

SPECIFICATION OF ROBOT

KJ314CWE25

KJ314CTE25

KJ264CFE25

KJ264CGE25

KJ264CTE25

KJ264CVE25

1st Edition : Sep.16.2013

KAWASAKI HEAVY INDUSTRIES LTD.

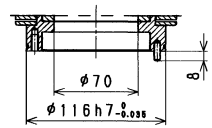
ROBOT DIV.

Doc, No:90101-2218DEA

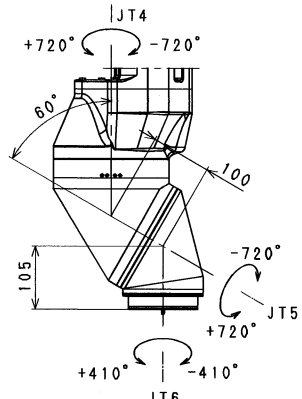
[1-2] Robot Arm (KJ264C)

1. Model	KJ264C-B0 , KJ264C-B1 (Floor) KJ264C-D0 , KJ264C-D1 (Mounting wall is left side) KJ264C-F0 , KJ264C-F1 (Mounting wall is right side) KJ264C-H0 , KJ264C-H1 (Shelf)													
2. Type	Articulated robot													
3. Degree of freedom	6 axes													
4. Axis specification	Operating axis	Max. operating range												
	Arm rotation (JT1)	KJ264C-B□ +120° ~ -120° KJ264C-D□ +120° ~ -30° KJ264C-F□ +30° ~ -120° KJ264C-H□ +120° ~ -120°												
	Arm out-in (JT2)	+130° ~ -80°												
	Arm up-down (JT3)	+90° ~ -65°												
	Wrist roll (JT4)	+720° ~ -720°												
	Wrist roll (JT5)	+720° ~ -720°												
	Wrist roll (JT6)	+410° ~ -410°												
	5. Repeatability	±0.5 mm (at the tool mounting surface)												
6. Playback Accuracy	±1.0 mm (at the tool mounting surface)													
7. Max. payload	Wrist : 15 kg (at the tool mounting surface) Upper arm : 25 kg (on the Upper Arm :Include painting equipments in pressurized compartment)													
8. Max. painting speed	1500 mm/s (at the center of tool mounting surface)													
9. 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>56.2 N·m</td> <td>2.19 kg·m²</td> </tr> <tr> <td>JT5</td> <td>43.4 N·m</td> <td>1.31 kg·m²</td> </tr> <tr> <td>JT6</td> <td>22.0 N·m</td> <td>0.33 kg·m²</td> </tr> </tbody> </table>			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
		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												
	Note * Each value in this table shows allowable payload 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.													
10. Driving motor	Brushless AC Servomotor													
11. Working range	See attached drawing													
12. Mass	KJ264C-B□ 540 kg (without options) KJ264C-D□ , -F□ , -H□ 530 kg (without options)													
13. Color	Munsell 10GY9/1 equivalent													
14. Installation	KJ264C-B□(Floor) KJ264C-D□(Mounting wall is left side) KJ264C-F□(Mounting wall is right side) KJ264C-H□(Shelf)													
15. Environment cond.	(Temperature) 0 ~ 40 °C, (Humidity) 35 ~ 85 %, no dew, nor frost allowed													
16. Explosion proof	Pressurized and intrinsically safe													
17. Air supply to the manipulator	Clean & dry air : 0.5 Nm ³ /min, 0.4~0.7 MPa Dew point : -17 °C or less at atmospheric pressure. Solid material : 0.01 μm or less Oil content : Mist separation 99.9999% or more													
18. Options	Adjustable Mechanical Stopper : JT1/JT2/JT3													
	Jig set for Zeroing													
	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														
19. Others	Consult Kawasaki about maintenance parts and spare parts.													

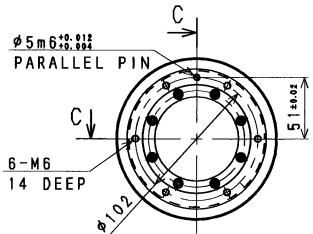
[2] Controller		
1. Model	E25/E27	
2. Enclosure	Enclosed structure / Indirect cooling system	
3. Dimensions	See attached drawing	
4. Number of controlled axes	6 axes 7/8/9 axes(built-in addition, option)	
5. Servo control and drive system	Full Digital Servo System	
6. Type of control	Teach mode	Joint, Base, Tool, Fixed Tool (option) operation mode
	Repeat mode	PTP, CP control mode Joint, Linear, Circular (option) interpolation
7. Teaching method	Teaching or AS language programming	
8. Memory capacity	8 MB	
9. External operation signals	External Motor Power Off, External Hold, etc.	
10. General purpose signals	Input signals	32 channels (Includes dedicated signals)
	Output signals	32 channels (Includes dedicated signals)
11. Operation panel	Basic Operation Switches (Teach/Repeat SW, Emergency Stop SW, Control power lamp)	
12. Cable length	Power/Signal cable in non hazardous area	3 m
	Power/Signal cable in hazardous area	3 m
	Teach Pendant cable	10 m
13. Mass	See attached drawing	
14. Power requirement	AC200 V - AC220 V±10%, 50/60 Hz, 3 phases, Max 5.6 kVA(E27), Max 10 kVA(E25)	
15. Ground	Less than 10 Ω (for Explosion proof) ,Less than 100 Ω (robot dedicated ground) Leakage current: max. 100 mA	
16. Ambient temperature	0 - 45 °C	
17. Relative humidity	35 - 85 % (non-condensation)	
18. Color	Munsell: 10GY9/1 equivalent	
19. Teach Pendant	Intrinsically safe construction, Color display (7.2 inch LCD) with touch panel Emergency Stop,Teach Lock and Deadman Switches	
20. Options		
General purpose signals	Input signals	64/96/128 channels (Includes dedicated signals)
	Output signals	64/96/128 channels (Includes dedicated signals)
I/O connector	D-SUB 37pin(male,female) with cover	
Operation panel	Motor Power ON, Cycle start, RUN/HOLD, Error reset, Error lamp	
Power/Signal cable	in non hazardous area 5,7,10,15,20,25,30m	} Total length: max. 40 m
	in hazardous area 1,5,7,10,15m	
Teach Pendant cable	5m, 15m, 20m, 25m	} Total length: max. 50 m
Teach pendant Connector Box	in non hazardous area 3,5,7,10,15,20,25,30m in hazardous area 1,3,5,7,10,15,20,25,30m	
Auxiliary storage	USB memory	
Brake release	Brake release switch	
AC Outlet	AC100V Outlet	
PC cable	1.5 m, 3 m	
Teach Pendant option	Cable hook, connector for TP less	
Others	Cooler, LED Light, Field BUS, Software PLC, Analog input/output, Conveyor Synchronization, Paint Equipment Control and so on	
21. Others	Consult Kawasaki about maintenance parts and spare parts.	



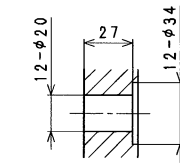
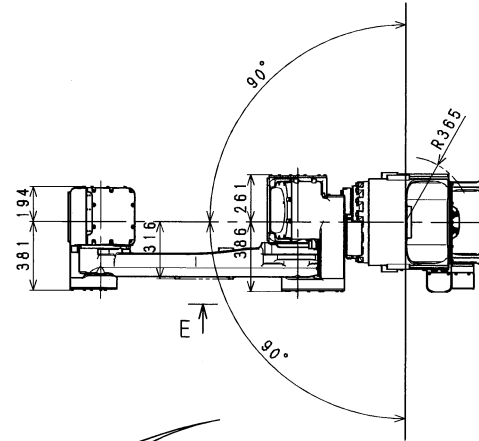
SECTION C-C



