Large SCARA robot, Dustproof/Splash-proof type Arm length 700mm, Vertical axis 200mm (400mm) [High-power specification]

■Model items

IX - NNW70□□[H]

Series Type NNW7020[H]:

Applicable controller Cable length 5L:5 m (standard) T2: XSEL-PX/QX

NNW7020[h]. Arm length 700mm, Vertical axis 200mm NNW7040[H]: Arm length 700mm, Vertical axis 400mm 10L : 10 m



Model/Specifications

Madel	Avia	a a figuration	length cap	Motor	Work	Repeatability	operating	cycle time (sec)			Axis 3 (vertical axis) push force (N) (Note 5)		Axis 4 allowable load	
Model	AXIS	configuration		(W)	envelope				Rated	Maximum	Maximum limit	Minimum	Allowable inertial moment (kg·m2) (Note 6)	torque
IX-NNW7020[H]-	Axis 1	Arm 1	350	750	±125°		6597mm/s [7010mm/s]				265	127.3		
	Axis 2	Arm 2	350	400	±145°		(Composite speed)							6.7
(IX-NNW7040[H]-①-T2)	Axis 3	Vertical axis	-	400	200mm (400mm)	±0.010	1583mm/s [1614mm/s]	0.52 [0.45]	5	20	[304]	[146.0]	0.1	[11.7]
	Axis 4	Rotating axis	-	200	±360°	±0.005	1200°/s [1266°/s]							

^{*}In the model number above, specify the cable length in ①.

Air inlet for air purge (Note 4)

Arm 2 stoppe

350

(206.5)

(971.5)

350

*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.

82.50

φ6 air-tube

φ4 air-tube

ALM (Note 3)

quick joint
User Connector 24-pin

waterproof connector (Shield

terminal include in 24 pins)

(Brake-release switch

Spacer O.D. φ7 height10 M4,

depth 5 (Note 2)

BK SW

quick joint

Common Specifications

Encoder type	Absolute				
User wiring	23-conductor AWG26 waterproof connector with shield				
User tubing	Air tube (O.D. ø6, I.D. ø4) x 2 (Normal working pressure 0.8 MPa)				
Oser tubing	Air tube (O.D. ø4, I.D. ø2.5) 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)				

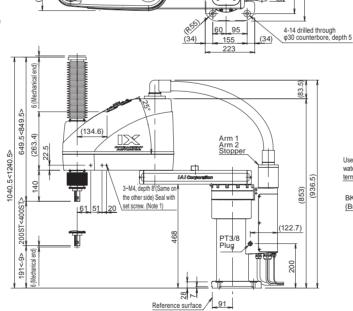
Ambient temperature/humidity	Temperature: 0–40 °C, humidity: 20–85%RH or less (no condensation)				
Unit weight	60Kg				
Applicable controller	T2: XSEL-PX/QX				
Cable length (Note 9)	5L: 5 m (standard), 10L: 10 m (optional)				
Protective structure	IP65 or equivalent				
Air purge pressure (Note 10)	0.3 MPa or more (0.6 MPa maximum) (Clean, dry air)				

Applicable tube O.D. $\phi 6$ (I.D. $\phi 4$)



Dimensions

*< > 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.

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

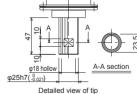
24 V DC to the applicable LED terminal in the user wiring.

Note 4: The air inlet can be installed in the opposite direction (by removing PT3/8 plug and switching the insertior direction of the joint).

Cables/tubes

- Motor/encoder cable
 Brake power cable
 User Wiring Cable
 Air tube (4 pcs)

5m/10m 5m/10m 5m/10m 5m/10m 0.15m



R210.5

ration prohibited area)
Work envelope

63

30

Detail view of panel

Applicable Controller Specifications

131

Reference *

(φ144)

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.



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.

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

^{*[]} indicates the high-power specification type