不锐系列机器人简介

不锐系列机器人是自主研发设计的通用六关节机器人。其设计采用轻型模块化思想设计，可根据不同的需要定制适合工作要求的产品。标准产品为 5kg、7kg、10kg 和 20kg、30kg 机器人。

↘ 操作空间大
采用三平行轴构型，模块化关节，每个关节理论都可以实现±180°旋转，再辅以优化的大臂和小臂，可达空间为球形；

↘ 高持重比
机身主体材料采用压铸铝和铝合金，轻量化设计，持重比可达 1:3；

↘ 使用维护简单
完全按工业机器人标准设计，安装固定后，连接电缆，轻松操作机械手；机器人语言上手简单，工艺丰富。

↘ 高回报，低成本
机器人设计采用通用伺服、传动部件，可靠性高，成本低，

↘ 高精度
机器人本体配有高分辨率位置反馈，高精度谐波减速部件，重复定位精度可达 0.02mm；

↘ 人机协作
满足机器人安全标准，同时可搭配区域监控、碰撞检测功能，实现人机协作、生产自动化、简化部署。

Instructions

Bright series robot is a universal six-joint robot series with our own R&D. By adopting light weight modular design, customized product can be manufactured to meet the needs in many different kinds of working condition. Standard products can be divided into five types (5kg,7kg, 10kg and 20kg,30kg) according to the load capability.

Large operating space

By adopting three parallel axis configurations, and modular joints design, each joint can rotate $\pm$ 180° in range, with optimized robot arms, a spherical full reachable workspace is realized.

High weight holding ratio

The robot structure is mainly made of die-cast aluminum and aluminum alloy according to the thought of light weight modular design, the weight holding ratio is about 1:3.

Easy to maintain

The robot was designed according to industrial robot standard, after fixed, and cable connected, our product are very simple to use. The robot language is easy to learn, and many working process setting are available within language.

Higher profit with lower cost

With the use of universal servo and transmission parts, the reliability is enhanced and the cost is lower.

