

YASKAWA

MOTOMAN GP8L

Handling & General Applications
with the GP-series



The 6-axis MOTOMAN GP8L is a fast, general-purpose industrial robot with 8 kg payload and a long reach of 1,636 mm.

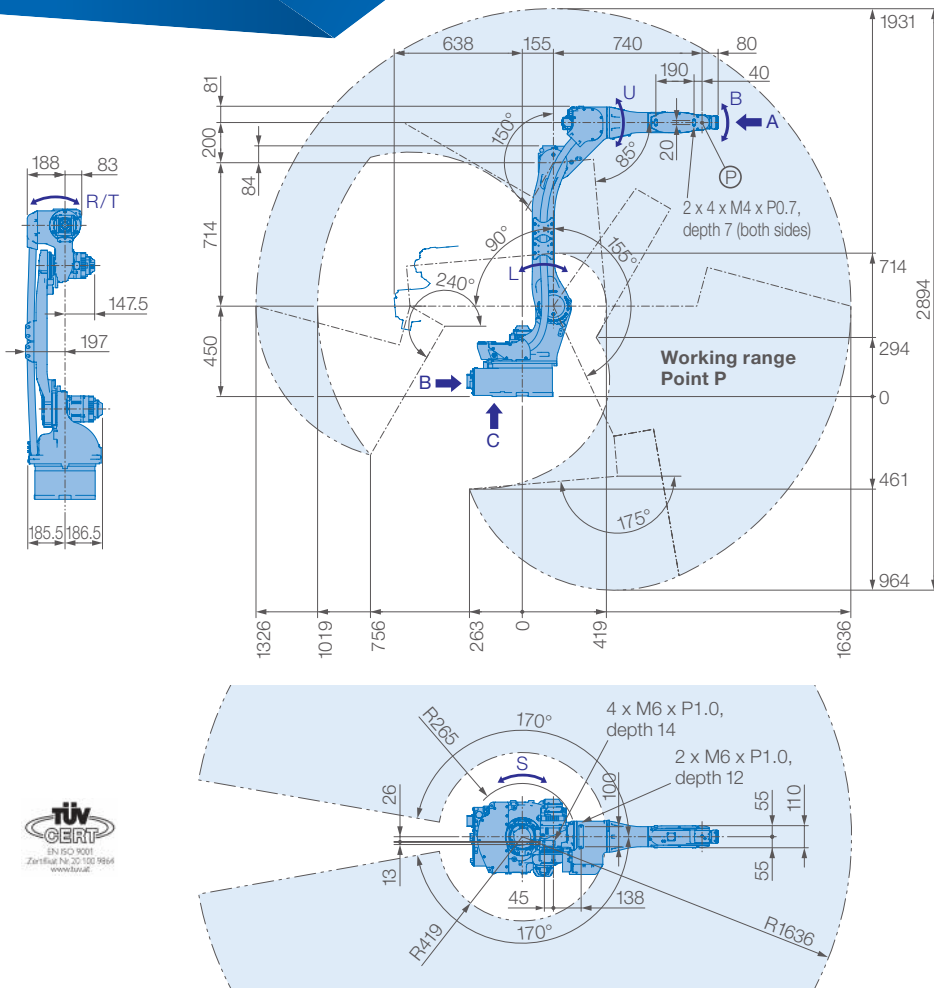
With its slim design and compact, very narrow wrist, it is particularly suitable for applications where space is at a premium, such as loading/unloading containers in packaging technology or logistics. Automation around machine tools and injection molding machines can also be excellently implemented with this robot.

Its intelligent Yaskawa Sigma-7 drive technology enables fast cycle times with high repeatability of ± 0.02 mm.

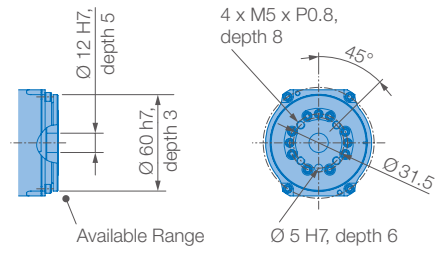
With numerous functions, interfaces and communication options of the YRC1000/YRC1000micro controllers, the MOTOMAN GP8L is open to a full range of different technologies, including modern sensor systems and image processing systems, which can be combined very well with this robot. Alternatively, the proven MOTOMAN teach pendant or the innovative Smart Pendant for newcomers to industrial automation are available for programming.

KEY BENEFITS

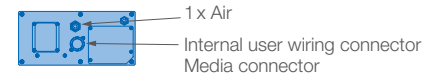
- Universal use
- Fast cycle times
- Compact design and slim wrist
- Long reach: 1,636 mm
- Internal media guide
- Easy installation, commissioning and operation



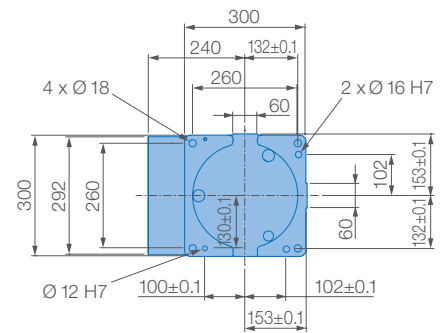
View A



View B



View C



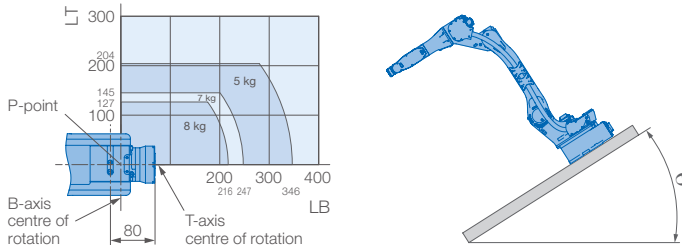
Mounting options: Floor, ceiling, wall, tilt*
IP Protection: IP54

* tilt with condition of angle – see table below

Prevent interaction of the robot with:

- Corrosive gases, liquids or explosive gases
- Exposure to water, oil or dust
- Excessive electrical noise (plasma)

Allowable wrist load



| Robot installation angle θ [deg.] | S-axis operating range [deg.] |
|--|--------------------------------------|
| $0 \leq \theta \leq 30$ | ± 170 degrees or less (no limit) |
| $30 < \theta \leq 35$ | ± 60 degrees or less |
| $35 < \theta \leq 45$ | ± 45 degrees or less |
| $45 < \theta$ | ± 30 degrees or less |

| Specifications GP8L | | | | | | |
|---------------------|--------------------------|---------------------|-----------------------|--|-----------------------------|--------------|
| Axes | Maximum motion range [°] | Maximum speed [°/s] | Allowable moment [Nm] | Allowable moment of inertia [kg · m ²] | Controlled axes | 6 |
| S | ± 170 | 260 | – | – | Max. payload [kg] | 8 |
| L | $+155/-90$ | 230 | – | – | Repeatability [mm] | $\pm 0.02^*$ |
| U | $+150/-85$ | 260 | – | – | Max. working range R [mm] | 1636 |
| R | ± 200 | 470 | 17 | 0.5 | Temperature [°C] | 0 to +45 |
| B | ± 135 | 550 | 17 | 0.5 | Humidity [%] | 20 – 80 |
| T | ± 360 | 1000 | 10 | 0.2 | Weight [kg] | 155 |
| | | | | | Power supply, average [kVA] | 1.5** |

* Conforms to ISO 9283 ** Varies in accordance with applications and motion patterns Note: SI units are used for specifications.

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YR-1-06VXL8-A00
A-01-2022, A-No. 220788