

## Spot Welding, Handling & General Applications with the ES-series

The MOTOMAN ES165D-series are versatile, high-speed 6-axis robots offering superior performance in material handling, machine tending and press tending.

The ES165D/ES165D-100 offers a large work envelope and a high moment of inertia ratings. Fast axial speeds and acceleration reduce cycle times and increase production output.

The internal cable wiring through the robot's upper arm increases the durability of the hose package.

The compact, slim design allows the robot to reach into confined spaces, improving system productivity.



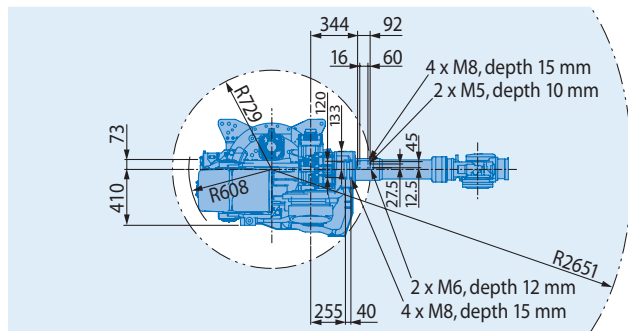
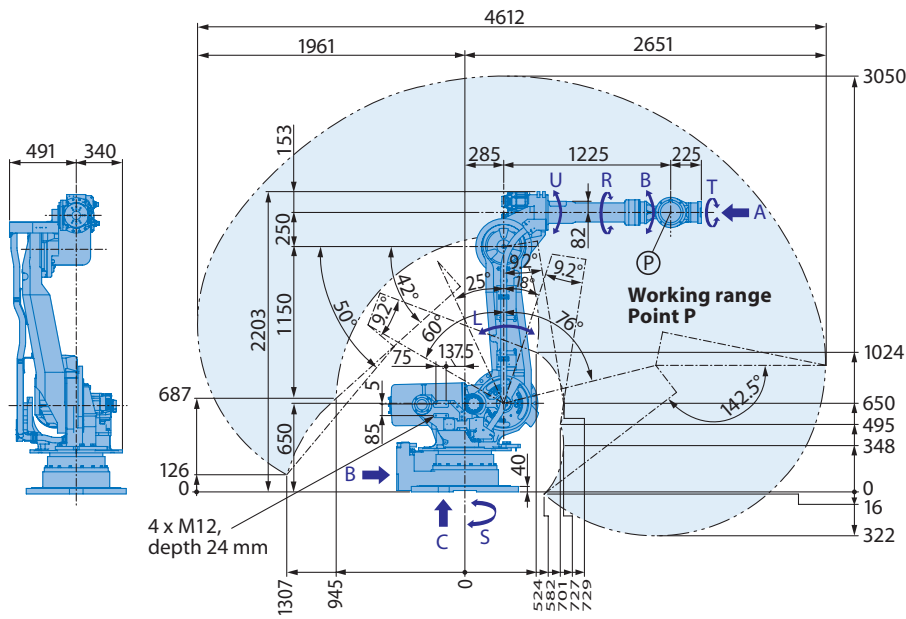
### Key benefits

- Fast, flexible and powerful
- Compact design allows maximum performance using minimal floor space
- High payload (165 kg/100 kg)
- Large working range (2,651 mm/3,010 mm)
- Increased durability of hose package by internal cable wiring

