

PL80

HIGH-PERFORMANCE PALLETIZING ROBOT

KEY BENEFITS

Versatile, high-speed robot for palletizing applications

Highly reliable

Small footprint with large working range

SPECIFICATIONS

80 kg payload

2,061 mm horizontal reach

3,291 mm vertical reach

0.03 mm repeatability

APPLICATION

Case Palletizing

Bag Palletizing

Depalletizing

Layer Picking

Layer Forming

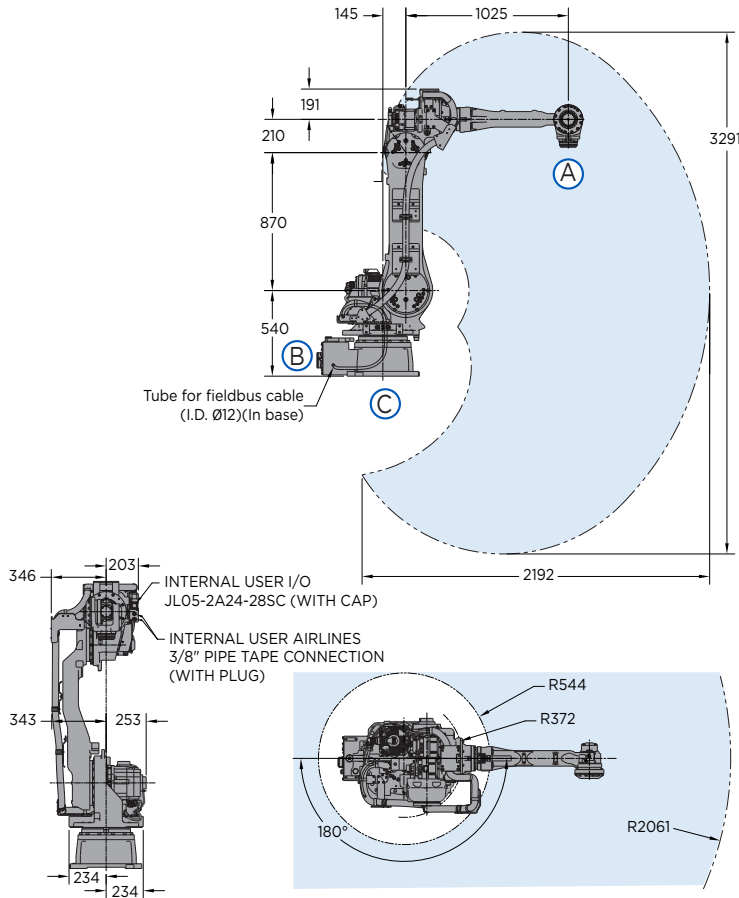
CONTROLLER

YRC1000

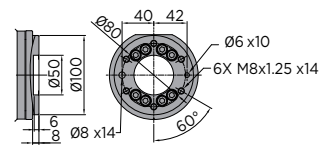


- Increase productivity with the highly efficient 5-axis PL80 robot.
- Ideal for a variety of palletizing applications, layer picking and other logistical tasks for end-of-line or distribution automation.
- Offering improved operation speed over conventional models, a performance-driven design with exceptionally fast axis speeds and acceleration reduces cycle time and increases production throughput.
- Internally routed airlines and cables from base to the end-of-arm tool maximize 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 PL80 has an IP67-rated wrist and IP54 body as standard.
- The PL80 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.

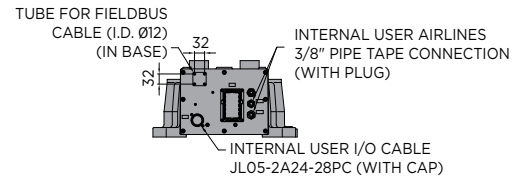
PL80 ROBOT



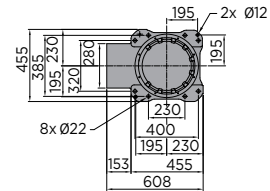
VIEW A



VIEW B



VIEW C



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

SPECIFICATIONS

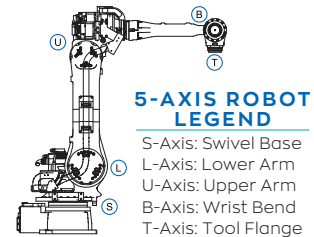
Axes	Maximum motion range	Maximum speed	Allowable moment	Allowable moment of inertia
	degrees	°/sec	N·m	kg·m ²
S	±180	180	-	-
L	+135/-90	180	-	-
U	+35/-160	180	-	-
B	+15/-15	180	78.4	48
T	±360	500	20.5	25

