SOLUTIONS IN MOTION®









TOP REASONS TO BUY

- High-speed operation up to 150 cycles per minute
- Zero footprint allows better space utilization
- Ideal for high density robot installations
- Simplified wrist design provides higher reliability
- Yields extraordinary production results with high-speed and reliable design

Compact and Powerful

 Zero-footprint, high-speed robot for pick-place, inspecting, sorting and kitting applications.

YASKAWA MOTOMAN

- Rotary axis is direct driven to simplify design and increase reliability.
- 3 kg maximum payload. Performance is optimized to payload.
- 600 mm vertical stroke enables picking and placing in deep boxes.
- Space-optimized design with compact base and short arm radii for high-density installations.
- Seamless covers to promote easy cleaning and prevent contamination.
- Acid and alkali resistant urethane paint.
- IP65 robot with NSF-H1 certified food-grade grease.

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

Payload: 3 kg

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 highresolution 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		
Structure		Parallel Arm/Delta
Mounting		Ceiling
Controlled Axes		4
Payload		3 kg (6.6 lbs)
Repeatability		±0.1 mm (±0.004")
Repetitive Rotational Accuracy (T-Axis)		±1 arc-min
Range of Motion (mm)		Ø1300 X H312 (H600 max)
T-Axis	Maximum Speed	1,200°/s
	Range of Motion	±360°
	Allowable Moment	0.167 N • m
	Allowable Inertia (GD ² /4)	0.017 kg • m ²
IP Rating		IP65
Mass		115 kg (253.6 lbs)
Brakes		All axes
Power Requirement		3-phase
Power Consumption		1.5 kVA
Operating Temperature		0° to 40° C (32° to 104° F)
Relative Humidity		20% to 80%, non-condensing

FS100 CONTROLLER SPECIFICATIONS*			
Dimensions (mm)	470 (w) x 200 (h) x 420 (d) (18.5" x 7.9" x 16.5")		
Approximate Mass	20 kg (44.1 lbs)		
Cooling System	Direct cooling		
Ambient Temperature	During operation: 0° to 40° C (32° to 104° F) During transit and storage: -10° to 60° C (14° to 140° F)		
Relative Humidity	90% max. non-condensing		
Primary Power Requirements	Single-phase or 3-phase power, 200/230 VAC at 50/60 Hz (MPP3, MPK2, MH6F, HP20F require 3-phase)		
External Transformer (optional)	For 480/575 VAC installations		
Digital I/O NPN-Standard PNP-Optional	Standard I/O: 16 inputs/16 outputs Max. I/O (optional): 168 inputs and 168 outputs		
Position Feedback	Absolute encoder		
Program Memory	JOB: 10,000 steps, 1,000 instructions CIO Ladder: 1,500 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, MotoPlus SDK (C language) – optional		
Maintenance Functions	Displays troubleshooting for alarms		
Number of Robots/Axes	Up to 2 robots, 16 axes (requires 2 controllers)		
Multi Tasking	Up to 6 concurrent jobs, 1 system job		
Fieldbus	All common networks supported		
Ethernet	10 Base T/100 Base TX		
Safety	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

MOTOMAN ROBOTICS

TECHNICAL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE DS-508-C ©2013 YASKAWA AMERICA, INC. JUNE 2013

YASKAWA AMERICA, INC. . MOTOMAN ROBOTICS DIVISION 100 AUTOMATION WAY, MIAMISBURG, OHIO 45342 TEL: 937.847.6200 = FAX: 937.847.6277

MOTOMAN IS A REGISTERED TRADEMARK ALL OTHER MARKS ARE THE TRADEMARKS AND REGISTERED TRADEMARKS OF YASKAWA AMERICA, INC.

YASKAWA