CATALOGUE

Krušik
HOLDING CORPORATION


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HOLDING CORPORATION

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Kruščik
HOLDING CORPORATION

ABOUT US

The Holding Corporation 'Krusik' a.d. is the name recognized worldwide among the users of the products of this sort. The Company has great tradition in manufacturing armament and military equipment. Krušik has sold more than 14mil items and exported to more than 70 countries of the world within past 80 years of its existence, therefore, it is ranked among leading armament manufacturers in this part of Europe. Throughout the years, Krusik has participating on more than 300 manifestations in the country and abroad. Strategic partners of Krušik are Ministry of Defence and members of the Defence Industry of Serbia.

PORTFOLIO

- PRODUCTION OF ARMAMENT AND MILITARY EQUIPMENT
- OVERHAUL OF ARMAMENT AND MILITARY EQUIPMENT
- TECHNOLOGY TRANSFERS AND ERECTION OF PLANTS
- MARKET ORIENTED PROGRAMS
- SERVICES: DISASSEMBLING AND SAFE DESTRUCTION OF WAR DEVICES, SHELF-LIFE EXPIRED PRODUCTS, METAL MANUFACTURING, HEAT TREATMENTS, PROTECTIVE COATINGS

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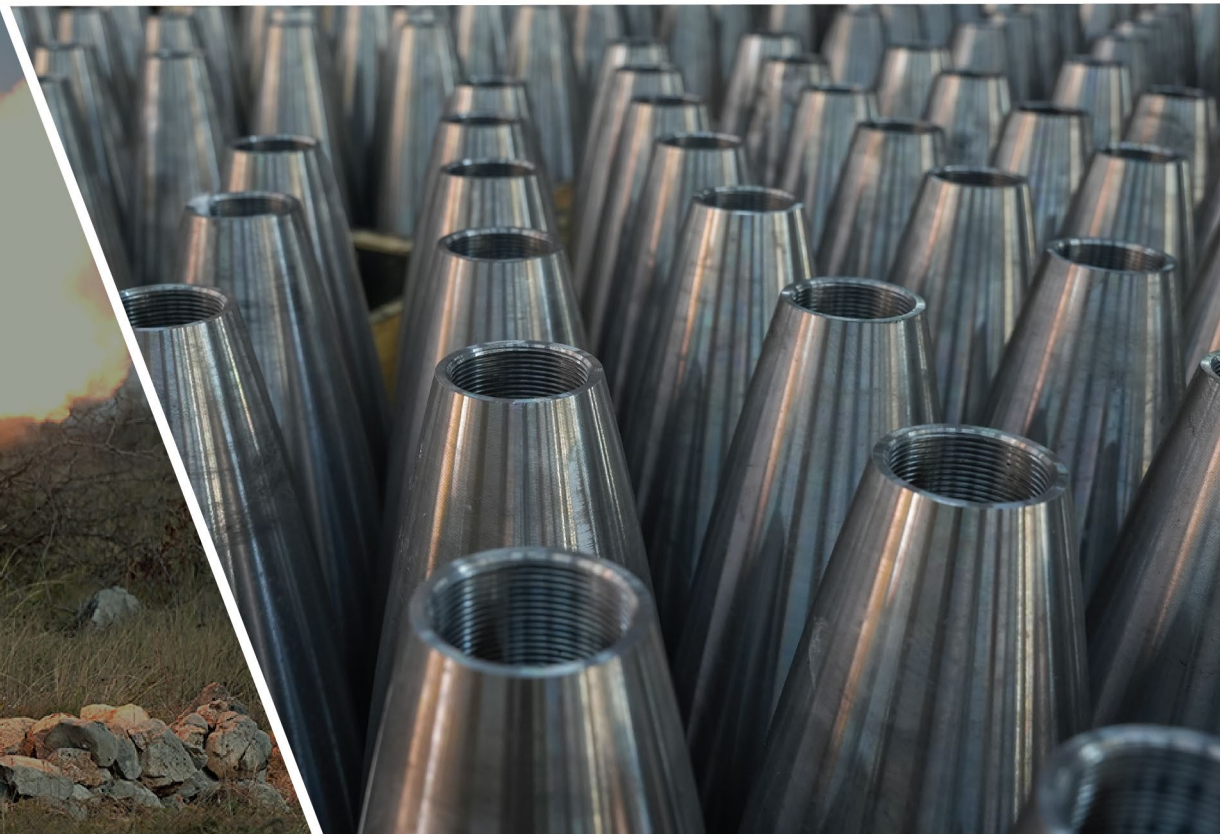
MORTAR SHELLS



60 mm M73
HE MORTAR SHELL

TECHNICAL DATA

Length of shell with fuze	286 mm
Mass of mortar shell with fuze	1350 g
Explosive charge	trotyl (TNT)
Mass of explosive charge	250 g
Fuze	impact, superquick action, UT M68 P1
Muzzle safety at lowest initial velocity	8 m
Shell is completed with ignition cartridge and increment charges	
Safe operational temperature range	-30°C to +50°C
High safety during transportation, handling and parachuting	

BALLISTIC DATA

When using 60 mm Mortar, barrel length 650 mm:

Maximum range	2500 m
Max. mean operating pressure in mortar	392 bars
Killing range (1 penetration / m²) - radius	10 m

The mortar shells can be fired from smooth bore mortar launchers.

PACKING

1 complete shell per carton	
12 cartons per wooden case	
Dimensions of wooden case	553 x 429 x 223 mm
Gross weight	29 kg
Volume of wooden case	0.053 m³
UN No.	0321
Hazard class	1.2E

60 mm M73PX
HE MORTAR SHELL with proximity fuze

TECHNICAL DATA

Length of shell with fuze	334 mm
Mass of mortar shell with fuze	1525 g
Explosive charge	trotyl (TNT)
Mass of explosive charge	250 g
Fuze	proximity, MBU M18
Muzzle safety at lowest initial velocity	50 m
Shell is completed with ignition cartridge and increment charges	
Safe operational temperature range	-30°C to +50°C
High safety during transportation, handling and parachuting	

BALLISTIC DATA

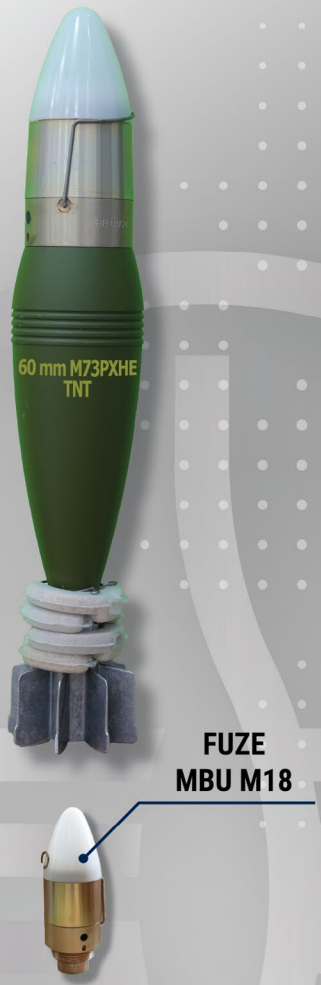
When using 60 mm Mortar, barrel length 650 mm:

Maximum range	2500 m
Max. mean operating pressure in mortar	392 bars
Killing range (1 penetration / m²) - radius	10 m

The mortar shells can be fired from smooth bore mortar launchers.

PACKING

1 complete shell per carton	
12 cartons per wooden case	
Dimensions of wooden case	553 x 429 x 223 mm
Gross weight	29 kg
Volume of wooden case	0.052 m³
UN No.	0321
Hazard class	1.2E



60 mm M73PXP1
HE MORTAR SHELL with proximity fuze

TECHNICAL DATA

Length of shell with fuze	301 mm
Mass of mortar shell with fuze	1525 g
Explosive charge	trotyl (TNT)
Mass of explosive charge	250 g
Fuze	proximity, MBU M18P1
Muzzle safety at lowest initial velocity	50 m
Shell is completed with ignition cartridge and increment charges	
Safe operational temperature range	-30°C to +50°C
High safety during transportation, handling and parachuting	

BALLISTIC DATA

When using 60 mm Mortar, barrel length 650 mm:

Maximum range	2500 m
Max. mean operating pressure in mortar	392 bars
Killing range (1 penetration / m²) - radius	10 m

The mortar shells can be fired from smooth bore mortar launchers.

PACKING

1 complete shell per carton	
12 cartons per wooden case	
Dimensions of wooden case	553 x 429 x 223 mm
Gross weight	29 kg
Volume of wooden case	0.052 m³
UN No.	0321
Hazard class	1.2E

60 mm M73P3
HE MORTAR SHELL

TECHNICAL DATA

Length of shell with fuze	301 mm
Mass of mortar shell with fuze	1350 g
Explosive charge	trotyl (TNT)
Mass of explosive charge	250 g
Fuze	impact, superquick action UT, M88 P1
Muzzle safety at lowest initial velocity	70 m
Shell is completed with ignition cartridge and increment charges	
Safe operational temperature range	-30°C to +50°C
High safety during transportation, handling and parachuting	

BALLISTIC DATA

When using 60 mm Mortar, barrel length 650 mm:

Maximum range	2500 m
Max. mean operating pressure in mortar	392 bars
Killing range (1 penetration / m²) - radius	10 m

The mortar shells can be fired from smooth bore mortar launchers.

PACKING

1 complete shell per carton	
12 cartons per wooden case	
Dimensions of wooden case	553 x 429 x 223 mm
Gross weight	29 kg
Volume of wooden case	0.052 m³
UN No.	0321
Hazard class	1.2E

60 mm Mk10
HE MORTAR SHELL

TECHNICAL DATA

Length of shell with fuze	410 mm
Mass of mortar shell with fuze	2100 g
Explosive charge	hexolite (RDX/ TNT) or trotyl (TNT)
Mass of explosive charge	380 g
Fuze	impact, superquick action UT, M88 P1
Muzzle safety at lowest initial velocity	70 m
Shell is completed with ignition cartridge and increment charges	
Safe operational temperature range	-46°C to +63°C
High safety during transportation, handling and parachuting	

BALLISTIC DATA

When using 60 mm Mortar, barrel length 1200 mm:

Maximum range	5035 m
Max. mean operating pressure in mortar	618 bars
Killing range (1 penetration / m²) - radius	14 m

The mortar shells can be fired from smooth bore mortar launchers.

PACKING

1 complete shell per carton	
8 cartons per wooden case	
Dimensions of wooden case	532 x 373 x 223 mm
Gross weight	32 kg
Volume of wooden case	0.044 m³
UN No.	0321
Hazard class	1.2E

60 mm Mk10PX
HE MORTAR SHELL with proximity fuze

TECHNICAL DATA

Length of shell with fuze	458 mm
Mass of mortar shell with fuze	2275 g
Explosive charge	hexolite (RDX/TNT) or trotyl (TNT)
Mass of explosive charge	380 g
Fuze	proximity, MBU M18
Muzzle safety at lowest initial velocity	50 m
Shell is completed with ignition cartridge and increment charges	
Safe operational temperature range	-46°C to +63°C
High safety during transportation, handling and parachuting	

BALLISTIC DATA

When using 60 mm Mortar, barrel length 1200 mm:

Maximum range	5035 m
Max. mean operating pressure in mortar	618 bars
Killing range (1 penetration / m²) - radius	14 m

The mortar shells can be fired from smooth bore mortar launchers.

PACKING

1 complete shell per carton	
8 cartons per wooden case	
Dimensions of wooden case	532 x 373 x 223 mm
Gross weight	29 kg
Volume of wooden case	0,044 m³
UN No.	0321
Hazard class	1.2E

60 mm Mk10PXP1
HE MORTAR SHELL with proximity fuze

TECHNICAL DATA

Length of shell with fuze	420 mm
Mass of mortar shell with fuze	2120 g
Explosive charge	hexolite (RDX/TNT) or trotyl (TNT)
Mass of explosive charge	380 g
Fuze	proximity, MBU M18P1
Muzzle safety at lowest initial velocity	50 m
Shell is completed with ignition cartridge and increment charges	
Safe operational temperature range	-46°C to +63°C
High safety during transportation, handling and parachuting	

BALLISTIC DATA

When using 60 mm Mortar, barrel length 1200 mm:

Maximum range	5035 m
Max. mean operating pressure in mortar	618 bars
Killing range (1 penetration / m²) - radius	14 m

The mortar shells can be fired from smooth bore mortar launchers.

PACKING

1 complete shell per carton	
8 cartons per wooden case	
Dimensions of wooden case	532 x 373 x 223 mm
Gross weight	29 kg
Volume of wooden case	0,036 m³
UN No.	0321
Hazard class	1.2E

60 mm Mk10P1 HE MORTAR SHELL

TECHNICAL DATA

Length of shell with fuze	410 mm
Mass of mortar shell with fuze	2100 g
Explosive charge	hexolite (RDX/ TNT) or trotyl (TNT)
Mass of explosive charge	380 g
Fuze	impact, superquick, delay action UTU, M93-N
Muzzle safety at lowest initial velocity	50 m
Shell is completed with ignition cartridge and increment charges	
Safe operational temperature range	-46°C to +63°C
High safety during transportation, handling and parachuting	

BALLISTIC DATA

When using 60 mm Mortar, barrel length 1200 mm:

Maximum range	5035 m
Max. mean operating pressure in mortar	618 bars
Killing range (1 penetration / m²) - radius	14 m

The mortar shells can be fired from smooth bore mortar launchers.

PACKING

1 complete shell per carton	
8 cartons per wooden case	
Dimensions of wooden case	532 x 373 x 223 mm
Gross weight	32 kg
Volume of wooden case	0.044 m³
UN No.	0321
Hazard class	1.2E

60 mm M73P1
SMOKE MORTAR SHELL

TECHNICAL DATA

Length of shell with fuze	286 mm
Mass of mortar shell with fuze	1350 g
Weight of smoke charge	220 g
Type of smoke charge	white phosphorus
Fuze	impact, superquick action UT, M68 P1
Muzzle safety at lowest initial velocity	8 m
Shell is completed with ignition cartridge and increment charges	
Safe operational temperature range	-30°C to +50°C
High safety during transportation, handling and parachuting	

BALLISTIC DATA

When using 60 mm Mortar, barrel length 650 mm:

Maximum range	2500 m
Max. mean operating pressure in mortar	392 bars

The mortar shells can be fired from smooth bore mortar launchers.

PACKING

1 complete shell per carton	
12 cartons per wooden case	
Dimensions of wooden case	553 x 429 x 223 mm
Gross weight	31,5 kg
Volume of wooden case	0.053 m³
UN No.	0246
Hazard class	1.3H

60 mm Mk10
SMOKE MORTAR SHELL

TECHNICAL DATA

Length of shell with fuze	410 mm
Mass of mortar shell with fuze	2100 g
Weight of smoke charge	270 g
Type of smoke charge	white phosphorus
Fuze	impact, superquick action UT, M88 P1
Muzzle safety at lowest initial velocity	70 m
Shell is completed with ignition cartridge and increment charges	
Safe operational temperature range	-46°C to +63°C
High safety during transportation, handling and parachuting	

BALLISTIC DATA

When using 60 mm Mortar, barrel length 1200 mm:

Maximum range	5035 m
Max. mean operating pressure in mortar	618 bars

The mortar shells can be fired from smooth bore mortar launchers.

PACKING

1 complete shell per carton	
8 cartons per wooden case	
Dimensions of wooden case	532 x 373 x 223 mm
Gross weight	32 kg
Volume of wooden case	0,044 m³
UN No.	0246
Hazard class	1.3H

60 mm M67
ILLUMINATING MORTAR SHELL

TECHNICAL DATA

Length of shell with fuze	330 mm
Mass of mortar shell with fuze	1270 g
Mass of illuminating candle	165 g
Fuze	pyrotechnic, time, TP M67
Illuminating power	180.000 Cd for 30 s
Mean rate of parachute descent with candle	-2.5 m/s
Shell is completed with ignition cartridge and increment charges	
Safe operational temperature range	-30°C to +50°C
High safety during transportation, handling and parachuting	

BALLISTIC DATA

When using 60 mm Mortar, barrel length 650 mm:

Maximum range	2500 m
Max. mean operating pressure in mortar	392 bars

The mortar shells can be fired from smooth bore mortar launchers.

