

# 并联机器人

## 选型手册

Parallel Robot Selection Manual

D3PMZ



## ● 型号和符号

D3PMZ	1100	P3	A1	E1	FXGX
机型	型号	负载	控制器类型	控制柜类型	视觉
D3PMZ	800	P3: 3KG	A1: ATOMCONTROL	E1: ATOM-01 E2: ATOM-02 E3: 定制	F0G0: 无视觉 FXGX: 有视觉
	1100				
	1300				
	1400				
	1600				

## ● Model and Symbol

D3PMZ	1100	P0	A1	E1	FXGX
Robot type	Type	Load Type	Control Type	Control Cabinet	Vision Type
D3PMZ	800	P3: 3KG	A1: ATOMCONTROL	E1: ATOM-01 E2: ATOM-02 E3: Custom	F0G0: Without vision FXGX: With vision
	1100				
	1300				
	1400				
	1600				

## D3PMZ-800-P3



高速度  
高精度  
高稳定性  
一体铸造

High speed  
High precision  
High stability  
Whole body cast

型号 Type		D3PMZ-800-P3
轴数 Axes		3+1
最大负载 Payload		3kg
机器人本体 Manipulator	重量 Weight	67.5kg
	工作空间直径 Diameter	800mm
重复定位精度 repeatability	位置 Position	0.05mm
	旋转 Rotation	0.05°
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	42.5°
	下摆 Down	65.8°
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	2.35kw	
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/IP67	

◆ 标准循环时间小于0.5s,满足追求最高速度和最经济需求

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

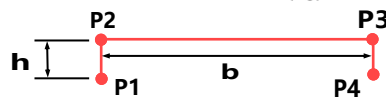
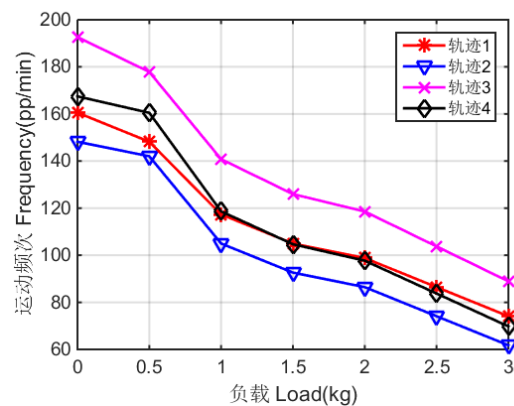
◆ 采用旋转伺服电机下置设计, 轻松满足高精度旋转作业需求

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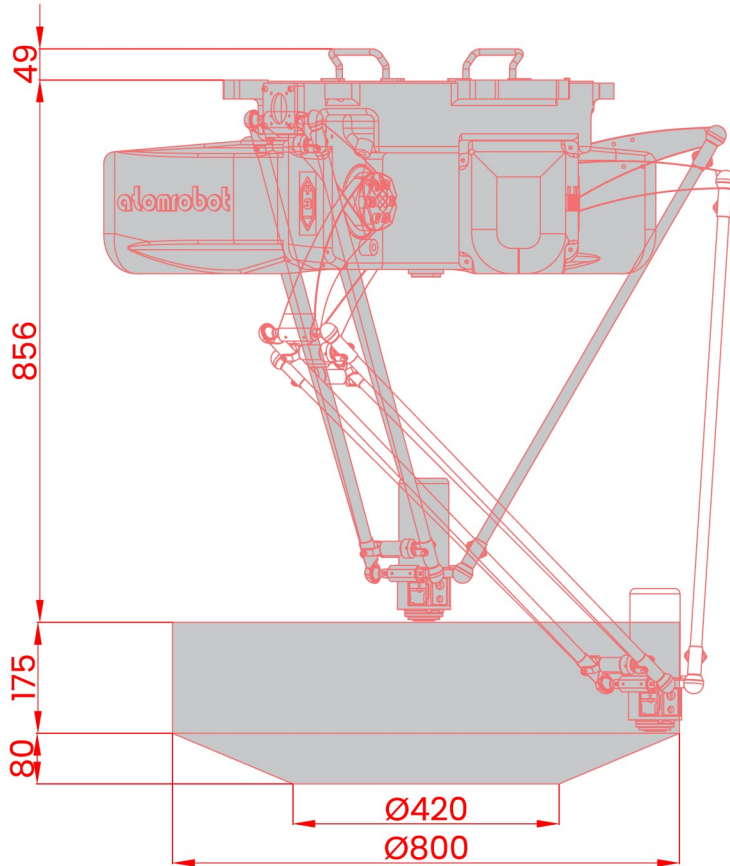
● 负载-频次 Load-Frequency



