



## Standard Specifications

BX200L-C00x

BX200L-F00x

1st ed. 28-Sep-16

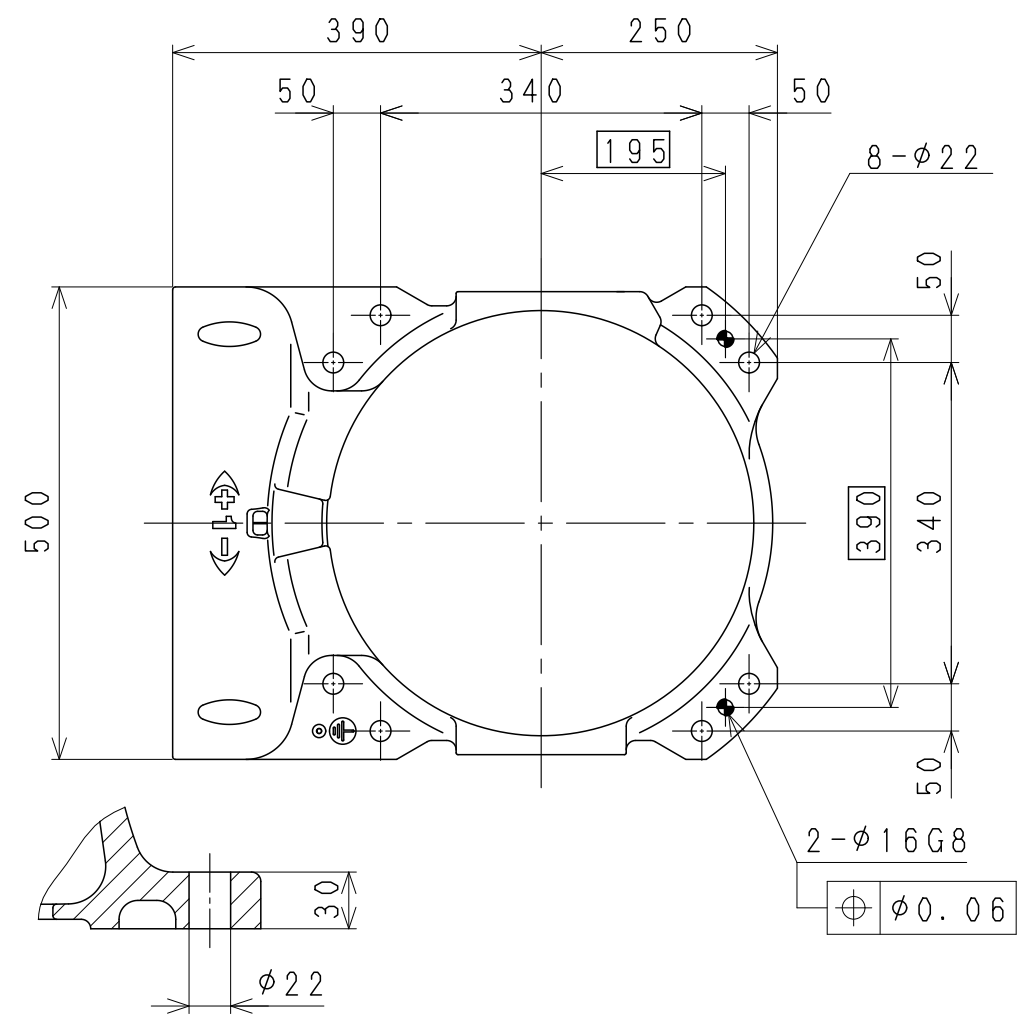
