

并联机器人

选型手册

Parallel Robot Selection Manual

D3PB



● 型号和符号

| | | | | | | |
|------|-------------|-------------|------------------|--------------------------------------|------------------------|-------------|
| | D3PB | 1100 | P3 | A1 | E1 | FXGX |
| 机型 | 型号 | 负载 | 控制器类型 | 控制柜类型 | 视觉 | |
| D3PB | 450 | P3: 3kg | A1: ATOMCONTROL | E1: ATOM-01 E2: ATOM-02 E3: 定制 | F0G0: 无视觉 FXGX: 有视觉 | |
| | 600 | | | | | |
| | 800 | | | | | |
| | 1100 | | | | | |
| | 1200 | | A2: KEBA CONTROL | | | |

● Model and Symbol

| | | | | | | |
|------------|------------|-------------|------------------|--|---|-------------|
| | D3P | 1100 | P3 | A1 | E1 | FXGX |
| Robot type | Type | Load Type | Control Type | Control Cabinet | Vision Type | |
| D3PB | 450 | P3: 3kg | A1: ATOMCONTROL | E1: ATOM-01 E2: ATOM-02 E3: Custom | F0G0: Without vision FXGX: With vision | |
| | 600 | | | | | |
| | 800 | | | | | |
| | 1100 | | | | | |
| | 1200 | | A2: KEBA CONTROL | | | |

D3PB-450-P3



高速度
高精度
高稳定性
小巧、敏捷

High speed
High precision
High stability
Small and Agile

| | | |
|---|---|--|
| 型号 Type | | D3P-450-P3 |
| 轴数 Axes | | 3+1 |
| 最大负载 Payload | | 3kg |
| 机器人本体 Manipulator | 重量 Weight | 41.5kg |
| | 工作空间直径 Diameter | 450mm |
| 重复定位精度 repeatability | 位置 Position | 0.05mm |
| | 旋转 Rotation | 0.1° |
| 旋转范围 Rotation range | | ±360° |
| 允许负载最大旋转惯量 Allowable maximum moment of inertia | | $31 \times 10^{-4} \text{kg} \cdot \text{m}^2$ |
| 主动臂角度范围 Angle range of actuated arm | 上摆 Up | 36.5° |
| | 下摆 Down | 65.5° |
| 输入电源 Power supply | 三相 Three-phase 380VAC -10%~+10%, 49~61HZ | |
| 电源容量 Power capacity | 3KVA | |
| 额定功率 Rated Power | 1.3kw | |
| 保存温度 Storage temperature | -10°C~70°C | |
| 工作环境 Work environment | -10°C~50°C, RH≤80% | |
| 防护等级 Protection | IP55 | |

◆ 标准循环时间小于0.5s,满足追求最高速度和最小体积需求

The standard cycle time is less than 0.5s, meeting your pursuit for the maximum speed and the minimum volume.

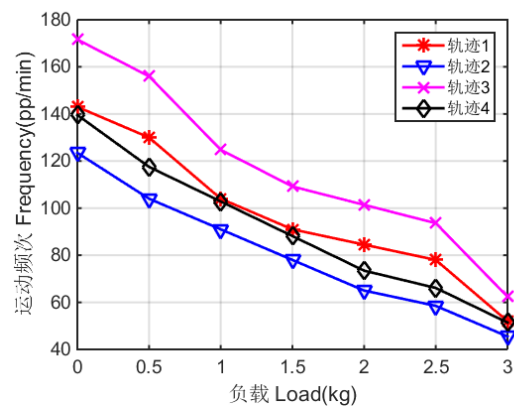
◆ 特殊旋转轴铰链设计, 轻松应对高强度高频次重复运动需求

Advanced design of Hooke joint in the rotational axis, enables the robot to easily cope with the high-intensity repetitive operation.

◆ 非常适于狭小空间内作业、3C制造等行业的高速高精生产作业, 主要用于小型工件的装配、搬运、检测等

The robot is ideal for narrow space operations, as well as high-speed and high-precision in 3C field. Widely used in assembly, handling and testing of small work pieces.