PACKING

1 complete shell per carton	
12 cartons per wooden case	
Dimensions of wooden case	532 x 373 x 223 mm
Gross weight	29 kg
Volume of wooden case	0,044 m³
UN No.	0171
Hazard class	1.2G

FUZE
TP, M67

60 mm Mk15
ILLUMINATING MORTAR SHELL

TECHNICAL DATA

Length of shell with fuze	520 mm
Mass of mortar shell with fuze	2100 g
Mass of illuminating candle	300 g
Fuze	electronic, time, ETSQ, M365
Illuminating power	330.000 Cd for 30 s
Mean rate of parachute descent with candle	2.5 m/s
Shell is completed with ignition cartridge and increment charges	
Safe operational temperature range	-30°C to +50°C
High safety during transportation, handling and parachuting	

BALLISTIC DATA

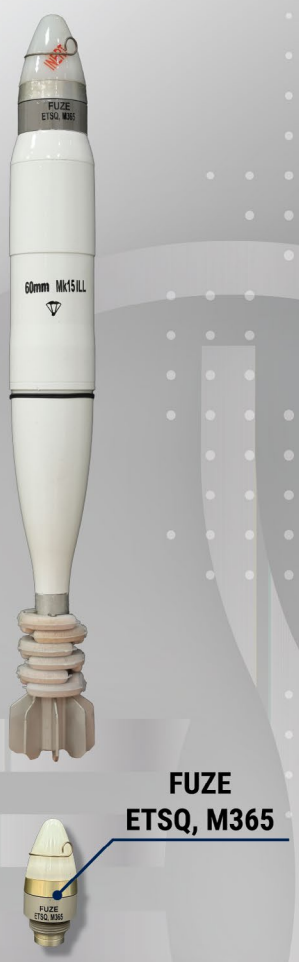
When using 60 mm Mortar, barrel length 1200 mm:

Maximum range	4500 m
Max. mean operating pressure in mortar	618 bars

The mortar shells can be fired from smooth bore mortar launchers.

PACKING

1 complete shell per carton	
8 cartons per wooden case	
Dimensions of wooden case	595 x 355 x 203 mm
Gross weight	29 kg
Volume of wooden case	0,043 m³
UN No.	0171
Hazard class	1.2G



81 mm M72
HE MORTAR SHELL

TECHNICAL DATA

Length of shell with fuze	387 mm
Mass of mortar shell with fuze	3050 g
Explosive charge	trotyl (TNT)
Mass of explosive charge	650 g
Fuze	impact, superquick action UT, M68 P1
Muzzle safety at lowest initial velocity	8 m
Shell is completed with ignition cartridge and increment charges	
Safe operational temperature range	-30°C to +50°C
High safety during transportation, handling and parachuting	

BALLISTIC DATA

When using 81 mm Mortar, barrel length 1150 mm:

Maximum range	4900 m
Max. mean operating pressure in mortar	618 bars
Killing range (1 penetration / m²) - radius	14 m

The mortar shells can be fired from smooth bore mortar launchers.

PACKING

1 complete shell per carton	
5 cartons per wooden case	
Dimensions of wooden case	607 x 480 x 174 mm
Gross weight	29 kg
Volume of wooden case	0,051 m³
UN No.	0321
Hazard class	1.2E

81 mm M72PX
HE MORTAR SHELL with proximity fuse

TECHNICAL DATA

Length of shell with fuze	435 mm
Mass of mortar shell with fuze	3225 g
Explosive charge	trotyl (TNT)
Mass of explosive charge	650 g
Fuze	proximity, MBU M18
Muzzle safety at lowest initial velocity	50 m
Shell is completed with ignition cartridge and increment charges	
Safe operational temperature range	-30°C to +50°C
High safety during transportation, handling and parachuting	

BALLISTIC DATA

When using 81 mm Mortar, barrel length 1150 mm:

Maximum range	4900 m
Max. mean operating pressure in mortar	618 bars
Killing range (1 penetration / m²) - radius	14 m

The mortar shells can be fired from smooth bore mortar launchers.

PACKING

1 complete shell per carton	
5 cartons per wooden case	
Dimensions of wooden case	607 x 480 x 174 mm
Gross weight	29 kg
Volume of wooden case	0,051 m³
UN No.	0321
Hazard class	1.2E

81 mm M72P4
HE MORTAR SHELL

TECHNICAL DATA

Length of shell with fuze	400 mm
Mass of mortar shell with fuze	3050 g
Explosive charge	trotyl (TNT)
Mass of explosive charge	650 g
Fuze	impact, superquick action UT, M88 P1
Muzzle safety at lowest initial velocity	70 m
Shell is completed with ignition cartridge and increment charges	
Safe operational temperature range	-46°C to +63°C
High safety during transportation, handling and parachuting	

BALLISTIC DATA

When using 81 mm Mortar, barrel length 1150 mm:

Maximum range	4900 m
Max. mean operating pressure in mortar	618 bars
Killing range (1 penetration / m²) - radius	14 m

The mortar shells can be fired from smooth bore mortar launchers.

PACKING

1 complete shell per carton	
5 cartons per wooden case	
Dimensions of wooden case	607 x 480 x 174 mm
Gross weight	29 kg
Volume of wooden case	0,051 m³
UN No.	0321
Hazard class	1.2E

FUZE
UT, M88P1

81 mm Mk11
HE MORTAR SHELL

TECHNICAL DATA

Length of shell with fuze	478 mm
Mass of mortar shell with fuze	4100 g
Explosive charge	hexolite (RDX/TNT) or trotyl (TNT)
Mass of explosive charge	900 g
Fuze	impact, superquick action, UT M88 P1
Muzzle safety at lowest initial velocity	70 m
Shell is completed with ignition cartridge and increment charges	
Safe operational temperature range	-46°C to +63°C
High safety during transportation, handling and parachuting	

BALLISTIC DATA

When using 81 mm Mortar, barrel length 1450 mm:

Maximum range	6500 m
Max. mean operating pressure in mortar	618 bars
Killing range (1 penetration / m²) - radius	18 m

The mortar shells can be fired from smooth bore mortar launchers.

PACKING

1 complete shell per carton	
5 cartons per wooden case	
Dimensions of wooden case	612 x 575 x 174 mm
Gross weight	34 kg
Volume of wooden case	0,061 m³
UN No.	0321
Hazard class	1.2E

81 mm Mk11PX
HE MORTAR SHELL with proximity fuze

TECHNICAL DATA

Length of shell with fuze	526 mm
Mass of mortar shell with fuze	4275 g
Explosive charge	hexolite (RDX/TNT) or trotyl (TNT)
Mass of explosive charge	900 g
Fuze	proximity, MBU M18
Muzzle safety at lowest initial velocity	50 m
Shell is completed with ignition cartridge and increment charges	
Safe operational temperature range	-46°C to +63°C
High safety during transportation, handling and parachuting	

BALLISTIC DATA

When using 81 mm Mortar, barrel length 1450 mm:

Maximum range	6500 m
Max. mean operating pressure in mortar	618 bars
Killing range (1 penetration / m²) - radius	18 m

The mortar shells can be fired from smooth bore mortar launchers.

PACKING

1 complete shell per carton	
5 cartons per wooden case	
Dimensions of wooden case	612 x 575 x 174 mm
Gross weight	34 kg
Volume of wooden case	0,061 m³
UN No.	0321
Hazard class	1.2E

81 mm Mk11P1
HE MORTAR SHELL

TECHNICAL DATA

Length of shell with fuze	478 mm
Mass of mortar shell with fuze	4100 g
Explosive charge	hexolite (RDX/TNT) or trotyl (TNT)
Mass of explosive charge	900 g
Fuze	impact, superquick, delay action, UTU M93-N
Muzzle safety at lowest initial velocity	50 m
Shell is completed with ignition cartridge and increment charges	
Safe operational temperature range	-46°C to +63°C
High safety during transportation, handling and parachuting	

BALLISTIC DATA

When using 81 mm Mortar, barrel length 1450 mm:

Maximum range	6500 m
Max. mean operating pressure in mortar	618 bars
Killing range (1 penetration / m²) - radius	18 m

The mortar shells can be fired from smooth bore mortar launchers.

PACKING

1 complete shell per carton	
5 cartons per wooden case	
Dimensions of wooden case	612 x 575 x 174 mm
Gross weight	34 kg
Volume of wooden case	0,061 m³
UN No.	0321
Hazard class	1.2E

81 mm M72P1
SMOKE MORTAR SHELL

TECHNICAL DATA

Length of shell with fuze	387 mm
Mass of mortar shell with fuze	3050 g
Weight of smoke charge	600 g
Type of smoke charge	white phosphorus
Fuze	impact, superquick action, UT M68 P1
Muzzle safety at lowest initial velocity	8 m
Shell is completed with ignition cartridge and increment charges	
Safe operational temperature range	-30°C to +50°C
High safety during transportation, handling and parachuting	

BALLISTIC DATA

When using 81 mm Mortar, barrel length 1150 mm:

Maximum range	4900 m
Max. mean operating pressure in mortar	618 bars

The mortar shells can be fired from smooth bore mortar launchers.

PACKING

1 complete shell per carton	
5 cartons per wooden case	
Dimensions of wooden case	607 x 480 x 174 mm
Gross weight	31,5 kg
Volume of wooden case	0,051 m³
UN No.	0246
Hazard class	1.3H

FUZE
UT, M68P1

81 mm Mk11 SMOKE MORTAR SHELL

TECHNICAL DATA

Length of shell with fuze	478 mm
Mass of mortar shell with fuze	4100 g
Weight of smoke charge (WP)	700 g
Type of smoke charge	white phosphorus
Fuze	impact, superquick action, UT M88 P1
Muzzle safety at lowest initial velocity	70 m
Shell is completed with ignition cartridge and increment charges	
Safe operational temperature range	-46°C to +63°C
High safety during transportation, handling and parachuting	

BALLISTIC DATA

When using 81 mm Mortar, barrel length 1450 mm:

Maximum range	6500 m
Max. mean operating pressure in mortar	618 bars

The mortar shells can be fired from smooth bore mortar launchers.

PACKING

1 complete shell per carton	
5 cartons per wooden case	
Dimensions of wooden case	582 x 557 x 154 mm
Gross weight	34 kg
Volume of wooden case	0,050 m³
UN No.	0246
Hazard class	1.3H

FUZE
UT, M88P1

81 mm M67
ILLUMINATING MORTAR SHELL

TECHNICAL DATA

Length of shell with fuze	410 mm
Mass of mortar shell with fuze	2950 g
Shell charge weight	420 g
Fuze	pyrotechnic, time, TP M67
Illuminating power	500.000 Cd for 40 s
Mean rate of parachute descent with candle	2.4 m/s
Shell is completed with ignition cartridge and increment charges	
Safe operational temperature range	-30°C to +50°C
High safety during transportation, handling and parachuting	

BALLISTIC DATA

When using 81 mm Mortar, barrel length 1150 mm:

Maximum range	3400 m
Max. mean operating pressure in mortar	422 bars

The mortar shells can be fired from smooth bore mortar launchers.

PACKING

1 complete shell per carton	
5 cartons per wooden case	
Dimensions of wooden case	607 x 518 x 174 mm
Gross weight	31.5 kg
Volume of wooden case	0,055 m³
UN No.	0171
Hazard class	1.2G

FUZE
TP, M67

81 mm Mk11
ILLUMINATING MORTAR SHELL

TECHNICAL DATA

Length of shell with fuze	530 mm
Mass of mortar shell with fuze	4200 g
Shell charge weight	700 g
Fuze	pyrotechnic, time, TP M67P2
Illuminating power	750.000 Cd for 30 s
Mean rate of parachute descent with candle	3.0 m/s
Shell is completed with ignition cartridge and increment charges	
Safe operational temperature range	-30°C to +50°C
High safety during transportation, handling and parachuting	

BALLISTIC DATA

When using 81 mm Mortar, barrel length 1450 mm:

Maximum range	5480 m
Max. mean operating pressure in mortar	618 bars

The mortar shells can be fired from smooth bore mortar launchers.

PACKING

1 complete shell per carton	
5 cartons per wooden case	
Dimensions of wooden case	630 x 565 x 154 mm
Gross weight	37 kg
Volume of wooden case	0,055 m³
UN No.	0171
Hazard class	1.2G

81 mm Mk15
ILLUMINATING MORTAR SHELL

TECHNICAL DATA

Length of shell with fuze	575 mm
Mass of mortar shell with fuze	4200 g
Shell charge weight	700 g
Fuze	electronic, time, ETSQ M365
Illuminating power	750.000 Cd for 30 s
Mean rate of parachute descent with candle	3.0 m/s
Shell is completed with ignition cartridge and increment charges	
Safe operational temperature range	-40°C to +63°C
High safety during transportation, handling and parachuting	

BALLISTIC DATA

When using 81 mm Mortar, barrel length 1450 mm:

Maximum range	5480 m
Max. mean operating pressure in mortar	618 bars

The mortar shells can be fired from smooth bore mortar launchers.

PACKING

1 complete shell per carton	
5 cartons per wooden case	
Dimensions of wooden case	686 x 557 x 154 mm
Gross weight	38 kg
Volume of wooden case	0,059 m³
UN No.	0171
Hazard class	1.2G

82 mm M74
HE MORTAR SHELL

TECHNICAL DATA

Length of shell with fuze	375 mm
Mass of mortar shell with fuze	3050 g
Explosive charge	trotyl (TNT)
Mass of explosive charge	650 g
Fuze	impact, superquick action, UT M68 P1
Muzzle safetly at lowest initial velocity	8 m
Shell is completed with ignition cartridge and increment charges	
Safe operational temperature range	-30°C to +50°C
High safety during transportation, handling and parachuting	

BALLISTIC DATA

When using 81 mm Mortar, barrel length 1150 mm:

Maximum range	4900 m
Max. mean operating pressure in mortar	618 bars
Killing range (1 penetration / m²) - radius	14 m

The mortar shells can be fired from smooth bore mortar launchers.

PACKING

1 complete shell per carton	
5 cartons per wooden case	
Dimensions of wooden case	607 x 480 x 174 mm
Gross weight	29 kg
Volume of wooden case	0,051 m³
UN No.	0321
Hazard class	1.2E

82 mm M74PX
HE MORTAR SHELL with proximity fuze

TECHNICAL DATA

Length of shell with fuze	423 mm
Mass of mortar shell with fuze	3225 g
Explosive charge	trotyl (TNT)
Mass of explosive charge	650 g
Fuze	proximity, MBU M18
Muzzle safetly at lowest initial velocity	50 m
Shell is completed with ignition cartridge and increment charges	
Safe operational temperature range	-30°C to +50°C
High safety during transportation, handling and parachuting	

BALLISTIC DATA

When using 81 mm Mortar, barrel length 1150 mm:

Maximum range	4900 m
Max. mean operating pressure in mortar	618 bars
Killing range (1 penetration / m²) - radius	14 m

The mortar shells can be fired from smooth bore mortar launchers.

PACKING

1 complete shell per carton	
5 cartons per wooden case	
Dimensions of wooden case	607 x 480 x 174 mm
Gross weight	29 kg
Volume of wooden case	0,051 m³
UN No.	0321
Hazard class	1.2E

82 mm M72P4
HE MORTAR SHELL

TECHNICAL DATA

Length of shell with fuze	400 mm
Mass of mortar shell with fuze	3050 g
Explosive charge	trotyl (TNT)
Mass of explosive charge	650 g
Fuze	impact, superquick action, UT, M88 P1
Muzzle safetly at lowest initial velocity	70 m
Shell is completed with ignition cartridge and increment charges	
Safe operational temperature range	-46°C to +63°C
High safety during transportation, handling and parachuting	

BALLISTIC DATA

When using 82 mm Mortar, barrel length 1150 mm:

Maximum range	4900 m
Max. mean operating pressure in mortar	618 bars
Killing range (1 penetration / m²) - radius	14 m

The mortar shells can be fired from smooth bore mortar launchers.

