# MP-SERIES™ INTEGRATED MULTI-AXIS STAGES

Simplified and Precise Two-Dimensional Positioning

### The MP-Series Integrated Multi-Axis Stages offer these benefits:

- Flexible design allows you to position stages from either above or below.
- Stages can carry a payload of up to 25kg while achieving an acceleration of 1g at maximum payload.
- · Ability to use existing Add-On-Instructions for pick and place and dispensing applications.
- Pre-alignment of axis that provides 30 arc seconds of orthogonality.
- Factory-installed, field-replaceable
- IP 30 environmental protection.
- Home-to-hard-stop operation with software over-travel limits that eliminate the need for costly and cumbersome external limit switches.
- · Availability of direct drive linear motor actuation for rapid positioning, high speeds and greater reliability.
- Availability of ballscrew actuation for applications that require higher force or absolute linear encoders.
- Assistance from experienced Applications Engineers.
- Tools in Motion Analyzer are available to assist in easy sizing and selection.
- · Easy to include in your mechanical design using provided CAD drawings and 3-D models.
- Fast and easy commissioning via integration into RSLogix 5000 software.
- Available in both 230V and 460V versions.



MP-SERIES™ INTEGRATED MULTI-AXIS STAGES

### Simplified Machine Design

The engineering, design and assembly of multi-axis linear motion solutions can be a complex, time-consuming and expensive set of tasks. But with Rockwell Automation MP-Series™ Integrated Multi-Axis Stages, you can simplify your machine design with an out-of-the box solution for precise two-dimensional positioning and velocity control.

From product selection to CAD drawings to commissioning, Rockwell Automation provides you with easy-to-use tools that enable you to streamline your machine design and speed time to market.

The MP-Series Integrated Multi-Axis Stages help you to greatly reduce the time and expense needed to implement a multi-axis linear motion solution. You'll find that product selection is easy using Motion Analyzer software. There's no mechanical data to enter. Simply enter information about the load and how it needs to be moved, and Motion Analyzer selects a suitable linear stage and drive for your application.

Machine design can also be simplified when you use provided CAD drawings and 3-D models. And, with RSLogix 5000 software, you'll benefit from easy-to-use catalog number driven actuator configuration. This convenient "connect and run" implementation eliminates the need for complex actuator configuration and tuning.

Since the MP-Series Integrated Linear Stages are part of the MP-Series servo motor and actuator family, they have the reliability you have come to expect from MP-Series products and are compatible with the Kinetix® 2000, Kinetix 6000 and Ultra™ 3000 servo drives, as well as all MP-Series™ cables and accessories.







# MP-Series Integrated Multi-Axis Linear Stages Performance Specifications

### MPMA-xABxxxxxx-xxx

Center Stacked X/Y stages with 250 frame linear motor driven x-axis and 200 frame linear motor driven y-axis

Maximum Payload 15 kg



	-	Travel (mn	n)	Е	ncoder Typ	Repeatability(μm)			
MPMA Cat. No.	X-axis Y-axis Z-axis		X-axis	Y-axis	Z-axis	X-axis	Y-axis	Z-axis	
MPMA-xABC0C0A0-S1C	200	200	n/a	Inc	Inc	n/a	15	15	n/a
MPMA-xABC6C6A0-S1C	260	260	n/a	Inc	Inc	n/a	15	15	n/a
MPMA-xABD2D2A0-S1C	320	320	n/a	Inc	Inc	n/a	15	15	n/a
MPMA-xABD8D8A0-S1C	380	380	n/a	Inc	Inc	n/a	15	15	n/a
MPMA-xABE4E4A0-S1C	440	440	n/a	Inc	Inc	n/a	15	15	n/a
MPMA-xABF6F6A0-S1C	560	560	n/a	Inc	Inc	n/a	15	15	n/a

Inc = Incremental

#### MPMA-xACxxxxxx-xxx

Center Stacked X/Y stages with 250 frame linear motor driven x-axis and 250 frame linear motor driven y-axis Maximum Payload 20 kg

	Travel (mm)			E	ncoder Typ	pe	Repeatability(μm)		
MPMA Cat. No.	X-axis	Y-axis	Z-axis	X-axis	Y-axis	Z-axis	X-axis	Y-axis	Z-axis
MPMA-xACB4B4A0-S1C	140	140	n/a	Inc	Inc	n/a	15	15	n/a
MPMA-xACC0C0A0-S1C	200	200	n/a	Inc	Inc	n/a	15	15	n/a
MPMA-xACC6C6A0-S1C	260	260	n/a	Inc	Inc	n/a	15	15	n/a
MPMA-xACD2D2A0-S1C	320	320	n/a	lnc	Inc	n/a	15	15	n/a