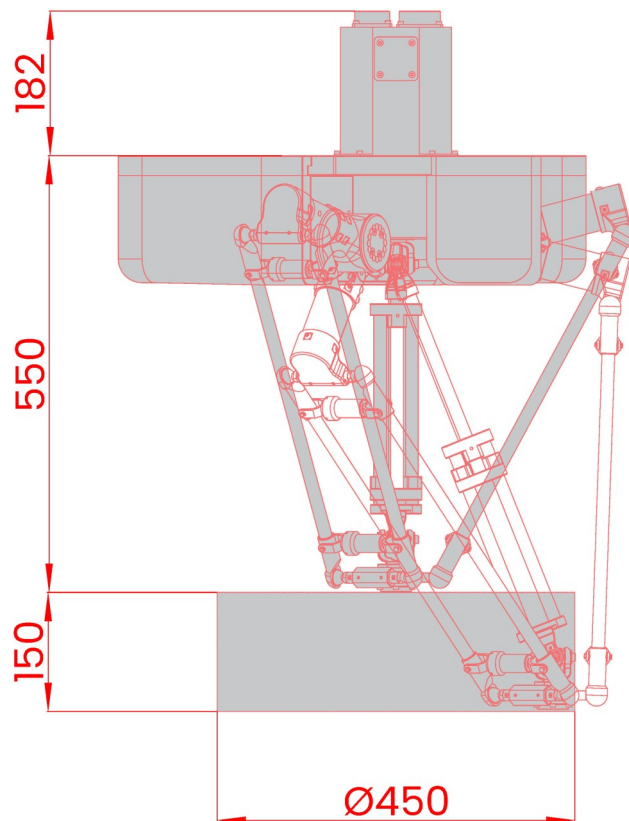
● 负载-频次 Load-Frequency



| 名称 Name | 循环模式 Model | 运动距离 Distance |
|-----------------|----------------------------------|---------------|
| 轨迹1 Trajectory1 | P1 → P2 → P3 → P4 → P3 → P2 → P1 | h=25, b=305 |
| 轨迹2 Trajectory2 | P1 → P2 → P3 → P4 → P3 → P2 → P1 | h=25, b=500 |
| 轨迹3 Trajectory3 | P1 → P2 → P3 → P2 → P1 | h=25, b=305 |
| 轨迹4 Trajectory4 | P1 → P2 → P3 → P2 → P1 | h=25, b=500 |

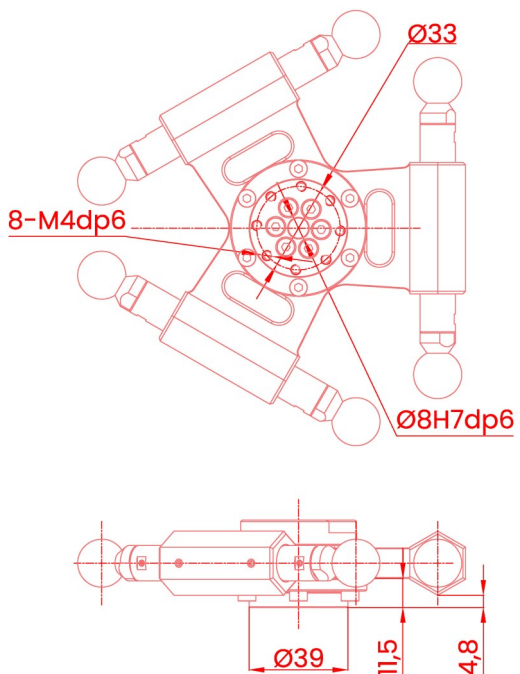
特别注意: 图中节拍时间在实际条件下测得, 但根据实际运用情况的不同 (工具数据、路径半径、夹具启动等), 节拍时间也会发生变化。

外形尺寸及运动范围
Outline dimensions and Working range (mm)

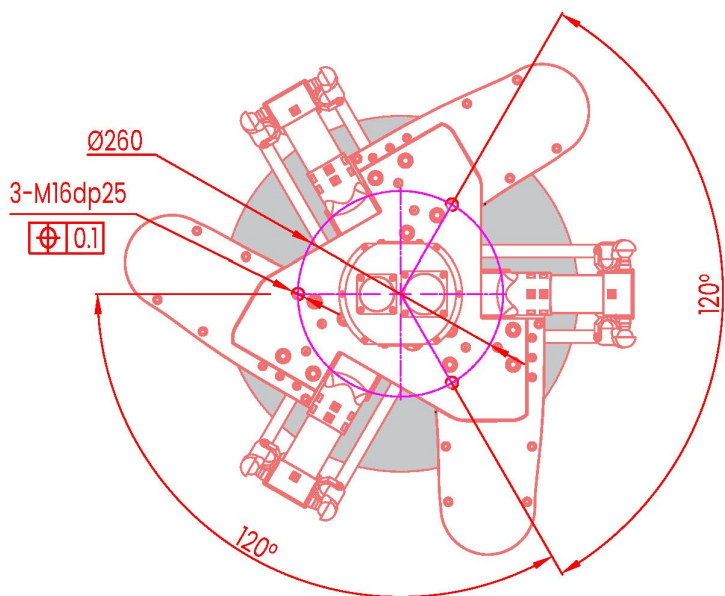


说明：
图示下部加深部分为机器人末端下表面几何中心的运动范围
Instruction:
The bottom gray part is the workplace of bottom surface 's center point of the end, which is a cylinder .

