



ARMOR-PIERCING AMMUNITION LINE

PPU • prvi partizan •





Dear Partners,

This year our company is celebrating 95th anniversary. Thanks to generations of dedicated employees our name is recognized all over the world.

We stay loyal and committed to our customers and to ourselves! Our goal is to continue offering high-performance products, the most accurate, high quality and safe ammunition.

What's the most important, we will continue to invest in our equipment and to modernize production line.

In year of 95th anniversary we proudly present the armor-piercing line of ammunition.

Customers requests and needs for armor-piercing ammunition led to introducing our armor-piercing line of ammunition.

Dedicated,with highly attention and passion we try to satisfy all needs.

Here you can find the almost everything for the needs of your armies,special units and low enforcement.

Yours truly,

Dobrosav Andric
General Manager





Cartridge 5,56 x 45 mm AP M995

#A-678#

GENERAL

- This cartridge is intended for use against personnel and armored targets in 5,56 x 45 mm weapons
- Headstamp: PPU , 5,56 x 45 and year of manufacture (two last digits)
- The cartridges shall function within the temperature range from - 54 °C to + 52 °C
- Life 10 years
- Cartridge dimensions and performance are in accordance with MIL-PRF-71208 standard

TECHNICAL DATA

CARTRIDGE

Weight	11,7 g
Length	max 57,40 mm
Extract force	min 200 N
Primer	small rifle primer, noncorrosive, no mercuric, nontoxic
Powder	double base powder

CASE

Type	5,56 x 45 mm, Boxer
Weight	approx. 6,2 g
Length	max 44,70 mm
Material	Brass CuZn30

BULLET

Type	FMJ BT AP (Full Metal Jacket Armor Piercing)
Weight	approx. 3,4 g (52 gr)
Length	max 24 mm
Diameter	max 5,7 mm
Material	Jacket: Gilding metal Core: tungsten core
Ballistic coefficient G1	0.260

PERFORMANCE

Velocity V_{0m}	1030 ± 12,1 m/s
Muzzle energy E_{25m}	1803 J
Chamber pressure	max 4050 bar, EPVAT method of measurement
Accuracy	Sdx, and Sdy max 17,78 cm at 550 m from muzzle
Terminal ballistic	projectile penetrate 3,5 mm thick NATO plate at range of 600 m from muzzle

Packing	800 rds in metal box M2A1 1000 rds in metal box M2A1
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#A-719#

Cartridge 6,5 x 39 mm (6,5 mm Grendel) AP HC

GENERAL

- This cartridge is intended for use against personnel and light armored targets in 6,5 x 39 mm (6,5 mm Grendel) mm caliber weapons at distance 800 m
- Headstamp: PPU and two last digits of manufacture (on 12 h) and 6,5 mm GREN (on 6 h)
- The cartridges shall function within the temperature range from - 54 °C to + 52 °C
- Life 10 years
- Cartridge dimensions are in accordance with Serbian military defense standard

TECHNICAL DATA

CARTRIDGE

Weight	17,8 g
Length	max 57 mm
Extract force	min 250 N
Primer	small rifle primer, noncorrosive, no mercuric, nontoxic
Powder	double base powder

CASE

Type	6,5 x 39 mm (6,5 mm Grendel), Boxer
Weight	approx. 7,9 g
Length	max 38,60 mm
Material	Brass CuZn30

BULLET

Type	FMJ BT AP (Full Metal Jacket Armor Piercing)
Weight	approx. 7,80 g (120 gr)
Length	max 30,2 mm
Diameter	max 6,71 mm
Material	Jacket: Gilding metal Core: tungsten core
Ballistic coefficient G1	0.540

PERFORMANCE

Velocity V_{25m}	740 ± 10 m/s
Muzzle energy E_{25m}	2135 J
Chamber pressure	max 3650 bar, EPVAT method of measurement
Accuracy	max extreme spread (5 shots) 220 mm at 300 m from muzzle
Terminal ballistic	projectile penetrate 8 mm thick hard steel plate with 90 % probability -at range of 100 m from muzzle
Test barrel length	415 m
Packing	810 rds in metal box M2A1



