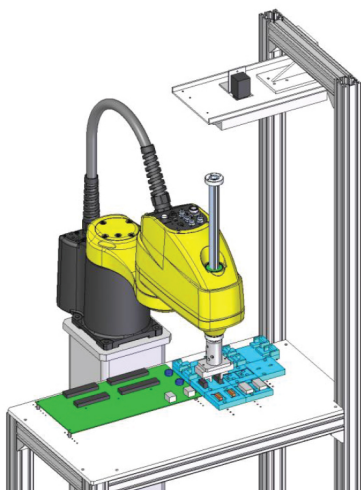


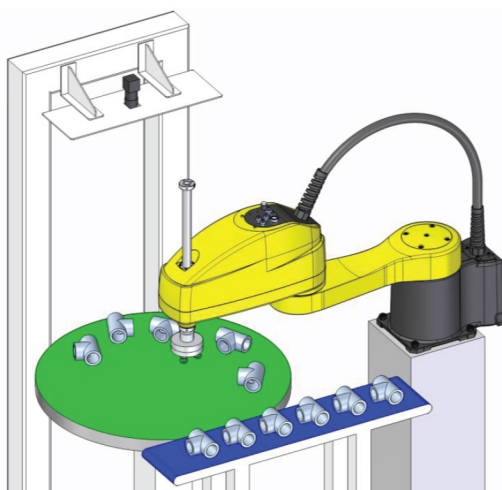
# **FANUC Robot** **SR-3*i*A, SR-6*i*A**



## Application examples



Circuit board assembly by SR-3iA



Visual circular tracking by SR-6iA

## Specification

| Model                                       |              | SR-3iA                                                                                                                                                                                                                | SR-6iA                                                   |
|---------------------------------------------|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|
| Type                                        |              | Scara Type                                                                                                                                                                                                            |                                                          |
| Controlled axes                             |              | 4 axes (J1, J2, J3, J4)                                                                                                                                                                                               | 4 axes (J1, J2, J3, J4)                                  |
| Reach                                       |              | 400 mm                                                                                                                                                                                                                | 650 mm                                                   |
| Installation                                |              | Floor, Wall                                                                                                                                                                                                           | Floor, Wall                                              |
| Motion range<br>(Maximum speed)<br>(Note 1) | J1 axis      | $\pm 142^\circ$ (720°/s)<br>2.48 rad (12.57 rad/s)                                                                                                                                                                    | $\pm 148^\circ$ (440°/s)<br>2.58 rad (7.68 rad/s)        |
|                                             | J2 axis      | $\pm 145^\circ$ (780°/s)<br>$\pm 2.53$ rad (13.61 rad/s)                                                                                                                                                              | $\pm 150^\circ$ (700°/s)<br>$\pm 2.62$ rad (12.22 rad/s) |
|                                             | J3 stroke    | 200mm (1800 mm/s)                                                                                                                                                                                                     | 210mm (2000 mm/s)                                        |
|                                             | J4 axis      | $\pm 720^\circ$ (3000°/s)<br>12.57 rad (52.36 rad/s)                                                                                                                                                                  | $\pm 720^\circ$ (2500°/s)<br>12.57 rad (43.63 rad/s)     |
| Cycle time (Note 2)                         |              | 0.33s                                                                                                                                                                                                                 | 0.29s                                                    |
| Max. load capacity at wrist                 |              | 3 kg                                                                                                                                                                                                                  | 6 kg                                                     |
| Allowable load inertia at wrist             | J4 axis      | 0.06 kg·m <sup>2</sup>                                                                                                                                                                                                | 0.12 kg·m <sup>2</sup>                                   |
| Repeatability                               | J1 + J2 axis | $\pm 0.01$ mm                                                                                                                                                                                                         | $\pm 0.01$ mm                                            |
|                                             | J3 stroke    | $\pm 0.01$ mm                                                                                                                                                                                                         | $\pm 0.01$ mm                                            |
|                                             | J4 axis      | $\pm 0.004^\circ$                                                                                                                                                                                                     | $\pm 0.004^\circ$                                        |
| J3 axis maximum push down force (Note 3)    |              | 150N                                                                                                                                                                                                                  | 200N                                                     |
| Cables and air for user                     | Standard     | RI x 4 / RO x 4, $\Phi 6$ mm x1, $\Phi 4$ mm x 2                                                                                                                                                                      |                                                          |
|                                             | Option       | RI x 4, $\Phi 6$ mm x 1, Solenoid valve x 2                                                                                                                                                                           |                                                          |
| Mass (Note 4)                               |              | 19 kg                                                                                                                                                                                                                 | 30 kg                                                    |
| Noise (Note 5)                              |              | 70dB or less                                                                                                                                                                                                          |                                                          |
| Installation environment                    |              | Ambient temperature : 0 to 45°C<br>Ambient humidity : Normally 75%RH or less (No dew nor frost allowed)<br>Short term 95%RH or less (within one month)<br>Vibration acceleration : 4.9m/s <sup>2</sup> (0.5G) or less |                                                          |

Note 1) In case of short distance motion, the axis speed may not reach the maximum value stated.

