

# MAKING IT EASY FOR THE WORLD TO AUTOMATE



SOLUTIONS

# **Introducing MOTUS 1**

### **Designed to Maximize Performance & Flexibility.**

Three frame sizes, three drive trains and highly configurable with in-stock solutions that ship as soon as two days.



Motion Plus, LLC 610 Epsilon Dr. Pittsburgh, PA 15238 1-866-MOTION+ 1-866-668-4660



# **MOTUS 1**

The **Motus 1** family of heavy-duty, high-performance stages from **Motion Plus** provides the perfect mix of flexibility and functionality, manufactured at industry-leading lead times. With three different frame sizes and three drive train options, this suite of electric linear actuators provides machine builders, OEM's and end-users alike the ability to maximize speed, load capacity, and precision with a multitude of options to optimize each.

The lightweight aluminum base comes in three frame sizes ranging from 95mm to 170mm wide and the dual square rail-guided design provides a very robust package for high load industrial applications. The integrated seal strip creates a high level of protection for internal components enabling **Motus 1** to be utilized in harsh environments. **Motus 1** stages can be configured with belt, ball screw or linear motor (*coming soon*) drive trains, to match performance to your needs.



#### MOTORS INCLUDED OR MOUNT YOUR OWN



We offer a wider range of configurable servo and stepper motors that can be mounted directly on the stage. Different motor frame sizes, encoder options, and brakes make finding the right motor for your application a cinch. But, if you have a different motor you would prefer to use, we offer a variety of motor flanges to fit many industry standard motor mounting faces.







## **MOUNTING MADE EASY**

Multiple options are offered for mounting the **Motus 1** stage to a surface. You can use the counterbored holes through the base to bolt down from the top, or you can mount via the t-slots on the side using a toe-clamp. Mounting contingencies for end effector or easy stage to stage mounting are designed in to the carriage as well.



## LIMIT AND HOME SENSORS

Whether you need PNP or NPN, or need 1, 2, or 3 home/limit options, configure what you need for your application.



# TRAVEL TO FIT YOUR APPLICATION

The **Motus 1** gives you the freedom to configure your stage to whatever travel length you need. Pick from any of the pre-configured travel or in-stock stages, configure your own, or contact **Motion Plus** to request a custom length to fit your application.



## IMPROVING ACCURACY & REPEATABILITY

If you are looking to further enhance the performance of a **Motus 1** stage, we offer configurable options for linear encoders, which will increase positional accuracy and repeatability of the system.

## **CABLE MANAGEMENT**



If you are building a multi-axis system or just mounting your **Motus 1** stage into a moving configuration you may need to protect and support motor/feedback and end effector cables. The **Motus 1** line has pre-designed and configurable cable management solutions to fit your needs.

## **ORDER TODAY AT**

www.motionplusmore.com



#### **MOTION PLUS**

Screw Driven	M1-095	M1-125	M1-170
Width (mm)	95	125	170
Height (mm)	55	70	90
Max Travel (mm)	1000	1500	2000
Max Payload <sup>*</sup> (Lb(N))	337 (1,500)	630 (2,800)	1,888 (8,400)
Max Thrust <sup>*</sup> (Lb(N))	148 (660)	283 (1,260)	396 (1,760)
Max Speed (mm/s)	530	390	310
Repeatability (µm) E1 E2	100 15	100 15	100 25

Belt Driven	M1-095	M1-125	M1-170
Width (mm)	95	125	170
Height (mm)	55	70	90
Max Travel <sup>*</sup> (mm)	2000	2000	2000
Max Payload <sup>**</sup> (Lb(N))	337 (1,500)	630 (2,800)	1,888 (8,400)
Max Thrust <sup>**</sup> (Lb(N))	75 (335)	150 (670)	540 (2,400)
Max Speed (mm/s)	3800	5000	5000
Repeatability (µm) E1 E2	300 15	300 25	300 25

\* Life at 100 million inches of travel

\* Consult Motion Plus for longer travels

\*\* Life at 100 million inches of travel

M1-095	M1-125	M1-170	
95	125	170	
55	70	90	
2000	2000	2000	
COMING SOON			
	95 55 2000	95 125   55 70   2000 2000	



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