

# MODELS-1011, 1012, 1013, 1014



## Aluminium Case Safety Pattern Pressure Gauges

### 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.

### STANDARD SPECIFICATION

Aluminium Safety Pattern Gauge with Baffle Wall (Weatherproof to IP54)

### Sizes

63, 100, 150, 200, 250 and 300 mm

### Case/ Bezel

Aluminium Black Stove Enamelled Finish. Solid front between bourdon tube and dial.  
**Bezel** Brass with Lacquered Finish. (Black Stove Enamelled on 1013 & 1014 Models)

### Socket & Element

Brass or 316 Stainless Steel (Ph.Br. or BeCu Element, Range Dependant)

### Movement

Brass or Stainless Steel

### Blowout Protection

S3 Safety Pattern with Baffle Wall and Blow-out Back

### 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
63mm	1.0	1.6 *	N/A
100 to 300 mm	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

63mm gauge 0 to 1400 bar \*

100 to 300 mm gauges 0 to 2500 bar

Or other equivalent units of pressure or vacuum

PED 2014/68/EU limits, GAS Group.1 <1000 bar, GAS Group.2 <3000 bar

### Pressure Connection Thread

1/8", 1/4", 3/8", 1/2" NPT, BSP, BSPT (See High Pressure Options)

MAX PRESSURE EN 837-1			
THREAD EN837	NPT Brass (316ss/Monel)	BSP Brass (316ss/Monel)	BSPT Brass (316ss/Monel)
1/8"	400 bar	400 bar	400 bar
1/4"	600 (1000) bar	600 (1000) bar	600 (1000) bar
3/8"	600 (1000) bar	600 (1000) bar	600 (1000) bar
1/2"	600 (1000) bar	700 (1600) bar	600 (1000) bar

Model-1012 Direct Mounted



Model-1011 Surface Mounted (Bottom Connection)

Model-1012 Direct Mounted (Bottom Connection)

Model-1013 Flush Mounted Screw Fixing (Rear Connection)

Model-1014 Flush Mounted Clamp Fixing (Rear Connection)

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
- Monel according to ISO 15156 / NACE MR-01-75 wetted parts
- Other pressure connections (Including high pressure)
- Perspex window
- Orifice Restrictor Screw (standard Ø0.9mm, Ø0.4mm on request)
- Customer logo printed on dial
- Vibragauge® (See data sheet)
- Snubbagauge® (See data sheet)
- Gauge over-pressure up to 130% of FSD

Further options on request

### Available with a wide range of accessories

Syphons, Snubbers, Overrange gauge protectors, Valves, Manifolds, Diaphragm seals, Swivel adaptors, etc ensures that STEWARTS can provide you with the right product to suit any individual application or requirement.

### High Pressure Options Available (316ss / Monel Only)

HIGH PRESSURE THREAD OPTIONS (Up to 2500 bar)						
GAUGE	TUBE MP (Up to 20 ksi)			TUBE HP (Up to 36 ksi)		
	1/4"	3/8"	9/16"	1/4"	3/8"	9/16"
63mm	M	M	/	/	/	/
100mm	M/F	M/F	M	M/F	M	M
150mm	M/F	M/F	M	M/F	M	M

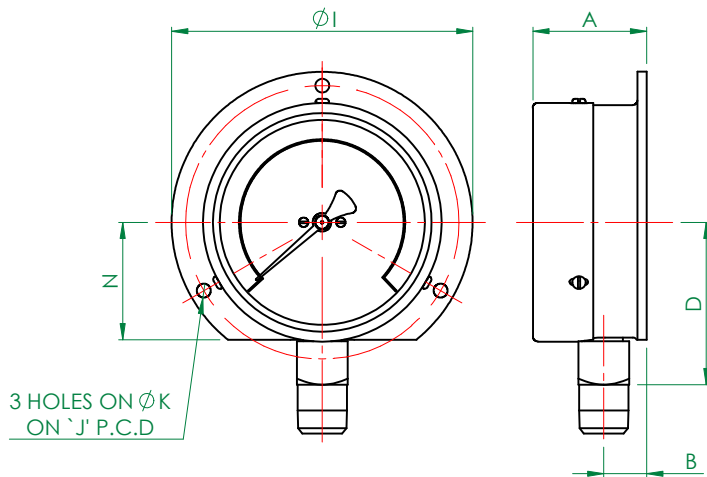
Ordering Parameters, Please state the following: SIZE, MODEL NO, SCALE RANGE, CONNECTION, PRESSURE MEDIUM & OPTIONAL EXTRAS

