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Kawasaki Robotics website
<https://kawasakirobotics.com/>



Kawasaki Robot

Medical & Pharmaceutical Robots

Small-to-medium robots
 up to 80kg payload

Large robots
 up to 300kg payload

Extra large robots
 up to 1,500kg payload

Dual-arm Collaborative robots

Explosion-proof painting robots

Sealing robots

Arc welding robots

Palletizing robots

Medical & pharmaceutical robots

Picking robots

Wafer transfer robots

Self-Propelled Robot



CAUTIONS TO BE TAKEN TO ENSURE SAFETY

- For those persons involved with the operation / service of your system, including Kawasaki Robot, they must strictly observe all safety regulations at all times. They should carefully read the Manuals and other related safety documents.
- Products described in this catalogue are general industrial robots. Therefore, if a customer wishes to use the Robot for special purposes, which might endanger operators or if the Robot has any problems, please contact us. We will be pleased to help you.
- Be careful as Photographs illustrated in this catalogue are frequently taken after removing safety fences and other safety devices stipulated in the safety regulations from the Robot operation system.



Medical and Pharmaceutical Robots

Controller

F60

Features

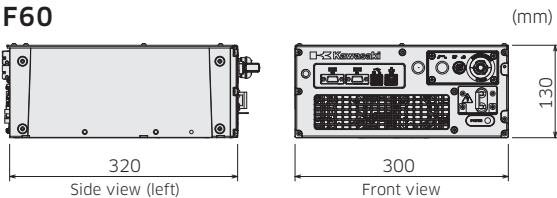
- Universal controller has common specifications to be used worldwide.
- Drastic downsizing has achieved very compact dimensions and light weight (8.3kg). It is easy for a person to carry the controller.

Standard Specifications

Dimensions (mm)		W300×D320×H130
Type		Open type indirect cooling system (IP20 or equivalent)
Controlled (axes)		6
Memory capacity (MB)		16
I/O signals	External operation	Motor power off, Hold
	Input (Channels)	16
	Output (Channels)	16
Cable length	Teach pendant (m)	5
	Robot-controller (m)	5
Mass (kg)		8.3
Power requirements		AC200 - AC230V ±10%, 50/60Hz, 1Φ Max. 2.0kVA
Installation environment	Ambient temperature (°C)	0 - 45
	Relative humidity (%)	35 - 85 (No dew, nor frost allowed)
Teach pendant		TFT color LCD display with touch-panel, E-Stop switch, Teach lock switch, Enable switch
Operation panel		E-stop switch, teach/repeat switch



External view and dimensions

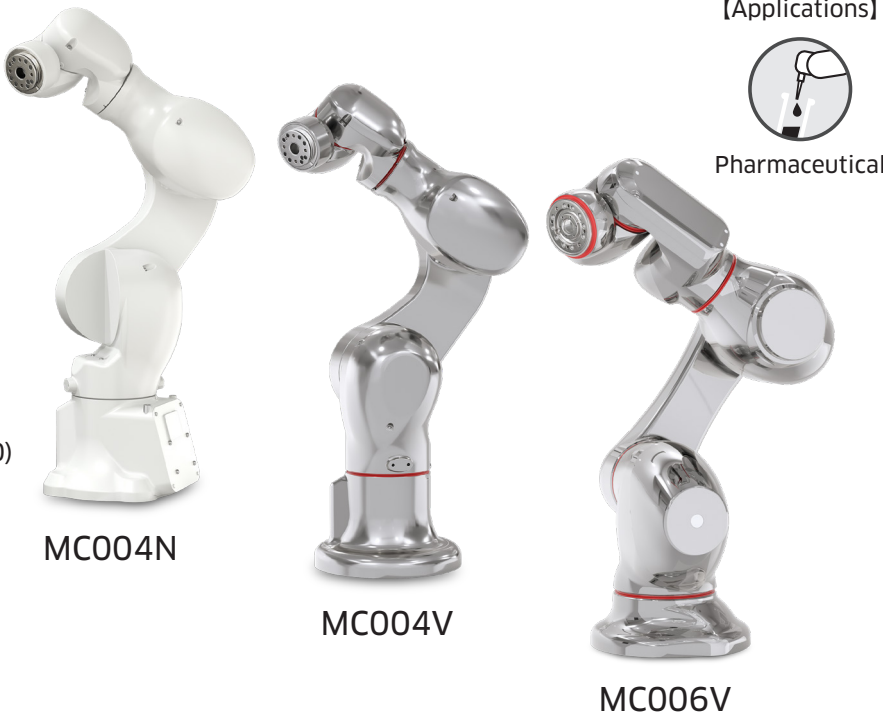


MC series

The streamlined arm with a special surface treatment is chemical-resistant, allowing for sterilization by VHP.

