

MODELS- 1221



PHENOLIC SAFETY PATTERN GAUGE

APPLICATIONS

Gas and Steam in excess of 25 Bar pressure can represent danger if there is a rupture in the Bourdon Tube measuring this gas. To minimize the danger, gauges in this application should be Safety Pattern type, having solid front between Bourdon tube and dial, safety window and blow-out back to allow any blast to release to the rear of gauge. Although there is not necessarily any great risk in the use of gauges for gases at pressure less than 25 Bar, a blow-out disc should be incorporated and the purchaser should have regard to the nature of the gas and the installation conditions and, if necessary, order a gauge of the Safety Pattern type.

VIBRAGAUGE® Option also available.

VIBRAGAUGE® for Dampening of vibration & pulsation without liquid filling.

STANDARD SPECIFICATION

Solid Front Safety Pattern Gauge
(Weatherproof Construction to IP65)

Sizes

4½" (115mm)

Case/ Bezel

Moulded Fibreglass / Phenolic
Full Safety Pattern Construction
Threaded Fibreglass / Polycarbonate Window Ring
Elastometer with integral O' Ring Seal
Polopropylene with Reinforced Fibreglass Blow-Out Back

Socket & Bourdon Tube

316 Stainless Steel

Movement

Stainless Steel Construction

Blowout Protection

S3 Baffle wall with blow-out backplate

Dial

White Anodised Aluminium (Black Printing)

Pointer

Black Aluminium

Window

Laminated Safety glass

Traceability

All instruments are individually calibrated and have an unique Serial Number

Certification available on request

- Certificate of Conformity Traceable to National Standards
- Group Certification (Pressure Test Calibration Statement)
- Point to Point Test Certificate
- BS EN 10204 3.1 Material Certification

Safety

All units are manufactured to comply with EN 837-1, S3 Safety Pattern specification and other regulatory standards including PED 2014/68/EU.

Installation instructions

Refer to EN 837-2 and our [Guidance On Use of Equipment](#) data sheet.

Accuracy class

ACCURACY CLASS EN837-1 (Optional)			Higher Pressure
	0 - 600 bar	>600 - 1600 bar	>1600 - 2500 bar
115mm	1.0 (0.6)	1.0	1.6

0.5% Accuracy on request (Consult Sales)

Higher Ranges on request (Consult Sales)

Over-pressure

0 - 100 bar	>100 - 600 bar	>600 - 1600 bar	>1600 - 2500 bar
1.25 x FSD	1.15 x FSD	1.10 x FSD	1.10 x FSD

Scale Range

Vacuum / Compound to -1 to 0 to -1 to 24 bar (Where applicable)

Standard 0 to 2500 bar

Or other equivalent units of pressure or vacuum

PED 2014/68/EU limits, GAS Group.1 <3000 bar,

Pressure Connection Thread

½", ¼", ⅜", ½" NPT, BSP, BSPT (See High Pressure Options)

MAX PRESSURE EN 837-1			
THREAD EN837	NPT (316ss / Monel)	BSP (316ss / Monel)	BSPT (316ss / Monel)
½"	400 bar	400 bar	400 bar
¼"	1000 bar	1000 bar	1000 bar
⅜"	1000 bar	1000 bar	1000 bar
½"	1000 bar	1600 bar	1000 bar



Model-1221

[See Page-2 for Dimension](#)

Operating Temperature Range EN837

-20° to 60°C (-4°F to 140°F)

[Options for lower/Higher operating ranges \(Contact Sales\)](#)

Temperature Error

Additional error when temperature changes from reference

Temperature of 20°C (68°F) ±0.4% for every 10°C (18°F) rising or Falling % of span

Optional Extras

- Micro adjustable pointer /Black finish
- Optional dial materials & Custom markings
- ISO 15156 / NACE MR-01-75 wetted parts
- Perspex window
- Orifice Restrictor Screw (standard Ø0.9mm, Ø0.4mm on request)
- Customer logo printed on dial
- Nitelitegage® (See data sheet)
- Vibragauge® (See data sheet)
- Snubbagauge® (See data sheet)
- Gauge overpressure up to 130% of FSD

[Further options on request](#)

Available with a wide range of accessories

Interposed: Syphons, Snubbers, Overrange gauge protectors.

Additional: Swivel Adaptors, Valves, Manifolds etc ensures that STEWARTS can provide you with the right product to suit any individual application or requirement.

