

# IXP-3N5520/4N5520 3N5515

Arm length  
550mm

Vertical axis  
200mm

Vertical axis  
150mm

Model Specification Items	Series	IXP	Number of axes	N	55	Arm length	20	Vertical axis stroke	WA	Encoder type	P3	Option	
		3: 3 axes 4: 4 axes	55: 550mm	20 :200mm 15GL :150mm 15GW :150mm	No gripper Large gripper installed Extra-large gripper installed	WA: Battery-less absolute specification	N: None P: 1m S: 3m M: 5m	X□□: Specified length R□□: Robot cable Cable length described below	P3: MSEL	B: Brake			

\*Controller is not included.  
\*Refer to "Attached Gripper Types" for the types of grippers installed.



**POINT**  
Note on selection

- Refer to P. 7 for \*1 through \*6.
- Make sure to select the brake option when the payload is 4kg or more.
- The vertical axis does not support push-motion control.
- The allowable push force should be 90N under condition of having a buffer such as a spring on a tool or the pressing side.
- Refer to P. 7 for the work envelope, and P. 8 for the notes on acceleration/deceleration setting.

\*The photograph shows a 4-axis specification.

Robot Specifications									
Axis configuration	Arm length (mm)	Work envelope	Positioning repeatability *1	Maximum operating speed in PTP mode *2			Payload (kg) *3		
				No gripper	With large gripper (GL)	With extra-large gripper (GW)	Rated	Maximum	
Axis 1	Arm 1	260	±127°	±0.04mm	2943mm/s (Composite speed)	2943mm/s (Composite speed)	2943mm/s (Composite speed)	2	6
Axis 2	Arm 2	290	±127°						
Axis 3	Vertical axis	—	200mm (Note 1)	±0.02mm	240mm/s	240mm/s	240mm/s		
Axis 4	Rotational axis	—	±360°	±0.02°	700°/s	—	—	—	1.5 (Note 3)
	Large gripper GL (Note 2)	—	22mm (Both fingers)	±0.01mm	—	125mm/s (One finger)	—		
	Extra-large gripper GW (Note 2)	—	30mm (Both fingers)	±0.01mm	—	—	157mm/s (One finger)	—	2.5 (Note 3)

(Note 1) When the extra-large gripper is installed, the work envelope of the vertical axis becomes 150mm. (Note 2) Refer to the gripper selection guide in our ROBO Cylinder General Catalog. (Note 3) This is the maximum payload on the gripper when it is attached to a SCARA Robot.

Robot Specifications	3-axis specification	4-axis specification	3-axis specification	
	No gripper	specification	With large gripper (GL)	With extra-large gripper (GW)
Encoder type	Battery-less absolute encoder *			
User wiring	AWG24×6, AWG26×5P (shielded) *User cables are sold separately. Refer to the operation manual for detail.		User wiring is not supported because the gripper wiring is used.	
User piping	O.D. ø4, I.D. ø2.5, 3 air tubes Maximum working pressure 0.8MPa			
Standard cycle time *4 (sec)	0.73		0.73 (When transporting 2kg including a gripper)	
Allowable torque (Axis 4) (N·m)	—	3.06	—	
Allowable moment (N·m)	9.4		Ma: 3.8 Mb: 5.5 Mc: 9.4	Ma: 9.4 Mb: 9.4 Mc: 9.4
Allowable inertial moment from the tip of the vertical axis *5 (kg·m <sup>2</sup> )	Rated 0.01 Maximum 0.03	Rated 0.01 Maximum 0.01	Maximum 0.026	Maximum 0.024
Ambient operating temperature/humidity	Temperature 0 ~ 40°C Humidity 20 ~ 85%RH (Non-condensing)			
Unit weight (kg)	20	21	21.3	21.9

\*The gripper is incremental type

Attached Gripper Types	
IXP-3N5515GL	The large gripper RCP4-GRSLL is installed at the tip of the vertical axis.
IXP-3N5515GW	The extra-large gripper RCP4-GRSWL is installed at the tip of the vertical axis.

Option			
Name	Option code	Reference page	Standard price
Brake	B	Refer to our ROBO Cylinder General Catalog	—

Price List		
Specification	Model number	Standard price
3-axis specification	IXP-3N5520	—
3-axis specification with large gripper	IXP-3N5515GL	—
3-axis specification with extra-large gripper	IXP-3N5515GW	—
4-axis specification	IXP-4N5520	—

Cable Length <Per Axis*>		
Type	Cable code	Standard price
Standard type	P (1m)	—
	S (3m)	—
	M (5m)	—
Specified length	X06 (6m) ~ X10 (10m)	—
	X11 (11m) ~ X15 (15m)	—
	X16 (16m) ~ X20 (20m)	—
Robot cable	R01 (1m) ~ R03 (3m)	—
	R04 (4m) ~ R05 (5m)	—
	R06 (6m) ~ R10 (10m)	—
	R11 (11m) ~ R15 (15m)	—
	R16 (16m) ~ R20 (20m)	—

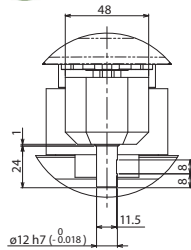
\*The 3-axis specification requires three cables, while the gripper specification and 4-axis specification require four cables.

Dimensions

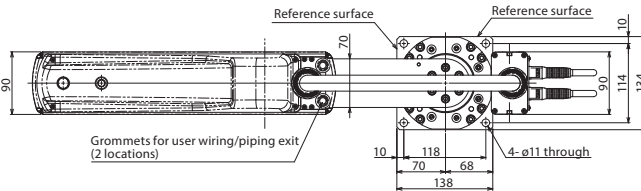


CAD drawings can be downloaded from the website.