AP HC-Tungsten Core bullet

Cartridge 7,62 x 51mm NATO AP M61

#A-698#

GENERAL

- This cartridge is intended for use in 7,62 x 51 mm caliber weapons (MAG,US M660, M219,M240, G3,L1A1, FAL, M14, and other...)
- Headstamp: PPU and two last digits of manufacture (on 12 h) and 7,62 x 51 (on 6 h)
- The cartridges shall function within the temperature range from - 54 °C to + 52 °C
- Life 10 years
- Cartridge dimensions and performance are in accordance with MIL-C-60617A standard

TECHNICAL DATA

CARTRIDGE

Weight	24,0 g
Length	max 71,12 mm
Extract force	min 265 N
Primer	large rifle primer, noncorrosive, no mercuric, nontoxic
Powder	double base powder

CASE

Type	7,62 x 51 mm, Boxer
Weight	approx. 11,2 g
Length	max 51,18 mm
Material	Brass CuZn30

BULLET

Type	FMJ BT AP (Full Metal Jacket Armor Piercing)
Weight	approx. 9,40 g (145 gr)
Length	max 29 mm
Diameter	max 7,84 mm
Material	Jacket: Gilding metal Core: steel core
Ballistic coefficient G1	0.419 (ICAO)

PERFORMANCE

Velocity V_{24m}	833 ± 9 m/s
Muzzle energy E_{24m}	3261 J
Chamber pressure	max 3800 bar, EPVAT method of measurement (using 6215 transducer)
Accuracy	mean radius max 19,05 cm at 550 m
Terminal ballistic	projectile penetrate 3,42 mm thick mid steel plate SAE-1010 or SAE-1020 at range of 1097 m or projectile penetrate two 3,42 mm thick mid steel plate SAE-1010 or SAE-1010 at range of 550 m
Packing	600 rds in metal box M2A1 (MIL-DTL-3060) 2 x 250 rds linked M13 (3B+1AP+1T) in metal box M2A1 (MIL-DTL-3060)



#A-741#

Cartridge 7,62 x 51mm AP M993

GENERAL

- This cartridge is intended for use in 7,62 x 51 mm caliber weapons (MAG,US M660, M219,M240, G3,L1A1, FAL, M14, and other...)
- Headstamp: PPU and two last digits of manufacture (on 12 h) and 7,62 x 51 (on 6 h)
- The cartridges shall function within the temperature range from - 54 °C to + 52 °C
- Life 10 years
- Cartridge dimensions and performance are in accordance with MIL-PRF-32317 standard

TECHNICAL DATA

CARTRIDGE

Weight	23,5 g
Length	max 71,10 mm
Extract force	min 267 N
Primer	large rifle primer, noncorrosive, no mercuric, nontoxic
Powder	double base powder

CASE

Type	7,62 x 51 mm, Boxer
Weight	approx. 11,2 g
Length	max 51,18 mm
Material	Brass CuZn30

BULLET

Type	FMJ BT AP (Full Metal Jacket Armor Piercing)
Weight	approx. 8,20 g (126,6 gr)
Length	max 29 mm
Diameter	max 7,84 mm
Material	Jacket: Gilding metal Core: tungsten core
Ballistic coefficient G1	0.419

PERFORMANCE

Velocity V_{24m}	910 ± 10 m/s
Muzzle energy E_{24m}	3395 J
Chamber pressure	max 3800 bar, EPVAT method of measurement (using 6215 transducer)
Accuracy	mean radius max 15,20 cm at 550 m
Terminal ballistic	projectile penetrate 7 mm thick hard steel plate at range of 500 m
Packing	600 rds in metal box M2A1 (MIL-DTL-3060) 2 x 250 rds linked M13 (3B+1AP+1T) in metal box M2A1 (MIL-DTL-3060)



Cartridge 7,62 x 54mm AP HC

GENERAL

- This cartridge is intended for use against personnel and light armored targets in 7,62 x 54 mm caliber weapons at distance 800 m
- Headstamp: PPU and two last digits of manufacture (on 12 h) and 7,62 x 54 R (on 6 h)
- The cartridges shall function within the temperature range from - 54 °C to + 52 °C
- Life 10 years
- Cartridge dimensions are in accordance with Serbian military defense standard

TECHNICAL DATA

CARTRIDGE

Weight	26,0 g
Length	max 77,16mm
Extract force	min 600 N
Primer	large rifle, berdan 6,55-DTN, primer, noncorrosive, no mercuric
Powder	double base powder

