

# Grenade Launcher



**Automatic Grenade Launcher KAGL40**

# KAGL40 Automatic Grenade Launcher



The 40mm KAGL is a fully automatic, blowback operated, air-cooled machine gun. Deployable from a tripod for ground use or mobile from vehicles or boats by the standardized interface.

M430 HEDP round will pierce 2" (50mm) thick armor plate.

It can fire between 1.500- 2.200 meters effectively. The KAGL40, which has been produced since 2005, has been in the inventory of the Turkish Armed Forces for many years.

**Caliber:** 40mm x 53 (HV)

**Principle Of Operation:** Recoil operated open bolt

**Feed Mechanism:** Belt fed from left side

**Firing Mode:** Safe / Full Automatic

**Length:** 1.090 mm

**Width:** 340 mm

**Height:** 225 mm

**Barrel Length:** 415 mm

**Weight:** 35 kg w/o mount & tripod

**Ammo:** HE, HEDP, TP, TPT

**Crew:** 3 P

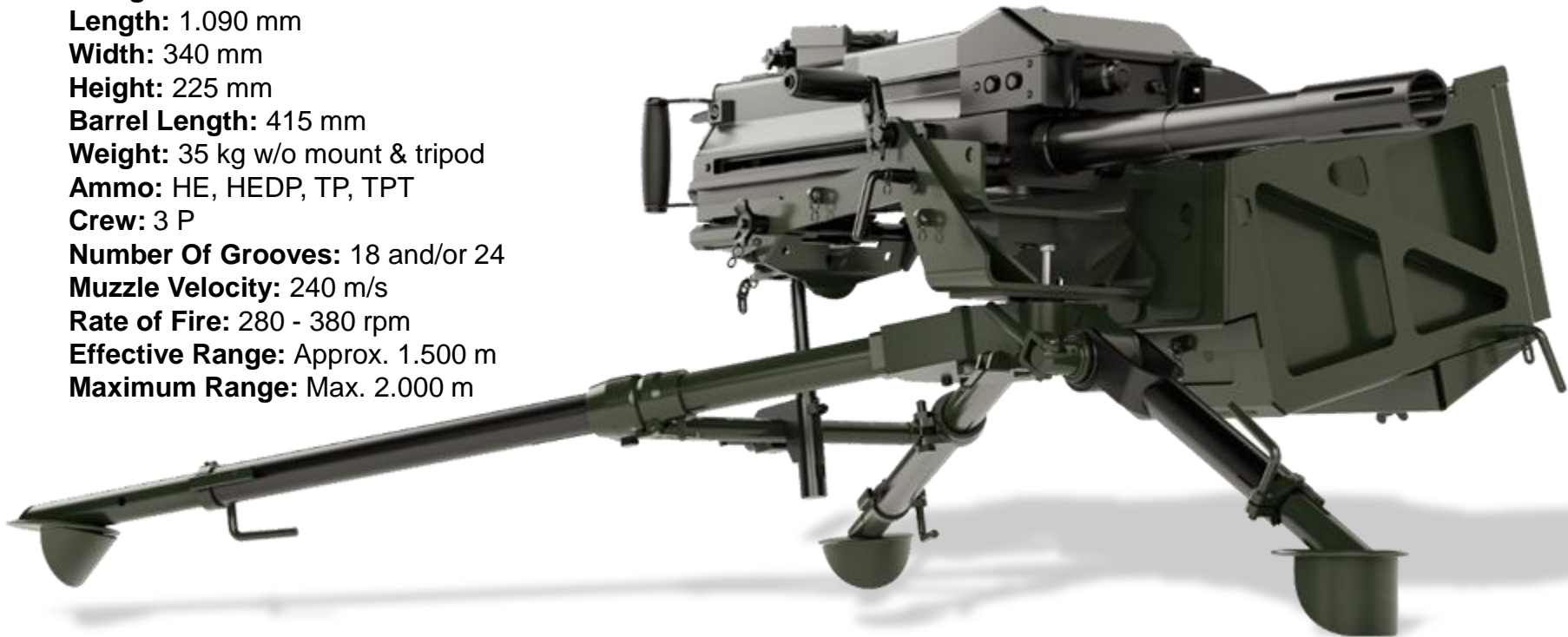
**Number Of Grooves:** 18 and/or 24

**Muzzle Velocity:** 240 m/s

**Rate of Fire:** 280 - 380 rpm

**Effective Range:** Approx. 1.500 m

**Maximum Range:** Max. 2.000 m





# KAGL40 Automatic Grenade Launcher

## 1. DESCRIPTION

KAGL40 40mm (HV) Automatic Grenade Launcher (NATO Stock Number (NSN): 1010-27-068- 8161) is an air-cooled, blowback-operated machine gun with fifteen major assemblies.