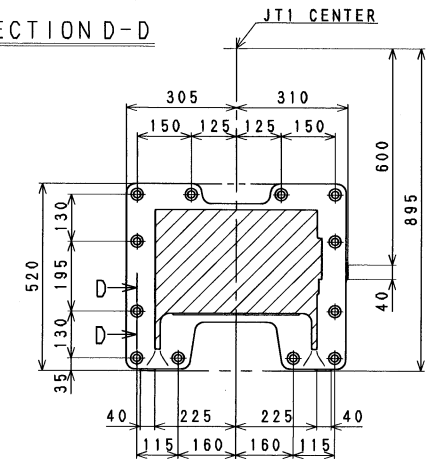
DETAIL A



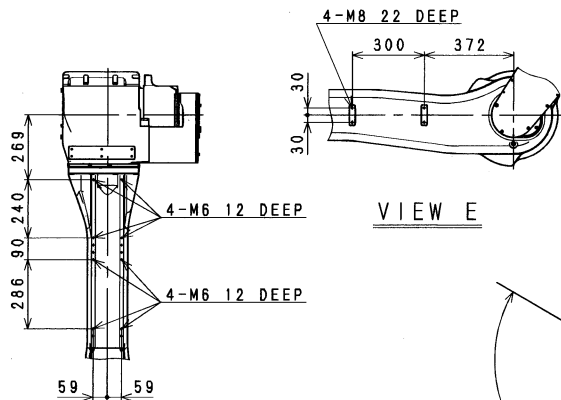
VIEW B



SECTION D-D

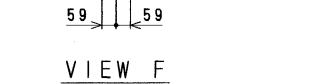
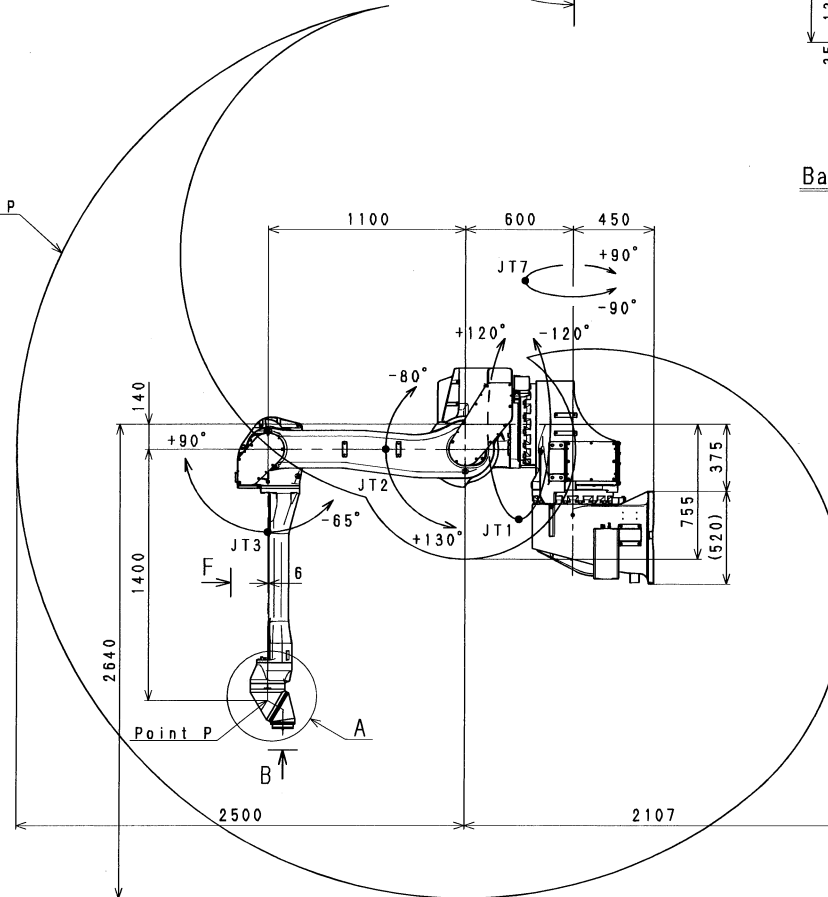
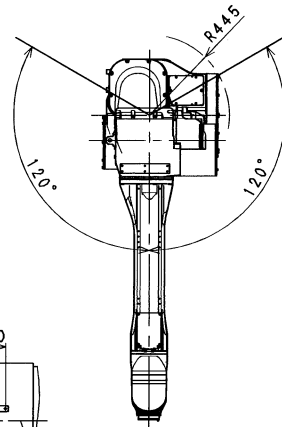


Base Installation Dimensions

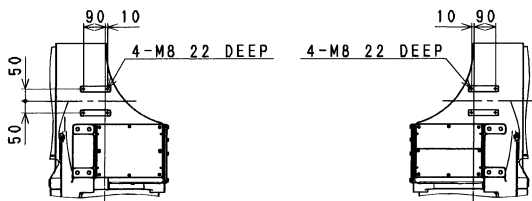


VIEW E

Working range based on point P

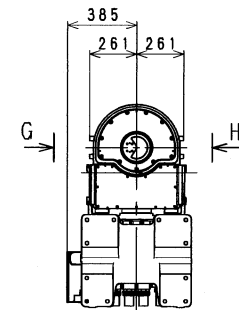


VIEW F

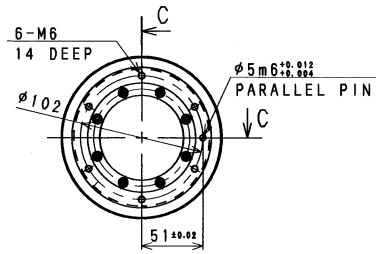


VIEW G

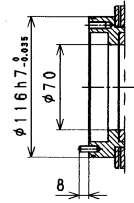
VIEW H



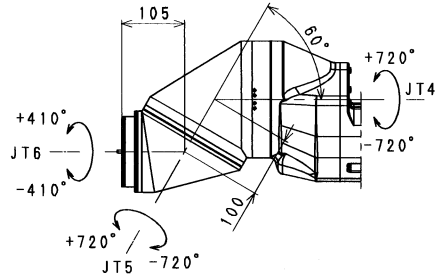
KJ314C-D0
WORKING RANGE



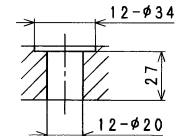
VIEW B



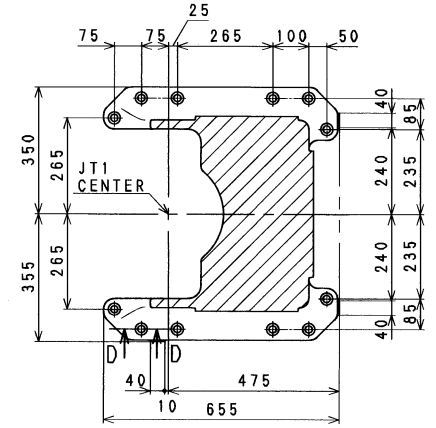
SECTION C-C



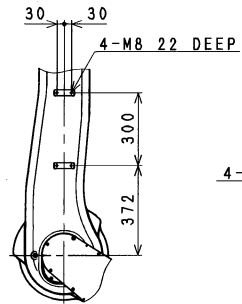
DETAIL A



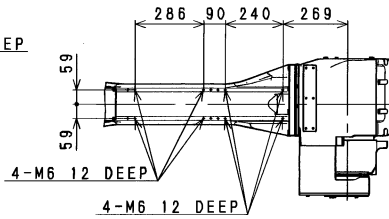
SECTION D-D



Base Installation Dimensions

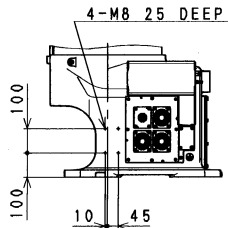
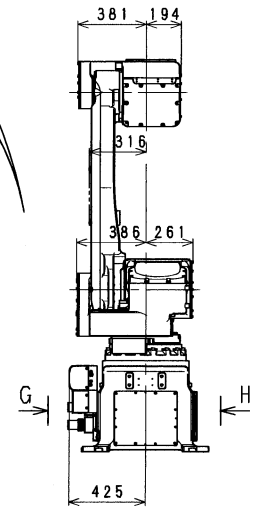
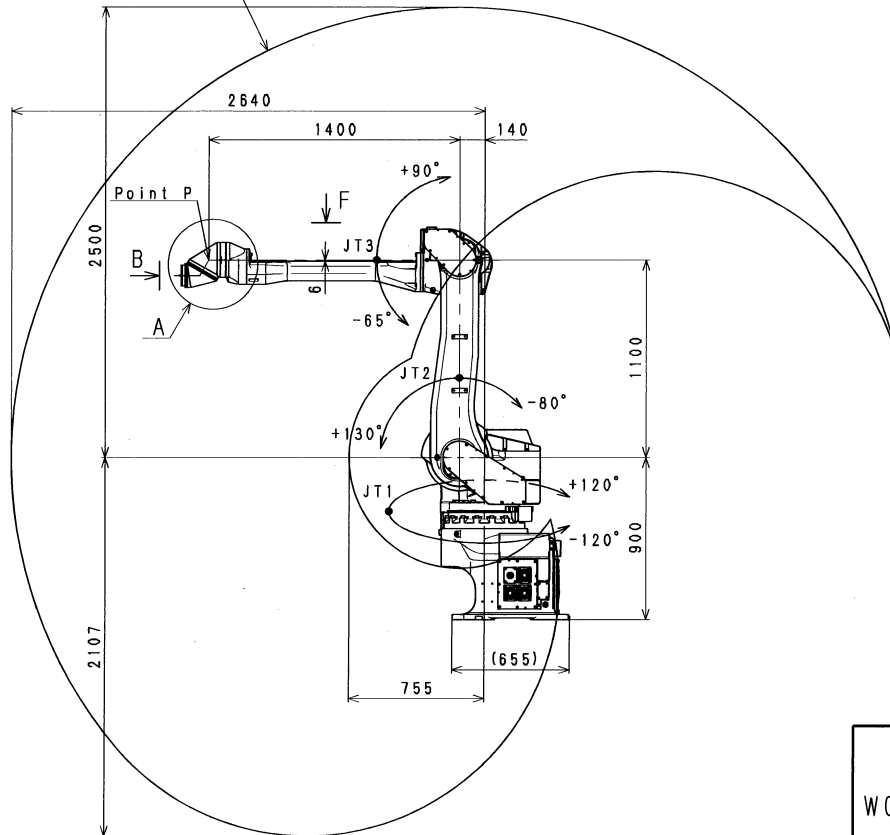


