



## AIR12-1420

|              |                             |
|--------------|-----------------------------|
| 高速度          | High speed                  |
| 高精度          | High precision              |
| 高稳定性         | High stability              |
| 紧凑的结构方案      | Compact design              |
| 腕部 IP67, 高防护 | Wrist IP67, high-protection |

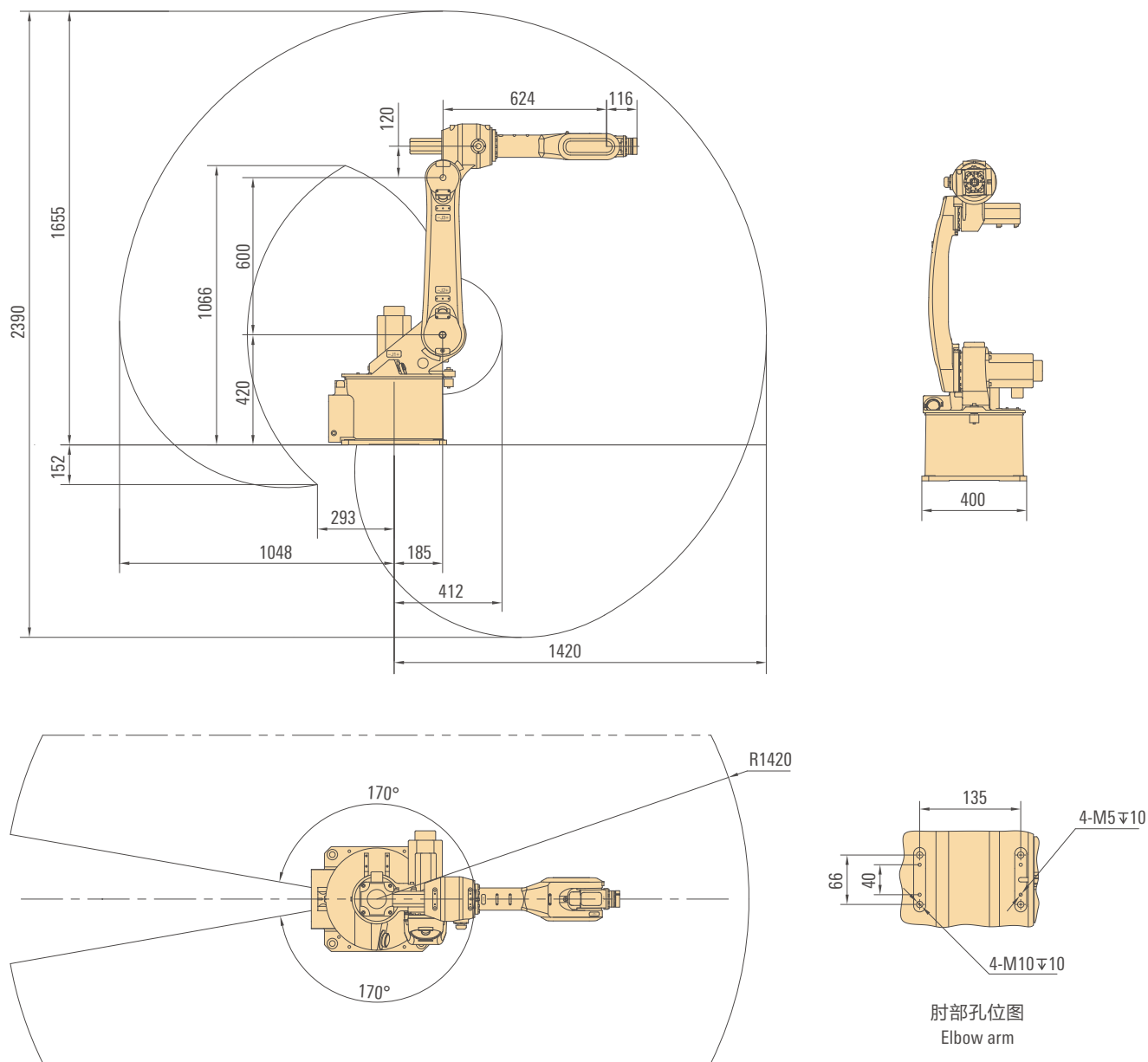
- 一流的运动速度, 高达  $\pm 0.02\text{mm}$  的重复定位精度。  
Superior moving speed, position repeatability up to  $\pm 0.02\text{mm}$ .
- 主要应用于上下料、打磨抛光、焊接等较恶劣环境下的作业, 以及搬运、码垛等高节拍需求的作业。  
AIR12-1420 is mainly used in loading & unloading, grinding & polishing, welding and other operations in harsh environment, as well as handling, palletizing and other operations with shorter cycle time demands.

