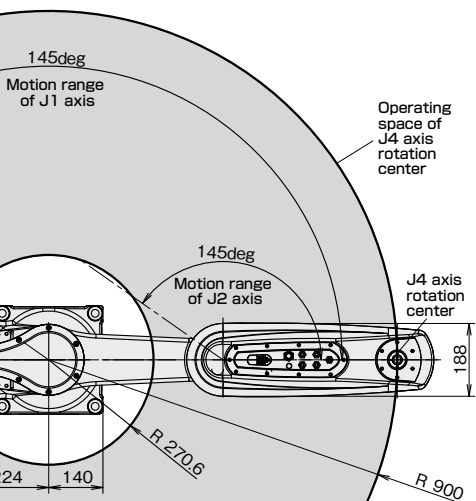
Model		SR-3iA	SR-3iA/H	SR-6iA
Type		4 axes (J1, J2, J3, J4)		
Controlled axes		4 axes (J1, J2, J3, J4)	3 axes (J1, J2, J3)	4 axes (J1, J2, J3, J4)
Reach		400 mm		
Installation				
Motion range (Maximum speed) (Note 1)	J1 axis	± 142deg (720deg/s) 2.48 rad (12.57 rad/s)		
	J2 axis	± 145deg (780deg/s) ± 2.53 rad (13.61 rad/s)		
	J3 stroke	200 mm (1800 mm/s)		
	J4 axis	± 720deg (3000deg/s) 12.57 rad (52.36 rad/s)		± 720deg (3000deg/s) 12.57 rad (52.36 rad/s)
Max. load capacity at wrist		3 kg		
Allowable load inertia at wrist	J4 axis	0.06 kg·m ²		
	J1 + J2 axis			
	J3 stroke	± 0.01 m		
Repeatability	J4 axis	± 0.004deg		
	J3 stroke			
J3 axis maximum push down force (Note 2)		150 N		
Cables and air for user	Standard	RI × 4 / RO × 4, Φ6mm ×		
	Option			
Mass (Note 3)		19 kg	17 kg	
Installation environment		Ambient temperature: 0 to 40°C Ambient humidity: 20 to 90% RH Vibration acceleration: 200-2000 Hz		
Matching controller R-30iB Compact Plus	Rated Voltage			
	Mass of controller			
	Dimensions (WxDxH)			
	Degree of protection			

Note 1) During short distance motions, the axis speed may not reach the maximum value stated.

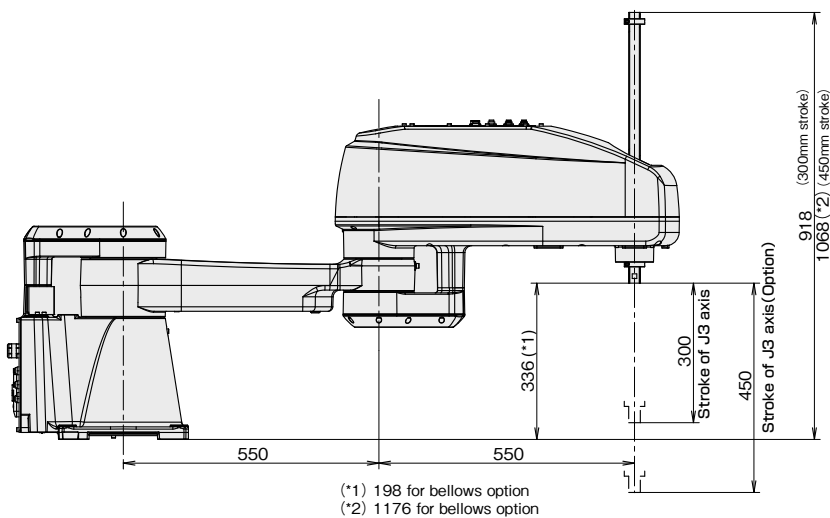
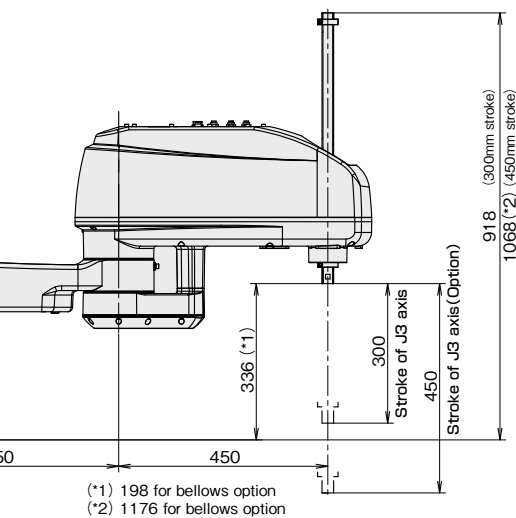
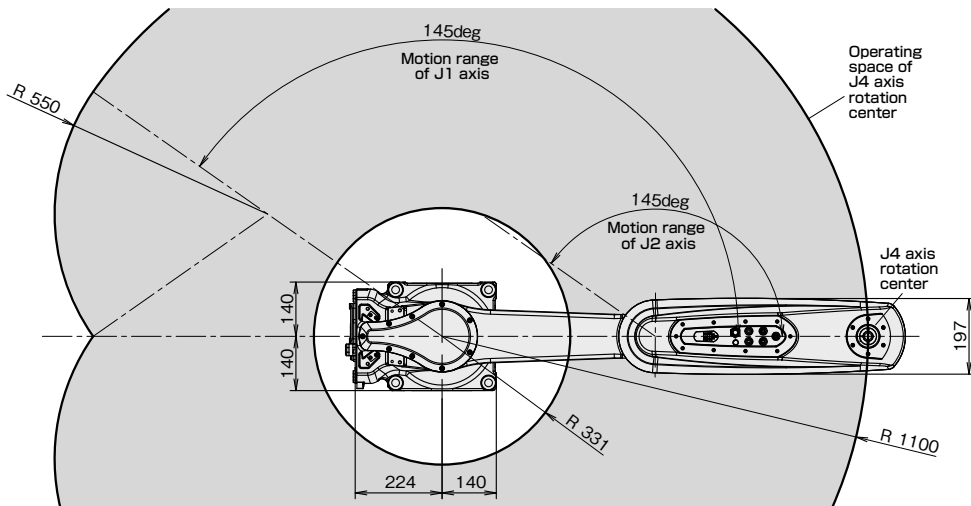
Note 2) Alarms may be occurred if push down for a long time.