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	PL80
Controlled axes		5
Maximum payload	kg	80
Repeatability	mm	0.03
Horizontal reach	mm	2,061
Vertical reach	mm	3,291
Weight	kg	565
Internal user I/O cable		23 conductors w/ ground
Internal user air line		(2) 3/8" connection
Power requirements		380-480 VAC
Power rating	kVA	4.5

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



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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

Depalletizing

Layer Picking

Layer Forming

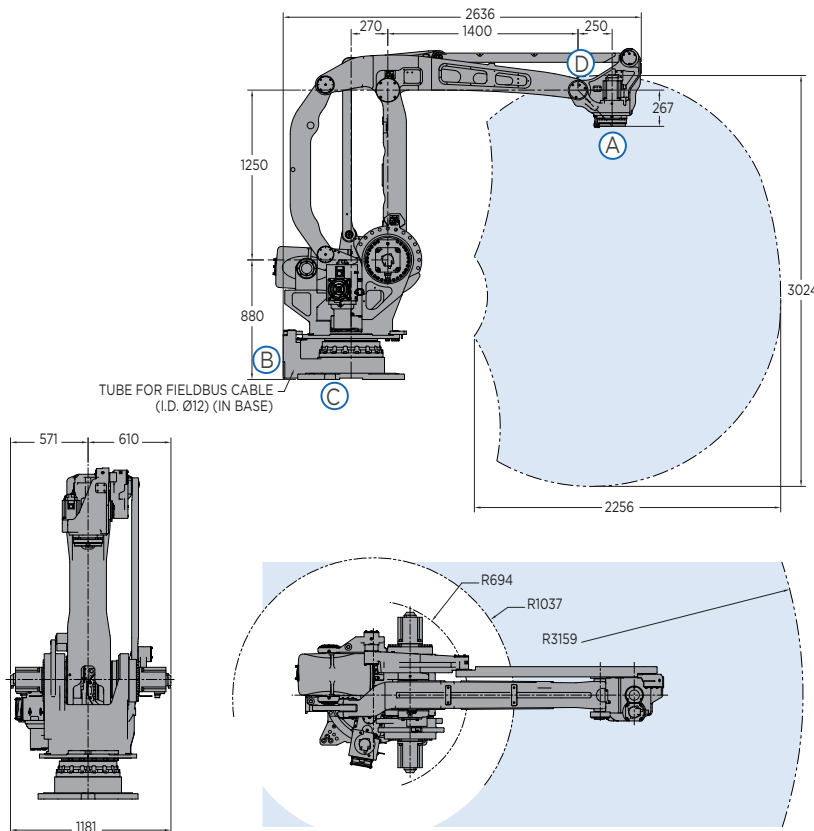
CONTROLLER

YRC1000

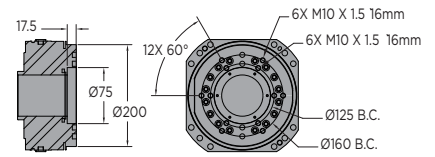


- Increase productivity with the powerful and efficient 4-axis PL190 robot.
- Performance-driven design and large work envelope enable a variety of palletizing applications, layer picking and other logistical tasks for end-of-line or distribution automation.
- Exceptionally fast axis speeds and acceleration 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 maximize 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.

