



Hydraulic & Offshore Supplies

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Instrumentation





Hydraulic & Offshore Supplies

Specialist manufacturers & suppliers of pressure and depth instrumentation to the diving, marine and subsea industries

We work in conjunction with many of the largest organisations within the instrumentation field and can therefore find a solution to meet just about any measurement requirement you may have.

Our Technical Team has a wealth of application knowledge upon which we can draw when the process demands.



DIVE PANELS

PREMIUM PNEUMO GAUGE



PNEUMO GAUGE PANEL



DNV/GL APPROVED TRANSMITTER



EASY READ DIGITAL DISPLAY



Pneumo Gauge manufactured in accordance with EN837.1, for use in dive panels and outside caisson chambers. Cleaned for use with oxygen and other mixed gas systems.

Nominal sizes: 6", 8", 10" and 12" diameter

Accuracy: +/- 0.25%

Full safety pattern, solid baffle & blow out back

Case: Black steel powder coated

Thread: 1/4" NPT standard, others available

Mounting: 3 hole fixing front flange for panel mount

Adjustment: Zero adjustment through window

Dial/Ranges: Metres & feet sea water. Mirror band, knife edge pointer

Options: Other mounting arrangements, customers logo's, coloured dials

Supplied with point to point calibration certificate

DNV/GL approved transmitter for marine applications. Particularly suitable if you are considering swapping your analogue gauge for a new digital system when used in conjunction with our "Easy Read" digital display.

Wetted parts: 316 Ti stainless steel

Body: 316 Ti Stainless steel

Process connection: 1/4" BSP or NPT

The "Easy Read" digital display was developed with one of the major international diving contractors who wanted to replace their analogue pneumo gauges with a digital system. The challenge was to design a unit small enough to fit existing panels without taking up too much room but at the same time provide large highly visible digits for easy reading by the operator.

Display: 4 x Red LED with 38mm high digits.

Current input: 0-20mA or 4-20mA programmable

Display value ranges: -999 to 9999

Case dimensions: 144 x 72 x 124mm

DIVE PANELS

STANDARD PNEUMO GAUGE



Standard Pneumo Gauge available in 150mm diameter, cleaned for use with oxygen and other mixed gas systems, designed for use within dive panels and outside caisson chambers.

Nominal size: 6"

Accuracy: +/- 0.25% FSD

Design: Safety blow out device in rear of case

Case: Black steel powder coated

Thread: 1/4" NPT, others available upon request

Panel mounting: Back entry via 3 hole front flange

Adjustment: Zero adjustment through window

Dial/ranges: Meters and feet sea water. Mirror band, knife edge pointer

Options: Other mounting arrangements, customer logo's, coloured dials

Supplied with point to point calibration certificate

BOTTOM ENTRY



MINIATURE PNEUMO GAUGE



Miniature Pneumo Gauge available in 100mm Diameter Case. Designed for Portable Dive Panels and panels where space is an issue.

Nominal Size: 4"

Accuracy: +/- 0.25% FSD

Design: Safety blow out device in rear of case

Case: Stainless steel, stainless steel bayonet bezel

Thread: 1/4" NPT, others available upon request

Panel mounting: Back entry via 3 hole front flange

Dial/Ranges: Meters and feet sea water. Mirror band, knife edge pointer

Options: Other mounting arrangements, customer logo's, coloured dials

HYPERBARIC/DE-COMPRESSION OR RE-COMPRESSION

PREMIUM CAISSON GAUGE



Premium design Caisson Pressure gauge for mounting inside hyperbaric chambers, caissons, living chambers & decompression chambers used for measuring the simulated depth (pressure) inside the chamber or used to measure the pressure within a pressure system operating inside the chamber.

Nominal Size: 6", 8", 10" & 12"

Standard tried & tested pressure gauge operation.

Pressure acts from within the bourdon tube for maximum precision. Large sealed internal reference chamber pressure tested for greater stability /safety.

Thread: Standard 1/4" NPT male (others on request)

No manual balance valve to set every time the chamber is used -less prone to leakage & avoids accidental valve opening, which would invalidate the dial reading. Simple zero pointer adjustment through window for fast & easy set up.

Ability to measure system pressures within the chamber (rather than just chamber pressure).

