

# 机器人规格

KJ194JFE25  
KJ194JGE25  
KJ194JTE25  
KJ194JVE25

2018年08月10日

川崎重工业有限公司

机器人营业部

规格书编号：90101-2793DCA

[1] KJ194本体部规格

1. 机械型号	KJ194J-B0, -B1 (地面式) KJ194J-D0, -D1 (壁挂式、安装面: 左) KJ194J-F0, -F1 (壁挂式、安装面: 右) KJ194J-H0, -H1 (架台式)													
2. 手臂形式	多关节型													
3. 动作自由度	6 轴													
4. 构成轴规格	动作轴	最大动作范围												
	手臂旋转 (JT1) (根据设置形态不同)	KJ194J-B□ +120 ° ~ -120 ° KJ194J-D□ +120 ° ~ -30 ° KJ194J-F□ +30 ° ~ -120 ° KJ194J-H□ +120 ° ~ -120 °												
	手臂伸缩 (JT2)	+130 ° ~ -80 °												
	手臂上下 (JT3)	+90 ° ~ -65 °												
	手腕旋转 (JT4)	+720 ° ~ -720 °												
	手腕弯曲 (JT5)	+720 ° ~ -720 °												
	手腕弯曲 (JT6)	+410 ° ~ -410 °												
5. 重复定位精度	±0.5 mm (手腕法兰面)													
6. 最大有效负荷	15 kg (手腕部) 25 kg (第2手臂部 : 包含内压室内涂装机器)													
7. 最大涂装速度	1500 mm/s													
8. 手腕负荷能力	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: center;">最大负荷扭矩</th> <th style="text-align: center;">负荷惯性力矩*</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">JT4</td> <td style="text-align: center;">56.2 N·m</td> <td style="text-align: center;">2.19 kg·m<sup>2</sup></td> </tr> <tr> <td style="text-align: center;">JT5</td> <td style="text-align: center;">43.4 N·m</td> <td style="text-align: center;">1.31 kg·m<sup>2</sup></td> </tr> <tr> <td style="text-align: center;">JT6</td> <td style="text-align: center;">22.0 N·m</td> <td style="text-align: center;">0.33 kg·m<sup>2</sup></td> </tr> </tbody> </table>			最大负荷扭矩	负荷惯性力矩*	JT4	56.2 N·m	2.19 kg·m <sup>2</sup>	JT5	43.4 N·m	1.31 kg·m <sup>2</sup>	JT6	22.0 N·m	0.33 kg·m <sup>2</sup>
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JT6	22.0 N·m	0.33 kg·m <sup>2</sup>												
<p>注* 此表中的数值表示在手腕各轴施加最大惯量时的许用惯性力矩。 关于其他的详细内容, 请另外垂询我公司。</p>														
9. 驱动电机	同期型无电刷电机													
10. 作业范围	参照附加图													
11. 机器重量	KJ194J-B□ 约530 kg (可选除外) KJ194J-D□, -F□, -H□ 约520 kg (可选除外)													
12. 涂色	Munsell 10GY9/1 等效													
13. 设置方法	KJ194J-B□(地面式) KJ194J-D□(壁挂式, 安装面: 左) KJ194J-F□(壁挂式, 安装面: 右) KJ194J-H□(架台式)													
14. 设置环境	周围温度0 ~ 40 °C, 相对湿度35 ~ 85 %, (无结露)													
15. 防爆构造	内压防爆+本质安全防爆构造													
16. 空气供给	清洁, 干燥空气 : 0.5 Nm <sup>3</sup> /min, 0.4~0.7 MPa 大气压露点: -17 °C 以下 固体材料 : 0.01 μm 或以下 油量检测 : 雾分离99.9999%以上													
17. 选装	可调节机械制动器 : JT1/JT2/JT3													
	喷涂设备													
	FGP马达 (最多可配1个)													
	电磁阀 (最多可配3个)													
	电控转换器 (最多可配3个)													
	第2手臂部上盖													
18. 其他	关于维护部件, 备件, 请另行咨询.													

(2) 控制部规格		
1. 控制柜型号	E25/E27	
2. 构造	独立全封闭间接冷却系统	
3. 构成及尺寸	参照添附图	
4. 控制的轴数	6轴 (选件: 最大9轴 [盘内增设])	
5. 驱动方式	全数字伺服方式	
6. 控制类型	示教模式	各轴独立、基本坐标系、工具坐标系、 固定工具坐标系 (选件)
	再现模式	各轴/直线、圆弧插补动作 (选件)
7. 示教方法	简单操作示教或AS语言编程	
8. 存储器容量	8 MB	
9. 通用信号	外部操作信号	紧急停止, 外部同期信号等
	输入信号	32通道 (含专用信号)
	输出信号	32通道 (含专用信号)
10. 操作面板	示教/再现转换开关、紧急停止开关、电源灯	
11. 线缆	分离线缆 (控制盘 ↔ 中继连接器)	3 m
	分离线缆 (中继连接器 ↔ 机器人本体)	3 m
	示教器线缆	10 m
12. 重量	参照添附图	
13. 电源要求	AC200 - AC220 V ± 10%, 50/60 Hz, 3相 5.6 kVA (E27)、10 kVA (E25)	
	A种接地 (防爆用)、D种接地 (机器人专用接地)、漏电电流 最大100 mA	
14. 环境条件	环境温度 0~45 °C、相对湿度 35~85% (无凝露, 无结霜)	
15. 颜色	Munsell 10GY9/1 等效	
16. 示教器	本质安全防爆、配有5.7英寸TFT彩色液晶触摸屏 非常停止开关、示教锁定开关、误操作自动停机开关	
17. 选装件		
输入输出信号	各64、96、128通道	
通用信号用连接器	D-SUB 37端口 (公/母) 付保护套	
操作面板	马达ON、循环开始、RUN/HOLD、错误重置、遥控/局部开关、报警指示灯	
分离线缆	(控制盘 ↔ 中继连接器) 5, 7, 10, 15, 20, 25, 30m	全长为40m
	(中继连接器 ↔ 机器人本体) 1, 5, 7, 10, 15m	
示教器线缆	3、5、7、10、15、20、25、30m	全长为30m
示教器中继 连接盒线缆	(控制盘 ↔ 配件) 3, 5, 7, 10, 15m	
	(配件 ↔ 连接盒) 1, 3, 5, 7, 10, 15m	
辅助存储	USB存储器	
马达制动解除装置	解除制动开关	
AC插座	AC100V插座	
电脑连接线缆	1.5 m、3 m	
示教器选装件	线缆挂钩、短路连接器	
盘内照明	LED照明	
控制盘冷却设备	请另行商谈。	
现场总线	请另行商谈。	
内置顺控功能	请另行商谈。	
模拟输入输出	请另行商谈。	
传送带同期	请另行商谈。	
喷涂机器控制	请另行商谈。	
18. 其他	有关维护, 维修零件请另行商谈。	

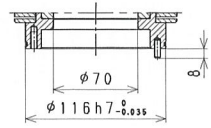
## 2. 保修期及保修内容

### (1) 保修期

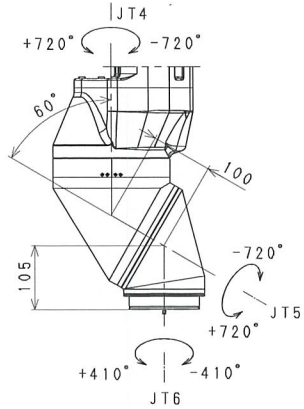
- 1) 本机的交货日开始一年或运转3000小时为止。
- 2) 含周边装置等系统交货的情况下，依照另行提出的制作规格书为准。

### (2) 保修内容

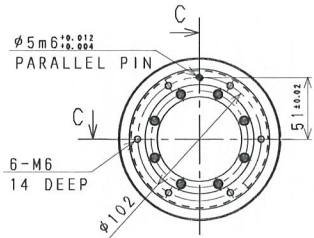
- 1) 在保修期内，如果是我公司的原因造成的构成本机的零件发生问题，在我公司认可的情况下，提供无偿修理服务。  
另外，上述保修的适应范围仅限我公司交付的制品，除此之外不负任何责任。
- 2) 即使在保修期内，对下列情况也不适用无偿修理服务。
  - ① 没有按「说明书」记载的注意事项操作而发生的故障。
  - ② 由贵公司进行的修理，改造，移动或使用者的不当操作而引发的故障。
  - ③ 因未满足「说明书」的点检，调整，维修要求而发生的故障。
  - ④ 没有使用纯正零件或我公司指定的零件及润滑油而发生的故障。
  - ⑤ 「说明书」上记载的消耗品的消耗及此消耗引起的故障和更换费用。
  - ⑥ 因火灾，地震，水灾，闪电或不适当的使用，亦或第三者的加害，偷盗等发生的故障
  - ⑦ 我公司施行范围外的运输及施工而导致的故障。
  - ⑧ 声响，振动，渗油，褪色，生锈及外观上的轻微瑕疵等并非性能上问题的。  
(根据规格的内容，另行签订合同。)
- 3) 此保修只适用于日本国内使用的机器人。
- 4) 转卖，转让，贷与，转移至其他国家的情况，另行签订合同。



