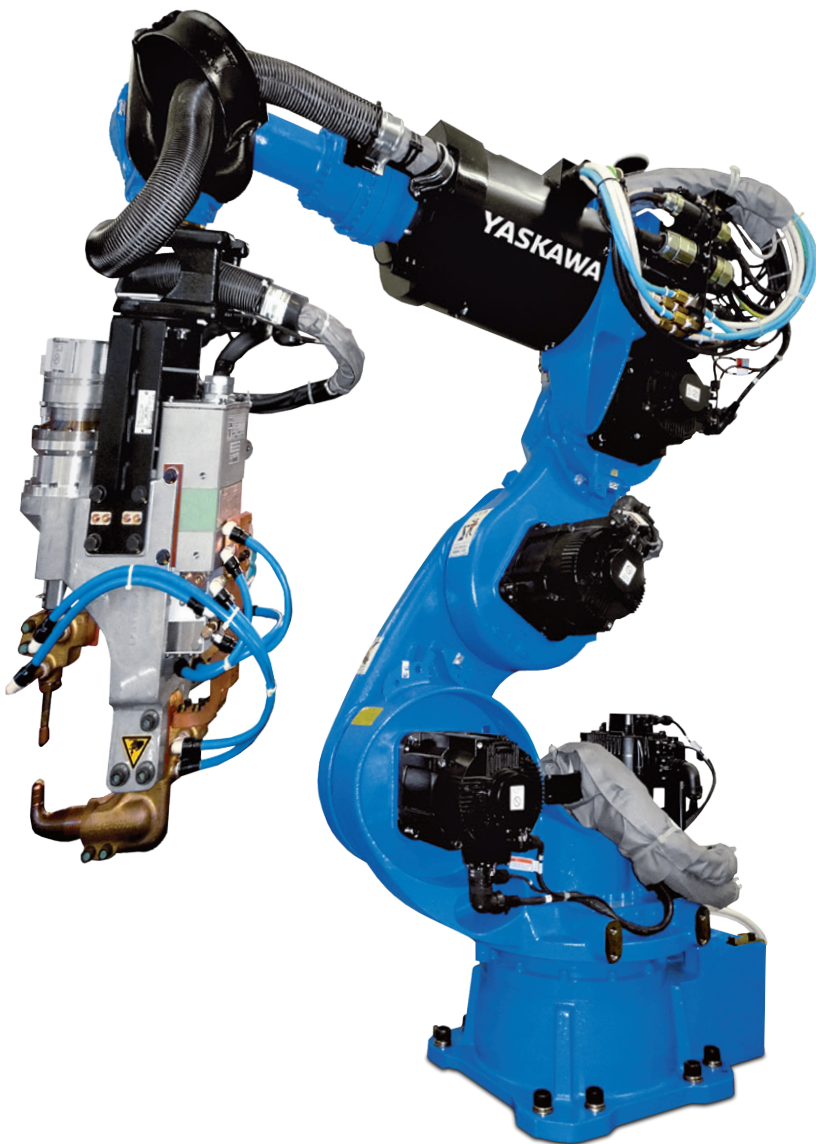


# MOTOMAN VS100

Spot Welding with the VS-series



The 7-axis MOTOMAN VS100 robot provides unique, slim design which optimizes automotive spot welding applications. It is the industry's first 7-axis spotwelding-robot which offers a highly flexible range of motion. This robot can be placed in close proximity to work pieces and other robots to create flexible, high-density layouts, eliminating multiple stations and resulting in shorter production lines and smaller spot welding work cells.

