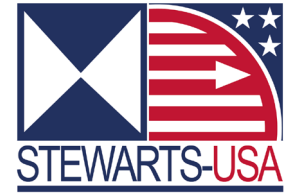


# MODELS - 8022, 8024



## Welded Stainless Steel Diaphragm Compensated SUBSEA Stainless Steel Pressure Gauges

### APPLICATIONS

Pressure gauges with volume compensating diaphragm; developed to compensate systems that are affected by ambient pressure during submersion and to indicate the system pressure during subsea operations at depth. The compensated gauge 'red zone' indicates that depth (ambient) pressure is greater than that of the system in order to avoid negative (crushing) forces on more delicate components.

### STANDARD SPECIFICATION

Design to EN 837-1.  
100% filled with no expansion bubble  
Welded, hermetically sealed, socket

### Compensating Device

*Stewarts-USA unique Welded stainless steel diaphragm – for robustness and durability*

### Sizes

63mm (2.5"), 100mm (4.0") and 115mm (4.5")

### Case/ Bezel / Socket & Element

316 Stainless Steel  
Removable bezel design allows repair or recalibration

### Movement

Precision Stainless Steel Construction

### Dial

Anodised Aluminium  
All gauges supplied as white lettering on black background as standard (Non glare), bespoke colours and designs are available upon request

### Pointer

White Painted Aluminium

### Window

Acrylic

### Traceability

All instruments are individually calibrated with a 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

0 - 10,000 psi = 1.0% of span on 4.0" & 4.5" (1.0% on 2.5").  
15 & 20K psi = 1.0% of span on 4.0" & 4.5" (1.5% on 2.5").  
30K psi & up = 1.5% of span on 4.0" & 4.5"

Higher Ranges on request (Consult Sales)

### Over-pressure

0 - 1500 psi	>1500 - 10000 psi	>10000 - 20000 psi	>20000 - 35000 psi
1.25 X FSD	1.15 X FSD	1.10 X FSD	1.10 X FSD

### Scale Range

Vacuum / Compound to 30"Hg-0 / 30"Hg-0-300 psi  
63mm (2.5") gauge 0 to 20000 psi  
100mm (4.0") & 115mm (4.5") gauges 0 to 35000 psi  
Or other equivalent units of pressure or vacuum

**PED 97/23/EC limits, GAS Group.1 < 15000 psi, GAS Group.2 < 40000 psi**

### 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 (6000 psi)	400 bar (6000 psi)	400 bar (6000 psi)
1/4"	1000 bar (15000 psi)	1000 bar (15000 psi)	1000 bar (15000 psi)
3/8"	1000 bar (15000 psi)	1000 bar (15000 psi)	1000 bar (15000 psi)
1/2"	1000 bar (15000 psi)	1600 bar (23200 psi)	1000 bar (15000 psi)



Model-8022 Direct Mounted (Bottom Connection)

Model-8024 Flush Mounted Clamp 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

- Aegis-Guard
- Micro adjustable pointer
- Dial White Anodized Aluminium (Black Printing)
- Dial 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
- Vibragauge® (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