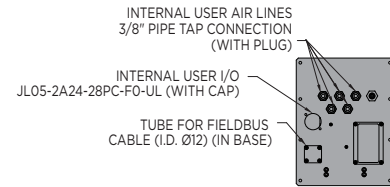
PL190 ROBOT



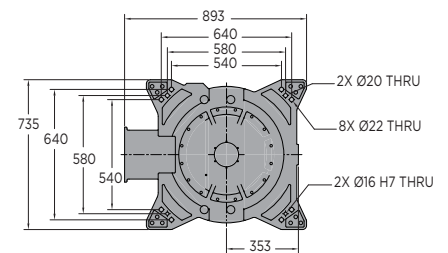
VIEW A



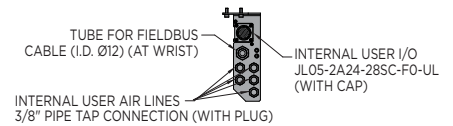
VIEW B



VIEW C



VIEW D



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

SPECIFICATIONS

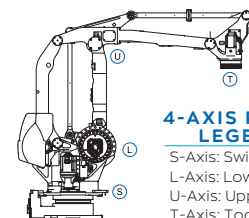
Axes	Maximum motion range	Maximum speed	Allowable moment	Allowable moment of inertia
	degrees	°/sec	N·m	kg·m ²
S	±180	140	-	-
L	+90/-45	145	-	-
U	+15.5/-120	145	-	-
T	±360	420	-	90

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



4-AXIS ROBOT LEGEND

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



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PL320

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

320 kg payload

3,159 mm horizontal reach

3,024 mm vertical reach

0.05 mm repeatability

APPLICATION

Case Palletizing

Bag Palletizing

Depalletizing

Layer Picking

Layer Forming

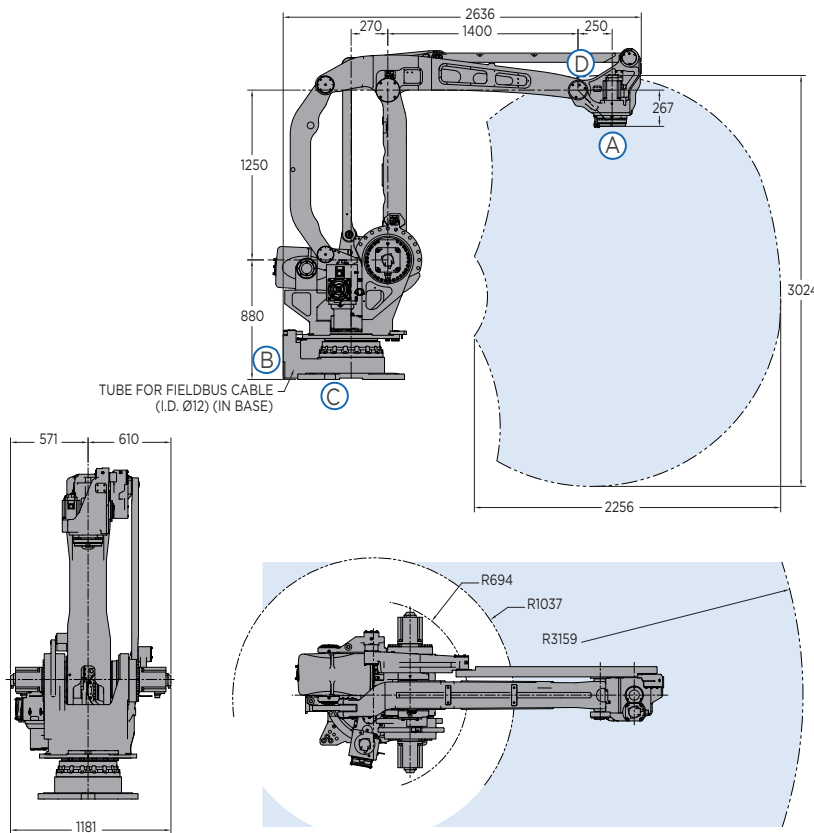
CONTROLLER

YRC1000

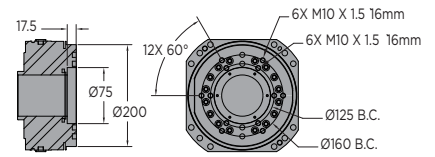


- Increase productivity with the powerful and efficient 4-axis PL320 robot.
- Performance-driven design and large work envelope enable a variety of palletizing applications, layer picking and other logistical tasks for end-of-line or distribution automation.
- Exceptionally fast axis speeds and acceleration 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 maximize 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 PL320 has an IP67-rated wrist and IP54 body as standard.
- The PL320 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.

