



.50CAL 12.7MM

Ball and Tracer
Reduced Range
Ammunition
(RRA)



MUNITIONS

SMALL CALIBER

General Dynamics Ordnance and Tactical Systems – Canada has more than 100 years experience in the manufacture of small caliber ammunition, including ball, tracer, blank and armor-piercing cartridges. The 0.50 caliber (12.7mm) RRA Ball and Tracer ammunition provide the same ballistic characteristics of full range operational ammunition up to 1,000m. The tracer version is a ballistic match to the ball round.

The 0.50 caliber RRA projectile has a steel core with rearward fins, which is inserted into a gilding metal jacket to minimize barrel wear. It is designed to function in M2HB and QCB machine guns at extreme temperatures and without any auxiliary equipment or modifications.

The 0.50 caliber RRA has a maximum range of 3,500m (3,827yd), roughly 50% shorter than that of conventional service ammunition see Figure 2. This is a major advantage when training near urban areas, since users can fire the 0.50 caliber RRA on a 7.62mm range, without changing the maximum distance of the safety template.



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Reduced Range Ammunition

TECHNICAL DATA

Cartridge Length	Approx. 13.7cm (5.4in)
Bullet Weight	Approx. 45g (644 grains)
Watertightness	Meets NATO waterproof criteria
Noise and recoil	Replicates service M33 ball ammunition
Accuracy at 550m (600yd)*	
0.50cal RRA Ball	300mm (11.8in)
0.50cal RRA Tracer	400mm (15.7in)
Max. chamber pressure at 21°C (68°F)	< 450 Mpa (65,267 Psi)
Cyclic rate in M2HB MG	Between 450 and 600 shots/minute

* Maximum average vertical and horizontal standard deviation

ADVANTAGES

- » Trajectory match within 1mil with M33 bullets at 1,000m (1,094yd)
- » 50% shorter range for reduced safety template
- » Realistic training scenarios in urban areas
- » Tracer visible to 1,000m (1,094yd)
- » Elimination of environmental contamination
- » Reduced range maintenance

FIGURE 1

Maximum range of the 0.50 caliber RRA vs. conventional projectiles

