



Standard Specifications

KJ314U-D

(for E controller)

1st ed. 24-Jan-19

2nd ed. 31-Jan-25

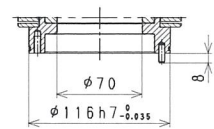
Kawasaki Heavy Industries, Ltd.
Robot Business Division

Specification number : 90151-0217DEB

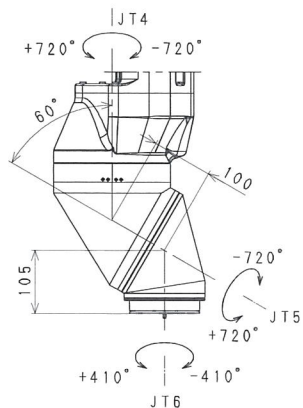
Robot specifications

1. Model	Installation mode		Fix Installation		Flexible Installation	
			Standard	Mirror	Standard	Mirror
	Wall mounting		KJ314U-D4	KJ314U-D5	KJ314U-D0	KJ314U-D1
2. Type	Articulated robot + Swing unit					
3. Degree of freedom	7 axes (6 axes + 1 axis)					
4. Max. payload	Wrist : 15 kg (at the tool mounting surface) Upper arm : 25 kg (including painting equipment in the pressurized chamber)					
5. Max. reach	3,100 mm					
6. Position repeatability	±0.5 mm (wrist flange surface) conforms to ISO 9283					
7. Max. painting speed	1,500 mm/s (at the center of tool mounting surface)					
8. Axis specification	Operating axis		Motion range			
	Arm rotation	(JT1)	±120°			
	Arm out-in	(JT2)	+ 130° - - 80°			
	Arm up-down	(JT3)	+ 90° - - 65°			
	Wrist swivel	(JT4)	±720°			
	Wrist bend	(JT5)	±720°			
	Wrist twist	(JT6)	±410°			
	Swing	(JT7)	±90°			
9. Load capacity of wrist			Max. torque	Moment of inertia*		
	JT4		56.2 N·m	2.19 kg·m ²		
	JT5		43.4 N·m	1.31 kg·m ²		
	JT6		22.0 N·m	0.33 kg·m ²		
<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>						
10. Mass	720 kg (without options)					
11. Mounting	Wall mounting					
	KJ314U-D4, KJ314U-D5	Fix Installation (install on fixed plane)				
	KJ314U-D0, KJ314U-D1	Flexible Installation (install on traverse unit)				
12. Installation Environment	Ambient Temperature :		0 - 40 °C			
	Relative Humidity :		35 - 85 % (with no dew condensation)			
13. Color	Munsell 10GY9/1 equivalent					
14. Explosion proof	Pressurized and intrinsically safe					
15. Air supply to the manipulator	Clean & dry air	0.5 Nm ³ /min, 0.4 - 0.7 MPa				
	Dew point	- 17 or less at atmospheric pressure				
	Solid material	0.01 μm or less				
	Oil content	Mist separation 99.9999% or more				
16. Options	Mechanical stopper	Adjustable stoppers JT1/JT2/JT3				
	Painting equipment	FGP motor (1 unit can be equipped with)				
		Solenoid valve for painting (up to 3 units can be equipped with)				
		Electro pneumatic converter for painting (up to 3 units can be equipped with)				
	Upper Arm Cover					
	Application hose protection unit					

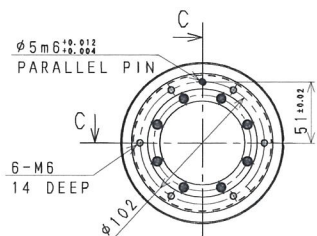
Consult Kawasaki about maintenance parts and spare parts.



