YASKAWA

SMALL - LIGHTWEIGHT - FAST



The MotoMINI 6-axis robot was especially designed for handling and assembly of small work pieces. It reduces the size of your production line and helps to increase productivity.

This light weight high-speed robot provides a payload of 500 g and a maximum reach of 350 mm. The high repeatability of 0.02 mm offers superior performance in small part handling and assembly. It is easy to change the location of MotoMINI according to the line's operating condition or the work piece being manufactured.

This robot is driven by the also small and compact MOTOMAN YRC1000micro controller, which is especially suited to operate small robots.

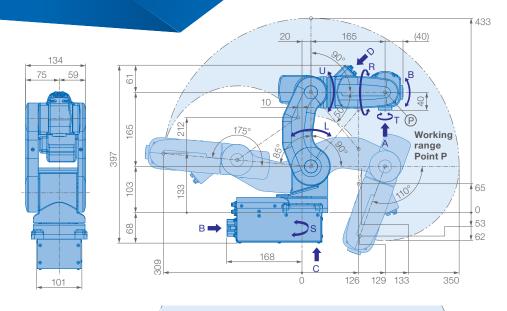
KEY BENEFITS

- Small and fast
- Lightweight and portable
- Superior performance in small part handling & assembly
- Minimum footprint
- Flexible positioning





MotoMINI



170°

Allowable wrist load

Allowable

moment

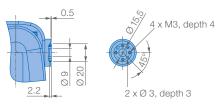
[Nm]

0.43

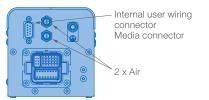
0.43

0.38

View A



View B



View C

Controlled axes

Max. payload [kg]

Repeatability [mm]

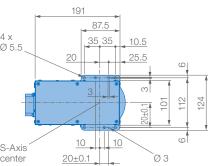
Temperature [°C]

Humidity [%]

Weight [kg]

Max. working range R [mm]

Power supply, average [KVA]

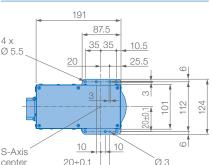


Robot installation angle θ [deg.]	S-axis operating range [deg.]
$0 \le \Theta \le 30$	±170 degrees or less (no limit)
$30 < \Theta \le 40$	±50 degrees or less
$40 < \Theta \le 50$	±40 degrees or less
50 < Θ	±30 degrees or less

Ø 5.5 S-Axis center

 $^{\star}\, \text{tilt}$ with condition of angle – see table below

Robot installation angle ⊖ [deg.]	S-axis operating range [deg.]
$0 \le \Theta \le 30$	±170 degrees or less (no limit)
$30 < \Theta \le 40$	±50 degrees or less
$40 < \Theta \le 50$	±40 degrees or less
50 < Θ	±30 degrees or less



Mounting options: Floor, ceiling, wall, tilt*

Robot installation angle ⊕ [deg.]	S-axis operating range [deg.]
$0 \le \Theta \le 30$	±170 degrees or less (no limit)
$30 < \Theta \le 40$	±50 degrees or less
$40 < \Theta \le 50$	±40 degrees or less
50 < ⊖	±30 degrees or less

View D



Internal user wiring connector Media connector

Internal I/O wiring: 8 x 0.05 mm²

Prevent interaction of the robot with:

- · Corrosive gasses, liquids or explosive gasses
- Exposure to water, oil or dust
- Excessive electrical noise (plasma)

Maximum

[°]

±170

+90/-85

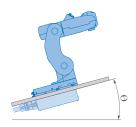
+90/-50

+210/-30

±140

±360

motion range



Axes

s

ш

R

В

Т



Maximum

speed [°/sec.]

315

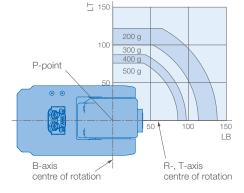
315

420

600

600

600



Specifications MotoMINI

Allowable

[kg·m²]

0.00378

0.00378

0.00299

moment of inertia

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YR-1-06VX05-A00 B-04-2019, A-No. 194523

6

0.5

+0.02

350 0 to +40

20 - 80

