



5.56 X 45 MM

BALL FMJ M855/ SS109 - 4,0 g (62 gr)

5.56 x 45 mm FMJ

The cartridge consists of case, primer, gunpowder and bullet. It is applicable in extreme polar or desert conditions, contributing to the versatility of its use.

5.56 x 45 mm – FMJ bullet

The FMJ (Full Metal Jacket) bullet weighs 4.0 g (62 gr) and has a lead core with a steel penetrator, enhancing its penetration capability. The jacket is made of CuZn10, providing strength and uniformity in ballistic performance.

5.56 x 45 mm – case

The caliber 5.56 x 45 mm CuZn30 case is intended for inserting the powder charge, primer and bullet.

SPECIFICATIONS

Technical Specification

CARTRIDGE

Caliber	5.56 x 45 mm, SS109
Weight	max 12.40 g
Length	max 57.40 mm

BULLET GRAIN

Type	FMJ, Ball
Weight	4.00 g ± 0.1 g (62 grain)
Length	max 23.4 mm
Material	Jacket - CuZn10; Core - Lead, Perforating - steel tip
Extraction	≥ 200 N

CASE

Length	max 44.7 mm
Material	CuZn30

PRIMER

Type	Boxer, non-corrosive, non-toxic
Propellant	Smokeless Powder (Double Base)
Waterproof	Sealant applied

The 5.56 x 45 mm, SS109, Ball, produced in ATS AMMO is compliant with NATO STANAG 4172 requirements. It complies with the requirements of the NATO manuals AC/225(LG/3-SG/1)D/8 and PFP(NAAG-LCG/1-SG/1) WP(2010)0002. The ammunition can be fired from all NATO nominated 5.56 mm weapons: assault rifles – FNC, M16A2, H&K G36, BERETTA AR70/90, L85A2; Light machine gun – MINIMI. Caliber 5.56 mm M855 – NSN 1305-54-000-0139

ELECTRONIC PRESSURE AND VELOCITY (KIAG 6215)			
Ammunition Temperature	+21°C ± 2°C		+52°C & -54°C
Velocity (at 24 m, m/s)	V = 919 ± 10 m/s		Max Velocity Difference between +52°C/ -54°C and 21°C samples +50m/s and -80m/s
Standard Deviation	≤ 12 m/s		No requirement
Max Corrected Mean Case Mouth Pressure, MPa	XCP +3SD ≤ 445 Mpa		Max case mouth difference between +52°C/ -54°C and 21°C samples is not +55 Mpa or -110 Mpa XCP+3SD ≤ 445 Mpa
Min Corrected Mean Port Pressure, MPa	XPP - 3SD ≤ 103 Mpa		Max port pressure difference between +52°C/ -54°C and 21°C samples is ± 15 Mpa XPP-3SD ≥ 103 Mpa
Action Time (ms)	No requirement		Max Mean Action Time + 5 SD for -54°C sample ≤ 3 ms
Muzzle Energy (at 24 m, J)	≤ 1480 J		No requirement
Precision (at 183 m)	HSD ≤ 46 mm and VSD ≤ 46 mm or Mr ≤ 46 mm		
Precision (at 550 m)	HSD ≤ 200 mm and VSD ≤ 200 mm		
Function and Casualty	Permissible percentage of defects was not exceeded		
Primer sensitivity critical hight method (run down)	Test ball 111.7 ± 0.57 g	H +5 SD ≤ 450	H - 2 SD ≤ 75
Terminal effects at distance 570 m, perforation mild steel plate, aluminium witness screen (0.3 m behind steel plate)	≤ 90%	mm (SAE 1010/ 1020, hardness RB 55-70) 0,5 mm ANSI 2024 T3	
Trajectory match	Horizontal		Vertical
	≤ 175 mm @ 300 m		≤ 125 mm @ 300 m
	≤ 385 mm @ 500 m		≤ 275 mm @ 550 m
Waterproof test	No more than 15% of the tested rounds have leaks		

Compatibility with: AC/225(LG/3-SG/1)D/8 and PFP(NAAG-LCG/1-SG/1)WP(2010)0002 and STANAG 4172


PACKING	
Micro	20 rounds fiberboard box
Makro	540 rounds, ADR 1.4 S, UN0012 certified fiberboard case
Weight (540 rounds)	Net: 6.63 kg (±0.04 kg) Gross: 6.99 kg (±0.04 kg) NEQ: 0.89 kg
Hazard class	1.4 S
UN Classification	CARTRIDGES, SMALL ARMS

Packaging options are available based on the buyer's request. Cartridges can be supplied in standard outer cartons or, for an additional cost, in metal M2A1 boxes. All shipments are palletized, with boxes and pallets marked according to the customer's specifications.

V = Corrected velocity
XCP = Corrected mean chamber pressure
XPP = Corrected mean Port pressure
HSD = Horizontal standard deviation
VSD = Vertical standard deviation
Mr = Mean radius

Outsourcing Components

ATS® Ammunition has its own top-to-bottom manufacturing of a finished Product, an output of In-house made Machines, and produces 100% In-house Materials, Components and Tooling). ATS AMMO 5.56 x 45 mm, SS109 components (bullet, case, primer) are perfectly compact, customizable and *available for individual purchase*.


PRIMER
No mercury
CuZn30


<small>Case Length: max 44.70 mm</small>
CASE 5.56 x 45 mm
Unprimed
CuZn30


<small>Grain Bullet Length: max 23.4 mm</small>
SS109 (M855) FMJ BALL
4 g 62 grain
CuZn10 Lead Core

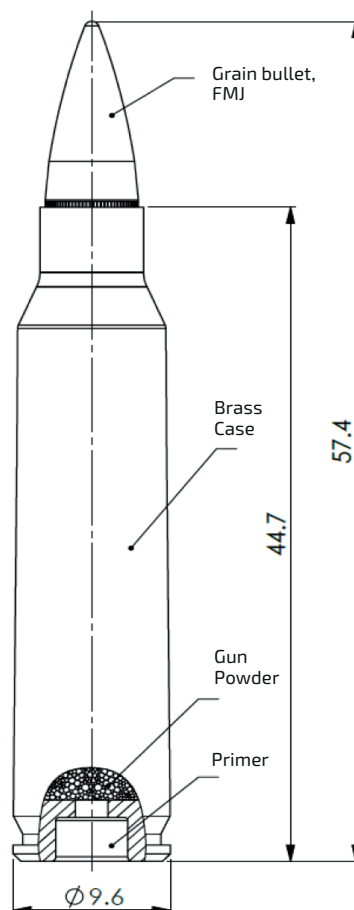


Image: Components Layout (5.56 x 45 mm, SS109)
Part number: 5561009; NSN 1305-54-000-0139