50th ANNIVERSARY
Kawasaki Robotics

Kawasaki Robot

duAro 2 Dual-arm SCARA Robot

Features:

Coexistent operations with workers

Co-existing and collaborative works with human workers are possible thanks to various functions to assure safety and the use of soft materials on the arm surface. In the event of a collision with the worker, the collision detection function will make the duAro stop.

Vertical Stroke (Z-axis) expanded to 550mm

The vertical stroke is extended from 150 to 550mm, enabling wider applications such as packing boxes with a large height.

Payload Capacity increased to 3 kg

The payload capacity is increased from 2 kg to 3 kg (total 6 kg for 2 arms) for wider applications.

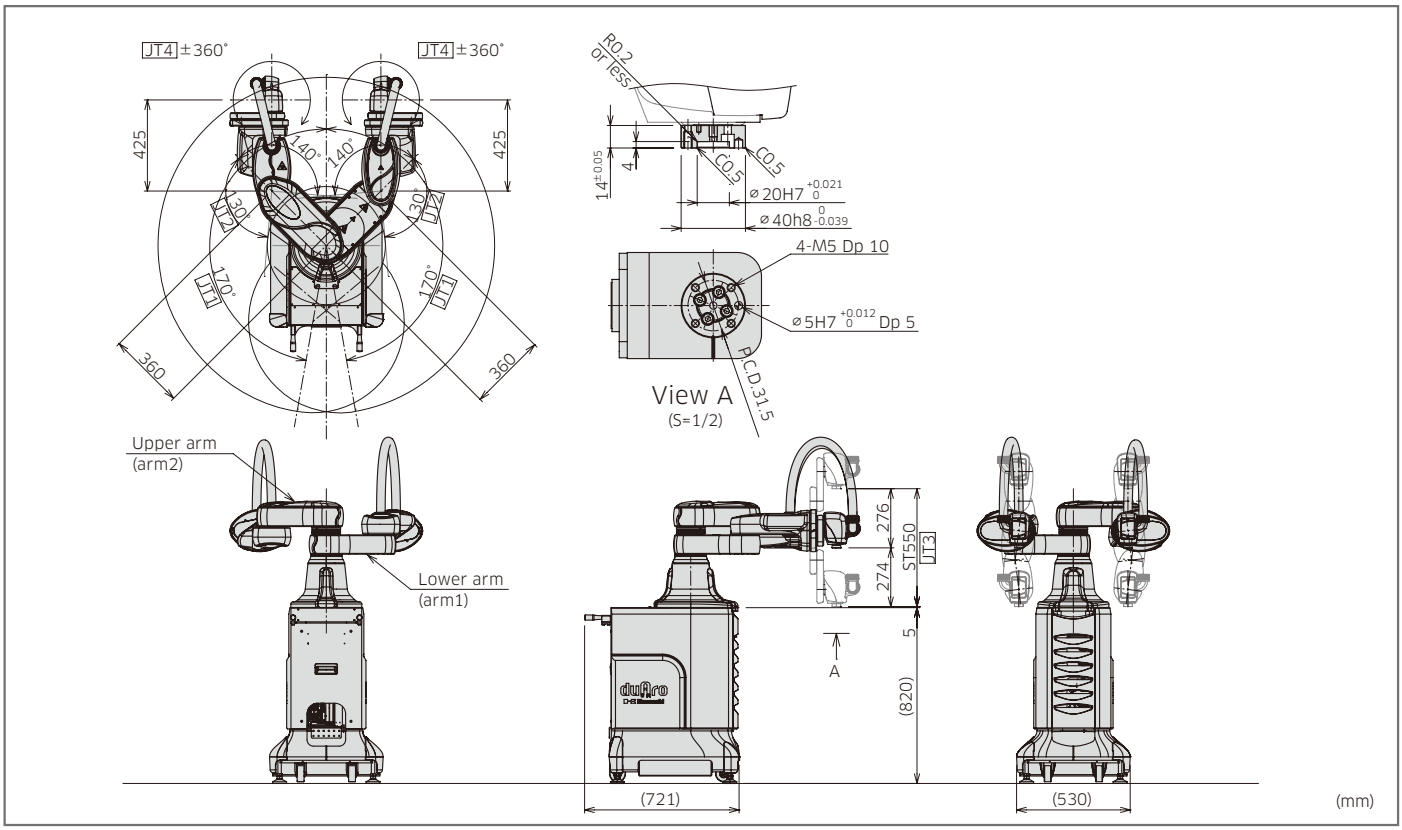
Easy use of the vision system

Since vision sensors can be used by simply adding optional software, a vision controller is not needed.