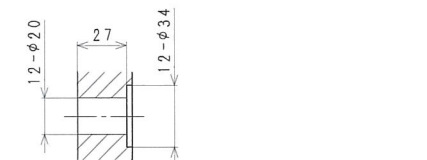
SECTION C-C



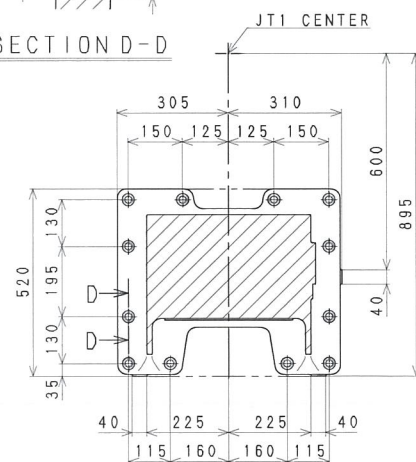
DETAIL A



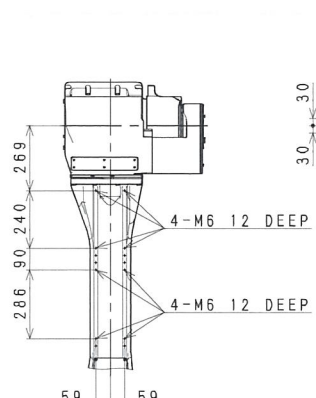
VIEW B



SECTION D-D

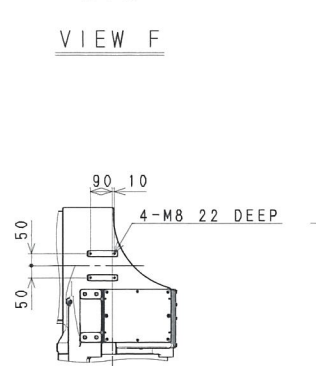


Base Installation Dimensions

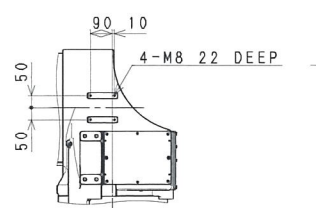
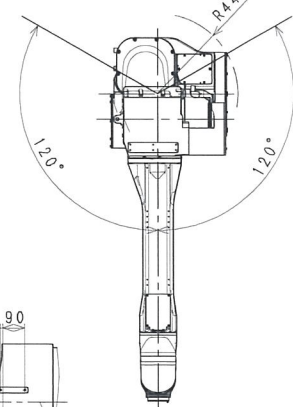


VIEW E

Working range based on point P

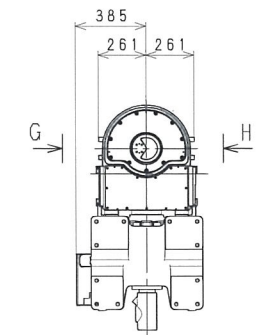
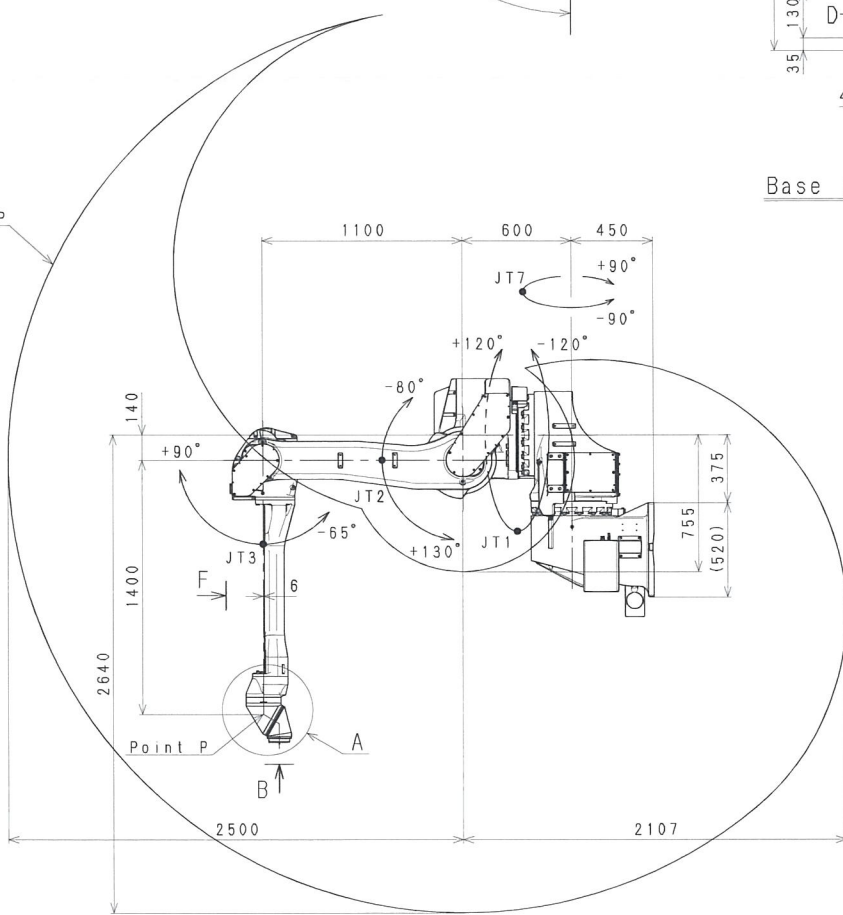