A disintegrating metallic link belt feeds ammunition from the left.

The KAGL40 40 mm (HV) Automatic Grenade Launcher provides automatic weapon suppressive fire for offensive and defensive purposes.

KAGL40 40mm (HV) Automatic Grenade Launcher can be used effectively against personnel, light armored vehicles, and hovering rotary aircraft. The weapon system is used as a ground gun mounted on the M3 tripod.

KAGL40 40mm (HV) Automatic Grenade Launcher has successfully passed 18 qualification tests listed below table with presence of listed Turkish Armed Forces users:

- 1 Country Land Forces
- 2 Country Gendarmerie Forces
- 3 Country Turkish Navy
- 4 Country Police Special Forces
- 5 Various Country Armed Vehicle Producers
- 6 Multiple International Users

### Tests

- First Inspection Test 10 Angle of Fire Test (70° depression and 70° elevation)
- Gun Sight and Bore Calibration Test 11 Accuracy Test
- Ammunition Compatibility Test 12 Interchangeability Test
- Proof Inspection Test 13 Barrel Life Test
- Low Temperature Test 14 Receiver Life Test
- High Temperature Test 15 Functional Test
- Belt Pull Test 16 Velocity Test
- Rate of Fire Test 17 Effective Range Test
- Trunnion Load Test 18 Maximum Range Test

# KAGL40 Automatic Grenade Launcher



## 1. DESCRIPTION

KAGL40 40mm Automatic Grenade Launcher is a weapon with automatic functioning and following characteristics:

a) Standardized interface-enabling use from M3 tripods or any compatible vehicles (Armored vehicles, Assault boats etc.)

b) Belt fed Fully automatic, blowback operated, air-cooled grenade launcher. KAGL40 40mm Automatic Grenade Launcher has also following specific features that distinguish itself from other competitors:

a) KAGL40 was firstly built at 2005 and has been manufactured and fielded more than 1.800 units.

b) KAGL40 has already accomplished all NATO grade above mentioned acceptance test.

c) KAGL40 has been used and proven at battlefield. Please ask references.

d) KAGL40 has already provided to most of Turkish Armed Vehicles producers to mount on remote control stations.

e) KAGL40 is equipped with MK19 Mod3 upgraded features.

f) KAGL40 is equipped with a leaf sight that allows quick targeting.

g) KAGL40 is equipped with a 24 grooved, Cold Forged and Mil Spec Hard Chrome Lined barrel made of CMV material that provides longer life time and reliable operation.

h) As a standard, KAGL40 offers a dovetail block that accepts any optical sight which is compatible and mountable to MK19 platform.

i) KAGL40 offers a compact and lightweight optic mount which allows moderns optics and night vision systems can be mounted to the weapon. (This is an optional feature).

