

GP180

HIGH-SPEED, HIGH-PAYLOAD ROBOT

KEY BENEFITS

High payload for heavy part processing

Engineered for easy installation, operation and maintenance

Single robot-to-controller cable connection enables fast setup

SPECIFICATIONS

180 kg payload

2,702 mm horizontal reach

3,393 mm vertical reach

0.05 mm repeatability

APPLICATION

Machine Tending

Material Handling

Press Tending

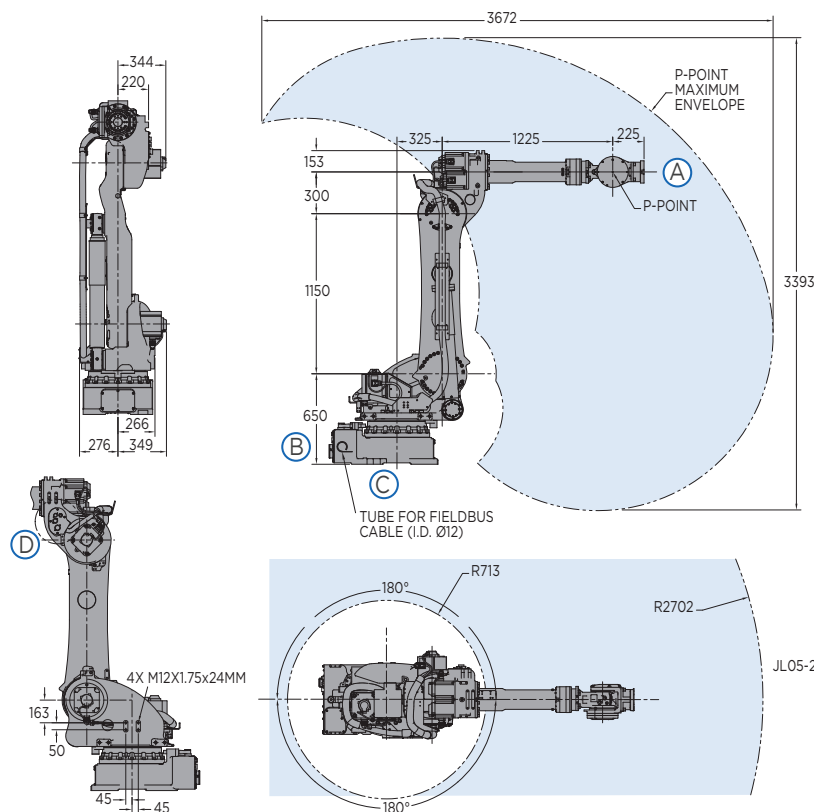
CONTROLLER

YRC1000

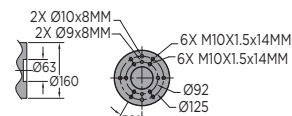


- Increase productivity with the powerful and efficient GP180 robot.
- 180-kg payload capacity and wide working envelope provide superior performance for handling applications.
- Exceptionally fast axis speeds and acceleration capabilities reduce cycle time and increase production output.
- Streamlined upper arm allows easy access to parts in tight spots and avoids potential interference with fixtures, improving application flexibility.
- Wide wrist motion range eliminates interference and improves application flexibility.
- Reduced interference design allows close proximity placement of robots for high-density workcells.
- High moment and inertia ratings allow handling of larger and heavier payloads.
- Cable installation tube facilitates fieldbus routing through the S-axis.
- 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.
- The GP180 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 GP180 can be floor-mounted. Brakes are included on all axes.
- Pre-wired for servo gripper which allows a wider range of product handling.
- Compact YRC controller utilizes the lightweight standard teach pendant with intuitive programming.

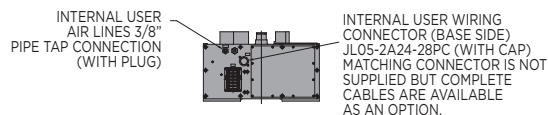
GP180 ROBOT



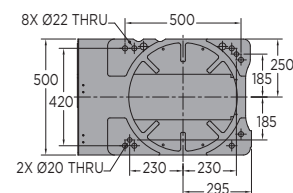
VIEW A



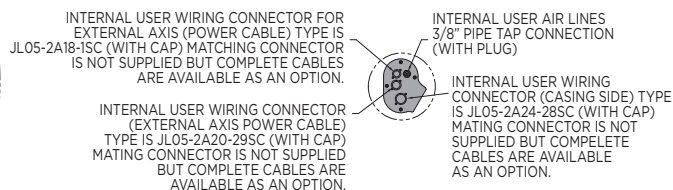
VIEW B



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	±180	125	-	-
L	+76/-60	115	-	-
U	+90/-86	125	-	-
R	±360	182	1,000	90
B	±130	175	1,000	90
T	±360	265	618	46.3

Specifications for GP180 with XP package may be different.

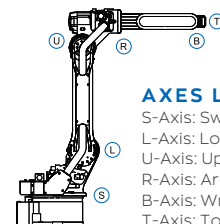
Mounting Options: Floor

* 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.

Item	Unit	GP180
Controlled axes		6
Maximum payload	kg	180
Repeatability	mm	0.05
Horizontal reach	mm	2,702
Vertical reach	mm	3,393
Weight	kg	1,020
Internal user I/O cable		24 conductors w/ ground
Internal user air line		(1) 3/8" connection
Power requirements		380-480 VAC
Power rating	kVA	5

OPTIONS

- Robot risers and base plates
- Extended length manipulator cables
- Wide variety of fieldbus cards
- External axes
- PLC integration via MLX300 software option*
- Functional Safety Unit (FSU)
- MotoSight™ 2D and 3D vision



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-881 ©2021 Yaskawa America, Inc. JANUARY 2021