# SUPER TEST GAUGE ACCURACY 0.15%

# Budenberg

Budenberg Standard Test Gauges are generally recognised as a world leader for accuracy and quality and are used by many Calibration Laboratories and workshops worldwide. The 5414 now provides a higher specification and incorporates many additional features as standard.

Housed in a new die cast safety pattern case, the 5414 meets the full requirements of EN837 including a brighter anti-parallax mirror scale & knife edge pointer for accurate repeatable readings. Recalibration is simplified by inclusion of a micrometer adjustable pointer and printed calibration marks on the dials.

All units are supplied with a detailed calibration certificate which is traceable to National Standards.

Sizes 250mm dial diameter

#### Mounting

Direct, Surface Mounting Flush Panel Mounting with clamp or three hole fixing

#### Case

LM6M Aluminium casting to BS1490 utilising a full Safety Pattern solid baffle wall with blow out back, finish to BS381C

#### Bezel

Direct / Surface mount - Stainless Steel 316L polished. Flush mount - Die cast Aluminium finished in black.

#### Scale Ranges

0 to 1 Bar up to 0 to 400 Bar Pressure Equivalent units of Pressure / Vacuum Available Dual Scale units or custom scales can be provided, contact our Sales Department with your requirements.

#### **Pressure Element**

Up to 70 Bar Beryllium Copper bourdon tube & Brass Chrome plated connection

From 71 Bar up to 400 Bar Beryllium Copper coil tube & Brass Chrome plated connection

#### Overload

Units will withstand the following overload pressure conditions for a short period:

Max Scale Value	Over Pressure to be Applied
≤ 80 Bar	130% of Maximum Scale Value
≥ 81 to 100 Bar	120% of Maximum Scale Value
≥ 601 Bar	115% of Maximum Scale Value

# **Pressure Connection**

1/2" BSP or NPT

3/8" BSP or 1/2" NPT as Standard on Flush Mounting Units Other connections including HF2 high pressure are available contact our Sales Office for Details



Accuracy Class 0.15% of FSD as defined in EN837-1

#### Dial

White anodised Aluminium with Mirror Scale with Anti Parallax mirror scale for accurate reading. Option: Dual scales or special dial markings are available

#### Pointer

Micrometer Adjustable, Knife-edge, Stainless Steel coloured Black

## Movement

Non Ferrous with Glass Bearings for Improved Accuracy & Sensitivity

# Window

Safety window

Environmental Rating Dust Proof and Splash Proof to IP54

#### Temperature

Operating: -20 to +60 Degrees C Storage: -40 up to + 70 Degrees C Options: For lower or higher operating temperatures, please contact our Sales Office.

#### Certification

All instruments are individually calibrated and have an unique Serial Number printed on the dial. A Certificate of Conformity traceable to National Standards is supplied free of charge.

#### Calibration

All units are individually calibrated to suit the test medium being used i.e. Gas or Liquid. It is important therefore to specify the medium at time of order

#### Safety

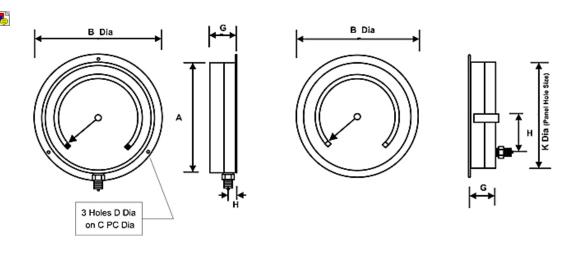
All units are manufactured to comply with EN 837-1, to S1 specification and other regulatory standards including P.E.D.

Rev-04 August 2009

Designed and Manufactured in UK.

Datasheet BUD-062

# Dimensions



**Direct / Surface Mounting** 

Flush Clamp Mounting

Model No	Α	В	С	D	G	Н	K	Weight
250mm 5414 Surface Mounting	259mm	290mm	273mm	6.4mm	66mm	20mm		2.9 Kg
250mm 5414 Flush Mounting	283mm				90mm	80mm	270mm	2.3 Kg

## **Options**

Oil free Test Gauges are available, the tubes and blocks of the Model 5414 are vapour de-greased before assembly and the strictest precautions are taken to see that no oil enters the tube during manufacture, the dial is marked "Use No Oil".

UKAS traceable certification available on request.

#### **Accessories**

For high temperature applications such as steam, see our range of syphons and adaptors. - See separate Datasheet.

We can supply Needle, Ball or 2 Valve manifolds for the Model 5414 – See separate Datasheet.

The manifolds in addition to allowing the instrument to operate normally allows the following: -

- a). Checking of gauge zero at line pressure.
- b). Complete isolation of the instrument.
- c). Inline calibration, allows in situation calibration

## **Applications**

a) Calibration of pressure gauges, transducers and transmitters.

- b) Calibration of pneumatic controllers, valves etc.
- c) Measurement of pressure on test beds in Aero, hydraulic systems, diesel engine injection systems.
- d) Setting of pressure relief valves.
- e) Measurement of pore water pressure in soil mechanics laboratories.
- f) Efficiency testing of steam turbines in power stations, gas turbines and compressors.

Specifications and dimensions in this leaflet, are subject to change without prior notice

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