

Premium Caisson - High Accuracy Depth Gauge



Application

Used to measure the pressure inside pressure chambers, e.g. caissons, living chambers, hyperbaric chambers and decompression chambers.

Standard Dial Size: 150mm.

Accuracy: +/- 0.25% fsd. Every Caisson Gauge is issued with a point-by-point Test Certificate of readings on its final test. The error in reading is guaranteed not to exceed one quarter of one percent of full scale range at any point of the scale on either rising or falling pressure.

Ranges: Usually calibrated in metre & feet of 'Sea Water'

Ranges to suit customer requirements

Operating Instructions

The gauge has a sealed chamber, this allows the owner to test the accuracy of the gauge without the need for a special chamber, and can be tested by fitting directly to a Dead Weight Tester. The gauge must be kept in its operating environment to allow for temperature stabilisation, and should be equalised and its zero adjusted before each operation, either calibration or in use. This is achieved by opening the plug/cap and re-tightening it, thus exposing the chamber to atmosphere via the second connection at the side or the rear of the gauge. The Gauge can now have its pointer reset to zero.

Specification

Sensing Element:

'C' type bourdon tube, specially heat treated copper beryllium (Cu Be₂)_m to maintain stability.

Drive Mechanism:

Non-ferrous jewelled movement, specially designed and manufactured to achieve high accuracy and smooth operation, fitted with magnetic rotation drive. This in turn drives a balanced magnetic disc, rotating on an accurately ground shaft with ruby jewels as bearings.

Dial:

White aluminium with mirror scale, black markings and zero adjustment.

Pointer:

Aluminium with nickel plated brass collet accurately balanced with knife edge tip to eliminate parallax error.

Case & Bezel:

Black powder coated mild steel.

Window:

Acrylic 3mm thick, fitted with zero adjuster.

Mounting

Type 2402 – Bottom connection surface

Type 2406 – Back connection front flange 3 hole fixing

Type 2408 – Back connection front flange clamp fixing (150mm ONLY)