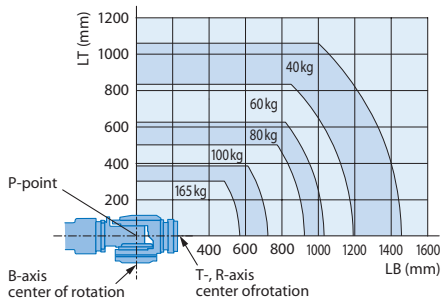
## MOTOMAN ES165D, ES165D-100

Spot welding, general purpose and handling

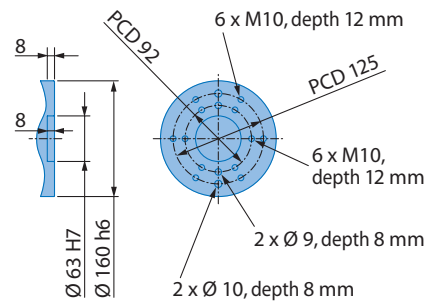
 **YASKAWA**



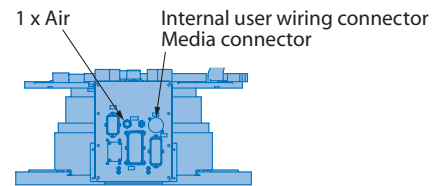
**Allowable wrist load**



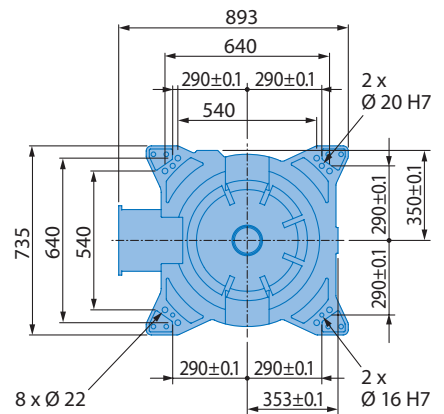
**View A**



**View B**



**View C**

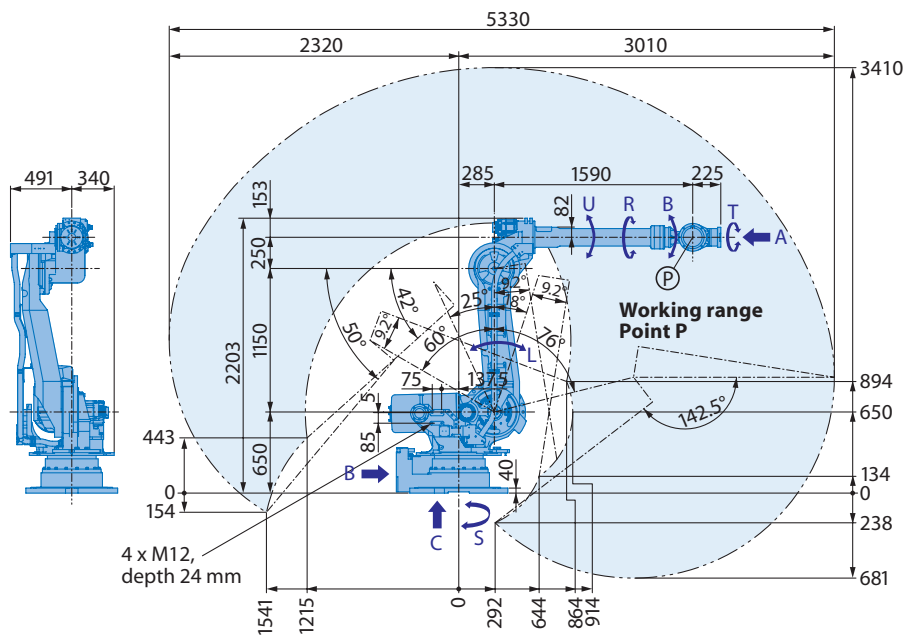


Mounting option: Floor

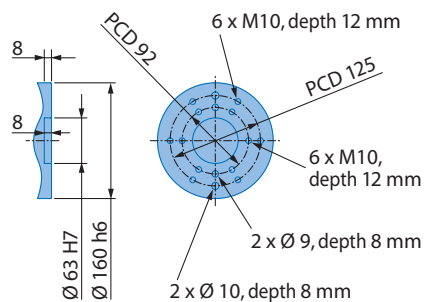
All dimensions in mm | Technical data may be subject to change without previous notice | Please request detailed drawings at robotics@yaskawa.eu.com – YR-ES0165D-B00, F-04-2013, A-No. 150285

**Specifications ES165D**

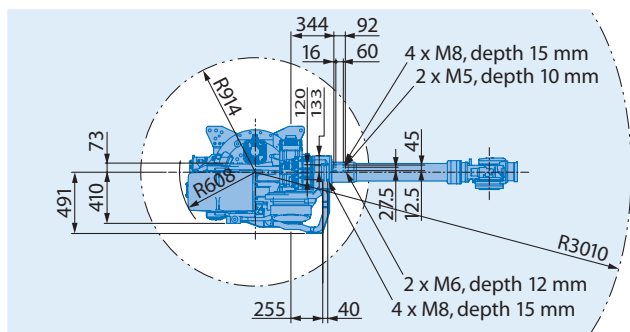
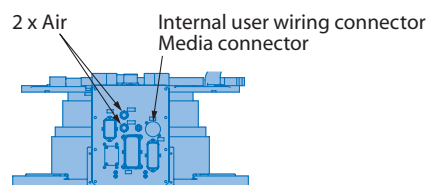
Axes	Maximum motion range [°]	Maximum speed [°/sec.]	Allowable moment [Nm]	Allowable moment of inertia [kg · m <sup>2</sup> ]	Controlled axes	
S	±180	110	-	-	Max. payload [kg]	6
L	+76/-60	110	-	-	Repeat. pos. accuracy [mm]	165
U	+230/-142.5	110	-	-	Max. working range [mm]	±0.2
R	±360	175	921	85	Temperature [°C]	R = 2651
B	±130	150	921	85	Humidity [%]	0 to +45
T	±360	240	490	45	Weight [kg]	20 – 80
					Power supply, average [KVA]	1100
						5



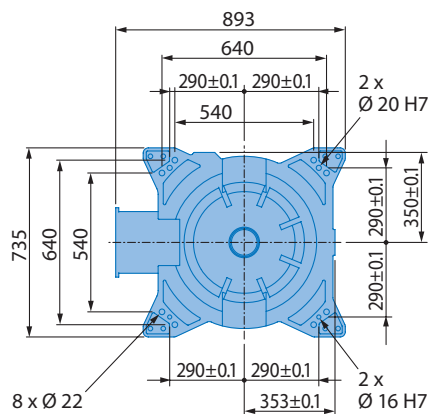
View A



View B

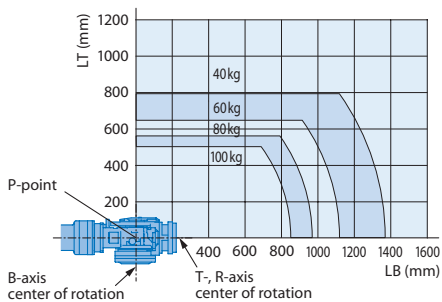


View C



Mounting option: Floor

Allowable wrist load



All dimensions in mm | Technical data may be subject to change without previous notice | Please request detailed drawings at robotics@yaskawa.eu.com – YR-E50165D-B10, A-04-2013, A-No. 150285

Specifications ES165D-100

Axes	Maximum motion range [°]	Maximum speed [°/sec.]	Allowable moment [Nm]	Allowable moment of inertia [kg · m <sup>2</sup> ]	Controlled axes	6
S	±180	110	–	–	Max. payload [kg]	100
L	+76/–60	110	–	–	Repeat. pos. accuracy [mm]	±0.2
U	+230/–142.5	110	–	–	Max. working range [mm]	R = 3010
R	±360	175	833	75	Temperature [°C]	0 to +45
B	±130	150	833	75	Humidity [%]	20 – 80
T	±360	240	490	25	Weight [kg]	1120
					Power supply, average [KVA]	5

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