

THIRD EDITION



NEXT GENERATION PROXIMITY FUZE

Safe
Reliable
Accurate
For all Calibers
Delivers Top Performance!

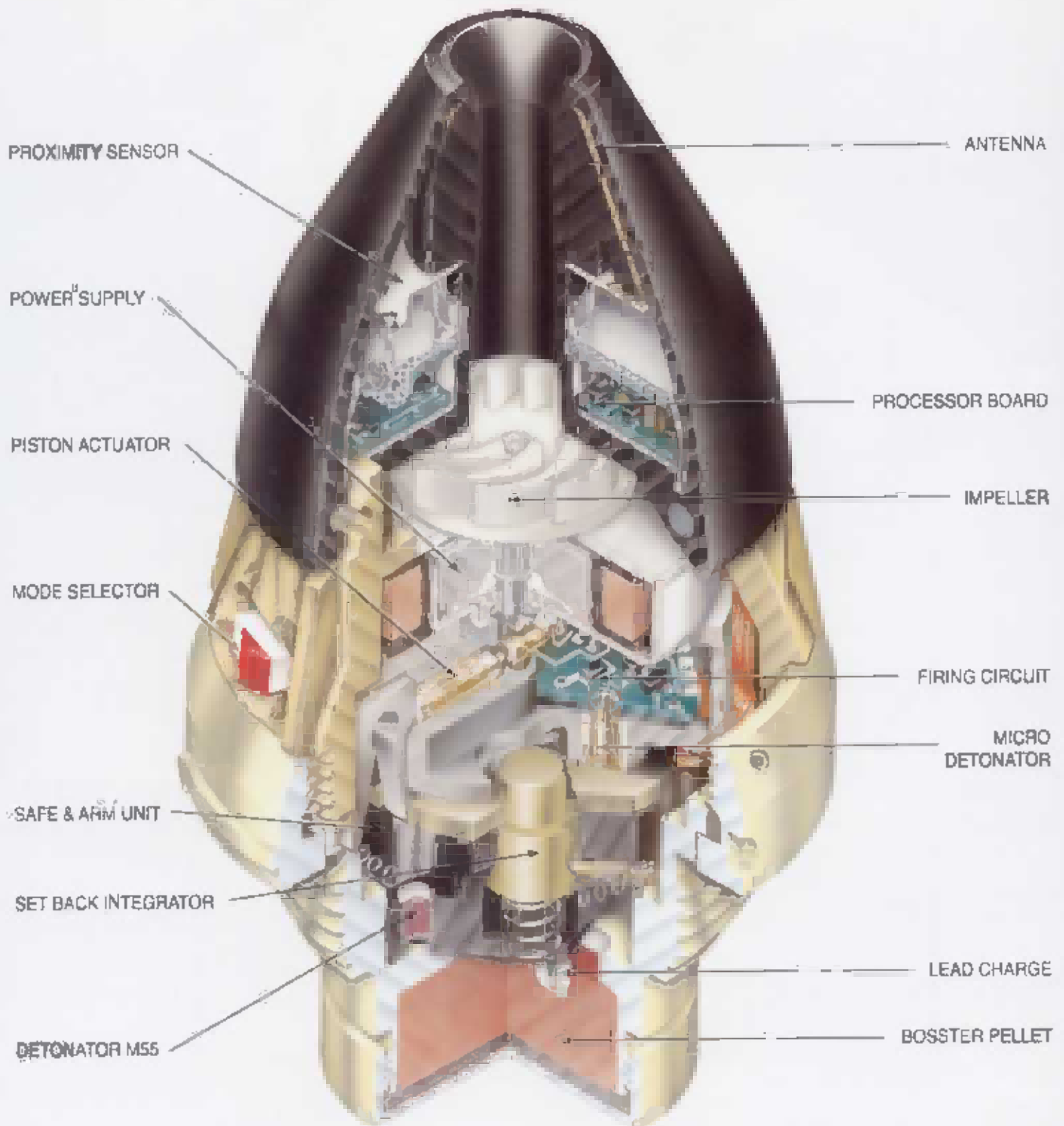
ALPHA

M787

Alpha M787 the electronic proximity and point detonation fuze

- *wide compatibility*
- *meets all MIL-STD-1316D safety requirements*
- *special increased overhead safety feature*

ALPHA - M787 Proximity Fuze for Mortar Ammunition



TECHNICAL SPECIFICATIONS

GENERAL:

The Alpha M787 is a Radio Proximity fuze utilizing the Doppler effect. The fuze is designed to initiate the warhead at the optimum height above the target providing the maximum effectiveness of the mortar ammunition.

