

# GP35L

## EFFICIENT, HIGH-SPEED ROBOT

### KEY BENEFITS

Extended reach and high speeds allow use in a variety of applications

High wrist ratings provide higher handling capacity

Engineered for easy installation, operation and maintenance

Single robot-to-controller cable connection enables fast setup

### SPECIFICATIONS

35 kg payload

2,538 mm horizontal reach

4,449 mm vertical reach

0.07 mm repeatability

### APPLICATION

Dispensing

Machine Tending

Material Cutting

Material Handling

Palletizing

Press Tending

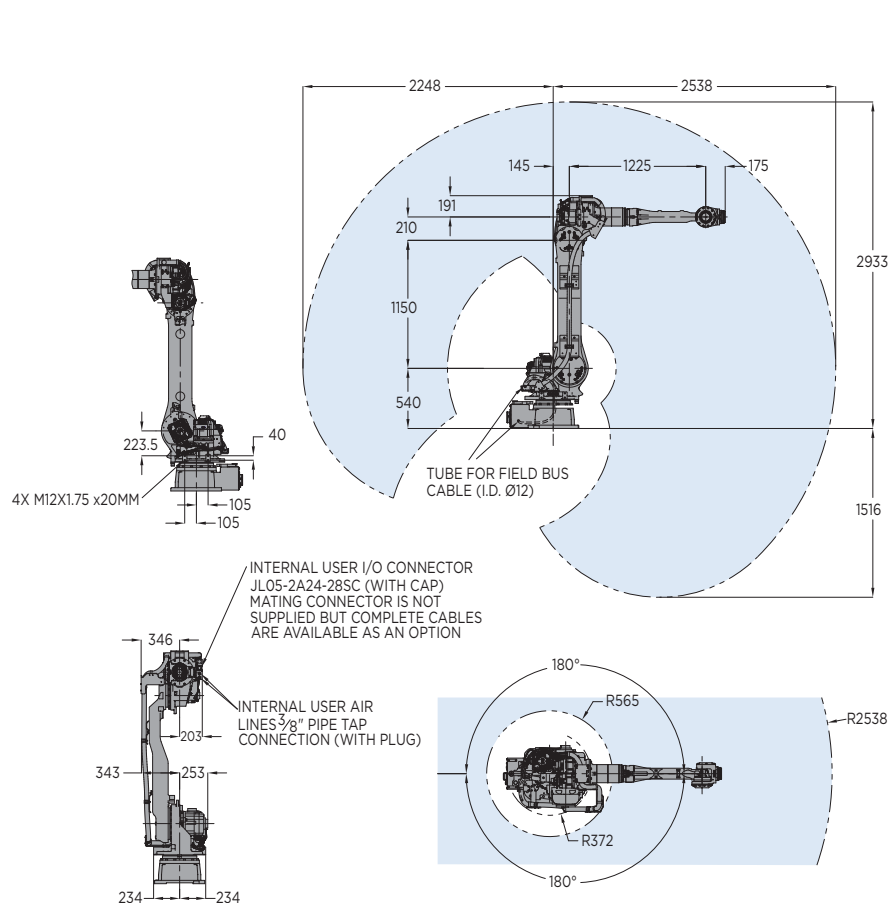
### CONTROLLER

YRC1000

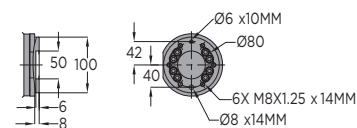


- Increase productivity with the powerful and efficient GP35L robot.
- Extended-reach, six-axis robot offers superior performance for a variety of applications.
- 35 kg payload supports a wide variety of tooling and sensors to fulfill diverse project needs.
- Exceptionally fast axis speeds and acceleration capabilities reduce cycle time and increase production output.
- Reduced interference design allows close proximity placement of robots for high-density workcells.
- 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.
- High moment and inertia ratings allow handling of larger and heavier payloads.
- Cables and air lines are routed through robot base to upper arm to increase cable life, enhance safety and reduce teaching time.
- Cable installation tube facilitates fieldbus routing through the S-axis.
- Mounting for peripheral equipment is provided in multiple locations to make integration easier.
- 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 GP35L 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 GP35L robot 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.

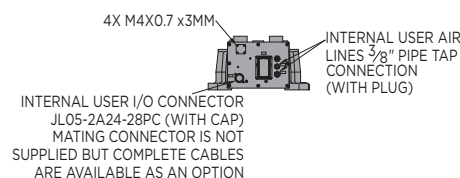
# GP35L ROBOT



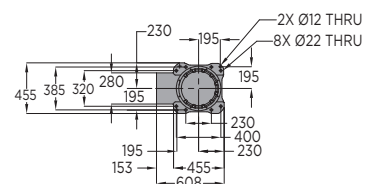
VIEW A



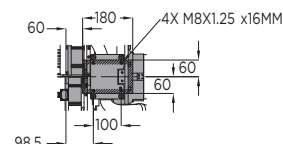
VIEW B



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 <sup>2</sup>           |
| S    | ±180                 | 180           | -                | -                           |
| L    | +135/-90             | 140           | -                | -                           |
| U    | +206/-80             | 178           | -                | -                           |
| R    | ±360                 | 250           | 147              | 10                          |
| B    | ±125                 | 250           | 147              | 10                          |
| T    | ±360                 | 360           | 78               | 4                           |

Specifications for GP35L with XP package may be different.

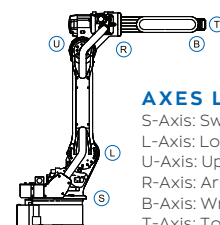
Mounting Options: Floor, Wall, Tilt or Ceiling

\* 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 | GP35L                   |
|-------------------------|------|-------------------------|
| Controlled axes         |      | 6                       |
| Maximum payload         | kg   | 35                      |
| Repeatability           | mm   | 0.07                    |
| Horizontal reach        | mm   | 2,538                   |
| Vertical reach          | mm   | 4,449                   |
| Weight                  | kg   | 600                     |
| Internal user I/O cable |      | 24 conductors w/ ground |
| Internal user air line  |      | (2) 3/8" connection     |
| Power requirements      |      | 380-480 VAC             |
| Power rating            | kVA  | 4.5                     |

## 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

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