# GP12, GP25 and GP25-12

# **Increase Productivity**

#### Highest payloads, speeds and wrist allowable moment in its class

- The productivity of the customer's equipment can be improved with the highest speed in the 12 and 25 kg payload class
- Acceleration/deceleration control has been improved to achieve maximum reduction of acceleration/deceleration times for all robot postures



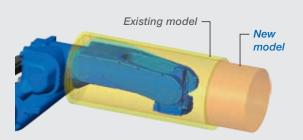
#### Hollow arm





50 mm dia.

50 mm dia.



Minimized interference radius of the wrist MH12/MH24 (earlier models): 136/147 mm GP12/GP25 (new models): 120/138 mm

# Make Equipment compact

#### Easy-to-use structure

• The hollow arm structure to store cables reduces operation restriction due to cable interference, simplifies teaching and eliminates cable disconnection caused by interference

#### Best accessibility in its class

• The slim arm design minimizes interference with peripheral devices even in small spaces

# Improve Efficiency in Installation, Operation and Maintenance of Equipment

#### Easy set-up

• Only one cable is required, which reduces setup time

# Wrist structure with great environment resistance

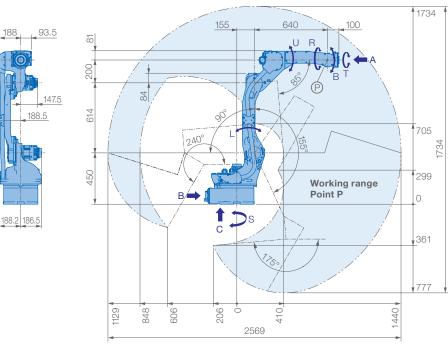
- Wrist structure of R, B and T axes are IP67-compliant as a standard specification
- Wrist structure of S, L and U axes are IP54-compliant (option IP65)

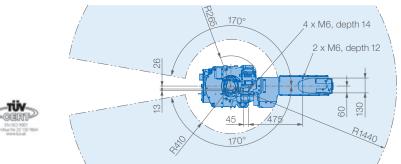
#### **Easy maintenance**

- Data saving feature enables to replace the wire harness in the robot without having to connect to a battery
- Productivity improvement due to reduction in number of cables & connectors



### **MOTOMAN GP12**



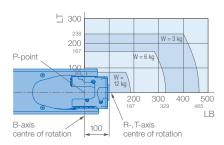


• Free from corrosive gasses or liquids, or explosive gasses

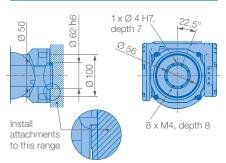
- Free from exposure to water, oil or dust
  Free from excessive electrical noise (plasma)

τ

#### Allowable wrist load



#### View A

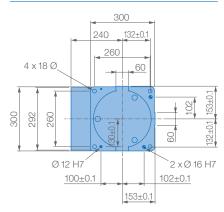


#### View B



Internal user wiring connector Media connector

#### View C



Mounting options: Floor, ceiling, wall, tilt\* Protection class: Main axes (S, L, U) IP54 (option 65), wrist IP67

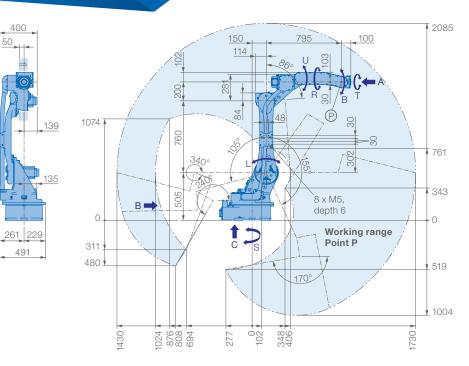
\* tilt with condition of angle - see table below

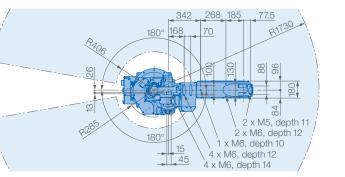
Robot installation angle ⊖ [deg.]	S-axis operating range [deg.]
$0 \le \Theta \le 30$	±170 degrees or less (no limit)
$30 < \Theta \le 35$	±60 degrees or less
$35 < \Theta \le 40$	±50 degrees or less
$40 < \Theta \leq 45$	±45 degrees or less
$45 < \Theta \le 50$	±40 degrees or less
$50 < \Theta \le 60$	±35 degrees or less
60 < <del>0</del>	±30 degrees or less

Specifications GP12						
Axes	motion range	Maximum speed [°/sec.]	Allowable moment [Nm]	Allowable moment of inertia [kg · m²]	Controlled axes	6
					Max. payload [kg]	12
S	±170	260	-	-	Repeatability [mm]	±0.08*
L	+155/-90	230	-	-	Max. working range R [mm]	1440
U	+155/-85	260	-	-	Temperature [°C]	0 to +45
R	±200	470	22	0.65	Humidity [%]	20 - 80
В	±150	470	22	0.65	Weight [kg]	150
т	±455	700	9.8	0.17	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.

