

# VA1400 II

## ARC WELDING

### KEY BENEFITS

7-axis robot can reduce floorspace by providing high-density robot spacing

Versatile robot can improve joint access when mounted in wall- or ceiling-orientation

Streamlined design with seventh axis (“elbow”) improves torch access into tight spaces or reaches around both sides of part

Proven torch cable reliability; backed by industry’s first two-year torch cable warranty

### SPECIFICATIONS

3 kg maximum payload

Vertical reach 2,475 mm

Horizontal reach 1,434 mm

±0.08 mm repeatability

### CONTROLLERS



DX200



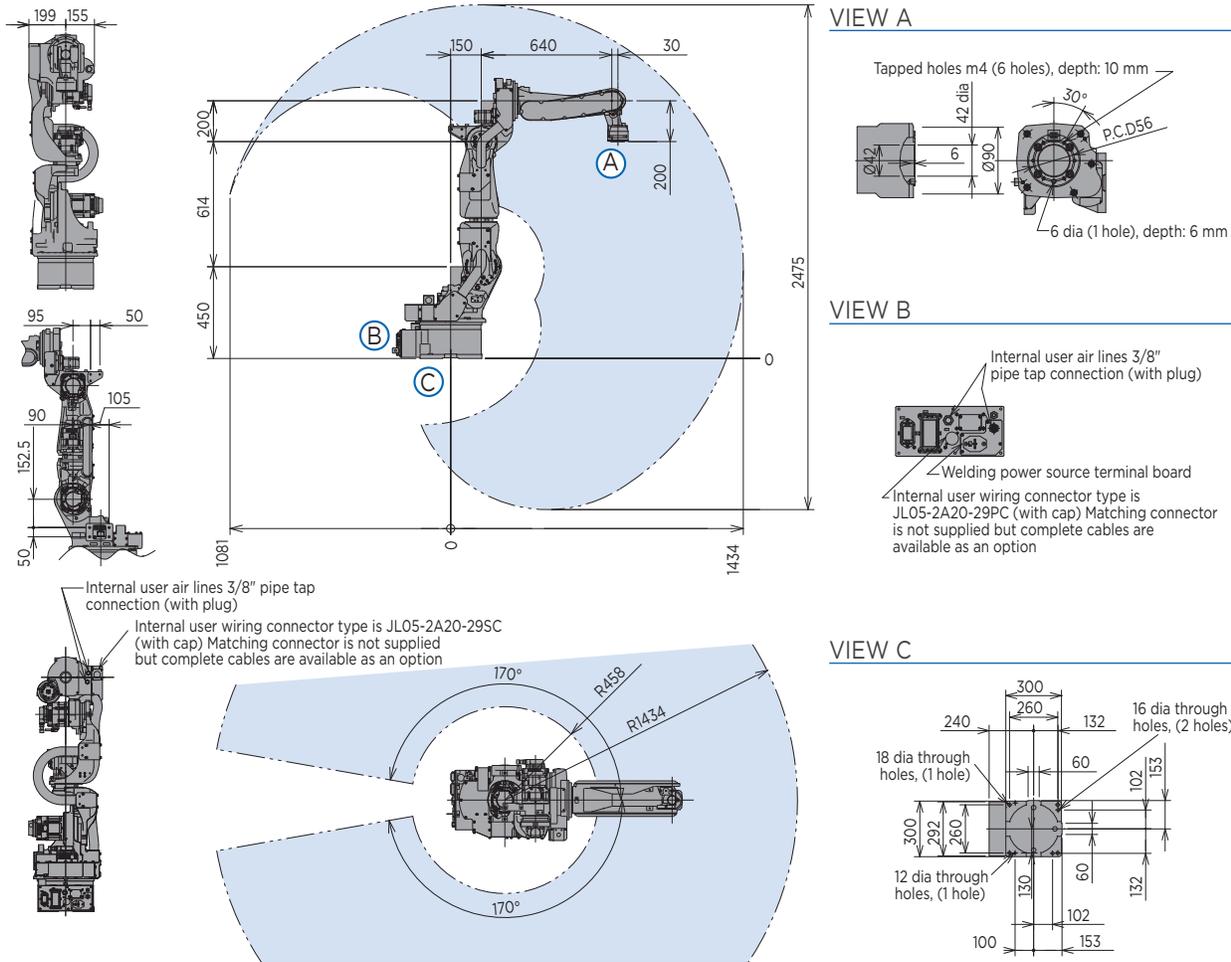
FS100



MLX200

- Innovative 7-axis design dramatically increases freedom of movement and maintains proper welding posture at all times.
- Located in lower arm, seventh axis (E-axis) acts as elbow, providing tremendous additional flexibility.
- Integrated through-the-arm torch cabling eliminates cable interference, simplifies programming and reduces cable wear.
- Power cable and welding utilities (gas and air hoses) are routed through robot base.
- Hollow upper arm maintains optimum bend radius of welding torch cable, maximizing weld performance. T-axis can rotate torch  $\pm 200$  degrees without cable interference.
- Symmetric wrist profile provides equal torch access to both sides of part.
- Space-saving design is ideally suited for use in high-density workcells with multiple robots working in close proximity.
- Ideally suited for applications that require access to parts in tight spots or those with potential interference from fixtures.
- Superior welding access provided by seventh axis often makes it possible to consolidate cells and simplify equipment, by eliminating need for part positioner.

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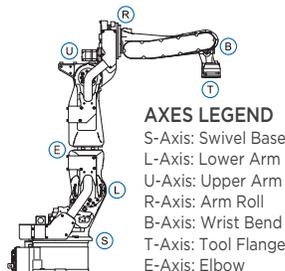
All dimensions are metric (mm) and for reference only.  
Request detailed drawings for all design/engineering requirements.

## SPECIFICATIONS

Axes	Maximum motion range [°]	Maximum speed [°/sec.]	Allowable moment [N•m]	Allowable moment of inertia [kg•m <sup>2</sup> ]	Controlled axes	7
S	±170	220	-	-	Maximum payload [kg]	3
L	+148/-70	200	-	-	Repeatability [mm]	±0.08
U	+150/-175	220	-	-	Horizontal reach [mm]	1,434
R	±150	410	8.8	0.27	Vertical reach [mm]	2,475
B	+180/-45	410	8.8	0.27	Temperature [°C]	0 to +45
T	±200	610	2.9	0.03	Humidity [%]	20 - 80
E	±90	220	-	-	Weight [kg]	150
					Power rating [kVA]	1.5
					Internal I/O cable (feeder control) [conductors]	16
					Internal gas line [connection]	(1) 3/8"

## OPTIONS

- Extended length manipulator cables
- Robot risers and base plates
- Wide variety of fieldbus cards
- Vision systems
- Seam tracking and seam finding packages
- Variety of weld packages



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