

AR1440

HIGH-SPEED, THRU-ARM DESIGN

KEY BENEFITS

Streamlined arm design reduces interference

Expanded wrist range improves application flexibility

Single robot-to-controller cable connection enables fast setup

SPECIFICATIONS

12 kg payload

1,440 mm horizontal reach

2,511 mm vertical reach

0.02 mm repeatability

APPLICATION

Arc Welding

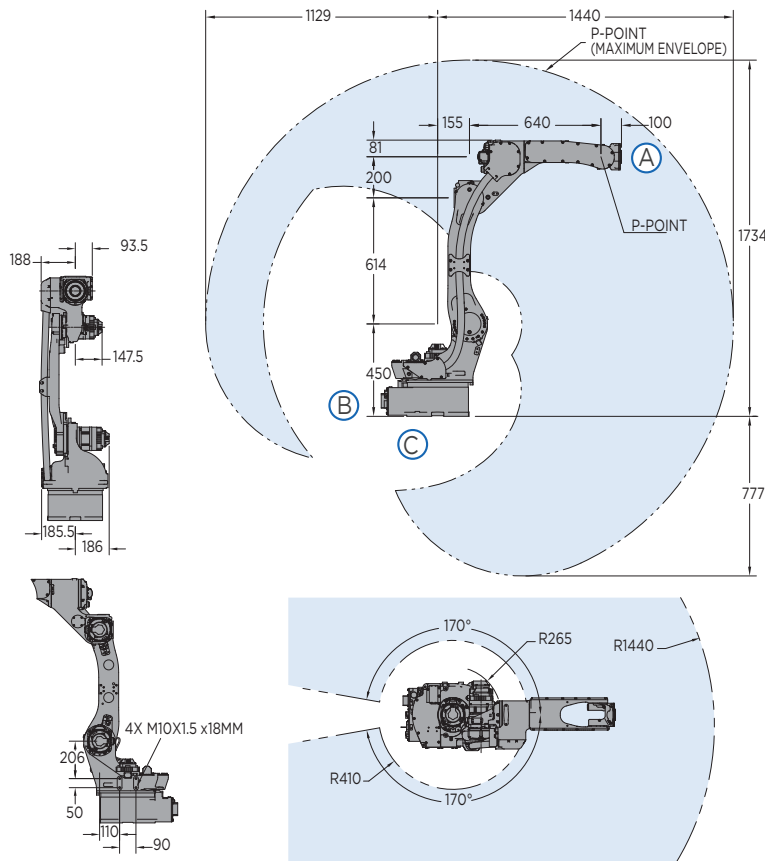
CONTROLLER

YRC1000

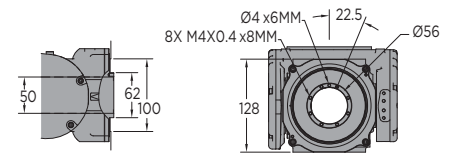


- Slim, fast, six-axis AR1440 welding robot achieves unrivaled welding performance and productivity.
- 12 kg payload supports a wide variety of motorized torches and sensors.
- Slim profile design allows close proximity placement of robots for high-density workcells.
- Contoured arm allows easy access to parts in tight spots and avoids potential interference with fixtures.
- Symmetric wrist profile, with ample range, provides equal torch access to both sides of part.
- High allowable moment and inertia ratings provide wrist rigidity and consistent weld quality.
- 50 mm thru-hole for torch cabling, hoses and sensor wires reduces cable interference and wear.
- Minimal U-axis cable protrusion and S-axis internal cable management prolongs cable life and maximizes part access.
- Optimized feeder mounting area on arm reduces equipment interference.
- Single power and control cable reduces wiring time and increases work efficiency.
- 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.
- 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.

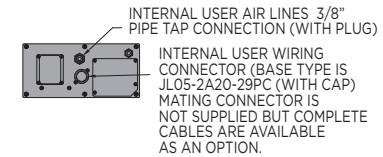
AR1440 ROBOT



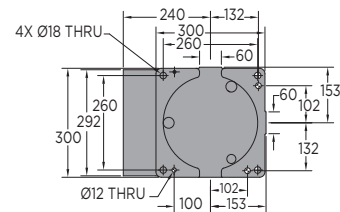
VIEW A



VIEW B



VIEW C



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

SPECIFICATIONS

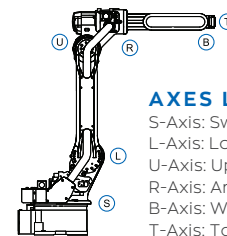
Axes	Maximum motion range	Maximum speed	Allowable moment	Allowable moment of inertia
	degrees	°/sec	N·m	kg·m ²
S	±170	260	-	-
L	+155/-90	230	-	-
U	+140/-85	260	-	-
R	±150	470	22	0.65
B	+90/-135	470	22	0.65
T	±210	700	9.8	0.17

Mounting Options: Floor, Wall, Tilt or Ceiling

Item	Unit	AR1440
Controlled axes		6
Maximum payload	kg	12
Repeatability	mm	0.02
Horizontal reach	mm	1,440
Vertical reach	mm	2,511
Weight	kg	150
Internal user I/O cable		17 conductors w/ ground
Internal user air line		(1) 3/8" connection
Power requirements		380-480 VAC
Power rating	kVA	1.5

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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