PACKING

1 complete shell per carton	
5 cartons per wooden case	
Dimensions of wooden case	607 x 480 x 174 mm
Gross weight	31,5 kg
Volume of wooden case	0,051 m³
UN No.	0321
Hazard class	1.2E

FUZE
UT, M88P1

82 mm Mk11
HE MORTAR SHELL

TECHNICAL DATA

Length of shell with fuze	478 mm
Mass of mortar shell with fuze	4100 g
Explosive charge	hexolite (RDX/TNT) or trotyl (TNT)
Mass of explosive charge	900 g
Fuze	impact, superquick action, UT, M88 P1
Muzzle safetly at lowest initial velocity	70 m
Shell is completed with ignition cartridge and increment charges	
Safe operational temperature range	-46°C to +63°C
High safety during transportation, handling and parachuting	

BALLISTIC DATA

When using 81 mm Mortar, barrel length 1150 mm:

Maximum range	6500 m
Max. mean operating pressure in mortar	618 bars
Killing range (1 penetration / m²) - radius	18 m

The mortar shells can be fired from smooth bore mortar launchers.

PACKING

1 complete shell per carton	
5 cartons per wooden case	
Dimensions of wooden case	612 x 575 x 174 mm
Gross weight	34 kg
Volume of wooden case	0,061 m³
UN No.	0321
Hazard class	1.2E

FUZE
UT, M88P1

82 mm Mk11PX
HE MORTAR SHELL with proximity fuze

TECHNICAL DATA

Length of shell with fuze	526 mm
Mass of mortar shell with fuze	4275 g
Explosive charge	hexolite (RDX/TNT) or trotyl (TNT)
Mass of explosive charge	900 g
Fuze	proximity, MBU M18
Muzzle safetly at lowest initial velocity	50 m
Shell is completed with ignition cartridge and increment charges	
Safe operational temperature range	-46°C to +63°C
High safety during transportation, handling and parachuting	

BALLISTIC DATA

When using 82 mm Mortar, barrel length 1450 mm:

Maximum range	6500 m
Max. mean operating pressure in mortar	618 bars
Killing range (1 penetration / m²) - radius	18 m

The mortar shells can be fired from smooth bore mortar launchers.

PACKING

1 complete shell per carton	
5 cartons per wooden case	
Dimensions of wooden case	582 x 557 x 154 mm
Gross weight	34 kg
Volume of wooden case	0,050 m³
UN No.	0321
Hazard class	1.2E

82 mm Mk11P1 HE MORTAR SHELL

TECHNICAL DATA

Length of shell with fuze	478 mm
Mass of mortar shell with fuze	4100 g
Explosive charge	hexolite (RDX/TNT) or trotyl (TNT)
Mass of explosive charge	900 g
Fuze	impact, superquick, delay action, UTU, M93-N
Muzzle safetly at lowest initial velocity	50 m
Shell is completed with ignition cartridge and increment charges	
Safe operational temperature range	-46°C to +63°C
High safety during transportation, handling and parachuting	

BALLISTIC DATA

When using 81 mm Mortar, barrel length 1450 mm:

Maximum range	6500 m
Max. mean operating pressure in mortar	618 bars
Killing range (1 penetration / m²) - radius	18 m

The mortar shells can be fired from smooth bore mortar launchers.

PACKING

1 complete shell per carton	
5 cartons per wooden case	
Dimensions of wooden case	582 x 557 x 154 mm
Gross weight	34 kg
Volume of wooden case	0,050 m³
UN No.	0321
Hazard class	1.2E

82 mm M74P1
SMOKE MORTAR SHELL

TECHNICAL DATA

Length of shell with fuze	375 mm
Mass of mortar shell with fuze	3050 g
Weight of smoke charge	600 g
Type of smoke charge	white phosphorus
Fuze	impact, superquick action, UT, M68 P1
Muzzle safetly at lowest initial velocity	8 m
Shell is completed with ignition cartridge and increment charges	
Safe operational temperature range	-30°C to +50°C
High safety during transportation, handling and parachuting	

BALLISTIC DATA

When using 82 mm Mortar, barrel length 1150 mm:

Maximum range	4900m
Max. mean operating pressure in mortar	618 bars

The mortar shells can be fired from smooth bore mortar launchers.

PACKING

1 complete shell per carton	
5 cartons per wooden case	
Dimensions of wooden case	607 x 480 x 174 mm
Gross weight	31,5 kg
Volume of wooden case	0,051 m³
UN No.	0246
Hazard class	1.3H

82 mm Mk11
SMOKE MORTAR SHELL

TECHNICAL DATA

Length of shell with fuze	478 mm
Mass of mortar shell with fuze	4100 g
Weight of smoke charge	700 g
Type of smoke charge	white phosphorus
Fuze	impact, superquick action, UT M88 P1
Muzzle safetly at lowest initial velocity	70 m
Shell is completed with ignition cartridge and increment charges	
Safe operational temperature range	-46°C to +63°C
High safety during transportation, handling and parachuting	

BALLISTIC DATA

When using 81 mm Mortar, barrel length 1450 mm:

Maximum range	6500 m
Max. mean operating pressure in mortar	618 bars

The mortar shells can be fired from smooth bore mortar launchers.

PACKING

1 complete shell per carton	
5 cartons per wooden case	
Dimensions of wooden case	582 x 557 x 154 mm
Gross weight	34 kg
Volume of wooden case	0,050 m³
UN No.	0246
Hazard class	1.3H

FUZE
UT, M88P1

82 mm M67
ILLUMINATING MORTAR SHELL

TECHNICAL DATA

Length of shell with fuze	410 mm
Mass of mortar shell with fuze	2950 g
Shell charge weight	420 g
Fuze	pyrotechnic, time, TP M67
Illuminating power	500.000 Cd for 30 s
Mean rate of parachute descend with candle	2.4 m/s
Shell is completed with ignition cartridge and increment charges	
Safe operational temperature range	-30°C to +50°C
High safety during transportation, handling and parachuting	

BALLISTIC DATA

When using 82 mm Mortar, barrel length 1150 mm:

Maximum range	3400 m
Max. mean operating pressure in mortar	422 bars

The mortar shells can be fired from smooth bore mortar launchers.

PACKING

1 complete shell per carton	
5 cartons per wooden case	
Dimensions of wooden case	607 x 518 x 174 mm
Gross weight	31,5 kg
Volume of wooden case	0,055 m³
UN No.	0171
Hazard class	1.2G

82 mm Mk11
ILLUMINATING MORTAR SHELL

TECHNICAL DATA

Length of shell with fuze	530 mm
Mass of mortar shell with fuze	4200 g
Shell charge weight	700 g
Fuze	pyrotechnic, time, TP M67 P2
Illuminating power	750.000 Cd for 30 s
Mean rate of parachute descent with candle	3.0 m/s
Shell is completed with ignition cartridge and increment charges	
Safe operational temperature range	-30°C to +50°C
High safety during transportation, handling and parachuting	

BALLISTIC DATA

When using 82 mm Mortar, barrel length 1450 mm:

Maximum range	5480 m
Max. mean operating pressure in mortar	618 bars

The mortar shells can be fired from smooth bore mortar launchers.

PACKING

1 complete shell per carton	
5 cartons per wooden case	
Dimensions of wooden case	630 x 565 x 154 mm
Gross weight	37 kg
Volume of wooden case	0,055 m³
UN No.	0171
Hazard class	1.2G

82 mm Mk15
ILLUMINATING MORTAR SHELL

TECHNICAL DATA

Length of shell with fuze	575 mm
Mass of mortar shell with fuze	4200 g
Shell charge weight	700 g
Fuze	electronic, time, ETSQ M365
Illuminating power	750.000 Cd for 30 s
Mean rate of parachute descend with candle	3.0 m/s
Shell is completed with ignition cartridge and increment charges	
Safe operational temperature range	-40°C to +63°C
High safety during transportation, handling and parachuting	

BALLISTIC DATA

When using 82 mm Mortar, barrel length 1450 mm:

Maximum range	5480 m
Max. mean operating pressure in mortar	618 bars

The mortar shells can be fired from smooth bore mortar launchers.

PACKING

1 complete shell per carton	
5 cartons per wooden case	
Dimensions of wooden case	686 x 557 x 154 mm
Gross weight	38 kg
Volume of wooden case	0,059 m³
UN No.	0171
Hazard class	1.2G

120 mm M62P8
HE MORTAR SHELL

TECHNICAL DATA

Length of shell with fuze	606 mm
Mass of mortar shell with fuze	12600 g
Explosive charge	TNT
Mass of explosive charge	2400 g
Fuze	impact, superquick, delay action, UTU M93 P1
Muzzle safetly at lowest initial velocity	50 m
Shell is completed with ignition cartridge and increment charges	
Safe operational temperature range	-30°C to +50°C
High safety during transportation, handling and parachuting	

BALLISTIC DATA

When using 120 mm Mortar, barrel length 1500 mm:

Maximum range	6555 m
Max. mean operating pressure in mortar	922 bars
Killing range (1 penetration / m²) - radius	18 m

The mortar shells can be fired from smooth bore mortar launchers.

PACKING

1 complete shell per carton	
2 cartons per wooden case	
Dimensions of wooden case	738 x 352 x 211 mm
Gross weight	38 kg
Volume of wooden case	0,055 m³
UN No.	0321
Hazard class	1.2E

FUZE
UTU, M93 P1

120 mm M62P9
HE MORTAR SHELL

TECHNICAL DATA

Length of shell with fuze	606 mm
Mass of mortar shell with fuze	12600 g
Explosive charge	TNT
Mass of explosive charge	2400 g
Fuze	impact, superquick, UT M88 P2
Muzzle safety at lowest initial velocity	70 m
Shell is completed with ignition cartridge and increment charges	
Safe operational temperature range	-30°C to +50°C
High safety during transportation, handling and parachuting	

BALLISTIC DATA

When using 120 mm Mortar, barrel length 1500 mm:

Maximum range	6555 m
Max. mean operating pressure in mortar	922 bars
Killing range (1 penetration / m²) - radius	18 m

The mortar shells can be fired from smooth bore mortar launchers.

PACKING

1 complete shell per carton	
2 cartons per wooden case	
Dimensions of wooden case	738 x 352 x 211 mm
Gross weight	38 kg
Volume of wooden case	0,055 m³
UN No.	0321
Hazard class	1.2E

120 mm M62P10
HE MORTAR SHELL

TECHNICAL DATA

Length of shell with fuze	593mm
Mass of mortar shell with fuze	12600 g
Explosive charge	TNT
Mass of explosive charge	2400 g
Fuze	impact, superquick, UT M68 P1
Muzzle safetly at lowest initial velocity	8 m
Shell is completed with ignition cartridge and increment charges	
Safe operational temperature range	-30°C to +50°C
High safety during transportation, handling and parachuting	

BALLISTIC DATA

When using 120 mm Mortar, barrel length 1500 mm:

Maximum range	6555 m
Max. mean operating pressure in mortar	922 bars
Killing range (1 penetration / m²) - radius	18 m

The mortar shells can be fired from smooth bore mortar launchers.

PACKING

1 complete shell per carton	
2 cartons per wooden case	
Dimensions of wooden case	738 x 352 x 211 mm
Gross weight	38 kg
Volume of wooden case	0,055 m³
UN No.	0321
Hazard class	1.2E

FUZE
UT, M68 P1

120 mm M62 M25P1 HE MORTAR SHELL

TECHNICAL DATA

Length of shell with fuze	626 mm
Mass of mortar shell with fuze	12600 g
Explosive charge	TNT
Mass of explosive charge	2400 g
Fuze	impact, superquick, UT M88 P2
Muzzle safety at lowest initial velocity	70 m
Shell is completed with ignition cartridge and increment charges	
Safe operational temperature range	-30°C to +50°C
High safety during transportation, handling and parachuting	

BALLISTIC DATA

When using 120 mm Mortar, barrel length 1500 mm:

Maximum range	7500 m
Max. mean operating pressure in mortar	1000 bars

The mortar shells can be fired from smooth bore mortar launchers.

PACKING

1 complete shell per carton	
2 cartons per wooden case	
Dimensions of wooden case	738 x 352 x 211 mm
Gross weight	41, 5 kg
Volume of wooden case	0,055 m³
UN No.	0321
Hazard class	1.2E

120 mm M62 M25
HE MORTAR SHELL

TECHNICAL DATA

Length of shell with fuze	626 mm
Mass of mortar shell with fuze	12600 g
Explosive charge	TNT
Mass of explosive charge	2400 g
Fuze	impact, superquick delay action fuze, UTU M93 P1
Muzzle safetly at lowest initial velocity	50 m
Shell is completed with ignition cartridge and increment charges	
Safe operational temperature range	-30°C to +50°C
High safety during transportation, handling and parachuting	

BALLISTIC DATA

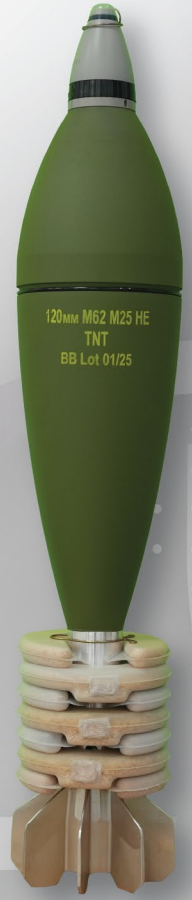
When using 120 mm Mortar, barrel length 1500 mm:

Maximum range	7500 m
Max. mean operating pressure in mortar	<1000 bars

The mortar shells can be fired from smooth bore mortar launchers.

PACKING

1 complete shell per carton	
2 cartons per wooden case	
Dimensions of wooden case	738 x 352 x 211 mm
Gross weight	41, 5 kg
Volume of wooden case	0,055 m³
UN No.	0321
Hazard class	1.2E



FUZE
UTU, M93P1

120 mm M62P8 TB MORTAR SHELL

TECHNICAL DATA

Length of shell with fuze	606 mm
Mass of mortar shell with fuze	12600 g
Explosive charge	THERMOBARIC
Mass of explosive charge	2400 g
Fuze	impact, superquick delay action, UTU M93 P1
Muzzle safety at lowest initial velocity	50 m
Shell is completed with ignition cartridge and increment charges	
Safe operational temperature range	-30°C to +50°C
High safety during transportation, handling and parachuting	

BALLISTIC DATA

When using 120 mm Mortar, barrel length 1500 mm:

Maximum range	6555 m
Max. mean operating pressure in mortar	<922 bars

The mortar shells can be fired from smooth bore mortar launchers.

PACKING

1 complete shell per carton	
2 cartons per wooden case	
Dimensions of wooden case	738 x 352 x 211 mm
Gross weight	41, 5 kg
Volume of wooden case	0,055 m³
UN No.	0321
Hazard class	1.2E

120 mm Mk12-L TB MORTAR SHELL

TECHNICAL DATA

Length of shell with fuze	807 mm
Mass of mortar shell with fuze	14800 g
Explosive charge	THERMOBARIC
Mass of explosive charge	3100 g
Fuze	impact, superquick delay action, UTU M93 P1
Muzzle safetly at lowest initial velocity	70 m
Shell is completed with ignition cartridge and increment charges	
Safe operational temperature range	-30°C to +50°C
High safety during transportation, handling and parachuting	

BALLISTIC DATA

When using 120 mm Mortar, barrel length 1900 mm:

Maximum range	9100 m
Max. mean operating pressure in mortar	1400 bars
Killing range (1 penetration / m²) - radius	24 m

When fired from the launcher with barrel length of 1500 mm and maximum pressure of 922 bars achieves the range of 7400m
The mortar shells can be fired from smooth bore mortar launchers.