法兰 Flange (mm)



基座安装 Base installation (mm)



D3PB-600-P3



高速度
高精度
高稳定性
小巧、敏捷

High speed
High precision
High stability
Small and Agile

| | | |
|---|---|--------|
| 型号 Type | D3PB-600-P3 | |
| 轴数 Axes | 3+1 | |
| 最大负载 Payload | 3kg | |
| 机器人本体 Manipulator | 重量 Weight | 66kg |
| | 工作空间直径 Diameter | 600mm |
| 重复定位精度 repeatability | 位置 Position | 0.05mm |
| | 旋转 Rotation | 0.1° |
| 旋转范围 Rotation range | ±360° | |
| 允许负载最大旋转惯量 Allowable maximum moment of inertia | 31×10 ⁻⁴ kg·m ² | |
| 主动臂角度范围 Angle range of actuated arm | 上摆 Up | 36.5° |
| | 下摆 Down | 65.5° |
| 输入电源 Power supply | 三相 Three-phase 380VAC -10%~+10%, 49~61HZ | |
| 电源容量 Power capacity | 3KVA | |
| 额定功率 Rated Power | 2.4kw | |
| 保存温度 Storage temperature | -10°C~70°C | |
| 工作环境 Work environment | -10°C~50°C, RH≤80% | |
| 防护等级 Protection | IP55 | |

◆ 标准循环时间小于0.5s,满足追求最高速度和最小体积需求

The standard cycle time is less than 0.5s, meeting your pursuit for the maximum speed and the minimum volume.

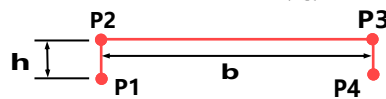
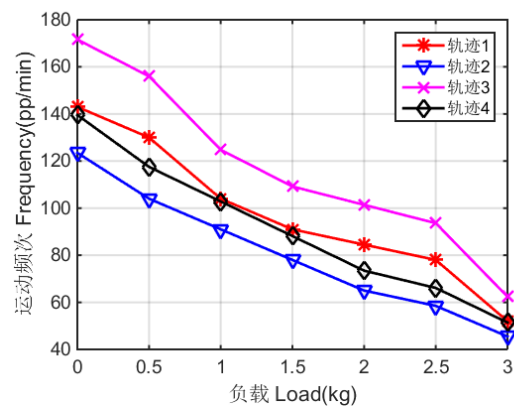
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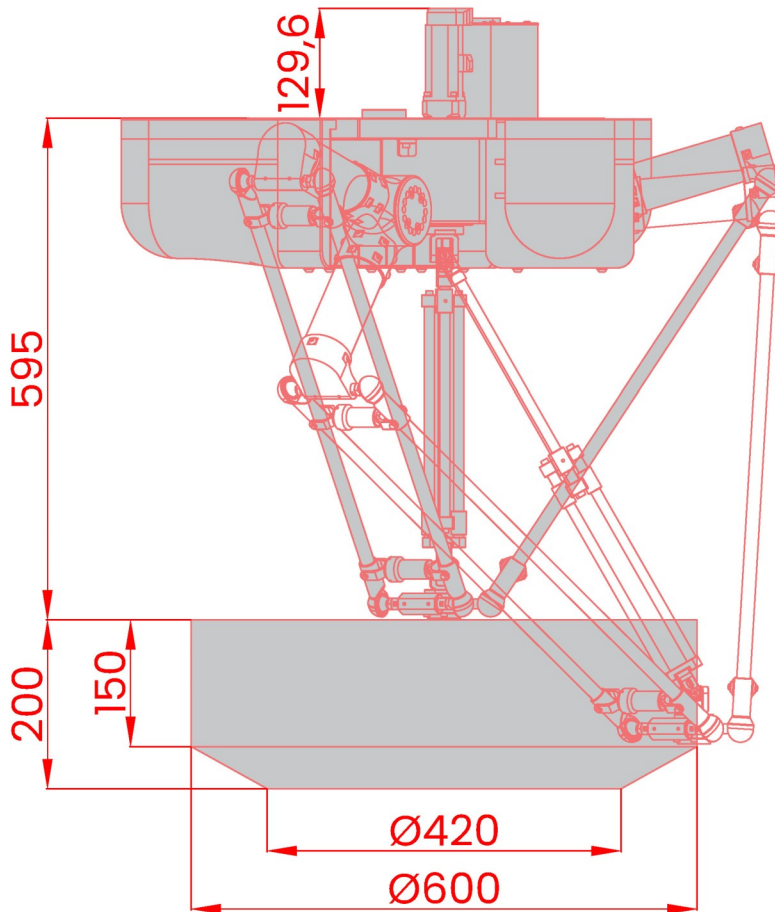
● 负载-频次 Load-Frequency



| 名称 Name | 循环模式 Model | 运动距离 Distance |
|-----------------|----------------------------------|---------------|
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| 轨迹2 Trajectory2 | P1 → P2 → P3 → P4 → P3 → P2 → P1 | h=25, b=500 |
| 轨迹3 Trajectory3 | P1 → P2 → P3 → P2 → P1 | h=25, b=305 |
| 轨迹4 Trajectory4 | P1 → P2 → P3 → P2 → P1 | h=25, b=500 |