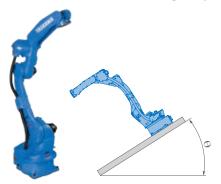
## **MOTOMAN GP25**



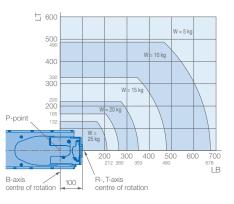


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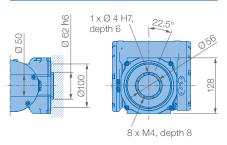
- Free from corrosive gasses or liquids,
- or explosive gasses • Free from exposure to water, oil or dust
- Free from excessive electrical noise (plasma)



#### Allowable wrist load



#### **View A**

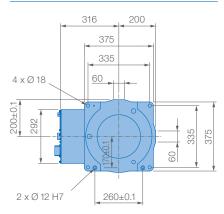


#### View B



Internal user wiring connector Media connector

#### View C



Mounting options: Floor, ceiling, wall, tilt\* Protection class: Main axes (S, L, U) IP54 (option 65), wrist IP67

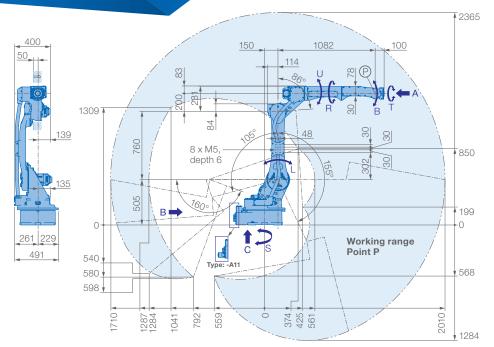
\* tilt with condition of angle - see table below

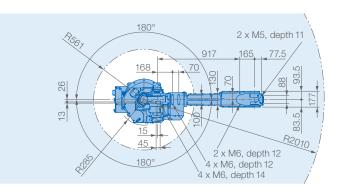
Robot installation angle ⊕ [deg.]	S-axis operating range [deg.]
$0 \le \Theta \le 30$	±170 degrees or less (no limit)
$30 < \Theta \leq 35$	±60 degrees or less
$35 < \Theta \le 40$	±50 degrees or less
$40 < \Theta \leq 45$	±45 degrees or less
$45 < \Theta \leq 50$	±40 degrees or less
$50 < \Theta \le 60$	±35 degrees or less
60 < <del>0</del>	±30 degrees or less

Specifications GP25						
Axes	motion range s	speed	Allowable moment [Nm]	Allowable moment of inertia [kg · m²]	Controlled axes	6
					Max. payload [kg]	25
S	±180	210	-	-	Repeatability [mm]	±0.06*
L	+155/-105	210	-	-	Max. working range R [mm]	1730
U	+160/-86	265	-	-	Temperature [°C]	0 to +45
R	±200	420	52	2.3	Humidity [%]	20 - 80
В	±150	420	52	2.3	Weight [kg]	250
т	±455	885	32	1.2	Power supply, average [KVA]	2,0**

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

### MOTOMAN GP25-12

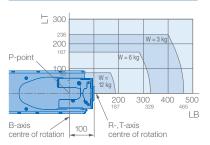




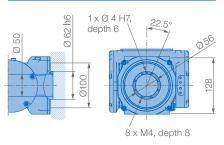
Free from corrosive gasses or liquids, or explosive gasses
Free from exposure to water, oil or dust
Free from excessive electrical noise (plasma)



#### Allowable wrist load



#### View A

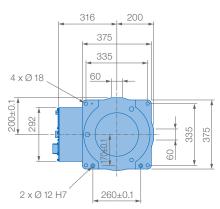


#### View B



Internal user wiring connector Media connector

#### View C



Mounting options: Floor, ceiling, wall, tilt\* Protection class: Main axes (S, L, U) IP54 (option 65), wrist IP67

\* tilt with condition of angle - see table below

Robot installation angle ⊖ [deg.]	S-axis operating range [deg.]
$0 \le \Theta \le 30$	±180 degrees or less (no limit)
$30 < \Theta \leq 35$	±60 degrees or less
35 < <del>O</del>	±30 degrees or less

Specifications GP25-12						
Axes	motion range	Maximum speed [°/sec.]	Allowable moment [Nm]	Allowable moment of inertia [kg · m²]	Controlled axes	6
					Max. payload (on U-axis) [kg]	12 (9)
S	±180	210	-	-	Repeatability [mm]	±0.08*
L	+155/-105	210	-	-	Max. working range R [mm]	2010
U	+160/-86	220	-	-	Temperature [°C]	0 to +45
R	±200	435	22	0.65	Humidity [%]	20 - 80
В	±150	435	22	0.65	Weight [kg]	260
т	±455	700	9.8	0.17	Power supply, average [KVA]	2.0**

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