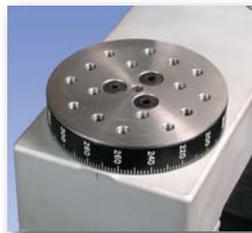


The TSTM-DC is an advanced motorized torque test stand, designed for a wide variety of applications requiring up to 100 lbFin (11.3 Nm) of torque, including closure torque testing, fastener torque testing, and more. The stand includes a torque loading plate with tapped holes for grip and fixture mounting. Stepper motor design eliminates speed variation with load. A lever-operated slider with travel stops makes engaging and disengaging samples quick and efficient. A modular mechanical design allows the stand to be configured for a variety of applications.

The TSTM-DC's controller adds a significant amount of sophistication, including integrated angle display and output, programmable angle travel limits, an extended speed range, PC control capability, programmable cycling, auto return, overload protection, password protection, and other features.

Features / Specifications

Maximum torque: 100 lbFin [11.3 Nm]
Speed range: 0.01 - 15 RPM [0.05 - 90°/s]
Speed accuracy: ±0.2% of setting, ±0% variation with load
Integrated angle indication with programmable travel limits
Maximum programmable travel limits: ±999,999.9° / ±2,777.77 revolutions
Rotational travel accuracy: ±0.7°
Rotational travel repeatability: 0.1°
Rotational travel resolution: 0.1°
Universal power supply: 80-250 VAC
Mounting holes for bench mounting
Base may be removed for alternative mounting
Grip / fixture mounting plate with 25 #10-32 threaded holes
Slider travel rate: 1.047" [26.6 mm] / lever revolution
CE mark



^ Rotating torque plate includes a matrix of tapped holes for grip or fixture mounting



The TSTM-DC is shown in a cap torque test, with a Series R50 torque sensor, M5i force/torque indicator, G1023 universal closure grip, and G1053 cap grip

Optional Hardware

- **Series R50 torque sensors**
Mount directly to the test stand. Capacities available from 10 ozFin to 100 lbFin (7 to 1,150 Ncm).
- **Force/torque indicator**
Displays the torque value. Several models are available. All mount directly to the test stand.
- **Multi-function cable, indicator to controller**
Connects an indicator to the controller. This single cable is used to transmit set points, overload signals, and torque data.
- **Serial cable, controller to PC**
For communicating with a PC for data output and computer control.
- **RS-232 to USB converter**



The TSTMH-DC is shown in a torsion spring test, with a Series R50 torque sensor and M5i force/torque indicator

Controller Features

Computer Control

An RS-232 port is provided to interface with a PC. A command set is provided to allow for full control from a PC. The following are required with PC control:

- Model M5i force/torque indicator
- 09-1162 multi-function cable
- 09-1056 serial cable

Digital Angle Indication

Rotational travel is indicated in degrees or revolutions, with output of angle data.

Programmable Angle Limits

The TSTM-DC can stop at or cycle between programmable upper and lower angle limits. Programmable in degrees or revolutions.

Overload Protection

Protects the torque sensor against overload (requires a Model M5i force/torque indicator and 09-1162 multi-function cable). The user programs the desired percentage of full scale of the sensor.

Auto-return

The torque table rotates to an angle limit or torque set point (requires a Model M5i force/torque indicator and 09-1162 cable), stops, and reverses direction at full speed to the other angle limit or torque set point.

Cycling / Dwell Time

Same as auto-return, but with the ability to program up to 100,000 cycles. Programmable dwell time time for upper and lower limits (set independently) can be set up for up to 10,000 seconds. Independent CW and CCW speeds may be programmed.

Programmable CW / CCW Button Functions

Programmable CW and CCW button functions - momentary motion, maintained motion, or auto.

Independent CW and CCW Speeds

Programmable independent speeds for CW and CCW directions.

Selectable Speed Units of Measurement (RPM and deg/s)

Password Protection

Prevents unauthorized changes to controller settings.

Ordering Information

Model No.	Description
TSTM-DC	Motorized torque test stand, vertical, 110V
TSTMH-DC	Motorized torque test stand, horizontal, 110V
09-1162	Multi-function cable, indicator to controller
09-1056	Serial cable, controller to PC
RSU100	Converter, RS-232 to USB
---	Column extensions

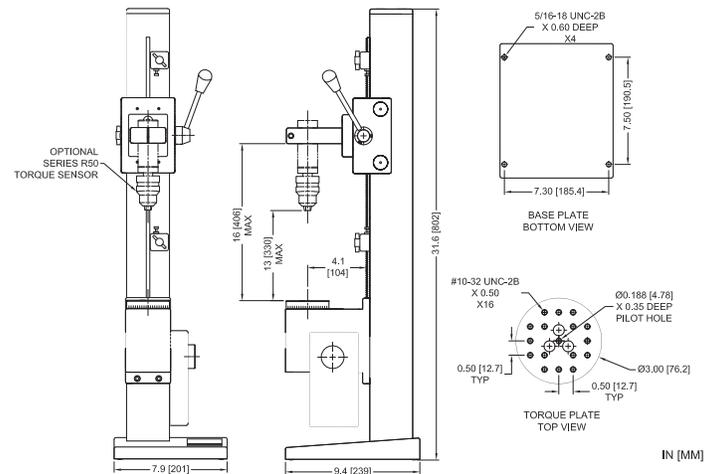
The TSTM/TSTMH contains a universal power supply (80 - 240V) and includes a 110V US power cord. Add suffix 'E' for Euro cord, 'U' for UK cord, or 'A' for Australian cord.

Ex: TSTM-DCE, TSTM-DCU, TSTMH-DCA

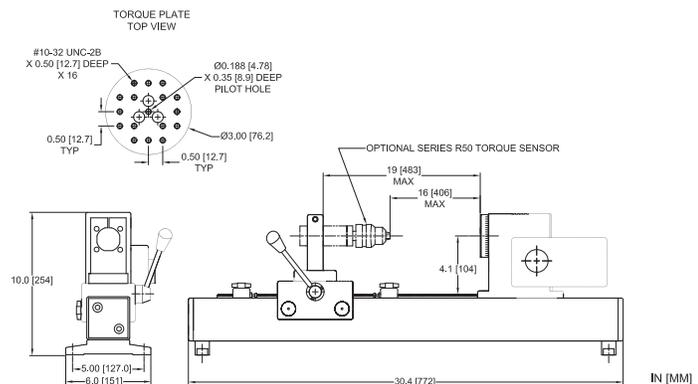
TSTM-DC / TSTMH-DC test stands include a tool kit

Dimensions

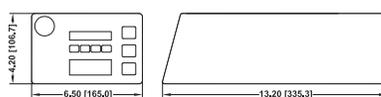
TSTM-DC



TSTMH-DC



CONTROLLER



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