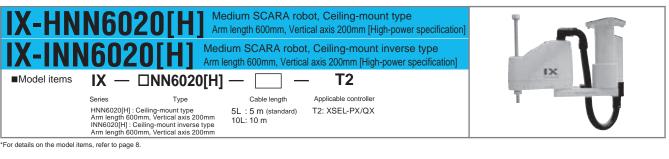
	<u>1502</u>	U	IIJ.	Arm lengt	h 500mm,	Vertical a	xis 200mn	n [High-power	specificati	on]				ALC: NOT	
Model items	IX —		N5020	[H] –	-] —	T2					-	~		
	Series HNN5020[H] : Arm length 500 INN5020[H] : 0 Arm length 500)mm, Ver Ceiling-mo	tical axis 200 ount inverse t	mm 10L: /pe	Cable leng 5 m (stand 10 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]							

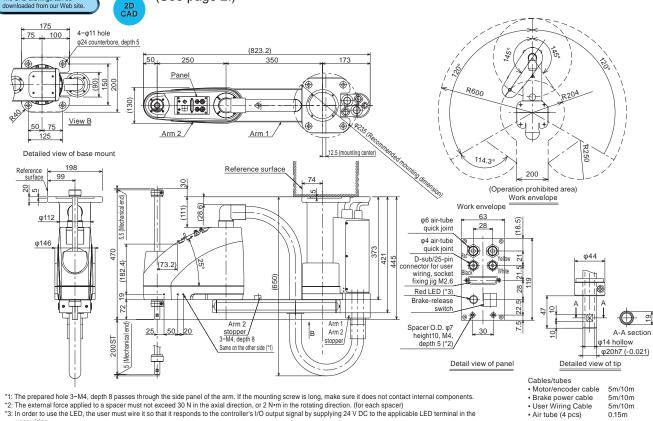
*In the model number above, specify the cable length in 1

*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.)

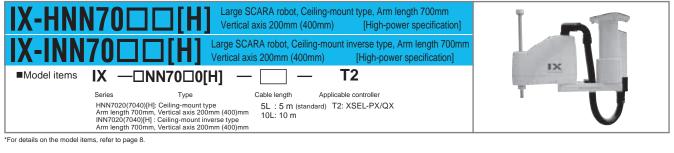


user wiring.

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(⁰-0.021) Arm 2 Arm 1 Arm 2 61

7.5 Detail view of panel

18.5)

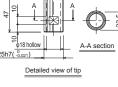
2

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

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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.

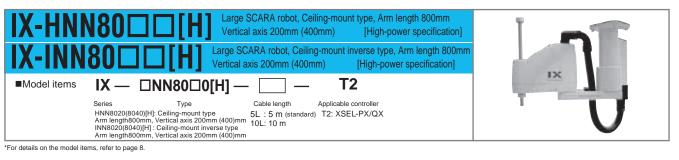
ntroller Specifications	Applicable C	Ap
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Applicable Controller	Features	Maximum I/O points (inputs/outputs)	Power-supply voltage	Reference page
XSEL-PX-###-2[3]	Maximum 5 axes, 1600 [2400] W supported	192/192 points	Single-phase	p. 37
XSEL-QX-###-2[3]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

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[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 🕥

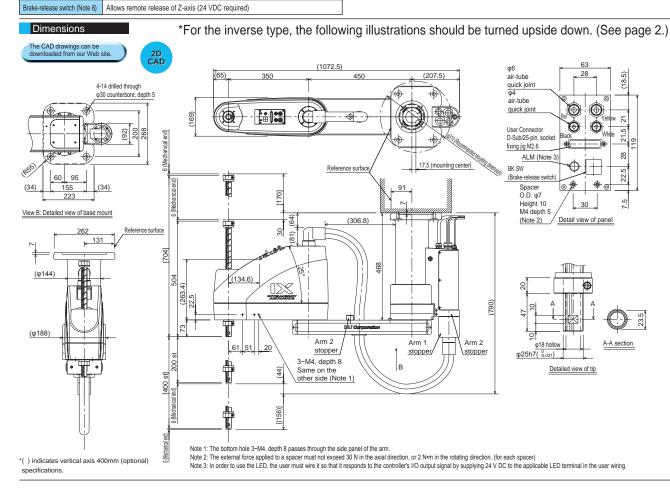
Common Spacific

	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.