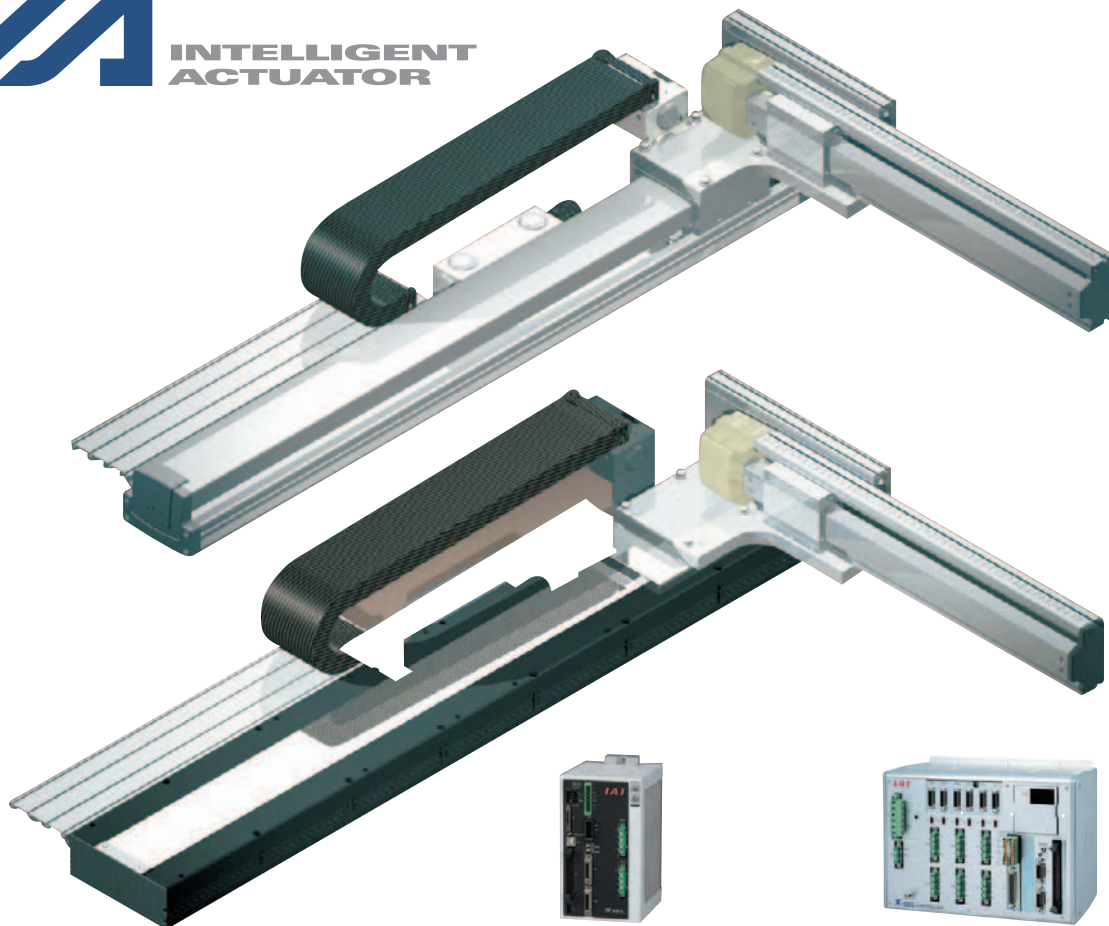


# NS or LSA plus ISPA Cartesian System



1-2-axis program controller that achieves high cost performance.

High-performance 1-6-axis program controller.

**S-SEL**

**X-SEL**

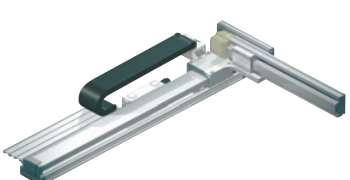
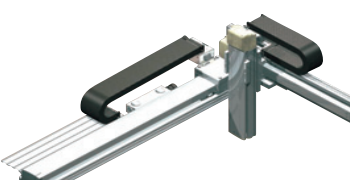
## **NS** X-Axis + ISPA Axes Combined

- **2-Axis Rotating Nut Motor System ICSPA2-BN**  
x: NS-LXMS y: ICSPA-MYM
- **3-Axis Rotating Nut Motor System ICSPA3-BN**  
x: NS-LXMS/XS y: ISPA-MYM z: ISPA-MXM/ZM
- **4-Axis Rotating Nut Motor System ICSPA4-BN**  
x: NS-LXMM y1: ISPA-MYM y2: ISPA-MZM/YM
- **6-Axis Rotating Nut Motor System ICSPA6-BN**  
x: NS-LXMM y1,y2: ISPA-MYM z1,z2: ISPA-MXM/ZM

