

MOTOMINI

COMPACT, LIGHTWEIGHT DESIGN

KEY BENEFITS

Smallest and lightest six-axis robot in the industry

7-kg weight robot is easy to carry, ship and install

Acceleration times are 20% faster over comparable small robots

Single robot-to-controller cable connection enables fast setup

SPECIFICATIONS

0.5 kg payload

350 mm horizontal reach

495 mm vertical reach

0.02 mm repeatability

APPLICATION

Assembly

Dispensing

Inspection

Kitting

Machine Tending

Material Handling

Packaging

Parts Feeding

Sorting

STEM Education

CONTROLLER

YRC1000micro

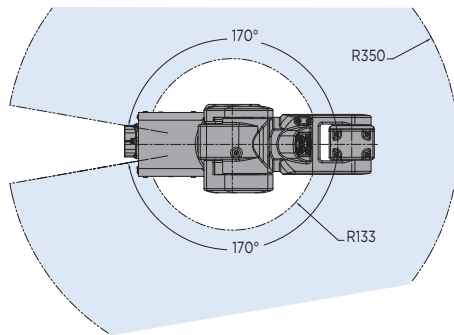
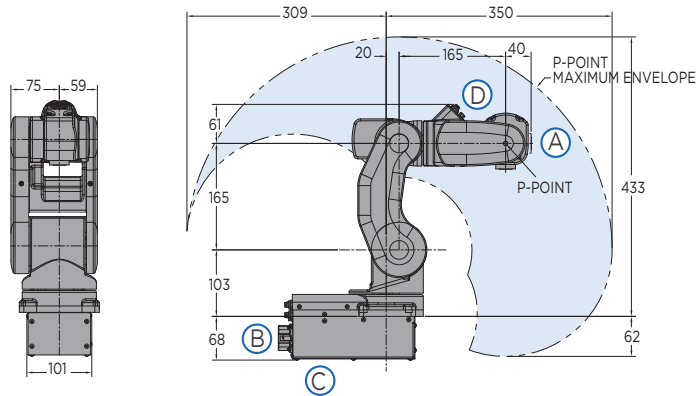


- Extremely lightweight, six-axis industrial robot offers the highest acceleration in a small-sized robot.
- 7-kg weight robot is easy to carry and ideal for tabletop-, floor-, ceiling-, tilt- or wall-mount installations, saving valuable floorspace.
- Acceleration times are 20% faster over comparable small robots to reduce cycle time and increase production output.
- 0.5 kg payload supports a unique variety of tooling and sensors to fulfill diverse project needs.
- Compact footprint (191 mm x 124 mm) allows robot to be mounted close to workpieces and other machinery in existing lines or cells.
- Cables and air lines are routed through robot base to upper arm to increase cable life, enhance safety and reduce teaching time.
- Less than 65 dB (with maximum load and speed) offers extremely quiet operation.
- Single power and control cable reduces wiring time and increases work efficiency.
- Modular robot harness design for improved diagnostics and maintenance.
- Home position data can be saved without battery connection for easy maintenance.
- The MotoMini is IP30 rated.
- Powerful and precise ultra-compact YRC1000micro controller minimizes installation space and optimizes performance.
- The MotoMini is available with either the standard teach pendant or the Smart Pendant.

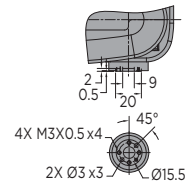
2019 Red Dot Design Award

2017 Nikkei Superior Products and Services Award

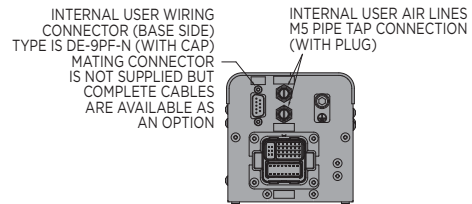
MOTOMINI ROBOT



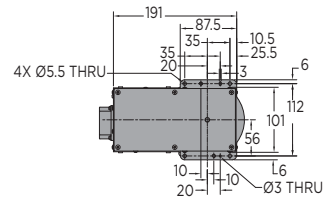
VIEW A



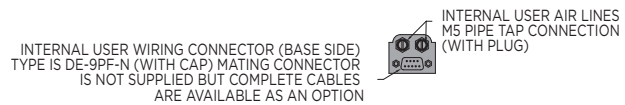
VIEW B



VIEW C



VIEW D



All dimensions are metric (mm) and for reference only. Request detailed drawings for all design/engineering requirements.

SPECIFICATIONS

Axes	Maximum motion range	Maximum speed	Allowable moment	Allowable moment of inertia
	degrees	°/sec	N·m	kg·m ²
S	±170	315	-	-
L	+90/-85	315	-	-
U	+120/-175	420	-	-
R	±140	600	0.42	0.00378
B	+210/-30	600	0.42	0.00378
T	±360	600	0.37	0.00299

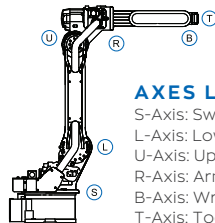
Mounting Options: Floor, Wall, Tilt, Ceiling

* MLX300 fieldbus cards, I/O cards and vision equipment must be purchased separately from the supplier. All peripherals are programmed using a PLC.

Item	Unit	MotoMini
Controlled axes		6
Maximum payload	kg	0.5
Repeatability	mm	0.02
Horizontal reach	mm	350
Vertical reach	mm	495
Weight	kg	7
Internal user I/O cable		9 conductors w/ ground
Internal user air line		2 x M5 connection
Power requirements		1- or 3-phase; 200/230 VAC
Power rating	kVA	0.5

OPTIONS

- External axes
- MotoSight™ 2D
- Functional Safety Unit (FSU)
- PLC integration via MLX300 software option*



AXES LEGEND

S-Axis: Swivel Base
L-Axis: Lower Arm
U-Axis: Upper Arm
R-Axis: Arm Roll
B-Axis: Wrist Bend
T-Axis: Tool Flange

YASKAWA

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