



Standard Specifications

BX165L-C50x

BX165L-F50x

1st ed. 28-Sep-16

4rd ed. 03-Apr-24

Kawasaki Heavy Industries, Ltd.
Robot Business Division

Specification number : 90151-0169DED

Robot specifications

1. Model	BX165L-C, BX165L-F																						
2. Type	Articulated robot																						
3. Degree of freedom	6 axes (Option 7 axes)																						
4. Max. payload	165 kg																						
5. Max. reach	2,597 mm																						
6. Position repeatability	±0.06 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>±160 °</td><td>120 °/s</td></tr> <tr> <td>Arm out-in (JT2)</td><td>+76 ° - -60 °</td><td>110 °/s</td></tr> <tr> <td>Arm up-down (JT3)</td><td>+90 ° - -75 °</td><td>130 °/s</td></tr> <tr> <td>Wrist swivel (JT4)</td><td>±210 °</td><td>170 °/s</td></tr> <tr> <td>Wrist bend (JT5)</td><td>±125 °</td><td>170 °/s</td></tr> <tr> <td>Wrist twist (JT6)</td><td>±210 °</td><td>280 °/s</td></tr> </table>		Operating axis	Motion range	Max. speed	Arm rotation (JT1)	±160 °	120 °/s	Arm out-in (JT2)	+76 ° - -60 °	110 °/s	Arm up-down (JT3)	+90 ° - -75 °	130 °/s	Wrist swivel (JT4)	±210 °	170 °/s	Wrist bend (JT5)	±125 °	170 °/s	Wrist twist (JT6)	±210 °	280 °/s
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8. Load capacity of wrist	<table> <tr> <th></th><th>Max. torque</th><th>Moment of inertia*</th></tr> <tr> <td>JT4</td><td>952 N·m</td><td>99 kg·m²</td></tr> <tr> <td>JT5</td><td>952 N·m</td><td>99 kg·m²</td></tr> <tr> <td>JT6</td><td>491 N·m</td><td>49.5 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	952 N·m	99 kg·m ²	JT5	952 N·m	99 kg·m ²	JT6	491 N·m	49.5 kg·m ²									
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JT5	952 N·m	99 kg·m ²																					
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9. Mass	890 kg (without options)																						
10. Mounting	Floor mounting																						
11. Installation Environment	Ambient Temperature: 0 - 45 °C																						
	Relative Humidity: 35 - 85 % (with no dew condensation)																						
12. Color	Munsell 10GY9/1 equivalent																						
13. Degree of protection	Wrist: IP67 equivalent, Arm: IP54 equivalent																						
14. Built-in utilities	-																						
15. Options																							
Mounting	-																						
Degree of protection	JT6 seal protection flange																						
Option harness	Type C0																						
	Type D0																						
	Type E0(NPN/PNP)																						
	Type H0(NPN/PNP)																						
Solenoid valve	Double solenoid / Single solenoid valves (3 units max.)																						
Air cleaning	Filter, Regulator, Mist separator																						
Mechanical stopper	Adjustable stopper JT1/JT2/JT3																						
Adapter plate	Between tool and wrist flange (tool side tapping PCD: 125/160, 92/125, 125)																						
Installation stand	-																						
Transport JIG	Fork pocket																						
Base plate	-																						

