



7.62 X 51 MM

BALL FMJ M80 - 9,4 G (147 GR)

7.62 x 51 mm - cartridge

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.

7.62 x 51 mm FMJ - M80 bullet

The FMJ (Full Metal Jacket) bullet weighs 9.4 g (145 gr) and features a lead core to deliver reliable penetration and stability. The jacket is made of CuZn10, providing the bullet with strength and uniform ballistic characteristics.

7.62 x 51 mm - case

The caliber 7.62 x 51 mm CuZn30 case is intended for inserting the powder charge, primer and bullet.

All data provided are indicative and subject to change.

SPECIFICATIONS

Technical Specification

CARTRIDGE

Caliber	7.62 x 51 mm, NATO
Weight	max 25.4 g
Length	max 71.12 mm

BULLET GRAIN

Type	FMJ, Ball
Weight	9.52 g ± 0.1 g (147 grain)
Length	max 28.95 mm
Material	Jacket - CuZn10; Core - Lead
Extraction	≥ 265 N

CASE

Length	max 51.18 mm
Material	CuZn30

PRIMER

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

The 7.62x51mm, NATO, Ball, ammunition producing in ATS AMMO is in compliance with NATO STANAG 2310 requirements. It's comply the requirements to the NATO manuals AC/225(LG/3-SG/1)D/9 and PFP (NAAG-LCG/1-SG/1)WP(2010)0002. The ammunition can be fired from NATO 7.62 mm weapons: Machine gun - L7A2 and M240B as well as assault rifles -G3A2, M14.

ELECTRONIC PRESSURE AND VELOCITY (KIAG 6215)			
Ammunition Temperature	+21°C ± 2°C	+52°C & -54°C	
Velocity (at 24 m, m/s)	V = 825 ± 15 m/s	Max Velocity Difference between +52°C/ -54°C and 21°C samples + 45 m/s and - 75 m/s	
Standard Deviation	≤ 9.7 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 ≤ 460 Mpa	
Min Corrected Mean Port Pressure, MPa	XPP -3SD ≥ 56 Mpa	No requirement	
Action Time (ms)	Max individual ≤ 4 ms	No requirement	
Muzzle Energy (at 24 m, J)	≤ 2765 J	No requirement	
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 ≤ 500	H - 2 SD ≤ 75
Terminal effects at distance 570 m, perforation mild steel plate, aluminium witness screen (0.3 m behind steel plate)	≤ 90%	3,5 mm (SA1010 / 1020, hardness RB 55-70) 0,5 mm ANSI 2024 T3	
Trajectory match	Horizontal ≤ 175 mm @ 300 m ≤ 385 mm @ 500 m	Vertical ≤ 125 mm @ 300 m ≤ 275 mm @ 550 m	
Waterproof test	No more than 15% of the tested rounds have leaks		

Compatibility with: STANAG 2310, AC/225(LG/3-SG/1)D/9 and PFP(NAAG-LCG/1-SG/1)WP(2010)0002 and STANAG 2310


PACKING	
Micro	15 rounds fiberboard box
Makro	600 rounds, ADR 1.4 S, UN0012 certified fiberboard case
Weight (600 rounds)	Net: 14.60 kg Gross: 15.40 kg NEQ: 1.70 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

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 7.62 x 51 mm components (bullet, case, primer) are perfectly compact, customizable and *available for individual purchase*.


PRIMER
No mercury
CuZn30

 <small>Case Length: max 51.18 mm</small>
CASE 7.62 x 51 mm
Unprimed
CuZn30

 <small>Grain Bullet Length: max 29 mm</small>
M80 FMJ BALL
9.4 g 145 grain
CuZn10 Lead Core

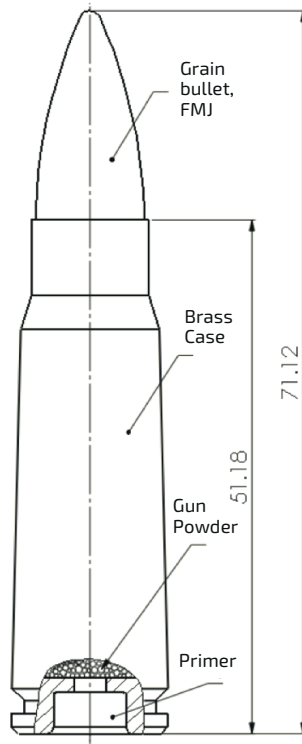


Image: Components Layout (7.62 x 51 mm)
Part number: 7621051