# THALES





## 5.56 mm F1 BALL AMMUNITION

Consistent performance in varying temperature conditions

#### PERFORMANCE

Projectile weight	4.0 g
Projectile velocity (V24m) Kistler 6203 transducer Kistler 6215 transducer	905 m/s @ +21 °C 915 m/s @ +21 °C
Muzzle energy Kistler 6203 transducer Kistler 6215 transducer	1.7 kj @ +21 ℃ 1.8 kj @ +21 ℃
Max chamber pressure Kistler 6203 transducer Kistler 6215 transducer	380 MPa @ +21 °C 405 MPa @ +21 °C

Thales Australia's 5.56 mm F1 ball ammunition meets the essential design parameters of the NATO STANAG 4172 and is comparable to other in-service natures such as SS109/M855 cartridge. The projectile features composite core construction comprising a hardened steel penetrator and lead slug enclosed in a gilding metal jacket.

Our 5.56 mm F1 ball ammunition can be used in all 5.56 calibre NATO weapons. The performance of the 5.56 F1 ball ammunition is equivalent to FN SS109 and US M855 ball cartridges. Our 5.56 mm F1 ball ammunition is manufactured at Thales Australia's munitions facility and is used by the Australian Defence Force in the F88 Steyr individual weapon and F89 Minimi light support weapon.

# 5.56 mm F1 BALL AMMUNITION CONSISTENT PERFORMANCE IN VARYING TEMPERATURE CONDITIONS

### **S**pecial features

Thales Australia's 5.56 mm F1 ball ammunition employs a specially designed propellant with very low temperature coefficient of ballistics to ensure velocities and pressures do not change greatly with variations in ammunition temperature.

As a result, maximum chamber pressure for the F1 cartridge at +80 °C is less than the NATO requirement for maximum chamber pressure at +52 °C.

#### FUNCTIONING

Typical ballistics					
	Projectile velocity (V24m) m/s		Chamber pressure MPa		
Temp (°C)	Kistler 6203 transducer	Kistler 6215 transducer	Kistler 6203 transducer	Kistler 6215 transducer	
-75	875	885	325	343	
-54	880	890	325	343	
-15	900	910	355	373	
5	905	915	355	373	
21	905	915	360	378	
52	910	920	360	378	
80	910	920	360	378	

### Packaging

Our 5.56 mm F1 ball ammunition can be supplied in the following standard packaging configurations:

- Blister packs (50 rounds per pack) —(training film pack)
- Charger clip (15 rounds per clip)
- Linked (200 rounds per belt).

The above-mentioned configurations are packed in standard military package containers. Details of these packaging configurations can be supplied upon request.

Other packaging configurations can be provided on request.

Our 5.56 mm F1 ball ammunition will be shipped in packages conforming to the UN recommendations for packaging of dangerous goods. The packages are classified as Hazard Division 1.4S, UN Number 0012. Proper shipping name—Cartridges, Small Arms.

Also available in 4 ball F1/1 tracer M856 linked configuration.



5.56 mm F1 ball ammunition in an M2A1 container