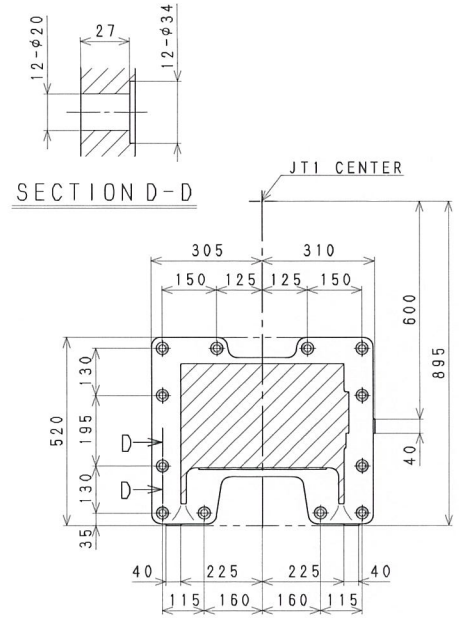
SECTION C-C



DETAIL A

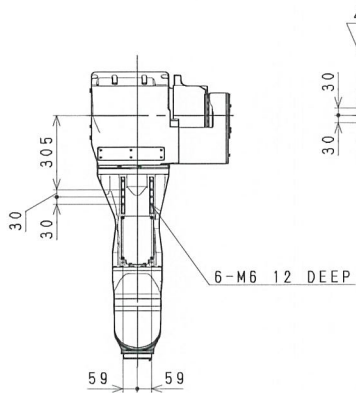


VIEW B

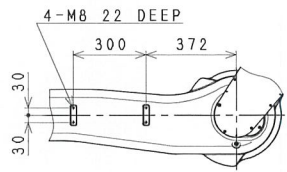


SECTION D-D

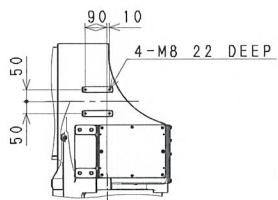
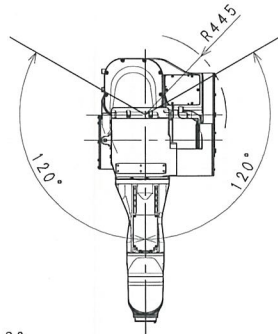
Base Installation Dimensions



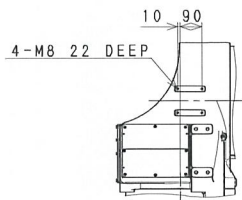
VIEW F



VIEW E

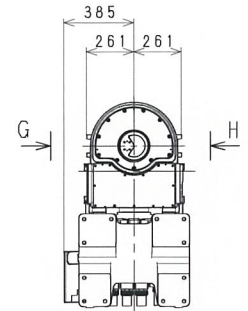
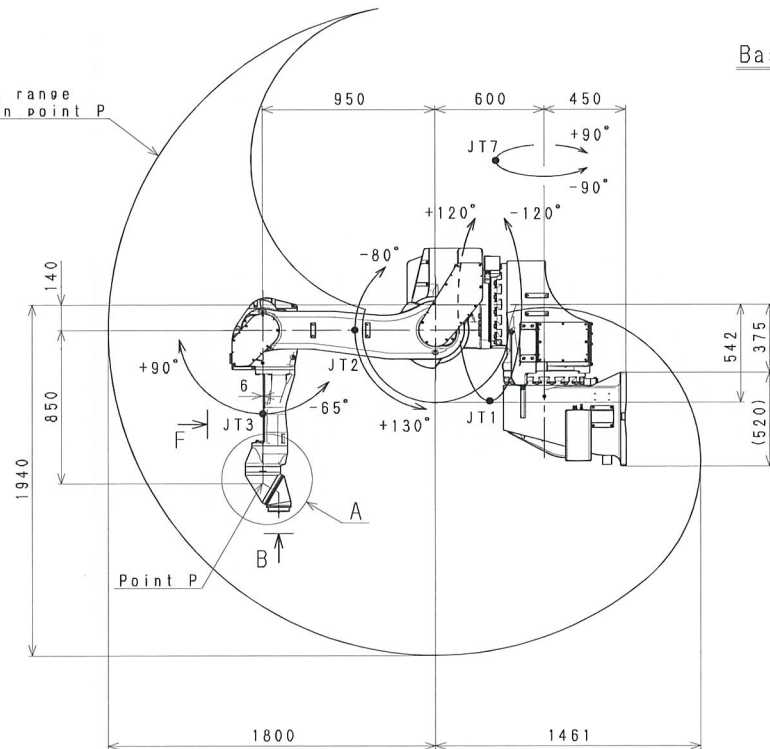


VIEW G

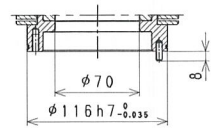


VIEW H

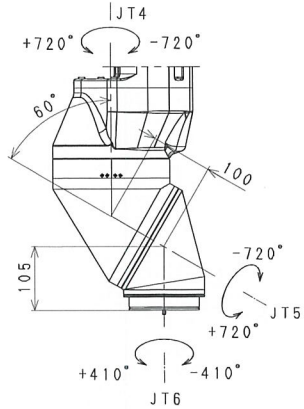
Working range based on point P



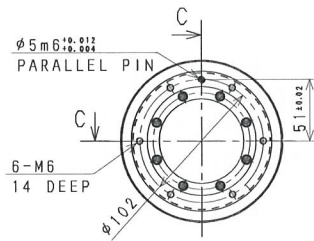
KJ244J-D0  
WORKING RANGE



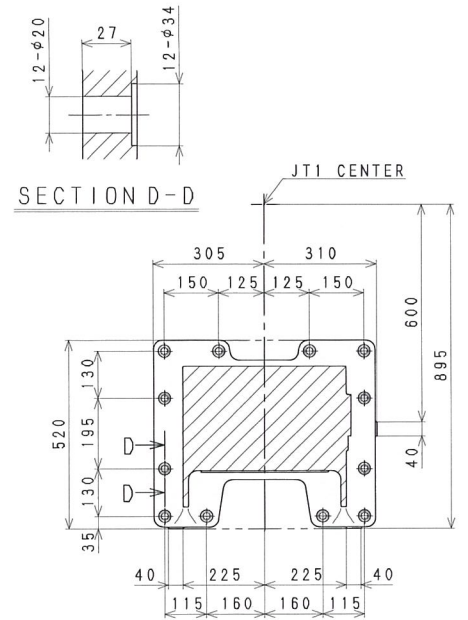
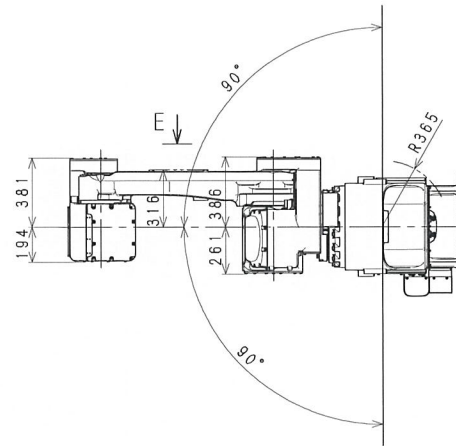
SECTION C-C



