# NATIONAL APERTURE, INC.

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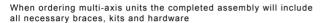
### **Motorized Stages**

## MM-3M-ST Linear

#### Standard Motorized MicroMini™ Stages

#### **FEATURES**

- 3D models available
- Built-in connectivity with all MM-3 MicroMini™ Stages
- ₩ Fully English/Metric compatible (all taps and clearance holes)





#### View Schematic

#### GENERAL DATA:

#### ■ Moment Load capacity: 6 to 9 oz-in

- ₩ Linear Travel: 12.7 mm
- ★ Table Speed: 1.6 mm/sec
- **Body Size:** 113.8 x 19.1 x 9.1 (mm)
- ₩ Weight: 50 grams

#### **GENERAL PRECISION:**

- Repeatability: 4 μm
- **MACCURACY:** 6 μm/25.4 mm
- **Slider Backlash:** 0 (spring preloaded)

## **Product Selector**

NOTE: If viewing on a cell phone, landscape mode is recommended.







Speed/Resolution	Max. Travel Rate	Resolution	GH Ratio	TPI
SPRS3	3.3073 mm/sec	0.2481 µm/count	64:1	40
SPRS4	1.6536 mm/sec	0.1240 µm/count	64:1	80

Click here for accessories



Specifications: MM-3M-ST

\*Repeatability: 4 µm
\*Homing Repeatability: 4 µm

\*Accuracy (linearity): 6  $\mu$ m/25.4 (mm)

Speed (for standard gearhead ratio): 1.6 mm/sec max @ 12 V with 64:1 gearhead

Slider Backlash: 0 (spring loaded)

Encoder Conversion (resolution): 0.12406 µm per count with 64:1 gearhead

(view resolution data sheet)

Wobble (max): 20 μrad

 Screw Pitch:
 0.3175 mm (80 TPI) or 0.635 mm (40 TPI)

 Linear motion per turn:
 0.3175 mm (80 TPI) or 0.635 mm (40 TPI)

Runout (max): 2 µm

Gearhead Backlash: 1-2 µm equivalent; can be compensated in software

10 mm diameter, 6-12 Vdc servo, brush type (see Motor Specifications)

**Load Capacity** 

Motor:

\*Direct top or side load: 0.23 kg (8.0 oz)

\*\*Return: 0.23 (8 oz) to 0.96 kg (34 oz)

\*Pitch: 9.5 oz-in (67 mNm)

\*Roll: 8 oz-in (56 mNm)

\*Yaw: 6.5 oz-in (45 mNm)

## **Shopping Cart**

# Part Qty Price Subtotal Total: \$0.00 clear items

Review & Confirm



**Download Catalog** 

#### **Motorized Stages**

- MM-1M Linear
- MM-3M-ST Linear
- MM-3M-FOS Linear
- O MM-3M-F Linear
- MM-4M-F Linear
- MM-4M-EX LinearMM-5M Linear
- O MM 2M D Deter
- MM-3M-R RotaryMM-4M-R Rotary
- MM-3M-G Goniometer
- MM-4M-G Goniometer

\*These stages may be run at twice the specified ratings without damage, but with a loss of accuracy and speed.
\*\*Retract is limited by the preload spring.

#### Travel Ranges & Dimensions

Model No.	Travel Range	Stage Body (L x W x H)	Weight
MM-3M-ST-X-TR1	12.7 (mm)	113.8 x 19.1 x 9.1 (mm)	50 g
MM-3M-ST-XY-TR1 (2 axis)	12.7 (mm)	113.8 x113.8 x 18.3 (mm)	100 g

The information contained on this website is subject to change without notice. Critical dimensions or specifications should be verified with our technical support staff.

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