

37.5kHz – 90 Day Marine Beacon

DKM502/90

Building on over 50 years of underwater acoustic beacon manufacturing experience, Dukane Seacom has developed DKM502/90 which is the newest version of the IMO standard in underwater acoustic locating beacons for maritime use. Expanding on the proven reliability of the DKM502, the DKM502/90 will assist in location of VDR & S-VDR capsules up to 6096 meters or 20,000 ft. water depth.

The DKM502/90 will provide a minimum of 90 days of uninterrupted operation once activated, complying with minimum standard specification SAE8045A, IEC61996-1 & IEC-61996-2.& BSH approved



Physical Characteristics

- Watertight aluminum case (1.3”dia, 3.99” length (less mount)).
- Capable of operation at depths of up to 20,000 feet (6096 m)
- Detectable at a range of 2000 to 4000yards (1800 to 3600 meters) based on environmental factors.
- Sustained pressure up to 8700 psi.
- Dual water switch actuation initiates beacon operation upon immersion in either fresh or salt water.
- The battery used to power the DKM502/90 will sustain beacon operation for a minimum of 90 days at an acoustic output of 160 dB. Operating frequency is 37.5 kHz.

Beacon Specifications

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| Operating Frequency: | 37.5 kHz ± 1 kHz |
| Operating Depth: | Surface to 20,000 feet (6096 meters) |
| Pulse Length: | 9.0 milliseconds Minimum |
| Pulse Repetition Rate: | Not less than 0.9 Pulse/Sec. |
| Operating Life: | 90 Days (Minimum). |
| Battery Life In Beacon: | 3 Years |
| Acoustic Output, Initial: | 1060 dynes/cm ² Rms pressure at 1 meter (160.5dB) |
| Acoustic Output After 90 Days: | 700 dynes/cm ² Rms pressure at 1 meter (157.0dB) |
| Operating Temperature Range: | +28°F (-2.2°C) to +100°F (+37.8°C) |
| Actuation: | Fresh or salt water |
| Radiation Pattern: | Rated output over 80 percent of sphere |
| Size: | 1.30 inches (3.30 cm) diameter x 3.99 inches (10.13 cm) long (less mount) |
| Weight, Beacon: | 6.7 ounces (190 grams) |
| Weight, N30A26 Mount: | 6 ounces (170 grams) |
| Storage Temperature Range: | -67°F (-55°C) to 185°F (85°C) |
| Battery: | Replaceable |

Standard Features

- Military grade corrosion protection.
- Chemical coating systems MIL-A-8625
- Innovative engineering technology that protects against inadvertent actuations.
- ATS-270M Portable Test Set shall be used to perform operational tests on the beacon.
- It can be detected at a range of 2000 to 4000 yards with DSL-375 locator.