



ANTI-AIRCRAFT AMMUNITION

12.7x108 MM

AIRCRAFT & ANTI-AIRCRAFT AMMUNITION

This ammunition is used for guns type A54, 56 and 77. It is available in two denominations:

- API (Armour Piercing Incendiary).
- API/T (Armour Piercing Incendiary, Tracer).

It can damage or destroy an aircraft within a range of 1500 metres and light armoured vehicles or vessels within 500 metres.

DATA

Complete Round

Length	147 mm.
Weight:	
API	116-126 gm.
API/T	112-122 gm.
Propellant	Single base smokeless powder

PERFORMANCE

Bullet velocity	818-833 metre/sec.
Effective range:	
Air targets	1500 metre
Ground targets	500 metre
Chamber pressure:	
Mean	3000 kg/sq.cm.
Max.	3300 kg/sq.cm.
Penetration:	
API	20 mm. steel plate placed at 10 metres (min.90% bullets penetrate through the plate)
API/T	15 mm. steel plate placed at 10 metres (min.90% bullets penetrate through the plate)

PACKING

280 rounds packed in a H14P steel box:

Size of box	40x16.5x30 cm.
Weight of box	42kg.
Colour & Marking	Service brown with yellow/white stencilling



AIRCRAFT AMMUNITION

23 MM

23 mm calibre ammunition with percussion primer is compatible with 23 mm Aerogun Model 1 and 2. The ammunition is normally used in belts in comprising links type A.

DATA

The following versions are available:

Type of complete round	Fuze	Cartridge case	Propellant	Velocity (m/sec)	Pressure (kg/cm ²)	Range (metres)
TP	Dummy	70/30 Brass	Single base smokeless 4/7	720	3000	2550
HEI	AP-24	70/30 Brass	Single base smokeless 4/7	720	3000	2550
API		70/30 Brass	Single base smokeless 4/7	720	3000	2550

PACKING

132 rounds (unbelted) packed in a wooden box:

Size of box 69x42x18 cm
Weight of box 45 kg.
Colour & marking Service brown with yellow/white stencilling



AIRCRAFT AMMUNITION

30 MM

This ammunition is suitable for use with 30mm. HP aircraft gun M1 fitted F-6 (MIG 19) aircraft and is available in the following three types:

- Ball
- HEI (High Explosive Incendiary)
- API (Armour Piercing Incendiary)



DATA

COMPLETE ROUND

Weight	835 - 840 gm.
Length	264 - 267 mm.

PROJECTILE

Body material	Forged steel
Colour	
Ball	White band
HEI	Red band
API	No band
Fuze	
Ball	P.R.F
HEI	30-2 or fuze No. 6
API	No. 8
Weight	401 -416gm.

CARTRIDGE CASE

Body material	Drawn brass 70:30
Propelling charge	Single base propellant NCHN 5/7
Weight of charge	96 gm.
Primer	Percussion type 330

PERFORMANCE

The ammunition is fed into the gun in link belts.	
Muzzle velocity	800 metres/sec.
Pressure	3050 kg/sq. cm.
Range	2000 metres
Accuracy:	
PE vertical	1.05 metres
PE horizontal	1.05 metres

PACKING (WIHTOUT LINKS)

i. Ball

12 rounds Ball packed in steel box measuring 31 x 16 x 19.5 cm.	
3 steel box (36 rounds) packed in a wooden crate:	
Size of wooden crate	55 x 37.5 x 26 cm.
Weight of wooden crate	48 kg.

ii. HE/API

27 rounds HE/API packed in tin liner which is packed in a wooden box:	
Size of box	44x33x 19 cm.
Gross weight of box	31kg.
Colour & marking	Service brown with yellow/white stencilling

ANTI MISSILE AMMUNITION

20 MM X 102 PHALANX AMMUNITION

(FOR VULCAN PHALANX GUN)

This ammunition is used in an American manufactured 6 barrellled Gatlin type Gun, which is contained in its Automatic controlling structure. The gun has a very high rate of fire and high muzzle velocity and is designed as an Anti missile weapon. The bullet is Armour Piercing and contains no explosive.