High precision

The robot is mounted with high resolution position feedback and high precision harmonic deceleration unit, the repetitive positioning accuracy is about 0.02mm.
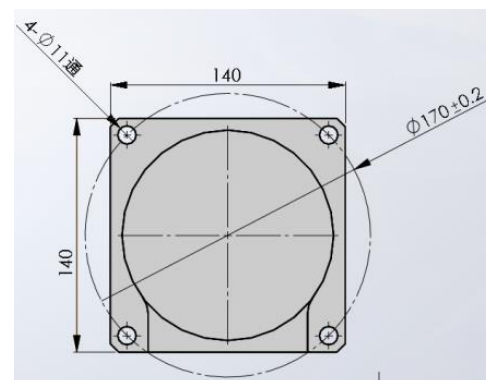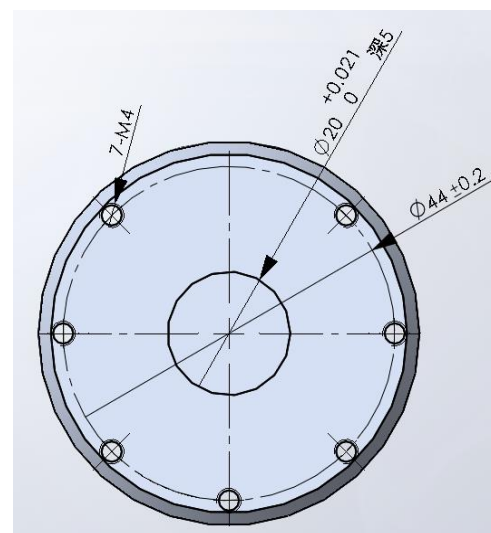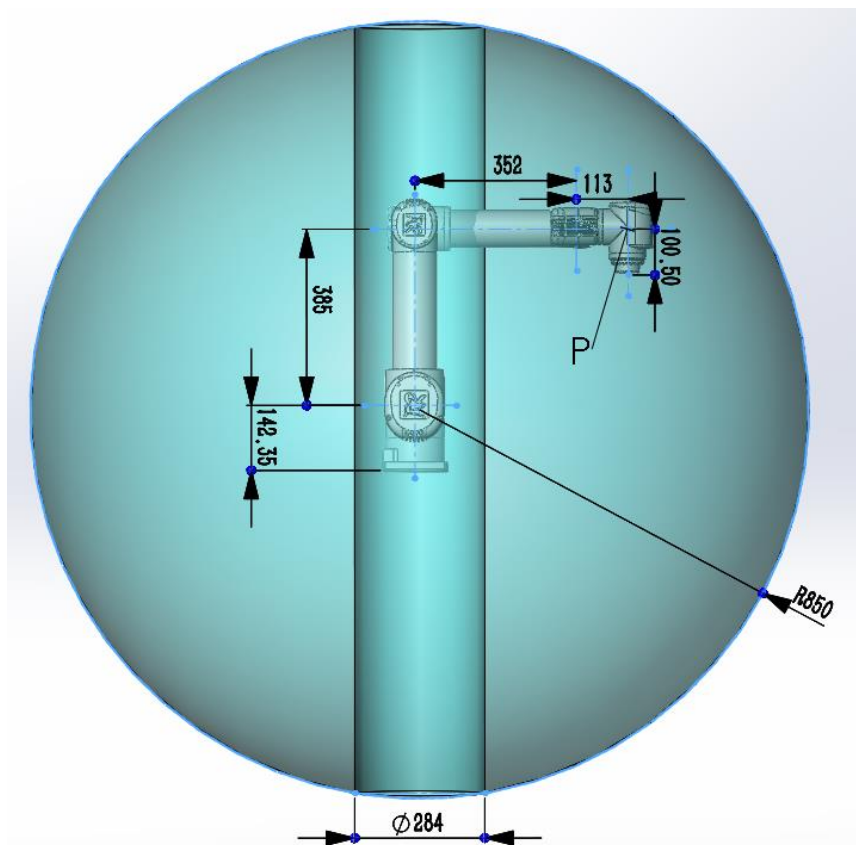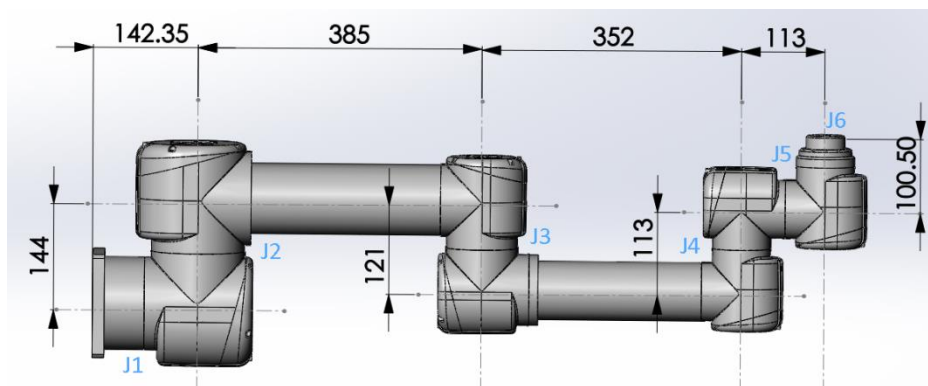
Human-robot collaboration

