

Portalevel™

Portable Ultrasonic Liquid Level Indicator for CO₂, Halon, FM200™, NAF S III, FE 13, CEA 410 & Novec 1230 gaseous extinguishing systems

NATO Stock Number 6680-99-275-5292
Classification Society Approved



Coltraco Ltd is the OEM of the Portalevel™ with over 15,000 units in service in 98 countries worldwide

Technology:

The Portalevel™ uses ultrasonic technology to identify the interface between liquid and air in any single skinned container. It therefore has none of the user problems associated with radioactive liquid level indicators which require dedicated training, storage, Health & Safety documentation, and transportation. It also replaces the traditional means of verifying liquid levels by dismantling and weighing in which the system may be closed down or disconnected, risking potential damage in so doing and involving considerable time, expense and inconvenience.



Operation:



The unit is simple to operate using push button controls and requires little or no training. It is calibrated to each cylinder at the touch of a button and the sensors are housed in magnetic applicators which ensures good contact with the surface and allows hands-free operation.

To locate the liquid level in a vessel, the sensor applicator is placed on the test vessel below the expected liquid level and then calibrated with all LED lights then illuminating on the digital unit. The sensor is then placed above the expected level – all lights extinguish. The sensor is moved between these two points in small steps until the interface (liquid level) is located.



With all types of bottles/cylinders, any that are found with unusual readings should be double-checked and if the same readings result are obtained, we recommend that the bottle be isolated and removed for weighing; in most cases it will be found that the contents have leaked.

Applications:

The Portalevel™ is a versatile, ultrasonic liquid level indicator that can locate the level of any liquid in any single skinned container of wall thickness 2 – 15 mm. Wall thickness of 15 mm – 50 mm is also possible, depending on material type and vessel size. It cannot monitor contents of plastic vessels as they do not conduct ultrasound. It is typically used for high pressure CO₂ or Halon cylinders constructed of seamless spun steel, approx 5 ft high, 10 ins diameter, 45 kg or pressed steel with welded seams with low pressure fills of varying sizes and fill weights:

a. Fire Extinguishant Cylinders



Its primary application is to check levels of liquid gaseous extinguishants in fire cylinders where it can be used to locate levels of CO₂, Halon and Halon substitutes such as FM200™ and NAF S III. It was recently selected after stringent comparative testing by the US Department of Defence Halon Depletion Agency for purchase who verified its accuracy to +/- 1.5 mm. We supply many units to fire service companies, offshore installations and utility companies worldwide for this purpose.

b. Marine Multi Banked Cylinders



Using the multi-bank cylinder rod, the Portalevel™ liquid level indicator can also verify levels of extinguishants in multi-banked cylinder rows using this extension rod to reach the second and third rows. This type of installation is typically found on board ships and we have extensive experience of supplying this equipment to the marine sector.

c. Sprinkler Systems

The Portalevel™ is a useful tool to check the system integrity of sprinkler systems. The majority of sprinkler systems contain "clean agents" such as CO₂, Halon and Halon substitutes for which the Portalevel™ was designed and which few other instruments are able to locate.

d. Water

The Portalevel™ can be used to locate water levels but in this case the signal gives inverse readings, ie high readings below level and low readings above.

e. LPG

Propane and Butane may be tested though the unit will function in reverse.



Technical Specifications:

The Portalevel is proven accurate to +/- 1.5mm and weighs just 500g. For a more detailed description of the Technical Specifications for the Portalevel, please [click here](#).

Certifications and Approvals:

The Portalevel ultrasonic level indicator has been manufactured by Coltraco for over 20 years and in that time we have been constantly improving and developing our equipment. We are currently in our 6th Generation of redesign for the Portalevel and have won numerous awards and approvals for our equipment. Below is a few examples of these Approvals:

- Manufactured to BS EN 5750, ISO 9001 Quality Standards
- RINA Classification Society Approval
- Manufactured to US MIL-STD
- NATO Stock Number 6680-99-192-2735
- Det Norske Veritas Accepted
- "Portalevel" Trade Mark Registered No 2290334
- UK Government Cage Code KD983
- US Department of Defense Halon Depletion Agency approval

Quality Assurance/Warranty: All our units are manufactured to BS EN quality standards. All electronics are covered by a 3 year warranty. Sensors are covered by a one year warranty. This warranty is valid provided that the unit has not been tampered with, opened, used contrary to instructions or damaged. The warranty covers free of charge repair and servicing of the unit to be carried out at our factory in the UK. The transport and return of the equipment and the insurance is the customer's responsibility.

Re-Calibration: We recommend that units are returned for annual recalibration, usually a requirement for any ISO 9001 operation using test instrumentation. Units returned for recalibration are generally tested and certified within a 48 turnaround period. Customers with a number of units may arrange for a loan unit if necessary.

After Sales Service: We are a dedicated Customer Services provider and service-led manufacturer with a mission to remedy any client concern in a friendly and professional manner. Our Technical Department is available at all times to discuss any technical or operational queries and experienced in giving telephone "teach-ins". All queries are answered on the same day and our technical staff are available to overseas clients outside UK office hours by arrangement. Our technical staff have many years' experience of the operation of the Portalevel™ in the field in a wide variety of market sectors and climatic conditions.