VIEW E

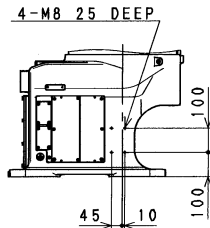


VIEW F

Working range based on point P

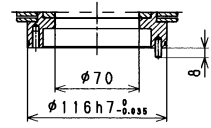


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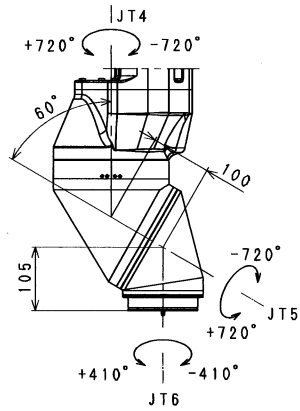


VIEW H

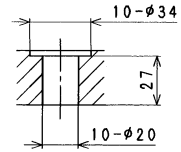
KJ264C-B0
WORKING RANGE



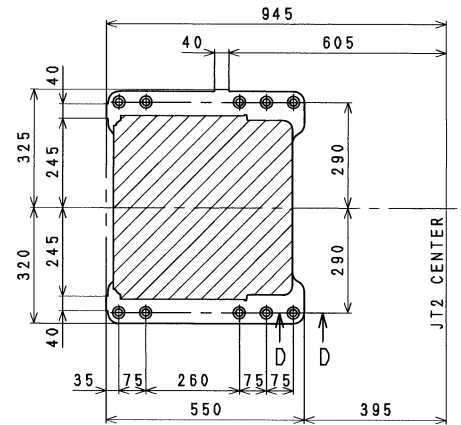
SECTION C-C



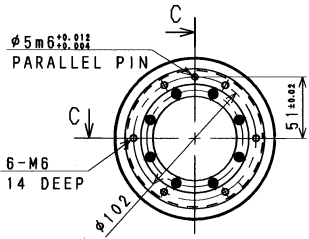
DETAIL A



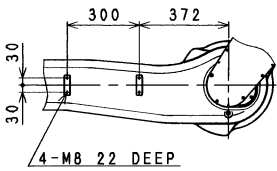
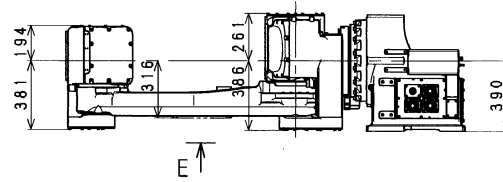
SECTION D-D



Base Installation Dimensions



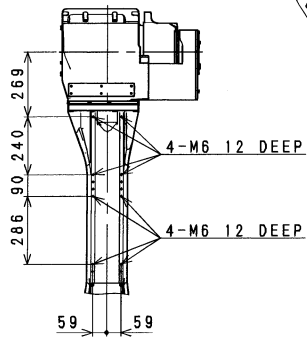
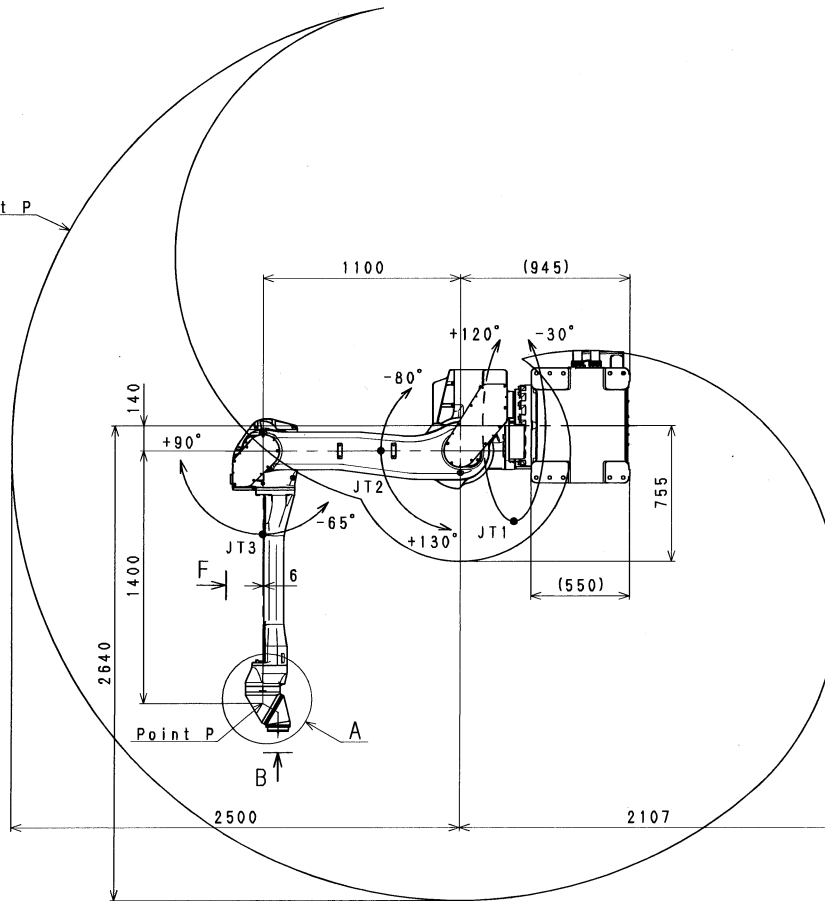
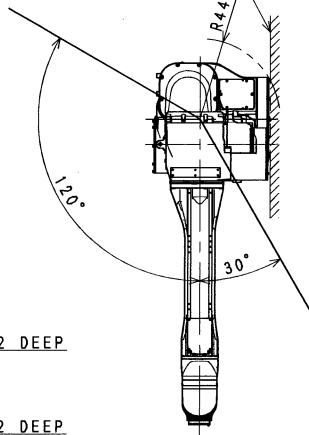
VIEW B



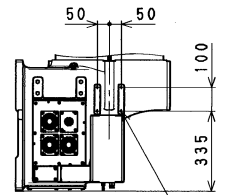
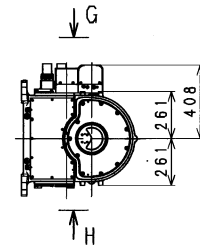
VIEW E

Working range based on point P

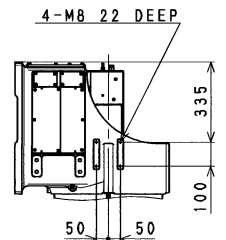
MOUNTING SURFACE



VIEW F

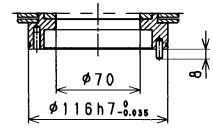


VIEW G

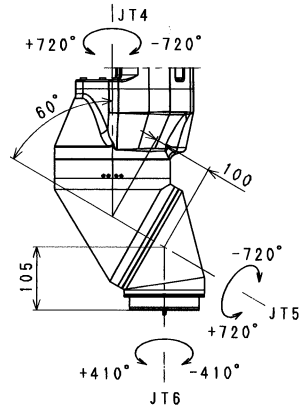


VIEW H

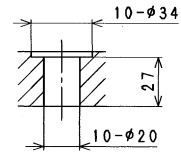
KJ264C-D0
WORKING RANGE



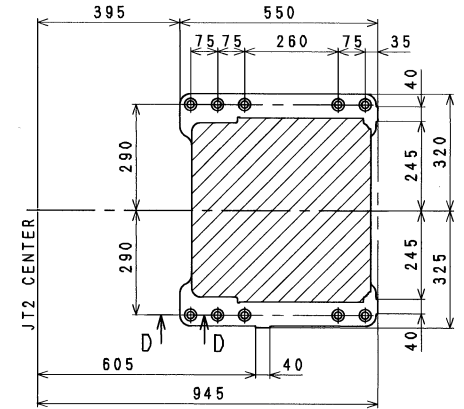
SECTION C-C



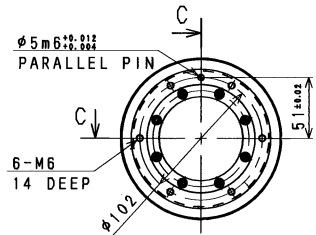
DETAIL A



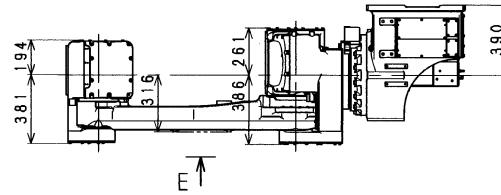
SECTION D-D



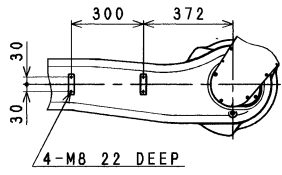
Base Installation Dimensions



VIEW B

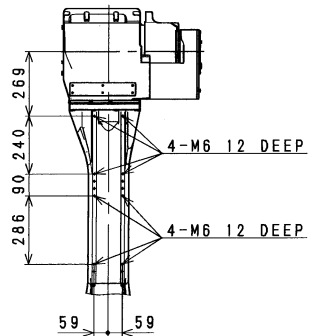
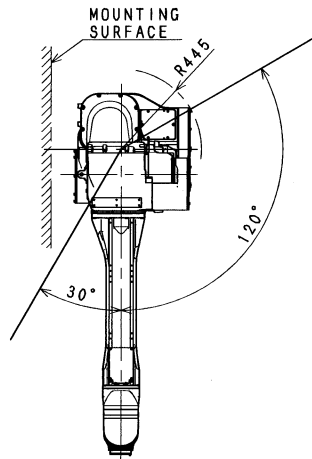