VIEW F

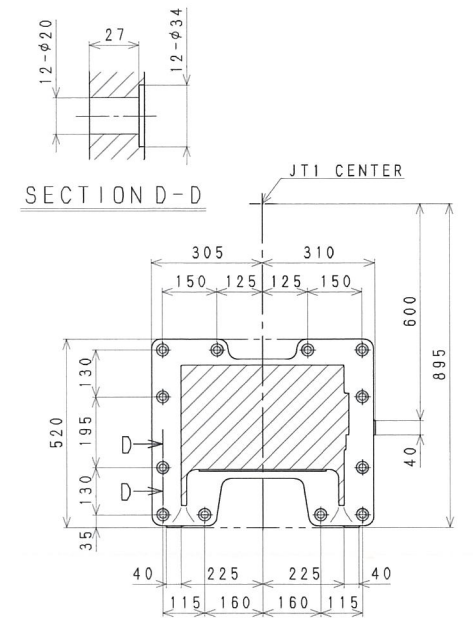
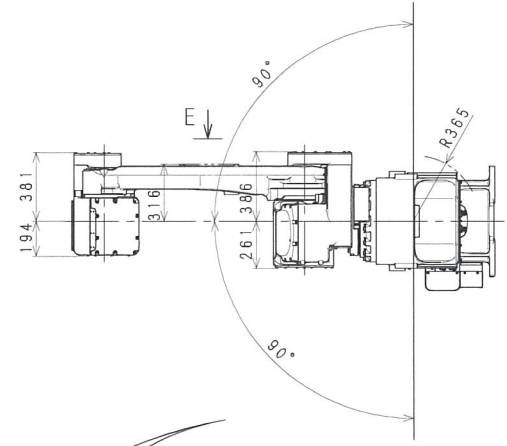
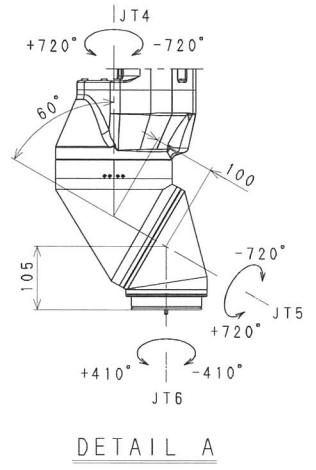
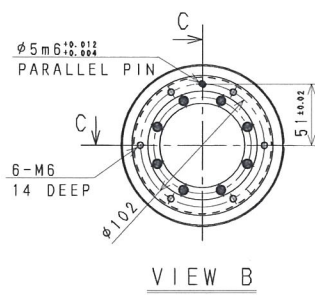
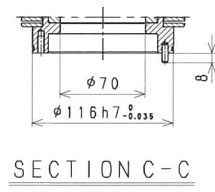


