

# MOTOMAN SP210

Spot Welding & Handling with the SP-series



The MOTOMAN SP210 is a high-performance 6-axis standard spot welding and handling robot with a payload of 210 kg. It is suitable for a wide range of common spot-welding guns and technologies, especially also for servo-controlled welding guns with robot-assisted gun alignment. Its slim design does not require a mechanical counterbalance balancer and allows low moving masses as well as higher accelerations and speeds. The stable wrist is particularly suitable for small and fast positioning movements, as are common in spot welding applications.

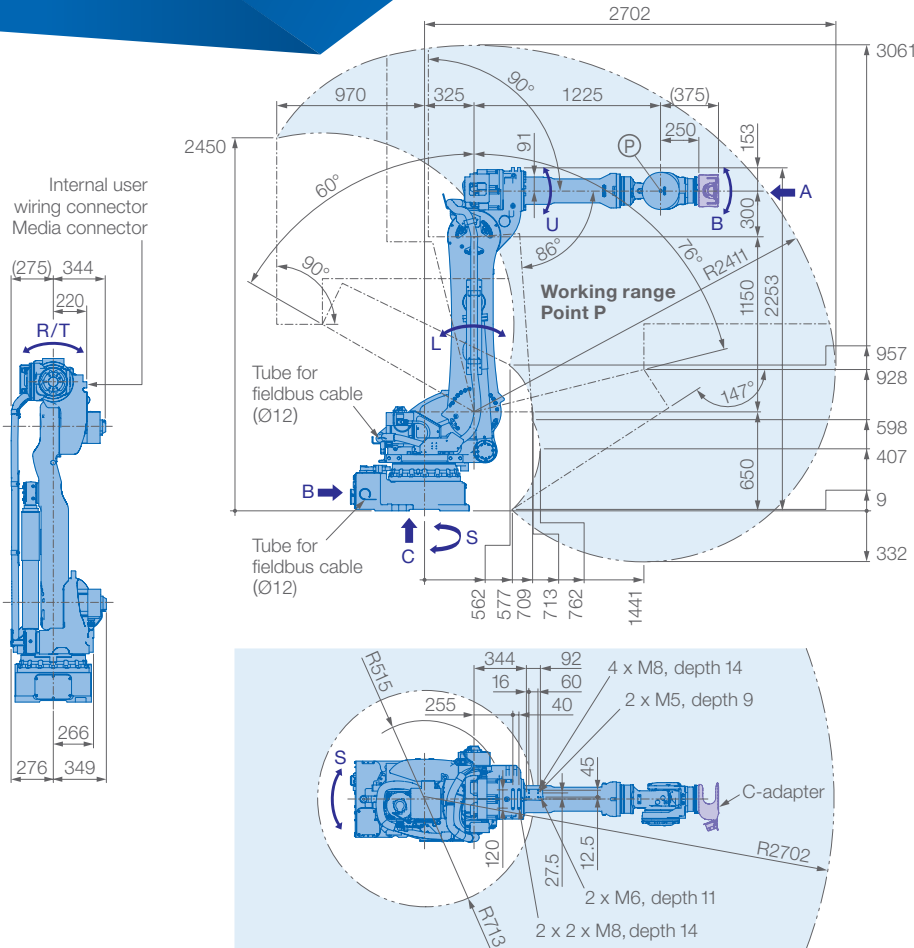
The MOTOMAN SP210 features the latest Yaskawa Sigma7 servo drive technology, is state-of-the-art in terms of dynamics and energy efficiency, and enables outstanding cycle times.

## KEY BENEFITS

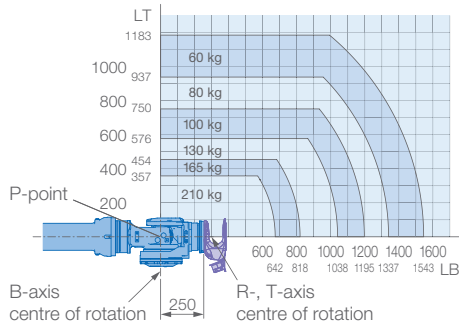
- Various application possibilities
- High payload (210 kg including C-adapter) and large working range (2702 mm)
- High repeatability ( $\pm 0.05$  mm)
- Slim body and compact footprint
- Integrated cable and media guide in the robot arm
- High robot density in production line possible
- Shortened process times
- High dynamics

## OPTIONS

- Cable packages of various designs, easily adaptable
- C-adapter for optimal cable routing on the wrist
- Sockets and base plates
- Extended robot cables
- Fieldbus and Safety Bus options
- External drive axes, tracks
- Functional Safety Unit (FSU), area limitations
- Vision system, e.g. MotoSight 2D



Allowable wrist load with C-adapter



Specifications SP210					
Axes	Maximum motion range [°]	Maximum speed [°/s]	Allowable moment [Nm]	Allowable moment of inertia [kg · m <sup>2</sup> ]	Controlled axes
					6
					Max. payload [kg]
					210 (225*)
S	±180	120	–	–	Repeatability [mm]
					±0.05
L	+76/–60	97	–	–	Max. working range R [mm]
					2702
U	+90/–86	115	–	–	Temperature [°C]
					0 to +45
R	±210 (±360*)	145	1323 (1372*)	143 (145*)	Humidity [%]
					20 – 80
B	±125	145	1323 (1372*)	143 (145*)	Weight [kg]
					1080
T	±210 (±360*)	220	735	84	Power supply, average [kVA]
					5.0

\* without C-adapter