

MODELS - 3010, 3011, 3012



SUBSEA Pressure Gauges

Standard Hyperbaric test 1.1 x Design Depth Pressure.

APPLICATIONS

Specially developed to meet the need for gauges working at great depths under the sea and in Hyperbaric conditions. Measures the true pressure of the system with reference to sea level atmospheric pressure where the gauge case is sealed. Reinforced case prevents ambient pressure affecting the inlet pressure reading.

STANDARD SPECIFICATION

SUBSEA Gauge (protected against complete, continuous submersion in water to IP68)

Sizes

63, 100 and 150 mm

Case/ Bezel

AlSi 316 Stainless Steel (Also available in Monel) (Manufactured from a solid billet). Pressure tight for depths up to 1,000 ft (300 mtr) of water.

Special gauges can be manufactured for depths up to 10,000 ft (3,000 mtr) of water on 100mm (4") gauges only.
Liquid filled (recommended)

Socket & Element

316 Stainless Steel (Also available in Monel see **Optional Extras**)

Movement

Stainless Steel Construction

Dial

Anodised Aluminium

Gauges can be supplied with either White lettering on Black background (non glare) or Black lettering on White background (Please state preference)
bespoke colours and designs are available upon request.

Pointer

Black Aluminium

Window

Toughened glass on 1000ft 63 & 100mm gauges

Acrylic on 1000ft 150mm gauge & 4000,5000 & 10000ft 100mm gauges.

Traceability

All instruments are individually calibrated and have an unique Serial Number on Dial.

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

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	
100mm	1.0 (0.6)	1.0	1.6	
150mm	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

Rear Connect

Vacuum to 1,400 bar (20,000 psi) on 63mm gauge

Vacuum to 3,000 bar (45,000 psi) on 100 & 150mm gauges

Bottom Connect

Vacuum to 700 bar (10,000 psi) on 63mm gauge

Vacuum to 700 bar (10,000 psi) on 100 & 150mm gauges

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 (316ss / Monel)	BSP (316ss / Monel)	BSPT (316ss / Monel)
1/8"	400 bar	400 bar	400 bar
1/4"	1000 bar	1000 bar	1000 bar
3/8"	1000 bar	1000 bar	1000 bar
1/2"	1000 bar	1600 bar	1000 bar

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

DATA SHEET REF: SUBSEA-REV01-15

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

Dry, Liquid Fillable or Pre-Filled. VIBRAGAUGE® Option also available. VIBRAGAUGE® for Dampening of vibration & pulsation without liquid filling. With liquid-filled case for applications with high dynamic Pressure pulsations or vibration.

Model-3012 Flush Mounted Screw Fixing (Rear Connection)



Model-3010 Direct Mounted (Bottom Connection)
Model-3011 Surface Mounted (Bottom Connection)
Model-3012 Flush Mounted Screw Fixing (Rear Connection)

See Page-2 for dimension

Operating Temperature Range EN837

-20° to 60°C (-4°F to 140°F) without loss of accuracy.

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

- Optional dial materials & Custom markings
- Monel according to ISO 15156 / NACE MR-01-75 wetted parts
- Other pressure connections (Including high pressure)
- Orifice Restrictor Screw (standard Ø0.9mm, Ø0.4mm on request)
- Customer logo printed on dial
- Liquid filled / Suitable for liquid filling
- Nitelitegag® (See data sheet)
- Vibragaug® (See data sheet)
- Gauge over-pressure up to 130% of FSD