PACKING

1 complete shell per carton	
2 cartons per wooden case	
Dimensions of wooden case	968 x 352 x 211 mm
Gross weight	50 kg
Volume of wooden case	0,071 m³
UN No.	0321
Hazard class	1.2E

FUZE
UTU, M93P1

120 mm M62 PX
HE MORTAR SHELL with proximity fuze

TECHNICAL DATA

Length of shell with fuze	641 mm
Mass of mortar shell with fuze	12775 g
Explosive charge	TNT
Mass of explosive charge	2400 g
Fuze	proximity, MBU M18
Muzzle safety at lowest initial velocity	50 m
Shell is completed with ignition cartridge and increment charges	
Safe operational temperature range	-30°C to +50°C
High safety during transportation, handling and parachuting	

BALLISTIC DATA

When using 120 mm Mortar, barrel length 1500 mm:

Maximum range	6555 m
Max. mean operating pressure in mortar	922 bars
Killing range (1 penetration / m²) - radius	18 m

The mortar shells can be fired from smooth bore mortar launchers.

PACKING

1 complete shell per carton	
2 cartons per wooden case	
Dimensions of wooden case	738 x 352 x 211 mm
Gross weight	38 kg
Volume of wooden case	0,055 m³
UN No.	0321
Hazard class	1.2E

120 mm Mk12-L HE MORTAR SHELL

TECHNICAL DATA

Length of shell with fuze	807 mm
Mass of mortar shell with fuze	14800 g
Explosive charge	hexolite (RDX/TNT) or trotyl (TNT)
Mass of explosive charge	3100 g
Fuze	impact, superquick action, UT M88 P2
Muzzle safetly at lowest initial velocity	70 m
Shell is completed with ignition cartridge and increment charges	
Safe operational temperature range	-30°C to +50°C
High safety during transportation, handling and parachuting	

BALLISTIC DATA

When using 120 mm Mortar, barrel length 1900 mm:

Maximum range	9100 m
Max. mean operating pressure in mortar	1400 bars
Killing range (1 penetration / m²) - radius	24 m

When fired from the launcher with barrel length of 1500 mm and maximum pressure of 922 bars achieves the range of 7400m
The mortar shells can be fired from smooth bore mortar launchers.

PACKING

1 complete shell per carton	
2 cartons per wooden case	
Dimensions of wooden case	968 x 352 x 211 mm
Gross weight	46 kg
Volume of wooden case	0,071 m³
UN No.	0321
Hazard class	1.2E

120 mm Mk12PX-L
HE MORTAR SHELL with proximity fuze

TECHNICAL DATA

Length of shell with fuze	855 mm
Mass of mortar shell with fuze	14975g
Explosive charge	hexolite (TDX/TNT) or trotyl (TNT)
Mass of explosive charge	3100 g
Fuze	proximity, MBU M18
Muzzle safety at lowest initial velocity	50 m
Shell is completed with ignition cartridge and increment charges	
Safe operational temperature range	-30°C to +50°C
High safety during transportation, handling and parachuting	

BALLISTIC DATA

When using 120 mm Mortar, barrel length 1900 mm:

Maximum range	9100 m
Max. mean operating pressure in mortar	1400 bars
Killing range (1 penetration / m²) - radius	24 m

When fired from the launcher with barrel length of 1500 mm and maximum pressure of 922 bars achieves the range of 7400 m
The mortar shells can be fired from smooth bore mortar launchers.

PACKING

1 complete shell per carton	
2 cartons per wooden case	
Dimensions of wooden case	968 x 352 x 211 mm
Gross weight	46 kg
Volume of wooden case	0,063 m³
UN No.	0321
Hazard class	1.2E

120 mm Mk12P1-L
HE MORTAR SHELL

TECHNICAL DATA

Length of shell with fuze	807 mm
Mass of mortar shell with fuze	14800 g
Explosive charge	hexolite (RDX/TNT) or trotyl (TNT)
Mass of explosive charge	3100 g
Fuze	impact, superquick, delay action, UTU M93 P1
Muzzle safetly at lowest initial velocity	50 m
Shell is completed with ignition cartridge and increment charges	
Safe operational temperature range	-30°C to +50°C
High safety during transportation, handling and parachuting	

BALLISTIC DATA

When using 120 mm Mortar, barrel length 1900 mm:

Maximum range	9100 m
Max. mean operating pressure in mortar	1400 bars
Killing range (1 penetration / m²) - radius	24 m

When fired from the launcher with barrel length of 1500 mm and maximum pressure of 922 bars achieves the range of 7400 m
The mortar shells can be fired from smooth bore mortar launchers.

PACKING

1 complete shell per carton	
2 cartons per wooden case	
Dimensions of wooden case	968 x 352 x 211 mm
Gross weight	46 kg
Volume of wooden case	0,071 m³
UN No.	0321
Hazard class	1.2E

FUZE
UTU, M93 P1

120 mm Rocket assisted Mk12
HE MORTAR SHELL

TECHNICAL DATA

Length of shell with fuze	920 mm
Mass of mortar shell with fuze	16,5 kg
Type of explosive	TNT/RDX
Mass of explosive	2,1 kg
Shell body material	forged steel
Mass of shell body	0,9 kg
Tail unit material	Al alloy
Mass of tail unit	0,9 kg
Ignition cartridge case	Al-alloy
Ignition cartridge M12	EMB – 161
Increment charge in celluloid container M12	EMB - 291
Rocket propelling charge	composite
Type of fuze: UT, M88P1	Point detonating
Muzzle safety when firing with ignition cartridge	70 m
Service life for complete round, fuze, increment charge and body	15 years
Reliable function within temperature range	-46 to°+63°C
Max. range with barrel length 1500mm	13.000m
Max. pressure	<922 bar
Killing range (1 penetration/m) - radius	25 m
Wounding range - radius	35 m
Fully safe during handling, transport & parachuting	
Simple overhaul	

120mm long range GPS guidance mortar shell

TECHNICAL DATA

Length of shell with fuze	850 mm
Mass of mortar shell with fuze	15,8 kg
Type of explosive	RDX
Mass of explosive	3,1 kg
Ignition catridge case	waterproof
Type of fuze	Point detonating
Muzzle safety when firing with ignition cartridge	70 m
Service life for complete round, fuze, increment charge and body	15 years
Reliable function within temperature range	-46° to + 63°C

Fully safe during handling, transport & parachuting
Simple overhaul

BALLISTIC DATA

Xmax (m)	Barrel Length (mm)	Pressure in barrel (bar)
9100	1900	<1250
8500	1500	<1000

Killing range (1 penetration/m2) - radius	24 m
Wounding range - radius	35 m

PACKING

1 complete shell per carton	
2 cartons per wooden box	
Dimensions of wooden box	900 x 317 x 166 mm
Total mass	43 kg
Total volume	0,047 m3
Hazard class	1.2E

120 mm M64P3
SMOKE MORTAR SHELL

TECHNICAL DATA

Length of shell with fuze	606 mm
Mass of mortar shell with fuze	12600 g
Weight of smoke charge	2350 g
Type of smoke charge	white phosphorus
Fuze	impact, superquick, UT M88 P1
Muzzle safety at lowest initial velocity	70 m
Shell is completed with ignition cartridge and increment charges	
Safe operational temperature range	-30°C to +50°C
High safety during transportation, handling and parachuting	

BALLISTIC DATA

When using 120 mm Mortar, barrel length 1500 mm:

Maximum range	6555 m
Max. mean operating pressure in mortar	922 bars

The mortar shells can be fired from smooth bore mortar launchers.

PACKING

1 complete shell per carton	
2 cartons per wooden case	
Dimensions of wooden case	738 x 352 x 211 mm
Gross weight	41 kg
Volume of wooden case	0,055 m³
UN No.	0246
Hazard class	1.3H

120 mm M64P5
SMOKE MORTAR SHELL

TECHNICAL DATA

Length of shell with fuze	626 mm
Mass of mortar shell with fuze	12600 g
Explosive charge	2350 g
Mass of explosive charge	white phosphorus
Fuze	impact, superquick, UT M88 P1
Muzzle safetly at lowest initial velocity	70 m
Shell is completed with ignition cartridge and increment charges	
Safe operational temperature range	-30°C to +50°C
High safety during transportation, handling and parachuting	

BALLISTIC DATA

When using 120 mm Mortar, barrel length 1500 mm:

Maximum range	7000 m
Max. mean operating pressure in mortar	922 bars

The mortar shells can be fired from smooth bore mortar launchers.

PACKING

1 complete shell per carton	
2 cartons per wooden case	
Dimensions of wooden case	968 x 352 x 211 mm
Gross weight	41 kg
Volume of wooden case	0,055 m³
UN No.	0321
Hazard class	1.2E

120 mm Mk12-L SMOKE MORTAR SHELL

TECHNICAL DATA

Length of shell with fuze	807 mm
Mass of mortar shell with fuze	14800 g
Weight of smoke charge	2800 g
Fuze	impact, superquick, UT M88 P1
Muzzle safety at lowest initial velocity	70 m
Shell is completed with ignition cartridge and increment charges	
Safe operational temperature range	-30°C to +50°C
High safety during transportation, handling and parachuting	

BALLISTIC DATA

When using 120 mm Mortar M75, barrel length 1900 mm:

Maximum range	9100 m
Max. mean operating pressure in mortar	≤1350 bars
Killing range (1 penetration / m²) - radius	24 m

When fired from the launcher with barrel length of 1500 mm and maximum pressure of 922 bars achieves the range of 7400 m
The mortar shells can be fired from smooth bore mortar launchers.

PACKING

1 complete shell per carton	
2 cartons per wooden case	
Dimensions of wooden case	968 x 352 x 171 mm
Gross weight	50 kg
Volume of wooden case	0,058 m³
UN No.	0246
Hazard class	1.3H

120 mm M87P1 ILLUMINATING MORTAR SHELL

TECHNICAL DATA

Length of shell with fuze	672 mm
Mass of mortar shell with fuze	10800 g
Fuze	pyrotechnic, time, TP M87
Illuminating power	1 000.000 Cd for 60 s
Mean rate of parachute descent with candle	3 m/s
Shell is completed with ignition cartridge and increment charges	
Safe operational temperature range	-30°C to +50°C
High safety during transportation, handling and parachuting	

BALLISTIC DATA

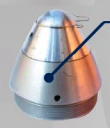
When using 120 mm Mortar, barrel length 1500 mm:

Maximum range	5900 m
Max. mean operating pressure in mortar	618 bars

The mortar shells can be fired from smooth bore mortar launchers.

PACKING

1 complete shell per carton	
2 cartons per wooden case	
Dimensions of wooden case	808 x 352 x 211 mm
Gross weight	37 kg
Volume of wooden case	0,06 m³
UN No.	0171
Hazard class	1.2G



FUZE
TP M87

120 mm Mk15
ILLUMINATING MORTAR SHELL

TECHNICAL DATA

Length of shell with fuze	725 mm
Mass of mortar shell with fuze	10800 g
Fuze	electronic, time, ETSQ M365
Illuminating power	1 000.000 Cd for 60 s
Mean rate of parachute descent with candle	3 m/s
Shell is completed with ignition cartridge and increment charges	
Safe operational temperature range	-30°C to +50°C
High safety during transportation, handling and parachuting	

BALLISTIC DATA

When using 120 mm Mortar, barrel length 1500 mm:

Maximum range	5900 m
Max. mean operating pressure in mortar	≤1350 bars

The mortar shells can be fired from smooth bore mortar launchers.

PACKING

1 complete shell per carton	
2 cartons per wooden case	
Dimensions of wooden case	968 x 352 x 211 mm
Gross weight	38 kg
Volume of wooden case	0,072 m³
UN No.	0171
Hazard class	1.2G


MORTAR SHELLS
FOR DRONE

60 mm M73-D HE MORTAR SHELL FOR DRONE with point detonating fuze

TECHNICAL DATA

Length of shell with fuze	297 mm
Mass of mortar shell with fuze	1350 g
Explosive charge	TNT
Mass of explosive charge	250 g
Fuze	point detonating for drone UT M88-D
Reliability of mortar shell with fuze	min 98%
Reliable function within temperature range	-46°C to +63°C

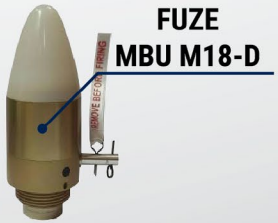
PACKING

8 pcs/wooden case	
Dimensions of wooden case	968 x 352 x 211 mm
Gross weight	23 kg
Volume of wooden case	0,072 m³
UN No.	0321
Hazard class	1.2E

60 mm M73PX-D HE MORTAR SHELL FOR DRONE with proximity fuze

TECHNICAL DATA

Length of shell with fuze	317 mm
Mass of mortar shell with fuze	1430 g
Explosive charge	TNT
Mass of explosive charge	250 g
Fuze	proximity MBU M18-D
Reliability of mortar shell with fuze	min 98%
Reliable function within temperature range	-46°C to +63°C



PACKING

8 pcs/wooden case	
Dimensions of wooden case	968 x 352 x 211 mm
Gross weight	23 kg
Volume of wooden case	0,072 m³
UN No.	0321
Hazard class	1.2E

81mm M72 TB-D MORTAR SHELL

TECHNICAL DATA

Length of shell with fuze	440 mm
Mass of mortar shell with fuze	2650 g
Explosive charge	THERMOBARIC
Eplosive temperature	2000°C
Mass of explosive charge	1300 g
Fuze	Impact action UT, M88-D
Safe operational temperature range	-46°C to +63°C
Reliability mortar shell with fuze	min.98%

FUZE
UT, M88-D

PACKING

5 pcs/wooden case	
Dimensions of wooden case	968 x 352 x 211 mm
Gross weight	31 kg
Volume of wooden case	0,072 m³
UN No.	0321
Hazard class	1.2E

81 mm M72-D HE MORTAR SHELL FOR DRONE with point detonating fuze

TECHNICAL DATA

Length of shell with fuze	400 mm
Mass of mortar shell with fuze	3050 g
Explosive charge	TNT
Mass of explosive charge	650 g
Fuze	point detonating for drone UT M88-D
Reliability of mortar shell with fuze	min 98%
Reliable function within temperature range	-46°C to +63°C

PACKING

5 pcs/wooden case	
Dimensions of wooden case	968 x 352 x 211 mm
Gross weight	27 kg
Volume of wooden case	0,072 m³
UN No.	0321
Hazard class	1.2E

81 mm M72PX-D HE MORTAR SHELL FOR DRONE with proximity fuze

TECHNICAL DATA

Length of shell with fuze	418 mm
Mass of mortar shell with fuze	3150 g
Explosive charge	TNT
Mass of explosive charge	650 g
Fuze	proximity MBU M18-D
Reliability of mortar shell with fuze	min 98%
Reliable function within temperature range	-46°C to +63°C

PACKING

5 pcs/wooden case	
Dimensions of wooden case	968 x 352 x 211 mm
Gross weight	27 kg
Volume of wooden case	0,072 m³
UN No.	0321
Hazard class	1.2E

82 mm M74-D HE MORTAR SHELL FOR DRONE with point detonating fuze

TECHNICAL DATA

Length of shell with fuze	400 mm
Mass of mortar shell with fuze	3050 g
Explosive charge	TNT
Mass of explosive charge	650 g
Fuze	point detonating for drone UT M88-D
Reliability of mortar shell with fuze	min 98%
Reliable function within temperature range	-46°C to +63°C

FUZE
UT, M88-D

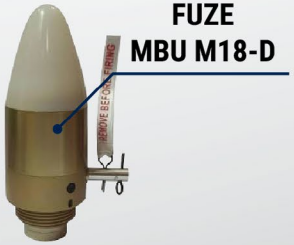
PACKING

5 pcs/wooden case	
Dimensions of wooden case	968 x 352 x 211 mm
Gross weight	27 kg
Volume of wooden case	0,072 m³
UN No.	0321
Hazard class	1.2E

82 mm M72PX-D HE MORTAR SHELL FOR DRONE with proximity fuze

TECHNICAL DATA

Length of shell with fuze	418 mm
Mass of mortar shell with fuze	3150 g
Explosive charge	TNT
Mass of explosive charge	650 g
Fuze	proximity MBU M18-D
Reliability of mortar shell with fuze	min 98%
Reliable function within temperature range	-46°C to +63°C



