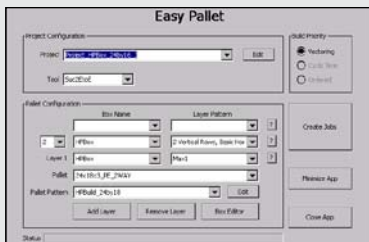




BAG PALLETIZING



CASE PALLETIZING



EASYPALLET PENDANT (OPTION)

TOP REASONS TO BUY

- Compact design for end-of-line palletizing applications
- Exceptionally small interference radius maximizes floorspace utilization
- High-performance robot maximizes productivity
- Economical design provides advantages of high-speed, high-performance palletizing, combined with a slim wrist and compact design



MPL80

MATERIAL HANDLING • PALLETIZING

Payload: 80 kg

Flexible Palletizing Solution

- Five-axis MPL80 “Master Palletizing” robot provides fast axial speeds, acceleration and deceleration to reduce cycle times; increases production output.
- 80 kg (176.4 lb) payload; 3,291 mm (129.6") vertical reach; 2,061 mm (81.1") horizontal reach; ± 0.07 mm (± 0.003 ") repeatability. Other MPL-series available with 100-, 160-, 300-, 500- and 800-kg payloads to meet wide range of palletizing requirements.
- Wide 360° work envelope allows service to multiple infeed conveyors and one or two pallet build locations.
- Compact design is ideally suited for end-of-line palletizing solutions requiring minimal space.
- Optional MotoSim® EG-VRC, off-line programming software with virtual robot control simplifies programming and simulation.
- Accommodates palletizing loads up to 95.5" high on a 42" pallet, or up to 76.6" high on a 48" pallet.

EasyPallet Pendant (option)

- Motoman Robotics' EasyPallet™ Pendant makes programming complex pallet patterns quick and easy.

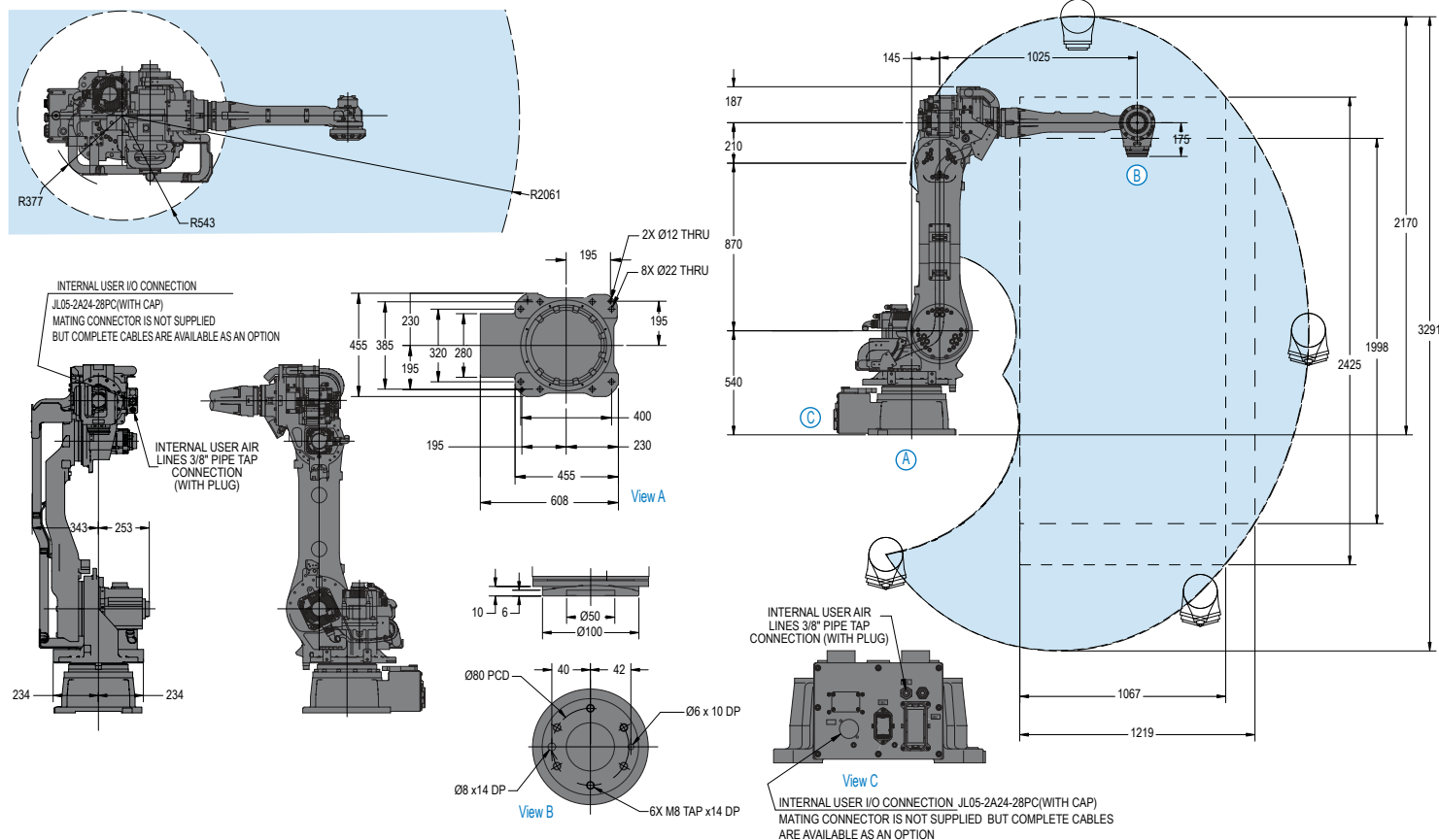
- With just a few simple menu selections, operators can choose from one of EasyPallet Pendant's more than 200 pre-designed palletizing patterns – right from the robot teach pendant.
- Patterns are independent of box sizes. This allows a box size to be applied to any stacking pattern to create a unique layer configuration.
- Patterns adjust automatically to changing box and pallet sizes, in effect multiplying the number of available patterns available.

