



# Model CAL 110

Calibration Exciter

## CAL 110 EXCITER SPECIFICATIONS

- ❖ Maximum Force: 110 lbf peak (500 N peak) forced-air cooled
- ❖ Maximum Force: 55 lbf peak (250 N peak) convection cooled
- ❖ Maximum stroke: 1.5" (38 mm) p-p
- ❖ Recommended max stroke for calibrations: 1.0 " (25mm)
- ❖ Maximum velocity: 50 in/sec (1.3 m/s)
- ❖ Maximum acceleration, bare armature: 40 g's peak, cooled; 20 g's peak, un-cooled
- ❖ Bandwidth: 1.0 Hz to 10,000 Hz
- ❖ Armature and TIMF weight: 2.5 lbs (1.1kg)
- ❖ Weight, incl. trunnion base: 75 lbs (34kg)
- ❖ Dimensions: 14" X 12" X 14.5" H (355mm X 305mm X 370mm H)
- ❖ Max. DUT weight: < 900gm
- ❖ Bolt exciter to floor or T-slot table
- ❖ Transverse acceleration, normal to driven-axis:



**Actual base not shown**

Below 20 Hz, 1" p-p or 10 g's	< 5%	20 – 2kHz (10 g's), typ.	< 10%
100 & 160 Hz (10 g's)	< 5%	20 – 2kHz, (10 g's) max.	<25% @ 2 freq.

- ❖ Total Harmonic Distortion:

5 Hz, 0.25 g's peak	< 25%	100 Hz, 10 g's	< 1%
10 Hz, 1 g	< 10%	200 Hz, 10 g's	< 1%
20 Hz, 10 g's	< 10%	500 Hz, 10 g's	< 1%
20 Hz, 1 g's	< 5%	≥ 1000 Hz, 10 g's	< 1%

- ❖ To reduce THD: add mass to armature; operate at smaller displacements and accelerations