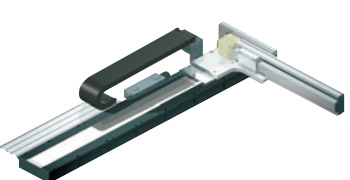
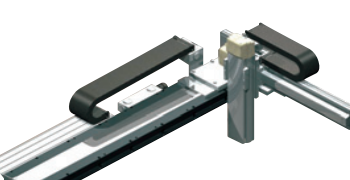
## **LSA** X-Axis + ISPA Axes Combined

- **2-Axis Linear Motor System ICSPA2-BL**  
x: LSA-W21SS y: ISPA-MYM
- **3-Axis Linear Motor System ICSPA3-BL**  
x: LSA-W21SS y: ISPA-MYM z: ISPA-MXM
- **4-Axis Linear Motor System ICSPA4-BL**  
x: LSA-W21SM y1: ISPA-MYM y2: ISPA-MZM/YM
- **6-Axis Linear Motor System ICSPA6-BL**  
x: LSA-W21SM y1,y2: ISPA-MYM z1,z2: ISPA-MXM/ZM

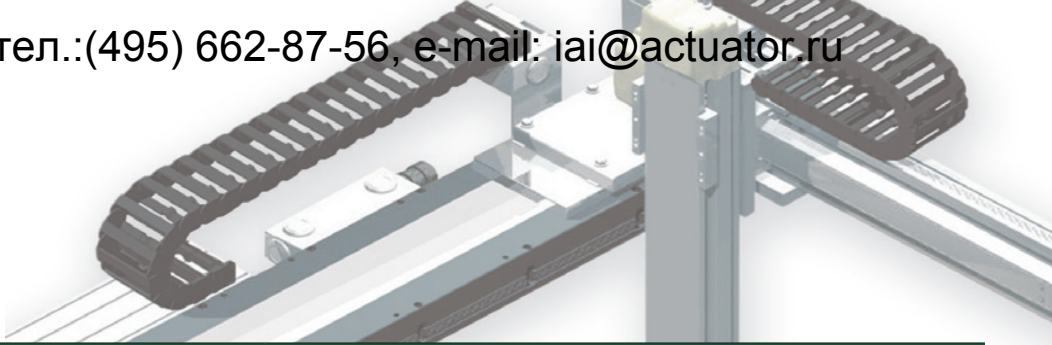
## Cartesian Robots Using Rotating Nut Actuators / Large Linear Motors - Supporting Long Strokes, High-speed Moves and Multiple Sliders

NS (Nut Rotation Actuator) + ISA													
Number of combined axes		2 axes				3 axes							
Z-axis installation method		—				Z-axis base mount							
Series		ICSPA2				ICSPA3							
Type		B1N□H	B1N□M	B2N□H	B2N□M	B1N□HB3H	B1N□HB3M	B1N□MB3H	B1N□MB3M	B2N□HB3H	B2N□HB3M	B2N□MB3H	B2N□MB3M
Exterior View													
Stroke (mm)	X-axis	500~2200		2250~3000		500~2200				2250~3000			
	Y-axis	200~700				200~700							
	Z-axis	—				100~500							
Speed (mm/s)	X-axis	2400	1300	2400	1300	2400		1300		2400		1300	
	Y-axis	1200	1200	1200	1200	1200		1200		1200		1200	
	Z-axis	—	—	—	—	1200	600	1200	600	1200	600	1200	600
Maximum Load Capacity (kg) *1		21.2	40.0	21.2	40.0	9.0	11.2	9.0	19.0	9.0	11.2	9.0	19.0
Page		<b>P.5</b>	<b>P.7</b>	<b>P.9</b>	<b>P.11</b>	<b>P.13</b>		<b>P.15</b>		<b>P.17</b>		<b>P.19</b>	

\*1: The load capacity changes according to the Y-axis stroke and Z-axis stroke. For details, check the page describing the type you are interested in.

LSA (Large Linear Servo Actuator) + ISA													
Number of combined axes		2 axes				3 axes							
Z-axis installation method		—				Z-axis base mount							
Series		ICSPA2				ICSPA3							
Type		B1L□H				B1L□HB3H				B1L□HB3M			
Exterior View													
Stroke (mm)	X-axis	1050~4155				1050~4155							
	Y-axis	200~400				200~400							
	Z-axis	—				100~400							
Speed (mm/s)	X-axis	2500				2500							
	Y-axis	1200				1200							
	Z-axis	—				1200				600			
Maximum Load Capacity (kg) *1		21.2				9.0				11.2			
Page		<b>P.41</b>				<b>P.43</b>							

\*1: The load capacity changes according to the Y-axis stroke and Z-axis stroke. For details, check the page describing the type you are interested in.