Note 3) Without controller.

-12iA

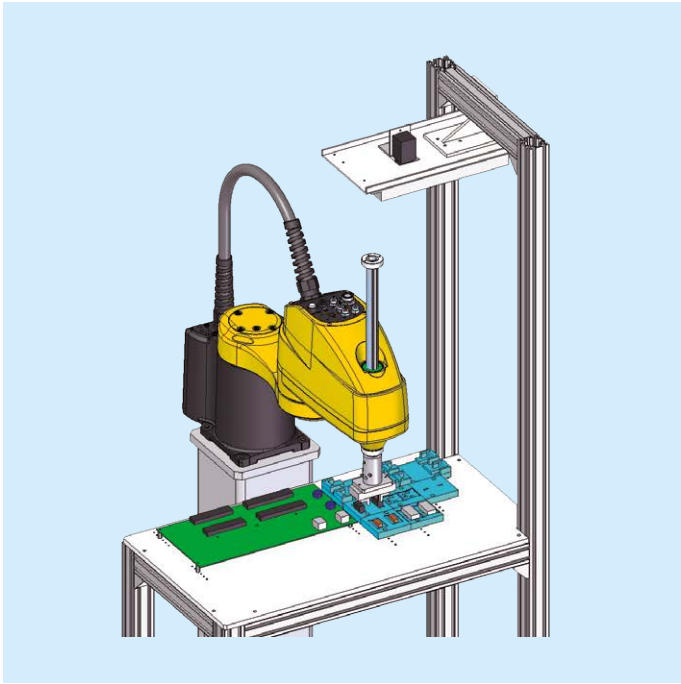


SR-20iA

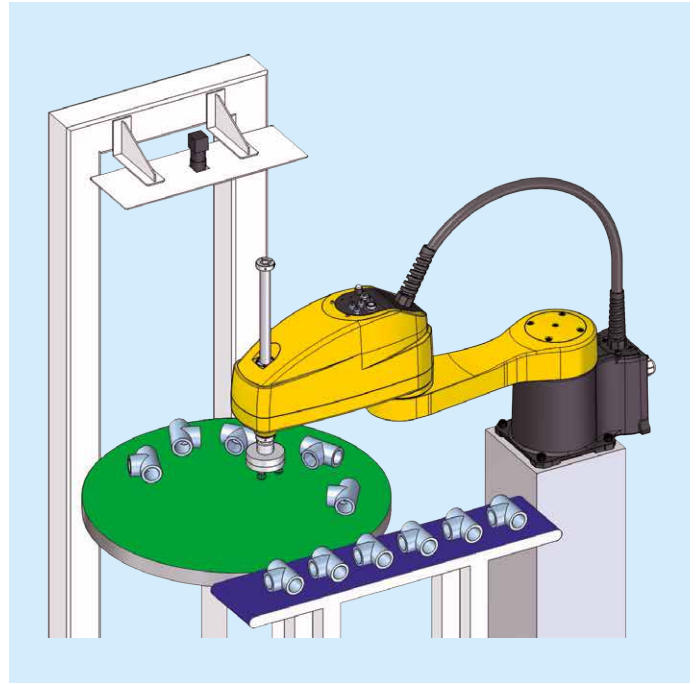


SR-6iA	SR-6iA/H	SR-12iA	SR-20iA
Scara Type			
axes (J1, J2, J3, J4)		3 axes (J1, J2, J3)	
650 mm		900 mm	
Floor, Wall			
± 148deg (440deg/s) 2.58 rad (7.68 rad/s)		± 145deg (440deg/s) 2.53 rad (7.68 rad/s)	
± 150deg (700deg/s) ± 2.62 rad (12.22 rad/s)		± 145deg (510deg/s) ± 145deg (500deg/s) ± 2.53 rad (8.90 rad/s) ± 2.53 rad (8.73 rad/s)	
210 mm (2000 mm/s)		300 mm (2800 mm/s) 450 mm (Option) (2800 mm/s)	
± 20deg (2500deg/s) 0.57 rad (43.63 rad/s)		± 720deg (2500deg/s) ± 720deg (1700deg/s) 12.57 rad (43.63 rad/s) 12.57 rad (29.67 rad/s)	
0.12 kg·m ²		12 kg 20 kg 0.30 kg·m ² 0.45 kg·m ²	
± 0.01 mm		± 0.015 mm ± 0.020 mm	