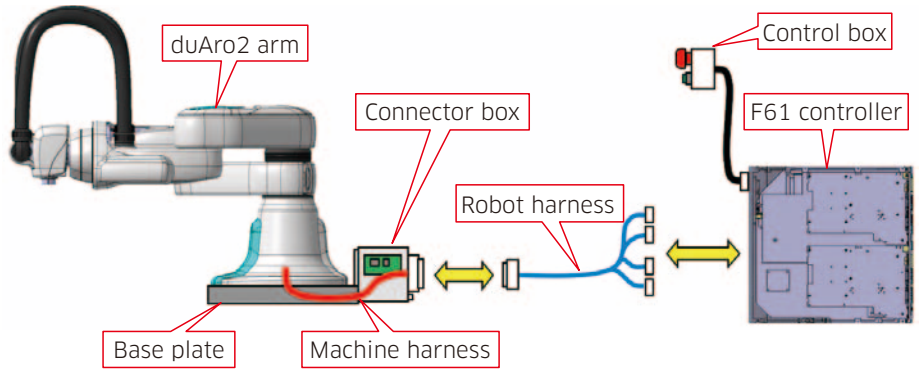
Separation of the arms and controller

In addition to the integrated type of arms and controller, a separate type (arms and controller are installed separately) allows free layout of the production line.

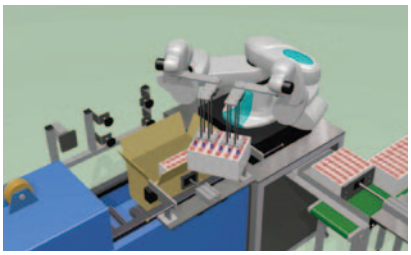
Dimensions



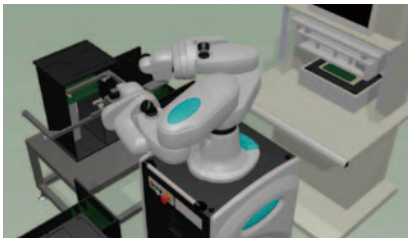
Optional separate type



Application



Packing products prior to shipment



Inspection of assembled PCBs

Specifications

		duAro 2	
Application		Assembly, handling, dispensing	
Degree of freedom (axes)		4 x 2 arms	
Max. payload (kg)		3 x 2 arms	
Positional repeatability (mm)		±0.05	
Motion range		Arm1 (lower arm)	Arm2 (upper arm)
	Arm rotation (°)	-170 - +170 (JT1)	-140 - +500 (JT1)
	Arm rotation (°)	-130 - +140 (JT2)	-140 - +130 (JT2)
	Ar up-down (mm)	0 - +550 (JT3)	0 - +550 (JT3)
	Wrist swivel (°)	-360 - +360 (JT4)	-360 - +360 (JT4)
Number of controlled axes		Max. 12 (standard 8, optional 4)	
Drive system		Full digital servo system	
Type of motion control	Manual mode	Coordinated movement of 2 arms, Individual movement of 1 arm, (Interpolation mode), Joint, Base, Tool	
	Auto mode	Coordinated movement of 2 arms, Individual movement of 2 arm, (Interpolation mode), Joint, Linear interplated motion	
Programming		Direct teaching method through tablets	
Memory capacity (MB)		16	
I/O signal	General input (No. of input)*2	16 (max. 80)	
	General output (No. of output)*2	16 (max. 80)	
Power requirements		AC200-230V ±10%, 50/60Hz ±2%, Single phase, Max. 2.0kVA*1	
		Class-D (3rd class) earth connection (earth connection dedicated to robots), leakage current: max. 10mA	
Mass (kg)		210kg (integrated type), 100 kg (separated type arm unit)	
Installation		Floor	
Enrironmental condition	Temperature(℃)	5 - 40*2	
	Humidity (%)	35 - 85 (no dew, nor frost allowed) *2	

*1: At the time of power activation, rush current generates in the range of several to tens of several times of the normal current. Due to such rush current, the supply voltage could drop. It is recommended to select a power supply capacity with enough room to cope with such instantaneous current change.
*2: Please consult with us for use of specifications other than specified above.

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