Our products meet the robot safety standards, with regional monitoring and collision detecting function, our robot can meet the need of collaboration, automatic production and simplified deployment.
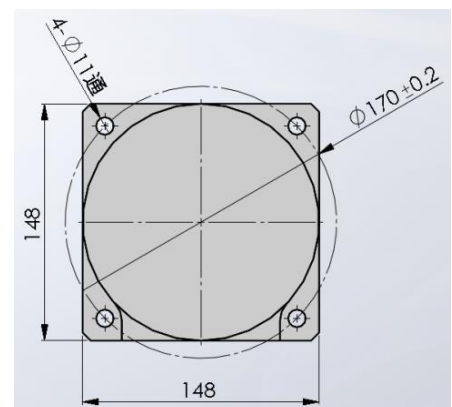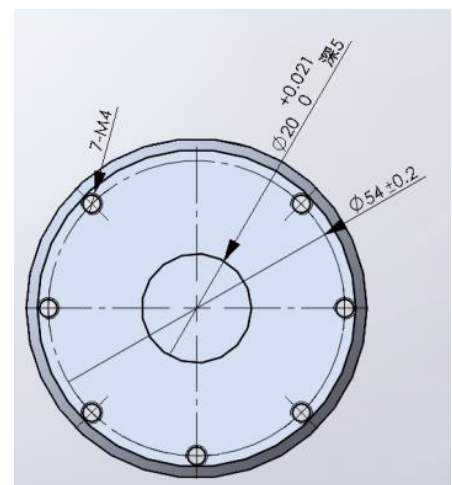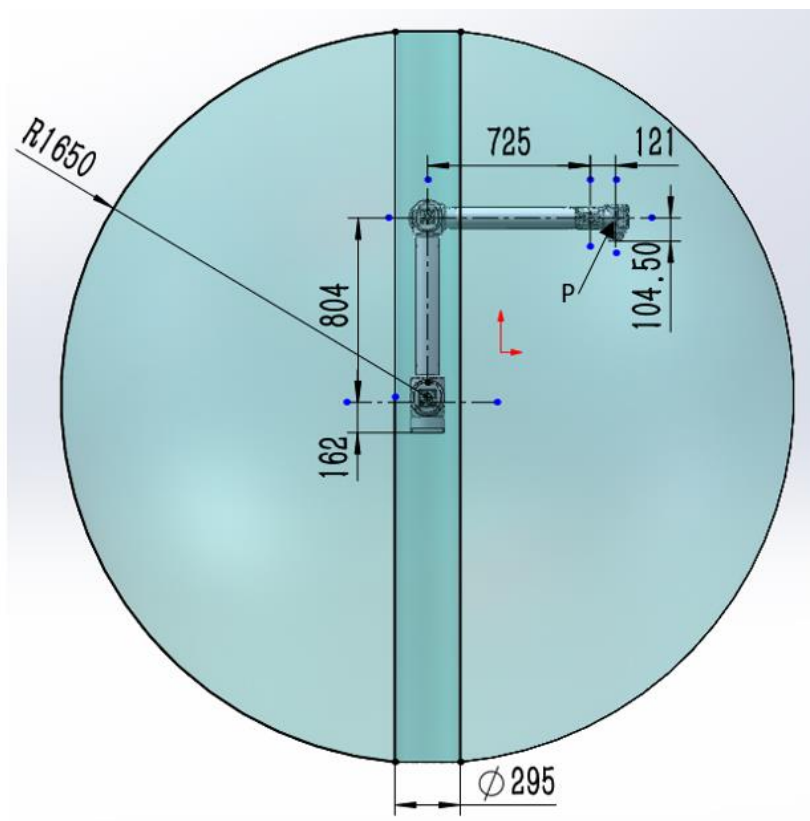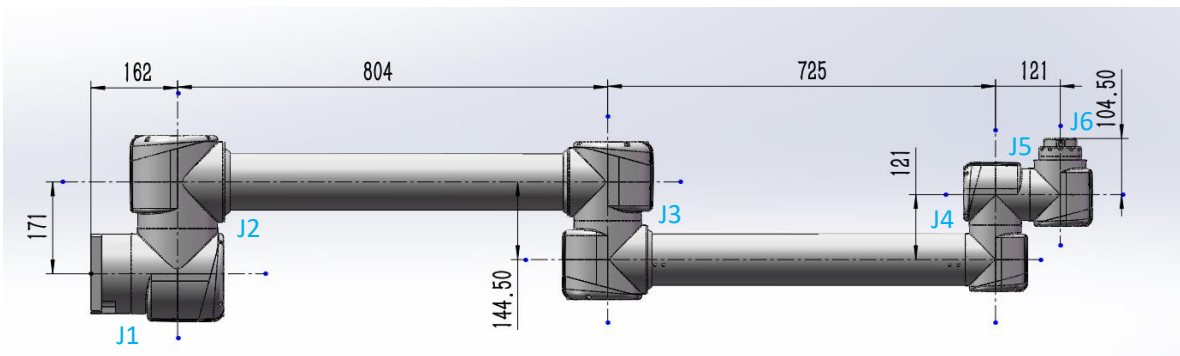
规格 Specifications

