

**ORDTECH
INDUSTRIES**

**AMMUNITION
20 X 82 MM**



GENERAL

The 20X82 mm round type selection and fuze designs including safety features were specifically designed to cater for all terrain, all targets and a multitude of weapon platforms in both conventional and non-conventional military roles.

For example, fuze muzzle safety was increased from 1 m to 8 m to cater for helicopter gun ships thereby ensuring total safety whilst the projectile is under the rotor blades.

Fuzes fitted to HEI / HEI-T and SAPHEI rounds comply to MIL-STD-331-A safety requirements, have 8 meter muzzle safety and can be fired in light rain.

HEI and HEI-T nose fuze has dual sensitivity feature to cater for targets ranging from vehicles to anti-personnel. The dual sensitivity ensures that if the round is fired on water, soft sand and marshy ground the resulting shrapnel will be deployed above the surface ensuring an excellent kill probability on the area.

If these same rounds are fired against soft skinned vehicles and light constructions, the dual sensitivity will ensure penetration before detonation.

SAPHEI base fuze was designed for use against light armour vehicles, heavy shelters, block houses and in densely wooded areas ensuring detonation after penetration of the above obstacles.

Combat round mixes (recommended)

-1- Against light vehicles, light buildings such as corrugated iron sheds and against personnel in open savannah or in swampy areas, a mix of 4 HEI : 1 HEI-T round recommended.

-2- In lightly wooded areas and more robust buildings a mix of 1 HEI : 1 HEI-T : 1 SAPHEI should be used.

-3- In densely wooded areas such as tropical forests with dense leaf canopies, against wooden bunkers and armoured personnel carriers a mix of 1 HEI : 1 SAPHEI is most suitable.

-4- Against heavy fortifications such as concrete bunkers the quantity of SAPHEI may be increased with mixes such as 3 or even 5 SAPHEI rounds linked with 1 HEI-T.

TYPES OF 20X82 MM ROUNDS PRODUCED

HEI / HEI-T

Fragmentation, Incendiary effects against air and ground targets

SAPHE-I

Against light and soft armoured vehicles and targets which require detonation delay for best terminal effects.

TP, TP-T

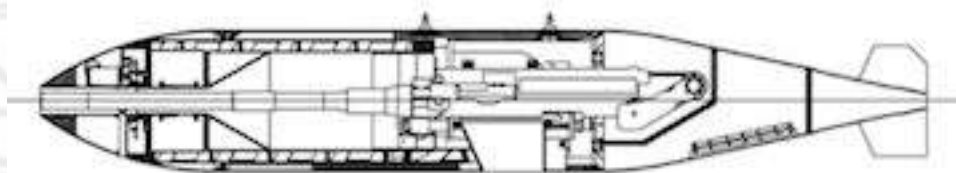
Same as HEI, HEI-T with inert aluminium fuze

Depending on the type of targets to be engaged these rounds may be belted as mixed types to ensure optimal terminal effects.



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APPLICATIONS



POD WITH 20 mm CANNON



**FIXED AND ROTARY WING AIRCRAFT GUNSHIPS
CANNON PODS UNDERWING & GUNNER MOUNTS**

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ANTI-MATERIEL RIFLES



NAVAL MOUNTS

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SPECIFICATIONS 20 X 82 mm AMMUNITION

Total Length	146 mm		
Cartridge Case Length	83 mm		
Total Mass	205 g		
Propellant Mass	20 g		
Projectile Mass	110 g		
Explosive Mass (P18 Hexal)	HEI	HEI-T	SAPHEI
	7g	5 g	6 g
Muzzle Velocity	720 m/s		
Pressure (Piezoelectric) Mean	≤ 275 MPa		
Pressure (Piezoelectric) Maximum	≤ 310 MPa		
Tracer Burn Time	2 s minimum		
Fuze Arming Distance	8 m minimum		
Penetration (SAPHEI)	25 mm at 100 m / impact angle $^{\circ}0$ standard N.A.T.O plate (110 Kg/mm ²)		
Packing	150 linked rounds in a box (mass: 30 Kg) Volume: 0.025 m ³ One 20 ft container takes 300 boxes		
Hazard Class	1.2G UN # 0093		