特别注意: 图中节拍时间在实际条件下测得, 但根据实际运用情况的不同 (工具数据、路径半径、夹具启动等), 节拍时间也会发生变化。

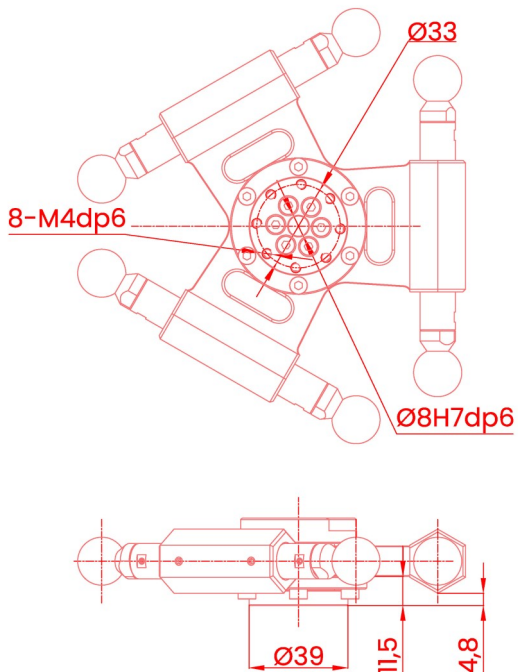
外形尺寸及运动范围
Outline dimensions and Working range (mm)



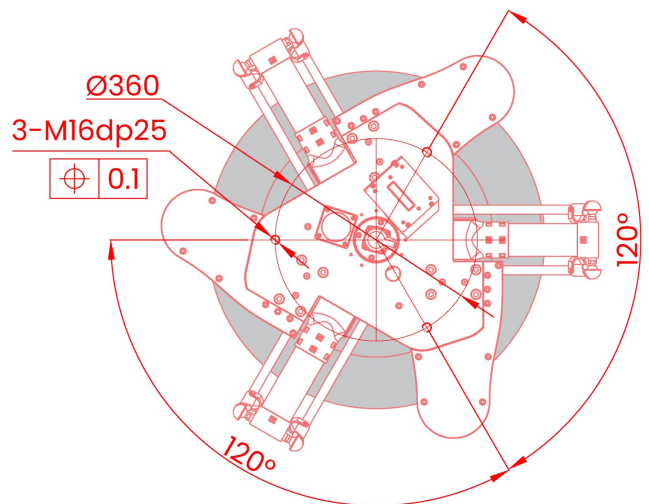
说明:
图示下部加深部分为机器人末端下表面几何中心的运动范围, 上部为圆柱空间, 并在下部向内收敛。

Instruction:
The bottom gray part is the workplace of bottom surface 's center point of the end, which is composed of a cylinder at the top and a circular truncated cone at the bottom.

法兰 Flange (mm)



基座安装 Base installation (mm)



D3PB-800-P3



高速度
高精度
高稳定性
低高度

High speed
High precision
High stability
Lower height

| | | |
|---|---|--------|
| 型号 Type | D3PB-800-P3 | |
| 轴数 Axes | 3+1 | |
| 最大负载 Payload | 3kg | |
| 机器人本体 Manipulator | 重量 Weight | 83.8kg |
| | 工作空间直径 Diameter | 800mm |
| 重复定位精度 repeatability | 位置 Position | 0.05mm |
| | 旋转 Rotation | 0.1° |
| 旋转范围 Rotation range | ±360° | |
| 允许负载最大旋转惯量 Allowable maximum moment of inertia | 31×10 ⁻⁴ kg·m ² | |
| 主动臂角度范围 Angle range of actuated arm | 上摆 Up | 47.3° |
| | 下摆 Down | 60.2° |
| 输入电源 Power supply | 三相 Three-phase 380VAC -10%~+10%, 49~61HZ | |
| 电源容量 Power capacity | 6KVA | |
| 额定功率 Rated Power | 2.4kw | |
| 保存温度 Storage temperature | -10°C~70°C | |
| 工作环境 Work environment | -10°C~50°C, RH≤80% | |
| 防护等级 Protection | IP55 | |

◆ 标准循环时间小于0.45s,满足追求最高速度和最小体积需求

The standard cycle time is less than 0.45s, meeting your pursuit for the maximum speed and economic.

