



9 X 19 MM

FMJ - 8,0 G (124 GR)

9 x 19 mm LUGER - cartridge

The 9 x 19 mm LUGER has become the most popular caliber for law enforcement agencies and modern sports shooting, because it can be used with a wide range of self-loading compact pistols and sub-machine guns with large magazine capacity.

9 mm LUGER – FMJ bullet

The full metal jacket bullets with lead core weigh 8 g.
The jacket is made of CuZn10/30 and the bullet core is made of PbSb.

9 x 19 mm LUGER – case

The caliber 9 x 19 mm CuZn30 case is designed to house the powder charge, the primer and the bullet.

SPECIFICATIONS

Technical Specification

CARTRIDGE

Caliber	9 x 19 mm
Weight	max 12.65 g
Length	max 29.69 mm

BULLET GRAIN

Type	FMJ, Ball
Weight	8.0 g ± 0.1 g (124 grain)
Length	max 15.8 mm
Material	Jacket - CuZn10; Core - Lead
Extraction	≥ 200 N

CASE

Length	max 19.15 mm
Material	CuZn30

PRIMER

Type	Boxer, non-corrosive, non-toxic
Propellant	Smokeless Powder (Double Base)
Waterproof	No sealant applied (applied upon request)

The 9x19, Ball, Parabelum ammunition produced in ATS AMMO is in compliance with STANAG 4090 and the NATO manual. PFP(NAAG-LCG/1-SG/1)WP(2010)0002 as well as with MOPI 9mm and C.I.P. The ammunition can be fired from all of the NATO nominated weapons: HP Browning; Beretta 92F; Glock 17,19,34; Sub-Machine gun PM12S; Sub-Machine gun MP5.

ELECTRONIC PRESSURE AND VELOCITY (KIAG 6215)			
Ammunition Temperature	+21°C ± 2°C	+54°C & -54°C	
Velocity (at 24 m, m/s)	$V = 345 \pm 8 \text{ m/s}$	Max Velocity Difference between +52°C/ -54°C and 21°C samples is $\pm 30 \text{ m/s}$	
Velocity (at 5 m, m/s)	$V = 365 \pm 8 \text{ m/s}$		
Standard Deviation	$\leq 9 \text{ m/s}$	No requirement	
Max Corrected Mean Case Mouth Pressure, MPa	$P + 3SD \leq 285 \text{ Mpa}$	Max case mouth difference between +52°C/ -54°C and 21°C samples is $\pm 65 \text{ Mpa}$	
Action Time (ms)	$\leq 3 \text{ m/s}$	No requirement	
Muzzle Energy (at 16 m, J for grain bullet weight 7-8.3 g)	491 - 713 J	No requirement	
Precision (at 46 m)	$Mr \leq 50 \text{ mm}, \text{HSD} \leq 50 \text{ mm} \ \& \ \text{VSD} \leq 50 \text{ mm}$		
Function and Casualty	Permissible percentage of defects was not exceeded		
Primer sensitivity critical high method (run down)	Test ball $55 \pm 0.57 \text{ g}$	H +5 SD ≤ 350	H - 2 SD ≤ 75
Waterproof test	No more than 15% of the tested rounds have leaks		

Compatibility with: STANAG 4090; PFP(NAAG-LCG/1-SG/1)WP(2010)0002, MOPI 9mm and C.I.P.

PACKING	
Micro	50 rounds (fiberboard box W/ plastic separator)
Makro	1000 rounds, ADR 1.4 S, UN0012 certified fiberboard case
Weight (1000 rounds)	Net: 12,26 kg
	Gross: 13,18 kg
	NEQ: 0,32 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
HSD = Horizontal standard deviation
VSD = Vertical standard deviation
Mr = Mean radius

Test Equipment

The equipment that is used for testing the ballistic characteristics of the ammunition is from Prototypa and is as follows:

- Universal Ballistic Breech (Receiver) UZ-2002
- Support reducing inserter UZ-2002
- Exchangeable parts sets for cal. 9x19 - for action time measuring:
 - Breech block head insulated marked 2 INM
 - Firing pin insulated marked 5 INA
 - Extractor marked 1
 - Firing pin spring
 - Extractor spring
 - Extractor cap
 - Rivet 3x8
 - Firing pin end
- Pressure Test Barrel cal. 9x19 for Receiver M2; Length 201.8 mm, KISTLER 6215 pressure vent position M1=21.5 mm
- Pressure Test Barrel cal. 9x19 for Receiver M2; Length = 150 mm, KISTLER 6215 pressure vent position M1=12.5 mm
- Velocity/Accuracy Test Barrel cal. 9x19 for Receiver M2; Length = 201.8 mm
- Velocity/Accuracy Test Barrel cal. 9x19 for Receiver M2; Length = 150 mm
- Velocity/Accuracy Test Barrel cal. 9x19 for Receiver M2; Length = 250 mm
- VPS - Simple one purpose drilling jig for cal. 9x19
- Head space gauge GO and NOGO cal. 9x19
- SAU-4QU Signal acquisition unit
 - 4 charge inputs for transducers/voltage inputs (programmable)
- Quartz High pressure Sensor KISTLER 6215A1
- LS06 Intelligent Light gates
 - Diode system, Base 1 m, software BMS - English
- BP-1 Bullet pull tester.
 - Range of calibers from 4,5 to 12 mm
 - Maximum load 2500 N

The equipment is controlled, maintain, and calibrated according to the specifications. We are always aiming for improving the testing facility with latest in line equipment's and assuring that the possibility of mistake is reduced to the minimum.

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 9 x 19 mm NATO BALL FMJ 8.0 g (124 gr) components (bullet, case, primer) are perfectly compact, customizable and *available for individual purchase*.

	 <small>Case Length: max 19.15 mm</small>	 <small>Grain Bullet Length: max 15.8 mm</small>
PRIMER	CASE 9 x 19 mm	FMJ BALL
No mercury	Unprimed	8,0 g 124 grain
CuZn30	CuZn30	CuZn10/CuZn30 Lead Core

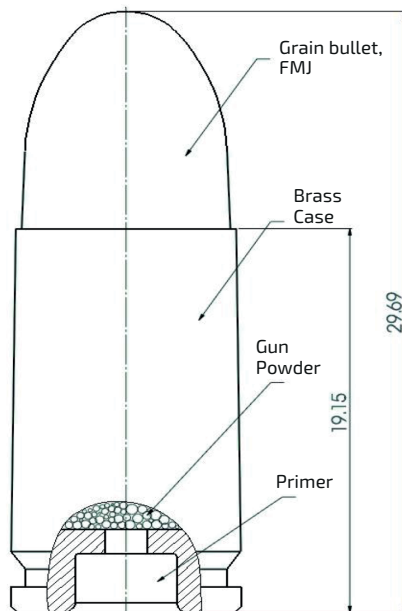


Image: Components Layout (9 x 19 mm NATO BALL FMJ 8.0 g (124 gr))
Part number: 9101908