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)



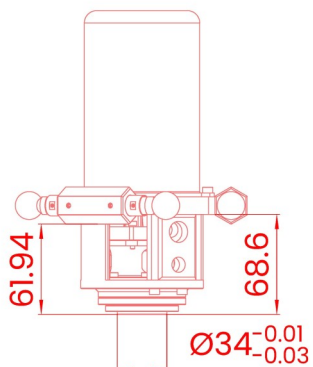
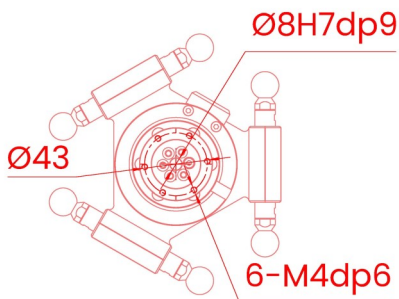
说明:

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，上部为圆柱空间，并在下部向内收敛。

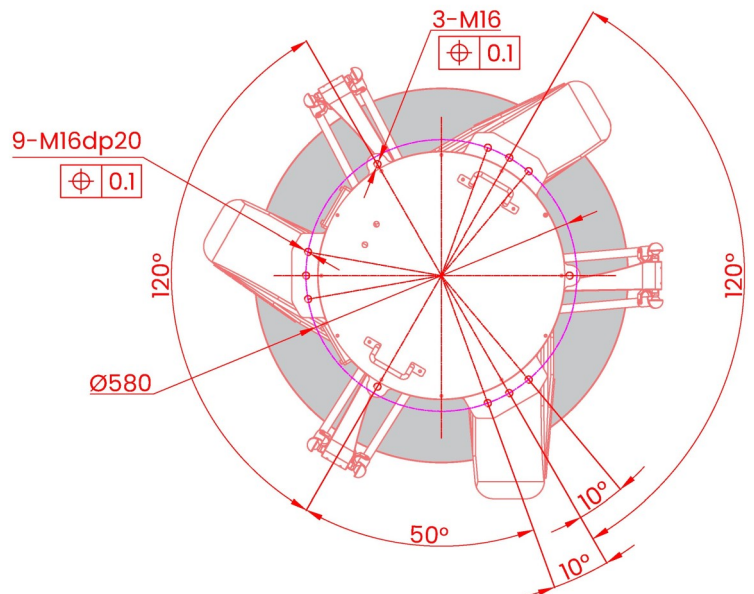
Instruction:

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)



## D3PMZ-1100-P3



高速度  
高精度  
高稳定性  
一体铸造

High speed  
High precision  
High stability  
Whole body cast

型号 Type		D3PMZ-1100-P3
轴数 Axes		3+1
最大负载 Payload		3kg
机器人本体 Manipulator	重量 Weight	85kg
	工作空间直径 Diameter	1100mm
重复定位精度 repeatability	位置 Position	0.05mm
	旋转 Rotation	0.05°
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	32.5°
	下摆 Down	68.5°
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/IP67

◆ 标准循环时间小于0.4s,满足追求最高速度和最经济需求

The standard cycle time is less than 0.4s, meeting your pursuit for the maximum speed and economic.

