

MOTOMAN SP185R

Spot Welding & Handling with the SP-series

The MOTOMAN SP185R is a powerful 6-axis shelf-mounted spot welding and handling robot. Combined with its long reach of over 3 meters, it has a significantly extended working space below its installation level. Mounted in an elevated position, the robot works mainly downwards and is used, for example, in steel construction.

With its maximum payload of 185 kg, it is suitable for a wide range of common spot-welding guns and grippers, especially also for servo-controlled welding guns as an integrated 7th axis with robot-supported gun compensation.

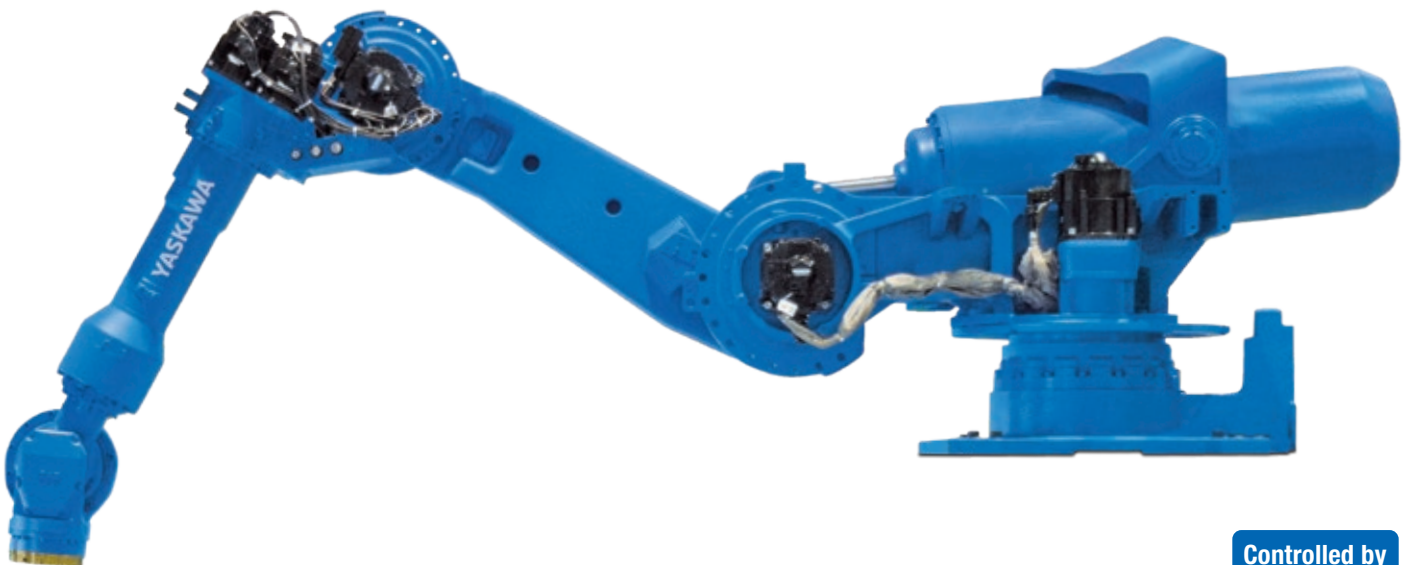
The MOTOMAN SP185R features the latest Yaskawa Sigma7 servo drive technology, is state-of-the-art in terms of dynamics and energy efficiency, and enables outstanding cycle times.

KEY BENEFITS

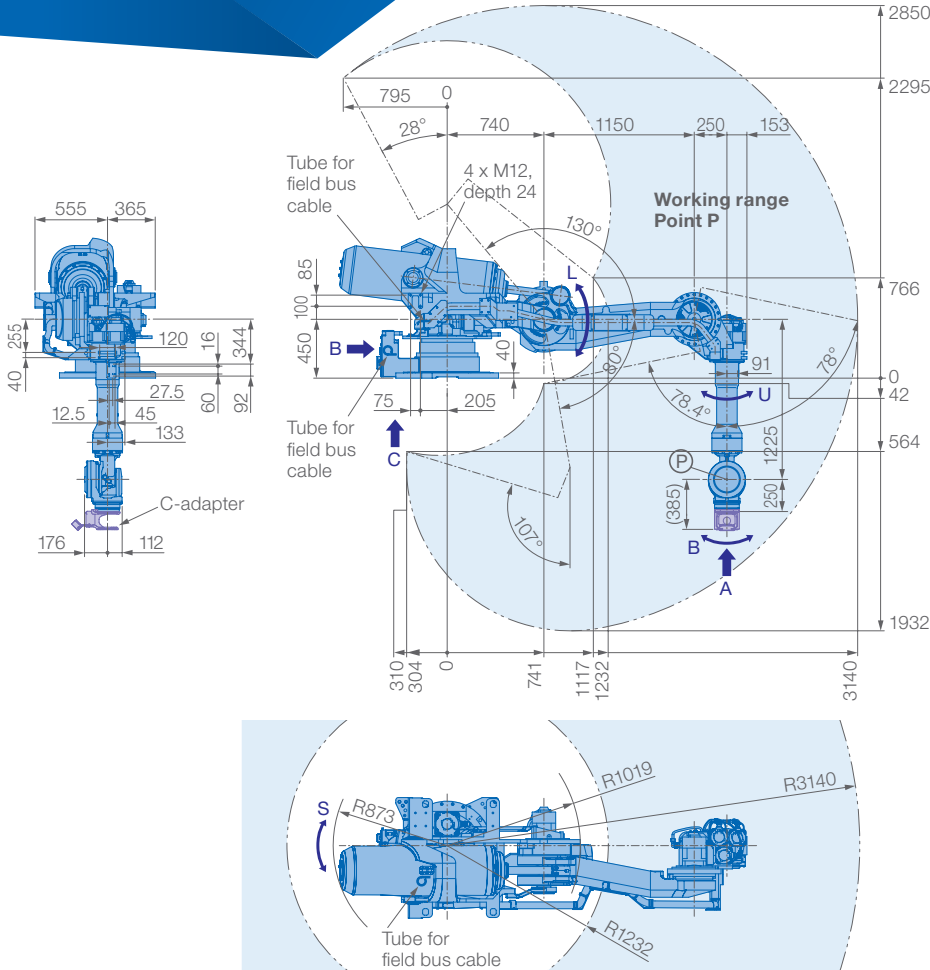
- Elevated console design possible
- Various/versatile application possibilities
- Minimum space requirements
- Large working range (3140 mm) and high payload (185 kg including C-adapter)
- High repeatability (± 0.05 mm)
- Slim design, compact footprint
- High robot density in production line possible
- Shortened process times
- High dynamics

