



## Model: 5214

Our 0.25% accuracy Standard Test Gauge is undoubtedly recognised as a world leader for its accuracy and, of course, Budenberg Quality.

This gauge incorporates a base test gauge accuracy with to a maximum of 500 graduations where possible, along with a knife edged pointer and an anti-parrallax mirror to help reduce the chance of human error. The Standard Test Gauge is an obvious choice when accuracy is paramount.

The standard test gauge meets all the requirements of EN837 and all units are supplied with a detailed calibration certificate with is traceable to National Standards. The gauge is also dust and splash proof to IP 54 standards.

Recalibration is simplified with the inclusion of a micrometer adjustable pointer as a standard feature.

### Sizes

150mm, 200mm & 250mm dial diameter

### Mounting

Direct, Surface Mounting is standard with a bottom connection. Flush Panel Mounting with clamp/three-hole fixing is also an option.

### 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 600 mBar up to 0 to 1,600 Bar Pressure  
0 to 10 psi and up to 25,000 psi  
Equivalent units of Pressure / Vacuum Available  
Dual Scale units or custom scales can be provided on request.

### Pressure Element

Up to 70 Bar Beryllium Copper bourdon tube & Brass Chrome plated connection  
From 71 Bar up to 600 Bar Beryllium Copper coil tube & Brass Chrome plated connection  
From 601 Bar up to 2500 Bar Ni-Span C Coil & Stainless Steel connection  
Option for Stainless Steel on request.

### 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 Bar	115% of Maximum Scale Value

### Pressure Connection

1/2" BSP or NPT on direct / surface mounting and  
3/8" BSP or 1/4" NPT as Standard on Flush Mounting Units  
Other connections including HF2 high pressure are available; contact our Sales Office for Details.

## STANDARD TEST GAUGE ACCURACY 0.25%



### Accuracy Class

0.25% 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, Aluminium coloured Black

### Movement

Non Ferrous with Glass Bearings for Improved Accuracy & Sensitivity

### 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

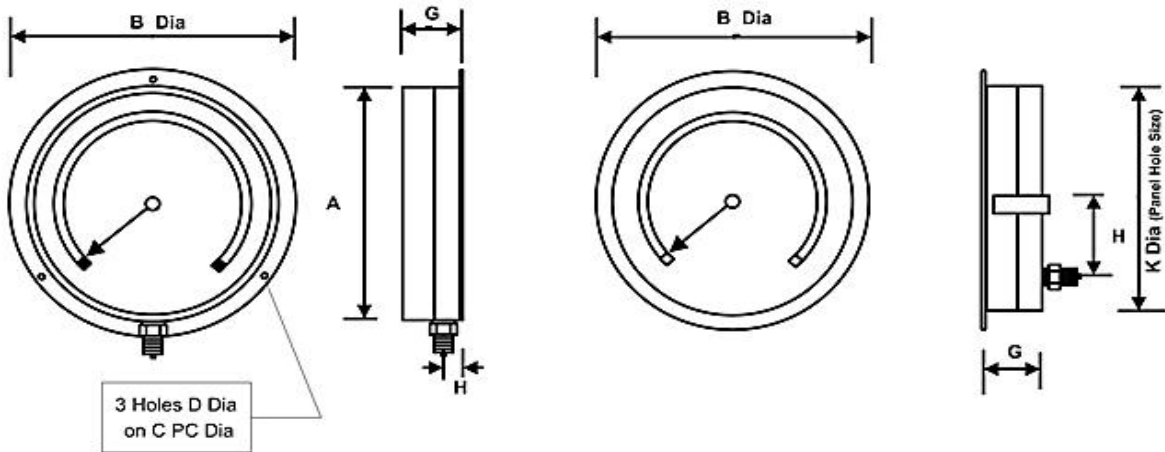
All instruments are individually calibrated and have an unique Serial Number printed on the dial. A Certificate of Conformity traceable to National Standards is supplied free of charge.

### 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.



Direct / Surface Mounting

Flush Mount - Clamp Fixing

Model No	A	B	C	D	G	H	K	Weight
150mm 5214FGP Surface Mounting	155mm	180mm	167mm	5.3mm	58mm	24mm		1 Kg
150mm 11/5214GP Flush Mounting	171mm				90mm	52mm	165mm	1 Kg
200mm 5214FGP Surface Mounting	207mm	235mm	221mm	5.3mm	61mm	24.4mm		2.3Kg
200mm 11/5214GP Flush Mounting	225mm				90mm	80mm	215mm	2 Kg
250mm 5214FGP Surface Mounting	259mm	290mm	273mm	6.4mm	66mm	20mm		2.9 Kg
250mm 11/5214GP Flush Mounting	283mm				90mm	80mm	270mm	2.3 Kg

**Options**

Oil free Test Gauges are available, the tubes and blocks of the Model 5214 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".

**Certification**

We supply a point -by-point test certificate with every standard test gauge. A typical example is available on request. All units are manufactured to comply with EN837 to S1 specification and other regulatory standards to include P.E.D.

UKAS traceable certification available on request.

**Pressure Medium**

If a gauge is calibrated on air and subsequently used on liquid, the weight of the liquid in the tube will weight down the end of the tube and cause an accuracy error. This effect is significant with graduations up to and including 16 bar (250 psi) and so we must be advised on the medium for which the gauges will be used: liquid or air; the dials of the gauge will be marked accordingly.

Gauges with a vacuum scale or with a compound scale (pressure & vacuum) are calibrated on air. Gauges with graduations above 16 bar (250 psi) are usually calibrated on oil. Gauges graduated above 16 bar and not exceeding 40 bar (250 & 600psi) can be tested on air at customers' request.

**Dial Markings**

Maximum Graduation	20	25	30	40	50	60	80	100	120	150	160
Number of dial divisions (150mm dial)	200	250	300	200	250	300	160	200	240	300	160
Number of dial divisions (200 & 250mm dial)	400	500	300	400	500	300	400	500	240	300	320

**Applications**

Our Standard Test Gauges can be used for a number of applications including: -

- 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.