

# PL190

## HIGHLY VERSATILE PALLETIZING ROBOT

### KEY BENEFITS

Versatile, high-speed robot for palletizing applications

High allowable moment of inertia handles unbalanced loads effectively

One-piece upper arm for reduced mass and increased durability

Highly reliable

### SPECIFICATIONS

190 kg payload

3,159 mm horizontal reach

3,024 mm vertical reach

0.05 mm repeatability

### APPLICATION

Case Palletizing

Bag Palletizing

De-Palletizing

Layer Picking

Layer Forming

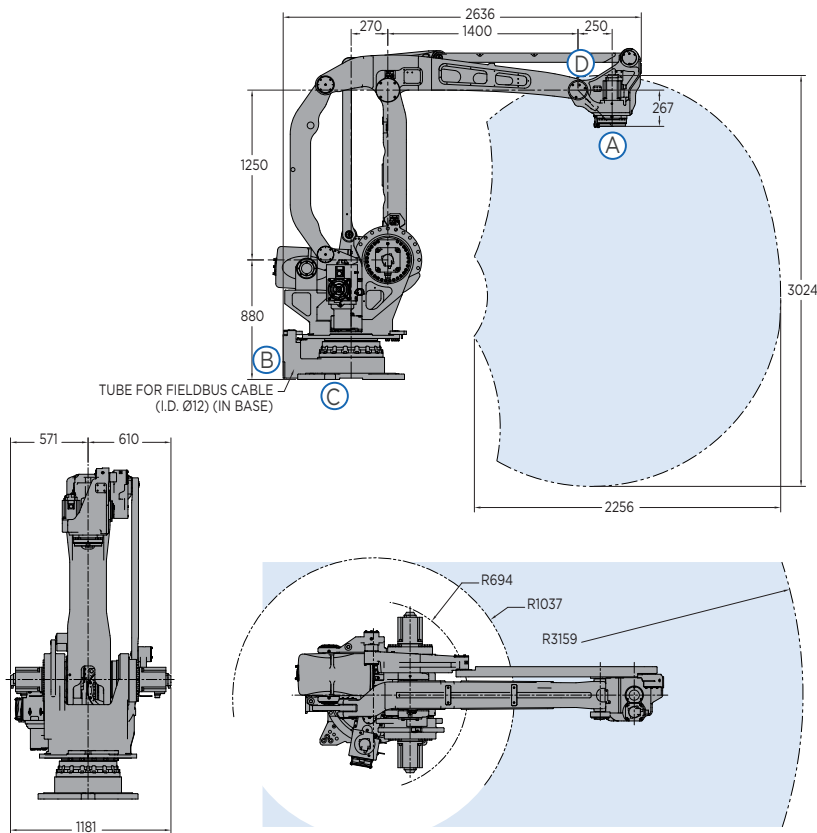
### CONTROLLER

YRC1000

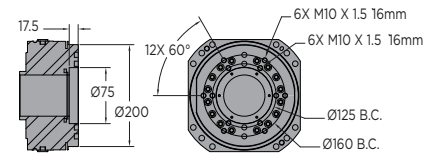


- Increase productivity with the powerful and efficient 4-axis PL190 robot.
- Performance-driven design and large work envelope enables a variety of palletizing applications, order picking and other logistical tasks for end-of-line or distribution automation.
- Exceptionally fast axis speeds and acceleration reduce cycle time and increase production throughput.
- 75 mm T-axis pass-through facilitates easy connections to end-of-arm tool.
- T-axis features high allowable moment of inertia; asymmetric loads are handled effectively without compromising speed or performance.
- Parallel-link design for strength, rigidity and stabilization of high moment/inertia loads. Heavy-duty bearings provide smooth arm rotation.
- Internally routed airlines and cables from base to the end-of-arm tool maximizes reliability.
- Cable installation tube facilitates fieldbus routing to the upper arm and/or gripper.
- 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 PL190 has an IP67 rated wrist and IP54 body as standard.
- The PL190 can be floor-mounted. Brakes are included on all axes.
- Compact YRC controller utilizes the lightweight teach pendant with intuitive programming.
- Available with PalletSolver® software for fast and easy creation of palletizing patterns.

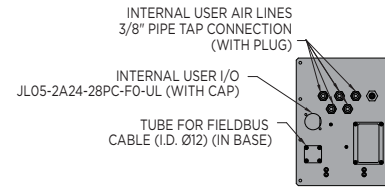
# PL190 ROBOT



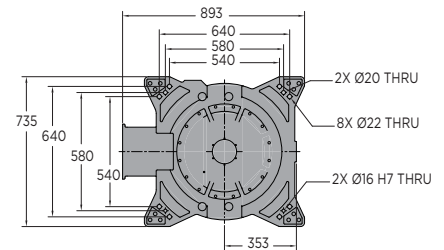
VIEW A



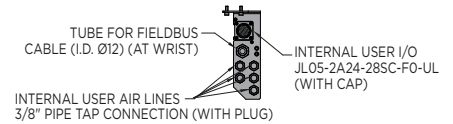
VIEW B



VIEW C



VIEW D



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

## SPECIFICATIONS

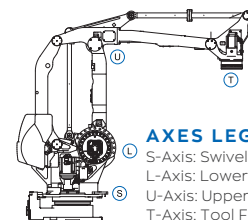
Axes	Maximum motion range	Maximum speed	Allowable moment	Allowable moment of inertia
	degrees	°/sec	N·m	kg·m <sup>2</sup>
S	±180	140	-	-
L	+90/-45	145	-	-
U	+15.5/-120	145	-	-
T	±360	420	-	90

Mounting Options: Floor  
 \* MLX300 fieldbus cards, I/O cards and vision equipment must be purchased separately from the supplier. All peripherals are programmed using a PLC.

Item	Unit	PL190
Controlled axes		4
Maximum payload	kg	190
Repeatability	mm	0.05
Horizontal reach	mm	3,159
Vertical reach	mm	3,024
Weight	kg	1,680
Internal user I/O cable		24 conductors w/ ground
Internal user air line		(5) 3/8" connection
Power requirements		380-480 VAC
Power rating	kVA	9.5

## OPTIONS

- Robot risers and base plates
- Extended length manipulator cables
- Wide variety of fieldbus cards
- External axes
- Functional Safety Unit (FSU)
- PLC integration via MLX300 software option\*
- MotoSight™ 2D and 3D vision
- PalletSolver software



### AXES LEGEND

- S-Axis: Swivel Base
- L-Axis: Lower Arm
- U-Axis: Upper Arm
- T-Axis: Tool Flange



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