

YASKAWA

MOTOMAN GP7

Handling & General Applications
with the GP-series



The MOTOMAN GP7 is an extremely fast and precise 6-axis industrial robot with a payload capacity of up to 7 kg. With a reach of 927 mm and a high repeatability of ± 0.01 mm, it is ideally suited to assembly tasks, but also universal handling tasks, CNC machine tool tending or packaging. Its smooth and streamlined modern industrial design is attractive and minimizes the space requirements at the installation site.

Cable entry is optionally from the side at the pedestal or from underneath through the base plate, thus enabling space-saving and uncluttered integration into its environment, irrespective of the intended installation position. The prepared routing of the supply lines in the arm enables optimal integration of the grippers or sensor systems, often dispensing with the need for an external media package.

A world of possibilities is open to the MOTOMAN GP7 with the numerous functions of the MOTOMAN YRC1000 controller or the compact MOTOMAN YRC1000micro controller. In conjunction with the conventional teach pendant, this robot is a reliable mechanical engineering partner. With the innovative operator control concept of the SmartPendant, it provides an excellent point of entry into the world of robotics.

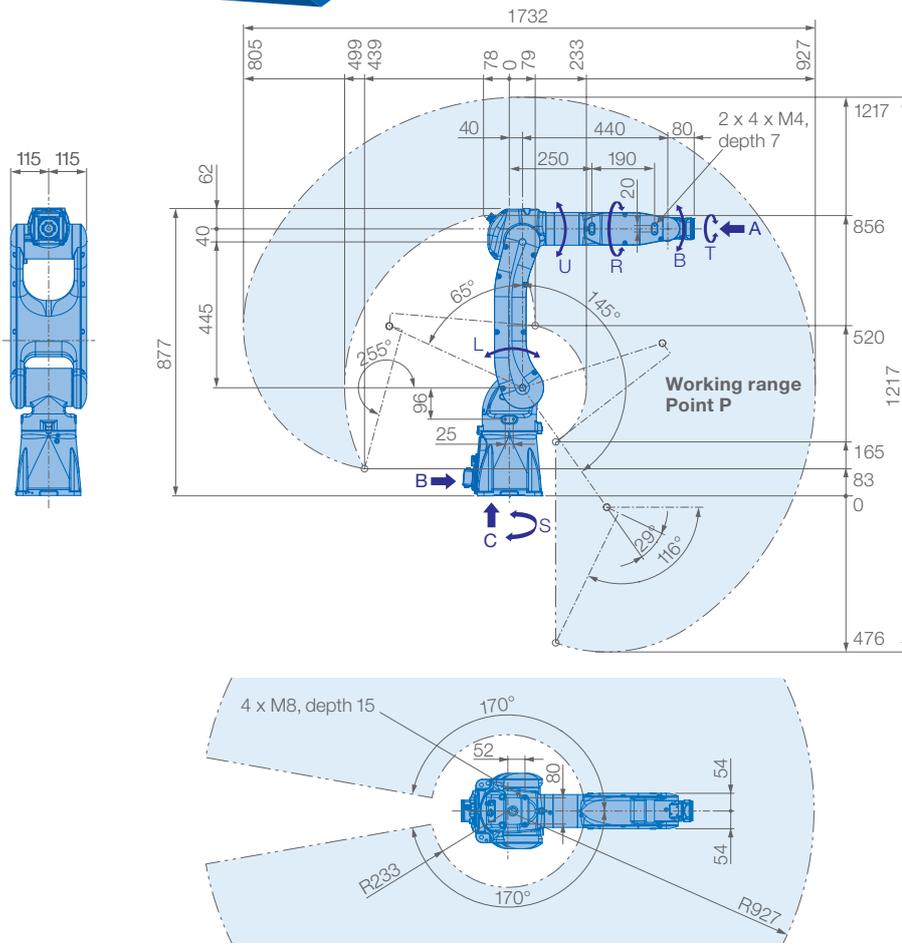
As standard, the MOTOMAN GP7 is designed with the high protection classification IP67. Other variants (e.g. with food-compatible grease in the food industry, special anti-corrosion coating for applications in aggressive ambient conditions, or as a cleanroom version CR5) are optionally available.

KEY BENEFITS

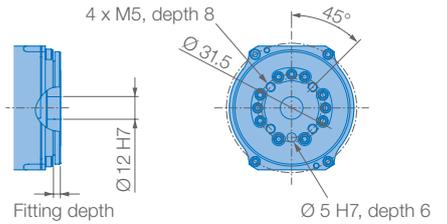
- Extremely fast and powerful
- Compact and flexible
- Large working range: 927 mm
- Reduced interference contours due to optimized design
- Simple commissioning and maintenance

Controlled by
YRC1000

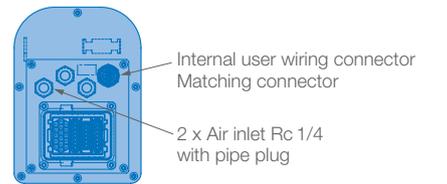
Controlled by
YRC1000
micro



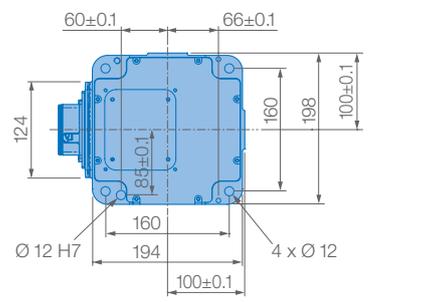
View A



View B



View C



Mounting options: Floor, ceiling, wall, tilt*

IP Protection: IP67

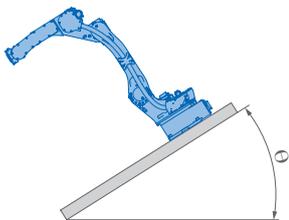
Option: Cleanroom class 5

* tilt with condition of angle – see table below

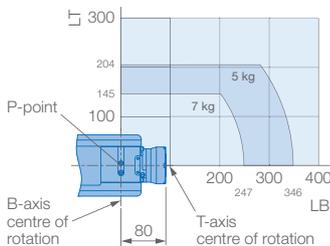
Robot installation angle θ [deg.]	S-axis operating range [deg.]
$0 \leq \theta \leq 30$	± 170 degrees or less (no limit)
$30 < \theta \leq 35$	± 60 degrees or less
$35 < \theta \leq 45$	± 45 degrees or less
$45 < \theta$	± 30 degrees or less

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



Specifications GP7						
Axes	Maximum motion range [°]	Maximum speed [°/s]	Allowable moment [Nm]	Allowable moment of inertia [kg · m ²]	Controlled axes	6
S	±170	375	–	–	Max. payload [kg]	7
L	+145/-65	315	–	–	Repeatability [mm]	±0.01*
U	+190/-70	410	–	–	Max. working range R [mm]	927
R	±190	550	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]	37
					Power supply, average [kVA]	1**

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