

AR1730

HIGH-SPEED, THRU-ARM DESIGN

KEY BENEFITS

Increased payload, axis speeds and wrist inertia improve throughput and quality

Streamlined arm design reduces interference

Expanded wrist range improves application flexibility

Single robot-to-controller cable connection enables fast setup

SPECIFICATIONS

25 kg payload

1,730 mm horizontal reach

3,089 mm vertical reach

0.02 mm repeatability

APPLICATION

Arc Welding

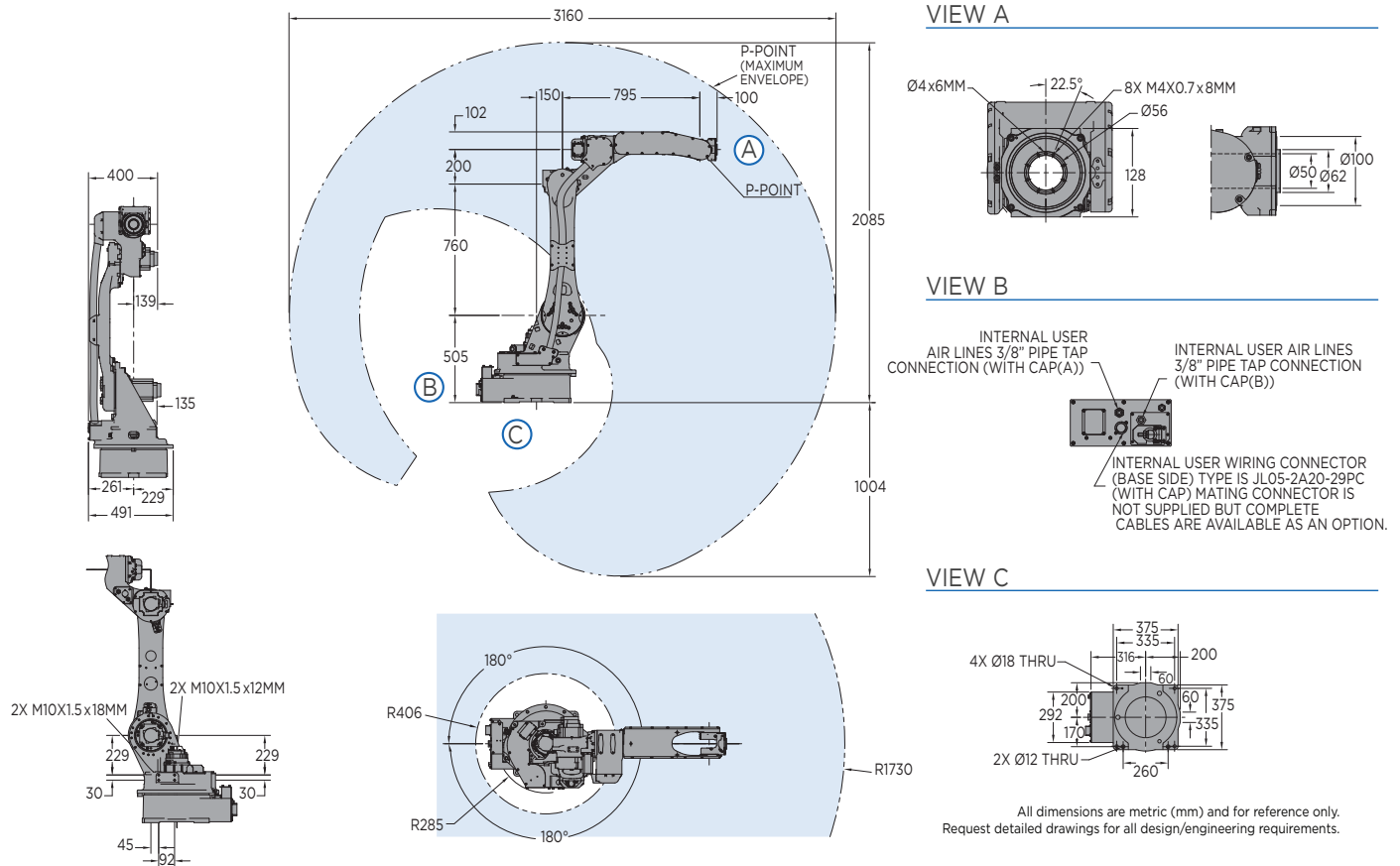
CONTROLLER

YRC1000



- Powerful, high-speed, six-axis AR1730 robot is ideal for a variety of welding applications.
- High wrist speed and payload accommodate additional sensors and accessories required for complex parts.
- Extensive horizontal reach and vertical reach accommodate wide range of parts.
- Work envelope extends behind robot, allowing space for tool storage or maintenance.
- 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.
- Patented double-yoke upper arm design is much stronger than other six-axis integrated cable designs.
- 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 protrusion from the U-axis and internal S-axis routing prolong cable life and maximize part access.
- 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.
- The AR1730 has an IP67-rated wrist and an IP54 body standard.
- 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.

AR1730 ROBOT



SPECIFICATIONS

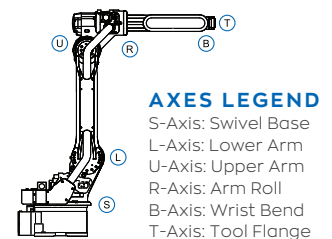
Axes	Maximum motion range	Maximum speed	Allowable moment	Allowable moment of inertia
	degrees	°/sec	N·m	kg·m ²
S	±180	210	-	-
L	+155/-105	210	-	-
U	+160/-86	265	-	-
R	±150	420	52	2.3
B	+90/-135	420	52	2.3
T	±210	885	32	1.2

Mounting Options: Floor, Wall, Tilt or Ceiling

Item	Unit	AR1730
Controlled axes		6
Maximum payload	kg	25
Repeatability	mm	0.02
Horizontal reach	mm	1,730
Vertical reach	mm	3,089
Weight	kg	250
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	2

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



YASKAWA

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