

GP25-12

EFFICIENT, HIGH-SPEED ROBOT

KEY BENEFITS

Extended reach for large part processing

Space-efficient design

Engineered for easy installation, operation and maintenance

SPECIFICATIONS

12 kg payload

2,010 mm horizontal reach

3,649 mm vertical reach

0.03 mm repeatability

APPLICATION

Assembly

Dispensing

Machine Tending

Material Handling

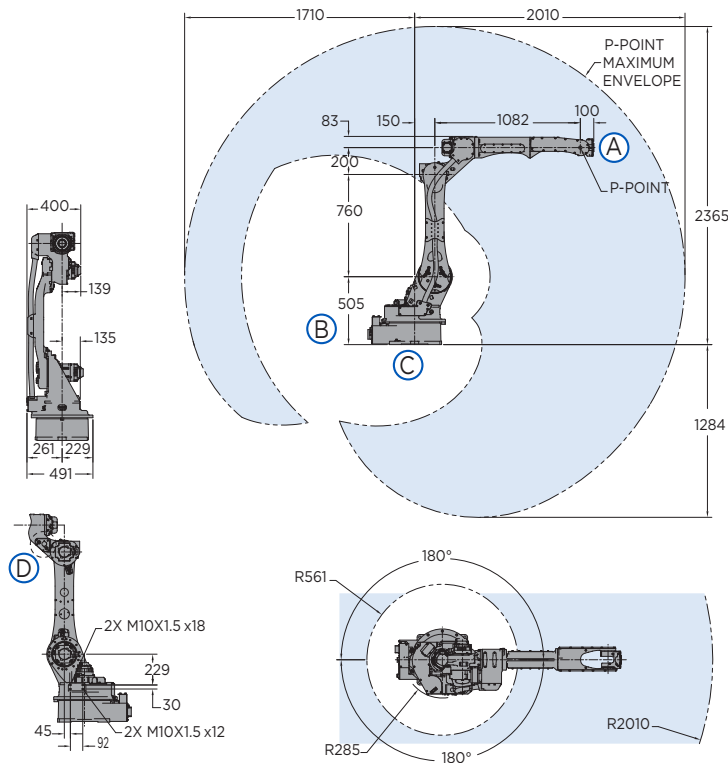
CONTROLLER

YRC1000

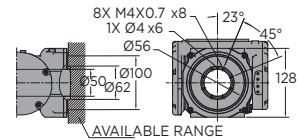


- Extended-reach GP25-12 robot offers a broad work envelope, increasing application flexibility.
- Exceptionally fast axis speeds and acceleration capabilities reduce cycle times and increase production output.
- Hollow upper arm structure provides optimal cable protection while simplifying programming. A 50 mm thru-hole, between axes 4-6, shields process utilities from wear, interference or snagging.
- Contoured arm design reduces interference with jigs and large parts.
- Symmetric wrist profile provides consistent motion and clearances regardless of robot approach.
- Mounting is available on the back side of the upper arm reducing interference with machines or other items in the workcell.
- 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.
- Ideally suited for use in high-density workcells with multiple robots working in close proximity.
- Slim arm allows easy access to parts in tight spots and avoids potential interference with fixtures.
- The GP25-12 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 GP25-12 can be floor-, wall-, tilt- or ceiling-mounted. Brakes are included on all axes.
- Compact YRC controller utilizes the lightweight standard teach pendant with intuitive programming.

GP25-12 ROBOT



VIEW A



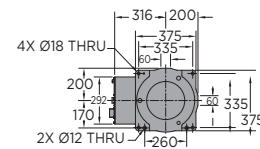
VIEW B

INTERNAL USER AIR LINE
3/8" PT (WITH PLUG)



INTERNAL USER CABLE
CONNECTOR JL05-2A20-29PC
(WITH CAP). MATING CONNECTOR
IS NOT SUPPLIED, BUT COMPLETE
CABLES ARE AVAILABLE AS
AN OPTION.

VIEW C



VIEW D

INTERNAL USER WIRING CONNECTOR
JL05-2A20-29SC WITH CAP MATING
CONNECTOR IS NOT SUPPLIED BUT
COMPLETE CABLES ARE AVAILABLE
AS AN OPTION.



AIR EXHAUST 3/8" PT WITH PLUG

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	210	-	-
L	+155/-105	210	-	-
U	+160/-86	220	-	-
R	±200	435	22	0.65
B	±150	435	22	0.65
T	±455	700	9.8	0.17

Specifications for GP25-12 with XP package may be different.

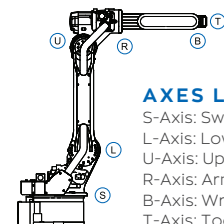
Mounting Options: Floor, Wall, Tilt or Ceiling

* 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	GP25-12
Controlled axes		6
Maximum payload	kg	12
Repeatability	mm	0.03
Horizontal reach	mm	2,010
Vertical reach	mm	3,649
Weight	kg	260
Internal user I/O cable		17 conductors w/ ground
Internal user air line		(1) 3/8" connection
Power requirements		380-480 VAC
Power rating	kVA	2.0

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-874 ©2021 Yaskawa America, Inc. JANUARY 2021