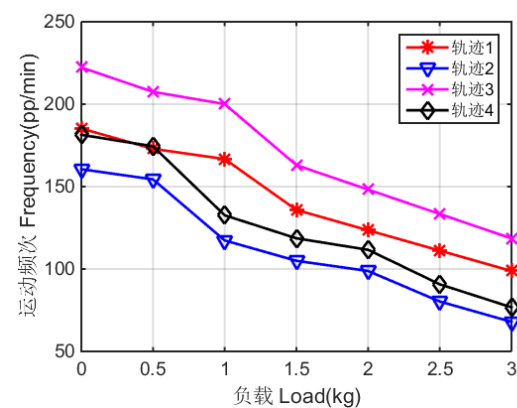
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● 负载-频次 Load-Frequency

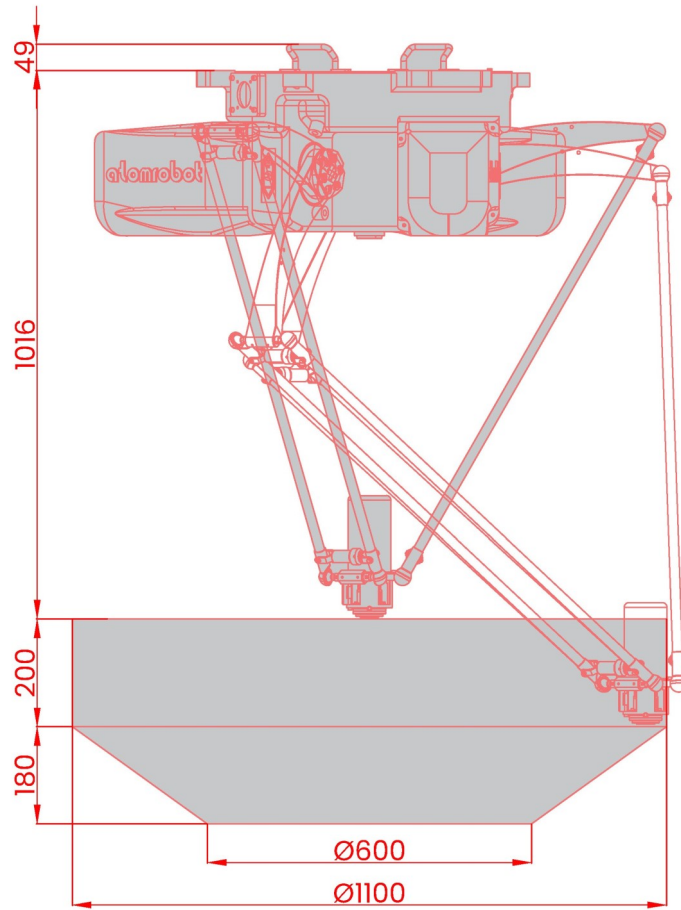


名称 Name	循环模式 Model	运动距离 Distance
轨迹1 Trajectory1	P1 → P2 → P3 → P4 → P3 → P2 → P1	h=25, b=305
轨迹2 Trajectory2	P1 → P2 → P3 → P4 → P3 → P2 → P1	h=25, b=500
轨迹3 Trajectory3	P1 → P2 → P3 → P2 → P1	h=25, b=305
轨迹4 Trajectory4	P1 → P2 → P3 → P2 → P1	h=25, b=500

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外形尺寸及运动范围

Outline dimensions and Working range (mm)



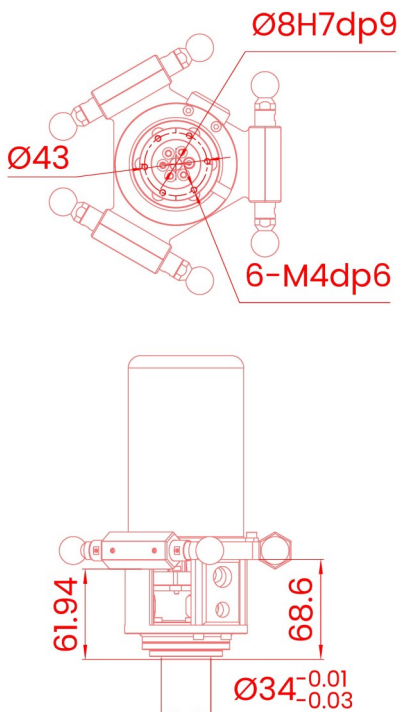
说明:

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。

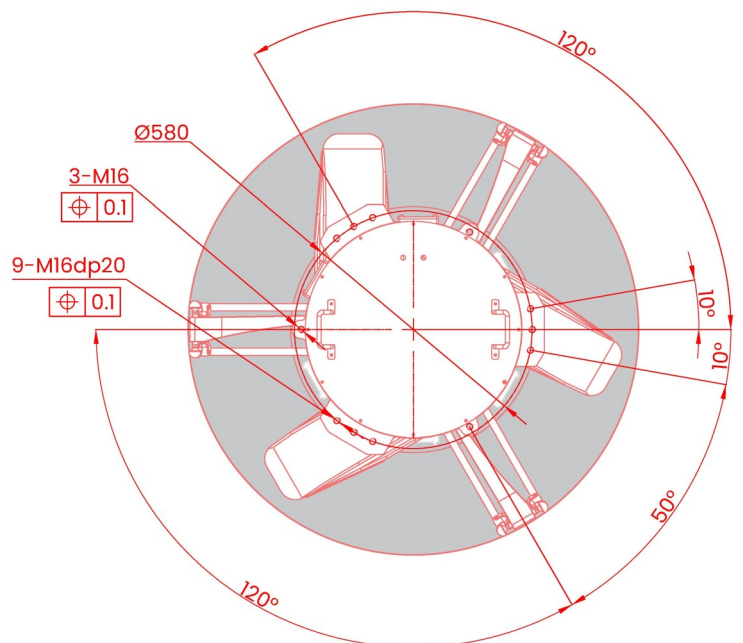
Instruction:

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)





## D3PMZ-1300-P3



高速度  
高稳定性  
大空间  
经济实用

High speed  
High stability  
Large space  
Economic & Practi-

型号 Type		D3PMZ-1300-P3
轴数 Axes		3+1
最大负载 Payload		3kg
机器人本体 Manipulator	重量 Weight	87.5kg
	工作空间直径 Diameter	1300mm
重复定位精度 repeatability	位置 Position	0.05mm
	旋转 Rotation	0.05°
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	31.5°
	下摆 Down	74°
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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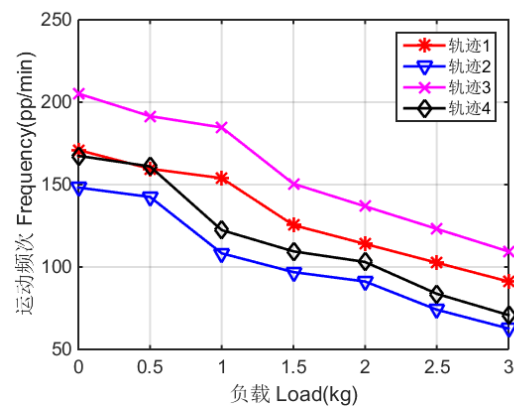
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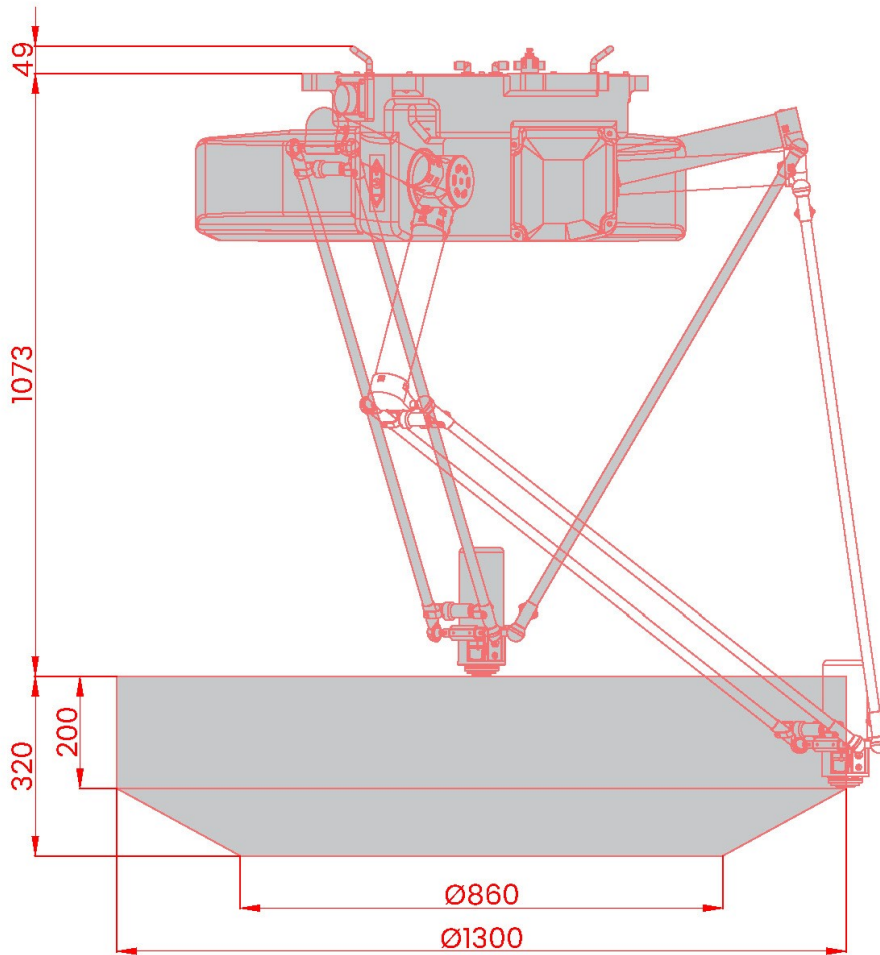
● 负载-频次 Load-Frequency