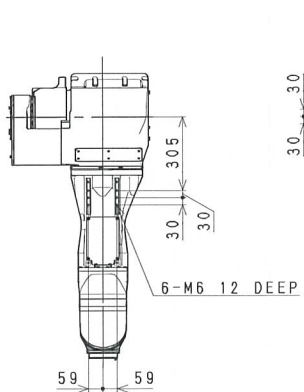
DETAIL A



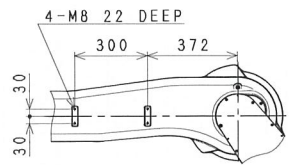
VIEW B



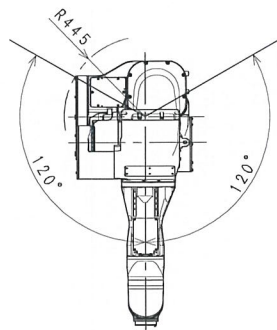
Base Installation Dimensions



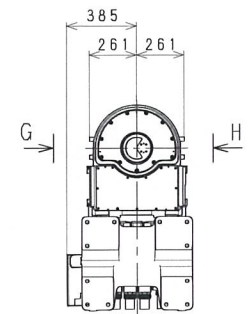
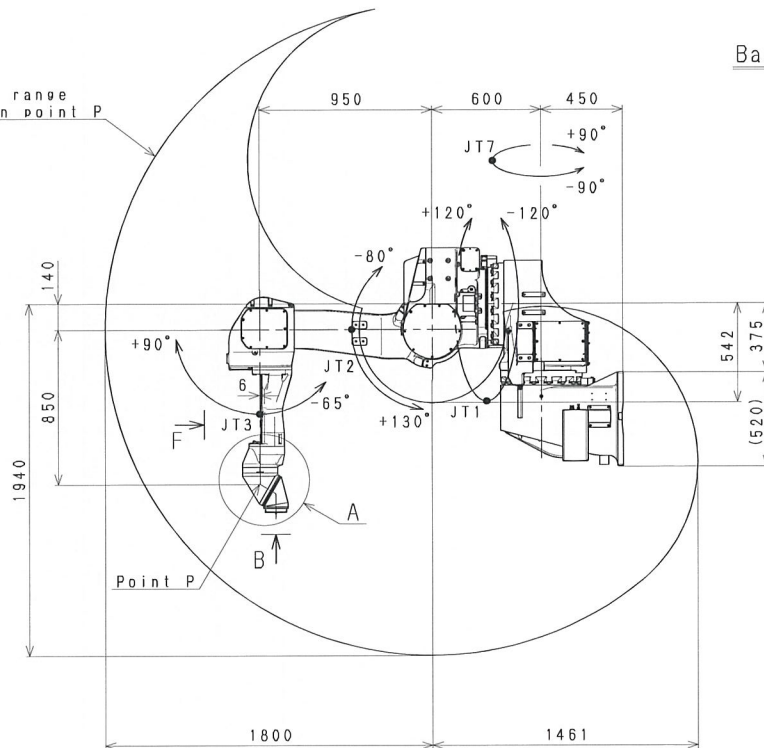
VIEW F



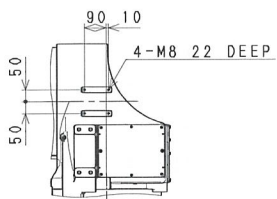
VIEW E



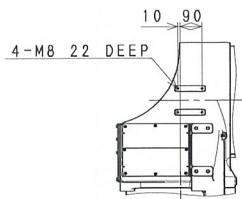
Working range based on point P



VIEW G

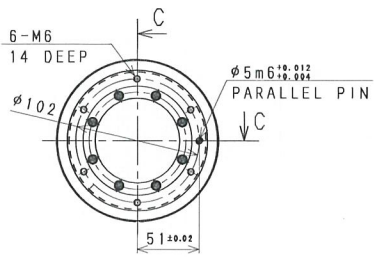


VIEW G

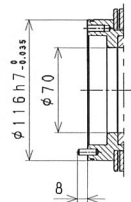


VIEW H

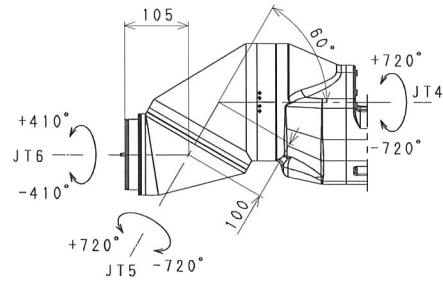
KJ244J-D1  
WORKING RANGE



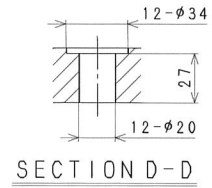
VIEW B



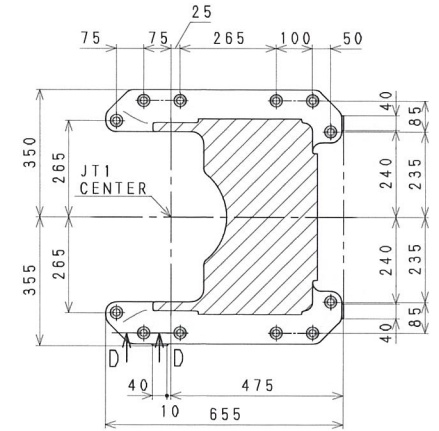
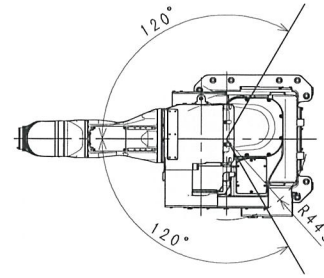
SECTION C-C



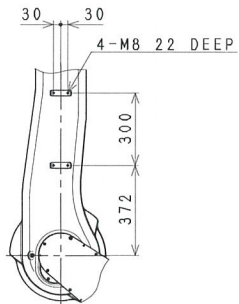
DETAIL A



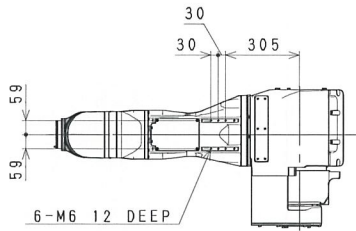
SECTION D-D



Base Installation Dimensions

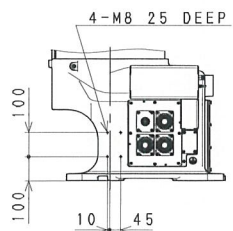
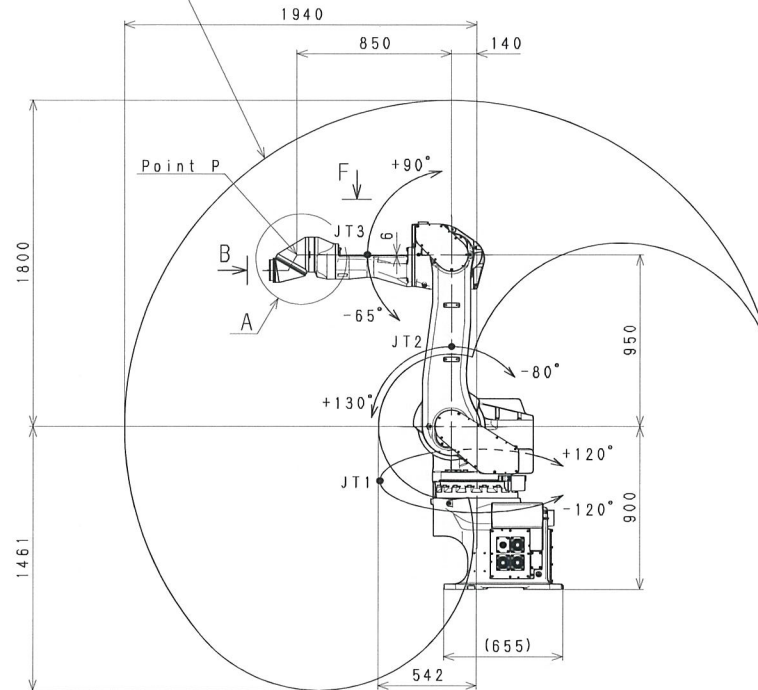


VIEW E

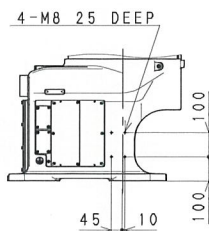


VIEW F

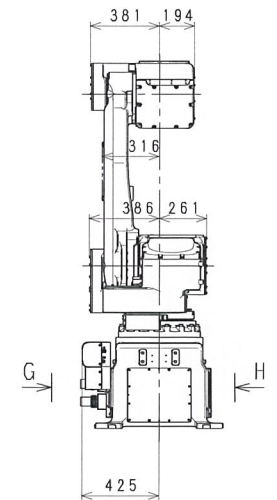
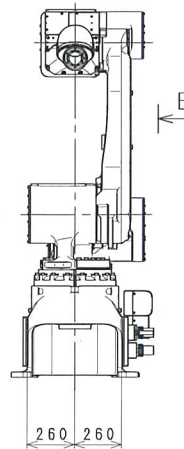
Working range based on point P