High Pressure Options Available

Ordering Parameters, Please state the following: SIZE, MODEL NO, SCALE RANGE, CONNECTION, PRESSURE MEDIUM & OPTIONAL EXTRAS

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

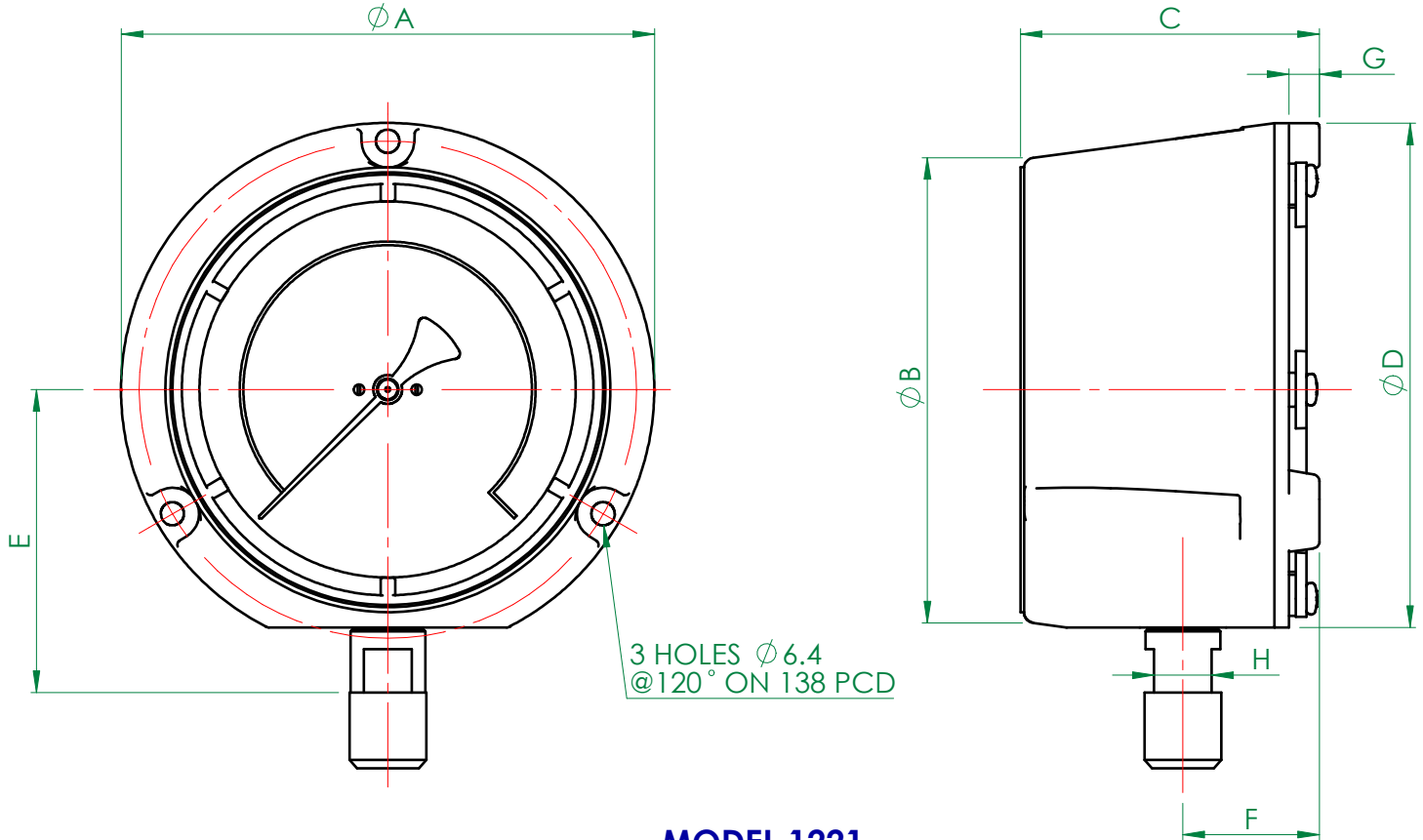
HIGH PRESSURE THREAD OPTIONS (Up to 2500 bar)						
GAUGE	TUBE MP (Up to 20 ksi)			TUBE HP (Up to 36 ksi)		
	¼	⅜	⅝	¼	⅜	⅝
63mm	M	M				
100mm	M/F	M/F	M	M/F	M	M
150mm	M/F	M/F	M	M/F	M	M

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Surface mounted gauges should be fitted with distance pieces of not less than 3/4" (20mm) long to allow them to be mounted away from wall or panel.



**MODEL 1221
DIRECT MOUNTED**

General Arrangement Dimensions in mm, tol' ± 1mm

Dim	UNIT	A	B	C	D	E	F	G	H
Dial Ø	mm	148	129	83	140	84	38	8.5	16
	in	5.8	5.1	3.3	5.5	3.3	1.5	0.3	0.6

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