COMPATIBILITY:

To be used with all types of HE and WP mortar bombs of calibers: 60mm, 81mm, 82mm, 120mm and 160mm.
Interchangeable with the following fuzes: DM111A2/A3/A4, M525, M734, M935, V19P, SC12P & w/adaptor: M567, M524, M526, M6, GVMZ-7, etc.

OPERATION MODES:

Proximity (PRX) - Detonates warhead at optimal height above target.
Point Detonation (PD) - Detonates warhead upon impact with target.

BACK-UP:

Point detonating back-up on  proximity mode.

ARMING:

Fuze arming (when the explosive elements are in one detonating line) is enabled by two arming mechanisms:

- set back force
- sustained air flow

SAFETY:

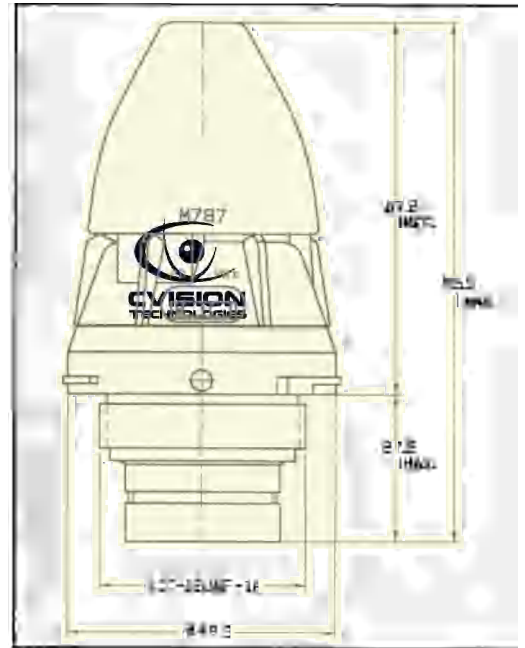
- Set back -** Acceleration of 400g minimum, for 1 millisecond minimum duration.
- Air speed -** Of 30 m/s minimum.
- Missequencing -** Prevents arming of the fuze whenever arming condition of "air flow" precedes arming condition of "set back".
- Fail safe mechanism -** Self-lock system in safe position, whenever missequencing occurs, without external arming possibility.
- Arming distance -** 100 m from muzzle.
- Double loading -** The fuze will not function in bore in a double loading event.
- Shorted detonator -** The electric detonator is shorted until arming.
- Safety pull wire -** No use of safety pull wire.

HEIGHT OF BURST:

- PRX Mode**
- (standard factory set) - 2.5 m above target for 60/81/82 mm.
4.0 m above target for 120/160 mm.
Other heights of burst upon request.

IMMUNITY:

The fuze utilizes a peak trajectory sensor to activate the proximity unit at the descending branch of trajectory - to provide over-head safety.



POWER SUPPLY:

Air driven (turbine) alternator.

EXPLOSIVE OUTPUT:

7 gr of CH-6 booster pellet

TEMPERATURE LIMITS:

For firing - From - 46°C to 63°C.
For storage - From - 54°C to 71°C.

PHYSICAL DESCRIPTION:

Total length - 95.5 mm
Cross section diameter - 49.3 mm
Intrusion depth - 27.5 mm
Thread size - 1.5"-12UNF-1A (Standard),
2"-12UNS-1A, 35.7 mm Pas 200.
(can be changed according to customer's request).
Weight - 250 ± 25 gr.

MILITARY STANDARDS:

MIL-STD-331B Environmental and performance tests for fuze and fuze components.
MIL-STD-333B/STANAG 2916 Fuze, projectile and accessory contours.
MIL-STD-1316D Fuze design, safety criteria.
STANAG 4187 Fuzing system - safety design requirements.