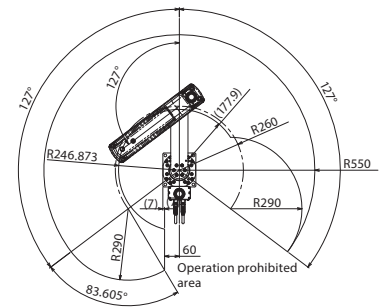
www.intelligentactuator.com



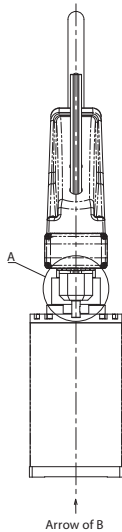
Detailed view of A



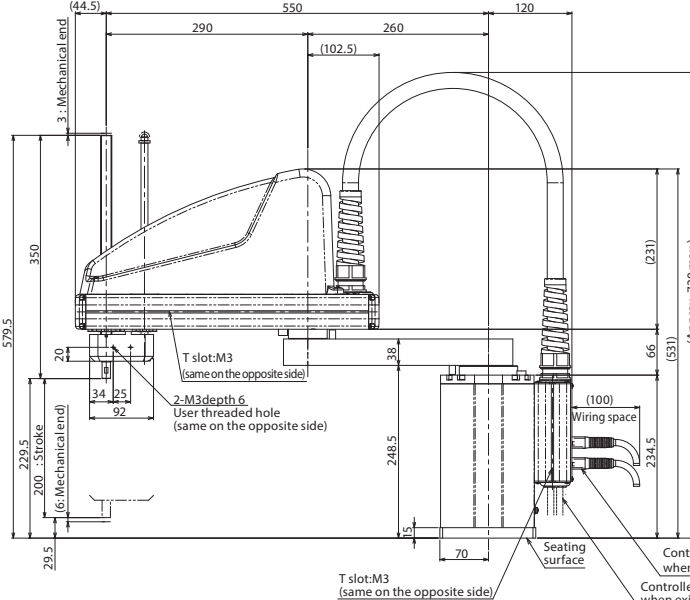
Grommets for user wiring/piping exit (2 locations)



Work envelope of the right-arm system

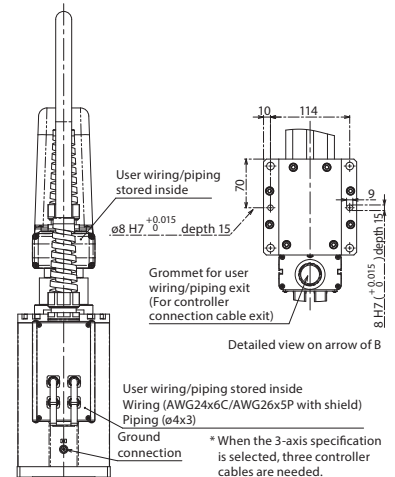


Arrow of B



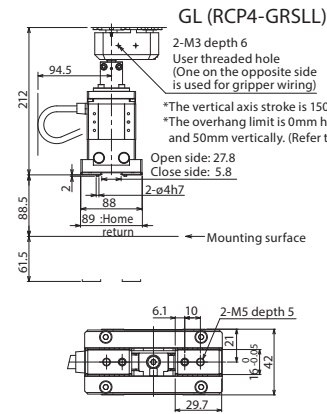
T slot:M3 (same on the opposite side)

Controller cables when exiting from the rear panel  
Controller cables when exiting through grommet

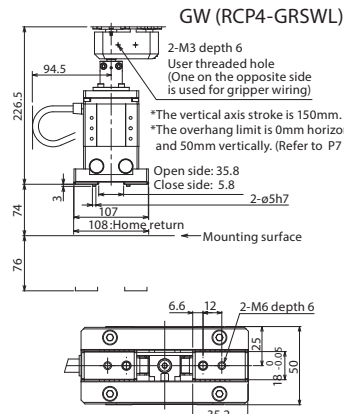


Detailed view on arrow of B

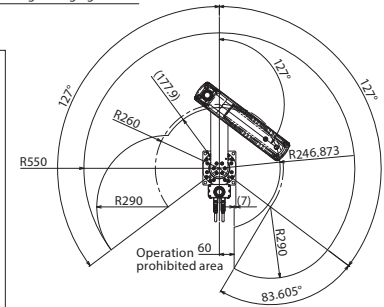
<Gripper Specification>



GL (RCP4-GRSLL)  
2-M3 depth 6  
User threaded hole (One on the opposite side is used for gripper wiring)  
\*The vertical axis stroke is 150mm.  
\*The overhang limit is 0mm horizontally and 50mm vertically. (Refer to P7 \*6.)  
Open side: 27.8  
Close side: 5.8



GW (RCP4-GRSWL)  
2-M3 depth 6  
User threaded hole (One on the opposite side is used for gripper wiring)  
\*The vertical axis stroke is 150mm.  
\*The overhang limit is 0mm horizontally and 50mm vertically. (Refer to P7 \*6.)  
Open side: 35.8  
Close side: 5.8



Work envelope of the left-arm system

Applicable Controller

IXP series robots can operate with the following controllers. Make sure to select the model depending on the purpose.

Name	External view	Maximum number of controlled axes	Supply voltage	Control method				Max. pos. points	Standard price	Reference page
				Position	Pulse train	Program	Network *Option			
MSEL-PCX/PGX		4	Single-phase 100V ~ 230V	-	-	•	DeviceNet CC-Link EtherNet/IP PROFINET EtherCAT	30000	-	→P37