VIEW G

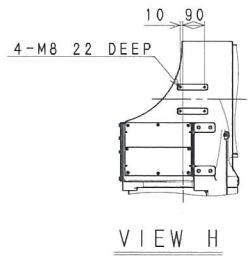
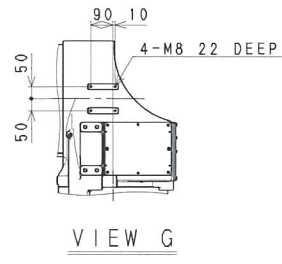
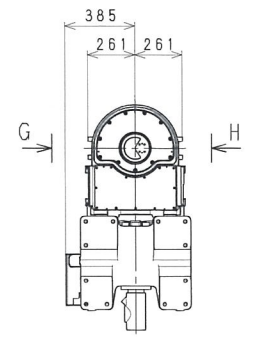
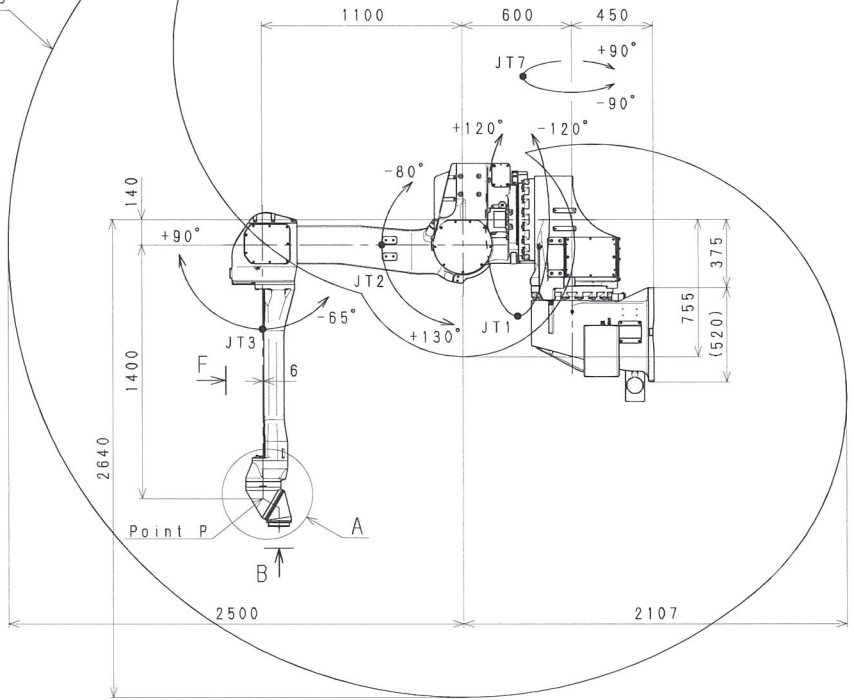
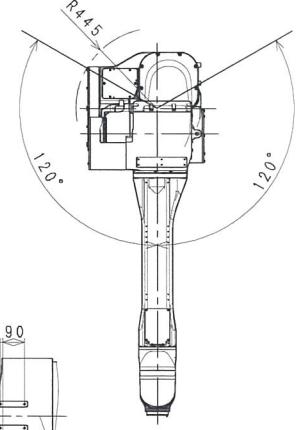
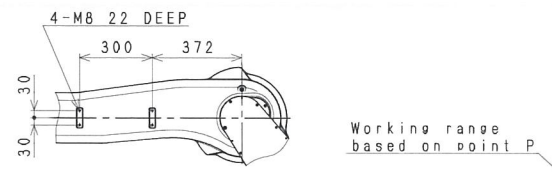
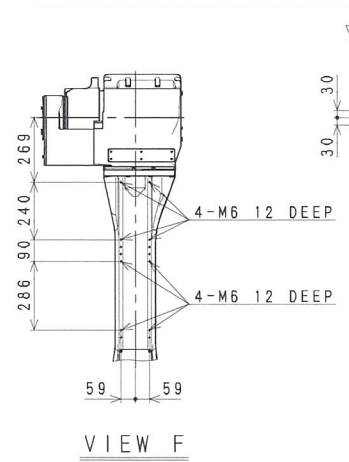
VIEW H