# MODELS-1011, 1012, 1013, 1014

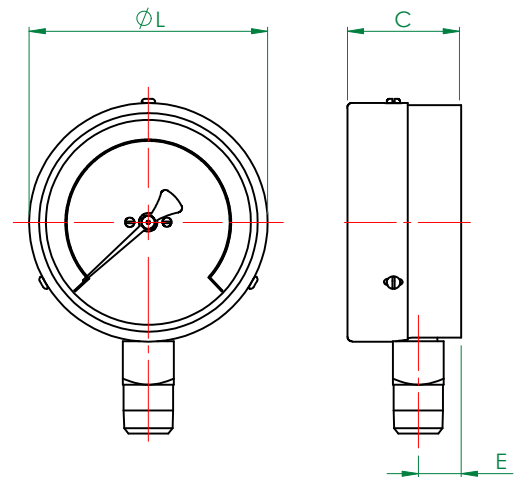


## Aluminium Case Safety Pattern Pressure Gauges

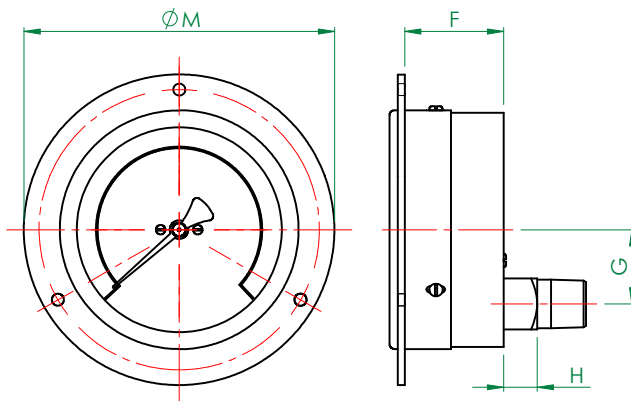
Surface mounted gauges should be fitted with distance pieces of not less than 3/4" (20mm) long to allow them to be mounted away from wall or panel.



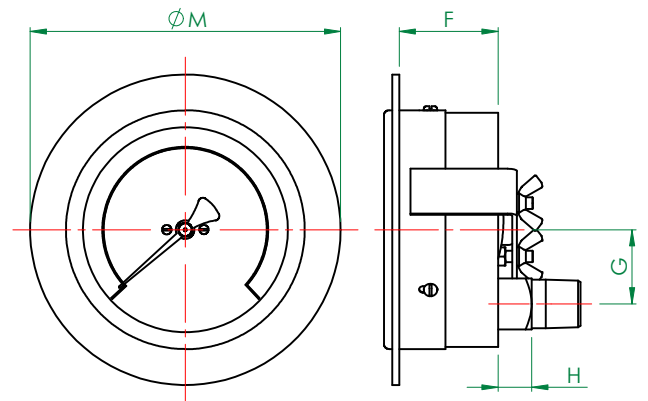
**MODEL 1011  
SURFACE MOUNTED**



**MODEL 1012  
DIRECT MOUNTED (STANDARD)**



**MODEL 1013  
FLUSH MOUNTED SCREW FIXING**



**MODEL 1014  
FLUSH MOUNTED CLAMP FIXING**

General Arrangement Dimensions in mm, tol' ± 1mm															
Dim	A	B	C	D	E	F	G	H	I	J	K	L	M	N	PANEL CUT OUT
2.5" (63mm)	35	11	35	38.5	11	29	21	6	86	75	3.6	65	90	32	70
4" (100mm)	49	18	49	70	18	43	32	14	130	118	6	103	134	51	112
6" (150mm)	53	18	53	92	18	50	32	14	183	168	6	153	185	75.5	165
8" (200mm)	54	18	53	122	17	46	52	16	235	221	5.5	204	239	103	215
10" (250mm)	55	17	55	148	17	49	52	16	290	273	6.5	256	302	129	270
12" (300mm)	56	17	56	173	17	51	52	16	346	325	6.5	306	369	153	320

## STEWART-BUCHANAN GAUGES LTD

Sales Office & Manufacturing Facility - 7 Garrel Road, Burnside Industrial Estate, Kilsyth, Glasgow G65 9JX, SCOTLAND  
Tel: +44 (0)1236 821533 | Fax: +44 (0)1236 824090 | E-mail: sales@stewarts-group.com | Web: stewarts-group.com