| 型号 Type                      |                                    | AIR12-1420                                                                                                                                                                                                                                                                                                                                                                                     |
|------------------------------|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 轴数 Axes                      |                                    | 6                                                                                                                                                                                                                                                                                                                                                                                              |
| 负载 Payload                   |                                    | 12kg                                                                                                                                                                                                                                                                                                                                                                                           |
| 机器人本体<br>Manipulator         | 重量 Weight                          | 180kg                                                                                                                                                                                                                                                                                                                                                                                          |
|                              | 最大运动范围 Reach                       | 1420mm                                                                                                                                                                                                                                                                                                                                                                                         |
| 定位精度<br>Positioning accuracy | 位置重复定位精度<br>Position repeatability | $\pm 0.03\text{mm}$                                                                                                                                                                                                                                                                                                                                                                            |
| IP 等级 Ingress Protection     |                                    | IP54 ( 腕部 : IP67 )<br>IP54 ( Wrist : IP67 )                                                                                                                                                                                                                                                                                                                                                    |
| 安装方式 Mounting                |                                    | 地装 / 壁装 / 吊装<br>Floor/ wall/ ceiling                                                                                                                                                                                                                                                                                                                                                           |
| 运动范围<br>Working range        | 轴 1* Axis 1 rotation               | $-170^{\circ}/+170^{\circ}$                                                                                                                                                                                                                                                                                                                                                                    |
|                              | 轴 2 Axis 2 arm                     | $-85^{\circ}/+150^{\circ}$                                                                                                                                                                                                                                                                                                                                                                     |
|                              | 轴 3 Axis 3 arm                     | $-95^{\circ}/+170^{\circ}$                                                                                                                                                                                                                                                                                                                                                                     |
|                              | 轴 4 Axis 4 wrist                   | $-195^{\circ}/+195^{\circ}$                                                                                                                                                                                                                                                                                                                                                                    |
|                              | 轴 5 Axis 5 bend                    | $-135^{\circ}/+135^{\circ}$                                                                                                                                                                                                                                                                                                                                                                    |
|                              | 轴 6 Axis 6 turn                    | $-360^{\circ}/+360^{\circ}$                                                                                                                                                                                                                                                                                                                                                                    |
| 运动速度<br>Rotation rate        | 轴 1 Axis 1 rotation                | 220°/s                                                                                                                                                                                                                                                                                                                                                                                         |
|                              | 轴 2 Axis 2 arm                     | 230°/s                                                                                                                                                                                                                                                                                                                                                                                         |
|                              | 轴 3 Axis 3 arm                     | 260°/s                                                                                                                                                                                                                                                                                                                                                                                         |
|                              | 轴 4 Axis 4 wrist                   | 440°/s                                                                                                                                                                                                                                                                                                                                                                                         |
|                              | 轴 5 Axis 5 bend                    | 440°/s                                                                                                                                                                                                                                                                                                                                                                                         |
|                              | 轴 6 Axis 6 turn                    | 700°/s                                                                                                                                                                                                                                                                                                                                                                                         |
| 适用控制柜 Controllers            |                                    | inCube20/ARC5-12                                                                                                                                                                                                                                                                                                                                                                               |
| 安装条件<br>Mounting conditions  |                                    | 环境温度: $0\sim 45^{\circ}\text{C}$<br>Ambient temperature: $0\sim 45^{\circ}\text{C}$<br>湿度: 恒温下 95% 以内, 无凝露。<br>Humidity: not more than 95% at constant temperature without condensation.<br>允许高度: 操作机正常工作环境的海拔高度不应超过 1000 米 (在 1000 米 -4000 米高度范围内, 操作机应降额使用)。<br>Allowable altitude: not more than 1000m above sea level.<br>不应有腐蚀性、可燃性、易爆性气体。<br>No corrosive, flammable or explosive gases. |

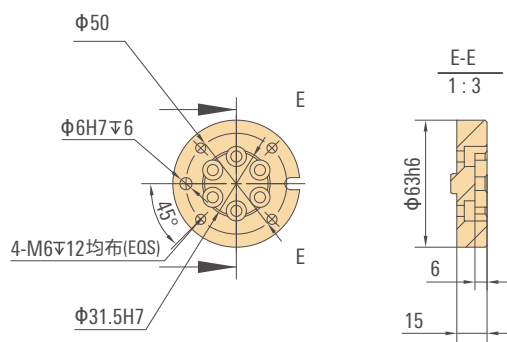


\* 若去除机械限位, 运动范围可达  $-180^{\circ}/+180^{\circ}$ 。  
If the mechanical limit is removed, the working range can reach  $-180^{\circ}/+180^{\circ}$ .

外形尺寸及运动范围 Outline dimension and Working range



法兰图 Flange drawing



底座安装图 Base installation drawing

