



# ADI 5.56mm F1 BALL AMMUNITION

## Consistent performance in varying temperature conditions

The ADI 5.56 mm F1 ball ammunition conforms to the design parameters of the NATO STANAG 4172 and is comparable to the FN SS109 5.56 mm cartridge. The projectile features composite core construction comprising a hardened steel penetrator and lead slug enclosed in a gilding metal jacket. ADI 5.56 mm F1 ball ammunition can be used in all 5.56 calibre NATO weapons. The performance of ADI 5.56 F1 ball ammunition is equivalent to FN SS109 and US M855 ball cartridges.

ADI 5.56 mm F1 ball ammunition is manufactured at ADI's munitions facility and is used by the Australian Defence Force in the F88 Steyr individual weapon and F89 Minimi light support weapon.

### Special features

ADI 5.56 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

| Temperature (°C) | Typical ballistics                          |                         |                         |                         |
|------------------|---|-------------------------|-------------------------|-------------------------|
|                  | Projectile velocity (V <sub>24m</sub> ) m/s |                         | Chamber pressure MPa    |                         |
|                  | 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                     |

### Performance

|   |                  |
|---|------------------|
| Projectile weight .....                 | 4.0 grams        |
| Projectile velocity (V <sub>24m</sub> ) |                  |
| Kistler 6203 transducer .....           | 905 m/s @ + 21°C |
| Kistler 6215 transducer .....           | 915 m/s @ + 21°C |
| Muzzle energy                           |                  |
| Kistler 6203 transducer .....           | 1.7 kJ @ + 21°C  |
| Kistler 6215 transducer .....           | 1.8 kJ @ + 21°C  |
| Maximum chamber pressure                |                  |
| Kistler 6203 transducer .....           | 380 MPa @ + 21°C |
| Kistler 6215 transducer .....           | 405 MPa @ + 21°C |

### Packaging

ADI 5.56 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 abovementioned 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.

ADI 5.56 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 for Weapons, Inert Projectile.

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

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