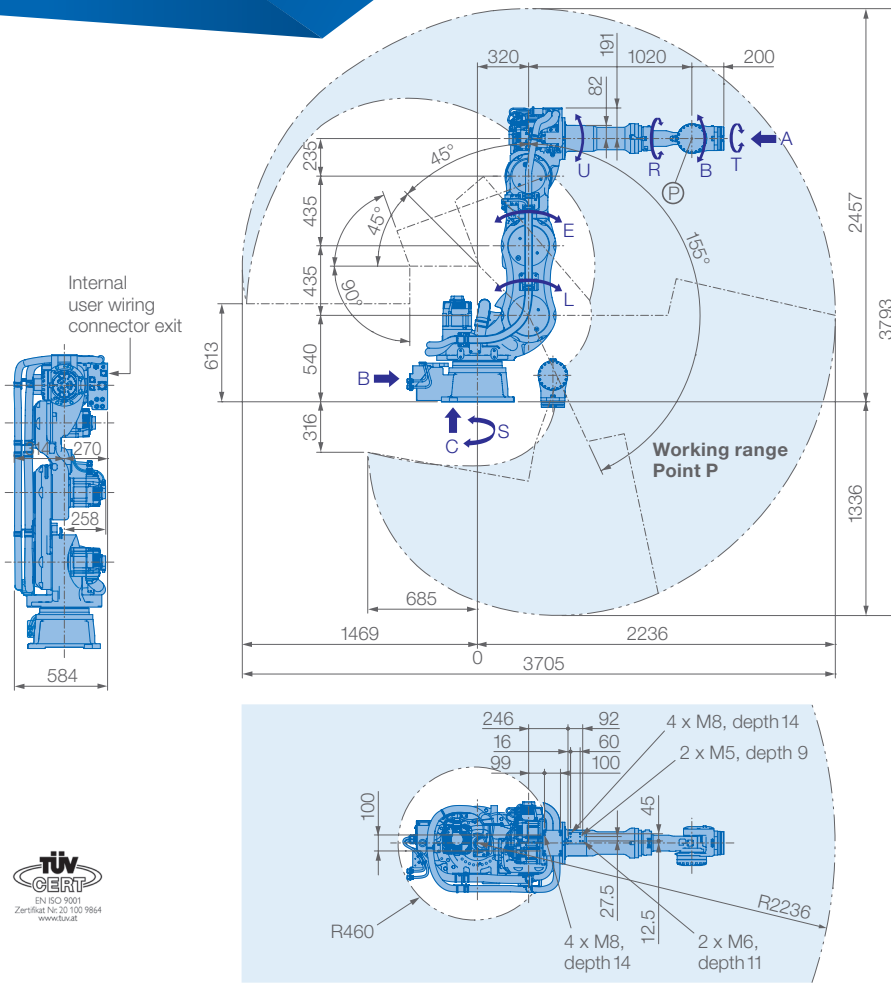
Its seven degrees of freedom provides ability to reorient manipulator axes without changing gun position in space. The multi-jointed arm can fold down into a very low profile.

The distance between the L-Axis and U-axis can be changed by changing the angle of the E-axis, effectively creating a variable length L arm.

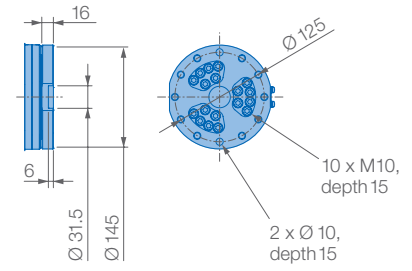
With this medium-sized robot the cycle times can be reduced and energy can be saved by replacing large-sized robots. With its integrated media hose package the MOTOMAN VS100 prevents interferences and reduces programming time.

## KEY BENEFITS

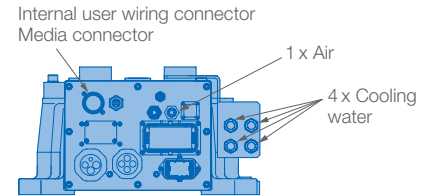
- Compact, fast and flexible
- First 7-axis robot for spot welding applications
- Innovative design, ideal for small cells
- High payload (Up to 110 kg)
- Reduced cycle times
- Wide reach and high, flexible motion range
  - Vertical reach : 3793 mm
  - Horizontal reach: 2236 mm
- Reduced maintenance and production costs
- Addition of E-axis creates a virtual variable length L arm
- New gaided working area can enable linear additional axes



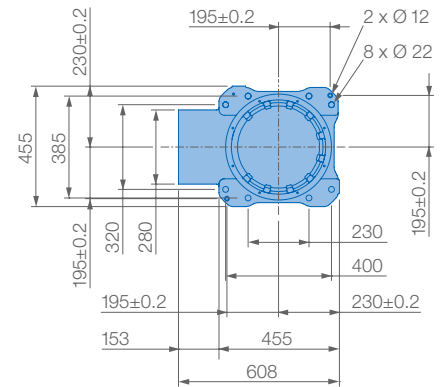
**View A**



**View B**



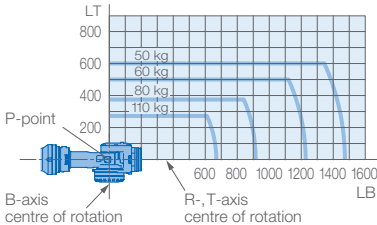
**View C**



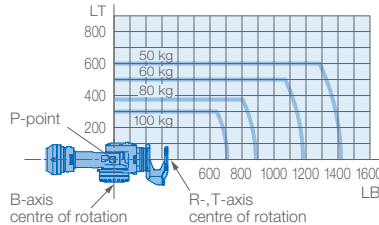
Mounting option: Floor  
Protection class: IP54/67

**Allowable wrist load**

without flange



with flange



Specifications VS100				
Axes	Maximum motion range [°]	Maximum speed [°/sec.]	Allowable moment [Nm]	Allowable moment of inertia [kg · m <sup>2</sup> ]
S	±180	140	–	–
L	+155/–45	110	–	–
E	+120/–45	110	–	–
U	+90/–70	130	–	–
R	±360	175	721	60.0
B	±125	175	721	60.0
T	±360	255	294	33.7

Controlled axes	7
Max. payload [kg]	110
Repeatability [mm]	±0.12
Max. working range R [mm]	2236
Temperature [°C]	0 to +40
Humidity [%]	20 – 80
Weight [kg]	780
Power supply, average [KVA]	5.5