型号 Model	R-SV05	R-SV07	R-SV10	R-SV20	R-SV30
自由度 Degrees of freedom	6 个旋转关节 6 rotating joints				
有效载荷 Payload	5kg	7kg	10kg	20kg	30kg
最大工作半径 Reach	850mm	1650mm	1300mm	1650mm	971mm
重复定位精度 Repeatability	±0.02mm				
最大工作范围 Working range — 1 轴 JT1	±180°				
2 轴 JT2	±180°				
3 轴 JT3	±160°				
4 轴 JT4	±180°				
5 轴 JT5	±180°				
6 轴 JT6	±360°				
最大速度 Maximum speed — 1 轴 JT1	160°/s	120°/s	120°/s	120°/s	120°/s
2 轴 JT2	160°/s	120°/s	120°/s	120°/s	120°/s
3 轴 JT3	160°/s	120°/s	120°/s	120°/s	180°/s
4 轴 JT4	190°/s	180°/s	180°/s	150°/s	180°/s
5 轴 JT5	190°/s	180°/s	180°/s	180°/s	180°/s
6 轴 JT6	190°/s	180°/s	180°/s	180°/s	180°/s
本体质量 Weight	21kg	36.55kg	35kg	55kg	52Kg
安装方式 Installation	地面、顶装、壁装 Free Standing/Ceiling Mounted/Wall Mounted				
工作环境温度 Working environment temperature	0～50°C				
工作环境湿度 Working environment humidity	35～85%				
IP 等级 IP classification	IP65				