CASE

Type	7,62 x 54 mm, berdan
Weight	approx. 9,6 g
Length	max 53,72 mm
Material	Brass CuZn30

BULLET

Type	FMJ BT AP (Full Metal Jacket Armor Piercing)
Weight	approx. 11,90 g (184 gr)
Length	max 33,3 mm
Diameter	max 7,92 mm
Material	Jacket: Gilding metal Core: tungsten core
Ballistic coefficient G1	0.544

PERFORMANCE

Velocity V_{25m}	820 ± 10 m/s
Muzzle energy E_{25m}	4000 J
Chamber pressure	max 2900 bar, C.I.P crusher method of measurement max 3500 bar, C.I.P transducer method of measurement
Accuracy	max extreme spread (5 shots) 200 mm at 300 m form muzzle
Terminal ballistic	projectile penetrate 10 mm thick hard steel plate with 90 % probability - at range of 200 m from muzzle
Packing	510 rds in metal box M2A1 750 rds in carton box

#A-770#



#A-717#

Cartridge 338 Lapua Magnum AP HC

GENERAL

- This cartridge is intended for use against personnel and armored targets in 8,60 x 70 mm(338 Lapua Magnum)caliber weapons at distance 1200 m
- Head stamp: PPU and two last digits of manufacture (on 12 h) and 338 LAPUA MAG (on 6 h)
- The cartridges shall function within the temperature range from - 54 °C to + 52 °C
- Life 10 years
- Cartridge dimensions are in accordance with C.I.P. specifications (REV 02-05-15).

TECHNICAL DATA

CARTRIDGE

Weight	44 g
Length	max 92,8 mm
Extract force	min 300 N
Primer	large rifle magnum, boxer, no corrosive, no mercuric
Powder	single or double base powder

CASE

Type	338 Lapua Magnum, Boxer
Weight	approx. 22 g
Length	max 69,2 mm
Material	Brass CuZn30

BULLET

Type	FMJ BT AP (Full Metal Jacket Armor Piercing)
Weight	approx. 15,9 g (245 gr)
Length	max 38,8 mm
Diameter	max 8,61 mm
Material	Jacket: Gilding metal Core: tungsten core
Ballistic coefficient G1	0.605 (ICAO)

PERFORMANCE

Velocity V_{25m}	900±25 m/s
Muzzle energy E_{25m}	6440 J
Chamber pressure	max 4200 bar, CIP transducer method of measurement
Accuracy	max extreme spread 150 mm at 300 m max mean radius 120 mm at 300 m
Terminal ballistic	projectile penetrate 12 mm thickness hard steel plate -at range of 570 m from muzzle
Packing	200 rds in metal box M2A1



AP HC-Tungsten Core bullet

Cartridge 12,7 x 99 mm AP M2

GENERAL

- This cartridge is intended for use against personnel and unarmored targets in .50 Browning (12,7 x 99 mm) weapons at distance up to 1200 m.
- Head stamp: PPU and "two last digits of year of manufacture" (on 12 h), and 12,7 x 99 (on 6 h)
- The cartridges shall function within the temperature range from - 40 °C to + 52 °C.
- Life 10 years

TECHNICAL DATA

CARTRIDGE

Weight	114 g
Length	max 138,43mm
Extract force	-890N
Primer	large rifle 12,7, boxer, no corrosive, no mercuric
Powder	double base powder

CASE

Type	12,7 x 99 Browning, BOXER
Weight	approx. 55 g
Length	max 99,30 mm
Material	Brass CuZn30

BULLET

Type	FMJ BT AP (Full Metal Jacket Armor Piercing)
Weight	approx. 42,50 g (656 gr)
Length	max 59 mm
Diameter	max 12,98 mm
Material	Jacket: Gilding metal Core: steel core
Ballistic coefficient G1	0.810 (ICAO)

PERFORMANCE

Velocity V_{24m}	820 ± 10 m/s
Muzzle energy E_{24m}	16659 J
Chamber pressure	max 3790 bar
Accuracy	max mean radius 30,48 cm at 550 m
Terminal ballistic	projectile penetrate 20 mm thick hard steel plate at range of 100 m from muzzle
Packing	120 rds in metal box M2A1