PACKING

5 pcs/wooden case	
Dimensions of wooden case	968 x 352 x 211 mm
Gross weight	27 kg
Volume of wooden case	0,072 m³
UN No.	0321
Hazard class	1.2E

120 mm M62-D HE MORTAR SHELL FOR DRONE with point detonating fuze

TECHNICAL DATA

Length of shell with fuze	593 mm
Mass of mortar shell with fuze	11300 g
Explosive charge	TNT
Mass of explosive charge	2400 g
Fuze	point detonating for drone UT M88-D
Reliability of mortar shell with fuze	min 98%
Reliable function within temperature range	-46°C to +63°C

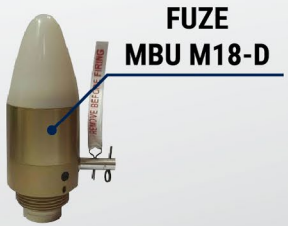
PACKING

2 pcs/wooden case	
Dimensions of wooden case	808 x 352 x 211 mm
Gross weight	33 kg
Volume of wooden case	0,06 m³
UN No.	0321
Hazard class	1.2E

120 mm M62PX-D HE MORTAR SHELL FOR DRONE with proximity fuze

TECHNICAL DATA

Length of shell with fuze	633 mm
Mass of mortar shell with fuze	11500 g
Explosive charge	TNT
Mass of explosive charge	2400 g
Fuze	proximity MBU M18-D
Reliability of mortar shell with fuze	min 98%
Reliable function within temperature range	-46°C to +63°C



PACKING

2 pcs/wooden case	
Dimensions of wooden case	968 x 352 x 211 mm
Gross weight	42 kg
Volume of wooden case	0,072 m³
UN No.	0321
Hazard class	1.2E

120 mm TB-D MORTAR SHELL FOR DRONE with point detonating fuze

TECHNICAL DATA

Length of shell with fuze	634 mm
Mass of mortar shell with fuze	12, 2 kg
Type of explosive	TBSX
Mass of explosive charge	3, 60 kg
Fuze	point detonating UT M88-D
Reliability of mortar shell with fuze	min 98%
Reliable function within temperature range	-46°C to +63°C

PACKING

2 pcs/wooden case, the fuze is packed separately from the mortar shell	
Dimensions of wooden case	808 x 352 x 211 mm
Gross weight	34 kg
Volume of wooden case	0,06 m³
UN No.	0294
Hazard class	1.2F


WARHEADS

FPV DIRECT ATTACK COMBAT DRONE MOSQUITO 1 WITH 50mm WARHEAD WITH FUZE

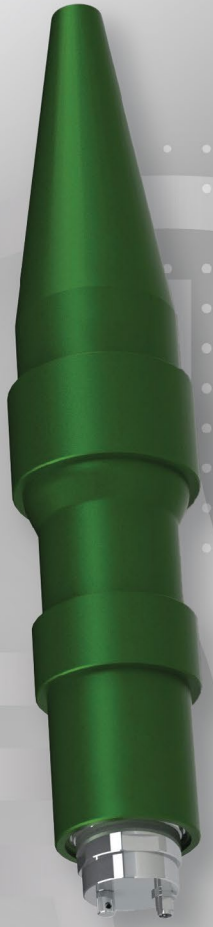
TECHNICAL DATA

Item purpose	For penetration of armored vehicles and objects, as well as destroying or incapacitating manpower
Warhead caliber	50 mm
Warhead function	Double effect, HEAT and fragmentation. HEAT effect min 100 mm (penetration on steel plate) and fragmentation desctructive effect min.10 m
Explosive fragments	400+ pieces
Fuze	Electro-mechanical, designated as UET M24. It has an impact (3D impact sensor) and directed function (the operator determines the moment of the warhead activation)
Range	2.5 km (drone armed with warhead and fuze)
Operating principle	FPV (First Person View)
Drone	7 inch drone is used. The drone has a camera, so the operator has clear picture of the potential target
Drone speed	80 km/h

FPV DIRECT ATTACK COMBAT DRONE MOSQUITO 2 WITH 78mm WARHEAD WITH FUZE

TECHNICAL DATA

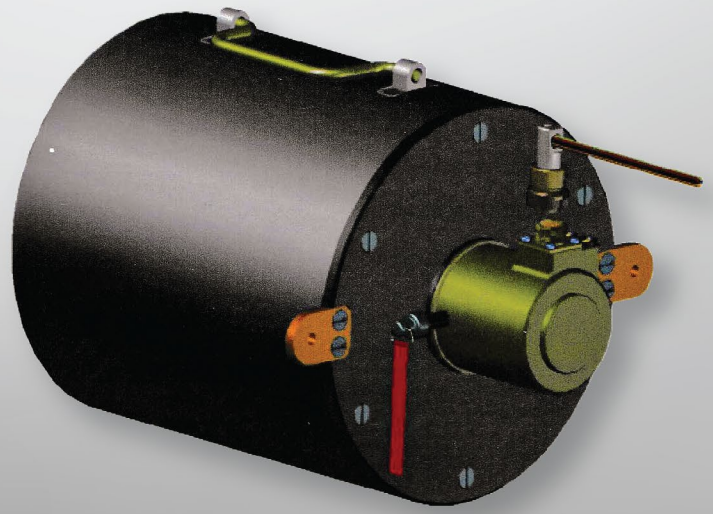
Item purpose	For penetration of armored vehicles and objects, as well as destroying or incapacitating manpower
Warhead caliber	78 mm
Warhead function	HEAT/fragmentation warhead. Efficiency / penetration of armor plate ≥ 350 mm
Explosive fragments	978 pieces
Fuze	Lower, electronic, impact, designated as UET M24P1. It has an impact (3D impact sensor) and directed function (operator determines moment of activation).
Range	2.5 km
Operating principle	FPV (First Person View)
Drone	10 inch drone is used. The drone has a camera, so the operator has clear picture of the potential target
Drone speed	80 km/h



5.0 kg HE WARHEAD WITH BLAST/FRAGMENTATION EFFECT

TECHNICAL DATA

Intended use	The warheads can be mounted on drones or unmanned aerial vehicles.
Warhead caliber	150 mm
Lenght with fuze	220 mm
Warhead mass	5 kg
Warhead function	Omni - directional, blast with fragmentation type (single warhead type with the above combination)
Fuze	Electronic fuze; impact and directed function
Mass of the explosive in the warhead	2.0 kg
Lethal radius	25 m



12.5 kg HE WARHEAD WITH BLAST EFFECT

TECHNICAL DATA

Warhead caliber	160 mm
Lenght without fuze	295 mm
Mass of the warhead without a fuze	11.2 kg
Explosive mass	6.45 kg
Fuze	electronic, super quick M24A2
Type of warhead	HE warhead with destruction effect
Storage temperature	-50C +70C
Explosive	TNT
Hazard class	1.4.D

35 kg M25A1 HE WARHEAD WITH BLAST/DEMOLITION EFFECT

TECHNICAL DATA

Intended use	The warheads can be mounted on drones or unmanned aerial vehicles. They are used to penetrate armored vehicles, static models, buildings, facilities, as well as destroy and disable manpower.
Warhead caliber	300 mm
Lenght without fuze (with mounting screws)	323 mm
Warhead mass	35 kg
Warhead function	High-explosive warhead (desctructive), with demolition effect
Fuze	Impact, electronic, UUED M25 designated. It has impact and directed function. The impact function is achieved after arming when hitting the target at any angle. The directed function is achieved after arming at any time by direct command of the drone operator.
Mass of explosive in warhead	23 kg

50 kg M25A2 HE WARHEAD WITH BLAST/DEMOLITION EFFECT

TECHNICAL DATA

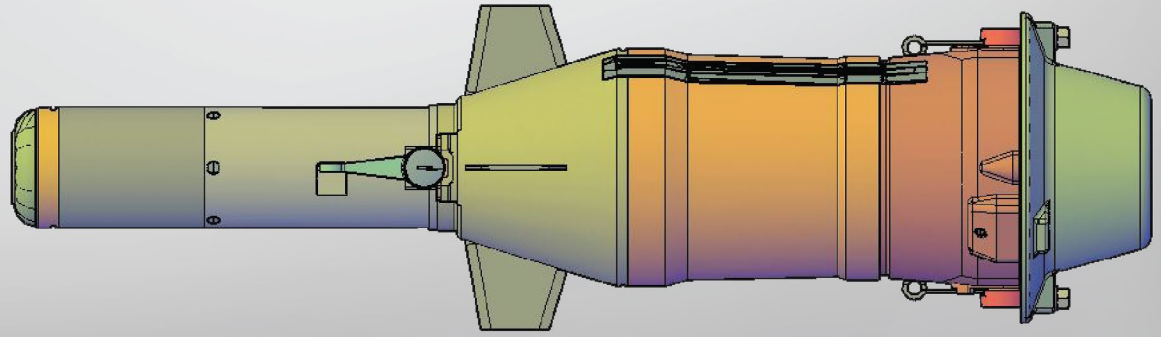
Intended use	The warheads can be mounted on drones or unmanned aerial vehicles. They are used to penetrate armored vehicles, static models, buildings, facilities, as well as destroy and disable manpower.
Warhead caliber	300 mm
Lenght without fuze (with mounting screws)	440 mm
Warhead mass	50 kg
Warhead function	High-explosive warhead (desctructive), with demolition effect
Fuze	Impact, electronic, UUED M25 designated. It has impact and directed function. The impact function is achieved after arming when hitting the target at any angle. The directed function is achieved after arming at any time by direct command of the drone operator.
Mass of explosive in warhead	35.00 kg

TANDEM SHAPED CHARGE WARHEAD

TECHNICAL DATA

Mass	3.7 kg
Warhead caliber (max)	125 mm
Lenght with protective cup	585 mm
Lenght without protective cup	520 mm
Tandem warhead	Front warhead mass + main warhead
Fuzes	Electrical, UOTE M15 and UPTE M15
Penetration of warhead after ERA	750 mm

The warhead is adapted to an UAV based on this principle.

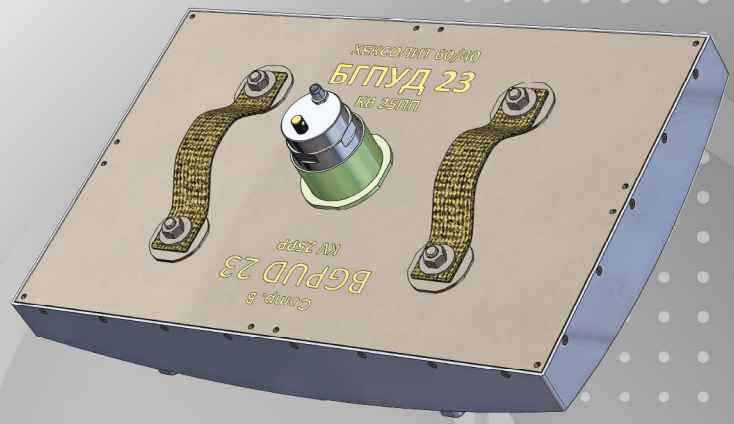


HE WARHEAD BG-PUD 23

TECHNICAL DATA

Mass	23,5 kg (explosive 9,6 kg)
Dimensions	427x272x82 mm (without a fuze)
Fragments type	Cubes made of hard metal; 4.452 fragments
Explosive	Hexolite 60 /40
Fuze	Electro-mechanical fuze of impact and directed action, UET M25
Target area	A 30 m diameter circle on the ground below BLV which is at a height of 50 m from the ground
Required density of action	Three hits per m²
Required efficiency	Of steel sheet , T/K, minimum thickness of 4 mm
V0 efficient fragments	Minimum 1,7 km/s (outside the target zone minimum 1,18 km/s), maximum 1,9 km/s
Energy of fragments on target	450 J, 600 J

Note: all data are approximate, confidential and instructive.



AIRCRAFT UNGUIDED ROCKETS

57 mm BR-1-57 (S-5M) AIRCRAFT ROCKET

BR-1-57 rocket is 57 mm caliber rocket with high explosive effect assembled with impact fuze. Purpose of this rocket is destruction of air targets at the altitudes up to 30.000 m.
BR-1-57 rocket can also be used for the ground targets destruction (aircraft, cars, warehouses and similar military objects).
BR-1-57 rocket is fired from the tube launchers (with rear part open), which are placed in the honeycomb L-57 launchers

TECHNICAL DATA

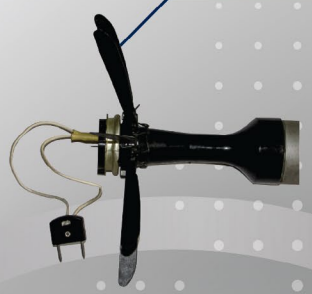
Rocket caliber	57 mm
Rocket length with fuze	868 g
Rocket mass	3,96 kg
Warhead mass (without fuze)	0,815 kg
Explosive charge mass	0,285 kg
Temperature range of use	-60°C to +50°C
Fuze	impact, superquick, inertia action UTI-1
	max 3000 m

PACKING

12 rockets in a wooden case	
Case dimension	1070 x 395 x 285 mm
Gross weight	72 kg
Volume of wooden case	0,2 m³
UN No.	0295
Hazard class	1.2F

FUZE
UTI-1

BR-1-57



INITIATION BY MEANS OF PLUG

BR-1-57 P1

INITIATION BY MEANS
OF AUTOMATIC SWITCHING
ON THE CIRCUIT

57 mm BR-2-57 (S-5K) AIRCRAFT ROCKET

BR-2-57 is of the holow charge effect. Its is 57 mm calibre assembled with the impact inertial fuze. The rocket is used to destroy armoured ground targets, tanks, self-propelled artillery, armoured vihicles, armoured personnel carriers etc. It serves as the rocket armament of modern jet airplanes.
Rocket BR-2-57 is launched with the fuze from the launcher tube (with the opened rear ends) which are placed in the honeycomb L-57 launchers

TECHNICAL DATA

Rocket caliber	57 mm
Rocket length with fuze	853 g
Rocket mass	3,64 kg
Thickness of penetrating armor at rocket strike under the angle 30° from the vertical line	130 mm
Temperature range of use	-60°C to +50°C
Launching range	max 3000 m

PACKING

12 rockets in a wooden case	
Case dimension	1070 x 395 x 285 mm
Gross weight	69 kg
Volume of wooden case	0,12 m³
UN No.	0295
Hazard class	1.2F

FUZE
UTI-2

BR-2-57

INITIATION BY MEANS OF PLUG

BR-2-57 P1

INITIATION BY MEANS OF AUTOMATIC SWITCHING ON THE CIRCUIT

57 mm BR-20-57 (S-5KO) AIRCRAFT ROCKET

The aircraft rocket BR-20-57 is a rocket of combined hollow-charge and fragmentation effect, therefore, with multiple employment advantages, completed with the impact fuze with superquick-inertia action. Rocket BR-20-57 is launched with the fuze from the launcher tube (with the opened rear ends) which are placed in the honeycomb L-57 launchers

TECHNICAL DATA

Rocket caliber	57 mm
Rocket length with fuze	991 mm
Rocket mass	4,5 kg
Explosive charge mass	0,32 kg
Penetration	160 mm
Temperature range of use	-60°C to +50°C
Launching range	max 3000 m

PACKING

8 rockets in a wooden case	
Case dimension	1100 x 443 x 250 mm
Gross weight	64 kg
Volume of wooden case	0,12 m³
UN No.	0180
Hazard class	1.1F

