

IX-TNN3015[H] Small SCARA robot, Wall-mount type
 Arm length 300mm, Vertical axis 150mm [High-power specification]

IX-UNN3015[H] Small SCARA robot, Wall-mount inverse type
 Arm length 300mm, Vertical axis 150mm [High-power specification]



■ Model items **IX** — **□NN3015[H]** — **□** — **T2**

Series	Type	Cable length	Applicable controller
TNN3015[H] : Wall-mount type Arm length 300mm, Vertical axis 150mm	□	5L : 5 m (standard)	T2: XSEL-PX/QX
UNN3015[H] : Wall-mount inverse type Arm length 300mm, Vertical axis 150mm		10L: 10 m	

*For details on the model items, refer to page 8.

Model/Specifications

Model	Axis configuration		Arm length (mm)	Motor capacity (W)	Work envelope	Positioning Repeatability (mm) (Note 1)	PTP operation Maximum operating speed (Note 2)	Standard cycle time (sec) (Note 3)	Load capacity (kg) (Note 4)		Axis 3 (vertical axis) push force (N) (Note 5)		Axis 4 allowable load	
									Rated	Maximum	Maximum limit	Minimum limit	Allowable inertial moment (kg·m ²) (Note 6)	Allowable torque (N·m)
IX-TNN3015[H]--T2	Axis 1	Arm 1	175	200	±120°	±0.010 (XY)	3560mm/s [3616mm/s] (Composite speed)	0.49	1	3	90.9 [111.0]	47.5 [58.0]	0.015	1.9
IX-UNN3015[H]--T2	Axis 2	Arm 2	125	100	±130°									
	Axis 3	Vertical axis	-	100	150mm	±0.010	1106mm/s [1316mm/s]							
	Axis 4	Rotating axis	-	50	±360°	±0.005	1600°/s							

*In the model number above, specify the cable length in .

*SCARA robots cannot operate continuously at 100% speed and acceleration. For details on the operating conditions, refer to Reference Acceleration/Deceleration Settings on page 45.

Common Specifications

Encoder type	Absolute
User wiring	15-conductor AWG26 D-sub/15-pin connector with shield (socket)
User tubing	Air tube (O.D. φ4, I.D. φ2.5) 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)

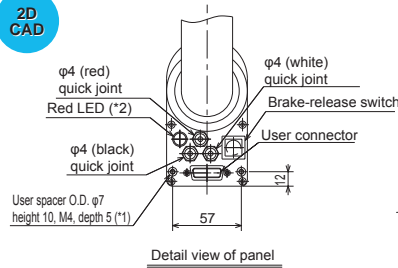
Ambient temperature/humidity	Temperature: 0-40 °C, humidity: 20-85%RH or less (no condensation)
Unit weight	20.8Kg
Applicable controller	T2: XSEL-PX/QX
Cable length (Note 9)	5L: 5 m (standard), 10L: 10 m (optional)

Dimensions

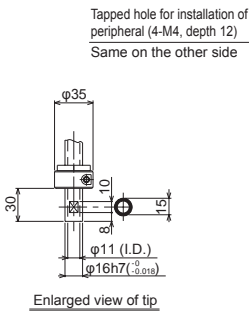
*For the inverse type, the following illustrations should be turned upside down. (See page 2.)

The CAD drawings can be downloaded from our Web site.

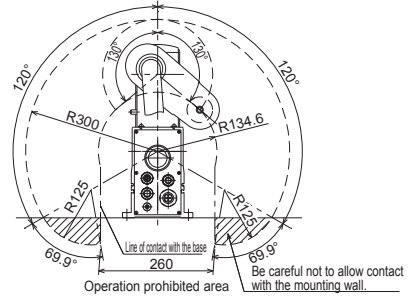
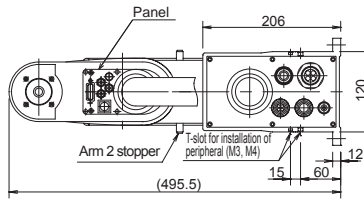
2D CAD



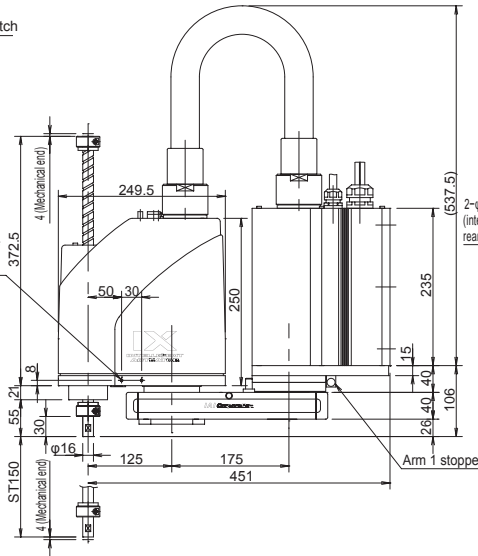
Detail view of panel



Enlarged view of tip



Work envelope



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

*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.

Applicable Controller Specifications

Applicable Controller	Features	Maximum I/O points (inputs/outputs)	Power-supply voltage	Reference page
XSEL-PX-###-2[3]	Maximum 6 axes, 1600 [2400] W supported	192/192 points	Single-phase [Three-phase] 230 VAC	p. 37
XSEL-QX-###-2[3]	Safety Category 4 supported			

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



Caution

For explanations of (Note 1) through (Note 9), refer to page 6.

