### **YASKAWA**

# **MOTOMAN MA1440**

## Shielded arc welding with the MA-series

The 6-axis MOTOMAN MA1440 has been developed in order to achieve optimal results in extremely difficult conditions and especially for the high demands of arc welding applications.

With it's increased payload of 6 kg, it's superior wire feed system, the maximum working range of 1440 mm and integrated media

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hose package, the 6-axis robot MA1440 significantly improve welding quality. This enables the simple machining of bulky and hard-to-access workpieces.

The fast motion sequences reduce welding cycle times. The torch cables are integrated in the robot arm in order to avoid collisions with the workpiece or other robots. This not only ensures greater accessibility to the devices; the reduced torsional and flexural loads on the torch dress package also result in less wear. Additionally, the possible number of robots in the production cells can be increased considerably.

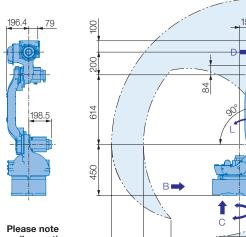
The hollow wrist from 42 mm was extended to 50 mm, and the rate of the flange to B-axis from 200 mm has been reduced to 100 mm. Further new features are the integration of the power cable as well as the air connections in the base and an enlarged turning range of more than  $340^{\circ}$ .

#### **KEY BENEFITS**

- Expanded diameter of hollow wrist (42 to 50 mm)
- High speed shortens the air cut time and eliminate the air cut time
- Doubled payload compared with other models in its class
- Servo torch and censors can be installed
- Can be used in the welding process is used more large robot
- Streamlined arm is based on industrial design eliminates the interference with jig
- Industrial design arm prevents the invasion of spatter and makes the maintenance easy
- Possibility of additional medium (Power cable, air connections, ect.)



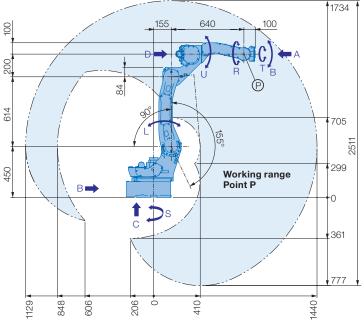
#### **MOTOMAN MA1440**



wall mounting option: +/-30'S-axis limit

Please note ceiling mounting option:

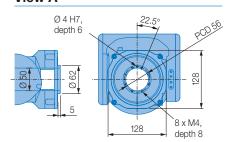
Depends on B-axis position



170°

4 x M6, depth 14

#### View A

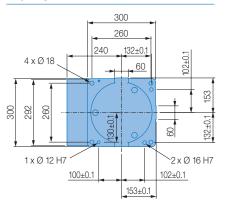


#### View B



Internal user wiring connector Media connector

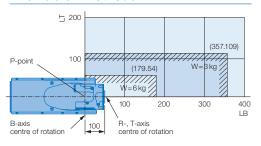
#### View C



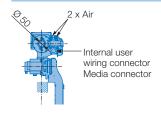
Mounting options: Floor, wall, ceiling

#### Allowable wrist load

50



#### View D



All dimensions in mm | Technical data may be subject to change without previous notice | Please request detailed drawings at robotics@yaskawa.eu.com – YR-MA01440-A00, YR-MA01440-A10, E-06-2015, A-No. 162865

#### Specifications MA1440 (Type floor, wall: YR-MA01440-A00, type ceiling: YR-MA01440-A10)

R1440

	Specifications MA1440 (Type floor, Wall: TR-MA01440-A00, type ceiling: TR-MA01440-A10)					
Axes	Maximum motion range	Maximum speed	Allowable moment	Allowable moment of inertia	Controlled axes	6
Axes	motion range [°]	[°/sec.]	[Nm]	[kg·m²]	Max. payload [kg]	6
S	±170	230	-	-	Repeat. pos. accuracy [mm]	±0.08
L	+155/-90	200	-	-	Max. working range R [mm]	1440
U	+240/-175	230	-	-	Temperature [°C]	0 to +45
R	±150	430	10.5	0.28	Humidity [%]	20 – 80
В	A00: +90/-135 A10: +135/-90	430	10.5	0.28	Weight [kg]	130
T	±210	630	3.2	0.06	Power supply, average [KVA]	1.5

