



Standard Specifications

MC004V-B00x

MC004V-B01x

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Kawasaki Heavy Industries, Ltd.
Robot Business Division

Specification number : 90151-0353DEC

Materials and specifications are subject to change without notice.

Robot specifications

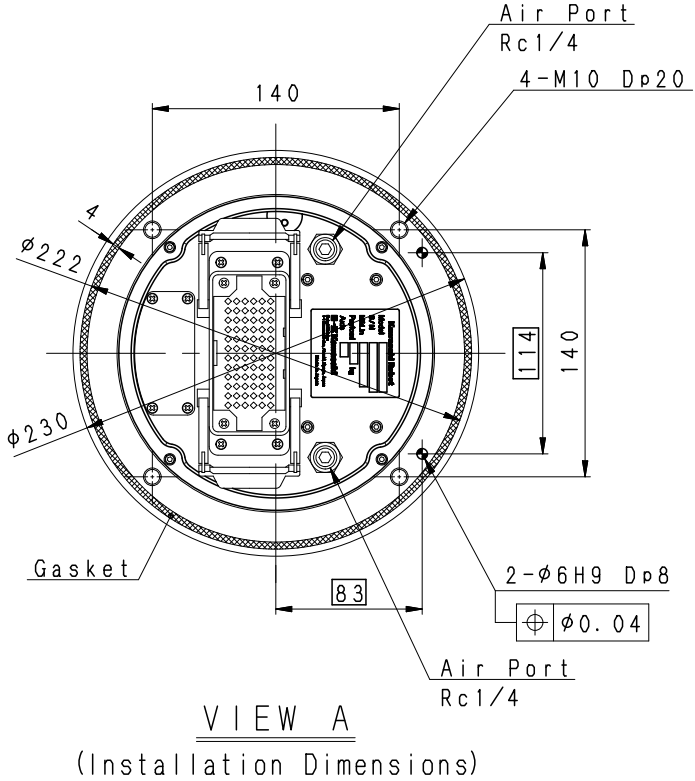
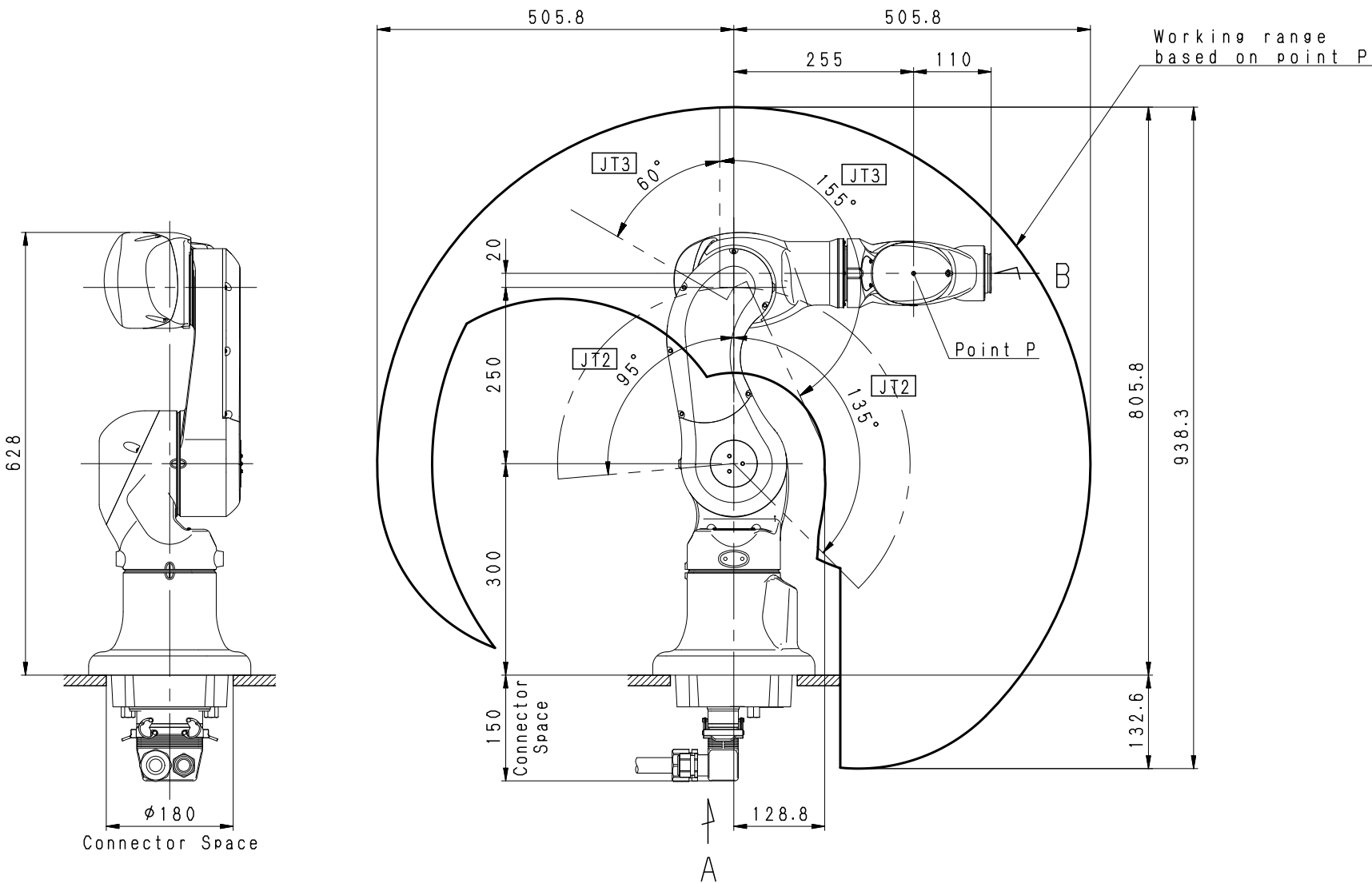
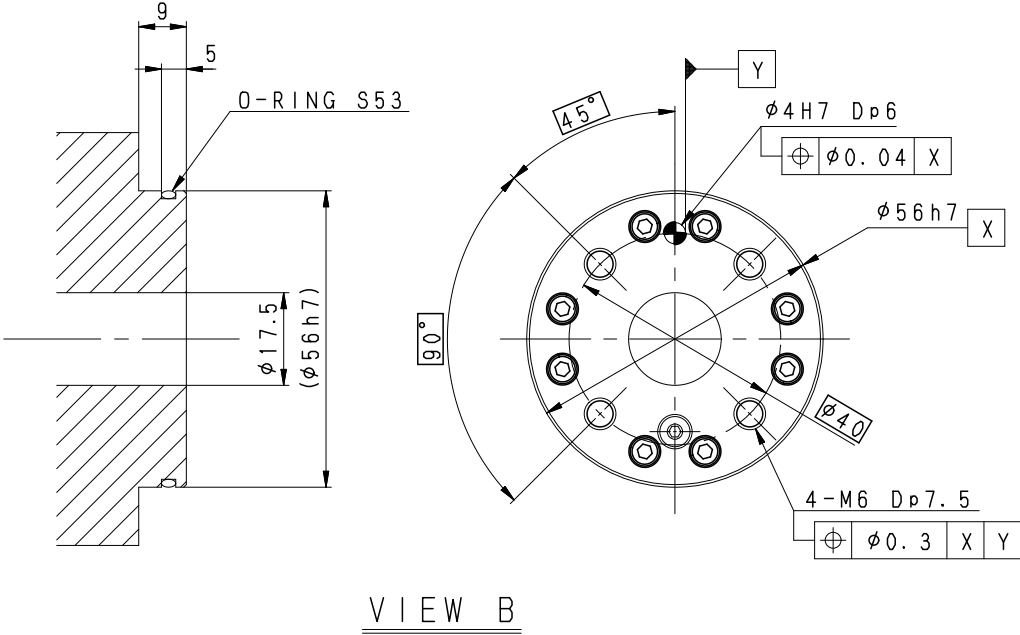
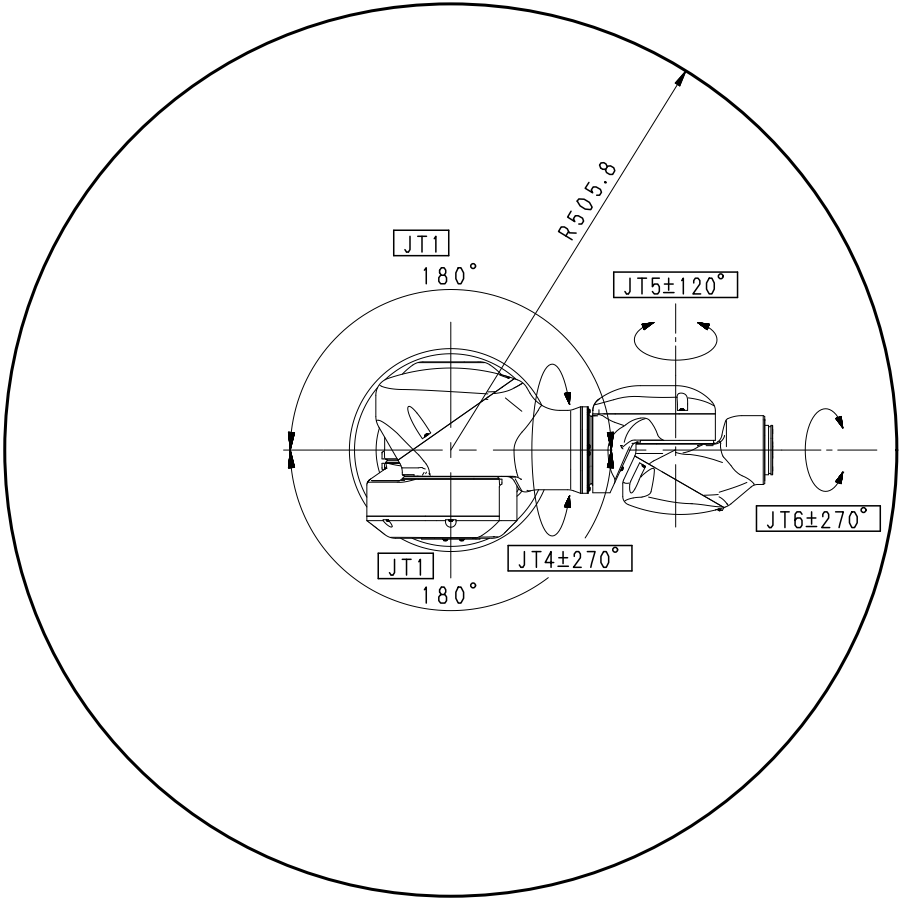
1. Model	MC004V-Bxxx																							
	B00x : Air tool specifications B01x : Servo tool specifications																							
2. Type	Articulated robot																							
3. Degree of freedom	6 axes (option 8 axes ^{*1})																							
4. Max. payload	4 kg																							
5. Max. reach	505.8 mm																							
6. Position repeatability	±0.028 mm (wrist flange surface) conforms to ISO 9283																							
7. Axis specification	<table><tr><th>Operating axis</th><th>Motion range</th><th>Max. speed</th></tr><tr><td>Arm rotation (JT1)</td><td>±180 °</td><td>200 ° /s</td></tr><tr><td>Arm out-in (JT2)</td><td>+135 ° - -95 °</td><td>180 ° /s</td></tr><tr><td>Arm up-down (JT3)</td><td>+60 ° - -155 °</td><td>225 ° /s</td></tr><tr><td>Wrist swivel (JT4)</td><td>±270 °</td><td>700 ° /s</td></tr><tr><td>Wrist bend (JT5)</td><td>±120 °</td><td>500 ° /s</td></tr><tr><td>Wrist twist (JT6)</td><td>±270 °</td><td>350 ° /s</td></tr></table>			Operating axis	Motion range	Max. speed	Arm rotation (JT1)	±180 °	200 ° /s	Arm out-in (JT2)	+135 ° - -95 °	180 ° /s	Arm up-down (JT3)	+60 ° - -155 °	225 ° /s	Wrist swivel (JT4)	±270 °	700 ° /s	Wrist bend (JT5)	±120 °	500 ° /s	Wrist twist (JT6)	±270 °	350 ° /s
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8. Load capacity of wrist	<table><tr><td></td><td>Max. torque</td><td>Moment of inertia*</td></tr><tr><td>JT4</td><td>8.5 N・m</td><td>0.20 kg・m²</td></tr><tr><td>JT5</td><td>8.5 N・m</td><td>0.20 kg・m²</td></tr><tr><td>JT6</td><td>4.0 N・m</td><td>0.10 kg・m²</td></tr></table> Note * Each value in this table shows allowable moment of inertia of JT4/JT5/JT6 when max. allowed torque is applied to each axis. If more detailed data is required for your application, please contact Kawasaki.				Max. torque	Moment of inertia*	JT4	8.5 N・m	0.20 kg・m ²	JT5	8.5 N・m	0.20 kg・m ²	JT6	4.0 N・m	0.10 kg・m ²									
	Max. torque	Moment of inertia*																						
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JT6	4.0 N・m	0.10 kg・m ²																						
9. Mass	25 kg (without options)																							
10. Mounting	Floor or Ceiling mounting																							
11. Installation Environment	Ambient Temperature: 10 - 35 °C Relative Humidity: 35 - 85 % (with no dew condensation)																							