4rd ed. 03-Apr-24

Kawasaki Heavy Industries, Ltd.  
Robot Business Division

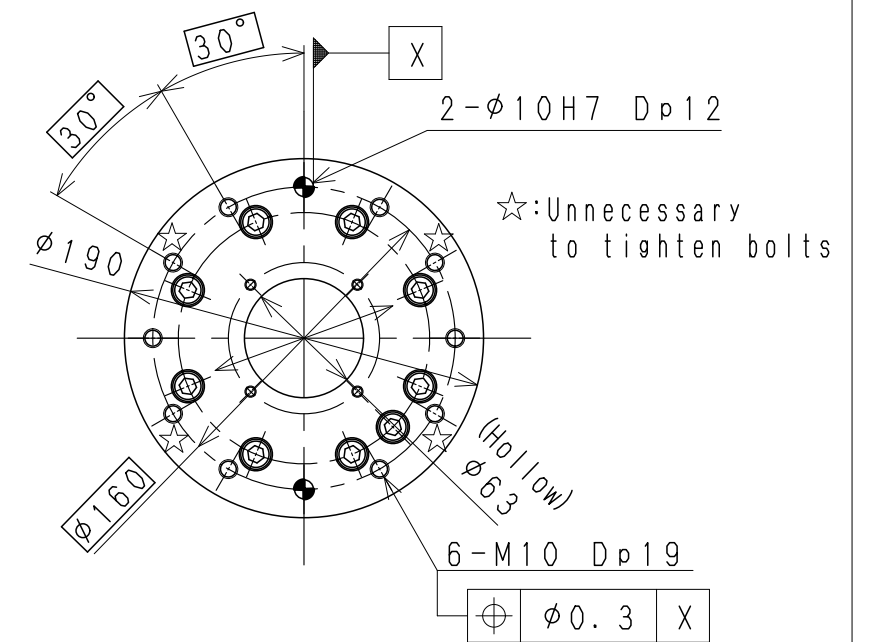