DATA

COMPLETE ROUND	
Weight	258.5±4gm
Length	167.5+0.7 mm -0.5 mm
PROJECTILE	
Material (Penetrator)	Tungsten Alloy W95NE-H
Colour	Red
Weight	93.5+2 gm
Length	74+0.5 mm -0.2 mm
CARTRIDGE CASE	
Material	Brass 70:30
Weight	120.45±3.3 gms
Length	101.9 -0.38 mm
Volume	44 ml approx.
Propelling Charge	Single Base Propellant
Charge Weight	40 gm
Primer	Electric M52A3B1
PERFORMANCE	
The Ammunition is fed into gun in link belts	
Rate of Firing	3000 Rounds/Minute
Muzzle Velocity	1135 + 15 m/sec
Pressure	4075 kg/cm ² Max
Range	1000 meter
PACKING (Without links)	
36 Rounds in a steel Box (M2A1) Measuring 31 x 16 x 19.5 cm	
03 Steel Boxes (108 rounds) packed in a wooden crate (P-213)	
Size of wooden Crate	55 x 37.5 x 26 cm
Gross Weight	49 kg
Colour & Marking	Service brown with yellow/white stencilling



ANTI-AIRCRAFT AMMUNITION

37 MM HE/T

This ammunition is suitable for use with 37mm field artillery AA guns. Model 1955, including twin version.

This is used to destroy low altitude aircraft and missiles. It is also effectively used against ground targets.

DATA

Complete Round	
Weight	1.490kg.
Length	381 - 384 mm.
PROJECTILE	
Body material	Forged steel
Filler	RDX/Aluminium 36 gm.
Tracer	No.405 time \geq 6 sec
Fuze	HEI with self destroying element (9-12, sec. delay)
Weight	732 gm.
CARTRIDGE CASE	
Body material	Drawn brass 70/30
Propellant charge	Single base propellant HN 7/14, 200 gm.
Primer	Percussion type No. 12 MK4/LA (Modified)
PERFORMANCE	
Muzzle velocity	866 metres/sec.
Range	8500 metres
Accuracy:	
PE horizontal	1.15 metres
PE longitudinal	1.05 metres
Firing rate	180 RPM
PACKING	
Each round packed in a waterproof re-useable plastic container. 20 rounds packed in a wooden box C-13/P:	
Size of box	46x36x30 cm.
Weight of box	43kg.
Colour & Marking	Service brown with yellow/white stenciling



AIRCRAFT AMMUNITION

BOMB HE AC 500 LBS

(250 KG) MK-P8 (LOW DRAG)

This is a multipurpose bomb similar to US type MK82, having low aerodynamic resistance and is designed to be carried on supersonic aircraft. It is made from forged carbon steel according to BS-3602.

For high altitude missions it is fitted with conventional fin assembly (Conical fin assembly MAU-938) and fuze M-904 & 505. For low level missions, it is fitted with retarder fin assembly (MK-15 MOD-4) with nose fuze M-904. It can be used on all American bomb racks, French bomb racks (PM-3, RPK-12 & RPK-16) of Mirage aircraft having bomb hooks 14" apart. Can also be used on British aircraft bomb release slips having hooks with 14" spacing.

DATA

Length of bomb with:

- i) Retarder fin assy 2280 mm
- ii) Conventional fin assy 2210mm

Bomb body diameter 275 mm.

Weight of bomb with:

- i) Retarder fin assy 254.54 kg
- ii) Conventional fin assy 241.38kg

Explosive charge, FOX/TNT 90 kg.

PACKING

6 bombs packed in steel fixture.

Size of steel fixture 1.68x0.98x0.78 metre

Gross weight of steel fixture 1900kg

Colour & marking Black with yellow/white stenciling