Features

- Hollow wrist for built-in cables and hoses.
- Compatible with ISO Class 5 (Fed-class 100) without vacuum piping.
- Special sealing material that enables sterilization by VHP. (MC004V/MC006V)
- Improved glossy plating, which offers a resistance to a wider range of chemicals. (MC006V)



【Applications】



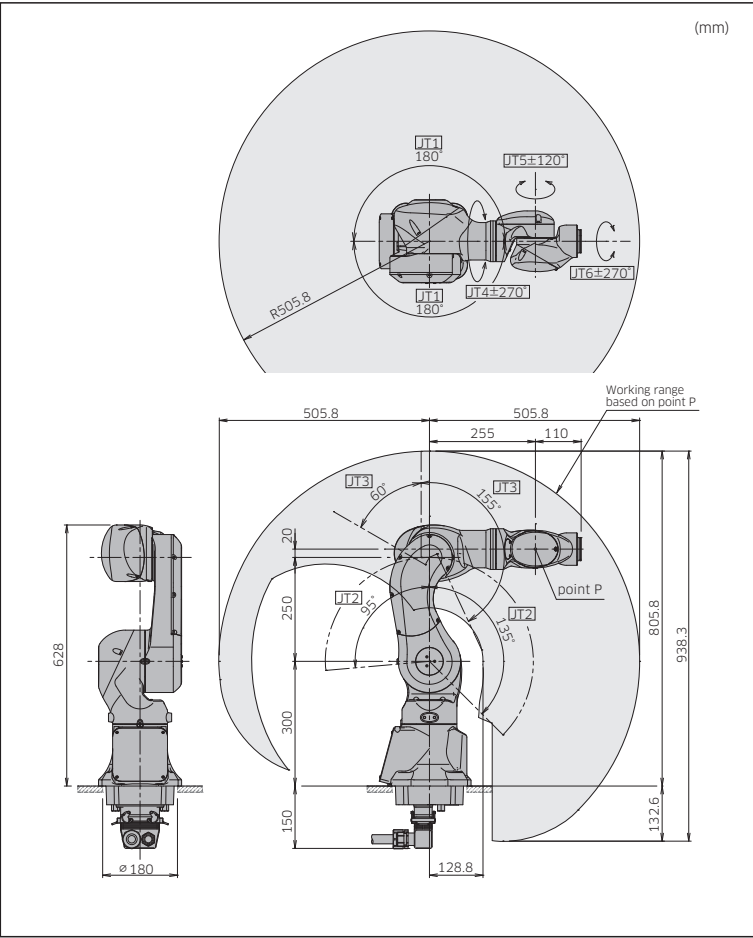
Pharmaceutical

MC004N / MC004V

Standard Specifications

Type		Articulated robot
Degree of freedom (axes)		6
Payload (kg)		4
Max. reach (mm)		505.8
Position repeatability*1 (mm)		±0.028
Motion range (°)	Arm rotation (JT1)	±180
	Arm out-in (JT2)	+135 - -95
	Arm up-down (JT3)	+60 - -155
	Wrist swivel (JT4)	±270
	Wrist bend (JT5)	±120
	Wrist twist (JT6)	±270
Max. speed (°/s)	Arm rotation (JT1)	200
	Arm out-in (JT2)	180
	Arm up-down (JT3)	225
	Wrist swivel (JT4)	700
	Wrist bend (JT5)	500
	Wrist twist (JT6)	350
Allowable moment (N·m)	Wrist swivel (JT4)	8.5
	Wrist bend (JT5)	8.5
	Wrist twist (JT6)	4.0
Allowable moment of inertia (kg·m²)	Wrist swivel (JT4)	0.2
	Wrist bend (JT5)	0.2
	Wrist twist (JT6)	0.1
Mass (kg)		25
Mounting		Floor, Ceiling
Installation environment	Ambient temperature (°C)	10 - 35
	Relative humidity (%)	35 - 85 (No dew, nor frost allowed)
Degree of protection*2		Wrist : IP67 or equivalent Base axes : IP65 or equivalent
Controller/Power requirements		F60/2.0kVA

*1: Conforms to ISO9283
*2: The flange must be closed in case of using the built-in piping.
*3: Special sealing material that enables sterilization by VHP. (MC004V)



MC006V

Standard Specifications

Type		Articulated robot
Degree of freedom (axes)		6
Payload (kg)		6
Max. reach (mm)		610
Position repeatability*1 (mm)		±0.3
Motion range (°)	Arm rotation (JT1)	±180
	Arm out-in (JT2)	+130
	Arm up-down (JT3)	+150
	Wrist swivel (JT4)	±270
	Wrist bend (JT5)	±120
	Wrist twist (JT6)	±270
Max. speed (°/s)	Arm rotation (JT1)	400
	Arm out-in (JT2)	300
	Arm up-down (JT3)	420
	Wrist swivel (JT4)	450
	Wrist bend (JT5)	450
	Wrist twist (JT6)	700
Allowable moment (N·m)	Wrist swivel (JT4)	13.0
	Wrist bend (JT5)	13.0
	Wrist twist (JT6)	7.0
Allowable moment of inertia (kg·m²)	Wrist swivel (JT4)	0.5
	Wrist bend (JT5)	0.5
	Wrist twist (JT6)	0.2
Mass (kg)		44
Mounting		Floor, Ceiling, Wall
Installation environment	Ambient temperature (°C)	10 - 35
	Relative humidity (%)	35 - 85 (No dew, nor frost allowed)
Degree of protection*2		IP67 or equivalent
Controller/Power requirements		F60/2.0kVA

*1: Conforms to ISO9283
*2: The flange must be closed in case of using the built-in piping.
*3: Special sealing material that enables sterilization by VHP.