E

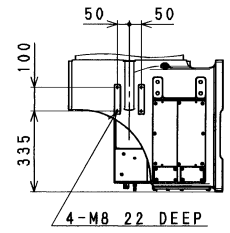
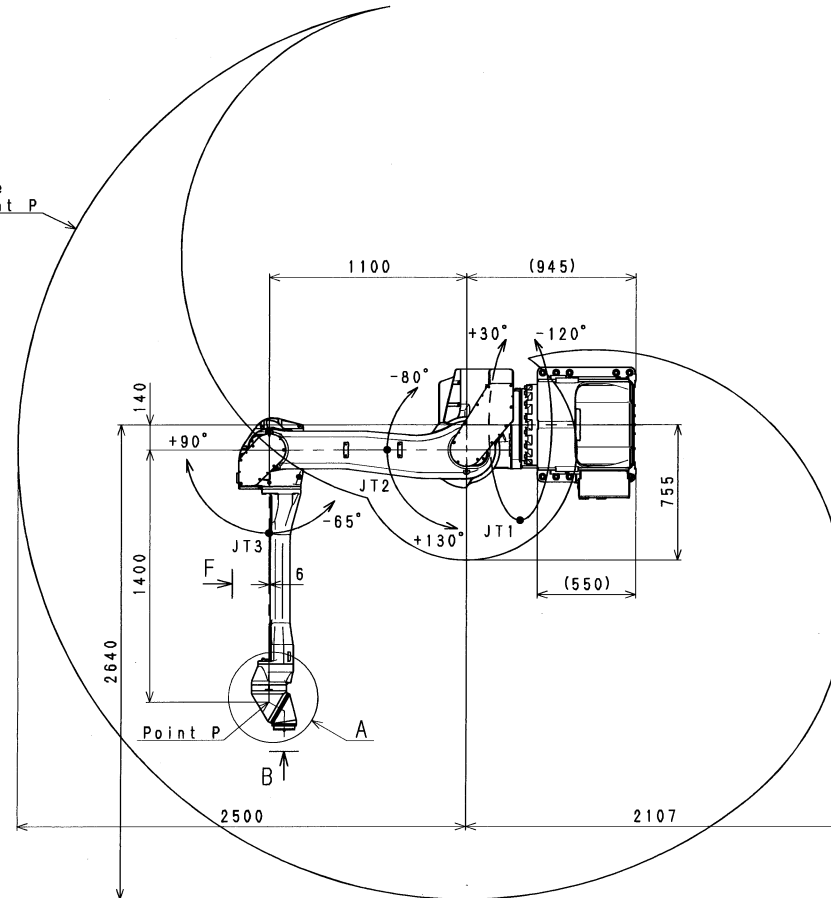


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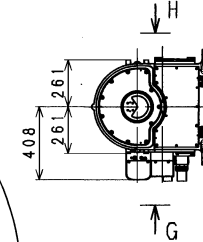
Working range based on point P



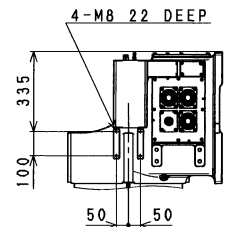
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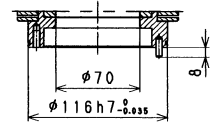
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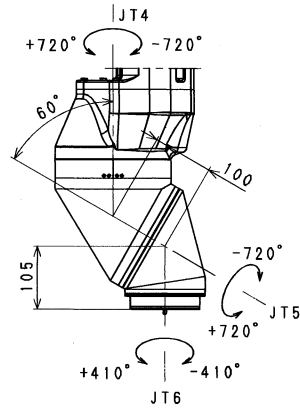
VIEW G



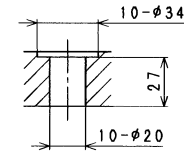
KJ264C-F0
WORKING RANGE



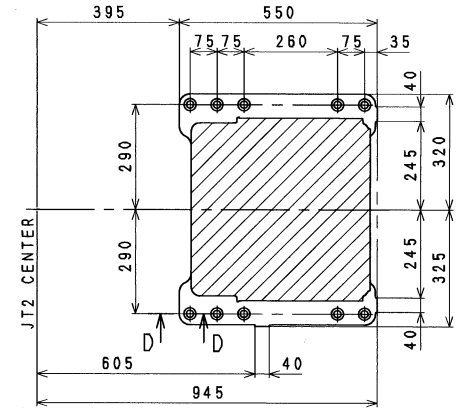
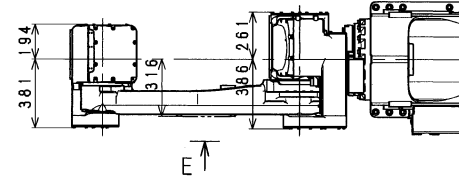
SECTION C-C



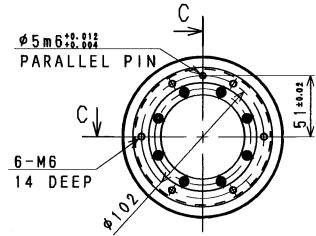
DETAIL A



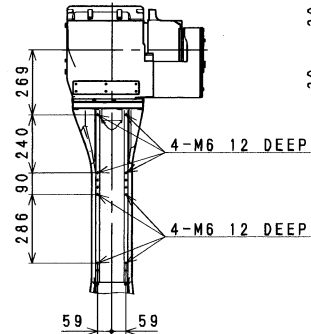
SECTION D-D



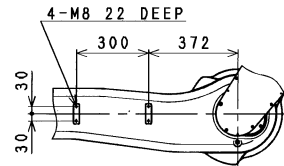
Base Installation Dimensions



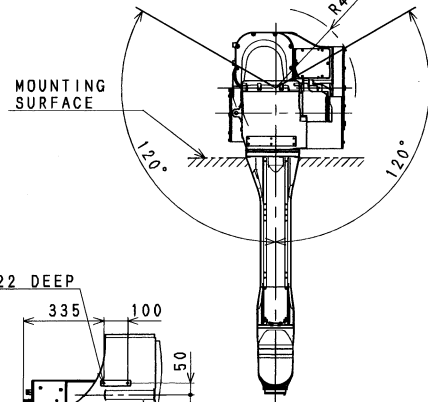
VIEW B



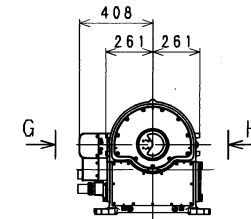
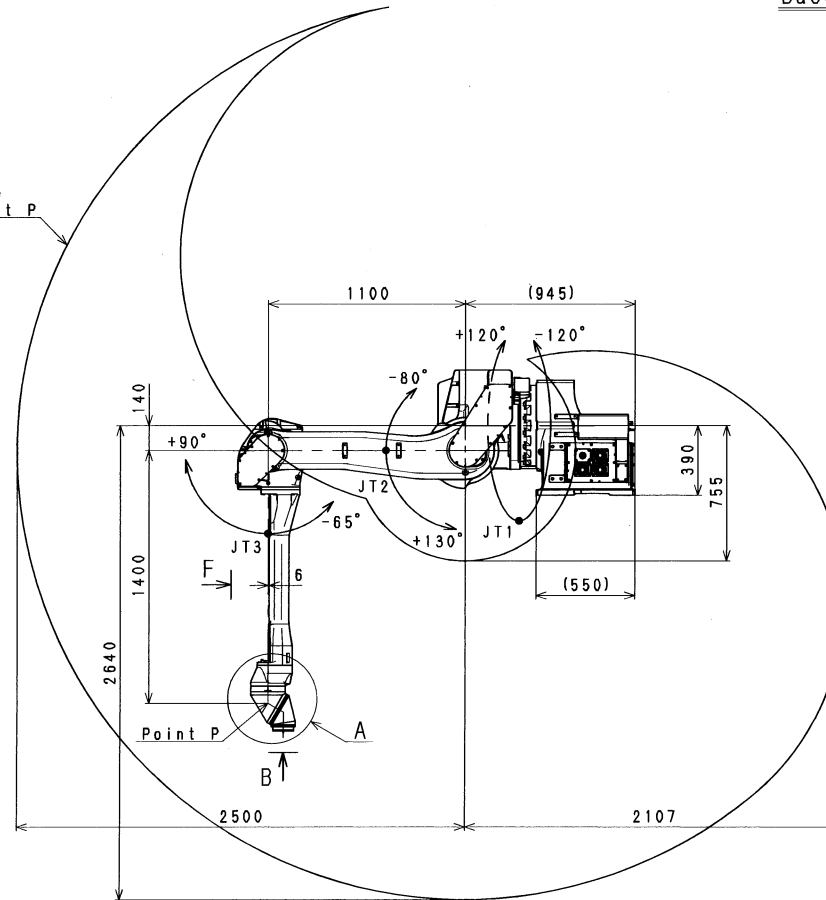
VIEW F