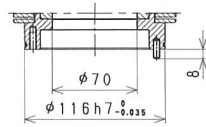
VIEW G



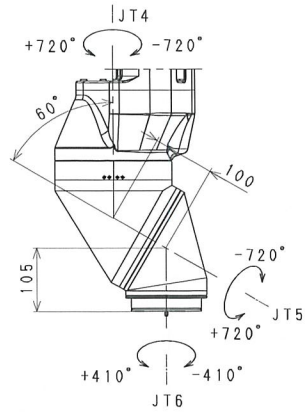
VIEW H



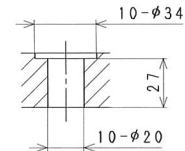
KJ194J-B0  
WORKING RANGE



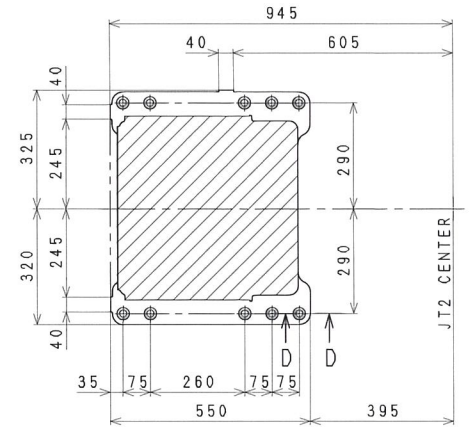
SECTION C-C



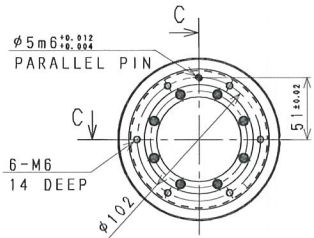
DETAIL A



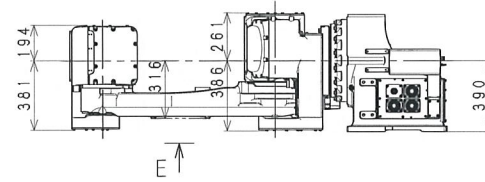
SECTION D-D



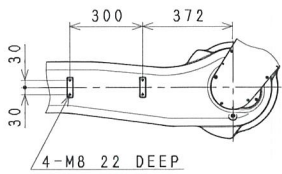
Base Installation Dimensions



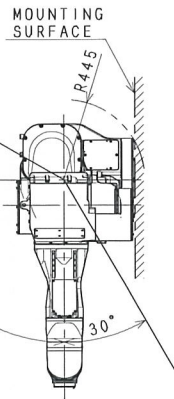
VIEW B



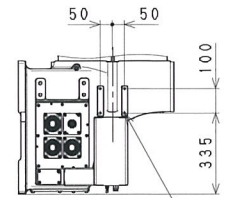
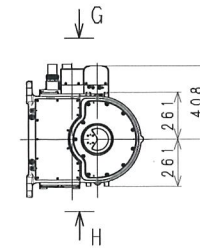
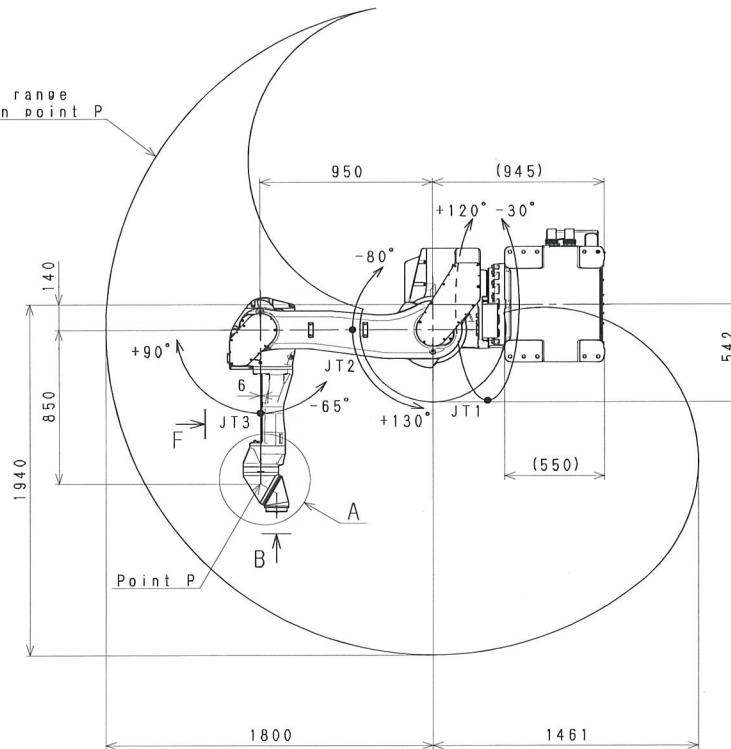
E



VIEW E

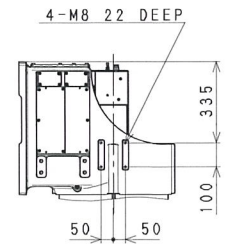


Working range based on point P



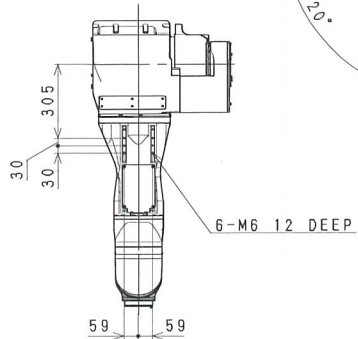
4-M8 22 DEEP

VIEW G



4-M8 22 DEEP

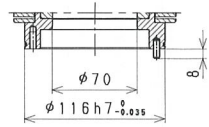
VIEW H



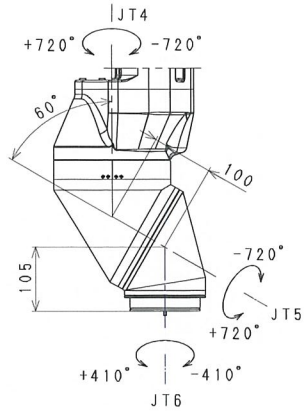
VIEW F

KJ194J-D0  
WORKING RANGE

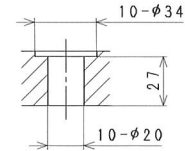




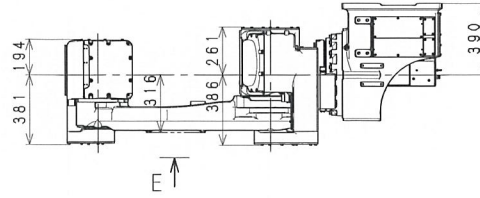
SECTION C-C



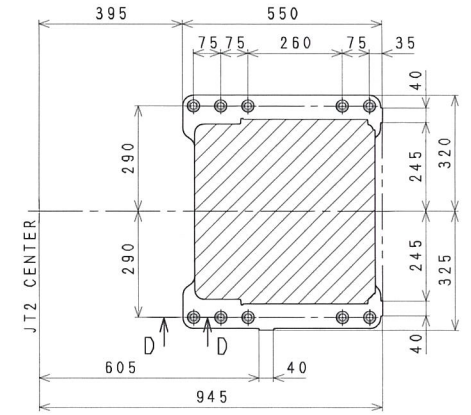
DETAIL A



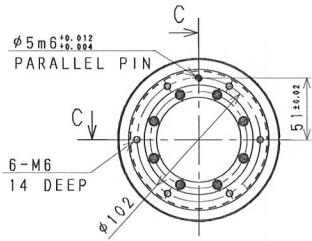
SECTION D-D



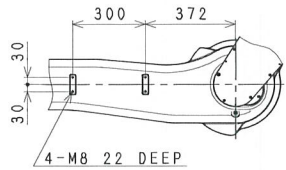
E



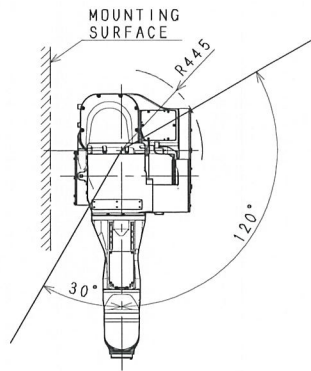
Base Installation Dimensions



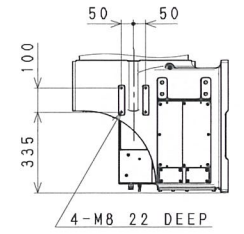
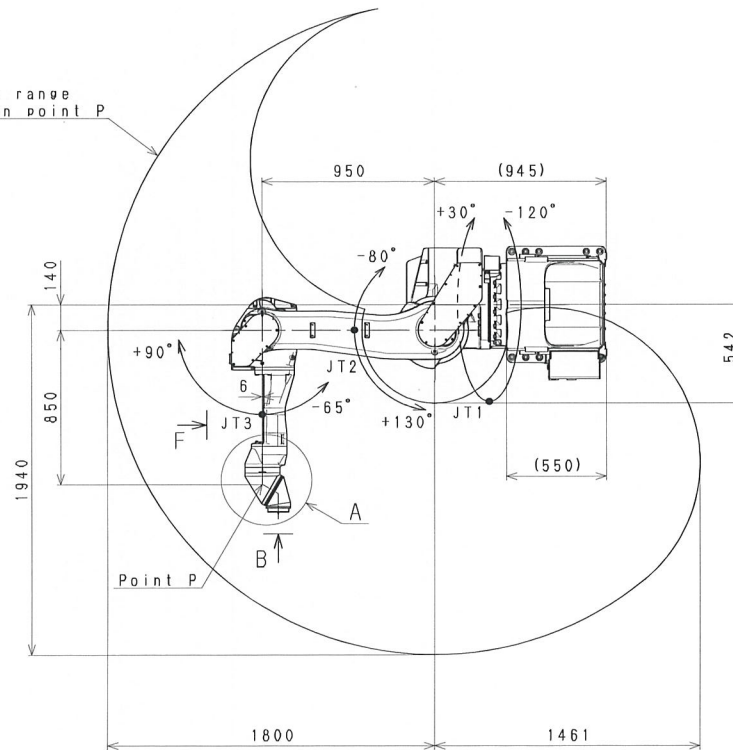
VIEW B



