Small SCARA robot, Wall-mount type

Arm length 350mm, Vertical axis 150mm [High-power specification]

Small SCARA robot, Wall-mount inverse type Arm length 350mm, Vertical axis 150mm [High-power specification]

**T2** 

■Model items

IX — □NN3515[H]

Cable length Туре

5L:5 m (standard) 10L: 10 m

Applicable controller

T2: XSEL-PX/QX



### Model/Specifications

| Model                                      | Axis configuration |               | Arm                 | Motor | Work<br>envelope | Repeatability |                        | Standard<br>cycle time<br>(sec)<br>(Note 3) | Load capacity<br>(kg) (Note 4) |                  | Axis 3 (vertical axis)<br>push force (N) (Note 5) |  | Axis 4 allowable load |     |
|--|--------------------|---------------|---------------------|-------|------------------|---------------|------------------------|---|--------------------------------|------------------|---|--|-----------------------|-----|
|  | AXIS               | configuration | length capacity (W) | Rated |                  |               |                        |   | Maximum                        | Maximum<br>limit | limit   | Allowable inertial<br>moment<br>(kg·m2) (Note 6) | torque                |     |
| IX-TNN3515[H]- ①-T2<br>IX-UNN3515[H]- ①-T2 | Axis 1             | Arm 1         | 225                 | 200   | ±120°            |               | 3979mm/s               | 042mm/s]                                    | 1                              | 3                | 90.9 47.5<br>[111.0] [58.0]                       | 47.5   | 0.045                 | 4.0 |
|  | Axis 2             | Arm 2         | 125                 | 100   | ±130°            |               | (Composite speed)      |   |                                |                  |   |  |                       |     |
|  | Axis 3             | Vertical axis | -                   | 100   | 150mm            |               | 1106mm/s<br>[1316mm/s] | [0.42]                                      |                                |                  |   | 0.015  | 1.9                   |     |
|  | Axis 4             | Rotating axis | -                   | 50    | ±360°            | ±0.005        | 1600°/s                |   |                                |                  |   |  |                       |     |

<sup>\*</sup>In the model number above, specify the cable length in ①.

\*SCARA robots cannot operate continuously at 100% speed and acceleration. For details on the operating conditions, refer to Reference Acceleration/ Deceleration Settings on page 44.

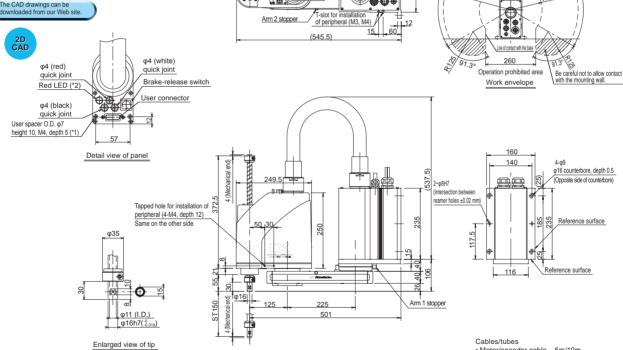
## Common Specifications

| Encoder type                  | Absolute  |  |  |  |
|-------------------------------|---|--|--|--|
| User wiring                   | 15-conductor AWG26 D-sub/15-pin connector with shield (socket)      |  |  |  |
| User tubing                   | Air tube (O.D. ø4, I.D. ø2.5) x 3 (Normal working pressure 0.8 MPa) |  |  |  |
| Alarm indicator (Note 7)      | Small red LED indicator x 1 (24 V DC must be supplied.)             |  |  |  |
| Brake-release switch (Note 8) | Allows remote release of Z-axis (24 VDC required)                   |  |  |  |

| Ambient temperature/humidity | Temperature: 0–40 °C, humidity: 20–85%RH or less (no condensation) |  |  |  |
|------------------------------|--|--|--|--|
| Unit weight                  | 21.9Kg   |  |  |  |
| Applicable controller        | T2: XSEL-PX/QX   |  |  |  |
| Cable length (Note 9)        | 5L: 5 m (standard), 10L: 10 m (optional)                           |  |  |  |

\*For the inverse type, the following illustrations should be turned upside down. (See page 2.) •  $\bigcirc$ •• The CAD drawings can be downloaded from our Web site T-slot for i Arm 2 stopper of peripheral (M3, M4) (545.5) Line of contact with the base R123 91.30 ω4 (white) 260 φ4 (red) quick joint quick joint





- \*1: The external force applied to a spacer must not exceed 30 N in the axial direction, or 2 N\*m in the rotating direction. (for each spacer)
  \*2: In order to use the LED, the user must wire it so that it responds to the controller's I/O output signal by supplying 24 V DC to the applicable LED terminal in the user wiring.
- Motor/encoder cable
  - 5m/10m

5m/10m

- Brake power cable
  User Wiring Cable
  Air tube (4 pcs)
  - 5m/10m 0.15m

# Applicable Controller Specifications

| Applicable<br>Controller | Features                                   | Maximum I/O points (inputs/outputs) | Power-supply voltage          | Reference page |  |
|--------------------------|--|-------------------------------------|-------------------------------|----------------|--|
| XSEL-PX-###-2[3]         | Maximum 6 axes,<br>1600 [2400] W supported | 192/192 points                      | Single-phase<br>[Three-phase] | p. 37          |  |
| XSEL-QX-###-2[3]         |  | 192/192 points                      | 230 VAC                       |                |  |

<sup>\*</sup>The SCARA model with high-power specification [H] needs a 2.4 kW three-phase type controller XSEL-PX/QX-###-3.



For explanations of (Note 1) through (Note 9), refer to page 7.

TNN3515[H]: Wall-mount type Arm length 350mm, Vertical axis 150mm UNN3515[H]: Wall-mount inverse type Arm length 350mm, Vertical axis 150mm \*For details on the model items, refer to page 8.

<sup>\*[ ]</sup> indicates the high-power specification type