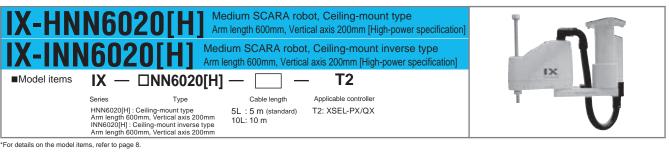
	<u>1502</u>	U	IIJ.	Arm lengt	h 500mm,	Vertical a	xis 200mn	n [High-power	specificati	on]				ALC: NOT	
Model items	IX —		N5020	[H] –	-	] —	T2					-	~		
	Series HNN5020[H] : Arm length 500 INN5020[H] : 0 Arm length 500	)mm, Ver Ceiling-mo	tical axis 200 ount inverse t	mm 10L: /pe	Cable leng 5 m (stand 10 m	, ,	Applicable co					1		U	
details on the model ite		8.													
Mode		Axis o	configuration	Arm length (mm)	Motor capacity (W)	Work envelope	Positioning Repeatability (mm) (Note 1)	speed	Standard cycle time (sec) (Note 3)	(kg) (	capacity Note 4) Maximum	push force		Axi allowat	le load Allowat
		Axis 1	Arm 1	250	400	±120°		(Note 2) 6283mm/s	(Note 5)	Raleo	Maximum	limit	limit	moment (kg-m2) (Note 6)	torque (N ⋅ m
HNN5020[H]- ① -T	2	Axis 2	Arm 2	250	200	±135°	±0.010 (XY)	[6381mm/s] (Composite speed)	0.44		10	152.0	78.1	0.00	3.3
NN5020[H]- ① -T2		Axis 3	Vertical axis	-	200	200mm	±0.010	1393mm/s [1473mm/s] 1200°/s	[0.39]	2	10	[181.0]	[93.0]	0.06	[3.7]
e model number above	e, specify the cable		Rotating axis	-	100	±360°	±0.005	[1857°/s]						speed and ac	
Common Specificat	ions									etails on th eration Settir			ns, refer to	Reference A	ccelerati
coder type	Absolute						Aml	bient temperature/humid	ity Temp	erature: 0-	40 °C, hu	umidity: 20–8	35%RH or le	ss (no conde	ensation)
er wiring	25-conductor A Air tube (O.D. a					,	-	nit weight	30.5	(g SEL-PX/C	)Y				
er tubing	Air tube (O.D. a		, ,	0.		,	-	able length (No				.: 10 m (opt	tional)		
m indicator (Note 7)	Small red LEE	) indicat	tor x 1 (24 V	DC must	be supplied	d.)									
e-release switch (Note 8	Allows remote re		,					ng illustra							
175 75 100 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		e, depth 5	50 Panel		(723.2) 25 Arm 1 nce surface		173			Page 1	R500		R250	191.3	
Reference surface	99			*				- ouning	dinension		(0	peration pro Work en	hibited area	a)	

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]	p. 37							
XSEL-QX-###-2[3]	Coloby Colomony A	192/192 points	230 VAC	p. 37							

\*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.



# Model/Specifications

Common Specifications

Model	Avie	configuration	Arm length	Motor capacity	Work	Positioning Repeatability		Standard cycle time	Load c (kg) (N		Axis 3 (ve push force			is 4 ble load
Wodel		Configuration	(mm)	(W)	envelope	(mm) (Note 1)	speed (Note 2)	(sec) (Note 3)	Rated	Maximum	Maximum limit	limit	Allowable inertial moment (kg-m2) (Note 6)	Allowable torque (N · m)
	Axis 1	Arm 1	350	400	±120°	±0.010	7121mm/s [7232mm/s]							
IX-HNN6020[H]- ① -T2	Axis 2	Arm 2	250	200	±135°	(XY)	(Composite speed)	0.52	2	10	152.0	78.1	0.06	3.3
IX-INN6020[H]-①-T2	Axis 3	Vertical axis	-	200	200mm	±0.010	1393mm/s [1473mm/s]	[0.43]	2	10	[181.0]	[93.0]	0.06	[3.7]
	Axis 4	Rotating axis	-	100	±360°	±0.005	1200°/s [1857°/s]							