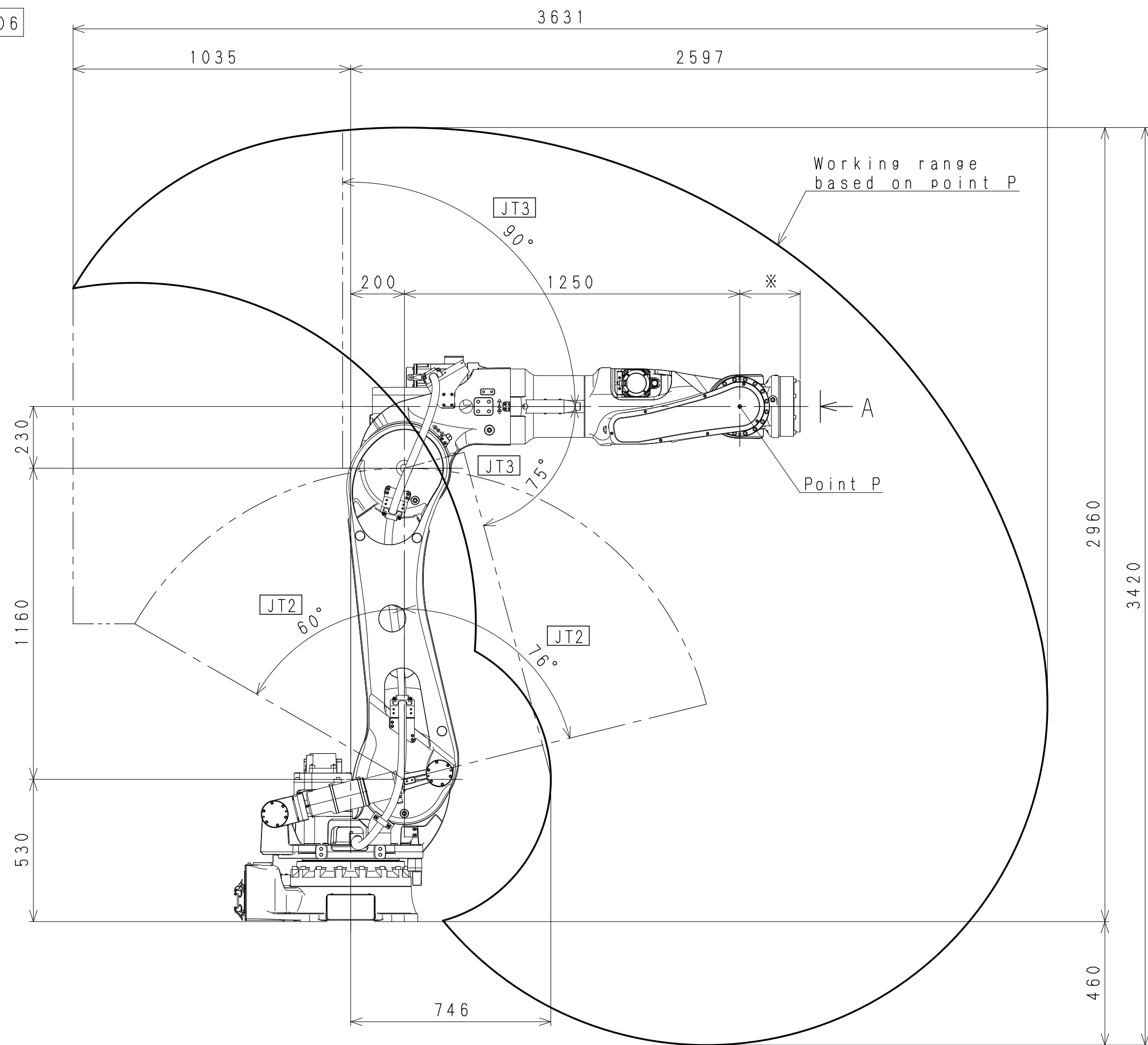
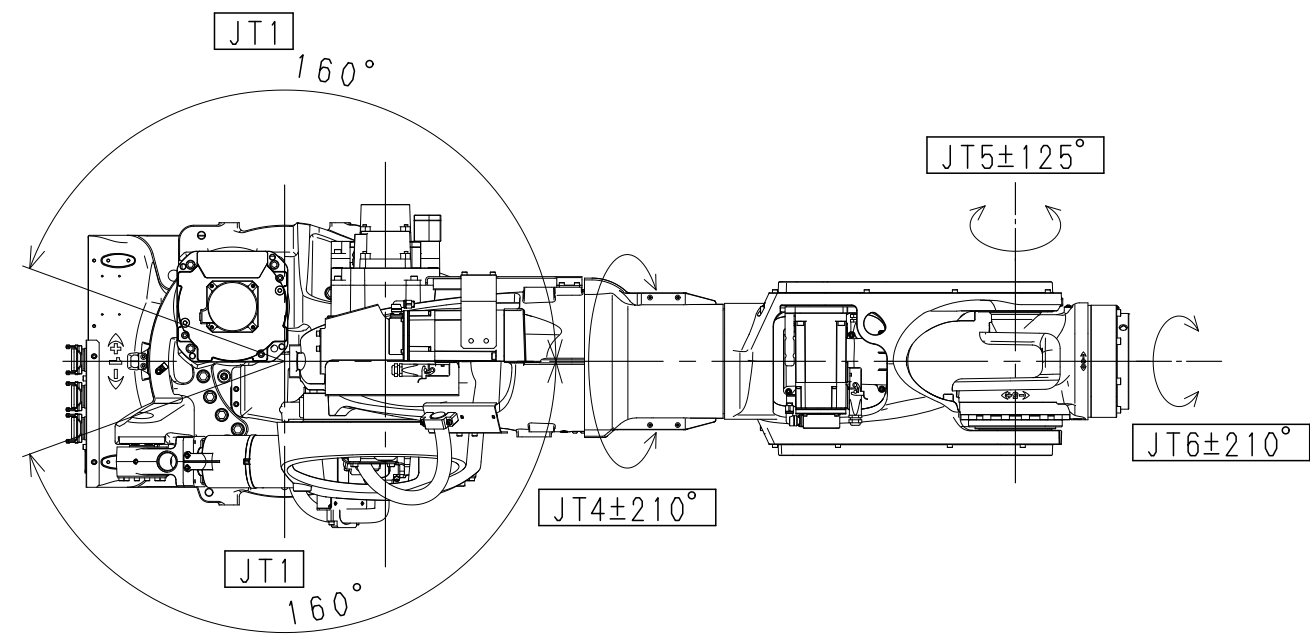
Specification number : 90151-0172DED