动作范围和尺寸 Movement Range and Size

R-SV05

R-SV07

R-SV10

R-SV20

189.50   809   720   121

208.50

121

J5   J6

J2   J3   J4

J1

173.50

104.5

720   121

104.5

809

189.50

P

R1650

Ø312

7-M4

Ø20 +0.021 / 0 深5

Ø54±0.2

4-Ø13

Ø210±0.2

180

180

25
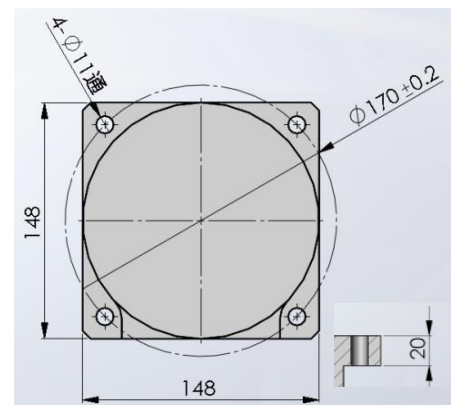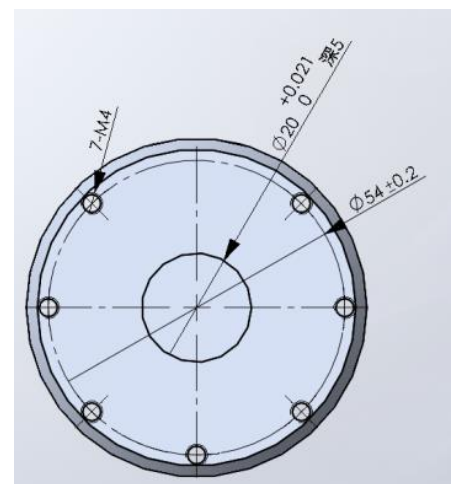