

EFORT

ESR6-500Z20

ESR6-500Z20,
Maximum payload 6 kg with maximum reach 500 mm.

■ **Highlights**

1. High rhythm and high precision
The fastest standard cycle time can reach 0.346 s, and the robot positioning accuracy can reach 0.02 mm.
2. High rigidity and low vibration
Robot body mode and rigidity enhancement, combined with vibration suppression and active vibration suppression functions, effectively reduce vibration.
3. Easy to maintain and scalable
The detachable structure of cables and batteries allows for the replacement of robots inside the device, and the built-in camera network cable enables various communication extensions.

■ **Applications**

It can be used in handling, sorting, assembly, etc.

■ **Industries**

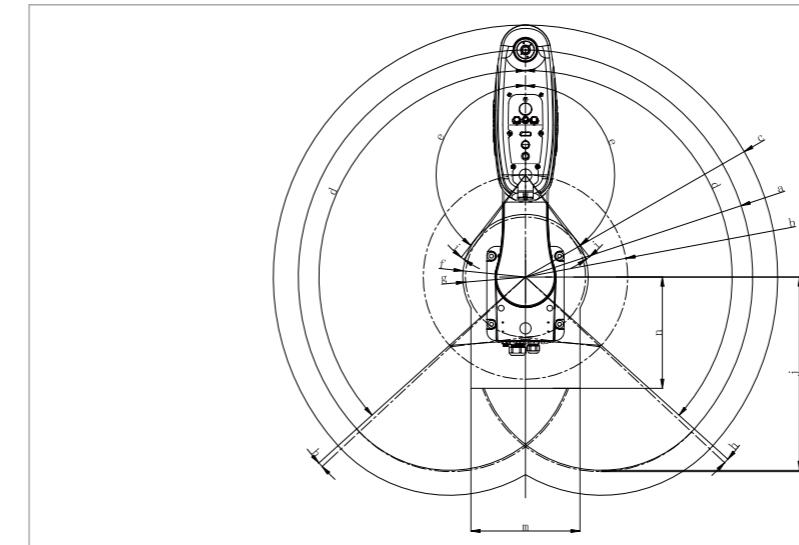
Suitable for industries such as electronic manufacturing, lithium batteries, automotive electronics, and photovoltaics.

SPECIFICATIONS

| Model | | ESR6-500Z20 |
|--------------------------------|---------------------|-----------------------------------|
| Reach | | 500 mm |
| Max. payload on wrist | Rated | 2 kg |
| | Maximum | 6 kg |
| Robot weight | | 18 kg |
| Maximum speed | J1+J2 | 7120 mm/sec |
| | J3 | 1100 mm/sec |
| | J4 | 2000/sec |
| Motion range | J1 | ±132° |
| | J2 | ±150° |
| | J3 | 200 mm |
| | J4 | ±360° |
| Repeatability | J1+J2 | ±0.02 mm |
| | J3 | ±0.01 mm |
| | J4 | ±0.01° |
| Standard cycle time | | 0.346 s |
| J4 allowable moment of inertia | Rated | 0.01 kg·m² |
| | Maximum | 0.12 kg·m² |
| Electric lines | | D-Sub 15-Pin |
| Pneumatic lines | | Φ4 mmx1, Φ6 mmx2 |
| J3 downward force | | 100 N |
| Installation | | Floor |
| Installation environment | Ambient temperature | 5~40°C |
| | Ambient humidity | RH≤80% (No dew nor frost allowed) |

