

TM 445 CIRCULAR DIAPHRAGM

GENERAL DESCRIPTION

The equipment is used for studying the stress and deflection of a thin diaphragm.

The circular aluminum alloy diaphragm is clamped around its edge by two heavy steel flanges. Internal pressure is applied to the diaphragm by a hydraulic hand pump. Pressure in the diaphragm is indicated on a pressure gauge. A dial gauge is fitted onto a cross bar to measure the diaphragm surface profile. Scale on the cross bar indicates the dial gauge position.

The strain gauges are fitted onto the diaphragm at different angles and radii. Each strain gauge is wired to form a full bridge with temperature compensation gauge and zero adjustment in a bridge box with strain gauge indicator.



TYPICAL EXPERIMENTS

- Deflection of circular diaphragm under pressure.
- Strains on the diaphragm surface under pressure.

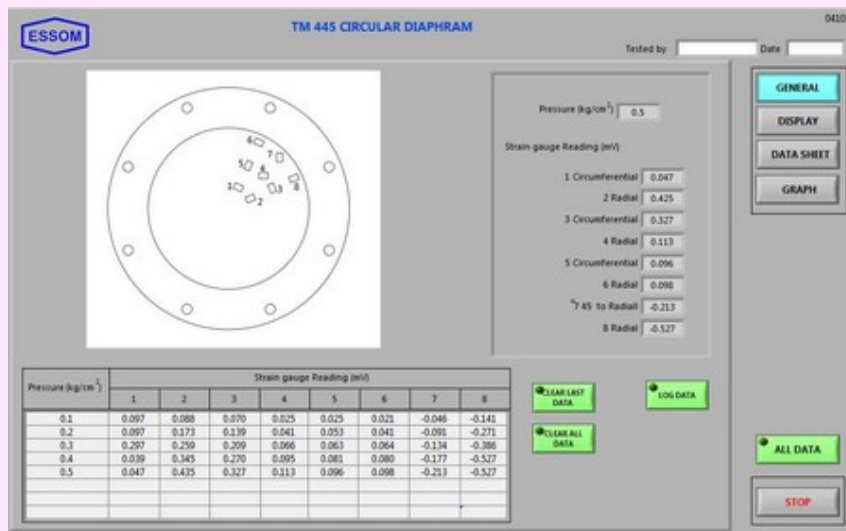
TECHNICAL DATA

- Diaphragm :
 - Effective diameter : 200 mm.
 - Maximum internal pressure : 60 kN/m².
- Pressure gauge : 1 kg/cm².
- Number of strain gauges : 8 ea.
- Dial gauge : 1 ea 0-20 mm x 0.01 mm graduation.
- Bridge box and strain indicator : 8 inputs.
- Power supply : 220V 1Ph 50Hz. Other power supply is available on request.

OPTIONAL EQUIPMENT

- TM 445-050 Computer Interface

This includes pressure sensor, computer interface unit, and software for data display and analysis by computer (separately supplied).



Net (unpacked) shipping dimensions WxLxH : 60 x 65 x 41 cm
 Net weight : Approx. 31 kg