MARK-10 TSB100 Compression Test Stands Owner's Manual

Contents

MARK-10 TSB100 Compression Test Stands

Product Usage Instructions

TSB100 Manual Test Stand:
The TSB100 is a lever-operated test stand suitable for various applications requiring quick action. Here are the detailed instructions to use the TSB100:

1. **Assembly:**
2. **Mounting:**
3. **Testing Procedure:**

TSC1000 Manual Test Stand:
The TSC1000 is a rugged stand for heavy-duty testing requirements. Follow these steps to utilize the TSC1000 effectively:

Setup:

TSF Manual Test Stand:
The TSF is ideal for spring testing and high-force tensile testing. Here's how you can use the TSF:

Installation:

Manual Test Stands

Model TSB100
Force, Manual, 100 lbF / 500 N
The TSB100 is a lever-operated test stand for many applications requiring quick action. Lightweight and compact design makes this stand portable for field testing. Modular design allows for the force gauge bracket and lever mechanism to be repositioned along the column. Removable base allows for a range of custom mounting configurations. Adjustable travel stops are available.

Features:

- **Rack and pinion mechanism with lever operation**
  Allows for quick testing. The lever can be repositioned in 30° increments.
- **Removable base with loading table**
  A steel loading table with threaded holes is provided for grip or fixture mounting. The entire base may be removed for alternative mounting.
- **Optional 6″ [152 mm] digital travel display (TSB001)**
  Useful in spring testing, rubber and polymer testing, and more.

Model TSC1000 / TSC1000H

Force, Manual, 1,000 lbF / 5,000 N

TSC1000

The TSC1000 is a rugged stand for heavy duty testing requirements requiring fine position control without back driving. Hand wheel operation allows the operator to produce gradual and repeatable force during testing. Modular design allows for the gauge mounting plate and housing to be moved along the length of the column. Removable base (TSC1000) or mounting legs (TSC1000H) allow for a range of custom mounting configurations.

Features:

- **Inline hand wheel operation**

  Precision Acme screw and nut provide smooth operation over the entire 1,000 lbF range. Inline force minimizes column bending during testing.
- **Modular design**

  Adjustable components accommodate a wide range of testing configurations.
- **Optional 6″ [152 mm] digital travel display (TSC001)**

  Useful in spring testing, rubber and polymer testing, and more.

TSFH

Specifications – Manual Test Stands

Model No.	Capacity lbF [N]	Maximum travel 1 in [mm]	Loading method	Travel rate in [mm]	Daylight 2 in [mm]
ES05	30 [150]	1.5 [38]	Spring-loaded lever	–	8 [203]
ES10	100 [500]	9 [229]	Lever	1.050 [26.7] / lever rev.	9 [229]
ES20			Top-mounted hand wheel	0.083 [2.1] / wheel rev.	
ES30	200 [1,000]	13 [330]	Side-mounted hand wheel	0.050 [1.3] / wheel rev.	14 [356]3
TSA750	750 [3,750]	with travel stops: 2.75 [70] without travel stops: 6 [152]	Rack & pinion, lever can be positioned in 30° increments	3.00 [76.2] / lever rev.	10.5 [267]3
TSA750H					14.5 [368]3
TSB100	100 [500]				21 [533]3
TSC1000	1,000 [5,000]	3.5 [89]	Inline hand wheel	0.10 [2.5] / wheel rev.	10 [254]3
TSC1000H					13 [330]3
TSF		4 [102]	Side-mounted hand wheel	0.013 [0.34] / wheel rev.	14 [356]3
TSFH					16.5 [419]3

1. Maximum travel depends on the grips or fixtures used during testing. The dimensions indicate distances without the use of grips or fixtures.
2. The clearance between the bottom of a mounted force gauge or sensor and the loading surface of the stand. Daylight will be reduced through the use of grips or fixtures. If the test sample size is close to the daylight specification above (or daylight less grip(s) or fixture(s)), a column extension may be necessary.
3. Column extensions are available.

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FAQs

Q: Can I use the TSB100 for spring testing?
A: The TSB100 is suitable for spring testing when equipped with the optional digital travel display (TSB001).

Q: What is the loading method for the ES20 model?
A: The ES20 model features a side-mounted hand wheel for loading.

Q: Is the TSFH model suitable for rubber and polymer testing?
A: Yes, the TSFH model can be used for rubber and polymer testing with the optional digital travel display (TSF001).

Documents / Resources

	**MARK-10 TSB100 Compression Test Stands** [pdf] Owner's Manual TSB100, TSC1000, TSF, TSFH, TSB100 Compression Test Stands, TSB100, Compression Test Stands, Test Stands

References

- **User Manual**