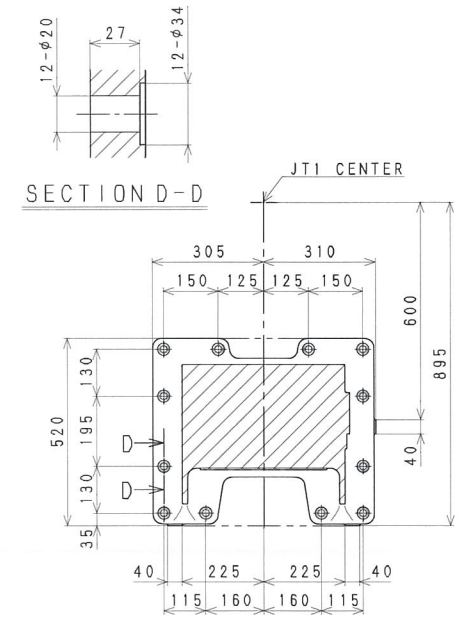
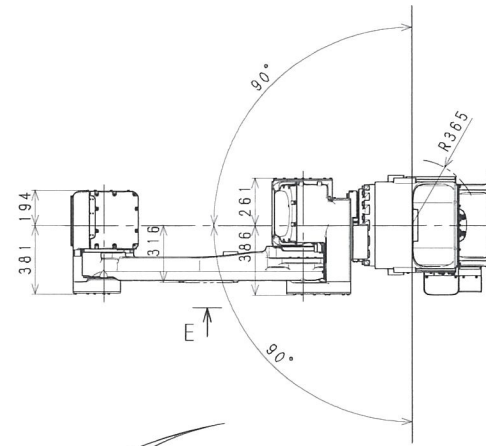
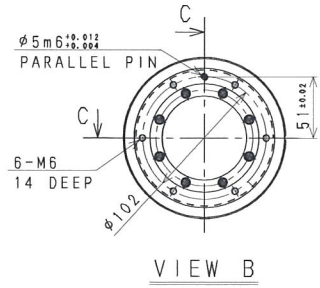
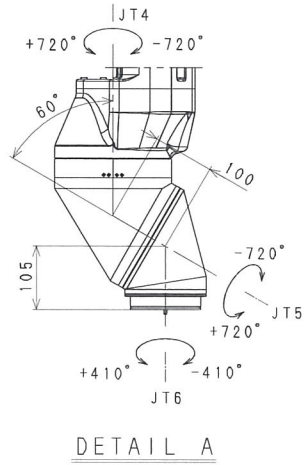
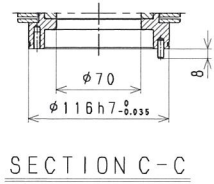
KJ314U-D4
(FIX INSTALLATION)
WORKING RANGE



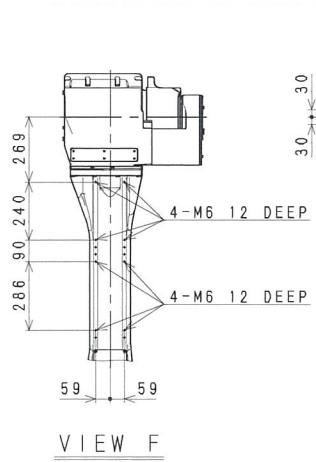
Base Installation Dimensions



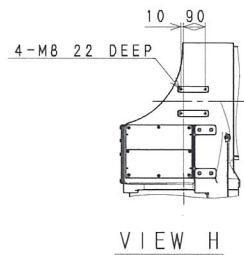
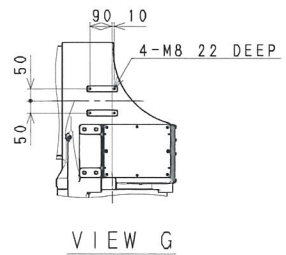
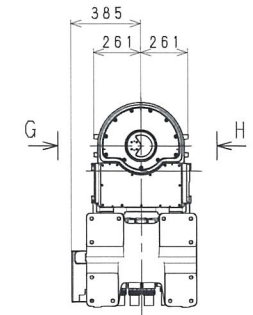
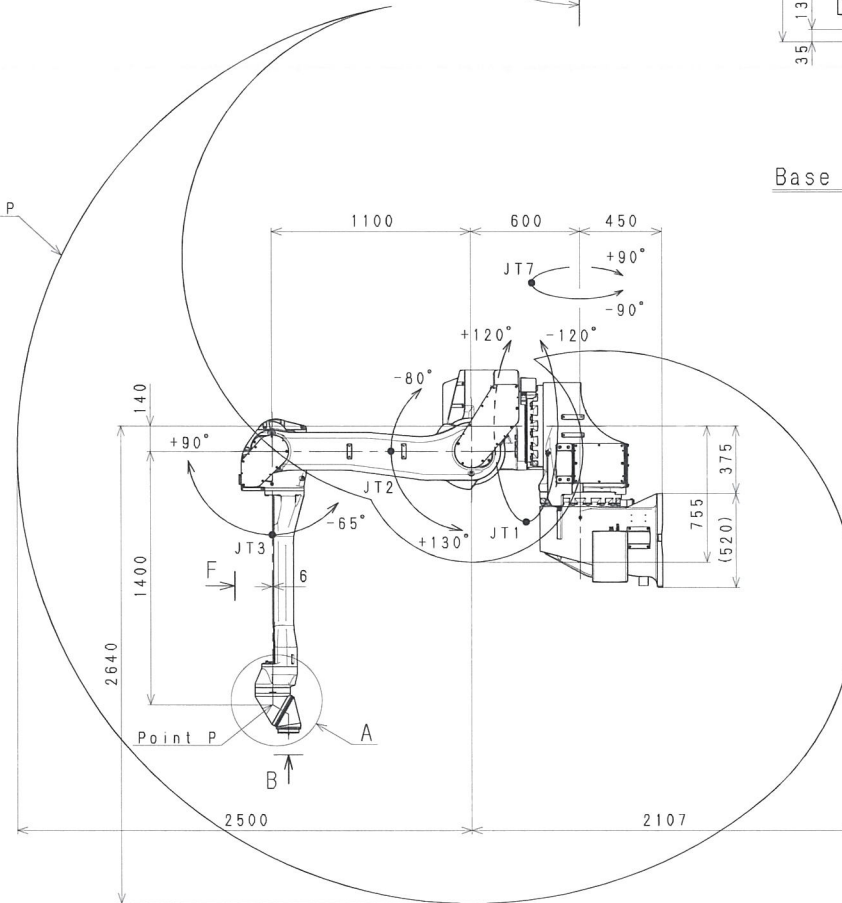
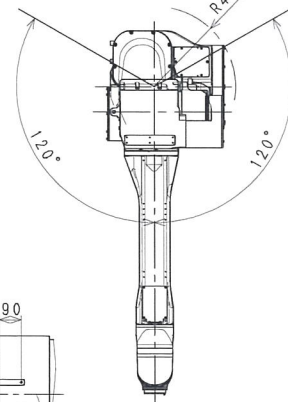
KJ314U-D5
(FIX INSTALLATION)
WORKING RANGE