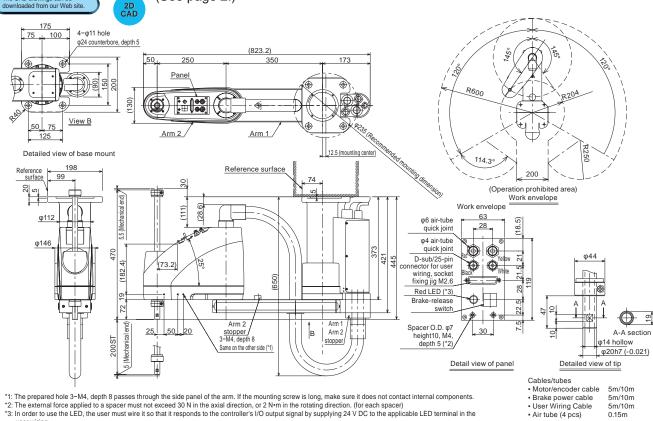
\*In the model number above, specify the cable length in 1

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

Encoder type	Absolute
User wiring	25-conductor AWG26 D-sub/25-pin connector with shield (socket)
Lloor tubing	Air tube (O.D. Ø6, I.D. Ø4) x 2 (Normal working pressure 0.8 MPa)
User 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	31.5Kg
Applicable controller	T2: XSEL-PX/QX
Cable length (Note 9)	5L: 5 m (standard), 10L: 10 m (optional)

Dimensions The CAD drawings can be downloaded from our Web site. \*For the inverse type, the following illustrations should be turned upside down. (See page 2.)

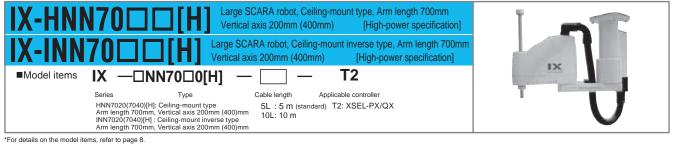


user wiring.

Applicable Cont	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]	p. 37								
XSEL-QX-###-2[3]	Sofoty Cotogony A	192/192 points	230 VAC	p. 37								

\*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 6. Caution



## Model/Specifications

Model	Avia	oppliquation	Arm length	Motor capacity	Work	Positioning Repeatability		Standard cycle time		apacity Note 4)	Axis 3 (ve push force (		Axi: allowab	
	AXIS	v 1	(mm)			(mm) (Note 1)	speed (Note 2)	(sec) (Note 3)	Rated	Maximum	Maximum limit	limit	Allowable inertial moment (kg·m2) (Note 6)	torque
	Axis 1	Arm 1	350	750	±125°	±0.015	6597mm/s							
IX-HNN7020[H]- ① -T2	Axis 2	Arm 2	350	400	±145°	(XY)	[7010mm/s] (Composite speed)	0.50			265	127.3		0.7
(IX-HNN7040[H]-①-T2) IX-INN7020[H]-①-T2	Axis 3	Vertical axis	-	400	200mm (400mm)	±0.010	1583mm/s [1614mm/s]	0.50 [0.42]	5	20	[304]	[146.0]	0.1	6.7 [11.7]
(IX-INN7040[H]-①-T2)	Axis 4	Rotating axis	-	200	±360°	±0.005	1200°/s [1266°/s]							

\*In the model number above, specify the cable length in 1

Common Specifications								
Encoder type	Absolute							
User wiring	25-conductor AWG26 D-sub/25-pin connector with shield (socket)							
User tubing	Air tube (O.D. Ø6, I.D. Ø4) x 2 (Normal working pressure 0.8 MPa)							
User 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)								

*SCARA robots cannot operate continuously at 100% speed and acceleration.
For details on the operating conditions, refer to Reference Acceleration/
Deceleration Settings on page 46.

Ambient temperature/humidity	Temperature: 0–40 °C, humidity: 20–85%RH or less (no condensation)
Unit weight	58Kg
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. Dimensions (See page 2.) The CAD dra vings can be com our Web site (972.5) φ6 air-tube 2D CAD 350 350 (207.5)quick joint φ4 28 air-tube quick joint ۲ 0 (**@**: 200 200 ۲ User Connector Ó D-Sub/25-pin, socket fixing jig M2.6 ÷ ALM (Note 3) 4-14 drilled through φ30 counterbore, depth 5 $\odot$ BK SW 17.5 (mounting center) 95 Reference surface (34) (34) (Brake-re 155 -Spacer O.D. φ7 Height 10 M4 depth 5 (Note 2) 0 223 91 [170] View B: Detailed view of base mount 30 (206.8) (64 Reference surface 262 <mark>⊧ 131</mark> 8 (81) THE T 704] 6 68 (φ144) (134.6) 8 190 820) 18 hollow <u>(</u>\$\$ IAI ₽ Æ φ25h7( <sup>0</sup>-0.021) Arm 2 Arm 1 Arm 2 61

7.5 Detail view of panel

18.5)

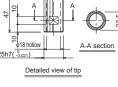
2

LC.