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



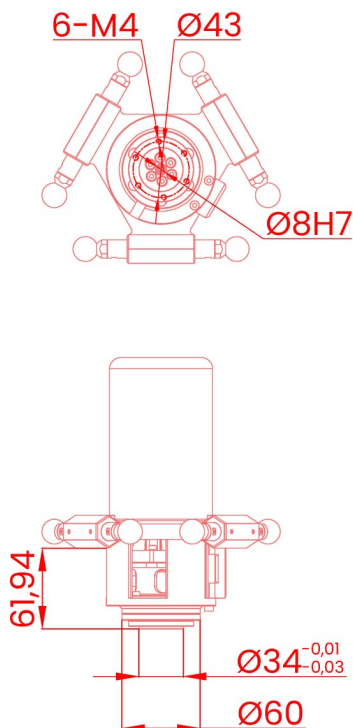
**说明:**

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。

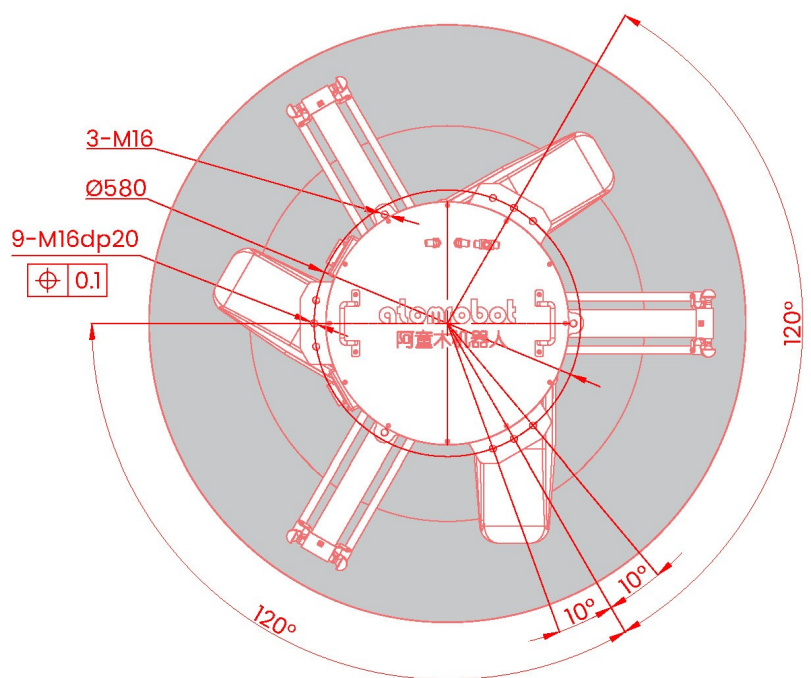
**Instruction:**

The bottom gray part is the workplace of moving platform 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)**





