

ALMOF-852 FUZE

Air Launched Mortar Bombs Fuze (ALMOF)
for carriage and release by drones and U.A.V



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ALMOF-852 Brochure Fuze for Air Launched Mortar Bombs

ALMOF-852

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Your Mortar Bomb (*)



+



Your Drone

+



Our ALMOF-852 Fuze



() Just filled warhead with fins without the standard PD mechanical fuze required for operation when launched from mortar tube and without propelling charge.*



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ALMOF-852 is designed for use with High Explosive Mortar projectiles for air launched applications; specifically for existing mortar bombs calibres 60mm, 81 mm, 82 mm, 120 mm of both N.A.T.O and Warsaw Pact.

Modes are Proximity or PD and are user selectable by means of selector switch situated on the fuze body. Arming is initiated by lanyard pull and completed by the release of the projectile from the delivery platform.

ALMOF-852 has the same intrusion as the standard mechanical PD fuzes and does not require a deep intrusion shell cavity.



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General Description

ALMOF-852 fuze is a Radio Frequency based fuze which was designed to replace standard fuzes of mortar bombs for use by drones or U.A.V.

Safe & Arm unit utilizes an electric motor with an out-of-line shutter principle and is located within the rear of the fuze steel body, just behind the electronic module, where the micro-electric detonator is situated.

Safe Arm Time is set for all release conditions to 3 seconds.

The fuze contains one impact sensor as a backup in the event that Proximity function fails.

The impact sensor is the main sensor when PD is selected.

The fuze is powered by lithium batteries to deliver power to the electronic module.



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Functioning

The fuze is issued by the factory on PD mode.
The battery is not energized.

Aafety and Arming
mechanism (S&A)
holds the explosive
train out-of-line.

Prior to Release from
the platform (drone)
the user selects the desired
mode PRX of PD.

Action is caused by
release from the platform.

On release a lanyard is extracted
and a safety pin is released in the S&A.

Simultaneously the battery
is switched through
to the electronic module.



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Action in Flight

In flight, the S&A arms at 3 sec – 0.5 sec to armed position.

Firing Capacitor is charged at 3 sec - 0.2 sec.

RF transceiver is activated at 3 sec - 0.1 sec.

At 3 sec the Trigger circuit is enabled.

At this point the fuze is electrically and mechanically armed and awaits a stimulus either from the Proximity or Impact sensors.

At the correct Height or Impact the fuze triggers the firing circuit causing the micro detonator to ignite the main charge.



Action Upon Impact

If the Proximity function fails or if PD mode is selected, then the back-up impact sensor generates an impulse which triggers the firing circuit igniting the micro detonator causing the projectile to explode.



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KEY FEATURES

- USER SELECTABLE FUNCTION MODES (PRX) OR (PD)
- BACK-UP IMPACT SENSOR
- ELECTRONIC SAFETY - 3 sec (min)
- OPERATIONAL LIFE - 200 sec (max)
- POWERED BY LITHIUM BATTERIES
- SHELF-LIFE IN EXCESS OF 10 YEARS
- ROTOR LOCKED IN ALL PRE-RELEASE CONDITIONS
- MECHANICAL SAFETY - 2 Sec

RELIABILITY

- MICROPROCESSOR CONTROLS ALL FUNCTIONS
- SOLID-STATE CIRCUIT DESIGN
- BACK-UP IMPACT SENSOR
- EXTENSIVE TESTING DURING ALL PRODUCTION STAGES
- HIGHLY RELIABLE COMPONENTS & PARTS
- MEETS MIL-STD 331, 810, 1316, 461



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SPECIFICATIONS & PERFORMANCE

DETONATION MODE:	PROXIMITY or AIR BURST
HEIGHT OF BURST:	2 m to 3 m A.G.L (ABOVE GROUND LEVEL)
POWER SOURCE:	LITHIUM BATTERY
MASS:	950 g +/- 50 g
RELEASE PROFILE:	ALTITUDE 100 m (MINIMUM) SPEED 0 m/s (MINIMUM) ANGLE 45° to 90°
RELIABILITY:	> 95% over 10 Years
SHELF LIFE:	10 years in packaging
TEMPERATURE LIMITS:	-45°C to +71°C
BOMB / FUZE INTERFACE:	3½ in. x 12UN
STANDARDS:	MIL-STD-810; 331; 461; 1316



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DIMENSIONS & PACKING / PACKAGING

DIMENSIONS:

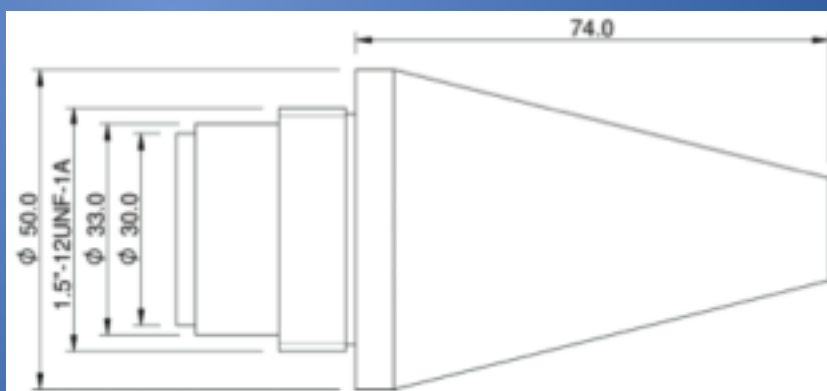
As per drawing attached
(principal dimensions of fuze)

PACKAGING:

20 fuzes per plastic box
(or other specified by the end user)

HAZARD CLASSIFICATION:

UN 0409, Class 1.2D



ORDTECH FUZING SYSTEMS

Capability overview

ORDTECH has a significant know-how, expertise and track record on filed proven performance of various fuzing systems for a wide range of applications and uses.



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ORDTECH FUZING SYSTEMS

Capability overview

Fuze Design
Production & Quality



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