INITIATION BY MEANS OF PLUG

INITIATION BY MEANS
OF AUTOMATIC SWITCHING
ON THE CIRCUIT

80 mm M16 (S-8 KOM) UNGUIDED AIRCRAFT ROCKET

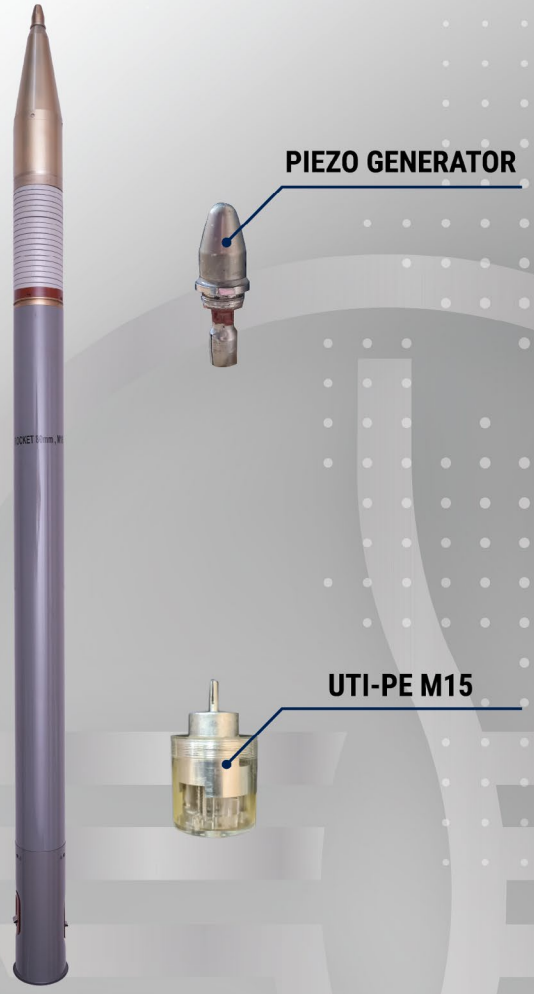
The VZ 80 mm, M16 (S-8 KOM) unguided aircraft rocket is with hollow-charge fragmentation warhead and designed for destruction of ground armored and unarmored targets, such as tanks, missile launchers as well as enemy troops. Rockets are launched individually or in burst from twenty-tube honeycomb launchers suspended under a plane wings (Launcher B-8M1) or armament carrier of helicopters (Launcher B-8V20-A)

TECHNICAL DATA

Rocket caliber	80 mm
Warhead explosive mass	1,1 kg
Rocket mass	11,1 kg
Rocket penetration under the angle of 30° to the normal	min.350 mm
Temperature range of use	-60°C to +50°C
Fuze - impact, superquick, inertia type - piezoelectric upper PIEZZO GENERATOR ПГ, M16 lower UTI-PE M15	
Launching range	1300-4000 m

PACKING

4 rockets in a wooden case	
Case dimension	1805 x 312 x 294 mm
Gross weight	64 kg
Volume of wooden case	0,16 m³
UN No.	0180
Hazard class	1.1F



128 mm M15
UNGUIDED AIRCRAFT ROCKET

Unguided aircraft rocket 128 mm M15 is with hollow-charge fragmentation warhead and designed for destruction of ground armored and unarmored targets, such as tanks, missle launchers as well as enemy troops. Rockets can be launched from launcher L-128-04

TECHNICAL DATA

Rocket caliber	128 mm
Rocket length	1835 mm
Rocket mass	44 kg
Temperature range of use	-40°C to +50°C
Fuze	upper impact mechanical with point detonating and delay action (MRV-U)
Launching range	max 4000 m

PACKING

1 rockets in a wooden case	
Case dimension	2030 x 295 x 255 mm
Case gross weight	74 kg
Case volume	0, 153 m³
UN No.	0295
Hazard class	1.2F

UNGUIDED ROCKETS FOR LAUNCHERS

107 mm M15
ARTILLERY ROCKET

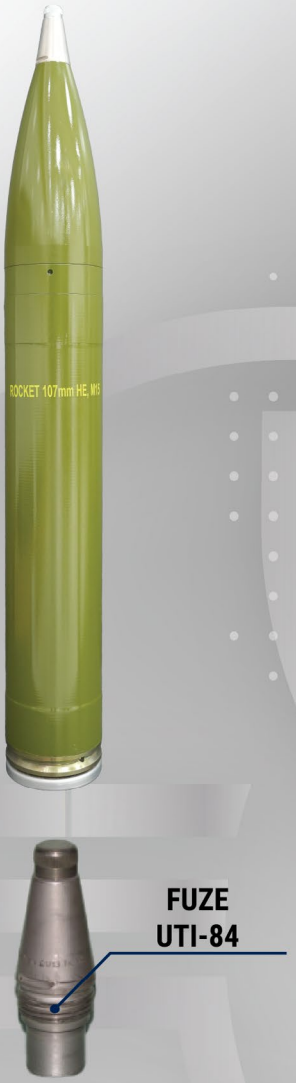
The unguided artillery rocket 107mm M15 is designed to incapacitate or destroy enemy troops, equipment, enemy forces at meeting places, enemy convoys, prevent assaults by parachute troops and invasions from the sea, neutralize enemy command posts and communication centers. Rocket is launched from different types of multi-tubes and modular launchers: LRV, M63, M94, SAKR RI812, etc.

TECHNICAL DATA

Rocket caliber	107 mm
Rocket length with UTI M84 fuze	827 mm
Rocket mass	18,6 kg
Fuze mass	0,35 kg
Explosive mass	1,25 kg
Maximum range	8,5 km
Temperature range of use	-30°C to +50°C
Fuze - impact, superquick, inertia action	UTi M84

PACKING

2 rockets in a wooden case	
Case dimension	1100 x 305 x 305 mm
Case gross weight	50 kg
Volume of wooden case	0,1 m³
UN No.	0295
Hazard class	1.2F



107 mm - Long range ARTILLERY ROCKET

The unguided long range artillery rocket 107 mm is designed to incapacitate or destroy enemy troops, equipment, enemy forces at meeting places, enemy convoys, prevent assaults by parachute troops and invasions from the sea, neutralize enemy command posts and communication centers. Rocket is launched from different types of multi-tubes and modular launchers: LRV, M63, M94, RI812, etc.

TECHNICAL DATA

Rocket caliber	107 mm
Rocket length with UTI M84 fuze	861 mm
Rocket mass	18, 4 kg
Explosive mass	1, 25 kg
Maximum range	12, 5 km
Temperature range of use	-30°C to +50°C
Fuze	UTI M84

PACKING

2 rockets in a wooden case	
Case dimension	1100 x 305 x 305 mm
Gross weight	50 kg
Volume of wooden case	0,1 m³
UN No.	0295
Hazard class	1.2F

122 mm GRAD 20 km ARTILLERY ROCKET

The artillery rocket intended for fire support against fortified, light armored or non-armoured targets. It is designed to incapacitate enemy troops and to neutralize enemy command posts and communication centers. Rocket is launched from different types of multi-tubes launchers: MLRS BM-21, MSVLR TAMNAVA 122 mm, MLRS RM-70, etc.

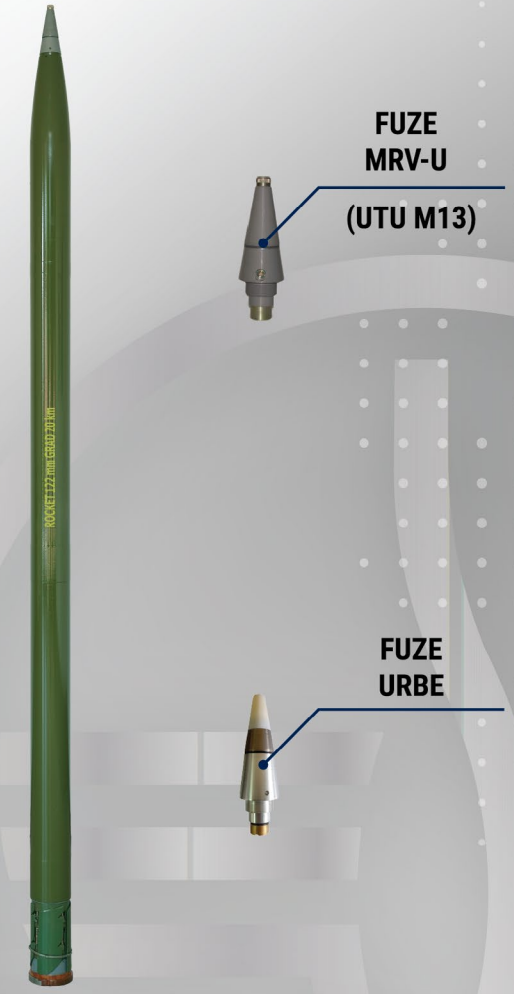
TECHNICAL DATA

Rocket caliber	122 mm
Lenght	2875 mm
Total mass	66 kg
Mass of warhead with fuze	19, 1 kg
Charge mass	20,45 kg
Motor total impulse	39700 Ns
Temperature range of use	-30°C to +50°C
Optimal angle of elevation	48°
Range	19,9 km

Rocket can be completed with two fuzes types: upper impact mechanical with point detonating and delay action (MRV-U) or with proximity fuze (URBE).

PACKING

1 rockets in a wooden case	
Case dimension	2940 x 275 x 225 mm
Gross weight	101 kg
Volume of wooden case	0,21 m³
UN No.	0295
Hazard class	1.2F



122 mm GRAD 20 km GPS GUIDANCE ARTILLERY ROCKET

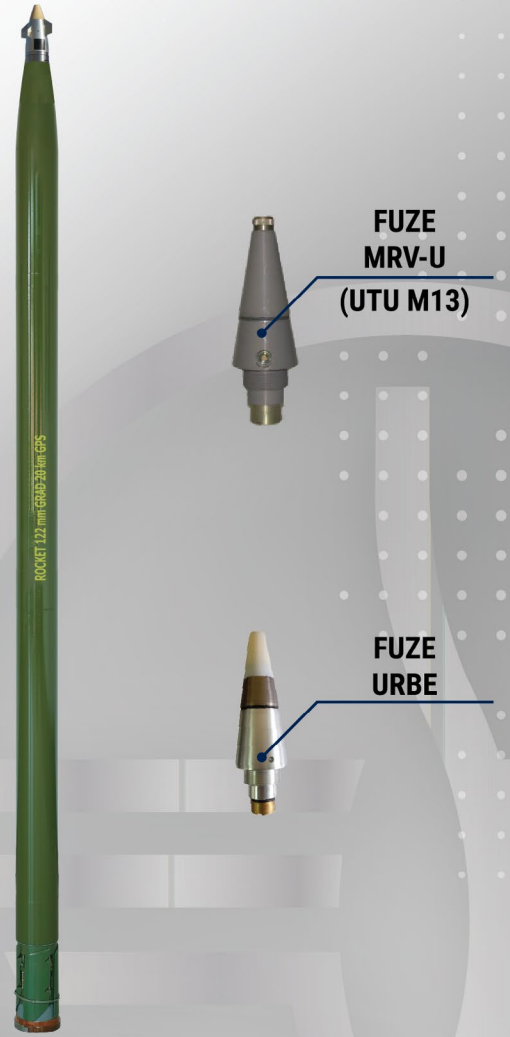
TECHNICAL DATA

Caliber	122 mm
Length	2973 mm
Rocket mass with PGK (device for trajectory correction)	68,5 kg
Mass of warhead with fuze	19,1 kg
Charge mass	20,45 kg
Motor total impulse	39700 Ns
Temperature range of use	-30°C to +50°C
Optimal angle of elevation	48°
Range	20 km

Rocket can be completed with two fuzes types: upper impact mechanical with point detonating and delay action (MRV-U) or with proximity fuze (URBE).

PACKING

1 rockets in a wooden case	
Case dimension	3100 x 275 x 225 mm
Case gross weight	101 kg
Case volume	0,21 m³
UN No.	0295
Hazard class	1.2F



122 mm GRAD 40 km ARTILLERY ROCKET

The artillery rocket intended for fire support against fortified, light armoured or non-armoured targets.
It is designed to incapacitate enemy troops and to neutralize enemy command posts and communication centers. Rocket is launched from different types of multi-tubes launchers:
MLRS BM-21, MSVLR TAMNAVA 122 mm, MLRS RM-70, etc.

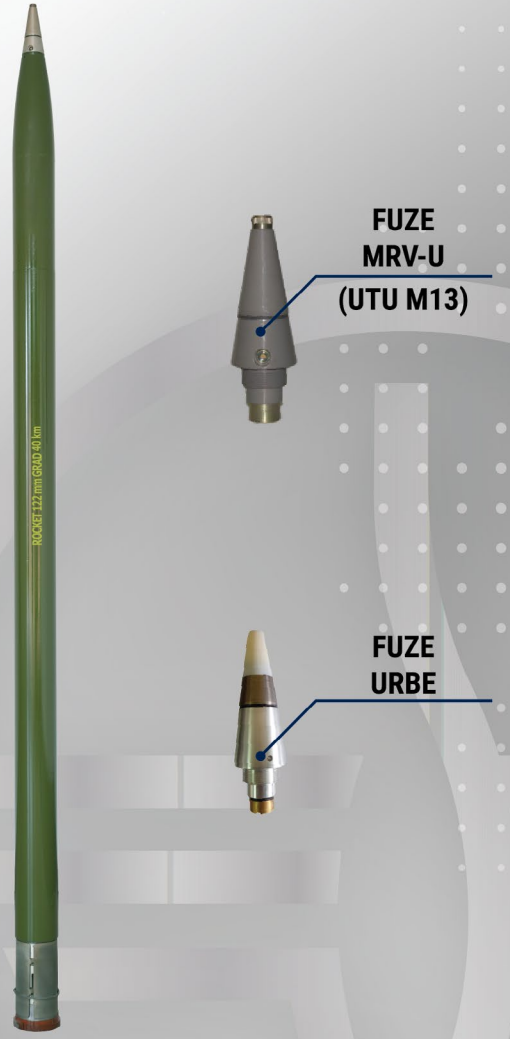
TECHNICAL DATA

Caliber	122 mm
Length	2875 mm
Total mass	69 kg
Mass of warhead with fuze	19,1 kg
Charge mass	20,15 kg
Motor total impulse	62250 Ns
Motor specific impulse	2280 Ns
Temperature range of use	-30°C to +50°C
Optimal angle of elevation	55°
Range	40 km

Rocket can be completed with two fuzes types: upper impact mechanical with point detonating and delay action (MRV-U) or with proximity fuze (URBE).

PACKING

1 rockets in a wooden case	
Case dimension	2940 x 275 x 225 mm
Case gross weight	101 kg
Case volume	0,21 m³
UN No.	0295
Hazard class	1.2F



128 mm OGANJ M18 ARTILLERY ROCKET

The unguided rocket cal. 128mm, OGANJ M18 is artillery rocket for fire support against fortified and non-fortified points, light armoured and non-armoured targets and enemy manpower, as much as destruction of command posts and communication centers. Rocket is launched from different types of multi-tubes launchers: LRSVM M-18 OGANJ, M-77 OGANJ, etc.

TECHNICAL DATA

Rocket caliber	128 mm
Warhead caliber	128 mm
Rocket lenght	2615 mm
Rocket mass	62 kg
Warhead mass	16,5 kg
Warhead effective action radius	40 m
Maximum range	22 km
Temperature range of use	-30°C to +50°C

Rocket can be completed with two fuzes types: point detonating with delay action (UTU M12) or with proximity fuze (UB M21)

PACKING

1 rockets in a wooden case	
Case dimension	2677 x 285 x 225 mm
Gross weight	72 kg
Volume of wooden case	0,17 m³
UN No.	0180
Hazard class	1.1F

128 mm OGANJ M19 ARTILLERY ROCKET

Unguided rocket 128mm, OGANJ M19 is intended for neutralization of area targets, enemy manpower, fortified and non-fortified points as much as light armoured and non-armoured vehicles.
Rocket is launched from different types of multi-tubes launchers:
LRSVM M-18 OGANJ, M-77 OGANJ, etc.