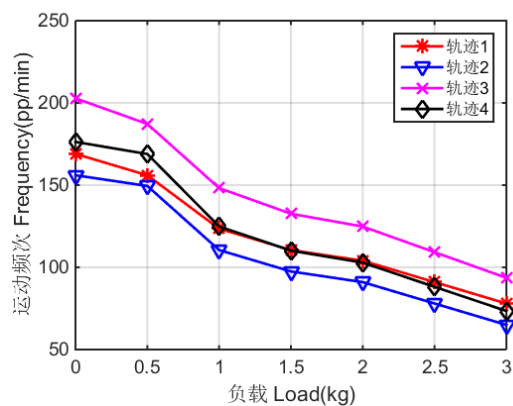
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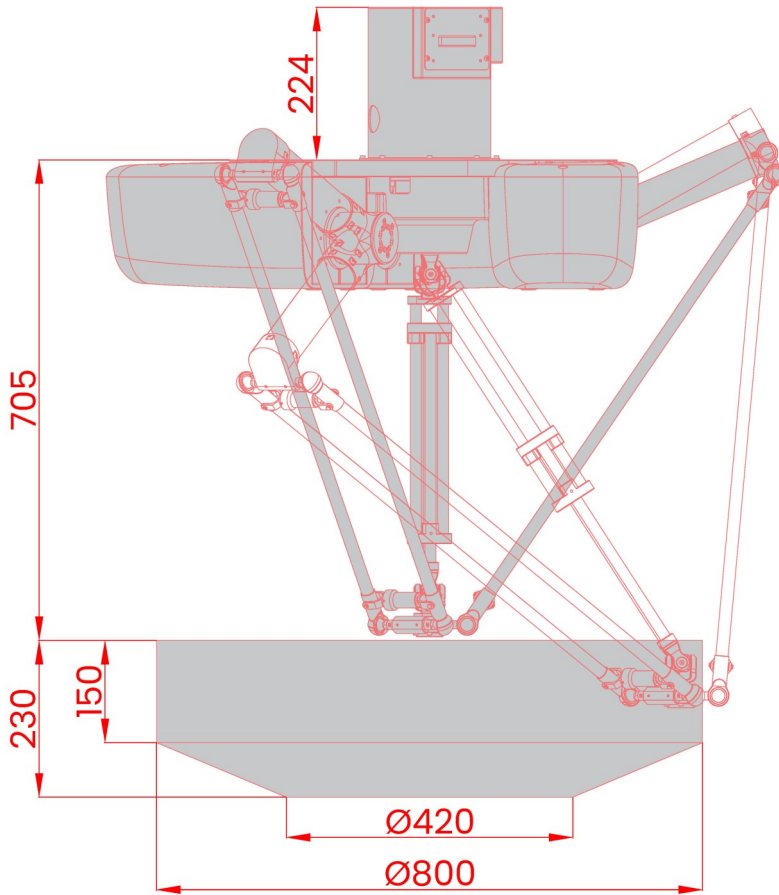
● 负载-频次 Load-Frequency



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|-----------------|----------------------------------|---------------|
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外形尺寸及运动范围
Outline dimensions and Working range (mm)



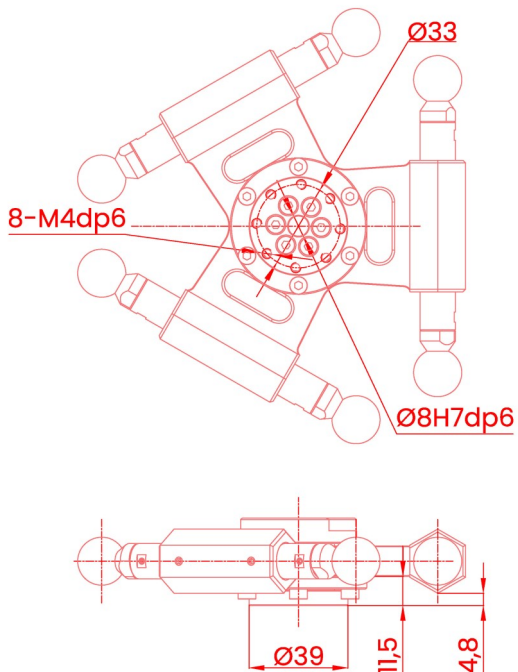
说明:

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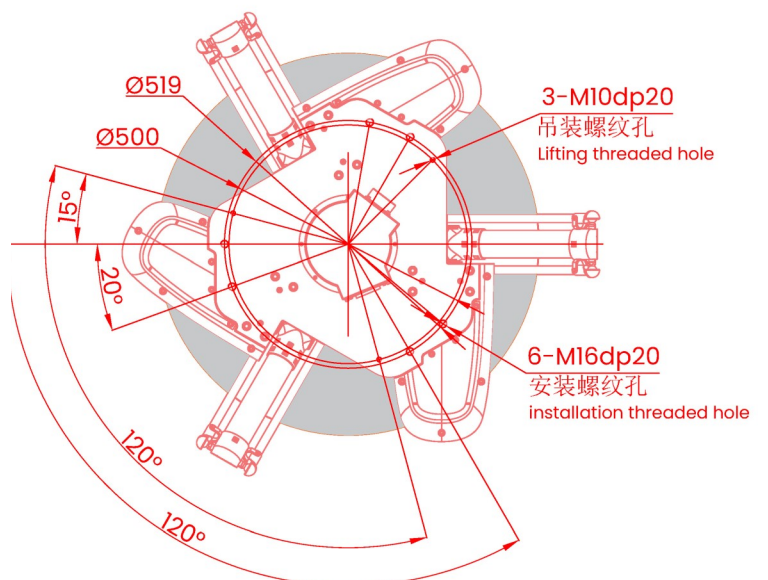
Instruction:

The bottom gray part is the workplace of bottom surface's center point of the end, which is composed of a cylinder at the top and a circular truncated cone at the bottom.

