

81 mm, HE with PROXIMITY FUZE FOR DRONE

Mortar shells

TECHNICAL DATA:

- Mass of mortar shell with fuze 3200 g
- Length of mortar shell with fuze 418 mm
- Mass of explosive (TNT) 650 g
- Reliability of mortar shell with fuze min.98%

Purpose

81mm mortar shell, HE, with MBU, M18-D fuze is intended for firing from drone. It is intended for neutralization of enemy live forces and ordnance items in or out of shelter, watchtowers, command posts, for creating pathways in minefields and wiring obstacles. ESD MD-02-01 setter is used to bring the fuze from the storage regime to the active mode and vice versa. The fuze operating time is in the function of the desired height of the drone flight.

Design description

Basic functional parts of the mortar shell are as follows:

1. MBU, M18-D Fuze is of electronic type, having point detonating and proximity action, secured with clock mechanism which should provide full safety of the crew during handling and activate the mortar shell at the target;
2. Shell body, filled with TNT, is the basic part the efficiency of the mortar shell at the target depends on;
3. Tail unit provides stability of the mortar shell on the trajectory during freefall from the drone.

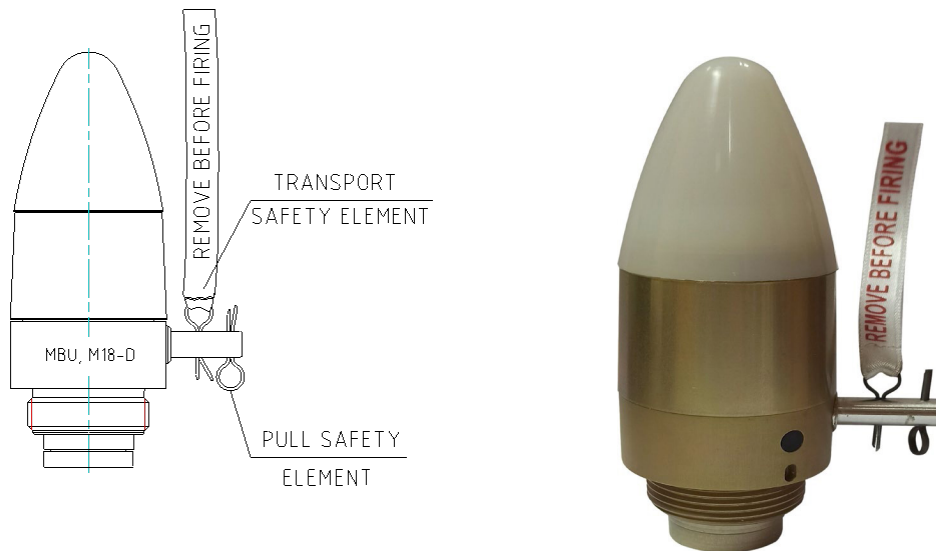


PD FUZE UT, M88-D for COMBAT DRONE Ammunition

Proximity FUZE MBU, M18-D is mechanical-electronic fuze based on a modern microprocessor technology with the interrupted initial train and safety mechanism based on the clock mechanism. It is battery powered proximity fuze which provides high and near surface proximity function as well as point detonation.

Purpose

The fuze is intended for assembling high explosive shells of 60 mm, 81/82 mm and 120 mm caliber for combat drone use. The fuze has two function modes as stated below. The connecting measures are in accordance with the NATO standard.

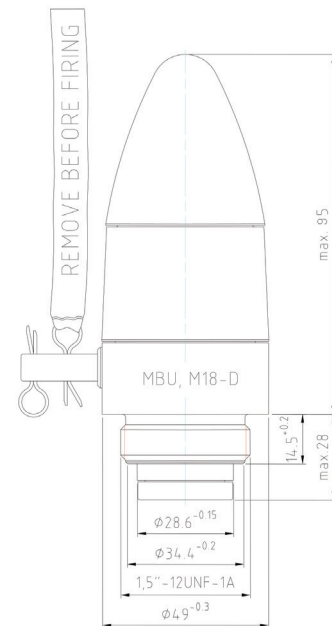


Technical data

- Safety as per STANAG 4157 and MIL-STD-331C
- Arming gravitational
- Safety:
 - two independent mechanical safeties (transport and pull safety element)
 - electronic safety 3 s
 - Low – explosive train interrupted
- Function mode: Impact - SQ
- Proximity (burst height from 1 m to 9 m)
- Drop safety 3 m
- Fuze mass 330 g
- Detonator charge mass 13,2 g
- Fuze length max. 95 mm
- Fuze length entering the shell max. 28 mm
- Fuze connecting thread 1,5"-12UNF-1A
- Maximum fuze diameter 49 mm

Functional data

- Temperature range of use -46°C to + 63°C
- Temperature range of storage -54°C to + 71°C
- High safety during handling, transportation and storing.
- Environment test as per MIL-STD-331A
- Usage period is minimum 15 years under prescribed keeping and storing conditions.



ESD-MD-02-01

Fuze setter

ESD is autonomous electronic device intended for setting of the fuze Proximity FUZE MBU, M18-D. ESD provides video display of set time Setter ESD - permanently usable.

TECHNICAL DATA:

- Purpose
 - Function and parameters
 - Power supply
 - Built in functions
- Setting function and parameters of the Proximity fuze MBU, M18-D
Impact function
Store mode
Primary battery (replaceable) -
more than 50000 settings without replacing battery
- non-contact two way communication (writing and reading)
- OLED display
- light and sound indication of setting
- low battery indication
- auto shutdown