### MPMA-xAPxxxxxx-xxx

Center Stacked X/Y stages with 200 frame ball screw driven x-axis and 200 frame ball screw driven y-axis Maximum Payload 20 kg

	-	Travel (mn	n)	Eı	ncoder Typ	oe .	Repeatability(µm)		
MPMA Cat. No.	X-axis	Y-axis	Z-axis	X-axis	Y-axis	Z-axis	X-axis	Y-axis	Z-axis
MPMA-xAPB8B8A0-S1C	180	180	n/a	Abs	Abs	n/a	60	60	n/a
MPMA-xAPC4C4A0-S1C	240	240	n/a	Abs	Abs	n/a	60	60	n/a
MPMA-xAPD0D0A0-S1C	300	300	n/a	Abs	Abs	n/a	60	60	n/a
MPMA-xAPE2E2A0-S1C	420	420	n/a	Abs	Abs	n/a	60	60	n/a
MPMA-xAPG6G6A0-S1C	660	660	n/a	Abs	Abs	n/a	60	60	n/a

# MP-Series Integrated Multi-Axis Linear Stages Product Specifications

### MPMA-xCBxxxxxx-xxx

Cartesian Stacked X/Y stages with 250 frame linear motor driven x-axis and 200 frame linear motor driven y-axis

Maximum Payload 20 kg



	T	ravel (mr	m)	Er	ncoder Ty	pe	Repeatability(µm)		
MPMA Cat. No	X-axis	Y-axis	Z-axis	X-axis	Y-axis	Z-axis	X-axis	Y-axis	Z-axis
MPMA-xCBD2D2A0-S1C	320	320	n/a	Inc	Inc	n/a	15	15	n/a
MPMA-xCBE4D2A0-S1C	440	320	n/a	Inc	Inc	n/a	15	15	n/a
MPMA-xCBE4E4A0-S1C	440	440	n/a	Inc	Inc	n/a	15	15	n/a
MPMA-xCBF6E4A0-S1C	560	440	n/a	Inc	Inc	n/a	15	15	n/a
MPMA-xCBG8E4A0-S1C	680	440	n/a	Inc	Inc	n/a	15	15	n/a
MPMA-xCBG8F6A0-S1C	680	560	n/a	Inc	Inc	n/a	15	15	n/a
MPMA-xCBI0F6A0-S1C	800	560	n/a	Inc	Inc	n/a	15	15	n/a
MPMA-xCBJ2F6A0-S1C	920	560	n/a	Inc	Inc	n/a	15	15	n/a

### MPMA-xCQxxxxxx-xxx

Cartesian Stacked X/Y stages with 250 frame ball screw driven x-axis and 200 frame ball screw driven y-axis Maximum Payload 20 kg

	Т	ravel (mr	n)	Encoder Type			Repeatability(μm)		
MPMA Cat. No.	X-axis	Y-axis	Z-axis	X-axis	Y-axis	Z-axis	X-axis	Y-axis	Z-axis
MPMA-xCQD0D0A0-S1C	300	300	n/a	Abs	Abs	n/a	60	60	n/a
MPMA-xCQE2D0A0-S1C	420	300	n/a	Abs	Abs	n/a	60	60	n/a
MPMA-xCQE2E2A0-S1C	420	420	n/a	Abs	Abs	n/a	60	60	n/a
MPMA-xCQG6E2A0-S1C	660	420	n/a	Abs	Abs	n/a	60	60	n/a
MPMA-xCQG6G6A0-S1C	660	660	n/a	Abs	Abs	n/a	60	60	n/a
MPMA-xCQH8G6A0-S1C	780	660	n/a	Abs	Abs	n/a	60	60	n/a
MPMA-xCQJ0G6A0-S1C	900	660	n/a	Abs	Abs	n/a	60	60	n/a

#### MPMA-xBExxxxxx-xxx

Center Stacked X/Z stages with 200 frame linear motor driven x-axis and 150 frame ball screw driven z-axis Maximum Payload 10 kg