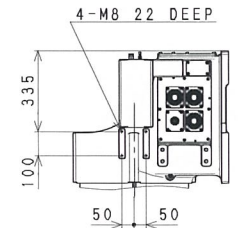
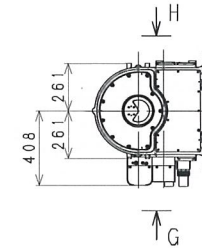
VIEW E



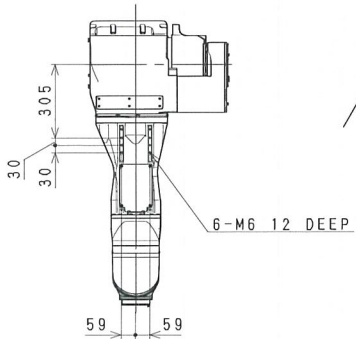
Working range based on point P



VIEW H

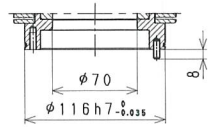


VIEW G

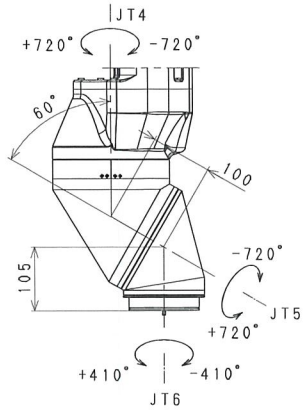


VIEW F

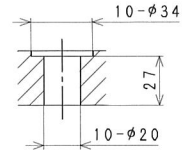
KJ194J-F0  
WORKING RANGE



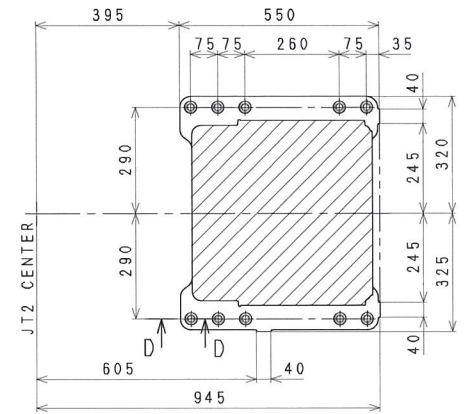
SECTION C-C



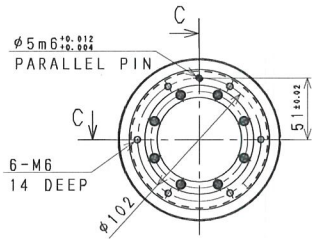
DETAIL A



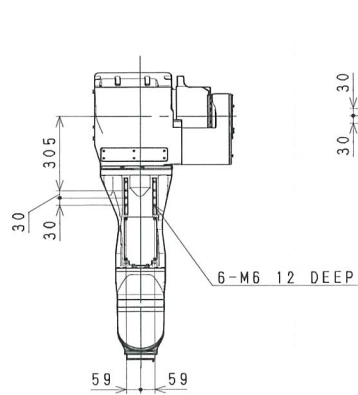
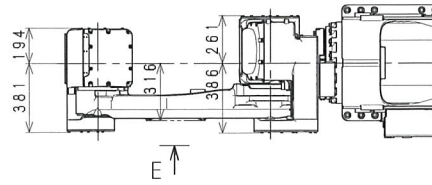
SECTION D-D



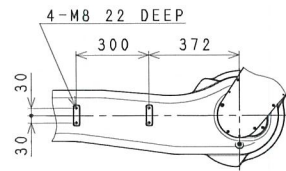
Base Installation Dimensions



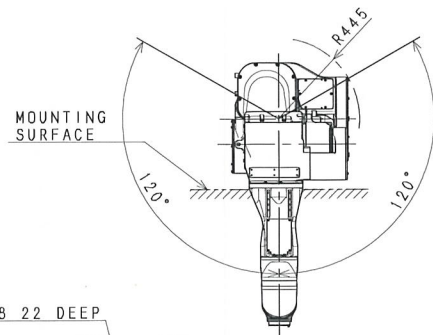
VIEW B



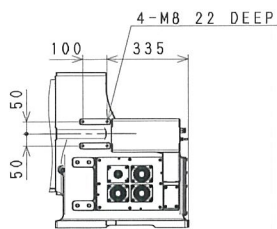
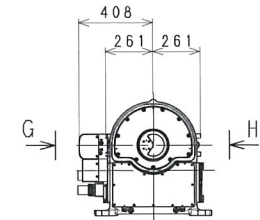
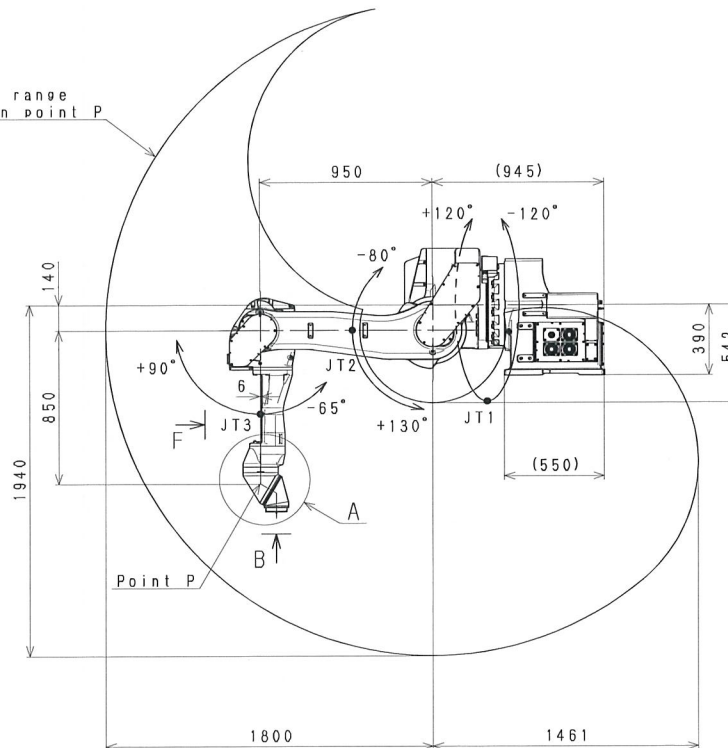
VIEW F



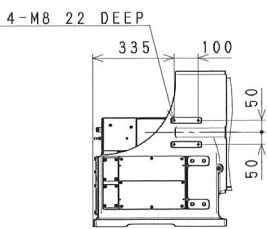
VIEW E



Working range based on point P

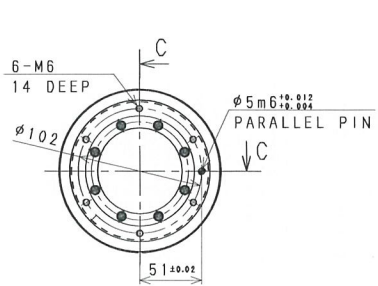


VIEW G

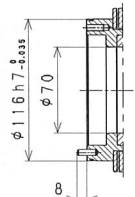


VIEW H

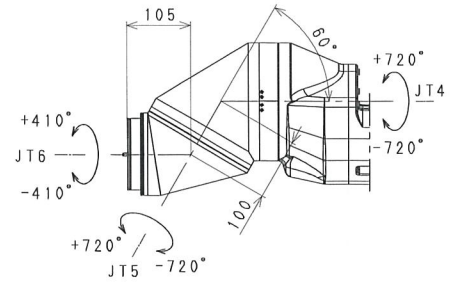
KJ194J-H0  
WORKING RANGE



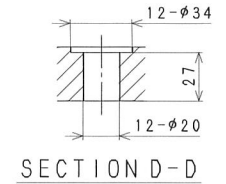
VIEW B



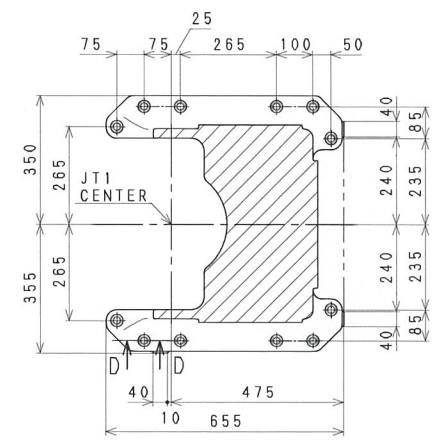
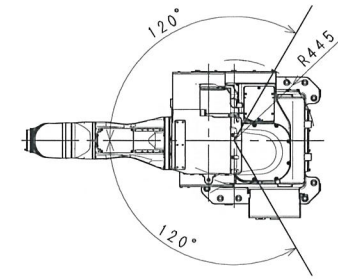
SECTION C-C