## D3PMZ-1400-P3



高速度  
高稳定性  
大空间  
经济实用

High speed  
High stability  
Large space  
Economic & Practi-

型号 Type		D3PMZ-1400-P3
轴数 Axes		3+1
最大负载 Payload		3kg
机器人本体 Manipulator	重量 Weight	89.5kg
	工作空间直径 Diameter	1400mm
重复定位精度 repeatability	位置 Position	0.05mm
	旋转 Rotation	0.05°
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	22°
	下摆 Down	76°
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	

◆ 标准循环时间小于0.4s,满足追求最高速度和最经济需求

The standard cycle time is less than 0.3s, meeting your pursuit for the maximum speed and economic.

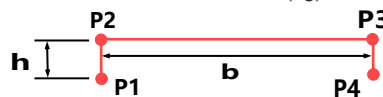
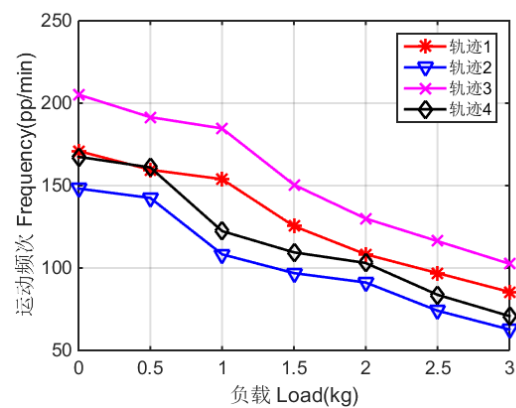
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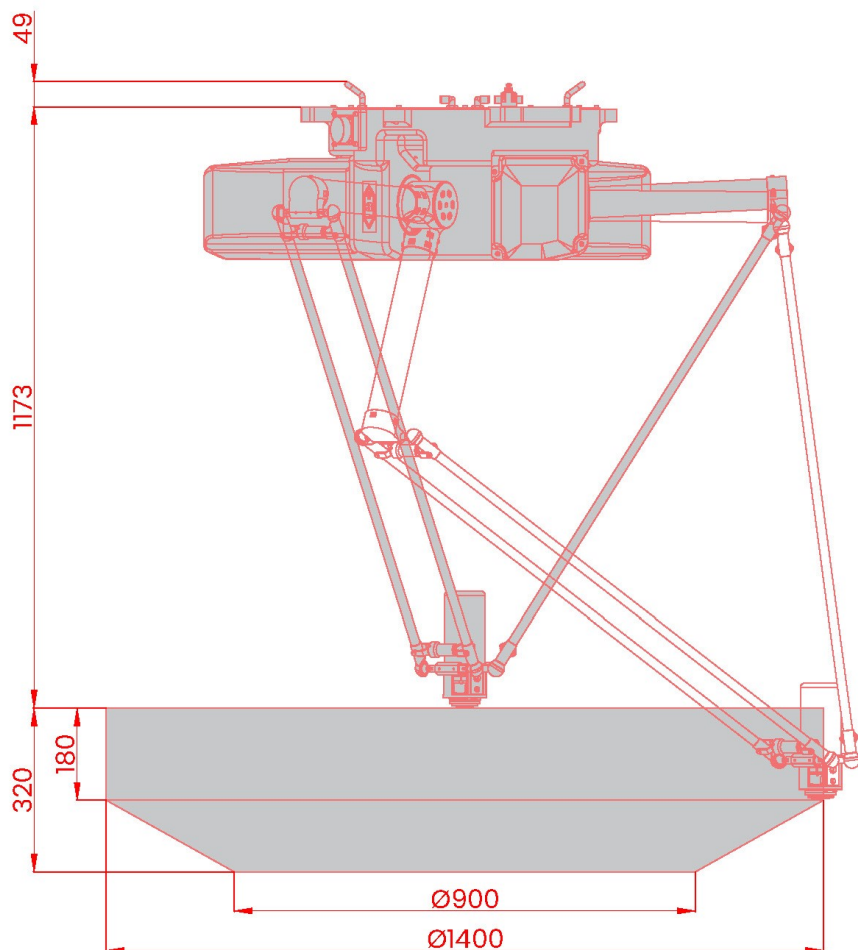
● 负载-频次 Load-Frequency