#A-747#



#A-746#

Cartridge 12,7 x 99 mm AP HC

GENERAL

- This cartridge is intended for use against personnel and unarmored targets in .50 Browning (12,7 x 99 mm) weapons at distance up to 1200 m.
- Head stamp: PPU and "two last digits of year of manufacture" (on 12 h), and 12,7 x 99 (on 6 h)
- The cartridges shall function within the temperature range from - 40 °C to + 52 °C.
- Life 10 years

TECHNICAL DATA

CARTRIDGE

Weight	114 g
Length	max 138,43mm
Extract force	-890N
Primer	large rifle 12,7, boxer, no corrosive, no mercuric
Powder	double base powder

CASE

Type	12,7 x 99 Browning,BOXER
Weight	approx. 55 g
Length	max 99,30 mm
Material	Brass CuZn30

BULLET

Type	FMJ BT AP (Full Metal Jacket Armor Piercing)
Weight	approx. 42,50 g (656 gr)
Length	max 59 mm
Diameter	max 12,98 mm
Material	Jacket: Gilding metal Core: tungsten core
Ballistic coefficient G1	0.810 (ICAO)

PERFORMANCE

Velocity V_{24m}	885,4 ± 9,14 m/s
Muzzle energy E_{24m}	16659 J
Chamber pressure	max 3790 bar
Accuracy	max mean radius 30,48 cm at 550 m
Terminal ballistic	projectile penetrate 20 mm thick hard steel plate at range of 550 m from muzzle

Packing	120 rds in metal box M2A1
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Cartridge 12,7 x 108 mm AP SC

GENERAL

- This cartridge is intended for use against personnel and armored targets in 12,7 x 108 mm caliber weapons at distance 1200 m
- Head stamp: PPU and two last digits of manufacture (on 12 h) and 12,7 x 108 (on 6 h)
- The cartridges shall function within the temperature range from - 40 °C to + 52 °C
- Life 10 years
- Cartridge dimensions are in accordance with C.I.P. specifications (REV 02-05-15).

TECHNICAL DATA

CARTRIDGE

Weight	134 g
Length	max 147 mm
Extract force	2450 - 5400N
Primer	large rifle 12,7/3 DShK, boxer, no corrosive, no mercuric
Powder	double base powder

CASE

Type	12,7 x 108 mm, Boxer
Weight	approx. 68 g
Length	max 108 mm
Material	Brass CuZn30

BULLET

Type	FMJ BT AP (Full Metal Jacket Armor Piercing)
Weight	approx. 51,3 g (792 gr)
Length	max 56,1 mm
Diameter	max 13,01 mm
Material	Jacket: Gilding metal Core: steel core
Ballistic coefficient G1	0.930 (ICAO)

PERFORMANCE

Velocity V_{25m}	810 ± 825 m/s
Muzzle energy E_{25m}	17037 J
Chamber pressure	max 3040 bar, crusher method of measurement
Accuracy	max mean radius 200 mm at 300 m
Terminal ballistic	projectile penetrate 20 mm thick hard steel plate with 90 % probability -at range of 100 m from muzzle

Packing	100 rds in metal box 12,7 DShK 160 rds in metal box PA-108
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#A-664#



AP HC-Tungsten Core bullet



AP SC- Steel Core bullet

#A-744#

Cartridge 12,7 x 108 mm AP HC

GENERAL

- This cartridge is intended for use against personnel and armored targets in 12,7 x 108 mm caliber weapons at distance 1200 m
- Head stamp: PPU and two last digits of manufacture (on 12 h) and 12,7 x 108 (on 6 h)
- The cartridges shall function within the temperature range from - 40 °C to + 52 °C
- Life 10 years
- Cartridge dimensions are in accordance with C.I.P. specifications (REV 02-05-15).

TECHNICAL DATA

CARTRIDGE

Weight	134 g
Length	max 147 mm
Extract force	2450 - 5400N
Primer	large rifle 12,7/3 DShK, boxer, no corrosive, no mercuric
Powder	double base powder

CASE

Type	12,7 x 108 mm, Boxer
Weight	approx. 68 g
Length	max 108 mm
Material	Brass CuZn30