OPTIONS

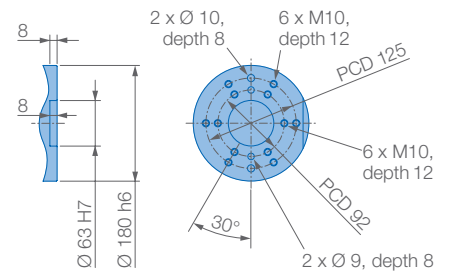
- Cable packages of various designs, easily adaptable
- C-adapter for optimal cable routing on the wrist
- Sockets and base plates
- Extended robot cables
- Fieldbus and Safety Bus options
- External drive axes, travel paths
- Functional Safety Unit (FSU), area limits
- Vision system, e.g. MotoSight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



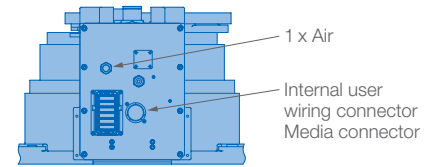
Controlled by
YRC1000



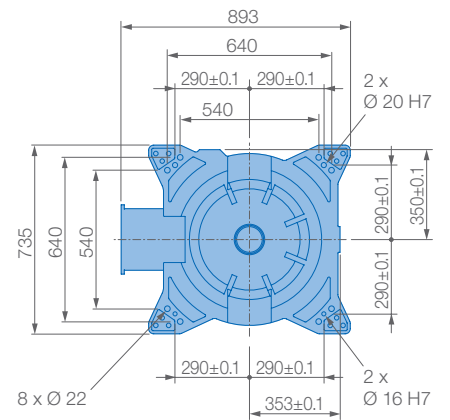
View A



View B

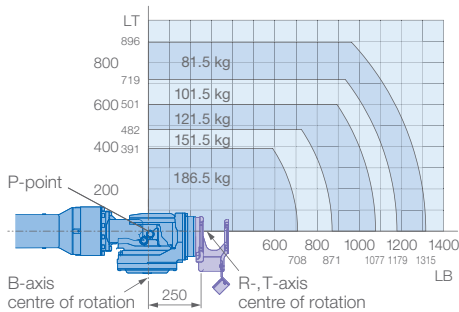


View C

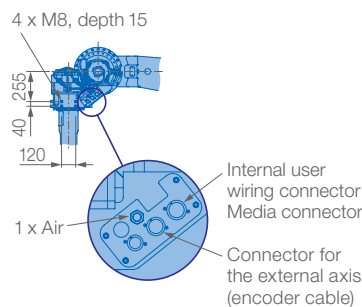


Mounting option: Shelf-mounted
IP Protection: IP54 (body), IP67 (wrist)

Allowable wrist load with C-adaptor



View D



Specifications SP185R						
Axes	Maximum motion range [°]	Maximum speed [°/s]	Allowable moment [Nm]	Allowable moment of inertia [kg · m²]	Controlled axes	6
S	±180	90	–	–	Max. payload [kg]	186,5 (200*)
L	+80/–130	85	–	–	Repeatability [mm]	±0,05
U	+78/–78,4	85	–	–	Max. working range R [mm]	3140
R	±205 (±360*)	120	1291 (1344*)	141 (143*)	Temperature [°C]	0 to +45
B	±120 (±125*)	120	1291 (1344*)	141 (143*)	Humidity [%]	20 – 80
T	±180 (±360*)	190	715	80	Weight [kg]	1830
					Power supply, average [kVA]	5.0

* without C-adaptor