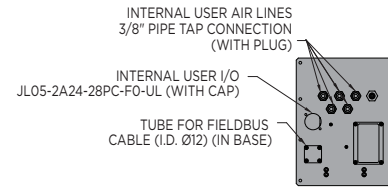
PL320 ROBOT



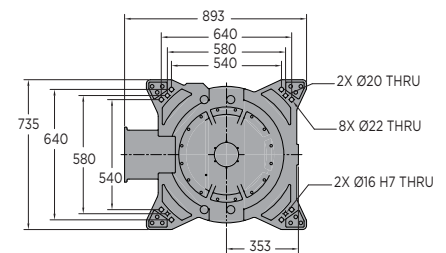
VIEW A



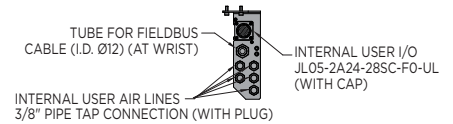
VIEW B



VIEW C



VIEW D



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

SPECIFICATIONS

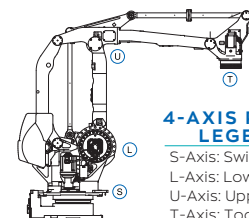
Axes	Maximum motion range	Maximum speed	Allowable moment	Allowable moment of inertia
	degrees	°/sec	N·m	kg·m ²
S	±180	120	-	-
L	+90/-45	110	-	-
U	+15.5/-120	110	-	-
T	±360	300	-	160

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	PL320
Controlled axes		4
Maximum payload	kg	320
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



