

# 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

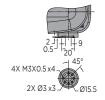


- Extremely lightweight, six-axis industrial robot offers the highest acceleration in a small-sized robot.
- 7-kg weight robot is easy to carry and ideal for tabletop-, floor-, ceiling-, tilt- or wall-mount installations, saving valuable floorspace.
- Acceleration times are 20% faster over comparable 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.

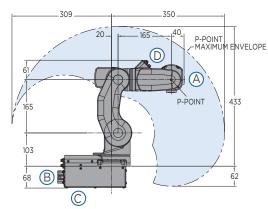
- Less than 65 dB (with maximum load and speed) offers extremely quiet operation.
- Single power and control cable reduces wiring time and increases work efficiency.
- Modular robot harness design for improved diagnostics and maintenance.
- Home position data can be saved without battery connection for 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

#### VIEW A







R350-

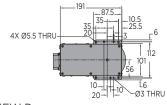
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#### VIEW B

INTERNAL USER WIRING CONNECTOR (BASE SIDE) TYPE IS DE-9PF-N (WITH CAP) DE-9PF-N (WITH CAP)
MATING CONNECTOR
IS NOT SUPPLIED BUT
COMPLETE CABLES
ARE AVAILABLE AS
AN OPTION





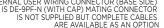


All dimensions are metric (mm) and for reference only. Request detailed drawings for all design/engineering requirements.



INTERNAL USER WIRING CONNECTOR (BASE SIDE) TYPE IS DE-9PF-N (WITH CAP) MATING CONNECTOR IS NOT SUPPLIED BUT COMPLETE CABLES ARE AVAILABLE AS AN OPTION





### **SPECIFICATIONS**

Axes	Maximum motion range	Maximum speed	Allowable moment	Allowable moment of inertia
	degrees	º/sec	N•m	kg•m²
S	±170	315	-	-
L	+90/-85	315	-	-
U	+90/-50	420	-	-
R	±140	600	0.42	0.00378
В	+210/-30	600	0.42	0.00378
Т	±360	600	0.37	0.00299

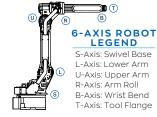
. 170°

- 170°

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		8 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\*





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.