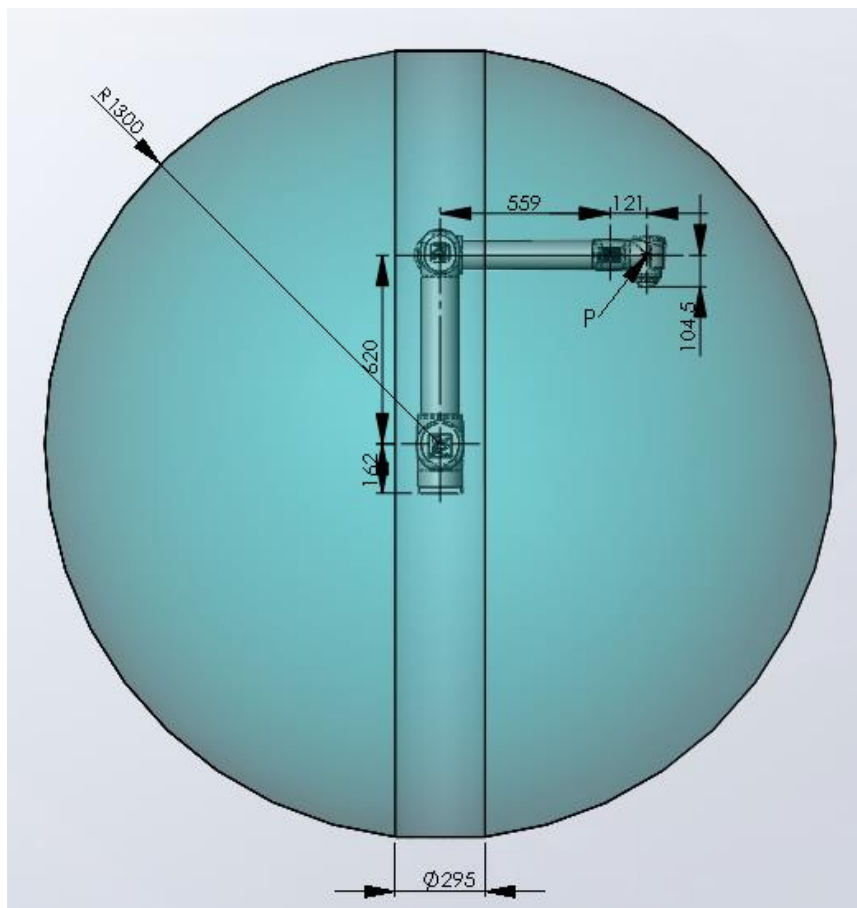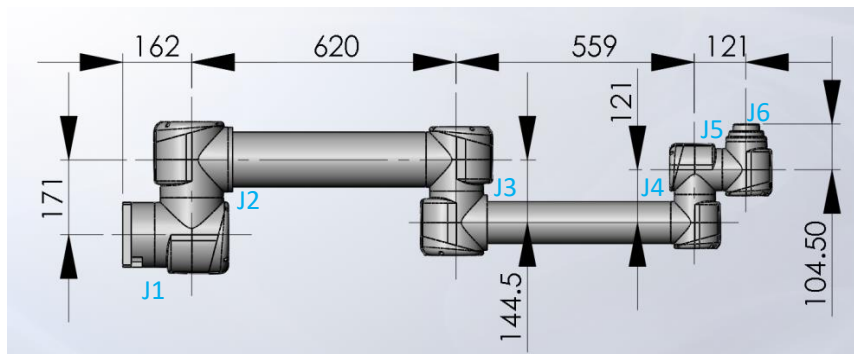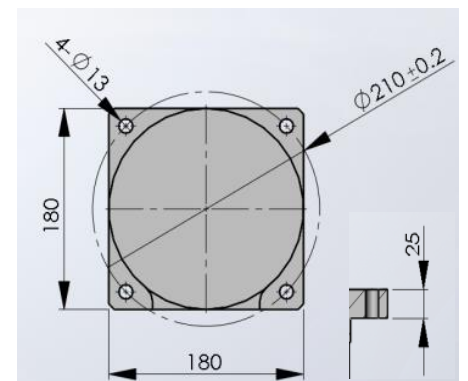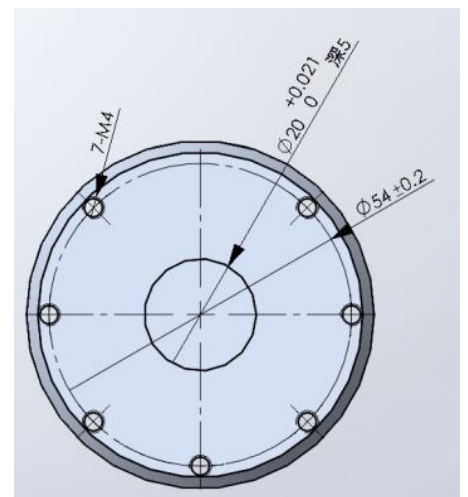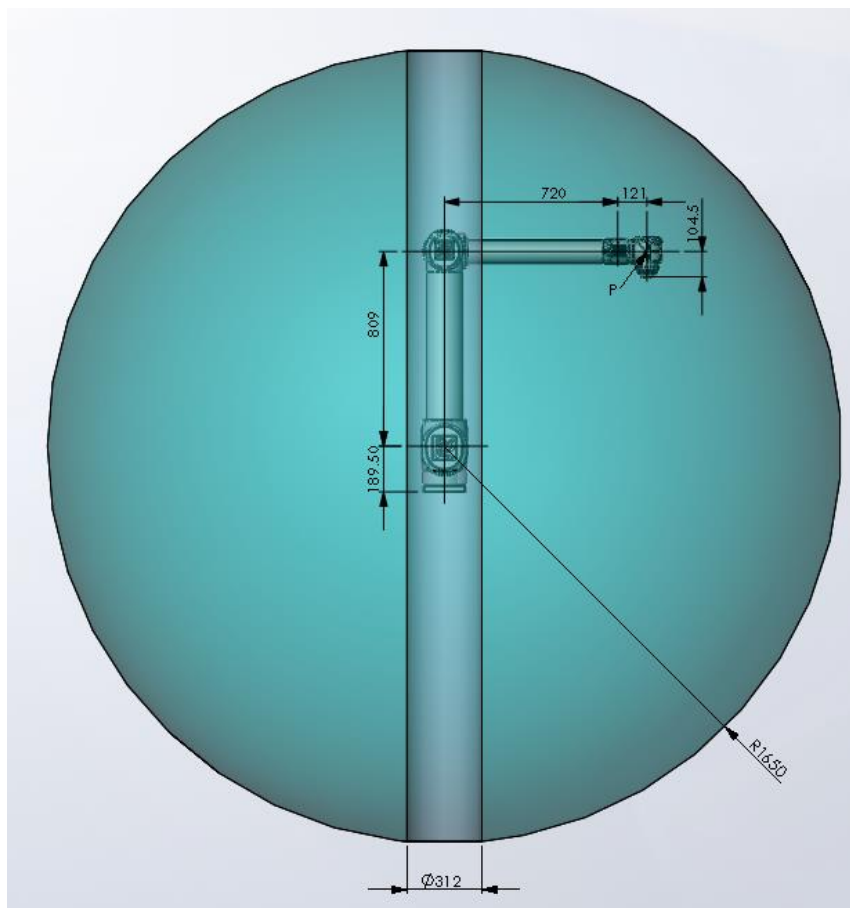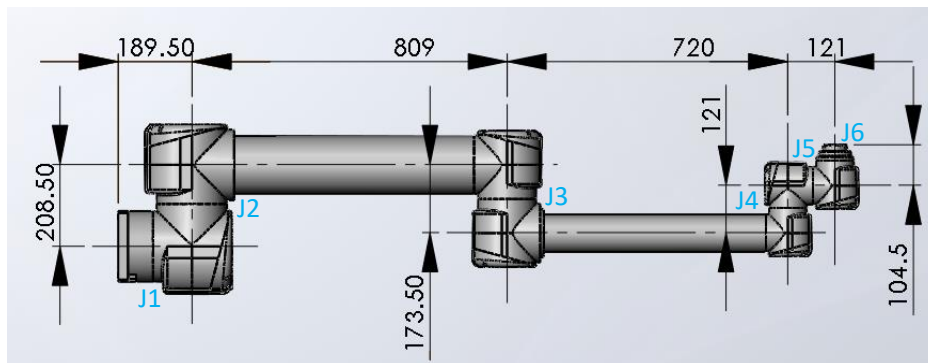
R-SV30
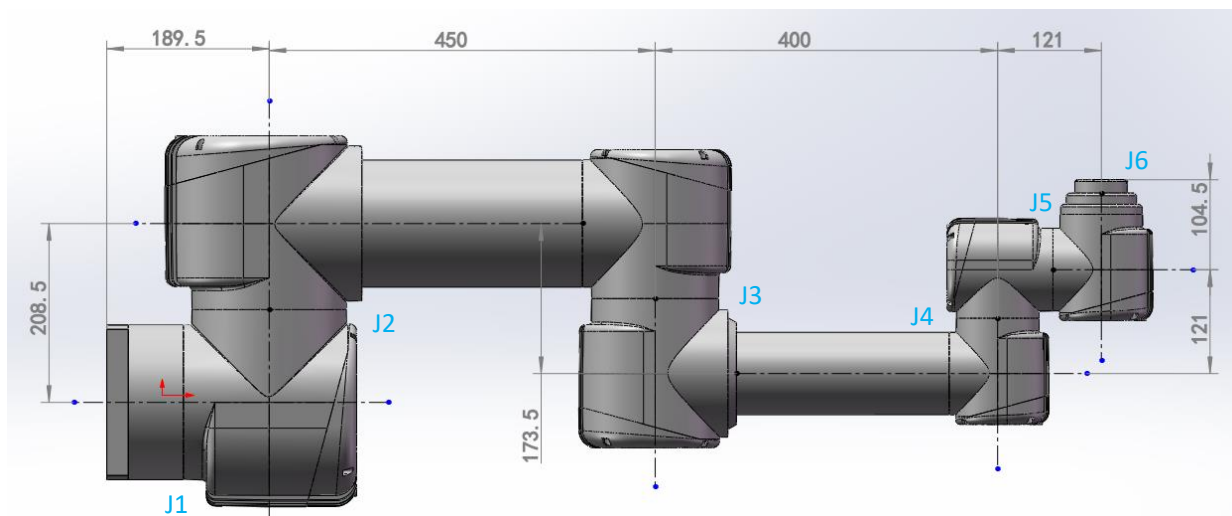
YRC 机器人控制柜