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。

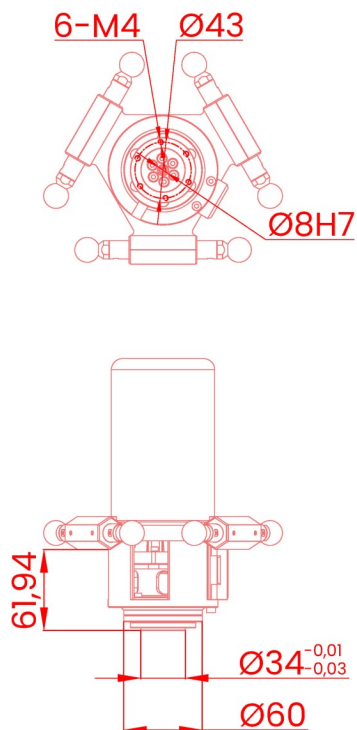
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**Outline dimensions and Working range (mm)**



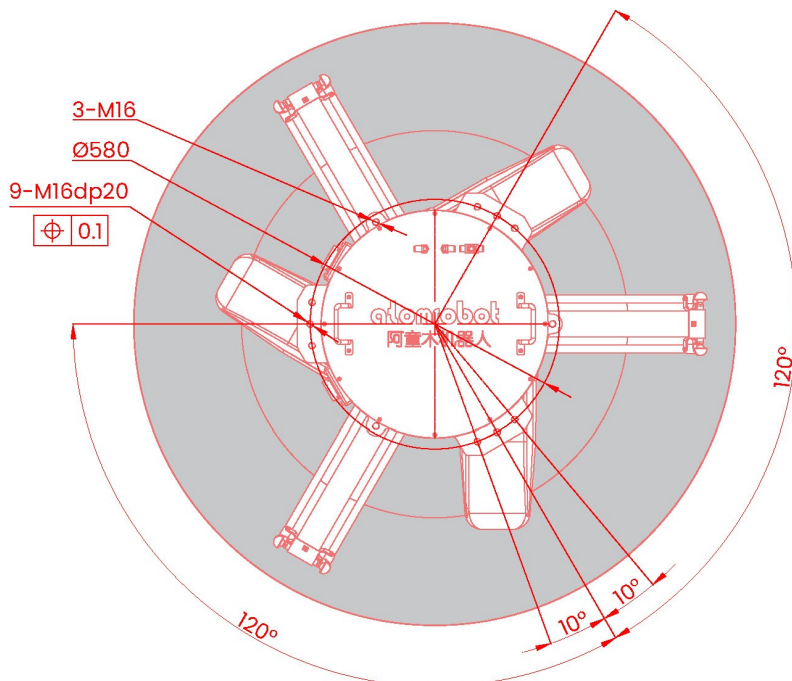
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The bottom gray part is the workplace of moving platform which is composed of a cylinder at the top and a circular truncated cone at the bottom.