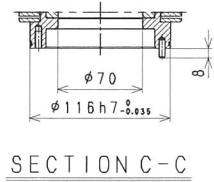
Base Installation Dimensions



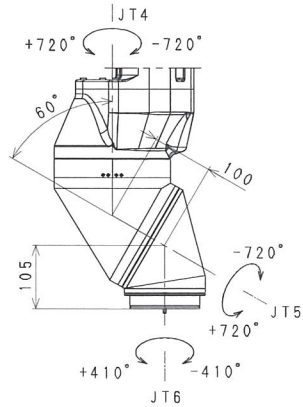
Working range based on point P



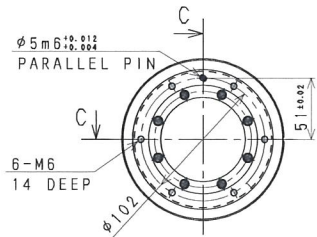
KJ314U-D0
(FLEXIBLE INSTALLATION)
WORKING RANGE



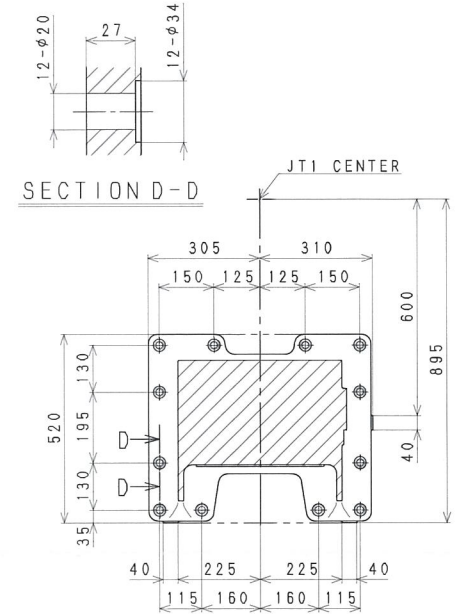
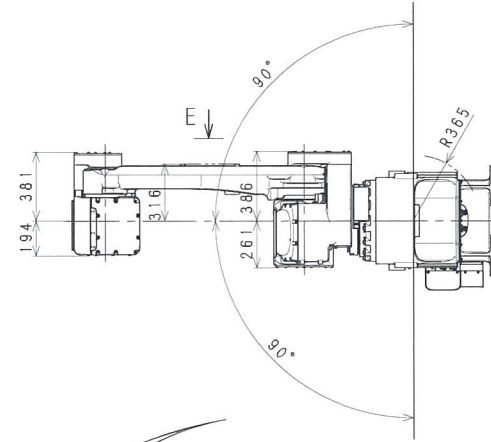
SECTION C-C



