YASKAWA

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 ±0.06 mm repeatability

Applications

Assembly
Material Handling

Packaging

Controller

YRC1000

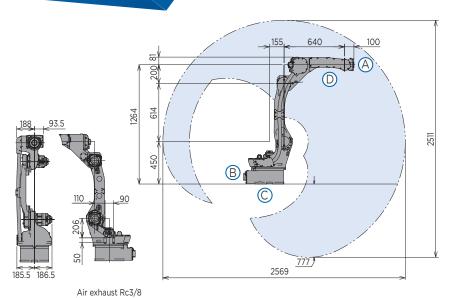
YRC1000micro

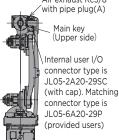


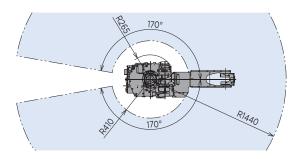
- Increase your productivity with the fast and efficient GP12 robot.
- All axis speeds have been increased by up to 15% surpassing other robots in its class.
- Reduced interference design allows close proximity placement of robots.
- Maximum reduction of acceleration/ deceleration times for all robot 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.

- New 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-, tiltor ceiling-mounted. Brakes are included on all axes.
- The GP12 robot is available with either the standard teach pendant or the Smart Pendant.

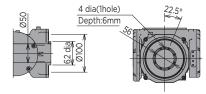
GP12 Robot







VIEW A



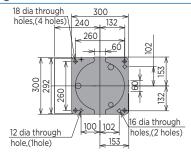
VIEW B



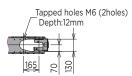
Internal User Air Line Rc3/8 with pipe plug(A)

Internal user wiring connector type is JL05-2A20-29PC (with cap) Matching connector type is JL05-6A20-29S (provided users)

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•m²]
S	±170	260	-	-
L	+155/-90	230	-	-
U	+150/-85	260	-	-
R	±200	470	22	0.65
В	±150	470	22	0.65
Т	±455	700	9.8	0.17

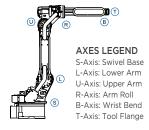
Specifications for GP12 with XP package may be different.

Mounting Options: Floor, Wall, Tilt or Ceiling

Item	GP12	
Controlled axes	6	
Maximum payload [kg]	12	
Repeatability [mm]	±0.06	
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
- PLC integration via MLX300 software option*



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^{*} 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.