± 0.04deg		± 0.005deg	
200 N		250 N	
1, Φ4mm × 2		RI × 4 / RO × 4, Φ6mm × 3	
RI × 4, Φ6mm × 1, Solenoid valve × 2			
30 kg		28 kg	
Temperature: 0 to 45°C		53 kg	
Humidity: Normally 75%RH or less (No dew nor frost allowed) Short term 95%RH or less (within one month)		64 kg	
Acceleration: 4.9m/s ² (0.5G) or less			
240VAC Single phase +10% - 15%, 50/60Hz ± 1Hz			
9 kg			
440 × 260 × 85.5 mm			
Conforming to IP20			

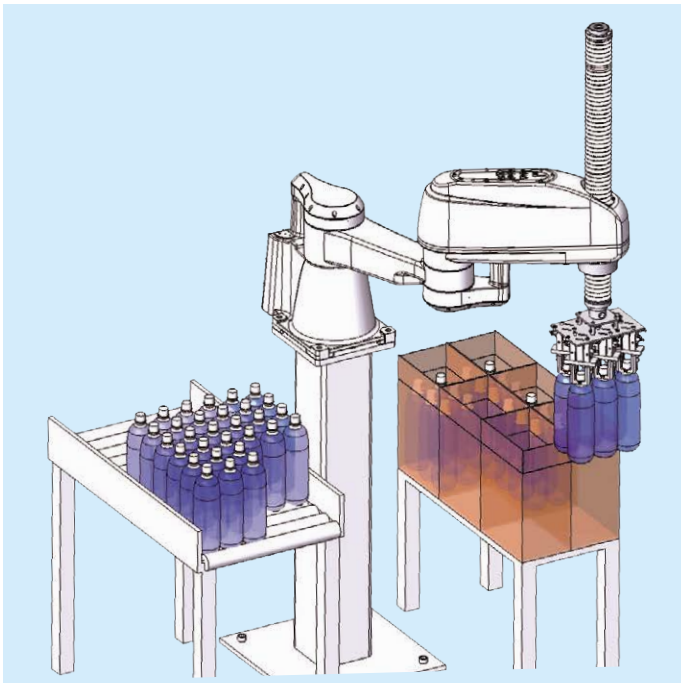
Application Examples



Circuit board assembly by SR-3iA

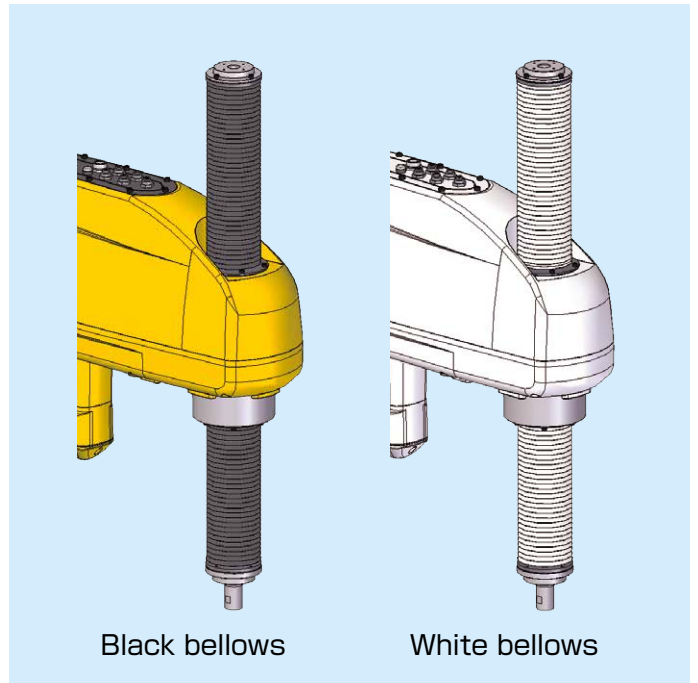


Visual circular tracking by SR-6iA



Bottle packing by SR-12iA

Option



Black bellows

White bellows

Example of bellows option

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