Note 2) Cycle time for 25mm-300mm-25mm motion pattern with 2kg payload.

Note 3) Alarms may be occurred if push down for a long time.

Note 4) Without controller.

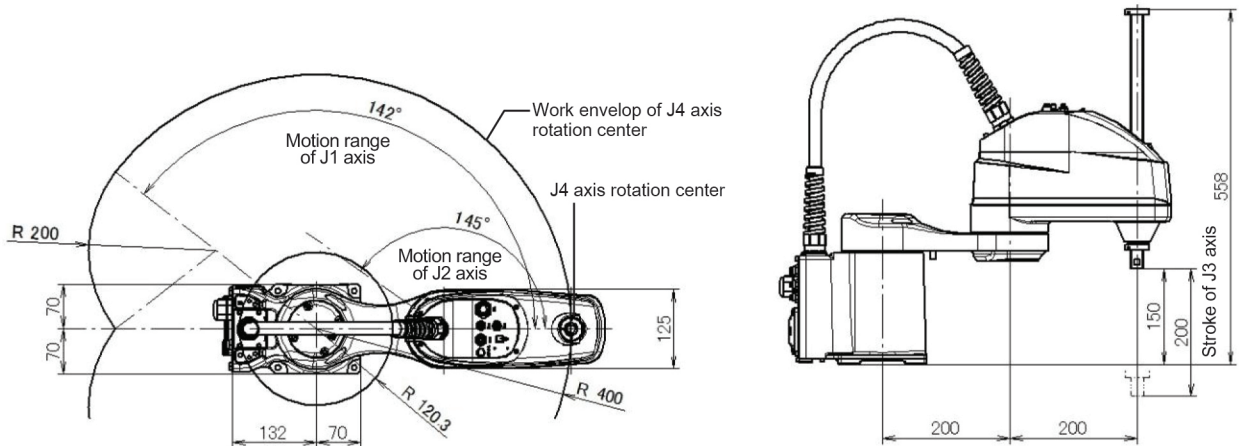
Note 5) This value is equivalent continuous A-weighted sound pressure level that applied with ISO11201(EN31201).

This value is measured with the following conditions.

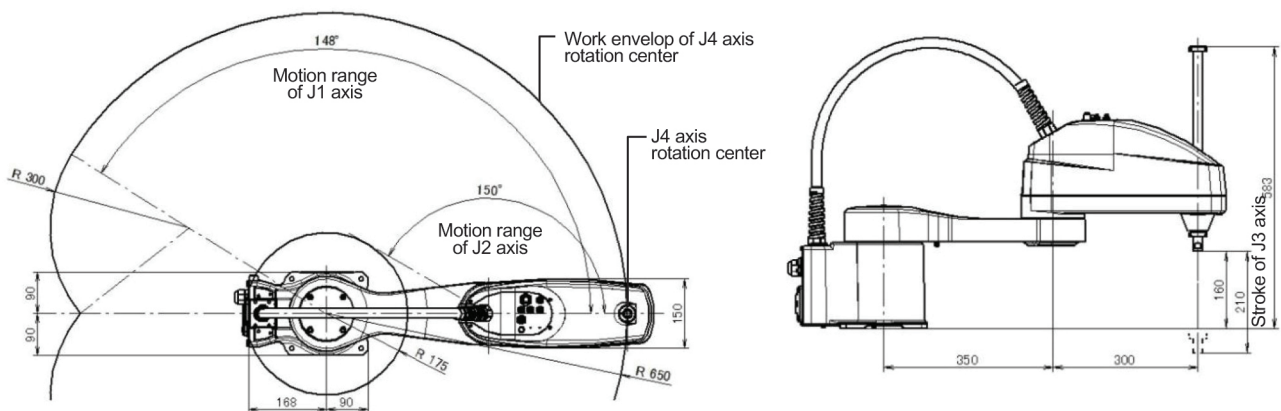
- Maximum load and speed      - Operation mode is AUTO