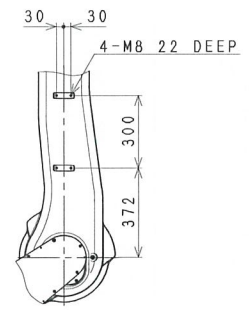
DETAIL A



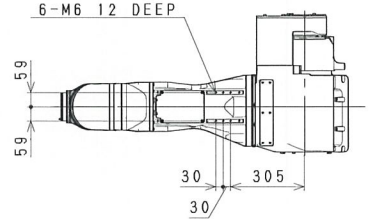
SECTION D-D



Base Installation Dimensions

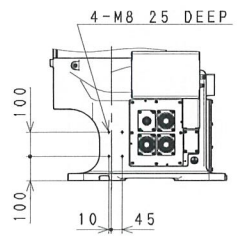
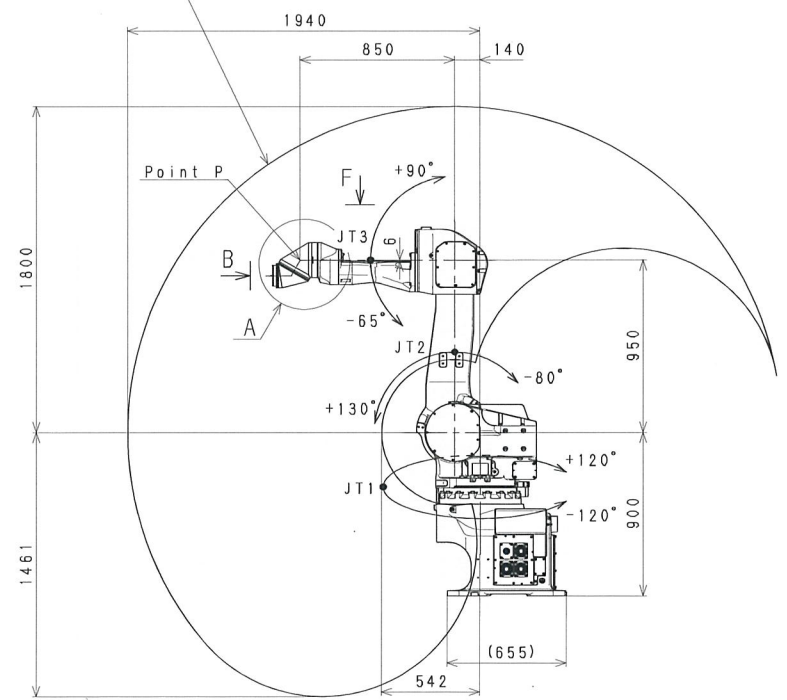


VIEW E

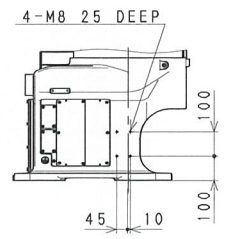


VIEW F

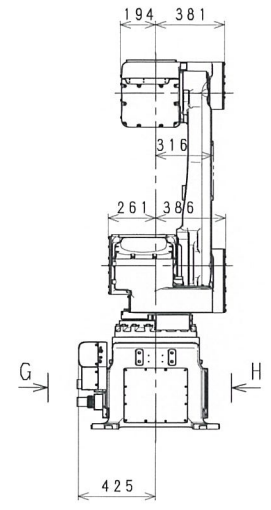
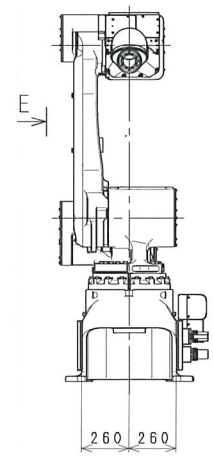
Working range based on point P



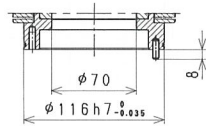
VIEW G



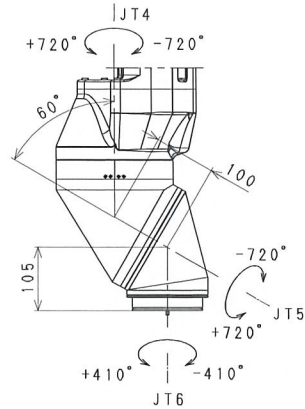
VIEW H



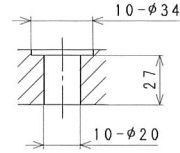
KJ194J-B1  
WORKING RANGE



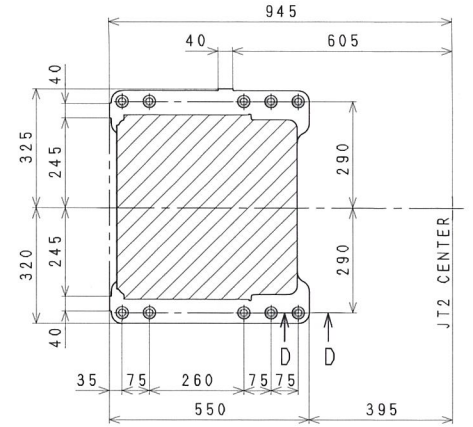
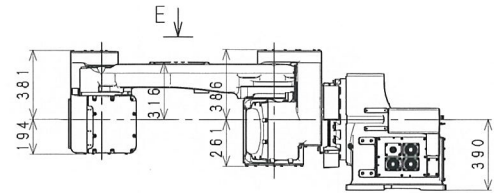
SECTION C-C



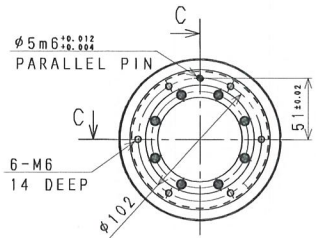
DETAIL A



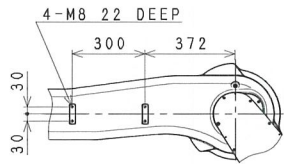
SECTION D-D



Base Installation Dimensions



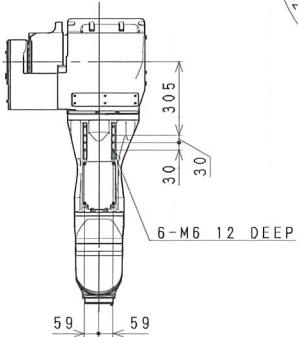
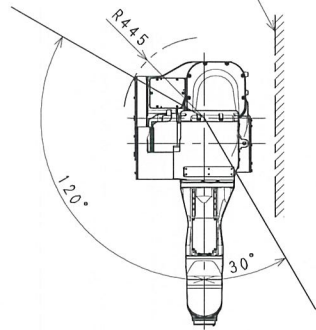
VIEW B



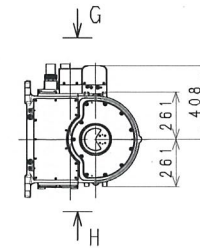
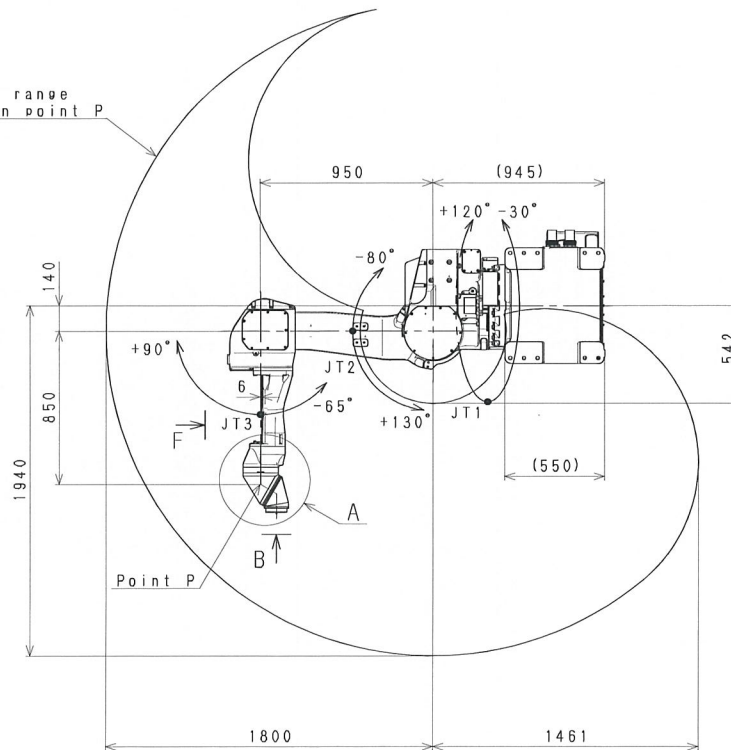
VIEW E