4-AXIS ROBOT LEGEND

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



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PL500

HIGHLY VERSATILE PALLETIZING ROBOT

KEY BENEFITS

Versatile, high-speed robot for palletizing applications

High allowable moment of inertia handles unbalanced loads effectively

Highly reliable

SPECIFICATIONS

500 kg payload

3,159 mm horizontal reach

3,024 mm vertical reach

0.05 mm repeatability

APPLICATION

Case Palletizing

Bag Palletizing

Depalletizing

Layer Picking

Layer Forming

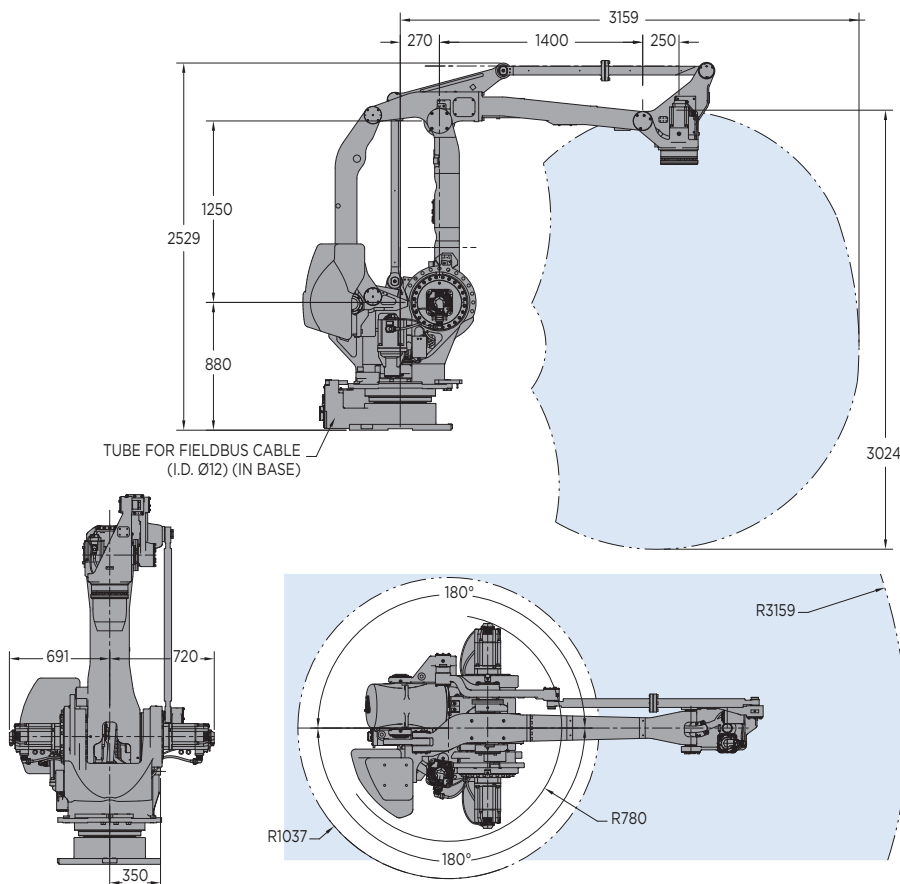
CONTROLLER

YRC1000

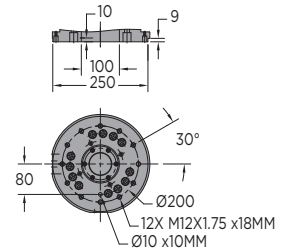


- Increase productivity with the powerful and efficient 4-axis PL500 robot.
- Performance-driven design and large work envelope enable a variety of palletizing applications, layer picking and other logistical tasks for end-of-line or distribution automation.
- Exceptionally fast axis speeds and acceleration reduce cycle time and increase production throughput.
- 100 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 maximize 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 PL500 has an IP54-rated wrist and body as standard.
- The PL500 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.

PL500 ROBOT



VIEW A



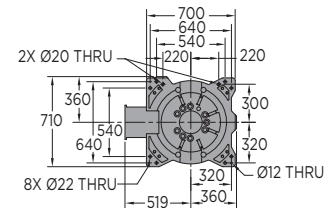
VIEW B

INTERNAL USER WIRING CONNECTOR TYPE IS JL05-2A24-28PC (WITH CAP) MATING CONNECTOR IS NOT SUPPLIED, BUT COMPLETE CABLES ARE AVAILABLE AS AN OPTION.



TUBE FOR FIELDBUS CABLE (I.D. Ø12) (IN BASE)

VIEW C



VIEW D

TUBE FOR FIELDBUS CABLE (I.D. Ø12) INTERNAL USER WIRING CONNECTOR TYPE IS JL05-2A24-28SC (WITH CAP) MATING CONNECTOR IS NOT SUPPLIED, BUT COMPLETE CABLES ARE AVAILABLE AS AN OPTION.

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

SPECIFICATIONS

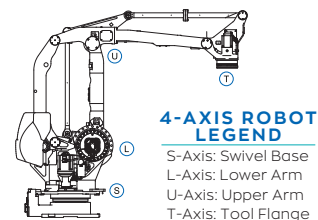
Axes	Maximum motion range	Maximum speed	Allowable moment	Allowable moment of inertia
	degrees	°/sec	N·m	kg·m ²
S	±180	85	-	-
L	+90/-45	85	-	-
U	+15.5/-120	85	-	-
T	±360	195	-	200

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	PL500
Controlled axes		4
Maximum payload	kg	500
Repeatability	mm	0.05
Horizontal reach	mm	3,159
Vertical reach	mm	3,024
Weight	kg	2,390
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	8