VIEW E

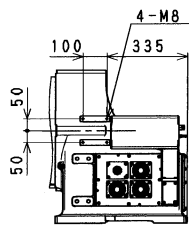


Working range based on point P

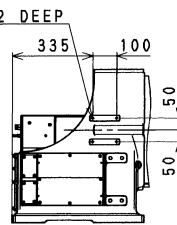


G

H

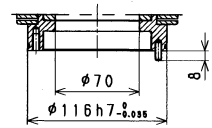


VIEW G

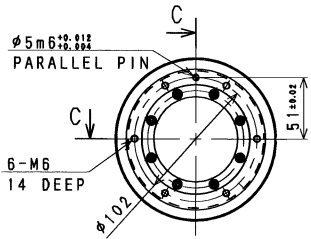


VIEW H

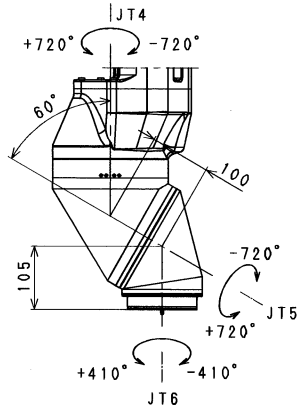
KJ264C-H0
WORKING RANGE



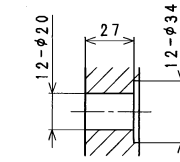
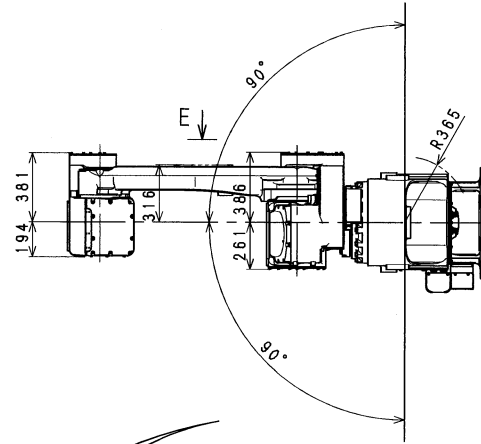
SECTION C-C



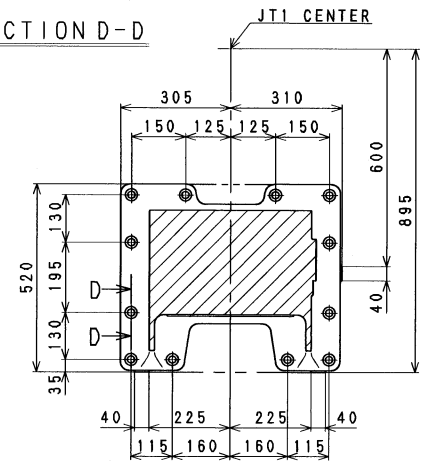
VIEW B



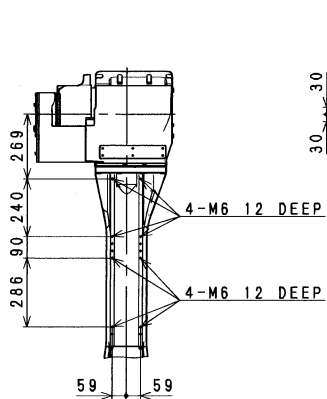
DETAIL A



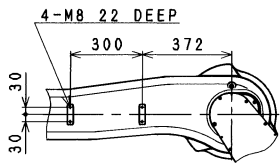
SECTION D-D



Base Installation Dimensions

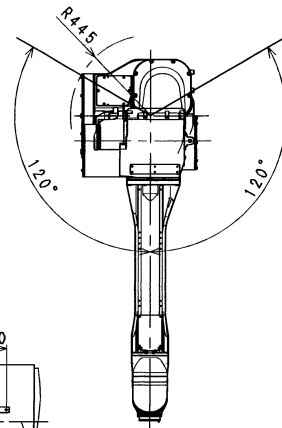


VIEW E

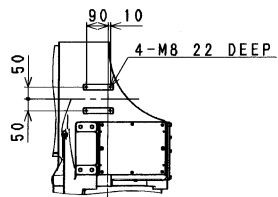
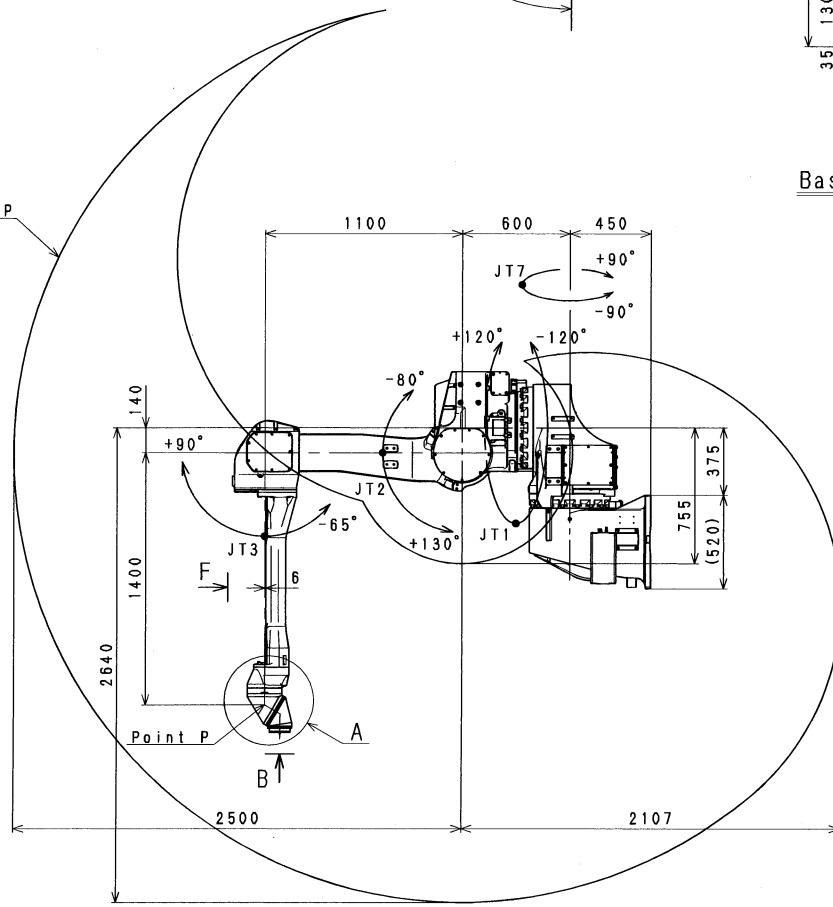