Further options on request

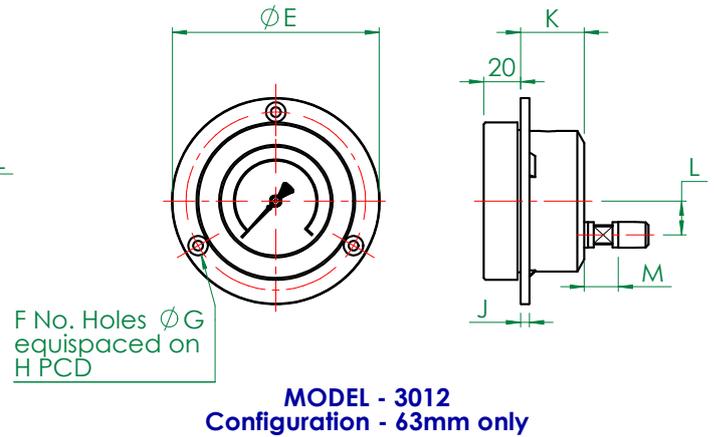
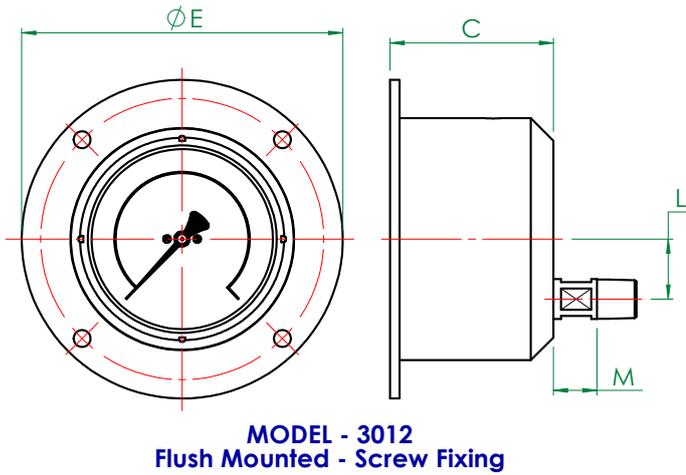
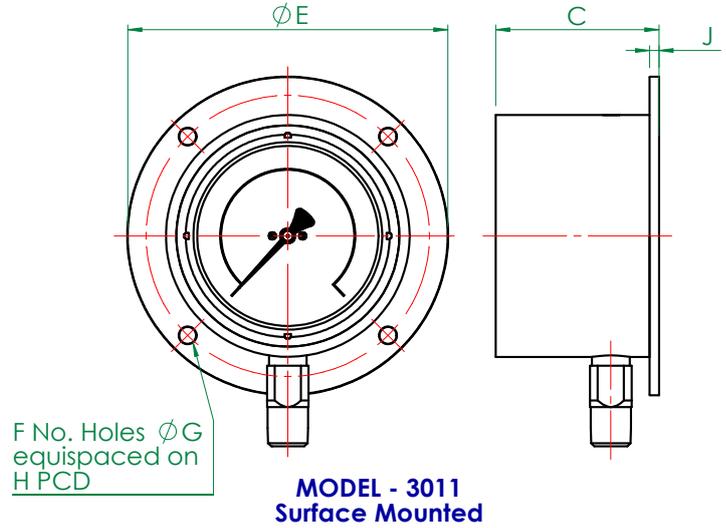
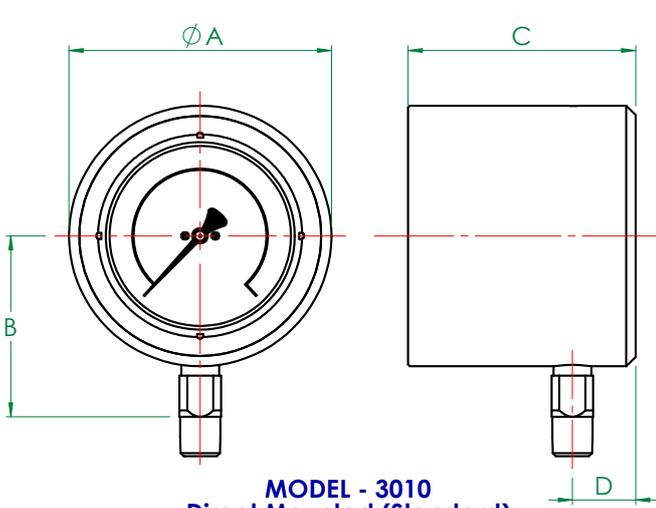
*** Gauges can be Recalibrated (Please return to manufacturer)**

High Pressure Options Available

GAUGE	HIGH PRESSURE THREAD OPTIONS (Up to 2500 bar)					
	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

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DEPTH	General Arrangement Dimensions in mm, tol' ± 1mm													
	Dim	A	B	C	D	E	F (No.)	G	H	J	K	L	M	PANEL CUTOUT
1000ft/300m	Dial Ø													
	2.5" (63mm)	84	50	53.3	19	110	3	5.2 (CSK)	95	4.75	34	18	18	80
	4" (100mm)	129	91.3	86.5	25.5	170	4	9	150	5	N/A	32	23	133
4000ft/1,200m	6" (150mm)	178	116	134.5	33.5	240	4	10.5	208	10	N/A	32	23	185
	4" (100mm)	129	91.3	105.5	33.5	170	4	9	150	5	N/A	32	23	133
5000ft/1,500m	4" (100mm)	132	92.8	105.5	33.5	170	4	9	150	5	N/A	32	23	136
10,000ft/3,000m	4" (100mm)	139	96.5	120.9	33.9	180	4	9	160	5	N/A	32	23	143

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