3 axes				4 axes (2 axes + 2 axes)		6 axes (3 axes + 3 axes)					
Z-axis slider mount				-		Z-axis base mount				Z-axis slider mount	
ICSPA3				ICSPA4		ICSPA6					
B1N□HS3M	B1N□MS3M	B2N□HS3M	B2N□MS3M	B3N1H	B3N1M	B3N1HB3H	B3N1HB3M	B3N1MB3H	B3N1MB3M	B3N1HS3M	B3N1MS3M
500~2200		2250~3000		250~2250		250~2250					
200~700				200~700		200~700					
100~400				-		100~500				100~400	
2400	1300	2400	1300	2400	1300	2400		1300		2400	1300
1200	1200	1200	1200	1200	1200	1200		1200		1200	1200
600	600	600	600	-	-	1200	600	1200	600	600	600
11.5	13.0	11.5	13.0	21.2	40.0	9.0	11.2	9.0	19.0	11.5	13.0
<b>P.21</b>	<b>P.23</b>	<b>P.25</b>	<b>P.27</b>	<b>P.29</b>	<b>P.31</b>	<b>P.33</b>		<b>P.35</b>		<b>P.37</b>	<b>P.39</b>

3 axes		4 axes (2 axes + 2 axes)		6 axes (3 axes + 3 axes)					
Z-axis slider mount		-		Z-axis base mount		Z-axis slider mount			
ICSPA3		ICSPA4		ICSPA6					
B1L□HS3M		B2L1H		B2L1HB3H		B2L1HB3M		B2L1HS3M	
1050~4155		730~3835		730~3835					
200~400		200~400		200~400					
100~300		-		100~400				100~300	
2500		2500		2500					
1200		1200		1200					
600		-		1200				600	
11.5		21.2		9.0		11.2		11.5	
<b>P.45</b>		<b>P.47</b>		<b>P.49</b>				<b>P.51</b>	

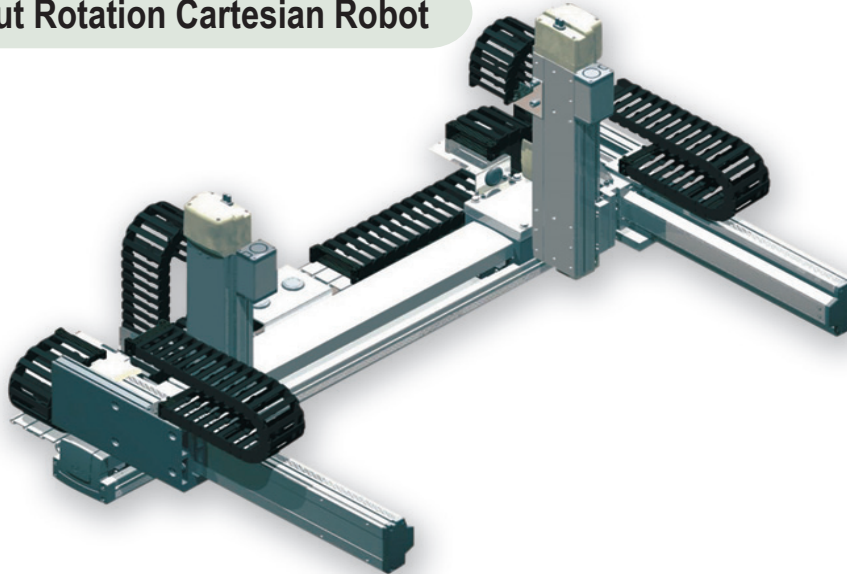
## ■ Introducing Two Multi-slider Type Cartesian Robots

A multi-slider robot consists of two sliders installed in one axis, where both sliders can be operated independently.

### ■ Combined actuator units of nut rotation type offering excellent transfer capability

- The built-in servo motor in the slider turns the nut to move the actuator. Accordingly, heavy loads can be operated at high speed even at a long stroke.
- A desired combination can be selected from 2-axis, 3-axis, 4-axis (2 axes + 2 axes) and 6-axis (3 axes + 3 axes) configurations.

#### X-axis Nut Rotation Cartesian Robot



### ■ Combined actuator units of linear servo type offering excellent acceleration/deceleration performance

- High-thrust linear servo actuators enable operations requiring a long stroke (up to 4155 mm) and high acceleration/deceleration (rating: 1 G).
- A desired combination can be selected from 2-axis, 3-axis, 4-axis (2 axes + 2 axes) and 6-axis (3 axes + 3 axes) configurations.

#### X-axis Linear Servo Cartesian Robot