凝聚多年的机器人开发经验，研发出前所未有的高质量、小型机器人控制柜。除外形更加美观外，在性能上也有了全新的突破。

外形紧凑

YRC 缩减占用空间，能够高密度摆放，重量更轻。

运动控制

YRC 集成专业高性能机器人运动控制器。EtherCAT 实时通信，实现机器人性能的最优化。

高扩展性

YRC 建立在模块化的基础上，留有模块扩展接口，可方便的进行各种功能扩展。

丰富的功能

内置丰富功能应用，可根据不同行业定制应用解决方案。

规格

控制硬件	Intel Atom 1.6GHz CPU
	多处理器系统
	EtherCAT 总线
	USB 存储器接口
控制软件	成熟可靠的实时 OS
	高级机器人编程语言
	预装软件
	可扩展功能

电气连接

电源	AC220V，50Hz
控制器连接	主电源电缆固定头
	机器人动力线
	机器人信号线
	机器人通用 I/O 线

物理特性

物理特性	长×宽×高（mm）	重量（kg）
尺寸	500×470×252	30

环境

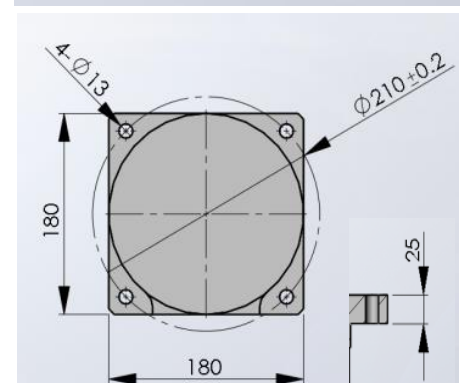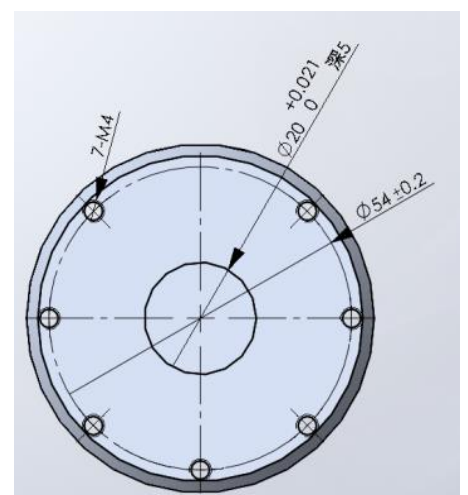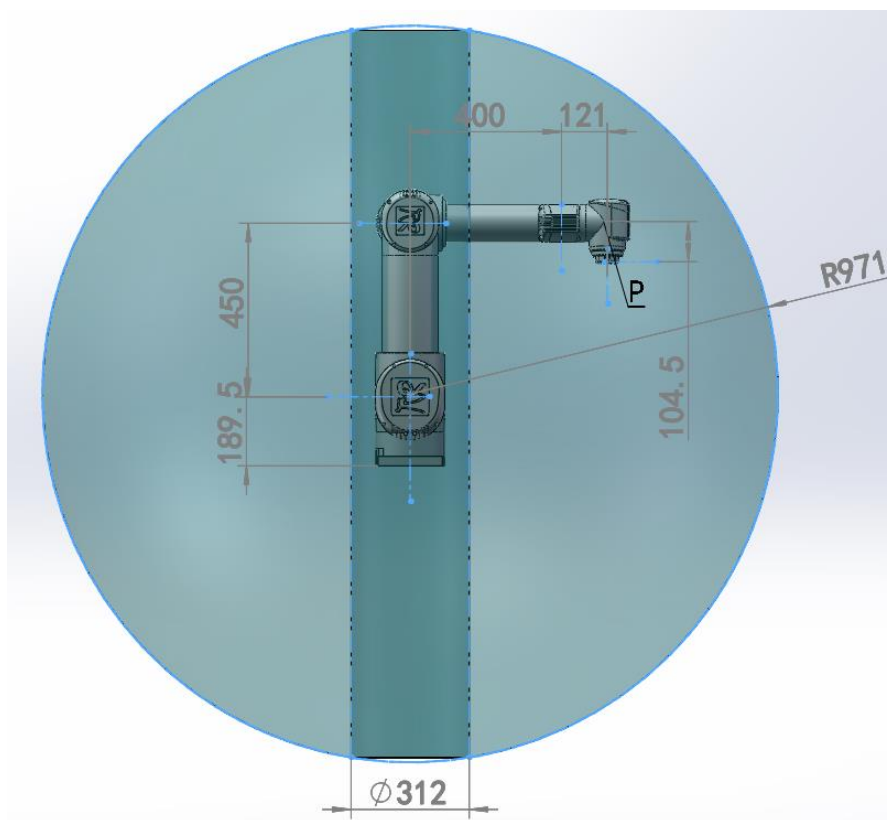| 环境温度	0-45℃（32-113℉）
相对湿度	最高 90%
防护等级	IP20
	操作面板 IP20
过滤器	潮湿颗粒物过滤
	潮湿粉尘过滤

