



# MPL160 II

CASE PALLETIZING | BAG PALLETIZING | DE-PALLETIZING  
LAYER PICKING | LAYER FORMING

### KEY BENEFITS

High-speed, 4-axis palletizing robot with performance-driven design

High allowable moment of inertia handles unbalanced loads effectively

Highly reliable

### SPECIFICATIONS

160 kg maximum payload

3,024 mm vertical reach

3,159 mm horizontal reach

±0.5 mm repeatability

### CONTROLLERS



DX200



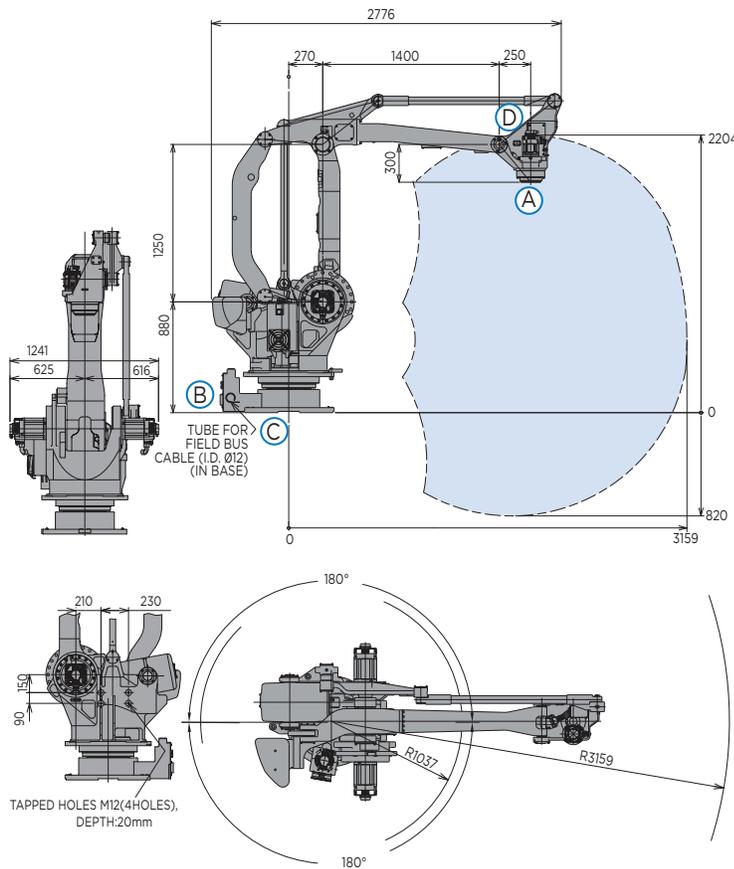
MLX200



MLX300\*

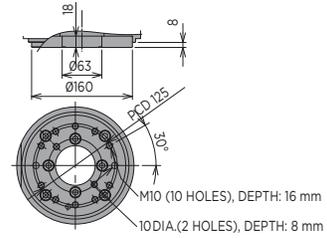
- Highly versatile, this 4-axis robot is ideal for a variety of palletizing applications, order picking and other logistical tasks for end-of-line or distribution center automation.
- Extensive 3,024 mm vertical reach, combined with 3,159 mm horizontal reach, provides ability to build 102 in. tall trailer-high loads on standard 48 in. x 40 in. pallet.
- Hollow wrist provides a wide range of wrist motion without interference.
- T-axis features high allowable moment of inertia; asymmetric loads are handled effectively without compromising speed or performance.
- Internally routed airlines and cables from base to end-of-arm tool maximize reliability.
- Cable installation tube facilitates fieldbus routing to the upper arm and/or gripper.
- NSF-H1 certified food-grade lubricant option available for food or consumer product packaging environment.
- Available with PalletSolver®, Yaskawa Motoman's operator-friendly palletizing software suite for fast and easy creation of palletizing patterns.
  - PalletSolver's offline pattern generation tool with intuitive graphical interface allows quick changeovers without halting production.
  - Highly customizable to each palletizing system.
  - Directly imports pallet patterns generated in widely-used TOPS® or CAPE software.

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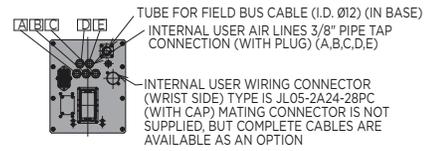


All dimensions are metric (mm) and for reference only.  
Request detailed drawings for all design/engineering requirements.

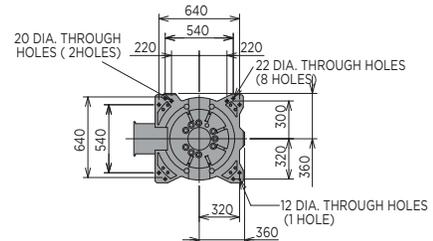
## VIEW A



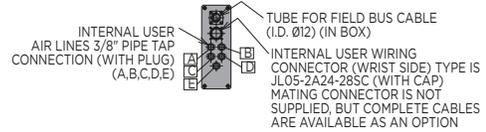
## VIEW B



## VIEW C



## VIEW D



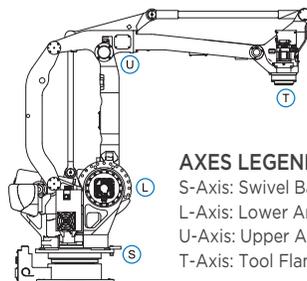
## SPECIFICATIONS

Axes	Maximum motion range [°]	Maximum speed [°/sec.]	Allowable moment of inertia [kg•m <sup>2</sup> ]	Controlled axes	4
S	±180	140	-	Maximum payload [kg]	160
L	-45/+90	140	-	Repeatability [mm]	±0.5
U	-120/+15.5	140	-	Horizontal reach [mm]	3,159
T	±360	305	80	Vertical reach [mm]	3,024
				Protection (IP Rating)	IP54
				Weight [kg]	1,700
				Power requirements	
				DX200 / MLX300	3-phase; 240/480/575 VAC at 50/60 Hz
				MLX200	3-phase; 200/230 VAC at 50/60 Hz
				Power rating [kVA]	
				DX200 / MLX300	9.5
				MLX200	10

\* The MLX300 software option is not available for use with arc or spot welding, coating, dispensing, cutting or other "path control" applications. MLX300 fieldbus cards, I/O cards and vision equipment must be purchased separately from the supplier. All peripherals are programmed using a PLC.

## OPTIONS

- NSF-H1 certified food-grade lubricants
- Extended length manipulator cables
- PalletSolver - revolutionary palletizing software
- MotoSight™ - easy to integrate vision software
- Robot risers and base plates
- Wide variety of fieldbus cards



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

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# YASKAWA