3

28

22.5



stopper

3-M4, depth 8

Same on the other side (Note 1)

(74.5)

[(125.5)] ₽

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5 (Mechanical en

 $\triangle$ 

Caution

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.

stopper

A P. 122.2

в

stoppe

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

\*( ) indicates vertical axis 400mm (optional) specifications.

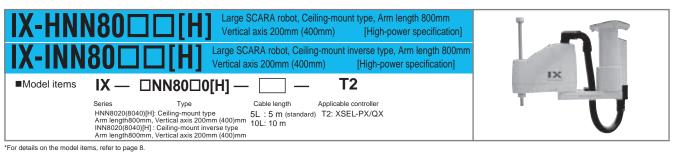
ntroller Specifications	Applicable C	Ap
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Applicable Controller	Features	Maximum I/O points (inputs/outputs)	Power-supply voltage	Reference page
XSEL-PX-###-2[3]	Maximum 5 axes, 1600 [2400] W supported	192/192 points	Single-phase	p. 37
XSEL-QX-###-2[3]	Safety Category 4 supported	192/192 points	230 VAC	p. 37

200 s

[400 st] 8 (Mechanical

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



### Model/Specifications

	Model			1	Motor	Work envelope	Repeatability		cycle time (sec)	Load capacity (kg) (Note 4)		Axis 3 (vertical axis) push force (N) (Note 5)		Axis 4 allowable load	
		Axis configuration	capacity (W)		Rated					Maximum	Maximum limit	limit	Allowable inertial moment (kg-m2) (Note 6)	torque	
	X-HNN8020[H]-①-T2 IX-HNN8040[H]-①-T2) X-INN8020[H]-①-T2	Axis 1	Arm 1	450	750	±125°	±0.015 (XY) [(C	7121mms [7586mm/s]				265	127.3 [146.0]	0.1	6.7 [11.7]
		Axis 2	Arm 2	350	400	±145°		(Composite speed)							
		Axis 3	Vertical axis	-	400	200mm (400mm)		1583mm/s [1614mm/s]		5	20	[304]			
(1	K-INN8040[H]- ① -T2)	Axis 4	Rotating axis	-	200	±360°	±0.005	1200°/s [1266°/s]							

\*In the model number above, specify the cable length in 🕥

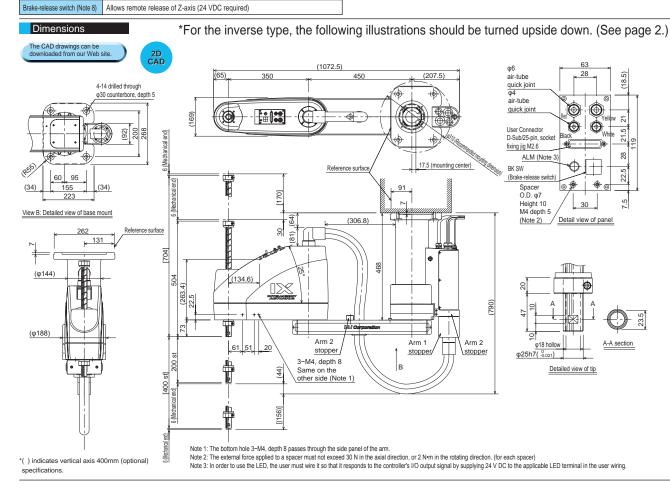
Common Spacific

	Encoder type	Absolute				
	User wiring	25-conductor AWG26 D-sub/25-pin connector with shield (socket)				
	User tubing	Air tube (O.D. Ø6, I.D. Ø4) x 2 (Normal working pressure 0.8 MPa)				
	User 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 )				

Ambient temperature/humidity	Temperature: 0-40 °C, humidity: 20-85%RH or less (no condensation)					
Unit weight	58Kg					
Applicable controller	T2: XSEL-PX/QX					
Cable length (Note 9)	5L: 5 m (standard), 10L: 10 m (optional)					

Deceleration Settings on page 46.

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



## 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	102/102 points	Single-phase	n 07	
XSEL-QX-###-2[3]	Safety Category 4 supported	192/192 points	[Three-phase] 230 VAC	p. 37	

\*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.