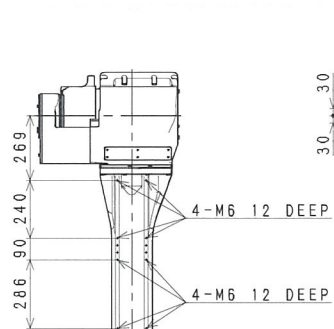
DETAIL A



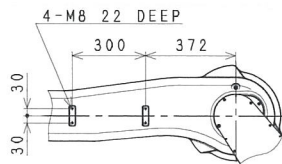
VIEW B



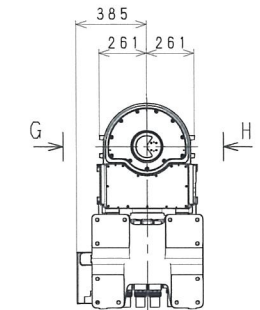
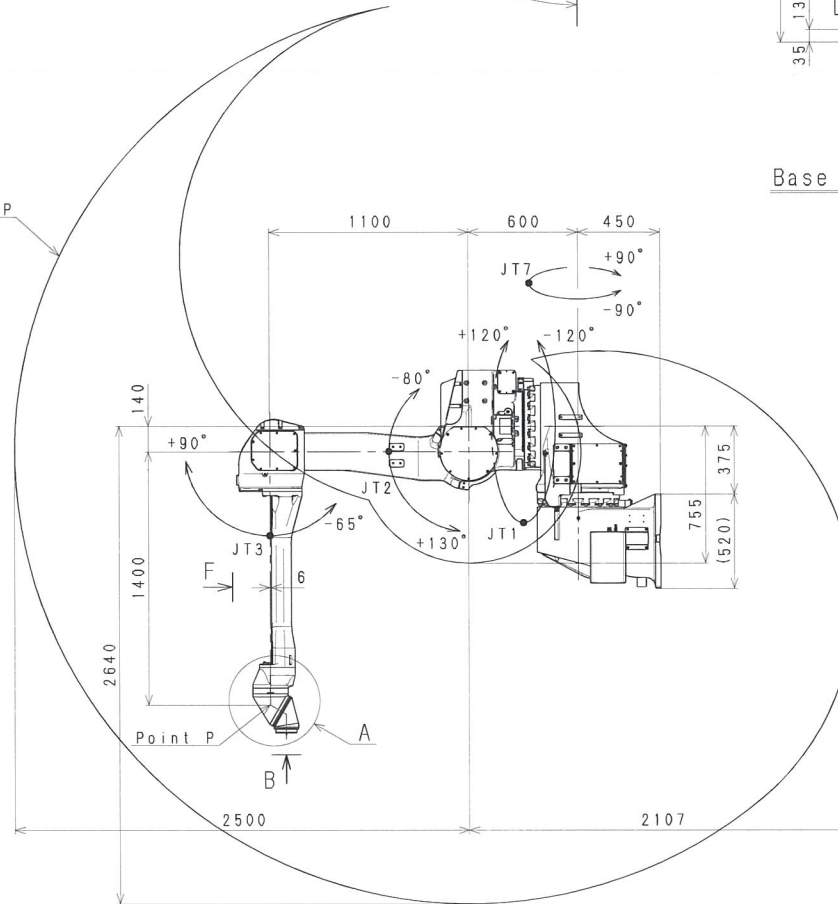
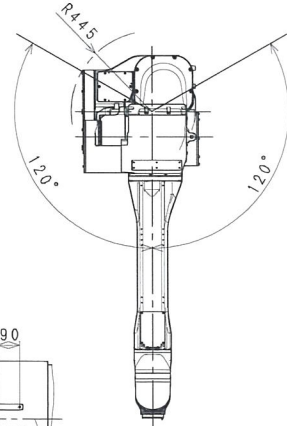
Base Installation Dimensions



VIEW E

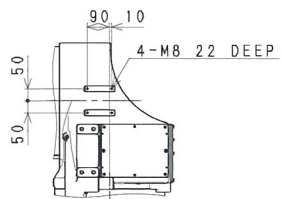


Working range based on point P

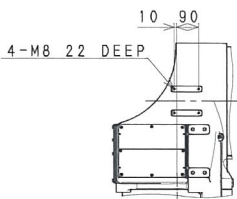


KJ314U-D1
(FLEXIBLE INSTALLATION)
WORKING RANGE

VIEW F



VIEW G



VIEW H