

IX-NNW80□□[H]

Large SCARA robot, Dustproof/Splash-proof type
 Arm length 800mm, Vertical axis 200mm (400mm) [High-power specification]



Model items	IX — NNW80□□[H] — □ — T2		
Series	Type	Cable length	Applicable controller
NNW8020[H]: Arm length 800mm, Vertical axis 200mm		5L : 5 m (standard)	T2: XSEL-PX/QX
NNW8040[H]: Arm length 800mm, Vertical axis 400mm		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-NNW8020[H]-□-T2 (IX-NNW8040[H]-□-T2)	Axis 1	Arm 1	450	750	±125°	7121mms [7586mm/s] (Composite speed)	0.52 [0.46]	5	20	265 [304]	127.3 [146.0]	0.1	6.7 [11.7]	
	Axis 2	Arm 2	350	400	±145°									
	Axis 3	Vertical axis	-	400	200mm (400mm)	±0.010								1583mm/s [1614mm/s]
	Axis 4	Rotating axis	-	200	±360°	±0.005								1200°/s [1266°/s]

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

[] indicates the high-power specification type

*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	23-conductor AWG26 waterproof connector with shield
User tubing	Air tube (O.D. φ6, I.D. φ4) x 2 (Normal working pressure 0.8 MPa) Air tube (O.D. φ4, I.D. φ2.5) x 2 (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)

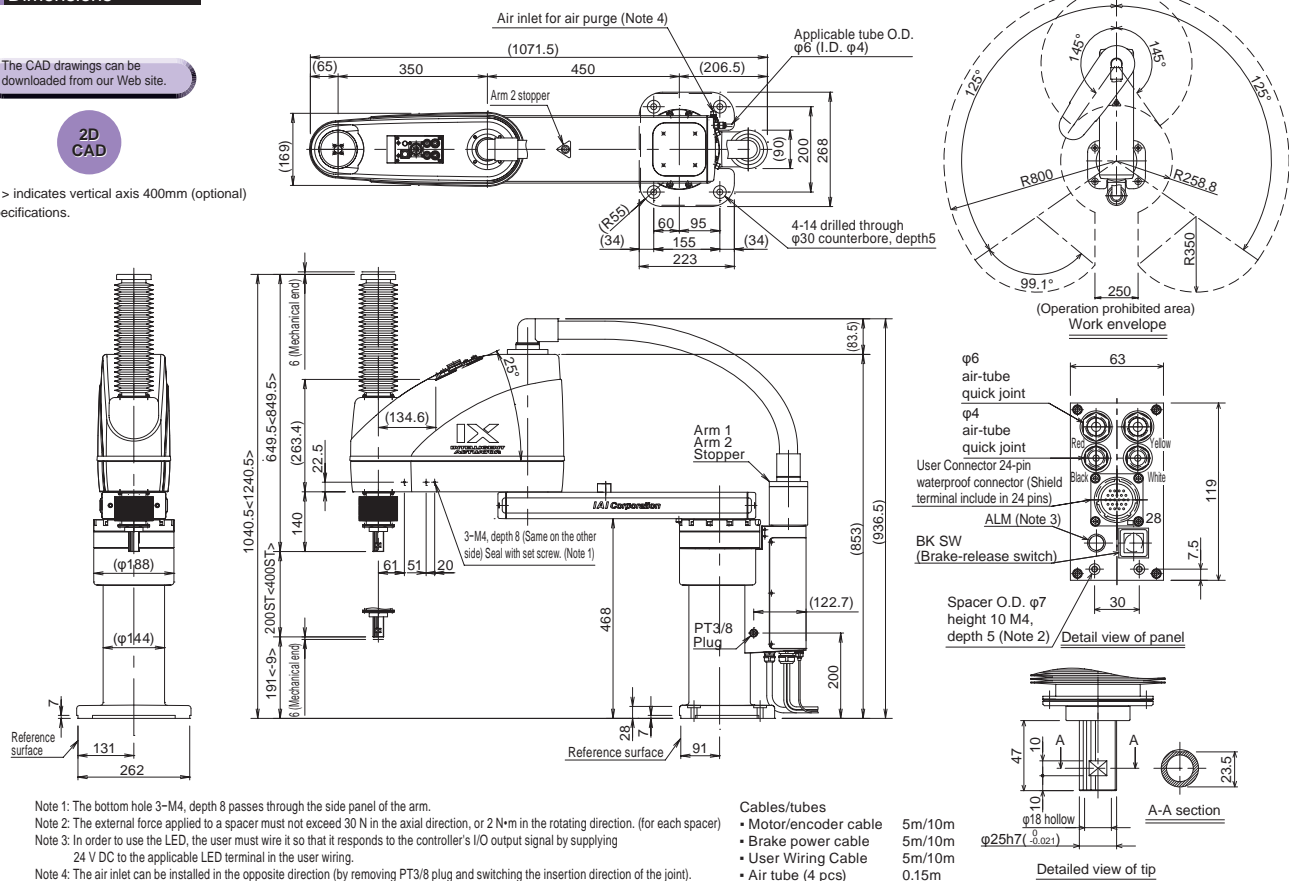
Ambient temperature/humidity	Temperature: 0-40 °C, humidity: 20-85%RH or less (no condensation)
Unit weight	62Kg
Applicable controller	T2: XSEL-PX/QX
Cable length (Note 9)	5L: 5 m (standard), 10L: 10 m (optional)
Protective structure	IP65 or equivalent
Air purge pressure (Note 10)	0.3 MPa or more (0.6 MPa maximum) (Clean, dry air)

Dimensions

The CAD drawings can be downloaded from our Web site.

2D CAD

< > indicates vertical axis 400mm (optional) specifications.



- Note 1: The bottom hole 3-M4, depth 8 passes through the side panel of the arm.
 Note 2: 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)
 Note 3: 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.
 Note 4: The air inlet can be installed in the opposite direction (by removing PT3/8 plug and switching the insertion direction of the joint).
- | Cables/tubes | |
|-----------------------|--------|
| • Motor/encoder cable | 5m/10m |
| • Brake power cable | 5m/10m |
| • User Wiring Cable | 5m/10m |
| • Air tube (4 pcs) | 0.15m |

Applicable Controller Specifications

Applicable Controller	Features	Maximum I/O points (inputs/outputs)	Power-supply voltage	Reference page
XSEL-PX-###-2[3]	Maximum 5 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 7.
 (Note 10) Increase the air purge pressure to a range between 0.3 and 0.6 MPa until immediately before the bellows starts to inflate, and adjust the flow rate using the speed controller.
 As a purge medium, use clean, dry air free from compressor oil or other contaminants, conforming to an air filtration rating of 10 μm or less.