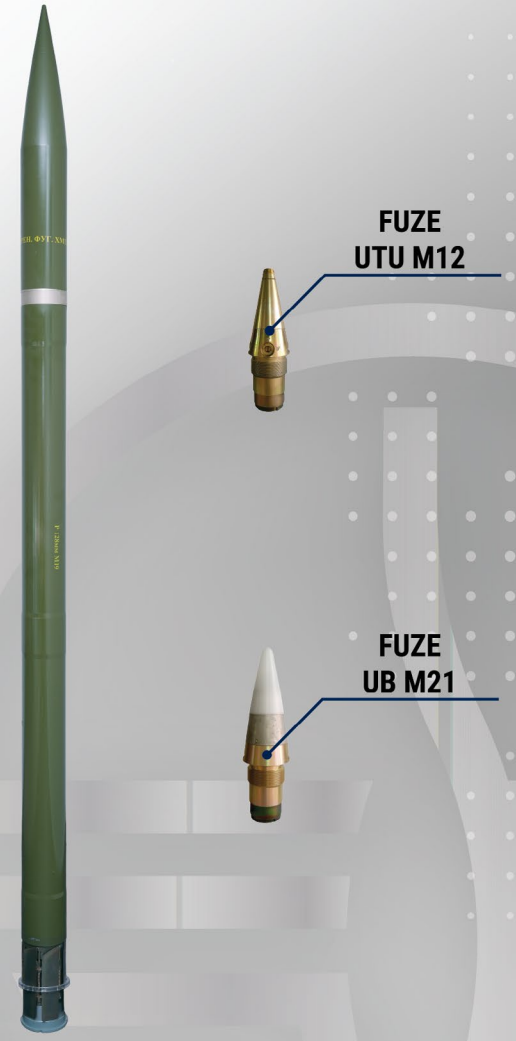
TECHNICAL DATA

Caliber	128 mm
Length	2580 mm
Mass	71,4 kg
Warhead mass	16,5 kg
Temperature range	-30°C to +50°C
Rocket range	40 km

Rocket can be completed with two fuzes types: point detonating with delay action (UTU M12) or with proximity fuzes (UB M21)

PACKING

1 rockets in a wooden case	
Case dimension	2677 x 285 x 225 mm
Case gross weight	101 kg
Case volume	0,21 m³
UN No.	0295
Hazard class	1.2F



128 mm OGANJ M20 ARTILLERY ROCKET

Unguided rocket cal. 128mm, OGANJ M20 is intended for neutralization of area targets, enemy manpower, as much as destruction of command posts and communication centers.
Rocket is launched from different types of multi-tubes launchers:
LRSVM M-18 OGANJ, M-77 OGANJ, etc.

TECHNICAL DATA

Caliber	128 mm
Lenght	3619 mm
Mass	92 kg
Warhead mass	23 kg
Rocket range	50 km
Temperature range	-30°C to +50°C

Rocket can be completed with two fuzes types: point detonating with delay action (UTU M12) or with proximity fuze (UB M21)

PACKING

1 rockets in a wooden case	
Case dimension	3680 x 285 x 225 mm
Gross weight	132 kg
Volume of wooden case	0,21 m³
UN No.	0295
Hazard class	1.2F

128 mm OGANJ M22 ARTILLERY ROCKET

Unguided rocket cal. 128mm, OGANJ M22 is intended for neutralization of area targets, enemy manpower, as much as destruction of command posts and communication centers.
Rocket is launched from different types of multi-tubes launchers:
LRSVM M-18 OGANJ, M-77 OGANJ, etc.

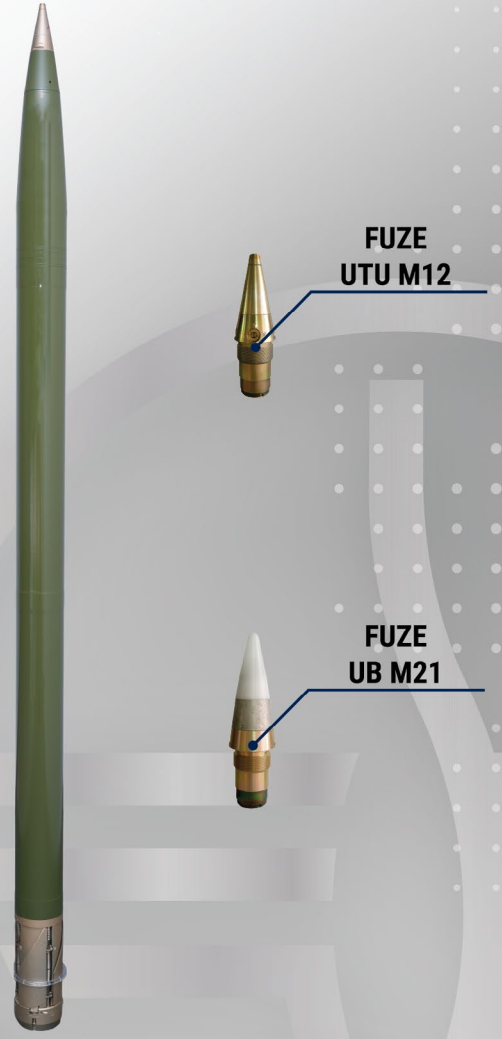
TECHNICAL DATA

Caliber	128 mm
Length	2785 mm
Mass	64 kg
Rocket range	22 km
Temperature range	-30°C to +50°C

Rocket can be completed with two fuzes types: point detonating with delay action (UTU M12) or with proximity fuzes (UB M21)

PACKING

1 rockets in a wooden case	
Case dimension	2900 x 285 x 225 mm
Case gross weight	90 kg
Case volume	0,21 m³
UN No.	0295
Hazard class	1.2F



128 mm PLAMEN A M63 ARTILLERY ROCKET

The unguided rocket PLAMEN A' is designed to inflict operational and powerful strikes on manpower, lightly armored enemy vehicles, to destruct command posts, communication centers, airports and military industrial infrastructure. Rockets can be launched from launcher VBR 128 mm M63, LRSV 128 mm M63/94, etc

TECHNICAL DATA

Maximum range	8600 m
Caliber	128 mm
Rocket lenght with the fuze	837 mm
Rocket mass	23,34 kg
Explosive charge mass	2,35 kg
Fuze - impact, superquick, inertia type	UTI M84
Temperature range	-30°C to +50°C

PACKING

2 rockets in a wooden case	
Case dimension	1070 x 360 x 223 mm
Case gross weight	56 kg
Case volume	0,086 m³
UN No.	0295
Hazard class	1.2F

128 mm PLAMEN D M08 ARTILLERY ROCKET

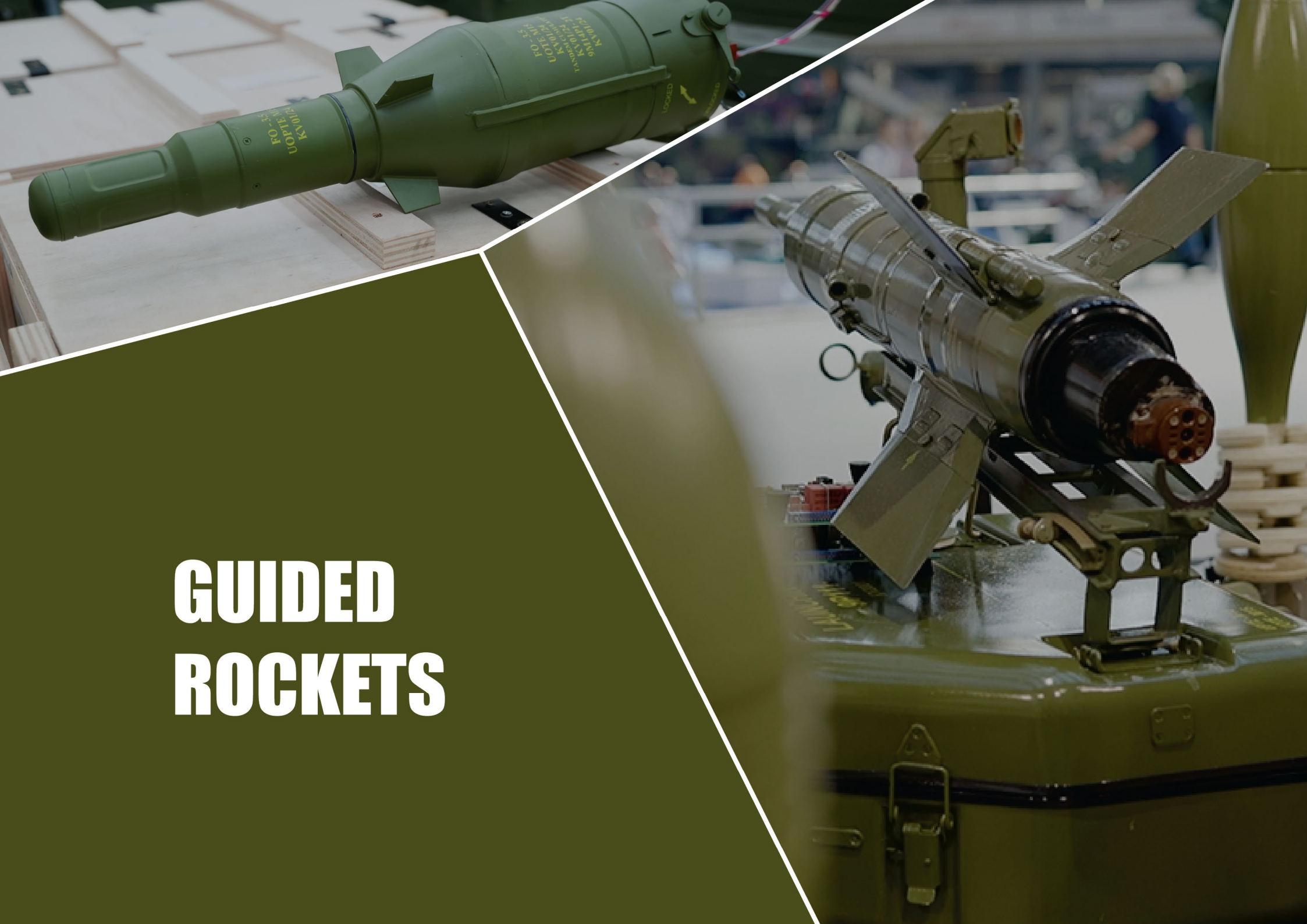
The unguided rocket PLAMEN D M08 is designed to inflict operational and powerful strikes on manpower, lightly armored enemy vehicles, to destruct command posts, communication centers, airports and military industrial infrastructure. Rockets can be launched from launcher LRSV 128 mm M63/94, etc

TECHNICAL DATA

Maximum range	12700 m
Caliber	128 mm
Lenght	975 mm
Rocket mass	25,67 kg
Explosive charge mass	2,95 kg
Fuze - impact, superquick, inertia type	UTI M84
Temperature range od use	-30°C to +50°C

PACKING

2 rockets in a wooden case	
Case dimension	1070 x 360 x 223 mm
Case gross weight	69 kg
Case volume	0,086 m³
UN No.	0295
Hazard class	1.2F



GUIDED ROCKETS

MALYUTKA 9M14P1B1 ANTITANK MISSILE

The wire guided antitank missile with semiautomatic guidance system (SACLOS) 9M14P1 (and improved 9M14P1B1) is an effective antitank combat weapon with range up to 3000 m, with a hit high level probability.

TECHNICAL DATA

Maximum firing distance	3000m
Minimum firing distance	500m
Penetration of armor steel of warhead	580mm
Mean flight velocity	120 m/sec
Caliber	125mm
Length	985mm
Wing span	393mm
Transverse dimensions of missile with folded wings	185x185mm
Missile mass	11.6kg
Temperature range	-30°C to +50°C

Guiding system: manual, by sending command signals along conductors, using the three-point method, or the semi-automatic two-point method

PACKING

1 missile in a wooden case 9Ja618	
Case dimension	1051 x 340 x 350 mm
Case gross weight	30 kg
Case volume	0,13m³
UN No.	0287
Hazard class	1.1D

PACKING

1 missile in a modernized 9P111-2 launch box with a launch rail and a cable with connectors for launching a guided missile

Launch box dimensions	580 x 425 x 225 mm
Gross weight of launch box	21 kg
Launch box volume	0,05 m³
UN No.	0287
Hazard class	1.1D

MALYUTKA 9M14P1-2F
MISSILE WITH ANTI-PERSONNEL WARHEAD

The wire guided antitank missile with anti-personnel warhead and with semiautomatic guidance system (SACLOS) 9M14P1B1 (and improved 9M14P1B1) is an effective combat weapon with range up to 3000 m and with a hit high level probability.

TECHNICAL DATA

Maximum firing distance	3000m
Minimum firing distance	500m
Overpressure of warhead at 7 m in open space	≥ 0,3 bar
Mean flight velocity	120 m/sec
Caliber	125mm
Length	866 mm
Wing span	393mm
Transverse dimensions of missile with folded wings	185x185mm
Missile mass	12.5 kg
Temperature range	-30°C to +50°C

Guiding system: manual, by sending command signals along conductors, using the three-point method, or the semi-automatic two-point method

PACKING

1 missile in a wooden case 9Ja618	
Case dimension	1051 x 340 x 350 mm
Case gross weight	31 kg
Case volume	0,13m³
UN No.	0287
Hazard class	1.1D

PACKING

1 missile in a modernized 9P111-2 launch box with a launch rail and a cable with connectors for launching a guided missile

Launch box dimensions	580 x 425 x 225 mm
Gross weight of launch box	22 kg
Launch box volume	0,05 m³
UN No.	0287
Hazard class	1.1D

MALYUTKA 9M14P1-2T ANTITANK MISSILE

The wire guided antitank missile with semiautomatic guidance system (SACLOS) 9M14P1B1 (and improved 9M14P1B1) is an effective antitank combat weapon with range up to 3000 m, with a hit high level probability.

TECHNICAL DATA

Maximum firing distance	3000m
Minimum firing distance	500m
Penetration of armor steel behind ERA (explosive reactive armor) of warhead	750 mm
Mean flight velocity	120 m/sec
Caliber	125 mm
Length	1035 mm
Wing span	393mm
Transverse dimensions of missile with folded wings	185x185mm
Missile mass	12.6kg
Temperature range	-30°C to +50°C

Guiding system: manual, by sending command signals along conductors, using the three-point method, or the semi-automatic two-point method

PACKING

1 missile in a wooden case 9Ja618	
Case dimension	1051 x 340 x 350 mm
Case gross weight	31 kg
Case volume	0,13m³
UN No.	0287
Hazard class	1.1D

PACKING

1 missile in a modernized 9P111-2 launch box with a launch rail and a cable with connectors for launching a guided missile

Launch box dimensions	580 x 425 x 225 mm
Gross weight of launch box	22 kg
Launch box volume	0,05 m³
UN No.	0287
Hazard class	1.1D

MALYUTKA 9M14P1B1 – 2L ANTITANK MISSILE

The wire guided antitank missile with semiautomatic guidance system (SACLOS) 9M14P1 (and improved 9M14PB1) is an effective antitank combat weapon with ranges up to 3000m, high hit probability.

TECHNICAL DATA

Maximum firing distance	3500m
Minimum firing distance	500m
Penetration of armor steel of warhead	580 mm
Mean flight velocity	150 m/sec
Caliber	125 mm
Length	985 mm
Wing span	393 mm
Transverse dimensions of missile with folded wings	185x185mm
Missile mass	10.1 kg
Temperature range	-30°C to +50°C

Guiding system: laser-guided system on the tripod and missile on the launch box

PACKING

1 missile in a wooden case 9Ja618	
Case dimension	1051 x 340 x 350 mm
Case gross weight	28.5 kg
Case volume	0,13m³
UN No.	0287
Hazard class	1.1D

PACKING

1 missile in a modernized 9P111-2 launch box with a launch rail and a cable with connectors for launching a guided missile

Launch box dimensions	580 x 425 x 225 mm
Gross weight of launch box	20 kg
Launch box volume	0,05 m³
UN No.	0287
Hazard class	1.1D

MALYUTKA 9M14P1-2F – 2L
MISSILE WITH ANTI-PERSONNEL WARHEAD

The wire guided missile with anti-personnel warhead with semiautomatic laser or thermal imaging system is an effective antitank combat weapon with range up to 3300 m, with a hit high level probability.