DX100 Controller

- Patented multiple robot control supports up to 8 robots/72 axes.
- Windows® CE programming pendant with color touch screen and USB interface.
- Faster processing speeds for smoother interpolation. Quicker I/O response. Accelerated Ethernet communication.
- Extensive I/O suite includes integral PLC and touch screen HMI, 2,048 I/O and graphical ladder editor.
- Supports all major fieldbus networks, including EtherNet/IP, DeviceNet, Profibus-DP and many others.
- Compliant to ANSI/RIA R15.06-1999 and other relevant ISO and CSA safety standards. Optional Category 3 functional safety unit.

MPL80 ROBOT

All dimensions are metric (mm) and for reference only. Please request detail drawings for all design/engineering requirements.



MPL80 SPECIFICATIONS

Structure	Vertical articulated type	
Controlled Axes	5	
Payload	80 kg (176.4 lbs)	
Vertical Reach	3,291 mm (129.6")	
Horizontal Reach	2,061 mm (81.1")	
Repeatability	±0.07 mm (0.003")	
Maximum Motion Range	S-Axis (Turning/Sweep)	±180°
	L-Axis (Lower Arm)	+135°/-90°
	U-Axis (Upper Arm)	+251°/-170°
	B-Axis (Wrist Twist)*	±15°
	T-Axis (Wrist Twist)	±360°
Maximum Speed	S-Axis	170°/s
	L-Axis	170°/s
	U-Axis	170°/s
	B-Axis†	170°/s
T-Axis	350°/s	
Approximate Mass	550 kg (1,212.8 lbs)	
Brakes	All axes	
Power Consumption	4.0 kVA	
Allowable Moment	B-Axis	78.4 N • m
	T-Axis	20.5 N • m
Allowable Inertia	B-Axis	16 kg • m ²
	T-Axis	6.1 kg • m ²
Internal User Electrical Cable	23 conductors + ground	
Internal User Air Hose	1 – 3/8" PT connector	

* B-axis angle range of motion relative to the robot mounting surface, but may be restricted by angle of other axes.

† B-axis speed limited because of its short range of motion.

DX100 CONTROLLER SPECIFICATIONS**

Dimensions (mm)	800 (w) x 1,000 (h) x 650 (d) (31.5" x 39.4" x 25.6")
Approximate Mass	250 kg max. (551.3 lbs)
Cooling System	Indirect cooling
Ambient Temperature	During operation: 0° to 45° C (32° to 113° F) During transit and storage: -10° to 60° C (14° to 140° F)
Relative Humidity	90% max. non-condensing
Primary Power Requirements	3-phase, 240/480/575 VAC at 50/60 Hz
Digital I/O	Standard I/O: 40 inputs/40 outputs consisting of 16 system inputs/16 system outputs, 24 user inputs/24 user outputs 32 Transistor Outputs; 8 Relay Outputs Max. I/O (optional): 2,048 inputs and 2,048 outputs
Position Feedback	By absolute encoder
Program Memory	JOB: 200,000 steps, 10,000 instructions CIO Ladder Standard: 15,000 steps Expanded: 20,000 steps
Pendant Dim. (mm)	169 (w) x 314.5 (h) x 50 (d) (6.7" x 12.4" x 2")
Pendant Weight	.998 kg (2.2 lbs)
Interface	One Compact Flash slot; One USB port (1.1)
Pendant Playback Buttons	Teach/Play/Remote Keyswitch selector Servo On, Start, Hold, and Emergency Stop Buttons
Programming Language	INFORM III, menu-driven programming
Maintenance Functions	Displays troubleshooting for alarms, predicts reducer wear
Number of Robots/Axes	Up to 8 robots, 72 axes
Multi Tasking	Up to 16 concurrent jobs, 4 system jobs
Fieldbus	DeviceNet Master/Slave, AB RIO, Profibus, Interbus-S, M-Net, CC Link, EtherNet IP/Slave
Ethernet	10 Base T/100 Base TX
Safety	Dual-channel Emergency Stop Pushbuttons, 3-position Enable Switch, Manual Brake Release Meets ANSI/RIAR15.06-1999, ANSI/RIA/ISO 10218-1-2007 and CSA Z434-03

**See DX100 Controller data sheet (DS-399) for complete specifications

www.motoman.com

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