**法兰 Flange (mm)**



**底座安装 Base installation (mm)**



## D3PMZ-1600-P3



高速度  
高稳定性  
大空间  
经济实用

High speed  
High stability  
Large space  
Economic & Practi-

型号 Type		D3PMZ-1600-P3
轴数 Axes		3+1
最大负载 Payload		3kg
机器人本体 Manipulator	重量 Weight	92.7kg
	工作空间直径 Diameter	1600mm
重复定位精度 repeatability	位置 Position	0.05mm
	旋转 Rotation	0.05°
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	22°
	下摆 Down	76°
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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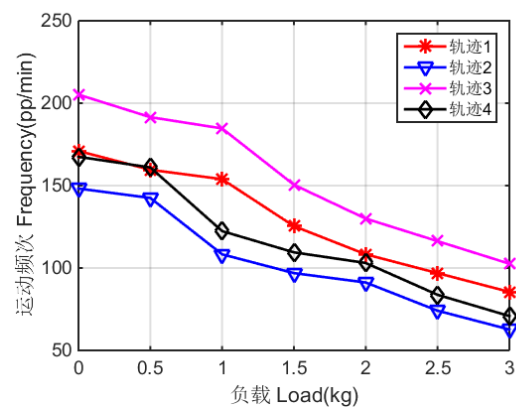
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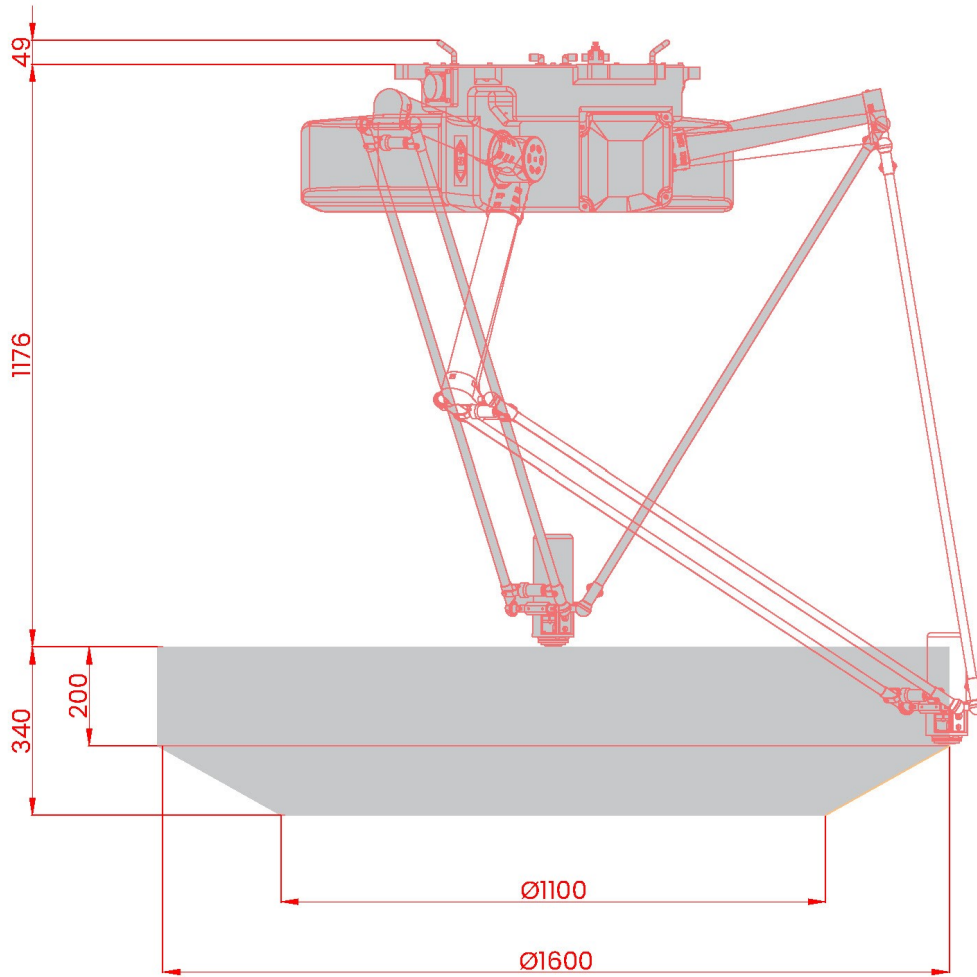
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**外形尺寸及运动范围**  
**Outline dimensions and Working range (mm)**



**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 moving platform 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)**