Calibration: Gauge can be bench calibrated on a Dead weight Tester like a conventional pressure gauge. Complete with a point to point calibration certificate.

STANDARD CAISSON



Available in 6" or 8" Diameter, the standard caisson has been designed for projects on a tight budget. It's intended use is the same as our "Premium Caisson Gauge", however the standard caisson gauge features an internally sealed reference chamber set to atmospheric pressure by means of a manually adjustable valve located at the bottom of the gauge.

Standard tried & tested pressure gauge operation.

Pressure acts from within the bourdon tube for maximum precision. Large sealed internal reference chamber pressure chamber pressure tested for greater stability & safety. Open vented case with sealed internal reference chamber set to

atmospheric pressure via a manually adjustable valve located at the bottom of the gauge. Options: Different ranges, customer Logos. Comes complete with point to point calibration certificate.

ADDITIONAL INSTRUMENTS

WARM WATER FEED THERMOMETER



The "Diving Suit Warm Water Feed Thermometer" has been designed to measure the warm water feed for diving suits. The compact nature of this instrument is ideal for the confines of a small diving chamber.

Range: 0-100 degrees C

Measuring Element: Bimetallic

Construction: All stainless steel

Mounting: Direct back entry

Thread: 1/2" NPT

Stem: 42mm below thread x 8mm diameter

Class: 1

SUBSEA PUMPING GAUGE



The "Subsea Pumping Gauge" is designed for applications where the head of water needs to be taken into account. This gauge features vacuum scales with ranges beyond the conventional "-1 Bar Vacuum".

Nominal Size: 100mm diameter

Accuracy Class: 1.0% FSD

Range: -4/+2 Bar (-40/+20 MSW)

Connection: 1/4" NPT bottom

Wetted parts: 316 stainless steel

Mounting: Surface mount 3 hole fixing backblange

Options: Oxygen cleaning, glycerine filling (not with oxygen or mixed gas media), alarm contacts

CERTIFICATION

CERTIFICATION

Our range of Pressure and Temperature Instrumentation can be supplied with either our Standard Test Certificate or a more comprehensive Point to Point Calibration Certification, both of which are directly traceable to National Standards. Certificates can be issued for instruments used on clean gas and oxygen systems.

LOGO DIALS



To personalise an installation, company names or logos can be printed onto the dials of our pressure gauges and thermometers at the point of manufacture. Any number of colours or complexity of logo can be reproduced, which can include your company telephone number and contact details where appropriate. Special dials with colour segments or markings can also be produced. Minimum order quantities can apply so please discuss with our sales team prior to ordering.

SUBMERSIBLE INSTRUMENTATION

DIVER BAIL-OUT/TANK CONTENTS GAUGE



The 50mm Diver 'Bail Out' subsea gauge for breathing tank contents measurement offers some significant advantages over its nearest rivals.

Decreased for oxygen service (Group1)

Selection of thread connections to suit hose

Marine bronze case (maximum corrosion resistance)

Toughened float glass window

Removable bezel for serviceability

Individual serial number for traceability

Satisfies the requirements of EN837-1 & Pressure Equipment Directive (PED)

EC Declaration of Conformity denoting suitability for Group 1 Gas Applications as required by the PED

DIVE BELL/MINIATURE CAISSON



The 63mm Dive Bell gauge is able to withstand depths of up to 450 metres of water and can be mounted internally or externally of the diving bell to measure on board gas pressure. Because the instrument is sealed they can also be used to measure storage pressure without being affected by changes in ambient conditions. It can also measure bell depth when used with an open connection.

Ranges: 1 – 1000 Bar

Threads: 1/8" or 1/4" BSPP, BSPT or NPT

Case and Bezel: Brass electroless nickel coated for Marine environment

Wetted Parts: Brass/bronze (316 stainless steel also Available) Mounting: Via screw thread panel ring

Window: 12mm float glass

Oil free

S2 Blowout device

SUBMERSIBLE INSTRUMENTATION

SUBMERSIBLE GAUGE



The 63mm subsea gauge is designed to withstand depths of up to 1200 metres water (optionally 2000 metres). It is manufactured to the highest possible standards to ensure the utmost integrity.

