

# GP7 and GP8

## Compact, High-Speed Robots

### Key Benefits

Highest payload, speeds and wrist allowable moment in its class

Compact, space-efficient design

Engineered for easy installation, operation and maintenance

IP67 rating for use in a wide variety of applications

### Specifications

#### GP7

7 kg payload  
927 mm horizontal reach  
1,693 mm vertical reach  
±0.03 mm repeatability

#### GP8

8 kg payload  
727 mm horizontal reach  
1,312 mm vertical reach  
±0.02 mm repeatability

### Applications

Assembly

Material Handling

Packaging

### Controllers

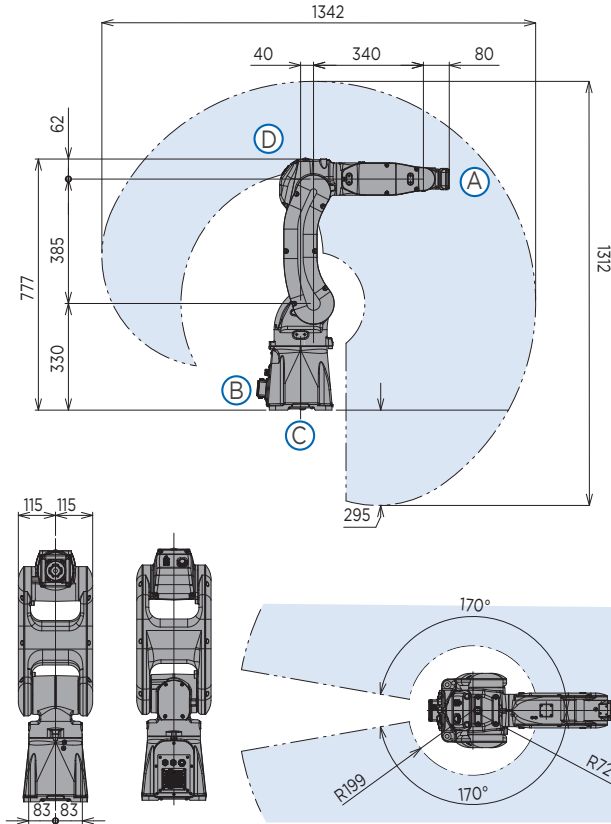
YRC1000

YRC1000micro

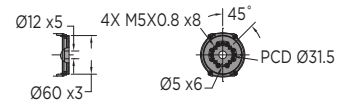


- Increase your productivity with the fast and efficient GP7 and GP8 robots.
- All axis speeds have been increased by up to 39% - surpassing other robots in its class.
- Small footprint, slim body design allows for minimum installation space.
- IP67 rating and easy-to-clean surface for use in sanitary or harsh environments. Anti-corrosive paint option available for further chemical resistance.
- Reduced interference design allows close proximity placement of robots.
- Increased reach enables wider work area.
- Maximum reduction of acceleration/ deceleration times for all robot positions.
- Highest wrist allowable moment for accurate and repeatable handling.
- 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.
- Optional location (bottom) for manipulator cable connection reduces interference with walls.
- 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 GP7 and GP8 robots are available with either the standard teach pendant or the Smart Pendant.

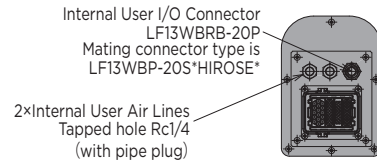
# GP7 and GP8 Robots



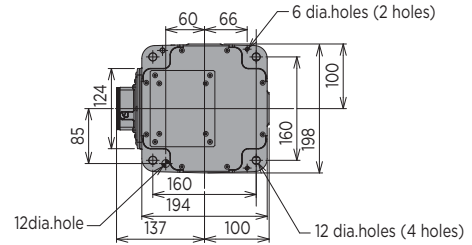
## VIEW A



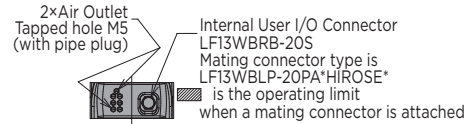
## VIEW B



## VIEW C



## VIEW D



GP8 robot shown.  
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·m <sup>2</sup> ] |     |
|------|--------------------------|----------|------------------------|------|------------------------|-----|--|-----|
|      | GP7                      | GP8      | GP7                    | GP8  | GP7                    | GP8 | GP7  | GP8 |
| S    | ±170                     | ±170     | 375                    | 455  | -                      | -   | -  | -   |
| L    | +145/-65                 | +145/-65 | 315                    | 385  | -                      | -   | -  | -   |
| U    | +190/-70                 | +190/-70 | 410                    | 520  | -                      | -   | -  | -   |
| R    | ±190                     | ±190     | 550                    | 550  | 17                     | 17  | 0.5  | 0.5 |
| B    | ±135                     | ±135     | 550                    | 550  | 17                     | 17  | 0.5  | 0.5 |
| T    | ±360                     | ±360     | 1000                   | 1000 | 10                     | 10  | 0.2  | 0.2 |

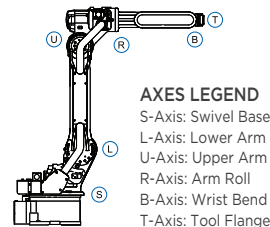
Mounting Options: Floor, Wall, Tilt or Ceiling

\* 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                    | GP7  | GP8   |
|-------------------------|--|-------|
| Controlled axes         | 6  | 6     |
| Maximum payload [kg]    | 7  | 8     |
| Repeatability [mm]      | ±0.03  | ±0.02 |
| Horizontal reach [mm]   | 927  | 727   |
| Vertical reach [mm]     | 1,693  | 1,312 |
| Weight [kg]             | 34   | 32    |
| Internal user I/O cable | 17 conductors (+ ground)                         |       |
| Internal user air line  | (2) 1/4" connection                              |       |
| Power requirements      | Three-phase 380-480 VAC 50/60 Hz                 |       |
| YRC1000                 | Three-phase or three-phase 200-230 VAC 50/60 Hz  |       |
| YRC1000micro            | Single-phase or three-phase 200-230 VAC 50/60 Hz |       |
| Power rating [kVA]      | 1  | 1     |

## Options

- Robot risers and base plates
- MotoSight™ 2D and 3D vision systems
- PLC integration via MLX300 software option\*



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