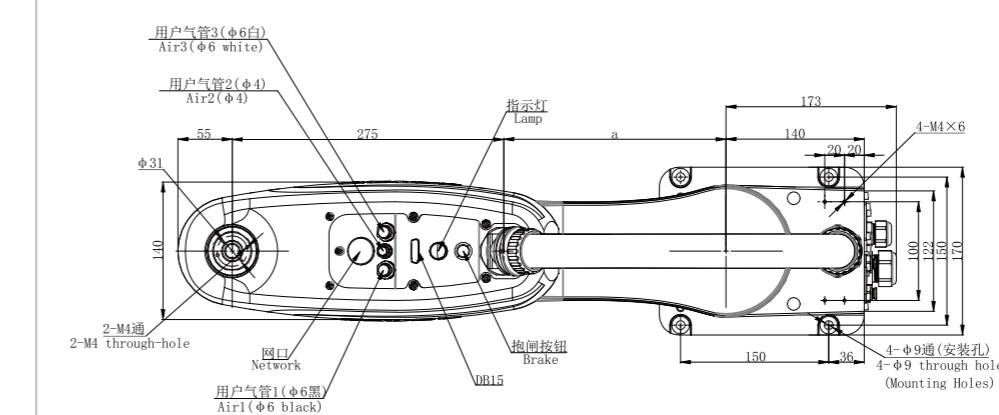


OPERATING SPACE



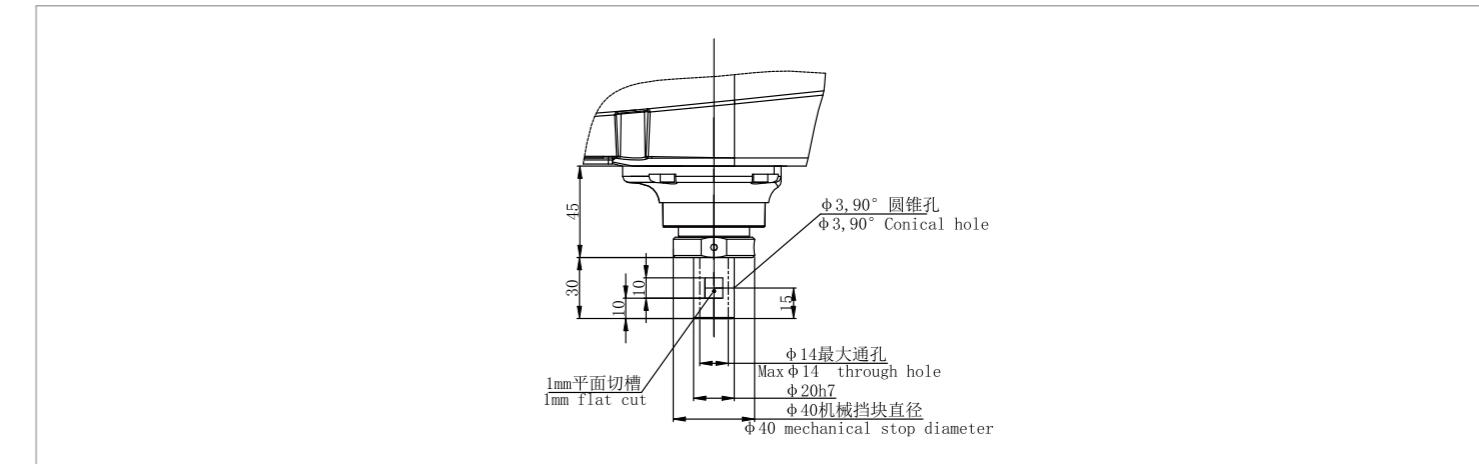
| ESR6 series range of motion parameters for different arm lengths | | |
|---|-------------|-------------|
| The name of the model | ESR6-500Z20 | ESR6-600Z20 |
| a. 第1轴臂长+第2轴臂长 (mm) | 500 | 600 |
| b. 第1轴臂长 (mm) | 225 | 325 |
| c. 第2轴臂长 (mm) | 225 | 325 |
| c. 最大运动范围 (mm) | 555 | 655 |
| d. Range of the 1st joint (°) | 132 | |
| e. Range of the 2nd joint (°) | 150 | |
| f. 运动范围 | 138.1 | 162.6 |
| g. 指示灯的安装距离 (mm) | 132.3 | 155.4 |
| g. The range of the indicator light installation distance (mm) | 132.3 | 155.4 |
| h. The angle of the first joint mechanical stop position (°) | 1 | |
| i. 第二关节机械停止的角度 (°) | 1.5 | |
| j. The angle of the mechanical stop position of the 2nd joint (°) | 425.6 | 492.5 |
| k. 第二关节机械停止范围 (mm) | 428.5 | 496.6 |
| l. The range of the second joint mechanical stop bits | 428.5 | 564.8 |
| m. 运动范围 | 240 | 220 |
| n. 运动范围 | 245 | |

BASE MOUNTING SIZE



| ESR6 series with different arm lengths | | |
|--|-------------|-------------|
| The name of the model | ESR6-500Z20 | ESR6-600Z20 |
| a | 225 | 325 |
| b | 565 | 575 |
| c | 585 | |

END FLANGE MOUNTING SIZE



Information Release Time 2025/04