



vAF-M17 and vFI-M17

Aerial Bomb Fuze and Initiator



The fuze is solid state with a powerful micro-controller and it can be used in MK-82, MK-84 and BLU-109 bombs. The fuze vAF-M17 has the same dimensions and functions as the original fuzes: M-904, M-905, FMU-152 and FMU-139.

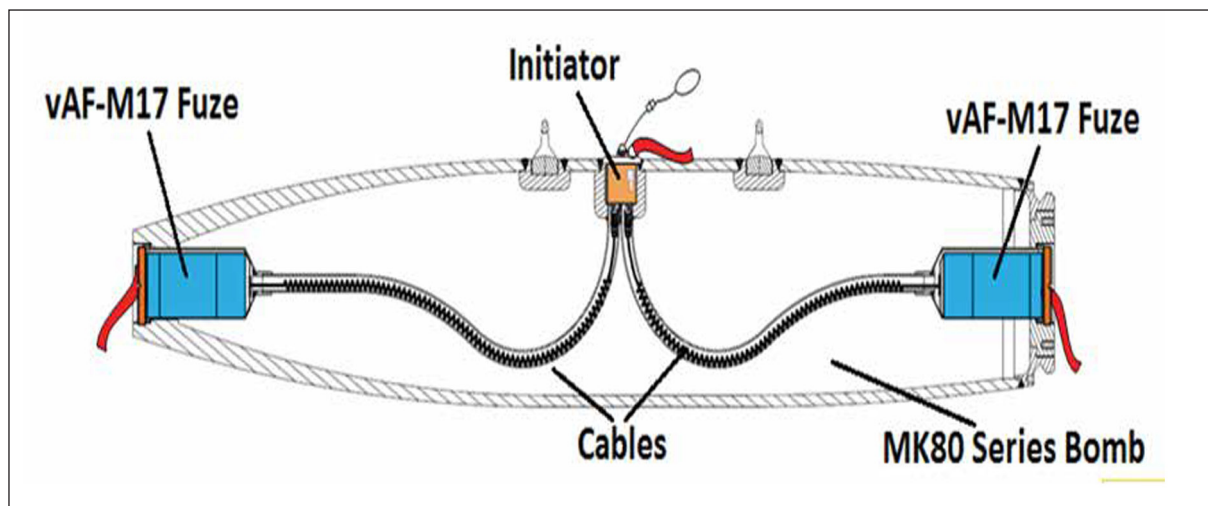
The fuze vAF-M17 contains an Interrupted Explosive Chain, which means that before arming the fuze is in a "safe" state; the detonator is physically isolated from the explosive contents of the bomb. Through this construction, a very high level of safety is built into the fuze. The fuze is used in multirole fighter aircraft. The minimal bombing altitude is 2000 m and the minimal flight speed is 200 km/h.

The fuze set consists of two devices:

- vAF-M17 body, which may be mounted at the nose and/or tail of the bomb. It contains all the components necessary for the arming and detonation process.

- vFI-M17 Initiator, this device is mounted on the top of the bomb between the bomb lugs and is connected with either one or two vAF-M17 fuze bodies, mounted in either the nose and/or tail of the bomb. The Initiator is a safety component which provides the necessary conditions to start the arming and detonation process.





The fuze set is developed and produced in accordance with MIL-STD-1316 (Fuze Design, Safety Criteria For)

The fuze satisfies the requirements defined in MIL-STD-331D & MIL-STD-810 for:

- Mechanical Shock Tests
- Vibration Tests
- Climatic Tests
- Electrostatic discharge - Personnel-borne and Helicopter-borne ESD
- Electromagnetic radiation hazards (HERO), and
- Electromagnet radiation, operational (EMRO)



General characteristics

• Fuze type	Inertial, Electro-mechanical, with a microcontroller, and with Interrupted Explosive Chain.
• Safety	Guaranteed to not activate under any accidental or unwanted situation. The fuze can be activated only if it is armed and after it has hit its target.
• Operation mode	ACTIVE: electrically initiated PASSIVE: no arming and no detonation
• Impact limit	Adjustable from 10g up to 200g; Duration of the impact >10ms
• Arming delay time	2, 4, 5, 6, 8, 10, 12, 14, 16, 18, 20, 25 seconds.
• Detonation delay time	Instant, 0.01, 0.025, 0.05, 0.06, 0.1, 0.18, 0.25, 0.75, 10, 60, 600 and 1000 seconds
• Accuracy of the arming time	±5%
• Accuracy of the detonation delay time	±8%
• Weight	Fuze: ~ 2kg Initiator: ~ 0.4kg
• Dimensions	Fuze : 165mm, Ø70 mm Initiator: 68mm, Ø52mm
• Working conditions	T= -40°C to +70°C @ 100% humidity
• Storage conditions	T= -55°C to +70°C @ 100% humidity