法兰 Flange (mm)



基座安装 Base installation (mm)



D3PB-1100-P3



高速度
高精度
高稳定性
低高度

High speed
High precision
High stability
Lower height

| | | |
|---|--------------------|--|
| 型号 Type | | D3PB-1100-P3 |
| 轴数 Axes | | 3+1 |
| 最大负载 Payload | | 3kg |
| 机器人本体 Manipulator | 重量 Weight | 85.5kg |
| | 工作空间直径 Diameter | 1100mm |
| 重复定位精度 repeatability | 位置 Position | 0.05mm |
| | 旋转 Rotation | 0.1° |
| 旋转范围 Rotation range | | ±360° |
| 允许负载最大旋转惯量 Allowable maximum moment of inertia | | $31 \times 10^{-4} \text{kg} \cdot \text{m}^2$ |
| 主动臂角度范围 Angle range of actuated arm | 上摆 Up | 39.2° |
| | 下摆 Down | 77.1° |
| 输入电源 Power supply | | 三相 Three-phase 380VAC -10%~+10%, 49~61HZ |
| 电源容量 Power capacity | | 10KVA |
| 额定功率 Rated Power | | 2.4kw |
| 保存温度 Storage temperature | | -10°C~70°C |
| 工作环境 Work environment | | -10°C~50°C, RH≤80% |
| 防护等级 Protection | | IP55 |

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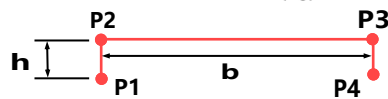
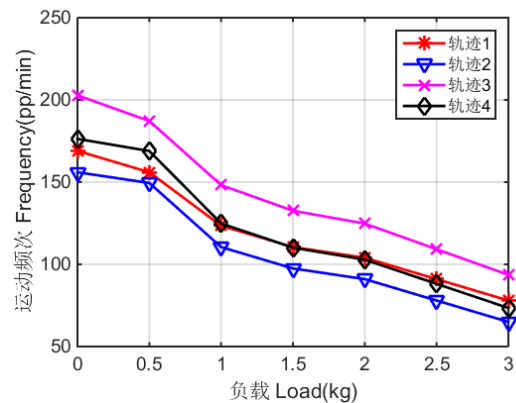
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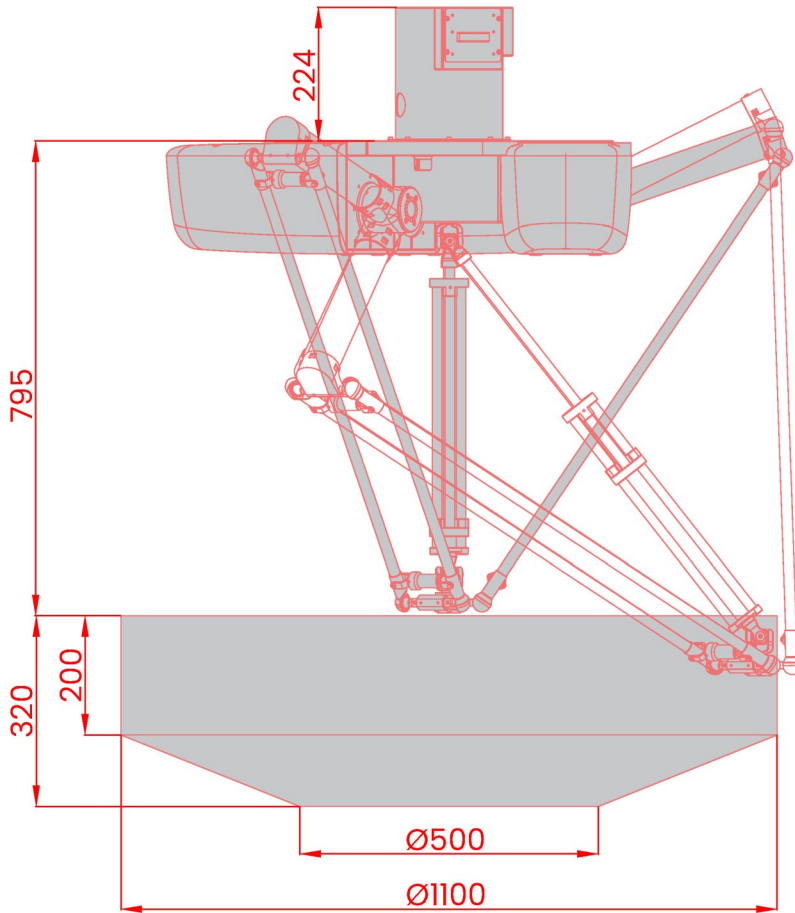
● 负载-频次 Load-Frequency



| 名称 Name | 循环模式 Model | 运动距离 Distance |
|-----------------|----------------------------------|---------------|
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| 轨迹2 Trajectory2 | P1 → P2 → P3 → P4 → P3 → P2 → P1 | h=25, b=500 |
| 轨迹3 Trajectory3 | P1 → P2 → P3 → P2 → P1 | h=25, b=305 |
| 轨迹4 Trajectory4 | P1 → P2 → P3 → P2 → P1 | h=25, b=500 |

