

AR900

COMPACT, HIGH-SPEED DESIGN

KEY BENEFITS

Streamlined arm design is easy to maintain and program

Contoured arm design optimizes robot range while maintaining a compact size

Fastest axis speeds in its class

Single robot-to-controller cable connection enables fast setup

SPECIFICATIONS

7 kg payload

927 mm horizontal reach

1,693 mm vertical reach

0.01 mm repeatability

APPLICATION

Arc Welding

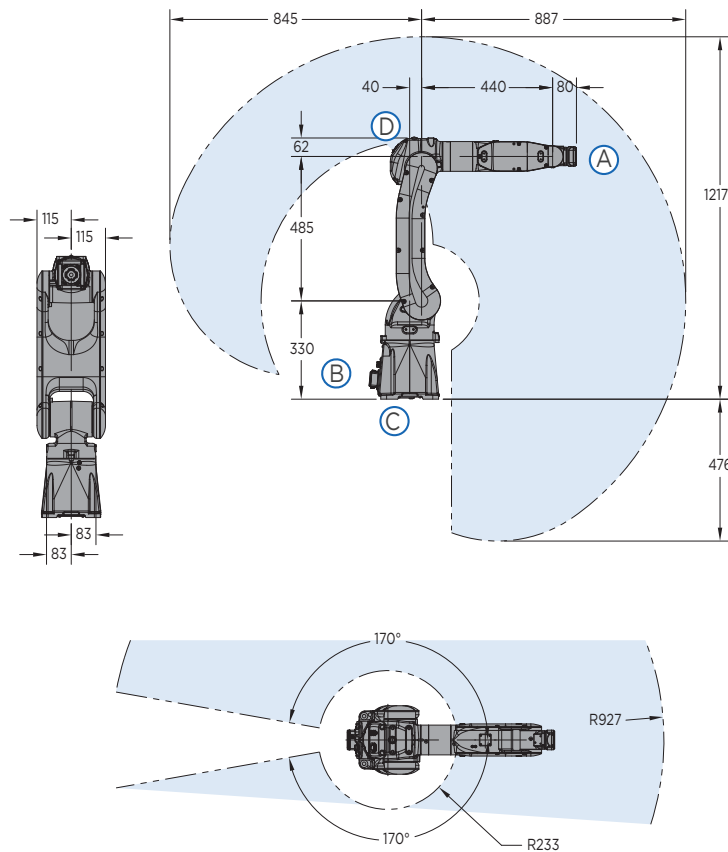
CONTROLLER

YRC1000

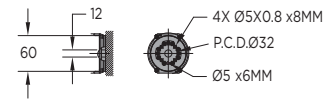


- Slim, fast, six-axis AR900 welding robot achieves unrivaled welding performance and productivity.
- Optimized acceleration/ deceleration control for all robot positions for faster cycle times.
- 7 kg payload supports a wide variety of sensors and torches.
- Slim profile design allows close proximity placement of robots for high-density workcells.
- Contoured arm design optimizes robot range while maintaining a compact size.
- High allowable moment and inertia ratings provide substantial wrist rigidity and consistent weld quality.
- Slim wrist and base axis radius for reduced turning interference and efficient use of space.
- Optional location (bottom) for manipulator cable connection reduces interference with walls.
- Over arm torch setup is ideal for welding small parts with complicated angles and in tight places.
- Modular robot harness design for improved diagnostics and maintenance.
- Single pendant provides control of up to eight robots and multiple positioners.
- Precise coordinated motion with other Yaskawa robots and servo positioners.
- Easy to clean surface for use in harsh environments.
- Variety of advanced, exclusive programming functions maximize weld quality and speed.
- Floor-mounted model is standard. Wall-, tilt- or ceiling-mounted versions are available.
- Compact YRC controller utilizes the lightweight standard teach pendant with intuitive programming.

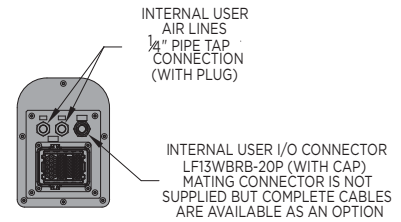
AR900 ROBOT



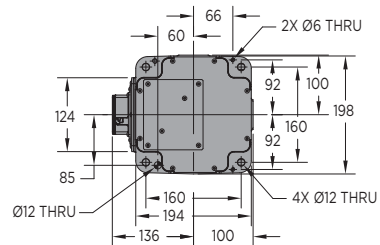
VIEW A



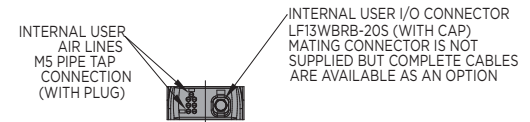
VIEW B



VIEW C



VIEW D



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

SPECIFICATIONS

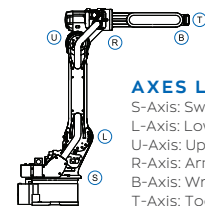
Axes	Maximum motion range	Maximum speed	Allowable moment	Allowable moment of inertia
	degrees	°/sec	N·m	kg·m ²
S	±170	375	-	-
L	+145/-65	315	-	-
U	+190/-70	410	-	-
R	±190	550	17	0.5
B	±135	550	17	0.5
T	±360	1,000	10	0.2

Mounting Options: Floor, Wall, Tilt or Ceiling

Item	Unit	AR900
Controlled axes		6
Maximum payload	kg	7
Repeatability	mm	0.01
Horizontal reach	mm	927
Vertical reach	mm	1,693
Weight	kg	34
Internal user I/O cable		17 conductors w/ ground
Internal user air line		(2) 1/4" connections
Power requirements		380-480 VAC
Power rating	kVA	1

OPTIONS

- Extended length manipulator cables
- Robot risers
- Wide variety of fieldbus cards
- Vision systems
- Variety of weld packages
- Seam tracking and seam finding packages
- Functional Safety Unit (FSU)
- External axes
- MotoSim® offline programming



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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