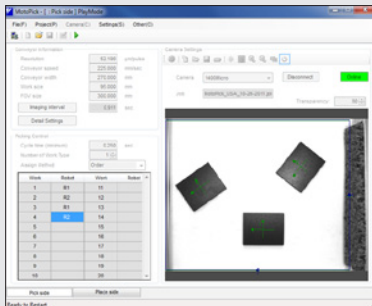




FAMILIAR PROGRAMMING INTERFACE



MOTOPICK SOFTWARE



FS100 CONTROLLER



# MPP3

ASSEMBLY • CARTONING • KITTING • PACKAGING  
PART TRANSFER • PICK AND PLACE

**Payload: 3 kg**

## TOP REASONS TO BUY

- High-speed operation – up to 150 cycles per minute
- Small footprint allows better space utilization
- Ideal for high density robot installations
- Simplified fourth axis design provides higher reliability
- Yields extraordinary production results while requiring minimal capital investment
- Saves floorspace as a zero-footprint robot

## Compact, Powerful and Economical

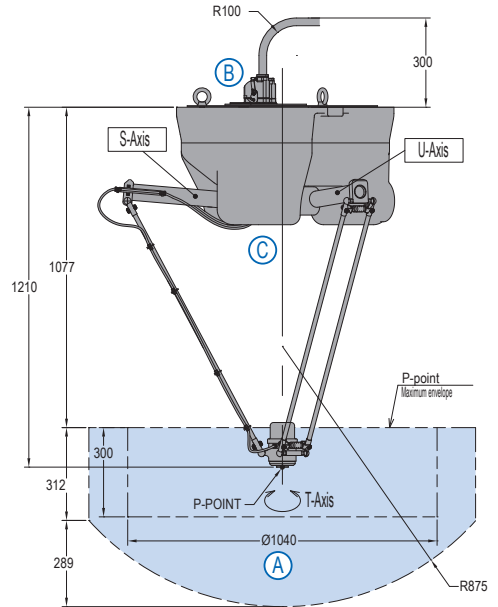
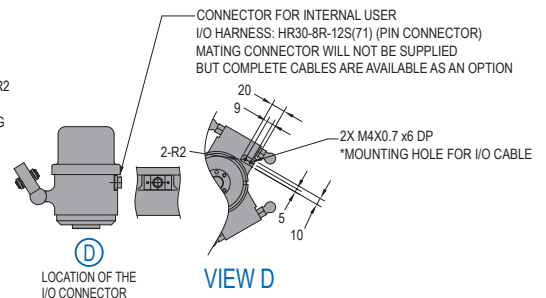
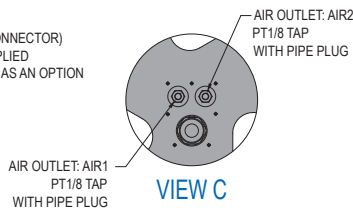
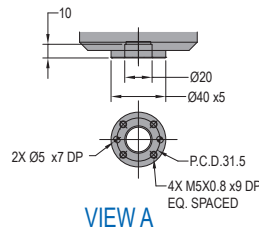
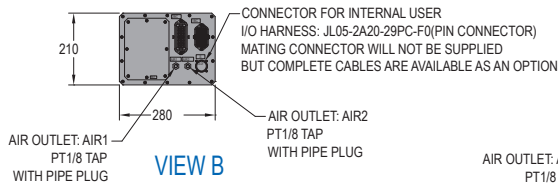
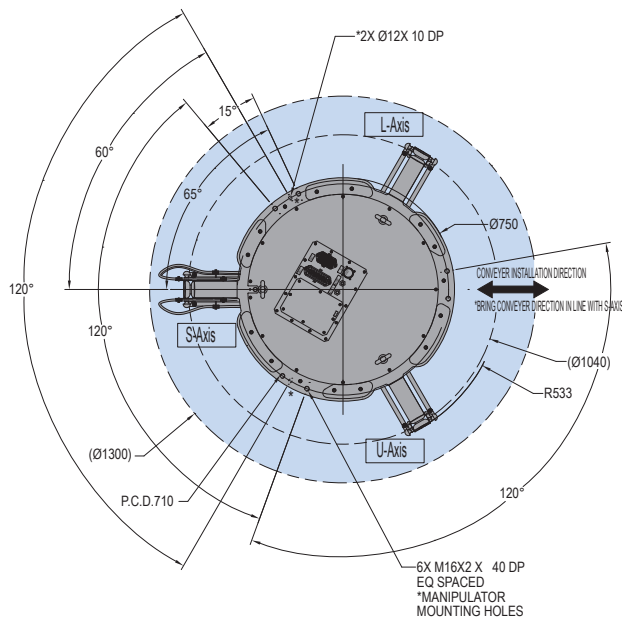
- Ideal for high-speed small parts handling, packaging and assembly applications.
- Three-arm configuration with rotary axis ( $\pm 360$  degrees). Rotary axis is direct driven to simplify design and increase reliability.
- 3 kg robot payload. Adjusts performance based on load. Effective for payloads less than 1 kg (2.2 lbs).
- Deep work envelope, up to 500 mm.
- Minimum installation area and small mounting surface make the MPP3 robot ideal for high-density installations.
- The MPP3 completes a wide range of packaging, cartoning, case packing and palletizing robots available from Motoman Robotics.
- IP65 rated robot. IP67 available as an option.

