DK290

Underwater Locating Device (ULD)

The Future of Underwater Locating Devices

The DK290 ULD is Dukane Seacom's advanced ULD that leverages the design features of the existing DK120/90 with improved battery safety features including a new non-restricted Class-9 lithium battery and containment of thermal runaway. Designed to aid in the retrieval of the Cockpit Voice and Flight Data Recorders (CVFDR), Dukane Seacom has over 30 years of experience delivering more than 500,000 ULDs worldwide.

The DK290 was designed with the uncompromising goal of improving battery safety onboard the aircraft and during shipment while ensuring the functionality required by TSO-C121b and TSO-C142b. With the hazards of lithium batteries emerging in the aviation industry, the DK290 was developed with battery safety at the forefront of all design considerations resulting in a ULD with reduced lithium content and capable of safely containing a thermal runaway event.

The DK290 utilizes the field proven Lithium Manganese Dioxide battery chemistry avoiding the use of other contentious chemistries such as Lithium Thionyl Chloride and Lithium Sulfuryl Chloride, which have been deemed unfit for use by many in the aviation industry. In addition, our Lithium Manganese Dioxide battery chemistry is far superior to unproven Alkaline technology for this application in terms of performance in harsh environments and temperature extremes over a six-year battery life.

KEY FEATURES

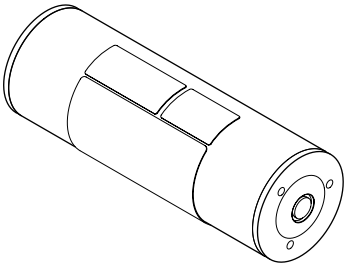
- Non-restricted Class-9 lithium battery
- TSO-C121b, TSO-C142b and DO-227A compliant
- Full containment of battery thermal runaway
- Improved performance and safety
- Enhanced omni-directional acoustic output
- Proven battery technology for airborne applications
- New dual water switch and hard anodized housing
- 90-day operation
- Six-year customer-replaceable battery
- RoHS & REACH compliant
- Same form factor as current DK100/ DK120/DK100-90/DK120-90

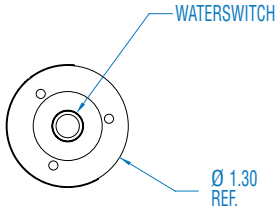
DUKANE SEACOM
A HEICO COMPANY

DK290

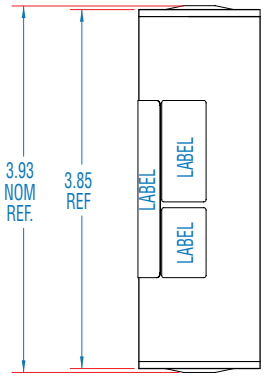
Underwater Locating Device (ULD)

Product Dimensions





End View



Side View

SPECIFICATIONS

Operating Frequency	37.5 kHz ± 1 kHz
Operating Depth	Surface to 20,000 feet (6,096 meters)
Pulse Length	9.0 milliseconds minimum
Pulse Repetition Rate	0.9 pulse/second minimum
Useful Life	6 years
Operating Life	90 days (minimum)
Acoustic Output, Initial	1060 dynes/cm^{2}rms pressure at 1 meter (160.5dB)
Acoustic Output, After 30 Days	700 dynes/cm^{2}rms pressure at 1 meter (157.0 dB)
Operating Temperature	+28°F to +100°F (-2.2°C to +37.8°C)
Actuation	Fresh or salt water
Radiation Pattern	Rated output over 80 percent of sphere
Size	1.30” diameter x 3.93” long (3.30 cm diameter 9.98 cm long)
Weight	Less than 6.7 oz (190 grams) (including battery)
Material	7075-T6 Aluminum, anodized finish
Power Source	Two ULD Batteries, multicell (< 2g Lithium)
Storage Temperature	-67°F to +185°F (-55°C to +85°C)
FAA Authorized	TSO-C121b (ULD) TSO-C142b (ULD Battery)
Performance	SAE AS8045A (ULD) RTCA DO-227A (ULD Battery)

DUKANE SEACOM
A HEICO COMPANY

7135 16th Street East, Suite 101 | Sarasota, FL 34243
T: 941.739.3200 | F: 941.739.3201

SSDK290-12RC 201110