IX-TNN3515[H] Small SCARA robot, Wall-mount type
 Arm length 350mm, Vertical axis 150mm [High-power specification]

IX-UNN3515[H] Small SCARA robot, Wall-mount inverse type
 Arm length 350mm, Vertical axis 150mm [High-power specification]



■ Model items **IX** — **□NN3515[H]** — **□** — **T2**

Series	Type	Cable length	Applicable controller
TNN3515[H] : Wall-mount type Arm length 350mm, Vertical axis 150mm		5L : 5 m (standard) 10L: 10 m	T2: XSEL-PX/QX
UNN3515[H] : Wall-mount inverse type Arm length 350mm, Vertical axis 150mm			

*For details on the model items, refer to page 8.

Model/Specifications

Model	Axis configuration		Arm length (mm)	Motor capacity (W)	Work envelope	Positioning Repeatability (mm) (Note 1)	PTP operation Maximum operating speed (Note 2)	Standard cycle time (sec) (Note 3)	Load capacity (kg) (Note 4)		Axis 3 (vertical axis) push force (N) (Note 5)		Axis 4 allowable load	
	Axis 1	Axis 2							Rated	Maximum	Maximum limit	Minimum limit	Allowable inertial moment (kg·m ²) (Note 6)	Allowable torque (N·m)
IX-TNN3515[H]- □ -T2	Axis 1	Arm 1	225	200	±120°	±0.010 (XY)	3979mm/s [4042mm/s] (Composite speed)	0.53 [0.42]	1	3	90.9 [111.0]	47.5 [58.0]	0.015	1.9
IX-UNN3515[H]- □ -T2	Axis 2	Arm 2	125	100	±130°									
	Axis 3	Vertical axis	-	100	150mm	±0.010	1106mm/s [1316mm/s]							
	Axis 4	Rotating axis	-	50	±360°	±0.005	1600°/s							

*In the model number above, specify the cable length in **□**.

*SCARA robots cannot operate continuously at 100% speed and acceleration. For details on the operating conditions, refer to Reference Acceleration/Deceleration Settings on page 45.

Common Specifications

Encoder type	Absolute
User wiring	15-conductor AWG26 D-sub/15-pin connector with shield (socket)
User tubing	Air tube (O.D. φ4, I.D. φ2.5) 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)

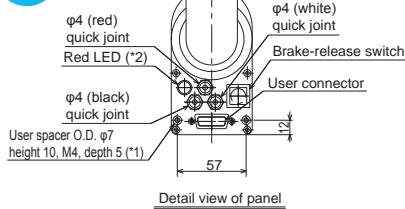
Ambient temperature/humidity	Temperature: 0-40 °C, humidity: 20-85%RH or less (no condensation)
Unit weight	21.9Kg
Applicable controller	T2: XSEL-PX/QX
Cable length (Note 9)	5L: 5 m (standard), 10L: 10 m (optional)

Dimensions

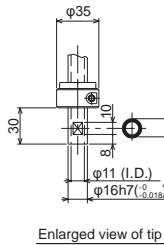
*For the inverse type, the following illustrations should be turned upside down. (See page 2.)

The CAD drawings can be downloaded from our Web site.

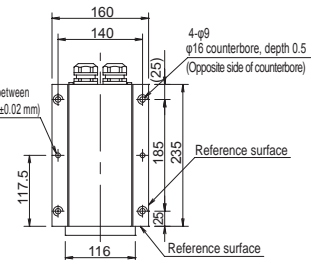
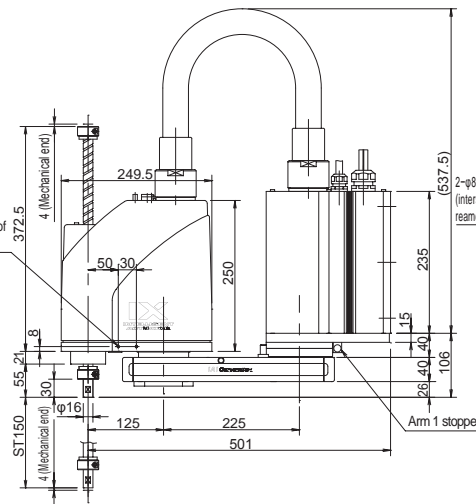
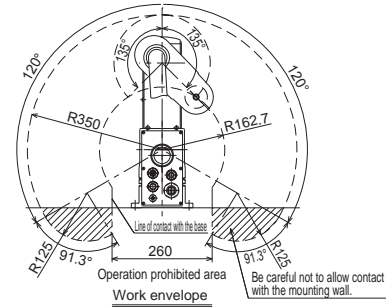
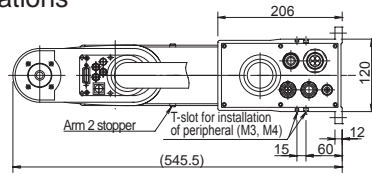
2D CAD



Detail view of panel



Enlarged view of tip



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

*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.

Applicable Controller Specifications

Applicable Controller	Features	Maximum I/O points (inputs/outputs)	Power-supply voltage	Reference page
XSEL-PX-###-2[3]	Maximum 6 axes, 1600 [2400] W supported	192/192 points	Single-phase [Three-phase] 230 VAC	p. 37
XSEL-QX-###-2[3]	Safety Category 4 supported			

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



Caution

For explanations of (Note 1) through (Note 9), refer to page 6.