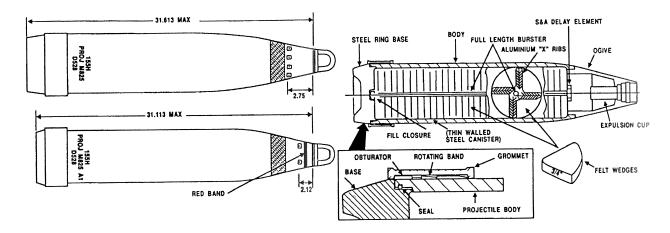


PROJECTILE, 155mm, WP, M825 & M825A1



Description. These projectiles are separate loading 155mm artillery projectiles which are used to produce a ground screening smoke of 5-10 minutes duration. The M825/M825Al projectile consists of a modified M483A1 projectile carrier consisting of an M483A1 ogive and expulsion charge in a modified M483A1 all steel body and a threaded steel ring base. A rotating band encircles the assembled projectile near the base. The projectile carries a payload of white phosphorus impregnated 3/4-inch felt wedges contained in a hermetically sealed steel canister (29 per quadrant, 116 per canister). A burster charge, 1/4-inch diameter (approximately 21 grams Composition A-5) runs the entire length of the canister in the 1/2-inch x 1/2-inch central cavity which was produced by off-setting the canister X ribs. A launch activated safe and arm (S&A) module from the MTSQ M577 Series or ET M762 fuze separates the forward end of the main charge from the heat sensitive pyrotechnic delay equipment.

Difference Between Models. The M825A1 projectile contains an improved payload and a new base which have corrected the M825 flight instability. The M825A1 base is made out of steel and has two wrench slots. The M825 base is made out of aluminum and has recesses for wrench.

Function. In-flight functioning of the mechanical time fuze ignites the expulsion charge causing ejection of the smoke payload. The 100 MS delay is activated by the burning expulsion charge and provides ample time for the canister to clear the projectile body before the main charge functions rupturing the canister and igniting the smoke payload. The multiple burning wedges fall to the target area and produce obscuring smoke (125-250 meters wide) lasting 5-10 minutes.

Weight Length (w/ fuze Filler and Weight

Fuzes
Propelling charges
Burster
Expulsion Charge
Primer
Range

102.6 pounds
34.9 - 35.4 inches
116 felt submunitions saturated with
12.75 lbs of WP
MTSQ - M577 series; ET - M762
M3&M4 series,M119,A1,A2; M203, A1
Composition A-5, 21.2 g
M10 Propellant, 51 g
Percussion, M82

2,980 - 17,740 meters

Reference: TM 43-0001-28, Army Ammunition Data Sheets, Artillery Ammunition, April 1994

