



Standard Specifications

MS005N-B

1st ed. 26-Jun-15

2nd ed. 20-Jan-21

Kawasaki Heavy Industries, Ltd.
Robot Business Division

Specification number : 90151-0082DEB

Materials and specifications are subject to change without notice.

Robot specifications

1. Model	MS005N-B																									
2. Type	Articulated robot																									
3. Degree of freedom	7 axes																									
4. Max. payload	5 kg																									
5. Max. reach	660 mm																									
6. Position repeatability	±0.10 mm (wrist flange surface) conforms to ISO 9283																									
7. Axis specification	<table border="1"> <thead> <tr> <th>Operating axis</th> <th>Motion range</th> <th>Max. speed</th> </tr> </thead> <tbody> <tr> <td>Arm rotation (JT1)</td> <td>±180°</td> <td>130°/s</td> </tr> <tr> <td>Arm out-in (JT2)</td> <td>+135° - -90°</td> <td>130°/s</td> </tr> <tr> <td>Arm up-down (JT3)</td> <td>±120°</td> <td>215°/s</td> </tr> <tr> <td>Wrist swivel (JT4)</td> <td>±180°</td> <td>300°/s</td> </tr> <tr> <td>Wrist bend (JT5)</td> <td>±115°</td> <td>300°/s</td> </tr> <tr> <td>Wrist twist (JT6)</td> <td>±180°</td> <td>480°/s</td> </tr> <tr> <td>Arm rotation (JT7)</td> <td>±180°</td> <td>215°/s</td> </tr> </tbody> </table>		Operating axis	Motion range	Max. speed	Arm rotation (JT1)	±180°	130°/s	Arm out-in (JT2)	+135° - -90°	130°/s	Arm up-down (JT3)	±120°	215°/s	Wrist swivel (JT4)	±180°	300°/s	Wrist bend (JT5)	±115°	300°/s	Wrist twist (JT6)	±180°	480°/s	Arm rotation (JT7)	±180°	215°/s
Operating axis	Motion range	Max. speed																								
Arm rotation (JT1)	±180°	130°/s																								
Arm out-in (JT2)	+135° - -90°	130°/s																								
Arm up-down (JT3)	±120°	215°/s																								
Wrist swivel (JT4)	±180°	300°/s																								
Wrist bend (JT5)	±115°	300°/s																								
Wrist twist (JT6)	±180°	480°/s																								
Arm rotation (JT7)	±180°	215°/s																								
8. Load capacity of wrist	<table border="1"> <thead> <tr> <th></th> <th>Max. torque</th> <th>Moment of inertia*</th> </tr> </thead> <tbody> <tr> <td>JT4</td> <td>17.0 N·m</td> <td>0.90 kg·m²</td> </tr> <tr> <td>JT5</td> <td>17.0 N·m</td> <td>0.90 kg·m²</td> </tr> <tr> <td>JT6</td> <td>7.0 N·m</td> <td>0.40 kg·m²</td> </tr> </tbody> </table> <p>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.</p>			Max. torque	Moment of inertia*	JT4	17.0 N·m	0.90 kg·m ²	JT5	17.0 N·m	0.90 kg·m ²	JT6	7.0 N·m	0.40 kg·m ²												
	Max. torque	Moment of inertia*																								
JT4	17.0 N·m	0.90 kg·m ²																								
JT5	17.0 N·m	0.90 kg·m ²																								
JT6	7.0 N·m	0.40 kg·m ²																								
9. Mass	50 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	Mirror-finished Stainless steel (316L equivalent)																									
13. Degree of protection	IP69K equivalent (except connectors box)																									
14. Cleanliness	ISO class 5																									
15. I/O type	NPN(sink) type																									
16. Overhaul interval	15000Hours (Conditional interval: 20000Hours)																									
17. Options	I/O type	PNP(source) Type																								

Consult Kawasaki about maintenance parts and spare parts.

