

IXA - 3NNN6018 / 4NNN6018 3NNN6033 / 4NNN6033

Standard Type Battery-less Absolute Arm Length 600 mm Vertical Axis 180/330 mm

Model Specification Items IXA - ☐ NNN 60 ☐ - ☐ - T2 ☐

Series - Number of Axes 3: 3-axis 4: 4-axis
Type Standard type
Arm Length 60: 600mm
Vertical Axis Stroke 18: 180mm 33: 330mm
Cable Length N: No cable SL: 5m 10L: 10m CL: Specified length (1m increments)
Applicable Controllers T2: XSEL-RAX/SAX
Options Refer to Options table below.

* Does not include a controller.



Please refer to P.19 for (Note 1) to (Note 9).

(Note 10) The maximum set value for acceleration/deceleration varies depending on the weight of the object being transported, the traverse distance, and the location. Operating continuously at the maximum set value could cause an overload error. For continuous operation, either lower the acceleration/deceleration value or refer to the duty (guideline) and set a stop time after acceleration/deceleration.

(Note 11) If the motor or controller is replaced, absolute reset must be performed. An adjustment jig (option model: JG-IXA1) will be required to perform absolute reset on the rotational axis (4th axis).

Model / Specifications

Model	Axis configuration	Arm length (mm)	Motor (W)	Operation range	Positioning repeatability (Note 1)	Maximum operation speed during PTP operation (Note 2)	Standard cycle time (s) (Note 3)	Continuous cycle time (s) (Note 3)	Payload (kg) (Note 4)	3rd axis (vertical axis) push force control range (N)*		4th axis allowable load
										Upper limit (Note 5)	Lower limit (Note 5)	
[3-axis specification] IXA-3NNN6018 - 1 - T2 - 2 IXA-3NNN6033 - 1 - T2 - 2	1-axis 1st arm 2-axis 2nd arm	350 250	600 200	±137 degrees ±140 degrees	±0.010mm	5934mm/s (composite speed) 400/400 deg/s (1st/2nd arm speed)	0.38	0.55	6	110.0	25.0	0.06
[4-axis specification] IXA-4NNN6018 - 1 - T2 - 2 IXA-4NNN6033 - 1 - T2 - 2	3-axis Vertical axis 4-axis Rotational axis	- -	200 100	180mm (330mm) ±360 degrees	±0.010mm ±0.005 deg	1600mm/s 2000 deg/s						

Legend: 1 Cable length 2 Options

Note: * The SCARA robot cannot operate continuously at 100% speed/acceleration. Refer to the Reference Data from P.20 for feasible operating conditions.

* Values in [] are for models with vertical axis of 330mm. Other specifications are the same for both 180mm and 330mm vertical axis models.

* Speed limitation applies to the push force. Contact IAI for details.

Cable Length

Type	Cable code
Standard type	5L(5m)
	10L(10m)
Specified length	1L(1m)~4L(4m)
	6L(6m)~9L(9m)
	11L(11m)
	12L(12m)
	13L(13m)
	14L(14m)
	15L(15m)

[3-axis specification] : Motor cables: 3 Encoder cables: 3 Brake cable: 1
[4-axis specification] : Motor cables: 4 Encoder cables: 4 Brake cable: 1

Options

Name	Model name	Reference page
Indicator	LED	See P.6

Single Unit Options

Name	Model name	Reference page
Flange	IX-FL-1	See P.6

(Note) Please purchase separately.

Common Specifications

Item	Description
Encoder Type	Battery-less Absolute Encoder
User wiring	10-core (9-core + shield) AWG24 (rated 30V/max 1A)
User piping	3 air tubes with ø6 outer diameter and ø4 inner diameter (max. operating pressure 0.6MPa)
Alarm indicator (*) (Note 7)	1 small amber LED indicator (24VDC supply required)
Brake release switch (Note 8)	Brake release switch for vertical axis fall prevention
Allowable load moment	8.3N·m
Ambient temp./humidity	Temperature: 0~40°C Humidity: 20~85% RH or Less (Non-condensing)
Ingress protection	IP20
Unit weight	3-axis specification: 30.5kg, 4-axis specification: 32.0kg
Noise (Note 9)	80dB or less

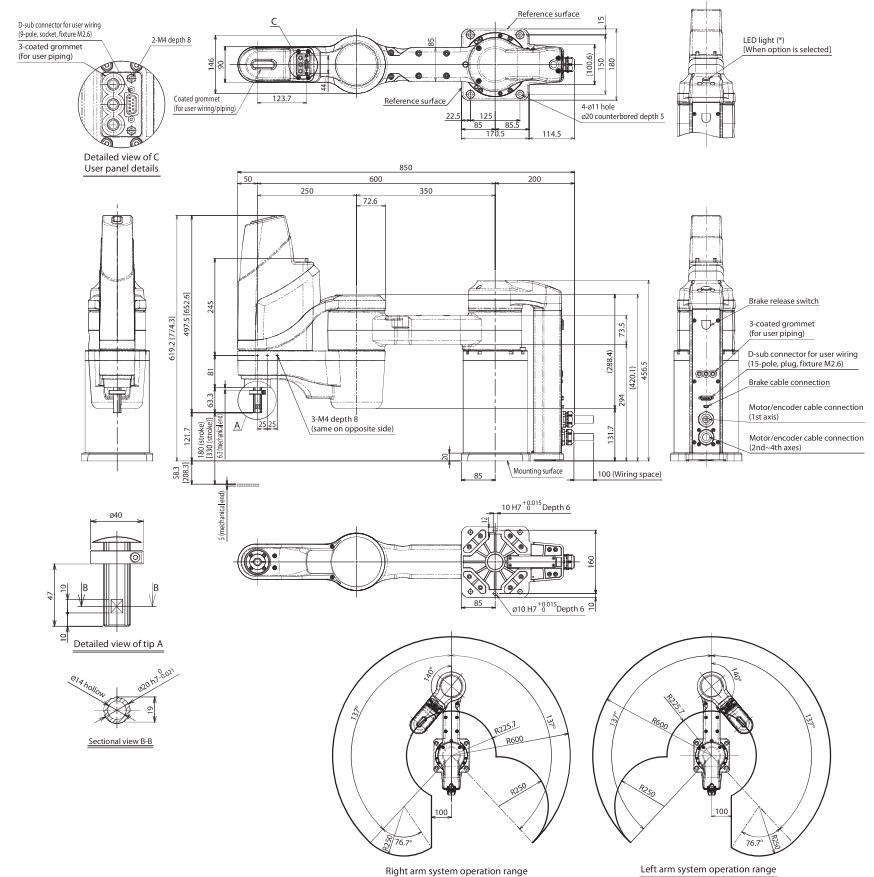
(*) An alarm indicator is equipped when the LED option is selected.

Dimensions

CAD drawings can be downloaded from our website.
www.intelligentactuator.de



* Values in [] are dimensions for vertical axis of 330mm.



(*) To operate the LED, wire a controller output to apply 24VDC to the LED terminal of the user wiring.

Applicable Controllers

The IXA series actuators can be operated by the controllers indicated below. Please select the type depending on your intended use.

Name	External view	Max. number of connectable axes	Power supply voltage	Positioner	Pulse-train	Control method		Maximum number of positioning points	Reference page
						Program	Network * option		
XSEL-RAX/SAX		8	Three-phase 230VAC	-	-	●	DeviceNet EtherCAT CC-Link EtherNet/IP	36666 (Depending on the type)	See P.24