VIEW F

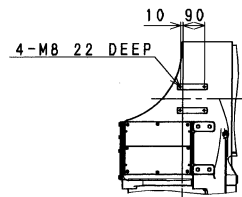
Working range based on point P



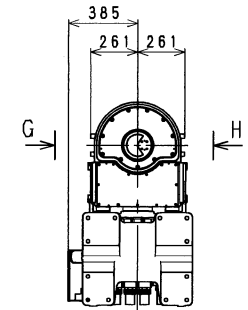
VIEW G



VIEW H

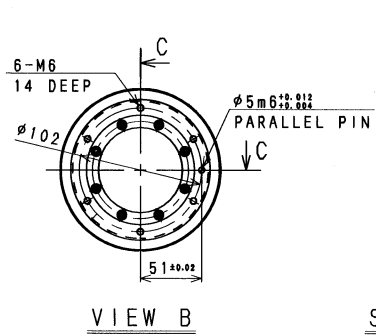


VIEW I

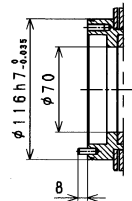


VIEW J

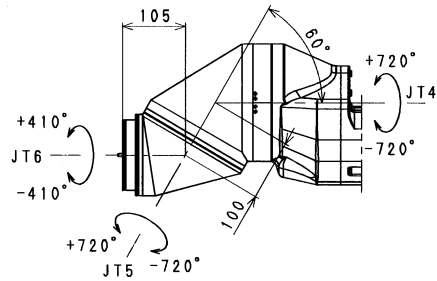
KJ314C-D1
WORKING RANGE



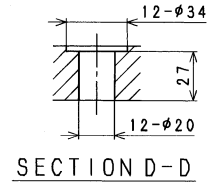
VIEW B



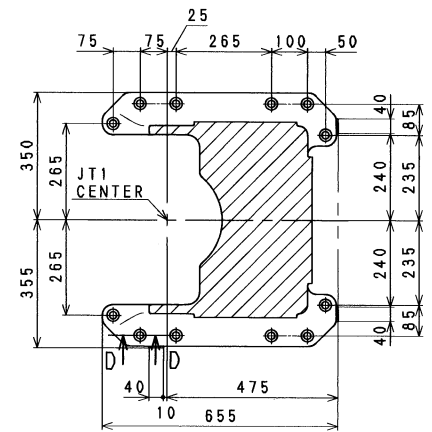
SECTION C-C



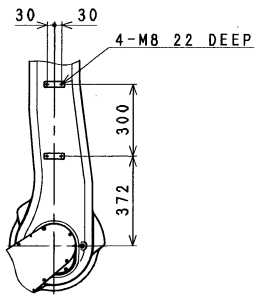
DETAIL A



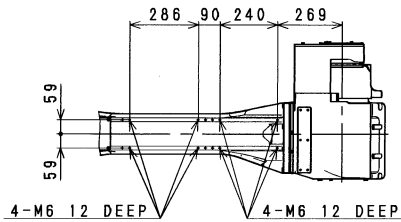
SECTION D-D



Base Installation Dimensions

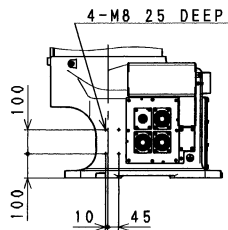
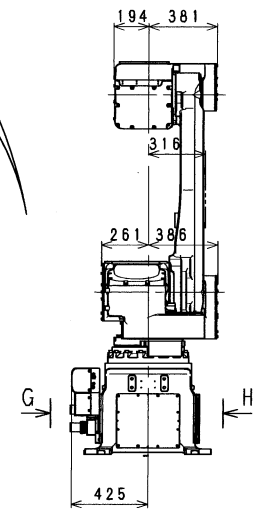
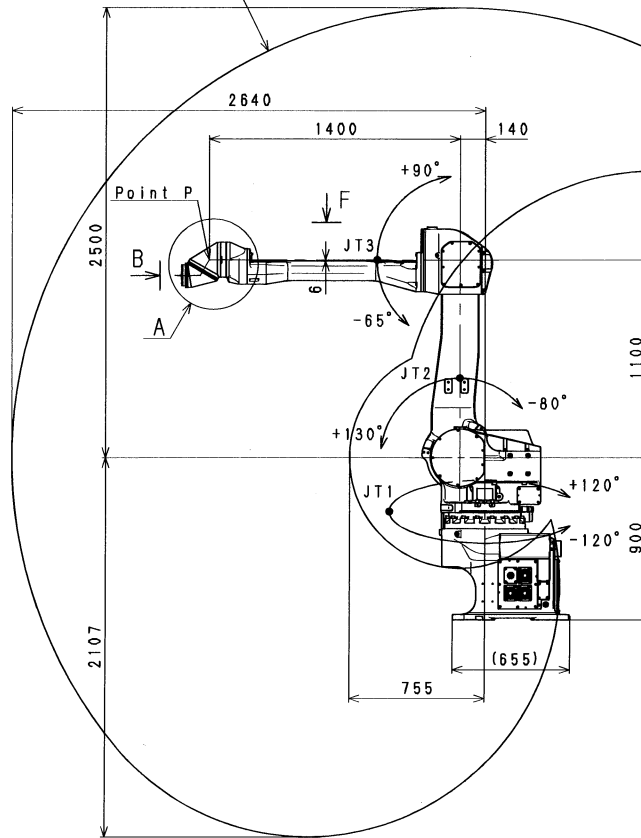


VIEW E

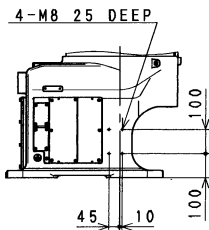


VIEW F

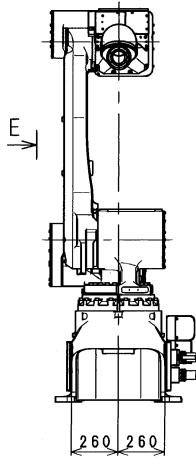
Working range
based on point P



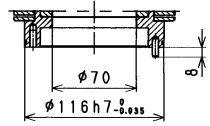
VIEW G



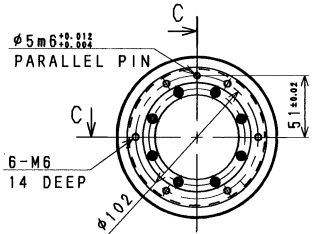
VIEW H



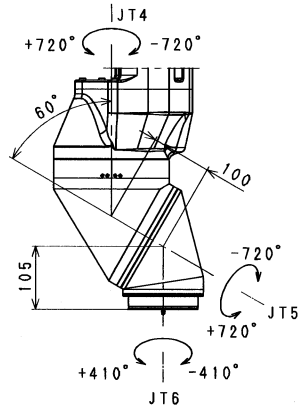
KJ264C-B1
WORKING RANGE



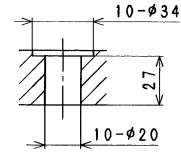
SECTION C-C



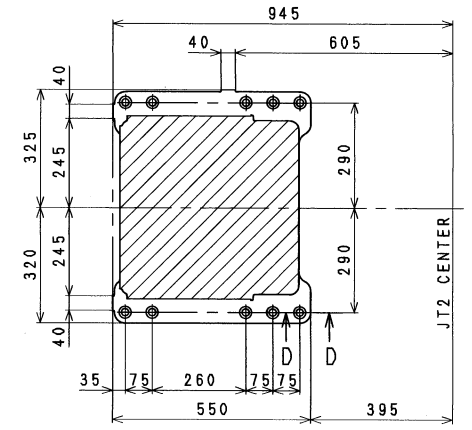
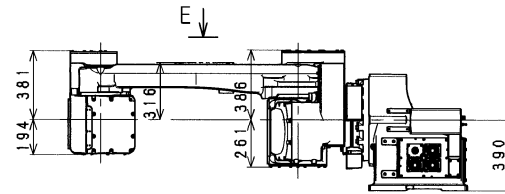
VIEW B



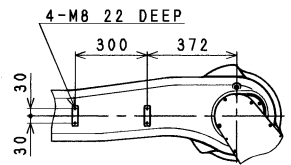
DETAIL A



SECTION D-D



Base Installation Dimensions



VIEW E

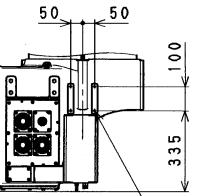
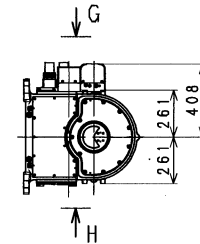
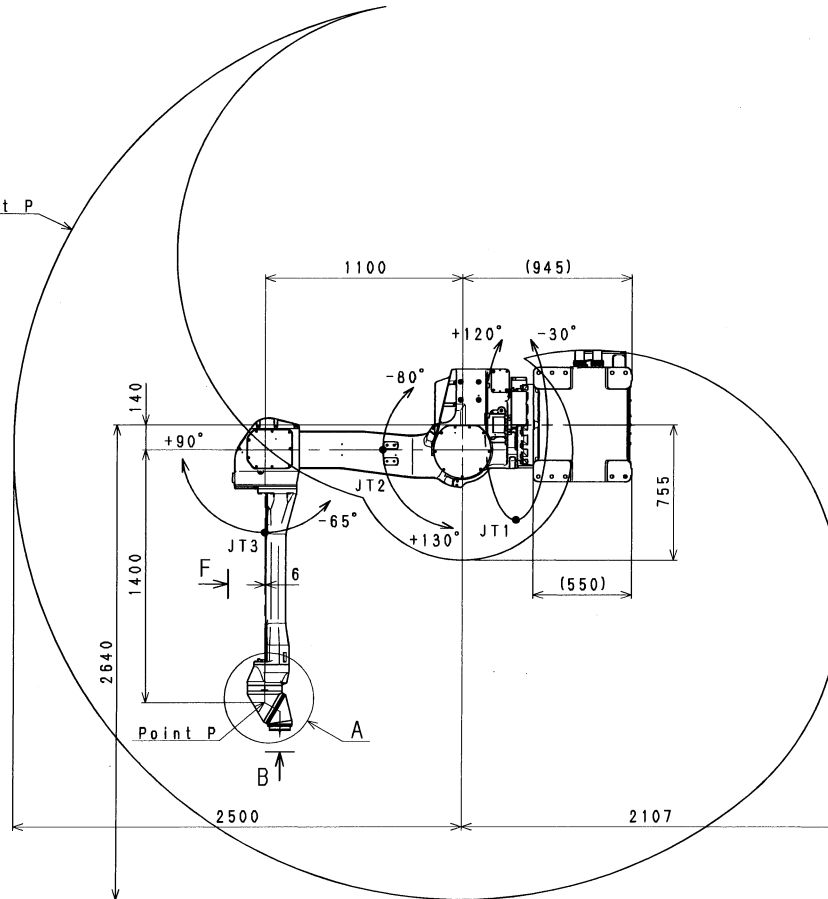
Working range based on point P