特别注意: 图中节拍时间在实际条件下测得, 但根据实际运用情况的不同 (工具数据、路径半径、夹具启动等), 节拍时间也会发生变化。

外形尺寸及运动范围
Outline dimensions and Working range (mm)



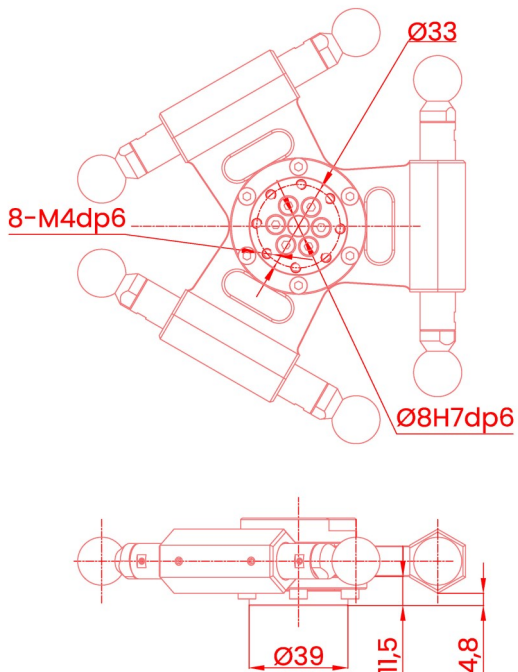
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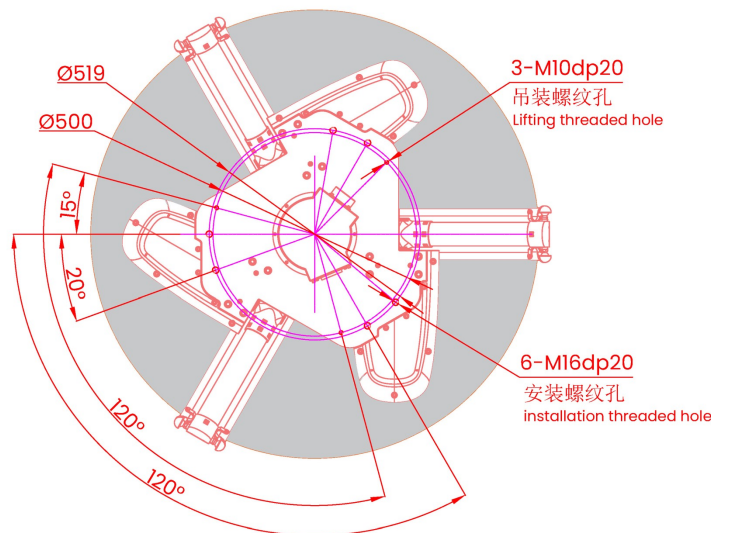
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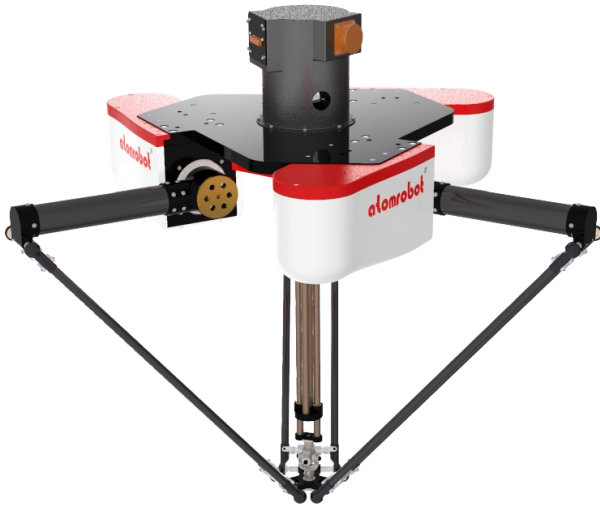
法兰 Flange (mm)



底座安装 Base installation (mm)



D3PB-1200-P3



高速度
高稳定性
大空间
低高度

High speed
High stability
Large space
Lower Height

| | | |
|---|---|--|
| 型号 Type | | D3PB-1200-P3 |
| 轴数 Axes | | 3+1 |
| 最大负载 Payload | | 3kg |
| 机器人本体 Manipulator | 重量 Weight | 80.6kg |
| | 工作空间直径 Diameter | 1200mm |
| 重复定位精度 repeatability | 位置 Position | 0.05mm |
| | 旋转 Rotation | 0.1° |
| 旋转范围 Rotation range | | ±360° |
| 允许负载最大旋转惯量 Allowable maximum moment of inertia | | $31 \times 10^{-4} \text{kg} \cdot \text{m}^2$ |
| 主动臂角度范围 Angle range of actuated arm | 上摆 Up | 34.5° |
| | 下摆 Down | 86.5° |
| 输入电源 Power supply | 三相 Three-phase 380VAC -10%~+10%, 49~61HZ | |
| 电源容量 Power capacity | 10KVA | |
| 额定功率 Rated Power | 6.1kw | |
| 保存温度 Storage temperature | -10°C~70°C | |
| 工作环境 Work environment | -10°C~50°C, RH≤80% | |
| 防护等级 Protection | IP55 | |