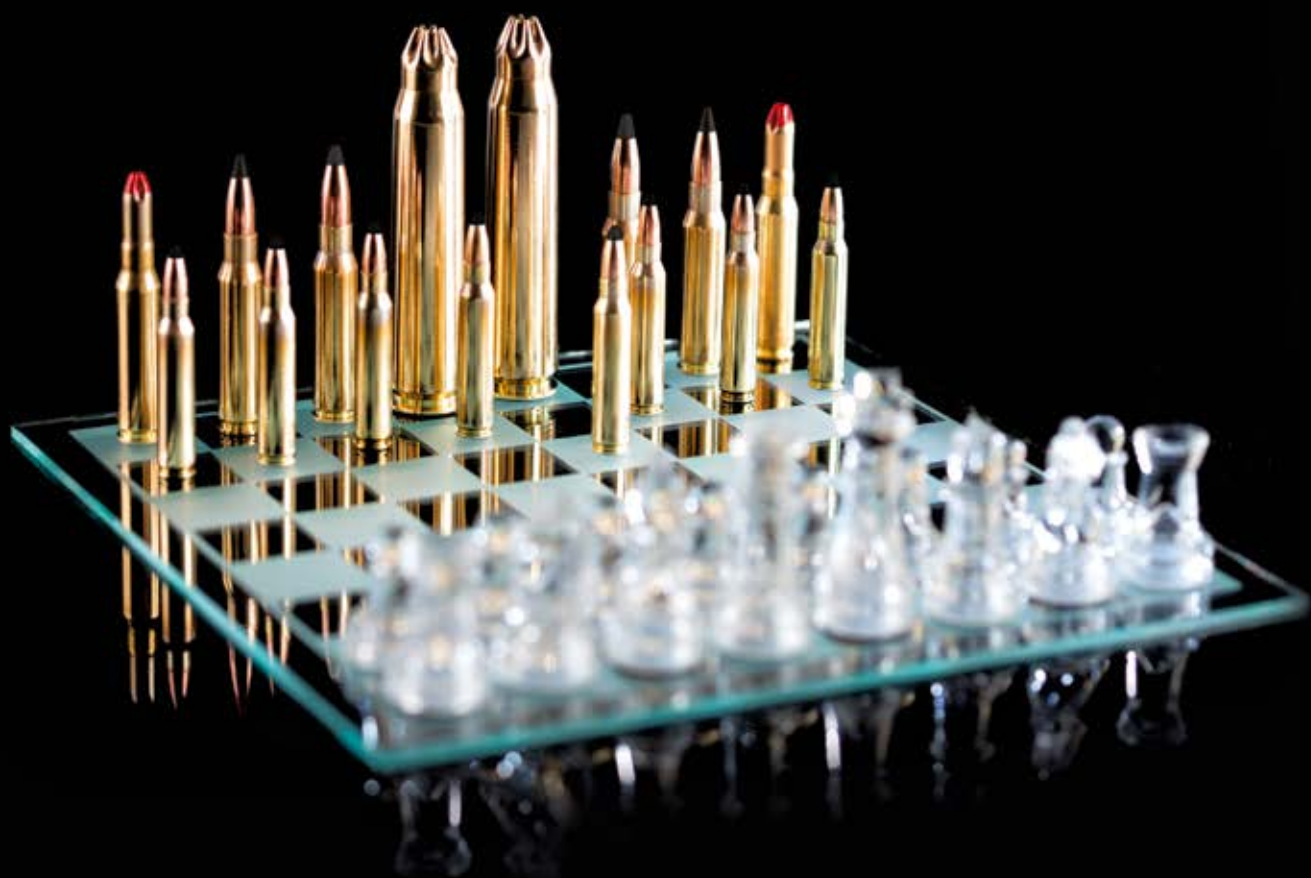
BULLET

Type	FMJ BT AP (Full Metal Jacket Armor Piercing)
Weight	approx. 51,3 g (792 gr)
Length	max 56,1 mm
Diameter	max 13,01 mm
Material	Jacket: Gilding metal Core: tungsten core
Ballistic coefficient G1	0.930 (ICAO)

PERFORMANCE

Velocity V_{25m}	810 ± 825 m/s
Muzzle energy E_{25m}	17037 J
Chamber pressure	max 3040 bar, crusher method of measurement
Accuracy	max mean radius 200 mm at 300 m
Terminal ballistic	projectile penetrate 25 mm thick hard steel plate with 90 % probability -at range of 200 m from muzzle
Packing	100 rds in metal box 12,7 DShK 160 rds in metal box PA-108





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