## **Force Test Stand**

Manufacturer: MARK-10

Model: ESM301

## **Descriptions:**

Mark-10 ESM301 Force Test Stand is designed for producing up to 300 lbF (1.5 kN) of tension or compression force on tested samples. It is a motorized test stand that could be used to apply force vertically. A digital force gauge is used to measure the applied force. The travel distance and speed could be set according to different purposes. Typical materials able to be tested by the ESM301 include many manufactured items, such as springs, electronic components, fasteners, caps, films, mechanical assemblies, and many others. Items that should not be used with the ESM301 include potentially flammable substances or products, items that can shatter in an unsafe manner, and any other components that can present an exceedingly hazardous situation when acted upon by a force.

## **Specifications:**

Load capacity:	
< 24 in [610 mm]/min:	300 lbF [1.5 kN]
> 24 in [610 mm]/min:	200 lbF [1 kN]
Standard speed range:	0.5 – 13 in/min [13 – 330 mm/min]
Optional speed range:	0.02 – 45 in/min [0.5 – 1,100 mm/min]
Maximum travel:	
ESM301:	11.5 in [292 mm]
ESM301L:	18.0 in [457 mm]
Speed setting accuracy:	±0.2%
Speed variation with load:	±0% [Stepper motor driven]
Travel accuracy:	±0.002 in [0.05 mm]
Travel resolution:	0.001 in / 0.02 mm
Limit switch repeatability:	0.001 in [0.03 mm]
Power:	Universal input 80-240 VAC, 50/60 Hz
Fuse type:	1.2 A, 250V, 3AG, SLO BLO
Weight (without options):	ESM301: 34 lb [15.4 kg]
	ESM301L: 39.5 lb [23.7 kg]
Environmental Conditions:	40 - 100°F [5 - 40°C], max. 96% humidity, non-condensating