Working range based on point P

MOUNTING SURFACE

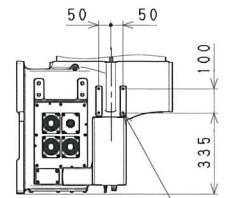


VIEW F



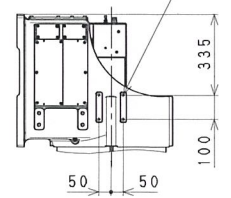
4-M8 22 DEEP

VIEW G

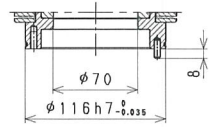


4-M8 22 DEEP

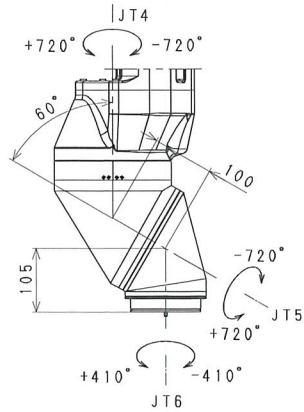
VIEW H



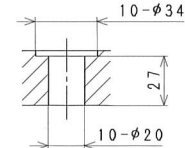
KJ194J-D1  
WORKING RANGE



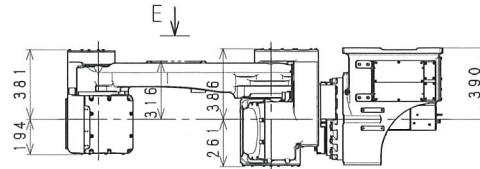
SECTION C-C



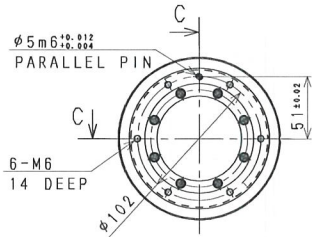
DETAIL A



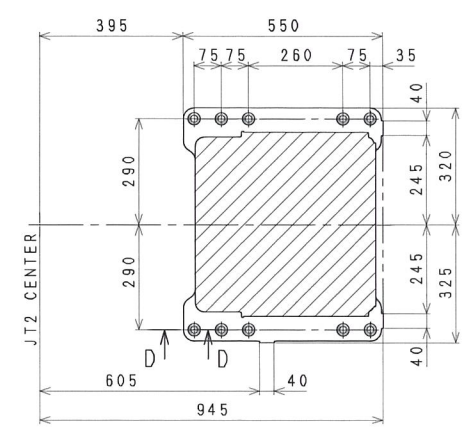
SECTION D-D



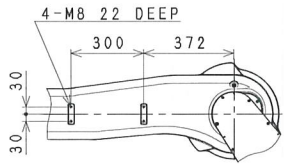
E



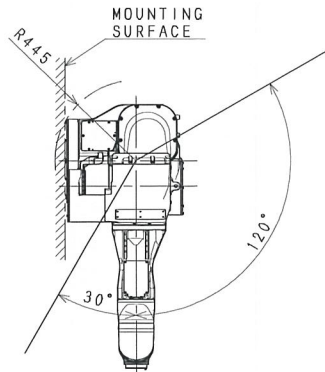
VIEW B



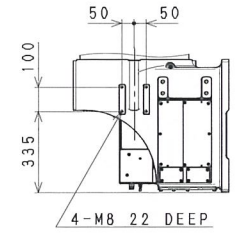
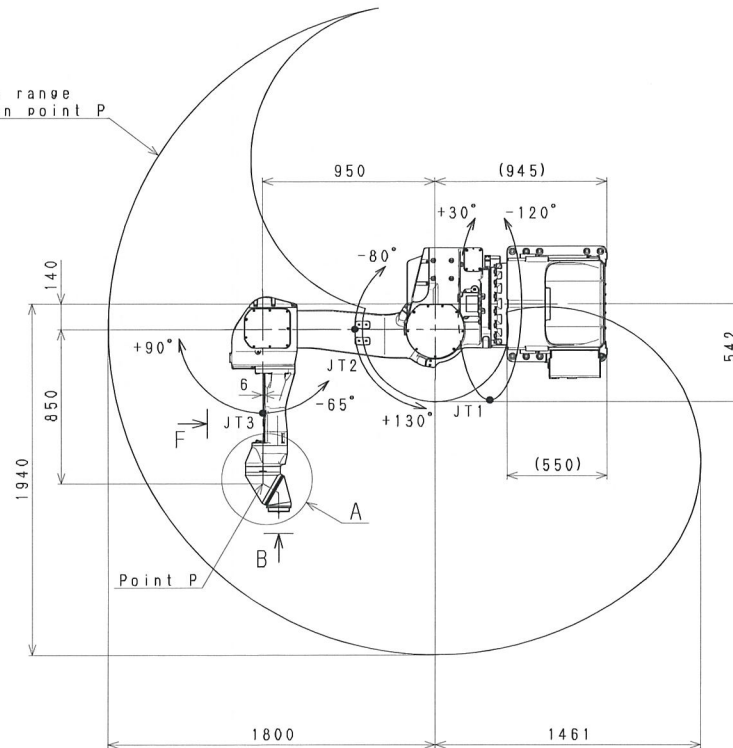
Base Installation Dimensions



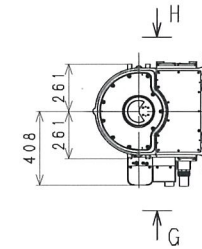
VIEW E



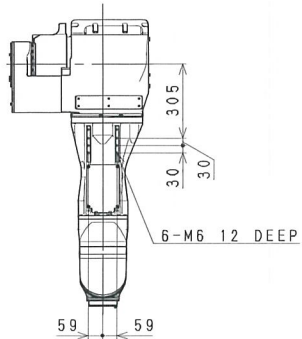
Working range based on point P



VIEW H

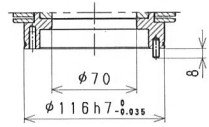


VIEW G

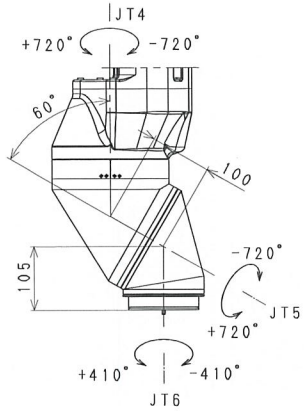


VIEW F

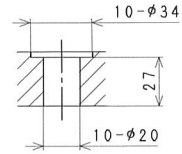
KJ194J-F1  
WORKING RANGE



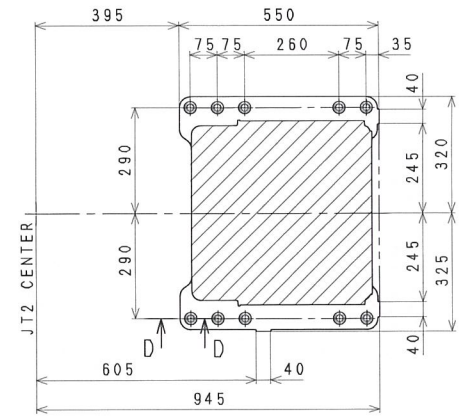
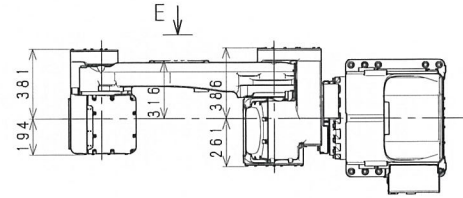
SECTION C-C