## FS100 Controller

- Small, compact controller.
- 470 mm wide, 200 mm high, 420 mm deep.
- Designed for packaging and small parts handling robots with payloads of 20 kg and under.
- Compatible with integrated MotoSight™ 2D vision (optional).
- Improved communication speeds and functionality.
- High-speed I/O response and high-resolution timers.
- Open architecture enables software customization in widely accepted environments such as C, C++, C# and .NET.
- Uses same programming pendant hardware as DX100 controller, providing a consistent programming interface with current products.

# MPP3 ROBOT

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



## MPP3 SPECIFICATIONS

<b>Structure</b>	Parallel Arm/Delta	
<b>Mounting</b>	Ceiling	
<b>Controlled Axes</b>	4	
<b>Payload</b>	3 kg (6.6 lbs)	
<b>Repeatability</b>	±0.1 mm (±0.004")	
<b>Repetitive Rotational Accuracy (T-Axis)</b>	±1 arc-min	
<b>Range of Motion</b>	φ1300 X H300	
<b>T-Axis</b>	<b>Maximum Speed</b>	1,200°/s
	<b>Range of Motion</b>	±360°
	<b>Allowable Moment</b>	0.167 N • m
	<b>Allowable Inertia (GD<sup>2</sup>/4)</b>	0.017 kg • m <sup>2</sup>
<b>IP Rating</b>	IP65	
<b>Mass</b>	115 kg (253.6 lbs)	
<b>Brakes</b>	All axes	
<b>Power Requirement</b>	3-phase	
<b>Power Consumption</b>	1.5 kVA	
<b>Operating Temperature</b>	0° to 40° C (32° to 104° F)	
<b>Relative Humidity</b>	20% to 80%, non-condensing	

## FS100 CONTROLLER SPECIFICATIONS\*

<b>Dimensions (mm)</b>	470 (w) x 200 (h) x 420 (d) (18.5" x 7.9" x 16.5")
<b>Approximate Mass</b>	20 kg (44.1 lbs)
<b>Cooling System</b>	Direct cooling
<b>Ambient Temperature</b>	During operation: 0° to 40° C (32° to 104° F) During transit and storage: -10° to 60° C (14° to 140° F)
<b>Relative Humidity</b>	90% max. non-condensing
<b>Primary Power Requirements</b>	Single-phase or 3-phase power, 200/230 VAC at 50/60 Hz (MPP3, MPK2, MH6F, HP20F require 3-phase)
<b>External Transformer (optional)</b>	For 480/575 VAC installations
<b>Digital I/O</b>	NPN-Standard PNP-Optional
<b>Position Feedback</b>	Absolute encoder
<b>Program Memory</b>	JOB: 10,000 steps, 1,000 instructions C/O Ladder: 1,500 steps
<b>Pendant Dim. (mm)</b>	169 (w) x 314.5 (h) x 50 (d) (6.7" x 12.4" x 2")
<b>Pendant Weight</b>	.998 kg (2.2 lbs)
<b>Interface</b>	One Compact Flash slot; One USB port (1.1)
<b>Pendant Playback Buttons</b>	Teach/Play/Remote Keyswitch selector Servo On, Start, Hold, and Emergency Stop Buttons
<b>Programming Language</b>	INFORM III, menu-driven programming, MotoPlus SDK (C language) – optional
<b>Maintenance Functions</b>	Displays troubleshooting for alarms
<b>Number of Robots/Axes</b>	Up to 2 robots, 16 axes (requires 2 controllers)
<b>Multi Tasking</b>	Up to 6 concurrent jobs, 1 system job
<b>Fieldbus</b>	All common networks supported
<b>Ethernet</b>	10 Base T/100 Base TX
<b>Safety</b>	Dual-channel Emergency Stop Pushbuttons, 3-position Enable Switch, Manual Brake Release

Note: Use DX100 controller for arc welding applications.  
\* See FS100 Controller data sheet (DS-509) for complete specifications

www.motoman.com

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