

The locating device, especially developed for the black box in maritime navigation. High degree of corrosion protection Intelligent activation Long-lasting battery



PT9 C-PROOF

Underwater Locating Device for VDR and S-VDR data protective capsules

Tested to meet or exceed all SAE AS 8045 requirements

Location signal as per DIN EN 61996 for maritime navigation

Approved by the BSH (Federal Maritime and Hydrographic Agency)

High corrosionresistance ensures longevity

The PT9 C-Proof is a sea-water-resistant underwater locating device. It is especially designed for the data protective capsules (FRM) of Voyage Data Recorder (VDR/SVDR) systems. It withstands the rough environmental conditions of maritime navigation, high-G impact shock and deep water immersion. The PT9 C-Proof is a battery-powered device which radiates a pulsed acoustic signal into the surrounding water upon activation by its water-sensitive switch. The beacon operates over a period of 30 days when immersed in fresh or salt water. It is fitted to a data protective capsule by means of a mounting kit.

The PT9 C-Proof has been type-tested under the hardest conditions and in accordance with the relevant standards.

The idea of the PT9 C-Proof was to develop an acoustic beacon especially for VDR and S-VDR capsules in maritime navigation. For this purpose, specially selected materials and coatings were used which have proved themselves suitable to withstand the rough environ-



Intelligent activation guarantees a high degree of reliability	mental conditions on the deck of a ship. Furthermore, the housing and the water-sensitive switches are galvanically coordinated!
	In addition to the corrosion-resistant parts such as housing and water-sensitive switch, the PT9 C-Proof is essentially different from conventional acoustic bea- cons as a result of its intelligent activation (patent pending). Disruptive factors such as rain, spray, condensation, detergents, etc. are ignored by this smart feature. The advantage of this protection against inadvertent triggering is that the number of unintentional activations is reduced to a minimum, thus improving the life of the battery.
No mechanical protection necessary Battery easy to exchange	There is no need to install additional parts such as, e.g. a water switch. The PT9 C-Proof delivery status is thus "ready for use". There is no need to assemble or dismantle the beacon for operation, inspection or battery testing. The beacon test can be performed in agreement with and as defined in SAE AS8045. The bat- tery is field-replaceable.

Technical Specifications	PT9 C-PROOF
Operating Frequency	According to DIN EN 61996
Operating Depth	Surface to 6000m (surface to 20,000 feet)
Pulse Length	Approx. 9 ms
Pulse Repetition Rate	Approx. 0.9 Pulse/s
Operating Life	30 days (minimum)
Acoustic Output	106 N/m ² rms pressure @ 1 metre (160.5 dB)
– after 30 days	70 N/m2 rms pressure @ 1 metre (157.0 dB)
Operating	· · · · · · · · · · · · · · · · · · ·
Temperature Range	–2°C (28°F) to 38° C (100°F)
Actuation	Fresh or salt water
Radiation Pattern	Rated output over 80% of sphere
Weight, Beacon	173g (6.1 ounces)
Power Source	Self-contained, lithium battery (field-replaceable)

PT9 ADAPTORS For all conventional data protective capsules



Compatible with all common data protective capsules

The PT9 C-Proof is 100% interchangeable with the following types of acoustic beacons: Dukane DK 120, Dukane DKM 120, Teledyne Benthos ELP-362D and RJE ULB-362. Adaptors for other beacons such as DK/DKM 480 and DK140 are available.

TAG 2550 TESTER Ultrasonic Receiver for Underwater Locating Device



Receives ultrasonic signals between 25 and 50 kHz The TAG 2550 is a smart and small battery-operated receiver designed to receive ultrasonic signals with a frequency between 25 and 50 kHz.

The received signals are reproduced visually in the form of a yellow LED and acoustically by means of an integrated loudspeaker. At the same time, the output signals can be represented via the earphone or on a PC screen via a suitable connection cable.

The TAG 2550 is simple to operate and both the visual and acoustic signals are clear and unequivocal.

Specifications	TAG 2550
Receiver frequency	25 kHz to 50 kHz
Power supply	Lithium battery type CR1632, 350–17609
Operating voltage	3 volts
Operating	
temperature range	0°C to +40°C
Size	58 mm x 36 mm x 20 mm (L x W x H)
Weight	24 grams

Simple operation at the touch of a button



Individualised special designs

Our vast experience in the development of underwater locating systems puts us in the position of being able to develop and make systems that are tailored to your individual requirements.



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