

GP4

SMALL, VERSATILE ROBOT

KEY BENEFITS

Compact, space-efficient design

Extremely fast axis speeds for maximum throughput

Engineered for easy installation, operation and maintenance

IP67 rating for use in a wide variety of applications

SPECIFICATIONS

4 kg payload

550 mm horizontal reach

1,008 mm vertical reach

0.01 mm repeatability

APPLICATION

Assembly

Inspection

Machine Tending

Material Handling

Packaging

Part Transfer

CONTROLLER

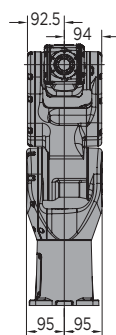
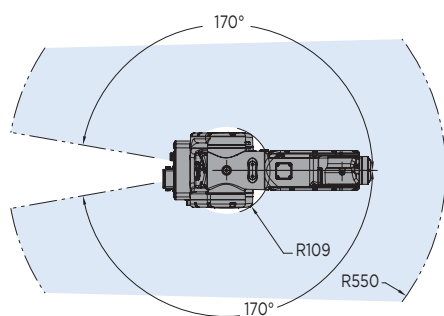
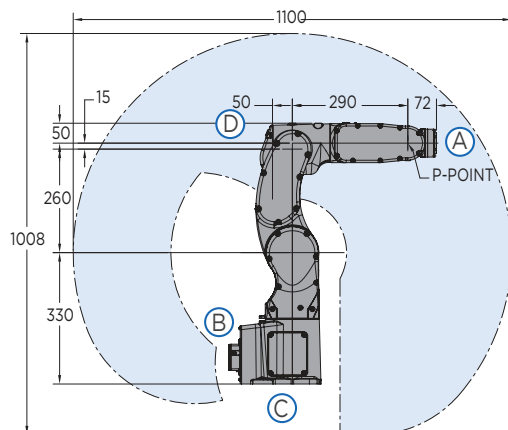
YRC1000

YRC1000micro

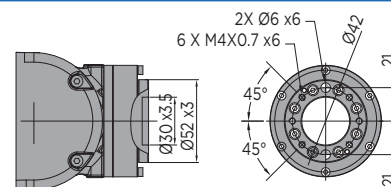


- Increase productivity of small component processing with the extremely fast and efficient six-axis GP4 robot.
- Highly precise, with axis speeds up to 1,000 degrees/s, the GP4 is ideal for high-volume assembly, handling and packaging applications.
- Small footprint, slim body design allows for minimum installation space.
- Highly flexible, the GP4 offers a large work envelop for its size; it is a viable six-axis alternative to SCARA-style robots typically used in the electronics, confectionery and small parcel sortation industries.
- IP67 rating and easy-to-clean surface for use in sanitary or harsh environments.
- Small interference radius allows close proximity placement of robots.
- Exceptionally fast acceleration/deceleration capabilities reduce cycle time and increase production output.
- High wrist allowable moment allows for accurate and repeatable handling.
- 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.
- Optional location (bottom) for manipulator cable connection reduces interference with walls.
- NSF-H1 certified food-grade lubricant option available for food or consumer product packaging environments.
- Utilizes the lightweight standard teach pendant with intuitive programming.

GP4 ROBOT



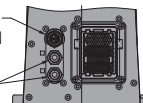
VIEW A



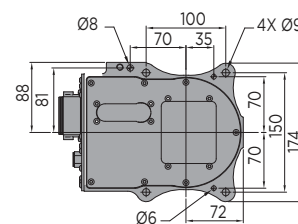
VIEW B

INTERNAL USER WIRING CONNECTOR (BASE SIDE)
TYPE IS LF13WBRB-20P (WITH CAP) MATING
CONNECTOR IS NOT SUPPLIED BUT
COMPLETE CABLES ARE AVAILABLE AS AN OPTION

INTERNAL USER AIR LINES
2X RC1/4 (WITH PLUG)



VIEW C



VIEW D

AIR EXHAUST
2X M5X0.8 x4.5
(WITH PLUG)

INTERNAL USER WIRING
CONNECTOR (BASE SIDE) TYPE IS
LF13WBRB-20S (WITH CAP) MATING
CONNECTOR IS NOT SUPPLIED BUT
COMPLETE CABLES ARE AVAILABLE
AS AN OPTION

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	465	–	–
L	+130/-110	465	–	–
U	+200/-65	525	–	–
R	±200	565	8.86	0.2
B	±123	565	8.86	0.2
T	±455	1,000	4.9	0.07

Specifications for GP4 with XP package may be different.

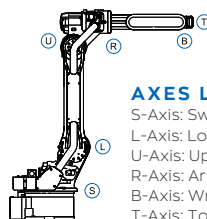
Mounting Options: Floor, Wall, Tilt or Ceiling

* 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.

Item	Unit	GP4
Controlled axes		6
Maximum payload	kg	4
Repeatability	mm	0.01
Horizontal reach	mm	550
Vertical reach	mm	1,008
Weight	kg	28
Internal user I/O cable		8 conductors (+ ground)
Internal user air line		(2) 1/4" connection
Power requirements YRC1000 YRC1000micro		Three-phase 380-480 VAC 50/60 Hz Single-phase or three-phase 200-230 VAC 50/60 Hz
Power rating	kVA	1

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

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Yaskawa America, Inc. DECEMBER 2024