



1-XF / MK-21

9 x 19 mm BALL | 115 grains (7.5 g)

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 of wide range of self-loading compact pistols and sub-machine guns with large magazine capacity of such ammunition.

9mm LUGER – FMJ bullet

The full metal jacket bullets with lead core are produced in weight 7.5 g. The jacket is made from CuZn10/30 and the bullet core is made from PbSb.

9 x 19 mm LUGER– case

The caliber 9 x 19 mm CuZn30 case is intended for inserting the powder charge, primer and bullet.

SPECIFICATIONS

Technical Specification 1-XF/MK-21

Caliber	9x19mm (Appendix 1)
Cartridge Length	max 29.69 mm
Cartridge weight	min 11.65 g - max 12.15 g
Grain bullet	FMJ, Ball
Grain Bullet weight	7.5 ± 0.1 / 115
Grain Bullet length	max 15.2 mm
Grain Bullet material	Jacket - CuZn10/CuZn30; Core - Lead
Grain Bullet extraction	≥ 200 N
Case length	max 19.15 mm
Case material	CuZn30
Propellant powder	Double base, smokeless
Primer	Boxer, non corrosive
Waterproof	No sealant applied, applied upon request

SPECIFICATIONS

ELECTRONIC PRESSURE, VELOCITY AND ACTION TIME (EPVAT), KIAG 6215 PRESSURE TRANSDUCER

Ammunition temperature	'+ 21° C ± 2° C	'+54°C & -54°C
Velocity at 16 m, m/s	V = 365 ± 8 m/s	Maximum Velocity Difference between +52°C/-54°C and 21°C samples is ± 30 m/s
Velocity at 5 m, m/s	V = 380 ± 8 m/s	
Standard deviation	≤ 9 m/s	No requierment
Maximum Corrected Mean Case Mouth Pressure , Mpa	P + 3SD ≤ 285 Mpa	Maximum case mouth difference between +52°C/-54°C and 21°C samples is ± 65 Mpa
Action time, ms	≤ 3ms	No requierment
Muzzle energy at 16 m, J (for grain bullet weight from 7 to 8.3 g)	491 - 713 J	No requierment

Precision at 46 m	Mr ≤ 50 mm, HSD ≤ 50 mm & VSD ≤ 50 mm		
Function and casualty	Permissible percentage of defects was not exceeded		
Primer sensitivity critical hight metod (run down)	Test ball	H +5 SD	H - 2 SD
	55 ± 0.57 g	≤ 350	≥ 75
Waterproof test	No more than 15% of the tested rounds have leaks		

V= Corrected mean velocity

P= Corrected mean pressure

HSD= Horizontal standard deviation

VSD= Vertical standard deviation

Mr= Mean radius