12. External facing	Plating for resistance to VHP and Buff #400 ^{*3}																							
13. Degree of protection	Wrist: IP67 equivalent, Arm: IP65 equivalent																							
14. Cleanliness	ISO class 5																							
15. Built-in utilities	Sensor harness	8 circuits																						
	Solenoid valve ^{*2}	Double / Single solenoid valves (2 units max.)																						
	Air port ^{*2}	2 ports (Rc 1/4)																						
	Pneumatic piping ^{*2}	φ 4 × max 4 lines																						
16. Supported sterilization	Dry process of VHP sterilization Reference Concentration of VHP: 400 - 1,200 ppm																							
17. Encoder backup battery	External: extension harness 3 m																							
18. Connector panel	Bottom connected																							
19. I/O type	NPN(sink) type																							
20. Options	Encoder backup battery	External: extension harness 1 - 5 m (every 1 m)																						
	I/O type	PNP(source) Type																						
	External axis ^{*1}	50W Brushless AC Servomotor (2 units max.)																						
	Mounting	Wall mounting																						

Consult Kawasaki about maintenance parts and spare parts.

*1 Servo tool specifications only

*2 Air tool specifications only

*3 Avoid chlorine-based chemicals and atmospheres when transporting, storing, installing and using the product, as they may cause the plating to peel off.



MC004V
WORKING RANGE