TECHNICAL DATA

Maximum firing distance	3300m
Minimum firing distance	500m
Overpressure of warhead at 7 m in open space	≥ 0,3 bar
Mean flight velocity	140 m/sec
Caliber	125 mm
Length	866 mm
Wing span	393 mm
Transverse dimensions of missile with folded wings	185x185mm
Missile mass	11.0 kg
Temperature range	-30°C to +50°C

Guiding system: laser-guided system on the tripod and missile on the launch box

PACKING

1 missile in a wooden case 9Ja618	
Case dimension	1051 x 340 x 350 mm
Case gross weight	28.5 kg
Case volume	0,13 m³
UN No.	0287
Hazard class	1.1D

PACKING

1 missile in a modernized 9P111-2 launch box with a launch rail and a cable with connectors for launching a guided missile

Launch box dimensions	580 x 425 x 225 mm
Gross weight of launch box	20.5 kg
Launch box volume	0,05 m³
UN No.	0287
Hazard class	1.1D

MALYUTKA 9M14P1-2T – 2L ANTITANK MISSILE

The wire guided antitank missile with semiautomatic laser or thermal imaging system is an effective antitank combat weapon with range up to 3200 m, with a hit high level probability.

TECHNICAL DATA

Maximum firing distance	3200m
Minimum firing distance	500m
Penetration of armor steel behind ERA (explosive reactive armor) of warhead	750 mm
Mean flight velocity	130 m/sec
Caliber	125 mm
Length	1035 mm
Wing span	393 mm
Transverse dimensions of missile with folded wings	185x185mm
Missile mass	11.1 kg
Temperature range	-30°C to +50°C

Guiding system: laser-guided system on the tripod and missile on the launch box

PACKING

1 missile in a wooden case 9Ja618	
Case dimension	1051 x 340 x 350 mm
Case gross weight	28.5 kg
Case volume	0,13 m³
UN No.	0287
Hazard class	1.1D

PACKING

1 missile in a modernized 9P111-2 launch box with a launch rail and a cable with connectors for launching a guided missile

Launch box dimensions	580 x 425 x 225 mm
Gross weight of launch box	20.5 kg
Launch box volume	0,05 m³
UN No.	0287
Hazard class	1.1D

MALYUTKA SYSTEM 2L / LASER GUIDANCE / THERMAL IMAGING GUIDANCE

Malyutka system consists of the following elements:

- Malyutka missile
- Launching box
- Tripod control box

LAUNCHING BOX 9P111-2

Launching box 9P111-2 is intended for storage of the following items:

- Missile 9M14P1 or 9M14P1B1 or 9M14P1-2T or 9M14P1-2F
- warhead with the fuze
- launching rail for launching the missile
- 16 m of 4- fiber cable whose one end has got a 4-pole plug for attaching to the control panel
- coil for winding the cable

Launching box is anticipated for maximum 10 firings after which it is returned to the the manufacturer for inspection and overhaul (possible damage due to products of combustion of powder gases of the the missile motor). A new warranty period for 10 new firings is provided after performed overhaul.

CONTROL PANEL 95415M

For laser guidance and thermal imaging guidance, the control box is placed on a tripod and it consists of: an optical block, an electronic block, a 24 V battery for charging the supercapacitor in the missile before launching the missile, a switch for selecting the missile, a connector for connecting the missile (maximum of 4 missiles) via a six-pin connector on the missile and a four-pin connector on the control panel.

Before starting the missile, the supercapacitors in the missile are charged from the 24 V battery, whereby a flashing icon for supercapacitor charging will appear in the field of view of eyeglass. When the icon stops flashing, the operator launches the missile, taking care to keep the sight of the binoculars on the target.

In the event that the personnel in the tank notice that they are in the laser beam and if they throw out a smoke screen, the operator who guides the missile on the command panel switches the switch from the laser guidance position to the thermal imaging guidance position.

Inside the optical system, there is a modulation disc with two rasters (one for height, the other for direction), which ensures hit accuracy at 3 km ±0.1 m.
The maximum launch speed is 1 missile / minute.
The readiness of the kit for use (change from marching to combat position) is a maximum of 10 minutes.

OTHER MILITARY PROGRAM

TMA-4
ANTIMAGNETIC ANTI-TANK MINE

The antitank destructive piercing mine- 6 is intended for incapacitating and demolition of enemy armored and other combat and transport vehicles. It has a destructive and penetrating effect.

TECHNICAL DATA

Dimensions	Ø 285 x 110 mm
Mass	6.3 kg
Explosive charge	Cast TNT
Explosive charge mass	5.5 kg
Initiation	Trough the fuze
Activation force	100 - 200 daN
Step-on area	Ø 200 mm (314 cm²)
Safe operational temperature range	-30°C to +60°C
Mine laying operation	Manual, Minelayer
Stability on mine field	6 months (the worst conditions)

PACKING

4 pcs per packing set. The set is packed in a barrel.	
Dimensions	Ø 330 x 370 mm
Volume	0.032 m³
UN No.	0137
Hazard class	1.1D

M-75
HAND GRENADE

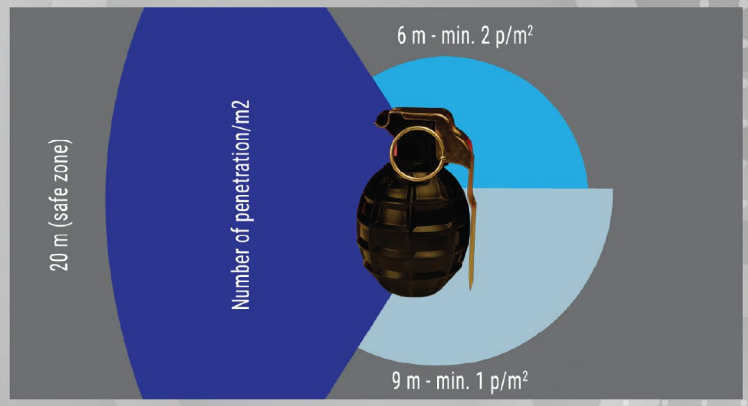
The hand grenade M-75 is intended for destruction of enemy troops located in different types of shelters and open areas.

TECHNICAL DATA

Mass	355 g
Dimensions	Ø 57 x 89 mm
Explosive charge - plastic explosive	36 g
Grenade body - plastic with steel balls	Ø 2,5 – 2,9 mm
Safety element pulling force	68 – 177 N
Level deflection safety angle	min 35°
Delay time	3 – 4,4 s
Proper function within temperature range	-30°C to +60°C
Convenient for any kind of transportation	

PACKING

1 complete grenade per plastic box 36 pcs. per wooden case	
Wooden case dimensions	607 x 480 x 174 mm
Case gross weight	25 kg
Case volume	0,051 m³
UN No.	0293
Hazard class	1.2F



M-84
HAND GRENADE

The hand grenade M-84 is intended for destruction of enemy troops located in different types of shelters and open areas.

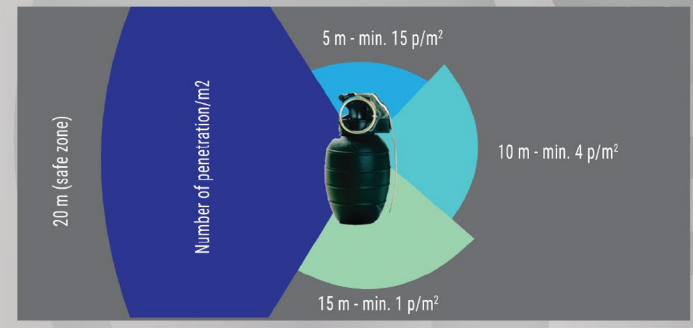
TECHNICAL DATA

Mass	480 ± 20 g
Dimensions	Ø 60 x 115 mm
Explosive charge - plastic explosive	95 ± 5 g
Grenade body - plastic with steel balls	Ø 2 x 2,3 mm
Safety element pulling force	70 - 150 N
Level deflection safety angle	min 50°
Delay time	4 s
Proper function within temperature range	-30°C to +60°C

PACKING

1 complete grenade per plastic box
24 pcs. per wooden case

Wooden case dimensions	553 x 429 x 223 mm
Case gross weight	24 kg
Case volume	0,053 m³
UN No.	0293
Hazard class	1.2F



FAB-100 M80
HE FREE - FALL BOMB

FAB - 100 M80 HE Bomb is intended for attack against targets of medium fortification level, such as industrial facilities, railroad junctions, roads, command posts, bridges or personnel. The bomb may be released safe or armed at speed up to 1000 km/h.

TECHNICAL DATA

Bomb type	FAB-100 M80
Diametar	230 mm
Lenght	1490 mm
Hook spacing (adaptable to A/C bom rack)	250 and 355.6 mm
Weights	
Without fuzes	117 kg
Main explosive charge (TNT)	39 kg
Fuzes	
Type AVU-ET	1 or 2
Type AUFK M91	1 or 2

PACKING

12 bodies (4x3)	one crate
Case dimension	1020 x 800 x 1600 mm
Case gross weight	1450 kg
Case volume	1.3 m³
12 Fins (24 hooks)	one crate
Case dimension	1160 x 900 x 760 mm
Case gross weight	170 kg
Case volume	0,8 m³
UN No.	0034
Hazard class	1.1D

FAB-250 M79
HE FREE - FALL BOMB

FAB - 250 M79 HE Bomb is intended for attack against targets of medium fortification level, such as industrial facilities, railroad junctions, roads, command posts, bridges or personnel. The bomb may be released safe or armed at speed up to 1000 km/h.

TECHNICAL DATA

Bomb type	FAB-250 M79
Diametar	320 mm
Lenght	2015 mm
Hook spacing (adaptable to A/C bom rack)	250 and 355.6 mm
Weights	
Without fuzes	240 kg
Main explosive charge (TNT)	105 kg
Fuzes	
Type AVU-ET	1 or 2
Type AUFK M91	1 or 2

PACKING

3 bodies	one crate
Case dimension	1100 x 1300 x 500 mm
Case gross weight	715 kg
Case volume	0.72 m³
9 Fins	one crate
Case dimension	1200 x 1200 x 1100 mm
Case gross weight	180 kg
Case volume	1.6 m³
UN No.	0034
Hazard class	1.1D

155 mm HE M107 ARTILLERY PROJECTILE Zone 7

MAIN COMBAT TASKS:
- neutralization of sheltered and unsheltered enemy war material (including armour material)
- neutralization of enemy manpower
- neutralization of fortified and non-fortified point and area targets

TECHNICAL DATA

Projectile mass (kg)	43.1
Projectile lenght (with nose plug) (mm)	684
Fuze	impact, SQ and delay UTIU M15
Muzzle velocity (m/s)	564 (Zone 7)
Maximum range (m)	14.500 (Zone 7)
Powded type	NCD 27 (Zone 7)
Powded mass	6,3 (Zone 7)
Primer	TK M82 P2

PACKING

*Projectile	8 pcs per pallet
Dimensions	360 mm x 765 mm x 829 mm
Gross weight	360 kg
Volume	0,23 m³
UN no.	0242
Hazard class	1.3C
*Primer	100 pcs per case
Dimensions	572 mm x 375 mm x 262 mm
Gross weight	50 kg
*Propelling charge	48 pcs per pallet
Dimensions	1200 mm x 800 mm x 1300 mm
Gross weight	438,8 kg
*Fuze	8 pcs per metal box
Dimensions	300 mm x 144.5 mm x 188 mm
Gross weight	7,7 kg

FUZE
UTIU M15

155 mm HE M107 ARTILLERY PROJECTILE Zone 8

MAIN COMBAT TASKS:
- neutralization of sheltered and unsheltered enemy war material (including armour material)
- neutralization of enemy manpower
- neutralization of fortified and non-fortified point and area targets

TECHNICAL DATA

Projectile mass (kg)	43.1
Projectile lenght (with nose plug) (mm)	684
Fuze	impact, SQ and delay UTIU M15
Muzzle velocity (m/s)	690 (Zone 8)
Maximum range (m)	18.400 (Zone 8)
Powded type	NCD 26 (Zone 8)
Powded mass	9,4 (Zone 8)
Primer	TK M82 P2

PACKING

*Projectile	8 pcs per pallet
Dimensions	360 mm x 765 mm x 829 mm
Gross weight	360 kg
Volume	0,23 m³
UN no.	0242
Hazard class	1.3C
*Primer	1000 pcs per case
Dimensions	572 mm x 375 mm x 262 mm
Gross weight	50 kg
*Propelling charge	48 pcs per box pallet
Dimensions	1200 mm x 800 mm x 1300 mm
Gross weight	438,8 kg
*Fuze	8 pcs per metal box
Dimensions	300 mm x 144.5 mm x 188 mm
Gross weight	7,7 kg

FUZE
UTIU M15

CONTROL TECHNICAL INSPECTION

All assets produced in HK"Krušik" have their own specified warranty period and shelf life.
It is usual to give a warranty period of 12 months for all assets. Shelf life is from 6 to 15 years, if they are stored in the prescribed storage conditions.

The shelf life mainly depends on the consistency of the chemical composition of materials subject to aging, which are an integral part of: rocket propellants, igniters,delay devices, tracers, warheads, fuze primers and other pyrotechnic parts.

After the expiration of shelf life, during the control- technical inspection, a sample of about 5% is taken from the batch where the shelf life was expired, on which disassembly is carried out to the level of assemblies and subassemblies.

Climate-mechanical and functional tests are performed on all subassemblies, and a sample of the material is sent for chemical stability testing.

In addition, tests of the assests performance are carried out at testing ground.
After these activities, a conclusion is reached and it can be:

1.To extend the shelf life for a certain batch to depending on the results of the control and technical inspection;
2.To perform an overhaul of the batch for the subassemblies that are found defective;
3.To transform the items into the practise models for training;
4. To destroy the batch of items in a controlled manner (which is a rare case).

HK„Krušik“ has the ability to perform control- technical inspection of all types of mortar shells as well as the following rockets: Malyutka,Strela 2M and Strela 10M (from our assortment) and rockets of Russian production: Fagot, Igla, R60, R73 and R27.

For each asset in HK"Krušik, in the constructive documentation, there is an instruction for extending the shelf life as well as a prescribed term planned for the control- technical inspection.

ARMAMENT OVERHAUL AND MODERNIZATION

In a certain period of time armament may be obsolete and may lose its effectiveness.
One of the most rational and productive ways to reach a high technical level is the modernization of existing armament and military equipment. Well-prepared and systematically implemented modernization, in reasonable and economically justified manner, increases the level of combat readiness and capability of combat items and systems, and that is why it is being applied to an increasing extent all around the world.

As a development-oriented company, HK "Krušik" successfully implements the overhaul, modernization and improvement of products from its own production. We especially emphasize the modernization of rockets and mortar shells. During the previous period, we managed to develop rockets and mortar shells of extended range, reaching the level of development of mortar shells to be used with modern combat systems such as drones and unmanned aerial vehicles.

Working with a foreign partner, we are currently able to improve the Strela 2M homing anti-aircraft missile, extend its range up to 6km, and improve the IR sensor. This missile will be primarily intended for use against drones. It will be assembled with proximity fuze, which will significantly increase the lethal effect

TRANSFER OF TECHNOLOGY

Given that many developing countries want to improve their military industries, HK “Krušik”
got the opportunity to transfer the technology of certain lines for assembly or production of different items to those countries. Having the tradition longer than 85 years which certainly includes vast experience in production, HK "Krušik" is able to offer the transfer of technologies for different items manufacture.

The range of transfer of technology depends on customer requirements.
One transfer usually includes installation of production line, line for products inspection, product packaging, product final inspection, Know-how documentation, delivery of elements and equipment in a quantity sufficient for uninterrupted annual work, training of the customer's personnel and professional staff both at the seller's and the customer's site, technical assistance during production according to the needs and requirements of the customer.


Крушик

NOTES


Rockets 128 mm
Rockets 122 mm
Projectiles 155 mm
Krušik
12:04

- 2,000+ employees
- 85+ years of experience in defense industry
- exports to 70+ countries

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Our partner

- Ministry of Defense
- Military Technical Institute
- The Army of Serbia
- Yugoimport SDPR