



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.

RS03N

| | |
|-------------------------|------------|
| Payload | 3 kg |
| Horizontal Reach | 620 mm |
| Vertical Reach | 967 mm |
| Repeatability | ±0.02 mm |
| Maximum Speed | 6,000 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

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.

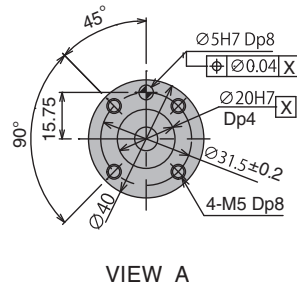
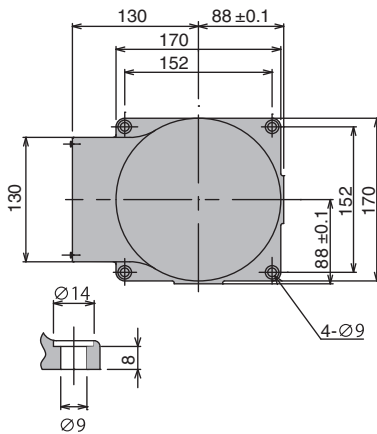
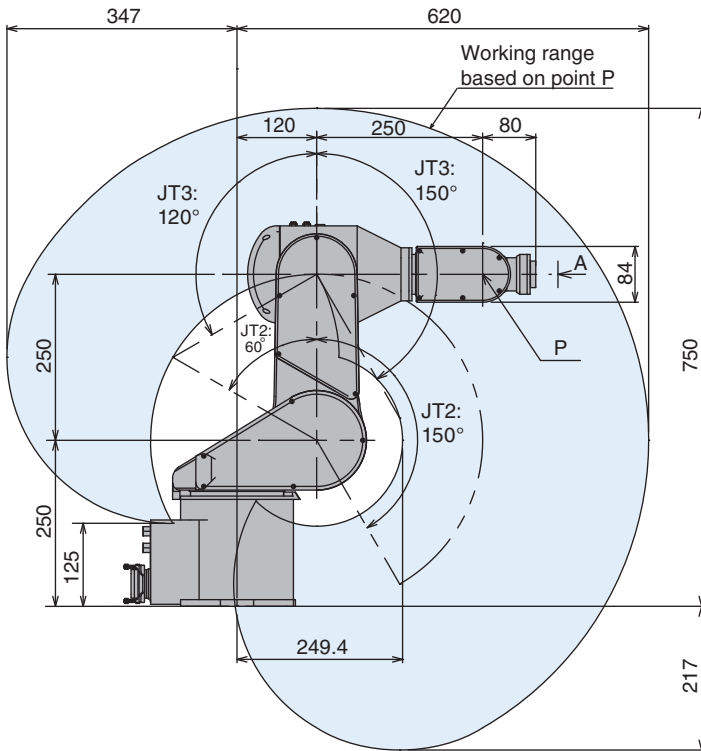
SPACE SAVING

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 industry leading mean time between failures (MTBF).

MOTION RANGE & DIMENSIONS



INSTALLATION DIMENSIONS

(mm)

Note: Detailed drawings are available upon request.

Simple friendly

RS03N SPECIFICATIONS

| | | | |
|---|--|---------------------------------------|------------------------|
| Type | Articulated | | |
| Degrees of Freedom | 6 axes | | |
| Payload | 3 kg | | |
| Horizontal Reach | 620 mm | | |
| Vertical Reach | 967 mm | | |
| Repeatability | ±0.02 mm | | |
| Maximum Speed | 6,000 mm/s | | |
| Work Envelope (degrees) & Maximum Speed (degrees/s) | Axis | Motion Range | Maximum Speed |
| | JT1 | ±160° | 360°/s |
| | JT2 | +150° ~ - 60° | 250°/s |
| | JT3 | +120° ~ -150° | 225°/s |
| | JT4 | ±360° | 540°/s |
| | JT5 | ±135° | 225°/s |
| | JT6 | ±360° | 540°/s |
| Wrist Load Capacity | Axis | Maximum Torque | Moment of Inertia |
| | JT4 | 5.8 N·m | 0.12 kg·m ² |
| | JT5 | 5.8 N·m | 0.12 kg·m ² |
| JT6 | 2.9 N·m | 0.03 kg·m ² | |
| Motor(s) | Brushless AC Servomotor | | |
| Brakes | All axes | | |
| Hard Stop(s) | Adjustable mechanical stopper JT1 | | |
| Mass | 20 kg (excluding Options) | | |
| Body Color | Kawasaki Standard | | |
| Installation | Floor, ceiling | | |
| Environmental Conditions | Temperature | 0 ~ 45° C | |
| | Humidity | 35 ~ 85 % (no dew, nor frost allowed) | |
| | Vibration | Less than 0.5 G | |
| Protection Classification | IP54 * Equivalent | | |
| Built-in Harness | Sensor harness 4 inputs, 24VDC, GND | | |
| Built-in Utilities | Pneumatic piping (ø4 x 2 lines) | | |
| Options | Wall mount Double/single solenoid valves (2 units max.) | | |