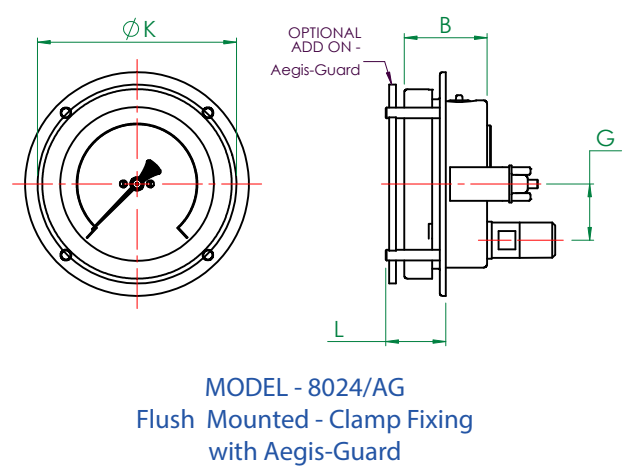
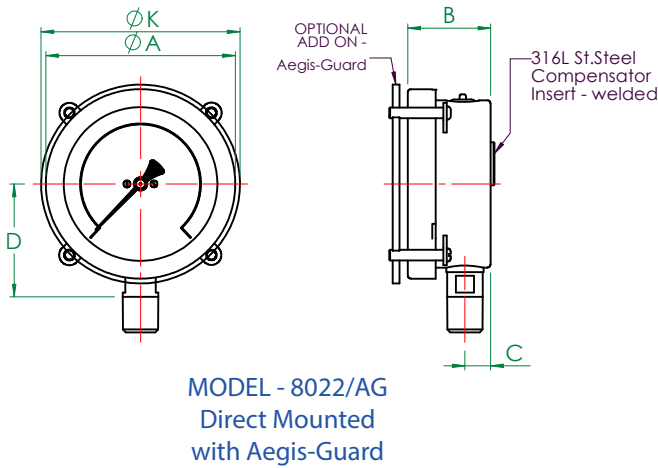
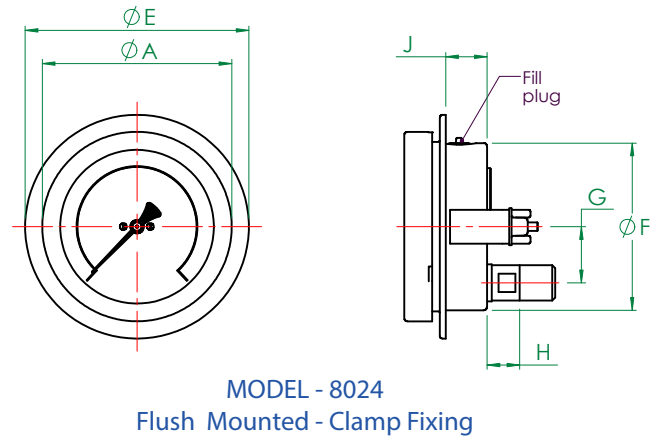
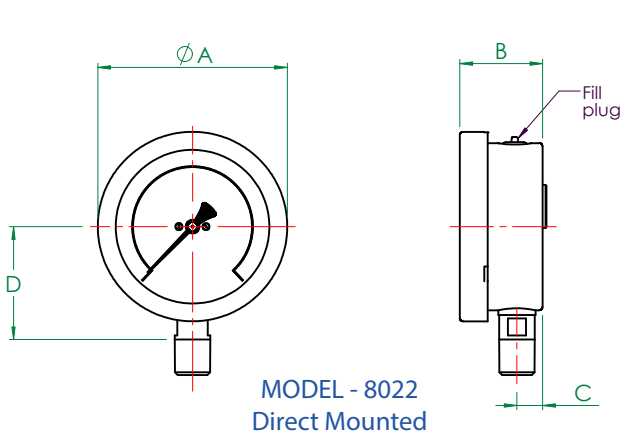
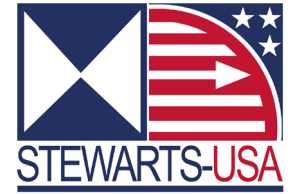
HIGH PRESSURE THREAD OPTIONS (Up to 2500 bar (36000 psi))						
GAUGE	TUBE MP (Up to 20 ksi)			TUBE HP (Up to 36 ksi)		
	1/4	3/8	9/16	1/4	3/8	9/16
63mm (2.5")	M	M	/	/	/	/
100mm (4.0")	M/F	M/F	M	M/F	M	M
115mm (4.5")	M/F	M/F	M	M/F	M	M

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

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

# MODELS - 8022, 8024

## Welded Stainless Steel Diaphragm Compensated SUBSEA Stainless Steel Pressure Gauges



Stewarts-USA Has developed a unique Aegis-Guard which will offer protection to the gauge in the event of external contact.

General Arrangement Dimensions in mm, Tolerance $\pm 1\text{mm}$ (0.0393 inches)													
Dialø	Dim	A	B	C	D	E	F	G	H	J	K	L	CUT OUT
63mm	2.5 (Inches)	68.4 (2.7)	37.5 (1.5)	16.3 (0.64)	45.2 (1.8)	85.2 (3.35)	62 (2.4)	18 (0.71)	18.8 (0.74)	21.5 (0.85)	75 (2.95)	28 (1.1)	66 (2.6)
100mm	4.0 (Inches)	112.2 (4.4)	49 (1.9)	15.2 (0.60)	66.9 (2.6)	132.5 (5.22)	99 (3.9)	33.3 (1.31)	19.3 (0.76)	24.6 (0.97)	117.8 (4.64)	35.5 (1.4)	106 (4.17)
115mm	4.5 (Inches)	129 (5.1)	49.2 (1.94)	15.5 (0.61)	74.8 (2.94)	160 (6.3)	114.8 (4.5)	33.3 (1.31)	19.3 (0.76)	26 (1.02)	150.5 (5.93)	37.2 (1.46)	122 (4.8)

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