## Work envelop

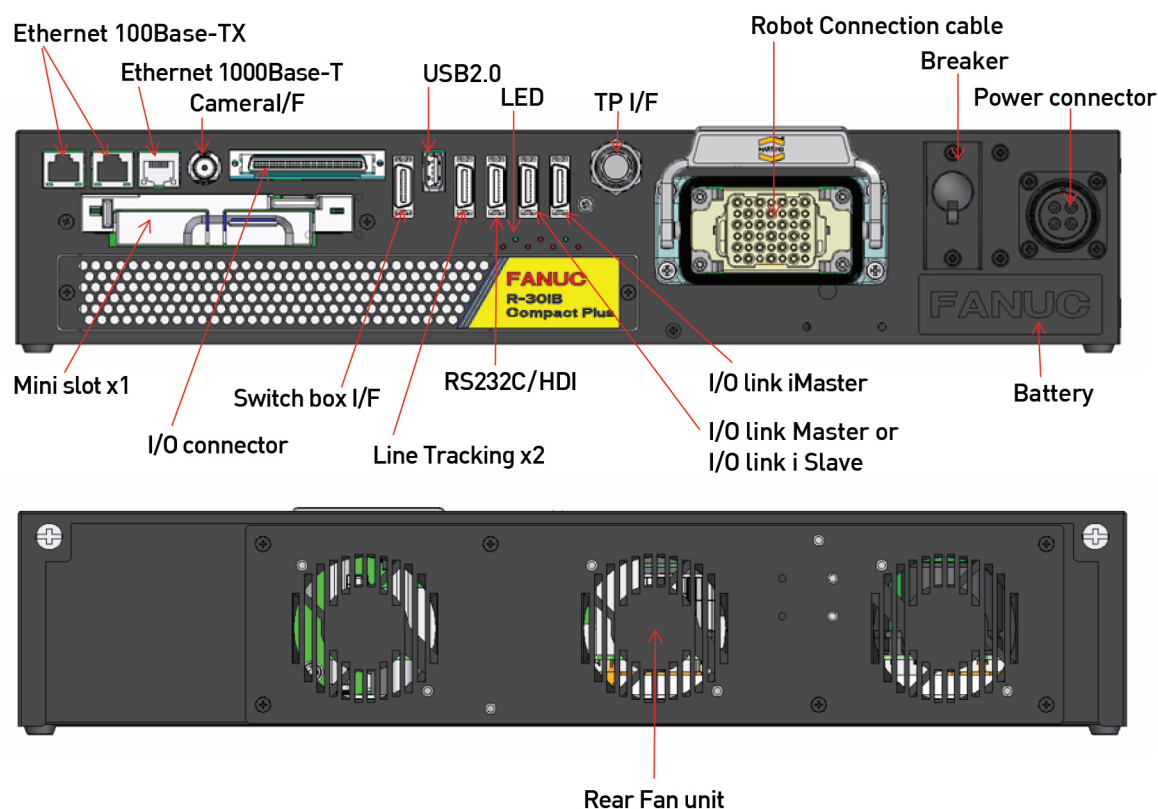
### SR-3iA



### SR-6iA



## R-30iB Compact Plus External I/F



## R-30iB Compact Plus specification

|                              |                       | R-30iB Compact Plus                                                                    |
|------------------------------|-----------------------|----------------------------------------------------------------------------------------|
| USB                          |                       | USB2.0                                                                                 |
| Integrated Vision            |                       | yes (option)                                                                           |
| LVC                          |                       | yes (option)                                                                           |
| Camera Multiplexer           |                       | yes (option) (in user's cabinet and 24V power is necessary)                            |
| Ethernet                     | General               | 2ch                                                                                    |
|                              | Gigabit Ethernet      | 1ch                                                                                    |
|                              | TP                    | yes (TP is option. TP I/F is standard.)                                                |
| RS-232-C                     |                       | yes                                                                                    |
| Line Tracking                |                       | yes (option: 2x by main board)                                                         |
| PMC                          |                       | no                                                                                     |
| I/O link                     |                       | #1. Master or Slave 1ch (exclusive with #3)                                            |
| I/O link i                   |                       | #2. Master 1ch #3. Slave 1ch (exclusive with #1)                                       |
| HDI                          |                       | yes (option 2ch)                                                                       |
| I/O                          |                       | yes (I/O = 20/16, RI/O = 5/4)                                                          |
| Safety I/O                   | EX-ESTOP input(EES)   | yes                                                                                    |
|                              | Fence(EAS)            | yes                                                                                    |
|                              | Servo off(EGS)        | no                                                                                     |
|                              | EX-Estop output(ESPB) | yes                                                                                    |
| Safety I/O (general purpose) |                       | yes<br>(mini slot option or I/O Unit model A: user cabinet and 24V power is necessary) |
| Option slot                  |                       | Wide mini: no, Mini: 1slot                                                             |
| Aux-axes                     |                       | no                                                                                     |