## Robot specifications

| 1. Model                     | BX200L-C, BX200L-F                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                         |                |              |                    |                    |           |                         |                  |               |                         |                   |               |                         |                    |        |          |                  |        |          |                   |        |          |
|------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|----------------|--------------|--------------------|--------------------|-----------|-------------------------|------------------|---------------|-------------------------|-------------------|---------------|-------------------------|--------------------|--------|----------|------------------|--------|----------|-------------------|--------|----------|
| 2. Type                      | Articulated robot                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                         |                |              |                    |                    |           |                         |                  |               |                         |                   |               |                         |                    |        |          |                  |        |          |                   |        |          |
| 3. Degree of freedom         | 6 axes (Option 7 axes)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                         |                |              |                    |                    |           |                         |                  |               |                         |                   |               |                         |                    |        |          |                  |        |          |                   |        |          |
| 4. Max. payload              | 200 kg                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                         |                |              |                    |                    |           |                         |                  |               |                         |                   |               |                         |                    |        |          |                  |        |          |                   |        |          |
| 5. Max. reach                | 2,597 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                         |                |              |                    |                    |           |                         |                  |               |                         |                   |               |                         |                    |        |          |                  |        |          |                   |        |          |
| 6. Position repeatability    | ±0.06 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>±160 °</td><td>105 ° /s</td></tr> <tr> <td>Arm out-in (JT2)</td><td>+76 ° - -60 °</td><td>90 ° /s</td></tr> <tr> <td>Arm up-down (JT3)</td><td>+90 ° - -75 °</td><td>100 ° /s</td></tr> <tr> <td>Wrist swivel (JT4)</td><td>±210 °</td><td>120 ° /s</td></tr> <tr> <td>Wrist bend (JT5)</td><td>±125 °</td><td>120 ° /s</td></tr> <tr> <td>Wrist twist (JT6)</td><td>±210 °</td><td>200 ° /s</td></tr> </tbody> </table> |                         | Operating axis | Motion range | Max. speed         | Arm rotation (JT1) | ±160 °    | 105 ° /s                | Arm out-in (JT2) | +76 ° - -60 ° | 90 ° /s                 | Arm up-down (JT3) | +90 ° - -75 ° | 100 ° /s                | Wrist swivel (JT4) | ±210 ° | 120 ° /s | Wrist bend (JT5) | ±125 ° | 120 ° /s | Wrist twist (JT6) | ±210 ° | 200 ° /s |
| Operating axis               | Motion range                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Max. speed              |                |              |                    |                    |           |                         |                  |               |                         |                   |               |                         |                    |        |          |                  |        |          |                   |        |          |
| Arm rotation (JT1)           | ±160 °                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 105 ° /s                |                |              |                    |                    |           |                         |                  |               |                         |                   |               |                         |                    |        |          |                  |        |          |                   |        |          |
| Arm out-in (JT2)             | +76 ° - -60 °                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 90 ° /s                 |                |              |                    |                    |           |                         |                  |               |                         |                   |               |                         |                    |        |          |                  |        |          |                   |        |          |
| Arm up-down (JT3)            | +90 ° - -75 °                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 100 ° /s                |                |              |                    |                    |           |                         |                  |               |                         |                   |               |                         |                    |        |          |                  |        |          |                   |        |          |
| Wrist swivel (JT4)           | ±210 °                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 120 ° /s                |                |              |                    |                    |           |                         |                  |               |                         |                   |               |                         |                    |        |          |                  |        |          |                   |        |          |
| Wrist bend (JT5)             | ±125 °                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 120 ° /s                |                |              |                    |                    |           |                         |                  |               |                         |                   |               |                         |                    |        |          |                  |        |          |                   |        |          |
| Wrist twist (JT6)            | ±210 °                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 200 ° /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>1,334 N·m</td><td>199.8 kg·m<sup>2</sup></td></tr> <tr> <td>JT5</td><td>1,334 N·m</td><td>199.8 kg·m<sup>2</sup></td></tr> <tr> <td>JT6</td><td>588 N·m</td><td>154.9 kg·m<sup>2</sup></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                | 1,334 N·m | 199.8 kg·m <sup>2</sup> | JT5              | 1,334 N·m     | 199.8 kg·m <sup>2</sup> | JT6               | 588 N·m       | 154.9 kg·m <sup>2</sup> |                    |        |          |                  |        |          |                   |        |          |
|                              | Max. torque                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Moment of inertia*      |                |              |                    |                    |           |                         |                  |               |                         |                   |               |                         |                    |        |          |                  |        |          |                   |        |          |
| JT4                          | 1,334 N·m                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 199.8 kg·m <sup>2</sup> |                |              |                    |                    |           |                         |                  |               |                         |                   |               |                         |                    |        |          |                  |        |          |                   |        |          |
| JT5                          | 1,334 N·m                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 199.8 kg·m <sup>2</sup> |                |              |                    |                    |           |                         |                  |               |                         |                   |               |                         |                    |        |          |                  |        |          |                   |        |          |
| JT6                          | 588 N·m                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 154.9 kg·m <sup>2</sup> |                |              |                    |                    |           |                         |                  |               |                         |                   |               |                         |                    |        |          |                  |        |          |                   |        |          |
| 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                   | -                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                         |                |              |                    |                    |           |                         |                  |               |                         |                   |               |                         |                    |        |          |                  |        |          |                   |        |          |

