



# HIGH-SPEED, HIGH-PERFORMANCE INDUSTRIAL ROBOTS

The new R-Series Robots are setting the benchmark for all small to medium duty industrial robots. The compact design, along with industry leading speed, reach and work range make the R-Series Robots ideal for a wide range of applications throughout a multitude of diverse industries.

## RS10L

Payload 10 kg
Horizontal Reach 1,925 mm
Vertical Reach 3,478 mm
Repeatability ±0.06 mm
Maximum Speed 13,100 mm/s

#### **Applications**

- Assembly
- Dispensing
- Inspection
- Machine Tending
- Material Handling
- Material Removal
- Welding



#### **ULTRA HIGH-SPEED OPERATION**

The new lightweight arm along with high-output high-revolution motors provide industry leading acceleration and high-speed operation. The acceleration rate automatically adjusts to suit the payload and robot posture to deliver optimum performance and the shortest cycle times.

## **WIDE WORK RANGE**

In addition to extending the robot's maximum reach, the rotation range of each axis has also been increased. The extended motion range translates to a larger usable work area with minimal dead-space and greater flexibility.

## **ENVIRONMENTAL PROTECTION**

The R-Series incorporates a double-seal construction on all axes and the electrical connections are water-resistant offering an IP67 classification for wrist and IP65 for the remaining axes. If a wash-down arm is required, the entire robot can be provided as IP67.

## **HIGH TORQUE**

Kawasaki Rasiolaki

High-output motors, combined with a rigid arm construction, allow for superior wrist torque and load capacity.

## **INTEGRATED FEATURES**

Built-in pneumatic lines and internal wiring are standard. Mounting pads and taps are provided to allow easy installation of additional cabling, tubing or equipment.

#### SPACE SAVING

The slim arm design requires very little floor space. Multiple robots can be installed in "high-density" applications without impeding performance.

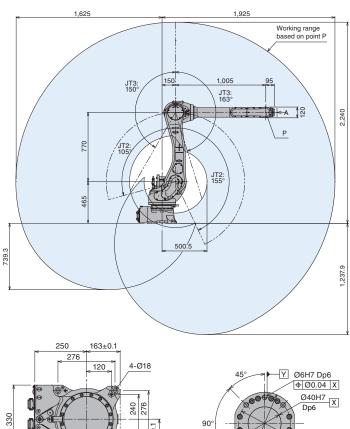
## **EASY MAINTENANCE**

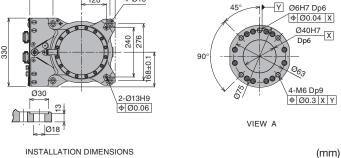
The Kawasaki design requires very little maintenance while boasting ndustry leading mean time between failures (MTBF).





## **MOTION RANGE & DIMENSIONS**





Note: Detailed drawings are available upon request.

RS10L SPECIFICATIONS			
Туре	Articulated		
Degrees of Freedom	6 axes		
Payload	10 kg		
Horizontal Reach	1,925 mm		
Vertical Reach	3,478 mm		
Repeatability	±0.06 mm		
Maximum Speed	13,100 mm/s		
Work Envelope (degrees) & Maximum Speed (degrees/s)	Axis	Motion Range	Maximum Speed
	JT1	±180°	190°/s
	JT2	+155° ~ - 105°	205°/s
	JT3	+150° ~ -163°	210°/s
	JT4	±270°	400°/s
	JT5	±145°	360°/s
	JT6	±360°	610°/s
Wrist Load Capacity	Axis	Maximum Torque	Moment of Inertia
	JT4	22 N·m	0.7 kg·m²
	JT5	22 N·m	0.7 kg⋅m²
	JT6	10 N·m	0.2 kg·m²
Motor(s)	Brushless AC Servomotor		
Brakes	All axes		
Hard Stops	Adjustable mechanical stopper JT1/JT2/JT3		
Mass	230 kg (excluding Options)		
Body Color	Kawasaki Standard		
Installation	Floor, wall, ceiling		
Environmental Conditions	Temperature		0 ~ 45° C
	Humidity		35 ~ 85 % (no dew, nor frost allowed)
	Vibration		Less than 0.5 G
Protection Classification	Wrist: IP67 Base: IP65 * Equivalent		
Built-in Harness	Sensor harness 12 inputs, 24VDC, GND		
Built-in Utilities	Pneumatic piping (ø8 x 2 lines)		
Options	IP67 entire arm JT1/JT2 motor cover Linear track options Riser (300/600 mm) Base plate Double/single solenoid valves (4 units max.) Air cleaning equipment (filter, regulator, mist separator) Limit switch JT1		
Controller	E30 (see E Controller data sheet for specifications)		



Assembly • Cutting • Dispensing • Grinding • Handling • Inspection • Packaging • Painting • Palletizing • Polishing • Tending • Welding

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