

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

0.02 mm repeatability

APPLICATION

Assembly

Material Handling

Packaging

CONTROLLER

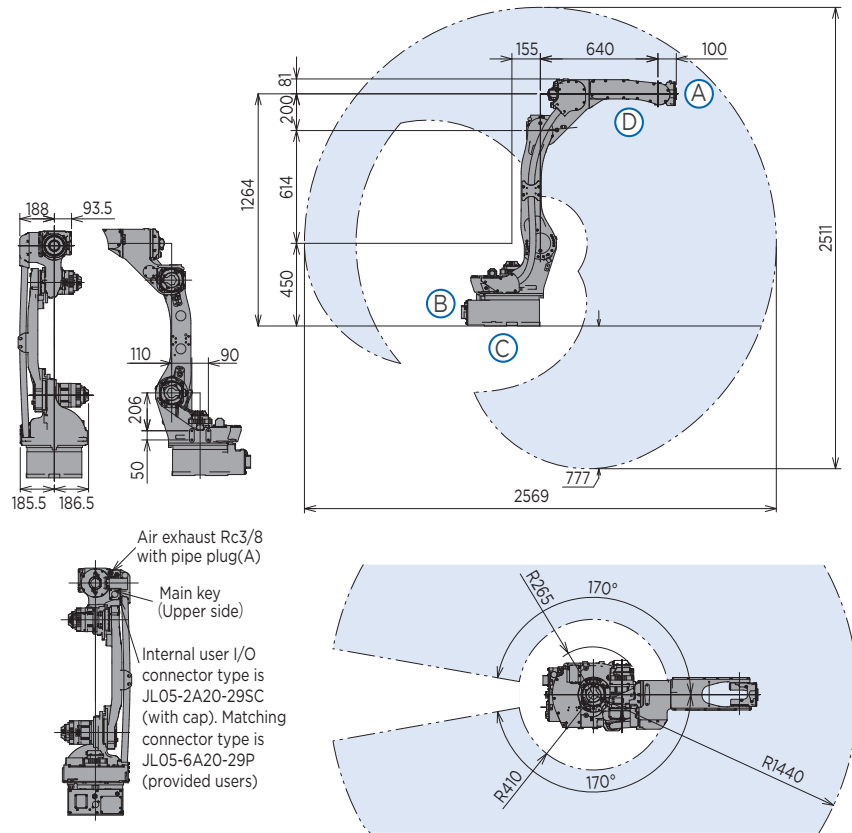
YRC1000

YRC1000micro

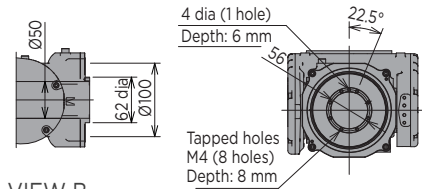


- Increase your productivity with the fast and efficient GP12 robot.
- All axis speeds have been increased by up to 15% - surpassing other robots in its class.
- Reduced interference design allows close proximity placement of robots.
- Maximum reduction of acceleration/ deceleration times for all robot 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.
- Single power and control cable reduces wiring time and increases work efficiency.
- Modular robot harness design for improved diagnostics and maintenance.
- Home position data can be saved without battery connection for easy maintenance.
- Ideal for high-volume assembly, handling and packaging applications.
- NSF-H1 certified food-grade lubricant option available for food or consumer product packaging environments.
- The GP12 has an IP67-rated wrist and an IP54 body standard. An XP (eXtra Protection) package that increases the body protection rating to IP65 is available.
- The GP12 can be floor-, wall-, tilt- or ceiling-mounted. Brakes are included on all axes.
- The GP12 robot is available with either the standard teach pendant or the Smart Pendant.

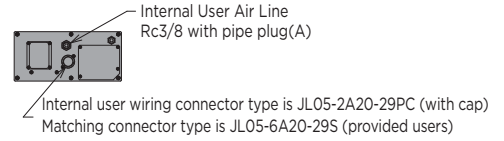
GP12 ROBOT



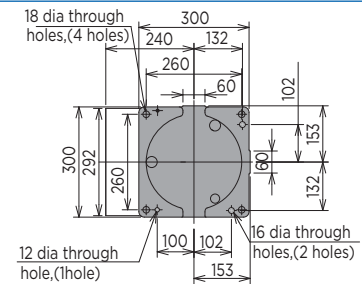
VIEW A



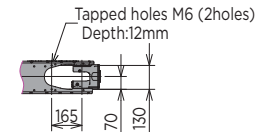
VIEW B



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	Allowable moment	Allowable moment of inertia
	degrees	%/sec	N·m	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

Specifications for GP12 with XP package may be different.
Mounting Options: Floor, Wall, Tilt or Ceiling

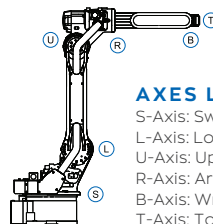
* The MLX300 software option is not available for use with arc or spot welding applications.
MLX300 fieldbus cards, I/O cards and vision equipment must be purchased separately from the supplier. All peripherals are programmed using a PLC.

** Food grade grease version includes (2) 3/8" internal user air line connections.

Item	Unit	GP12
Controlled axes		6
Maximum payload	kg	12
Repeatability	mm	0.02
Horizontal reach	mm	1,440
Vertical reach	mm	2,511
Weight	kg	150
Internal user I/O cable		17 conductors (+ ground)
Internal user air line		(1) 3/8" connection**
Power requirements YRC1000		Three-phase 380-480 VAC 50/60 Hz
YRC1000micro		Three-phase 200-230 VAC 50/60 Hz
Power rating	kVA	1.5

OPTIONS

- Robot risers and base plates
- MotoSight™ 2D and 3D vision systems
- PLC integration via MLX300 software option*



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

YASKAWA

YASKAWA AMERICA, INC. 100 Automation Way | Miamisburg, OH 45342
937.847.6200 | motoman.com

Technical specifications subject to change without notice. | Motoman is a registered trademark.
All other marks are the trademarks and registered trademarks of Yaskawa America, Inc.
DS-867-A ©2021 Yaskawa America, Inc. JULY 2021