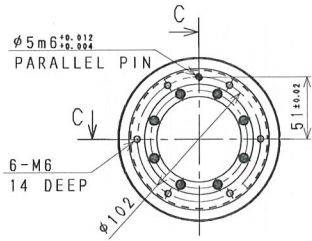
DETAIL A



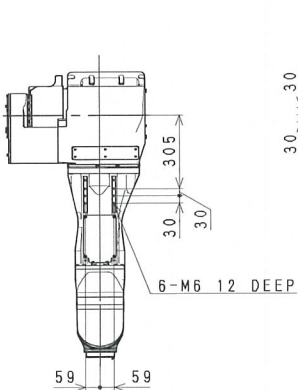
SECTION D-D



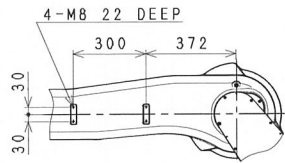
Base Installation Dimensions



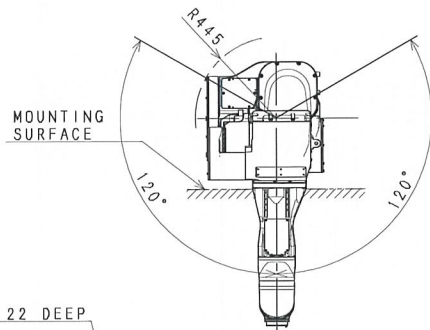
VIEW B



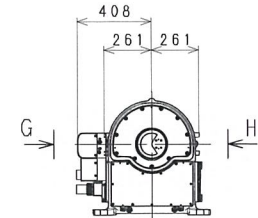
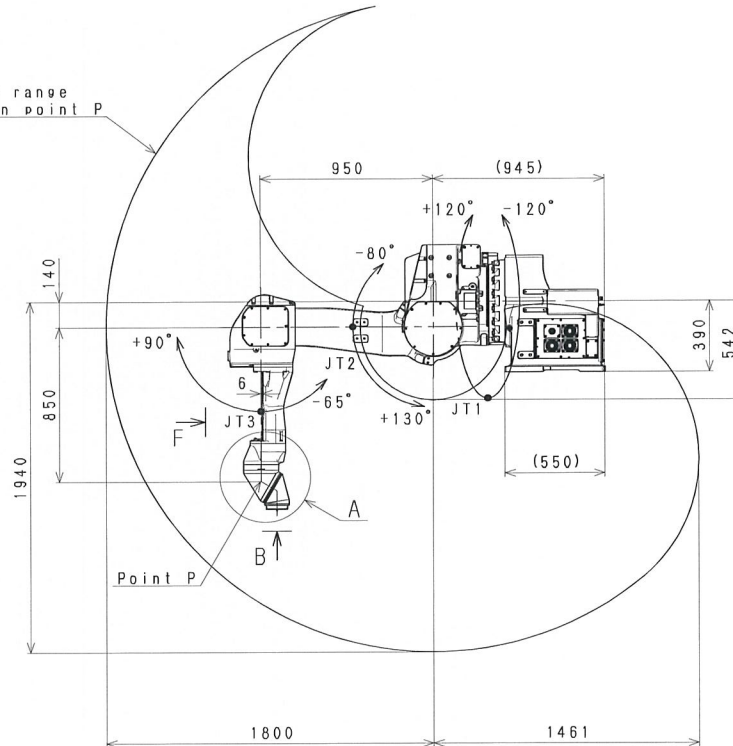
VIEW F



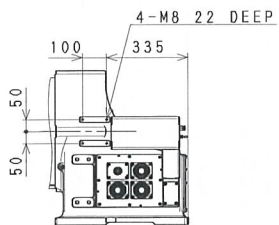
VIEW E



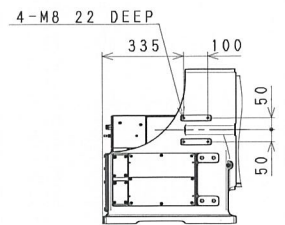
Working range based on point P



VIEW G



VIEW G

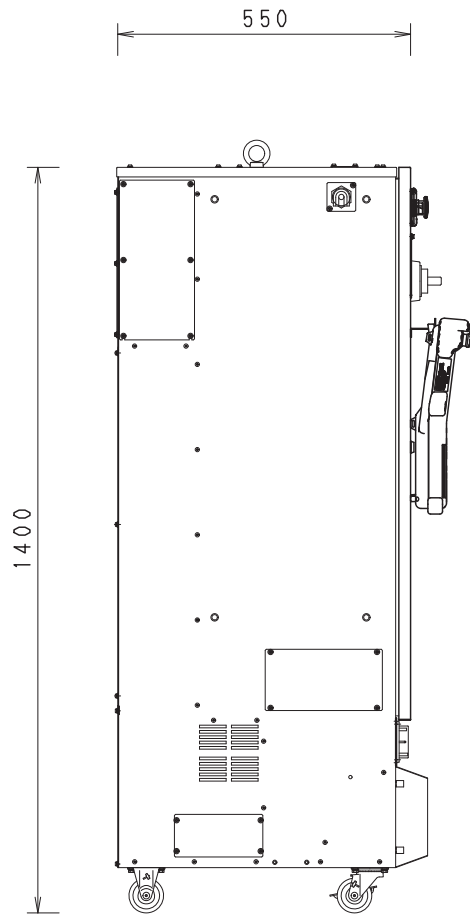


VIEW H

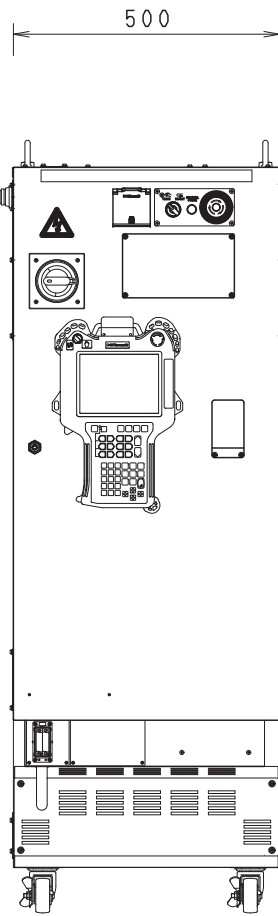
KJ194J-H1  
WORKING RANGE

E25/E27 CONTROLLER

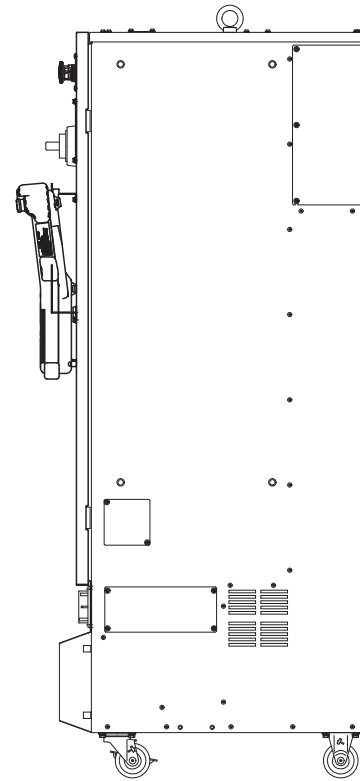
MASS: 120Kg



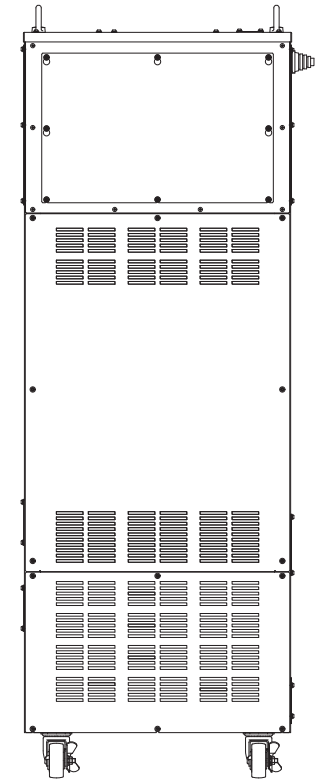
SIDE VIEW



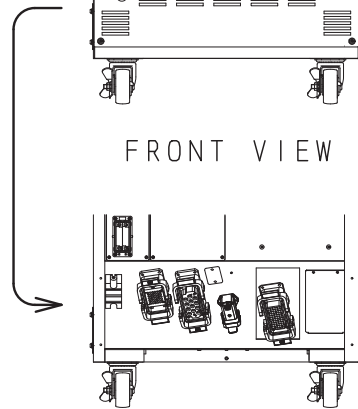
FRONT VIEW



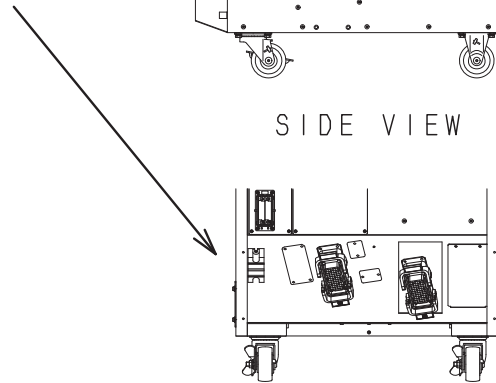
SIDE VIEW



REAR VIEW



WITHOUT CONNECTOR COVER (E25)



WITHOUT CONNECTOR COVER (E27)