Ranges: 0-6 to 0-1000 Bar. Case and wetted parts:

Pressure tight solid bar stock 316 stainless

Connection: 1/4" NPT. Others available upon request

Window: Armoured 19mm (25mm on 2000 metre option)

Options: Calibration certificates, filling, other mounting possibilities

ULTRA DEEP GAUGE



The 100mm "Ultra Deep" gauge is designed to withstand depths of up to 4000 meters water.

It is manufactured to the highest possible standards to ensure the utmost integrity.

Ranges: 0-6 to 0-1000 Bar. Case and wetted parts:

Pressure tight solid bar stock 316 stainless

Connection: 1/2" NPT. Others available upon request.

Window: Armoured 35mm

Options: Calibration certificates, filling, other mounting possibilities

SUBMERSIBLE TRANSMITTER



The submersible pressure transmitter can be universally used to monitor:

- 1) **ROV depth measurement**
- 2) **Diver monitoring system (diver depth)**
- 3) **System pressure monitoring at depth**

The transmitter comes with a range of thread sizes and can be supplied with either a flying lead or wetcon connector.

The 4-20mA output signal can be directly relayed to our 'Easy Read Digital Display'. (See page 2)

PANEL GAUGES

63mm "S3" PREMIER GAUGE FOR O2/MIXED BREATHING GAS



63mm diameter full safety pattern, class 1.6 bourdon tube pressure gauge designed for oxygen/mixed gas applications where 316 stainless steel wetted parts are suitable. These instruments are suitable for all gaseous and liquid media that are not highly viscous and that will not solidify, crystallize, attack or corrode stainless steel. This gauge is designed for applications according to the European Standard EN837-1 where "S3" safety features (see below) are required. Considered to be the industry standard and widely used all over the world.

Some Technical Features:

Laminated safety glass window, solid baffle wall behind Dial, full safety blow out back

63mm "S2" STANDARD GAUGE FOR O2/MIXED BREATHING GAS



63mm standard design class 1.6 bourdon tube pressure gauge designed for oxygen applications where 316 stainless steel or brass wetted parts are suitable. These instruments are suitable for all gaseous and liquid media that are not highly viscous and that will not solidify, crystallize, attack or corrode stainless steel. This gauge is designed for applications according to the European Standard EN837-1 with "S2" safety features such as rear blow out disc and perspex window. Designed for those clients who do not require all the benefits of our premier "Full Safety Pattern" S3 range.

Ranges: 0-11 Bar, 0-28 Bar, 0-40 Bar, 0-70 Bar, 0-100 Bar, 0-160 Bar, 0-280 Bar (Dual scale PSI)

63mm STANDARD GAUGE FOR NON O2/MIXED GAS SYSTEMS



63mm diameter class 1.6 bourdon tube pressure gauge designed typically for process applications where brass or stainless steel wetted parts are suitable. These instruments are suitable for all gaseous and liquid media (except oxygen) that are not highly viscous and that will not solidify, crystallize, attack or corrode brass.

Please note that this gauge is designed for applications according to the European Standard EN837-1. This European Standard stipulates that this style of gauge should not be used on gas and air applications above 25 bar and should never be used on oxygen applications.

Ranges: Standard Bar/PSI Ranges to EN-837

Options: Glycerine filled case, direct mount bottom or back entry

VALVES & CALIBRATION EQUIPMENT

VALVES & MANIFOLDS



We provide an extensive range of valves from simple 1/4 turn ball valves to 3 and 5 valve manifolds. These are supported by our range of gauge adaptors, swivels, over range protectors and syphons.

Standard materials such as brass and stainless steel are common place, however exotic materials such as monel, titanium etc. can be supplied if required.

If you do have any questions or requirements, please do not hesitate in contacting our office.



CALIBRATION EQUIPMENT

The range of calibration equipment is extensive.

- 1. Master test gauges in 6", 8", 10" and 12" dia cases size**
- 2. Comparitor pumps up to 7000 Bar**
- 3. Deadweight testers**
- 4. Dirt/moisture traps for calibrating instrumentation which may be contaminated by oil etc. The trap keeps the rest of the calibration equipment free from dirt/grease**
- 5. Portable calibrators**
- 6. Hand pumps**
- 7. Digital test gauges**

All equipment will be supported by fully traceable certification.

If you do have any questions or requirements, please do not hesitate in contacting our offices.





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