用户界面

控制面板	控制柜上或遥控
YTP 示教器	重量：1kg
	线缆长度：5m
	彩色图形界面触摸屏
	操作按键
	紧急停止
	三位模式开关
	单手持握
	USB 存储器支持
维护	状态 LED 指示灯
	恢复程序
	登陆时间标记功能
	错误信息日志记录

安全

基本	安全紧急停止
	带检测功能的双通道安全回路
	使能启动装置

接口

输入/输出	16/16（可扩展）
数字	24V DC 或继电器信号
模拟	0-10V（需定制）
网口	以太网（10/100MB/s）
现场总线(需选配)	PROFIBUS DP
	Ethernet/IP
	CAN

YRC robot control cabinet

With years of experience in robot R&D, the cabinet is designed with higher quality, smaller in size than ever before. Not only the optimal design is much elegant, but also the performance meets its breakthrough.

Compact structure

By reducing the occupancy space, YRC cabinet is much lighter in weight , and can be placed in high density.

Motion control

Integrated with KEBA professional robot motion controller and EtherCAT real-time communication protocol, YRC can optimize the performance.

High scalability

YRC robot control cabinet, which is based on modular design, have module extension interface for function extention.

Rich functionality

Providing many motion program template. According to different industries, application solutions can be customized.

Specifications	
Hardware	Intel Atom 1.6GHz CPU
	Multiprocessor system
	EtherCAT
	USB storage interface
Software	Mature reliable real-time OS
	Advanced robot programming language
	Preloading software
	Extensible function

Electrical connection	
Power supply	AC220V，50Hz
Controller connection	Main power cable with fixing unit
	Robot power cable
	Robot signal cable
	Robot universal I/O cable

Physical characteristics	L×W×H (mm)	Weight (kg)
size	500×470×252	30

Environmental requirement	
Temperature	0-45℃（32-113℉）
Relative humidity	Up to 90%
IP classification	IP20
	IP20 for Operating panel
Filter	Wet particulate matter filtration
	Wet dust filtration

User interface	
Control panel	On the cabinet or remote
YTP Teaching pendent	1kg in weight
	Wire length 5m
	Color graphic interface on touch screen
	Operation buttons
	Emergency stop
	Three-position switch
	Can be hold in one hand during operation
	USB storage supported
Maintain	Status LED indicator light
	Program recover
	Login time markup function
	Error message log

Safety	
Basic	Emergency stop
	Dual channel safety loop with detection function
	Enabling device

Interface	
Input / Output	16/16(Extensible)
Digital	24V DC or relay signal
Analog	0-10V (Need to be selected)
Network port	EtherNET (10/100MB/s)
Field Bus (Need to be selected)	PROFIBUS DP
	Ethernet/IP
	CAN