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



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PL800

VERSATILE, HEAVY PAYLOAD PALLETIZING ROBOT

KEY BENEFITS

Versatile, high-speed robot for palletizing applications

High allowable moment of inertia handles unbalanced loads effectively

Highly reliable

SPECIFICATIONS

800 kg payload

3,159 mm horizontal reach

3,024 mm vertical reach

0.05 mm repeatability

APPLICATION

Case Palletizing

Bag Palletizing

Depalletizing

Layer Picking

Layer Forming

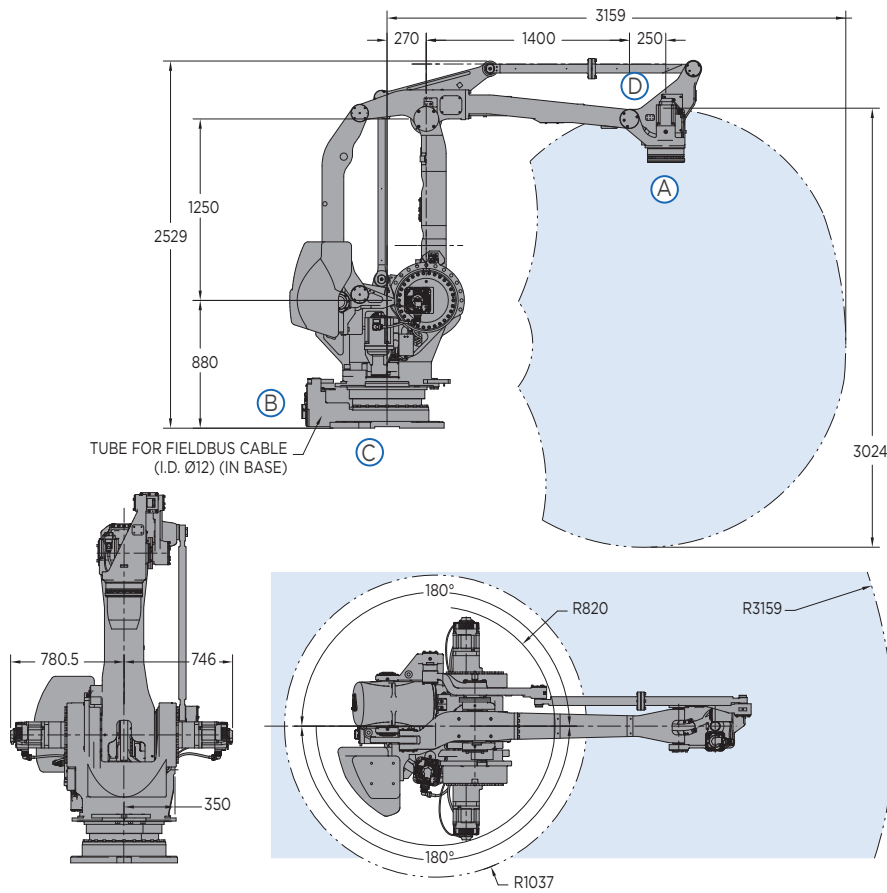
CONTROLLER

YRC1000

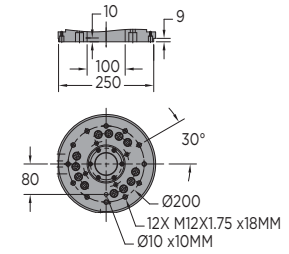


- Increase productivity with the powerful and efficient 4-axis PL800 robot.
- Performance-driven design and large work envelope enable a variety of palletizing applications, layer picking and other logistical tasks for end-of-line or distribution automation.
- Exceptionally fast axis speeds and acceleration reduce cycle time and increase production throughput.
- 100 mm T-axis pass-through facilitates easy connection 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 maximize 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 PL800 has an IP54-rated wrist and body as standard.
- The PL800 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.

PL800 ROBOT



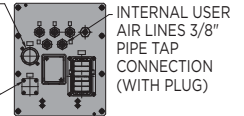
VIEW A



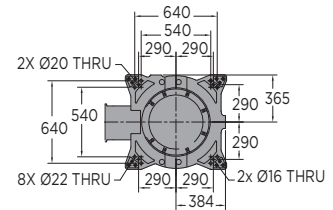
VIEW B

INTERNAL USER WIRING CONNECTOR TYPE IS JL05-2A24-28PC (WITH CAP) MATING CONNECTOR IS NOT SUPPLIED, BUT COMPLETE CABLES ARE AVAILABLE AS AN OPTION.

TUBE FOR FIBLBUS CABLE (I.D. Ø12) (IN BASE)



VIEW C



VIEW D

TUBE FOR FIBLBUS CABLE (I.D. Ø12)

INTERNAL USER AIR LINES 3/8" PIPE TAP CONNECTION (WITH PLUG)



INTERNAL USER WIRING CONNECTOR TYPE IS JL05-2A24-28SC (WITH CAP) MATING CONNECTOR IS NOT SUPPLIED, BUT COMPLETE CABLES ARE AVAILABLE AS AN OPTION.

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

SPECIFICATIONS

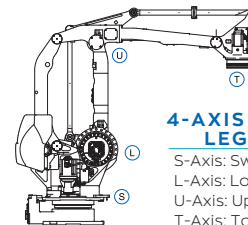
Axes	Maximum motion range	Maximum speed	Allowable moment	Allowable moment of inertia
	degrees	°/sec	N·m	kg·m ²
S	±180	65	-	-
L	+90/-45	65	-	-
U	+15.5/-120	65	-	-
T	±360	125	-	550

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	PL800
Controlled axes		4
Maximum payload	kg	800
Repeatability	mm	0.05
Horizontal reach	mm	3,159
Vertical reach	mm	3,024
Weight	kg	2,560
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	8

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



4-AXIS ROBOT LEGEND

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



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