MOUNTING SURFACE

R4.45

120°

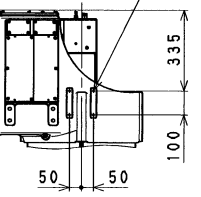
30°



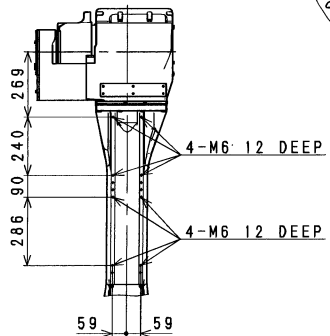
4-M8 22 DEEP

VIEW G

4-M8 22 DEEP

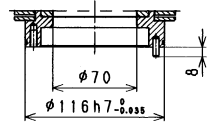


VIEW H

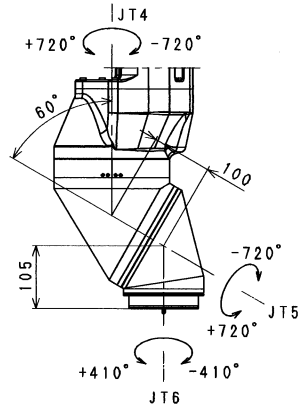


VIEW F

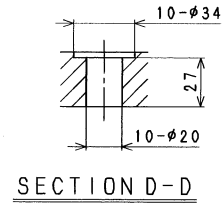
KJ264C-D1
WORKING RANGE



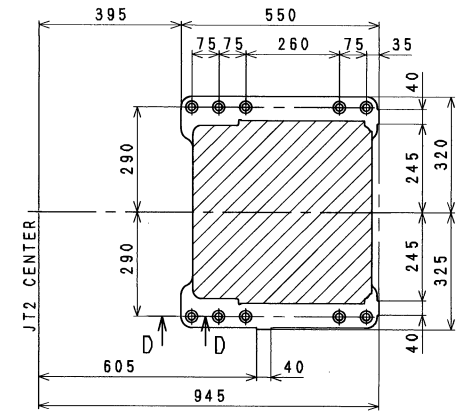
SECTION C-C



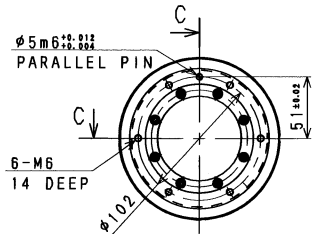
DETAIL A



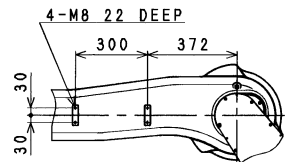
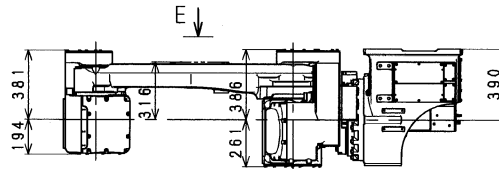
SECTION D-D



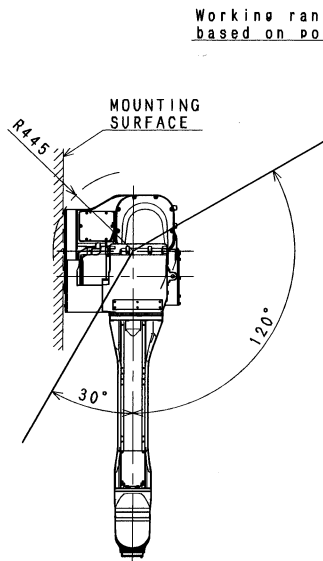
Base Installation Dimensions



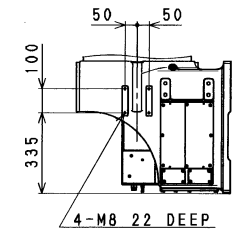
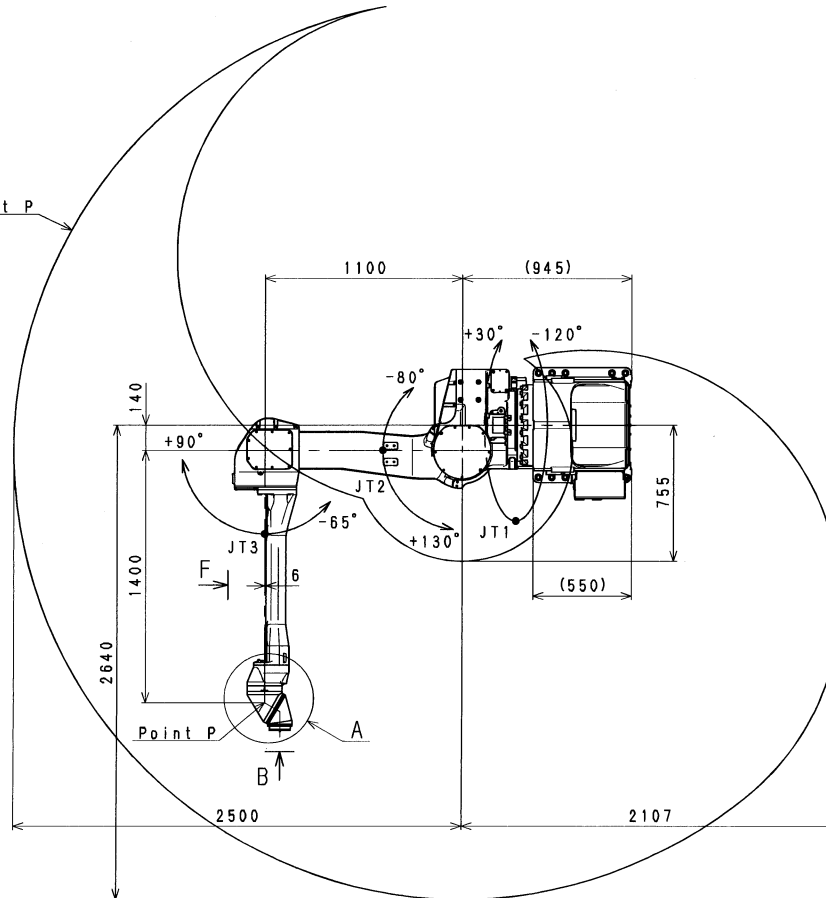
VIEW B



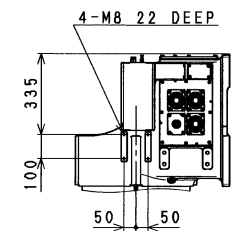
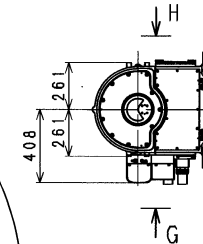
VIEW E



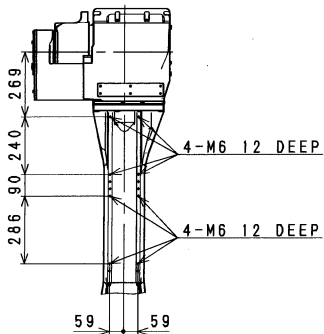
Working range based on point P



VIEW H

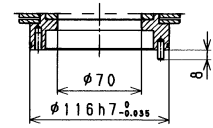


VIEW G

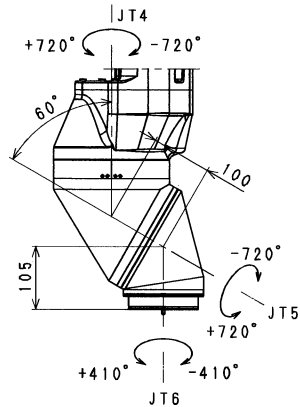


VIEW F

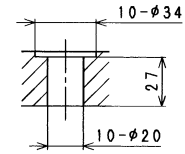
KJ264C-F1
WORKING RANGE



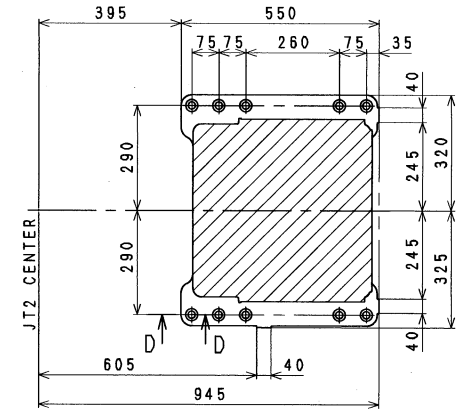
SECTION C-C



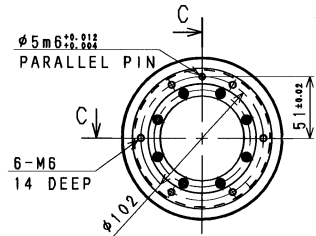
DETAIL A



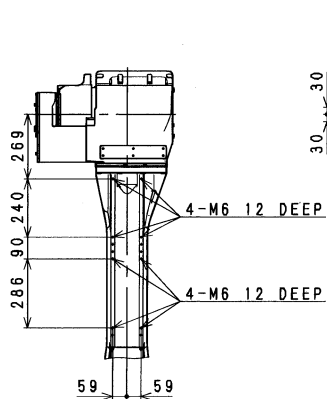
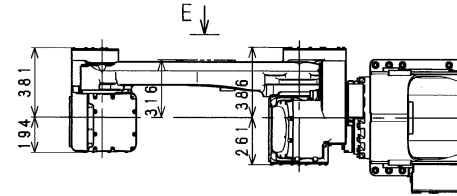
SECTION D-D