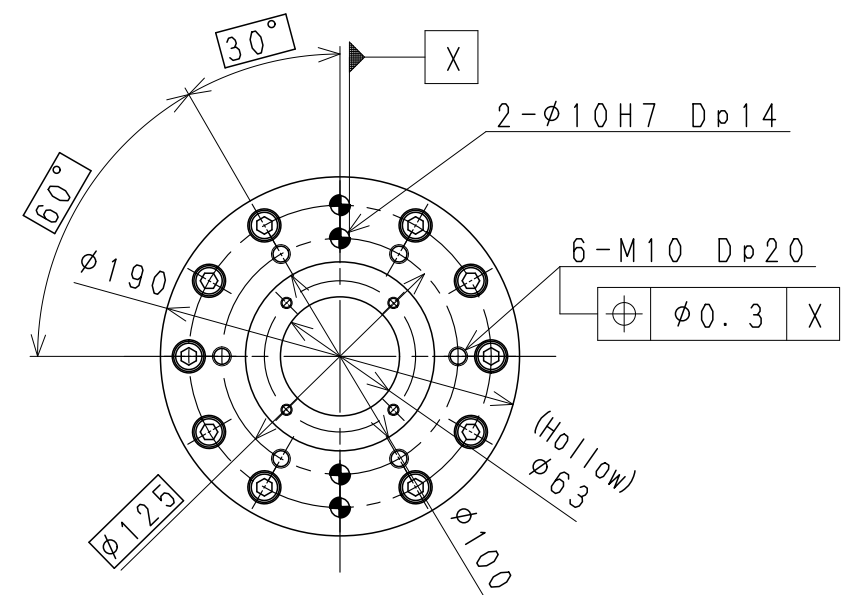


Installation Dimensions



STANDARD FLANGE

※ Dimension: 225



OPTION FLANGE

※ Dimension: 245

VIEW A

BX100L/165L/200L  
WORKING RANGE