	Travel (mm)				coder Ty	pe	Repeatability(µm)			
MPMA Cat. No.	X-axis	Y-axis	Z-axis	X-axis	Y-axis	Z-axis	X-axis	Y-axis	Z-axis	
MPMA-xBED2A0B8-S2C	320	n/a	180	Inc	n/a	Abs	15	n/a	60	
MPMA-xBED2A0D0-S2C	320	n/a	300	Inc	n/a	Abs	15	n/a	60	
MPMA-xBEE4A0B8-S2C	440	n/a	180	Inc	n/a	Abs	15	n/a	60	
MPMA-xBEE4A0D0-S2C	440	n/a	300	Inc	n/a	Abs	15	n/a	60	
MPMA-xBEG8A0B8-S2C	680	n/a	180	Inc	n/a	Abs	15	n/a	60	
MPMA-xBEG8A0D0-S2C	680	n/a	300	Inc	n/a	Abs	15	n/a	60	

# MP-Series Integrated Multi-Axis Linear Stages Product Specifications

#### MPMA-xBDxxxxxx-xxx

Center Stacked X/Z stages with 250 frame linear motor driven x-axis and 150 frame ball screw driven Z-axis Maximum Payload 20 kg

	Т	ravel (mn	n)	Eı	ncoder Typ	oe	Rep	eatability(	μm)
MPMA Cat. No.	X-axis	Y-axis	Z-axis	X-axis	Y-axis	Z-axis	X-axis	Y-axis	Z-axis
MPMA-xBDD2A0B8-S2C	320	n/a	180	Inc	n/a	Abs	15	n/a	60
MPMA-xBDD2A0D0-S2C	320	n/a	300	Inc	n/a	Abs	15	n/a	60
MPMA-xBDE4A0B8-S2C	440	n/a	180	Inc	n/a	Abs	15	n/a	60
MPMA-xBDE4A0D0-S2C	440	n/a	300	Inc	n/a	Abs	15	n/a	60
MPMA-xBDE4A0E2-S2C	440	n/a	420	Inc	n/a	Abs	15	n/a	60
MPMA-xBDG8A0B8-S2C	680	n/a	180	Inc	n/a	Abs	15	n/a	60
MPMA-xBDG8A0D0-S2C	680	n/a	300	Inc	n/a	Abs	15	n/a	60
MPMA-xBDG8A0E2-S2C	680	n/a	420	Inc	n/a	Abs	15	n/a	60
MPMA-xBDI0A0B8-S2C	800	n/a	180	Inc	n/a	Abs	15	n/a	60
MPMA-xBDI0A0D0-S2C	800	n/a	300	Inc	n/a	Abs	15	n/a	60
MPMA-xBDI0A0E2-S2C	800	n/a	420	Inc	n/a	Abs	15	n/a	60
MPMA-xBDJ2A0D0-S2C	920	n/a	300	Inc	n/a	Abs	15	n/a	60
MPMA-xBDJ2A0E2-S2C	920	n/a	420	Inc	n/a	Abs	15	n/a	60
MPMA-xBDJ2A0F4-S2C	920	n/a	540	Inc	n/a	Abs	15	n/a	60

### MPMA-xBlxxxxxx-xxx

Center Stacked X/Z stages with 200 frame ball screw driven x-axis and 150 frame ball screw driven Z-axis Maximum Payload 25 kg

	-	Travel (mr	n)	- I	Encoder Ty	/pe	Repeatability(μm)		
MPMA Cat. No.	X-axis	Y-axis	Z-axis	X-axis	Y-axis	Z-axis	X-axis	Y-axis	Z-axis
MPMA-xBID0A0B8-S2C	300	n/a	180	Abs	n/a	Abs	60	n/a	60
MPMA-xBID0A0D0-S2C	300	n/a	300	Abs	n/a	Abs	60	n/a	60
MPMA-xBIE2A0B8-S2C	420	n/a	180	Abs	n/a	Abs	60	n/a	60
MPMA-xBIE2A0D0-S2C	420	n/a	300	Abs	n/a	Abs	60	n/a	60
MPMA-xBIG6A0B8-S2C	660	n/a	180	Abs	n/a	Abs	60	n/a	60
MPMA-xBIG6A0D0-S2C	660	n/a	300	Abs	n/a	Abs	60	n/a	60

If you need assistance sizing your MP-Series Integrated Multi-Axis Stages, contact our experienced Applications Engineers at (888) 772-6672.

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