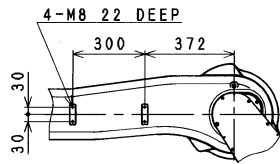
Base Installation Dimensions



VIEW B

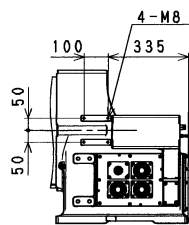
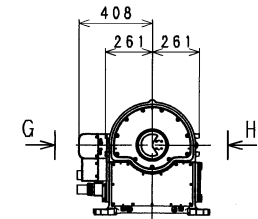
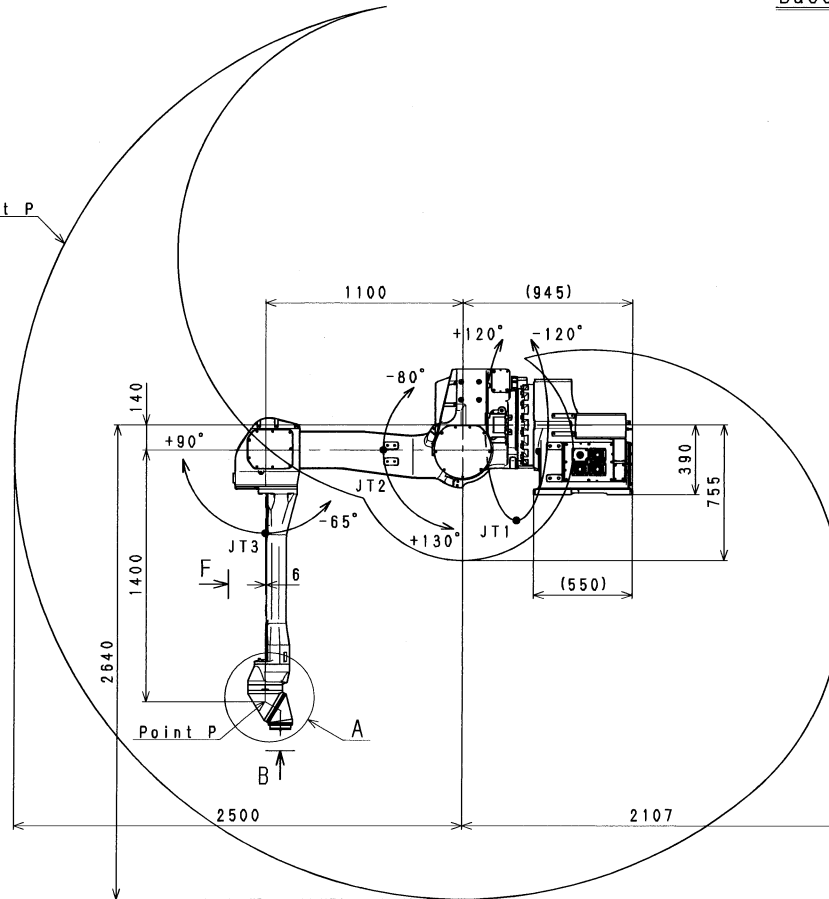
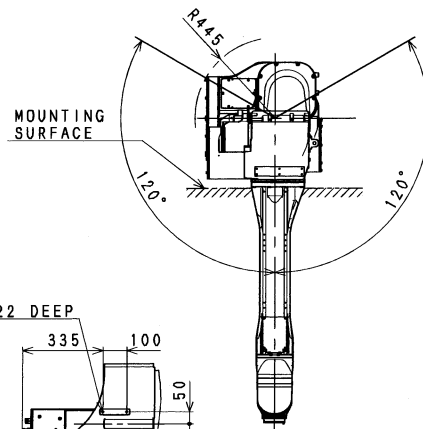


VIEW F

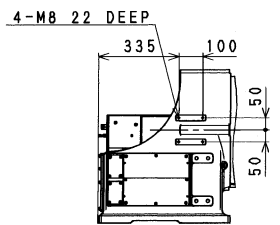


VIEW E

Working range based on point P



VIEW G

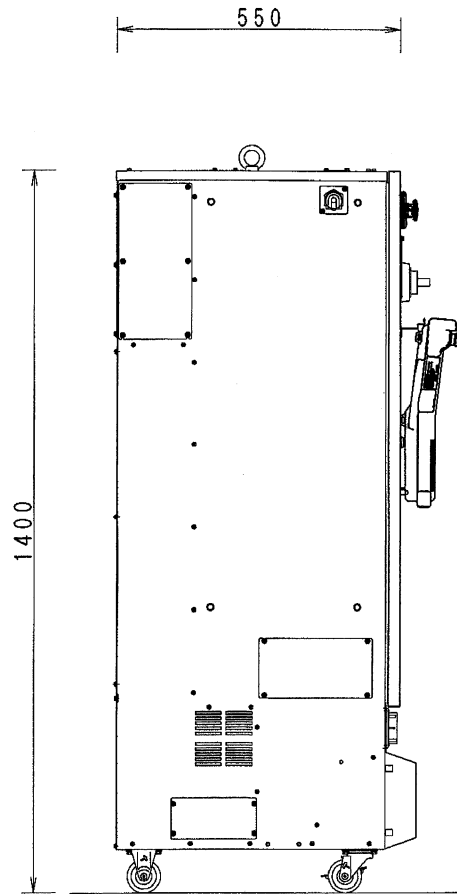


VIEW H

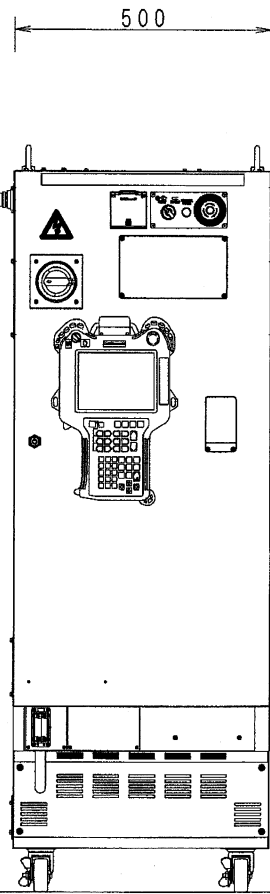
KJ264C-H1
WORKING RANGE

E25 CONTROLLER

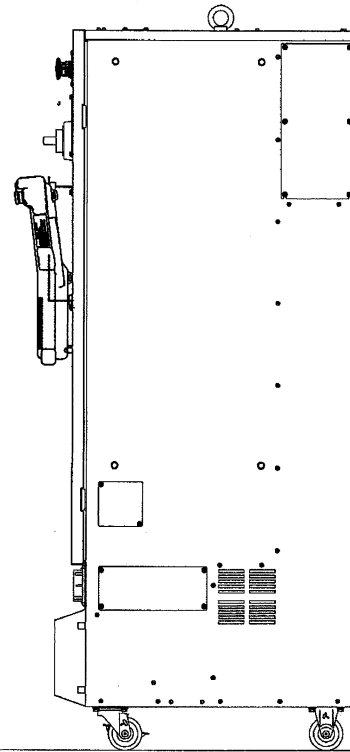
MASS: 120Kg



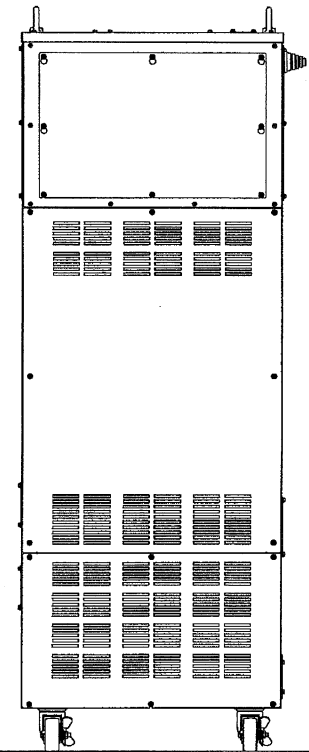
SIDE VIEW



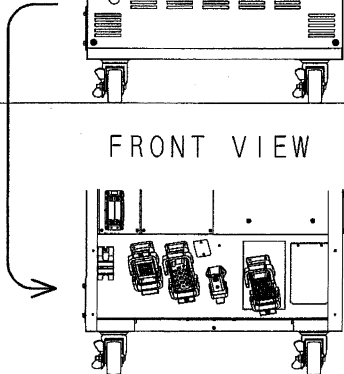
FRONT VIEW



SIDE VIEW



REAR VIEW



WITHOUT CONNECTOR COVER