

Kawasaki Robot

duAro “duAro” Dual-arm SCARA Robot

The “duAro” Dual-arm SCARA Robot by Kawasaki Robotics:
A Brand-new Offering that Realizes the Concept of an Innovative
Dual-arm SCARA Robot

Features:

Saves space

The “duAro” dual-arm robot, with its two coaxial arms controlled by a single controller, can fit into a single-person space. The coaxial dual-arm configuration makes it possible to perform coordinated movement, which has been impossible for even two SCARA robots, in addition to dual-arm operations.

Ease of introduction

The wheeled base on which the arms are placed accommodates the controller. This enables the user to move the robot together with its base to any location desired.

Coexistent operations with people

Low-power motors and a deceleration function enable the duAro to coexist with people in work operations. Also, in the event of a possible person-robot collision, the collision detection function instantaneously stops the robot’s movement.

* Risk assessment shall be implemented to reduce risk.

Ease in teaching operation

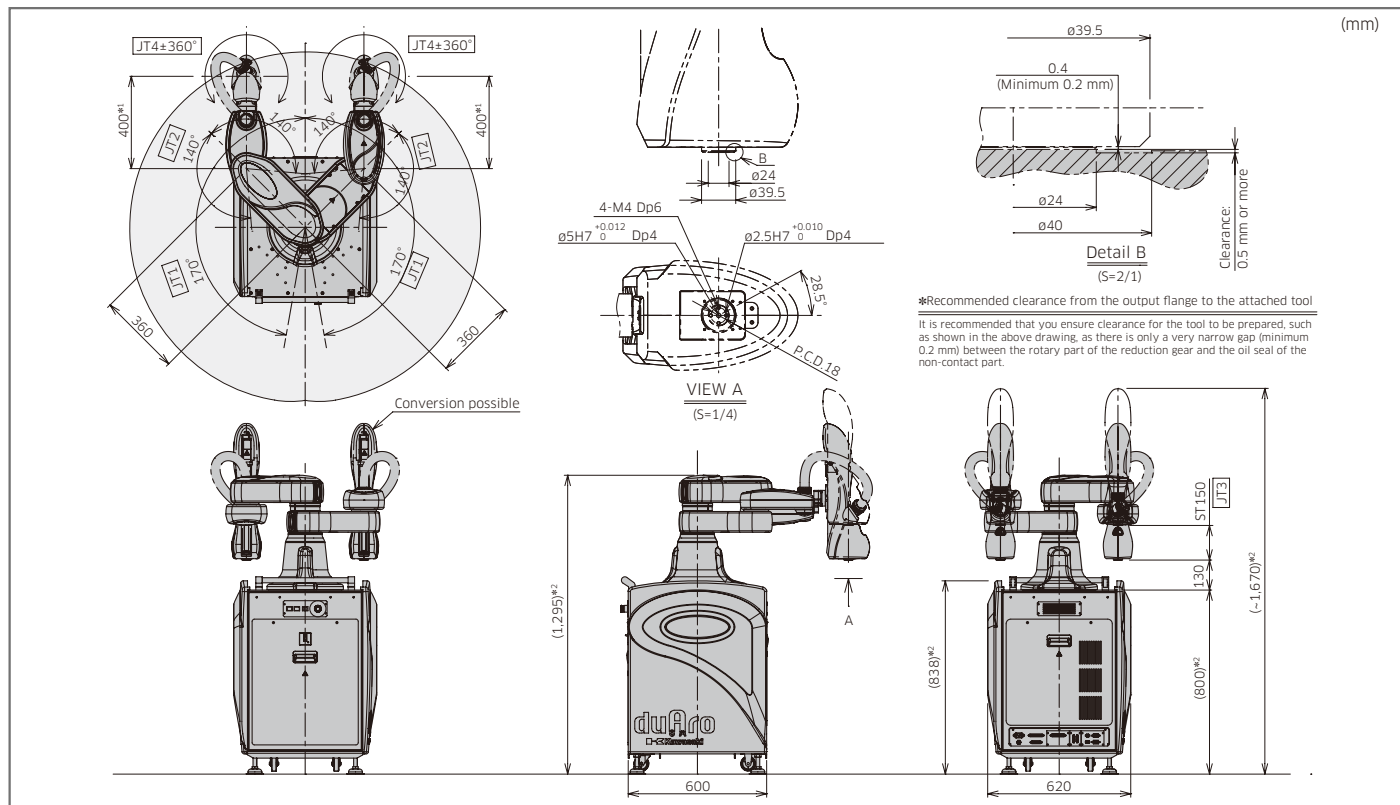
Teaching the robot by direct demonstration (by holding the robot’s arms) allows the user to easily teach the robot the movements required of them.

Various options

Teaching operations can be conveyed via tablet or teaching pendant, both of which can be connected to multiple robots. A vision system and standard gripper options are also available.



Motion range & dimensions



*1: Dimension varies in case of other options or conversion
*2: Height adjustable by adjustor

Specifications

		duAro 1	
Type	Horizontal articulated type		
Degree of freedom (axes)	4 × 2 arms		
Max. payload (kg)	2 (1 arm)		
Positional repeatability (mm)	±0.05		
Motion range (°)	Arm rotation (°)	Arm 1 (lower arm) -170 - +170 (JT1)	Arm 2 (upper arm) -140 - +500 (JT1)
	Arm rotation (°)	-140 - +140 (JT2)	-140 - +140 (JT2)
	Arm up-down (mm)	0 - +150 (JT3)*1	0 - +150 (JT3)*1
	Wrist swivel (°)	-360 - +360 (JT4)*1	-360 - +360 (JT4)*1
Controller (D61)	Number of controlled axes	Max. 12	
	Drive system	Full digital servo system	
	Coordinate systems	Joint, Base, Tool	
	Types of motion control	Joint/Linear/Circular Interpolated motion	
	Programming	Programming, Direct teach	
	Memory capacity (MB)	4	
	General purpose signals	Input (Channels)	16 (Max. 32)*2
Output (Channels)		8 (Max. 16)*2	
Power requirements	AC200-220V ±10%, 50/60Hz±2%, 1ø, Max. 2.0kVA		
	Class-D earth connection (Earth connection dedicated to robots), leakage current: Maximum 100mA		
Mass (kg)	about 145		
Installation	Floor		
Environmental condition	Temperature (°C)	5 - 40	
	Humidity (%)	35 - 85 (No dew, nor frost allowed)	

*1: Specification varies in case of other options or conversion
*2: Option



Kawasaki Heavy Industries, Ltd.

ROBOT DIVISION

<https://robotics.kawasaki.com/>

Tokyo Head Office/Robot Division

1-14-5, Kaigan, Minato-ku, Tokyo 105-8315, Japan
Phone: +81-3-3435-6852 Fax: +81-3-3437-9880

Akashi Works/Robot Division

1-1, Kawasaki-cho, Akashi, Hyogo 673-8666, Japan
Phone: +81-78-921-2946 Fax: +81-78-923-6548

Global Network

Kawasaki Robotics (USA), Inc.
Phone: +1-248-446-4100

Kawasaki Robotics (UK) Ltd.
Phone: +44-1925-71-3000

Kawasaki Robotics GmbH
Phone: +49-2131-34260

Kawasaki Robotics Korea, Ltd.
Phone: +82-32-821-6941

Kawasaki Robotics (Tianjin) Co., Ltd.
Phone: +86-22-5983-1888

Kawasaki Motors Enterprise (Thailand) Co., Ltd.
(Rayong Robot Center)
Phone: +66-38-955-040-58

* Materials and specifications are subject to change without notice.