

GP12

Efficient, High-Speed Robot

Key Benefits

Highest payload, speeds and wrist allowable moment in its class

Space-efficient design

Engineered for easy installation, operation and maintenance

Specifications

12 kg payload

1,440 mm horizontal reach

2,511 mm vertical reach

±0.08 mm repeatability

Applications

Assembly

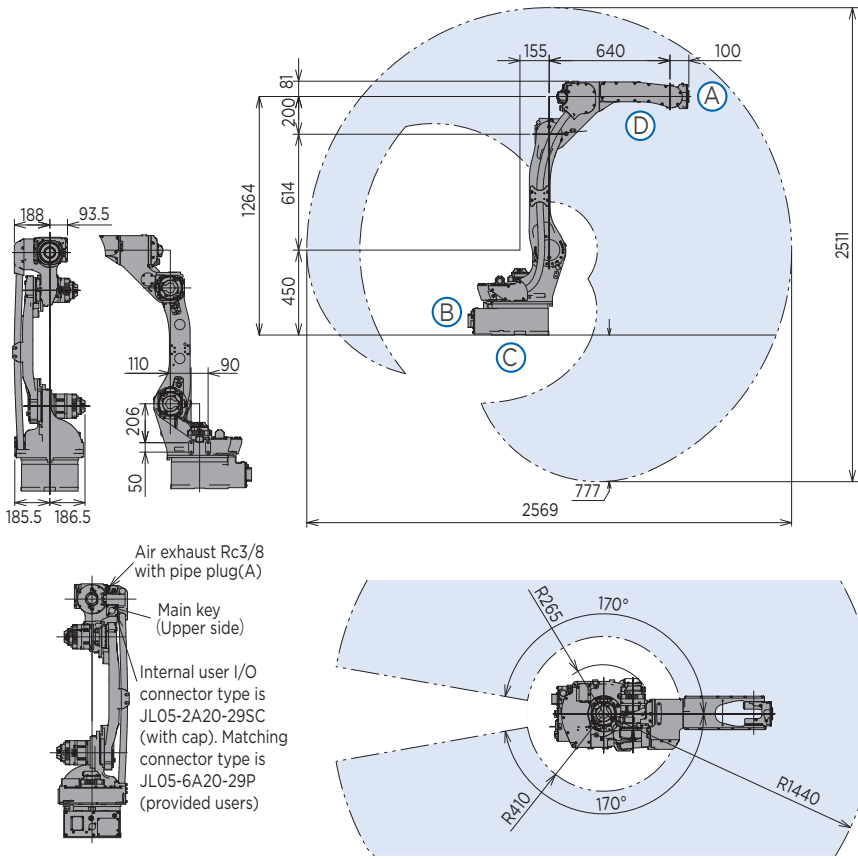
Material Handling

Packaging

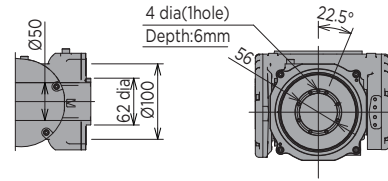


- Increase your productivity with the fast and efficient GP12 robot
- All axis speeds have been increased by up to 15% - surpassing other robots in its class
- Reduced interference design allows close proximity placement of robots
- Maximum reduction of acceleration/ deceleration times for all robot positions
- Hollow arm structure eliminates cable interference
- Highest wrist allowable moment for accurate and repeatable handling
- Higher payload allows wider range of tooling integration such as double gripper for multi-handling operations
- IP67-rated wrist and IP54 body (IP65 optional)
- Easy, single cable connection for fast setup and simple maintenance
- Equipped with data saving feature that permits the robot's wire harness to be replaced without having to connect it to a battery
- Ideal for high-volume assembly, handling and packaging applications
- The GP-series robots are controlled by Yaskawa's new high-performance YRC1000 controller that is built to a global standard and does not require a transformer for input voltages ranging from 380VAC to 480VAC. It is highly compact, resulting in reduced space requirements. Its I/O communication speed is improved by as much as 50% for improved work efficiency.

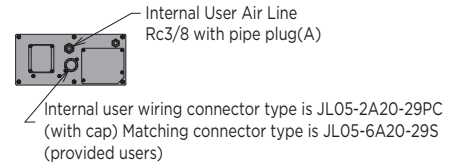
GP12 Robot



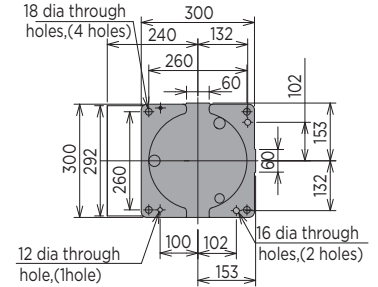
VIEW A



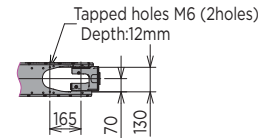
VIEW B



VIEW C



VIEW D



All dimensions are metric (mm) and for reference only. Request detailed drawings for all design/engineering requirements.

SPECIFICATIONS

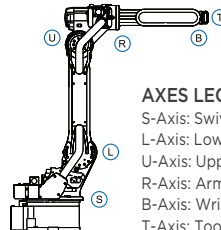
| Axes | Maximum motion range [°] | Maximum speed [°/sec.] | Allowable moment [N•m] | Allowable moment of inertia [kg•m ²] |
|------|--------------------------|------------------------|------------------------|--|
| S | ±170 | 260 | - | - |
| L | +155/-90 | 230 | - | - |
| U | +150/-85 | 260 | - | - |
| R | ±200 | 470 | 22 | 0.65 |
| B | ±150 | 470 | 22 | 0.65 |
| T | ±455 | 700 | 9.8 | 0.17 |

Mounting Options: Floor, Wall, or Ceiling

| Item | GP12 |
|-------------------------|--------------------------|
| Controlled axes | 6 |
| Maximum payload [kg] | 12 |
| Repeatability [mm] | ±0.08 |
| Horizontal reach [mm] | 1,440 |
| Vertical reach [mm] | 2,511 |
| Weight [kg] | 130 |
| Internal user I/O cable | 17 conductors (+ ground) |
| Internal user air line | (1) 3/8" connection |
| Power requirements | 380-480 VAC |
| Power rating [kVA] | 1.5 |

Options

- Robot risers and base plates
- MotoSight™ 2D and 3D vision systems



AXES LEGEND

S-Axis: Swivel Base
L-Axis: Lower Arm
U-Axis: Upper Arm
R-Axis: Arm Roll
B-Axis: Wrist Bend
T-Axis: Tool Flange

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