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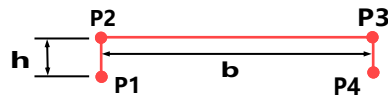
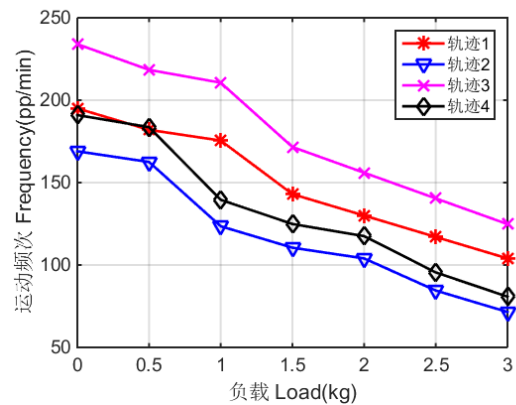
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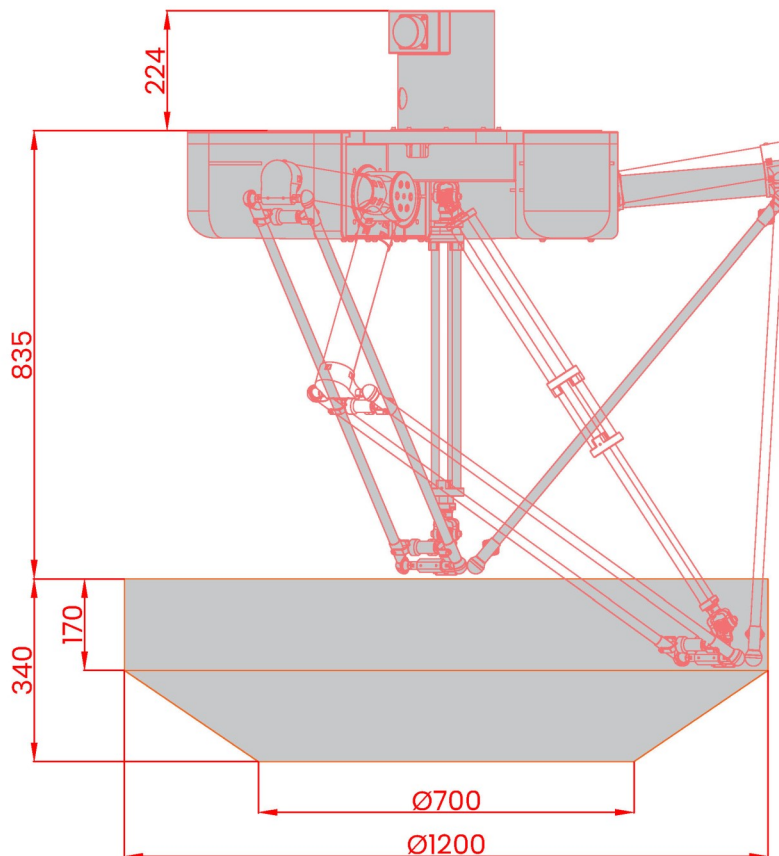
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|-----------------|----------------------------------|---------------|
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| 轨迹3 Trajectory3 | P1 → P2 → P3 → P2 → P1 | h=25, b=305 |
| 轨迹4 Trajectory4 | P1 → P2 → P3 → P2 → P1 | h=25, b=500 |

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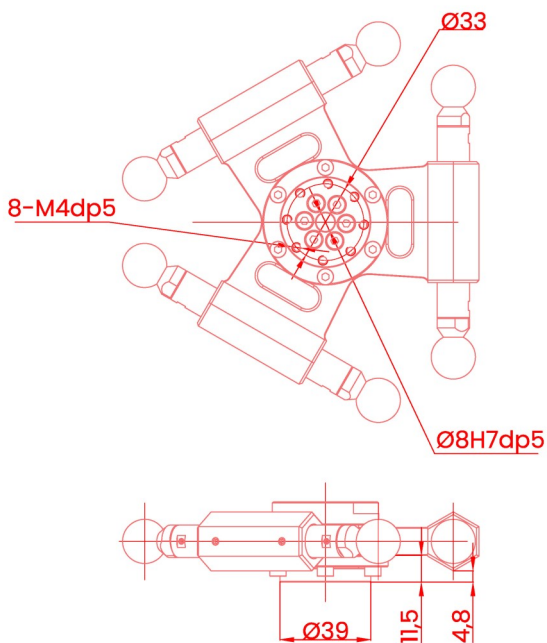
外形尺寸及运动范围
Outline dimensions and Working range (mm)



说明：
图示下部加深部分为机器人末端下表面几何中心的运动范围，上部为圆柱空间，并在下部向内收敛。

Instruction:
The bottom gray part is the workplace of bottom surface's center point of the end, which is composed of a cylinder at the top and a circular truncated cone at the bottom.

法兰 Flange (mm)



基座安装 Base installation (mm)