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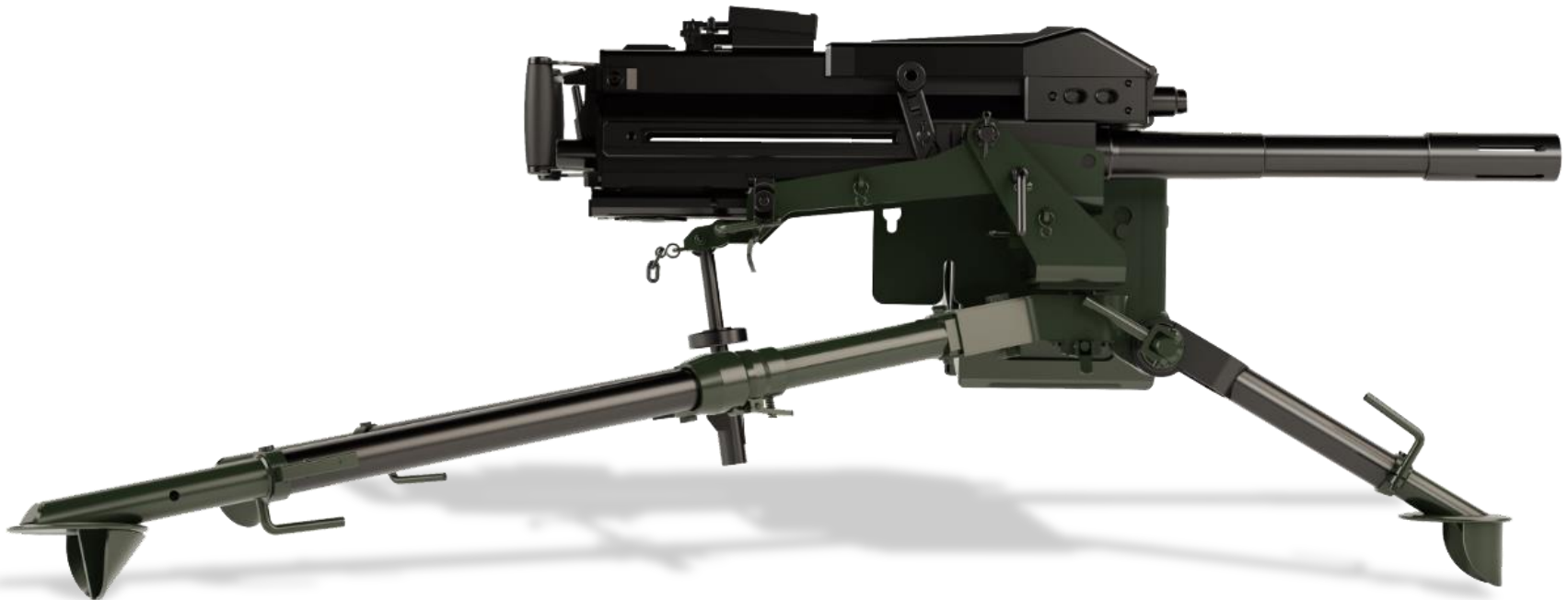
## 2. APPLICABLE DOCUMENTS

Following documents are to be applicable to the weapon: PL.KL.SS.020 KAGL40 40mm (HV) Automatic Grenade Launcher Acceptance Test Procedure

**3. AMMUNITION:** M383A1 Target Practice tested ammunition qualified according to NATO requirement shall be used for test requirements.

**4. DESIGN:** KAGL40 40mm (HV) Automatic Grenade Launcher is developed for international military high end users.

KAGL40 40mm Automatic (HV) Grenade Launcher complies to Manufacturer's own PL.KL.SS.020 KAGL40 40mm (HV) Automatic Grenade Launcher Acceptance Test Procedure.



# KAGL40 Automatic Grenade Launcher



## 5. TECHNICAL SPECIFICATIONS

WEAPON SPECIFICATIONS	
NATO Stock Number / NSN	1010-27-068-8161
Caliber / Ammo	40mm x 53 HV (TP, TPT, HE, HEDP)
Principle of Operation	Recoil Operated Open Bolt
Feed Mechanism	Belt Fed from Left Side
Firing Mode	Safe / Fully Automatic
Length of Weapon	1.090 mm
Width of Weapon	340 mm
Height of Weapon	225 mm
Weight (w/o mount & tripod)	35 kg
Barrel Definition	Manufactured by most modern cold forging technology using top quality hardened barrel steel and coated with military grade hard chrome lining.
Barrel Length	415 mm
Barrel Grooves	24 Grooves
Barrel Life	10.000 rounds (As long as cleaning and maintenance procedure is being followed.)
Muzzle Velocity	240 m/s
Rate of Fire	300 – 380 rpm
Effective Range	1.500 m
Maximum Range	Min.2.000 m

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**6. PRODUCTION:** The weapons, spare parts and accessories are manufactured in a continuously controlled production process in accordance with requirement of this document and Company's Quality Assurance System. That ensures interchangeability of components and subassemblies.

Special process of components (namely heat treatment, chrome coating, hard anodizing, manganese phosphate etc.) are performed at Company's facility under strict quality control procedures. That ensures continuous and sustainable high performance of components and the weapon.

All barrels are designed and manufactured under strict quality control procedures.

Manufacturer is using cold hammer forged barrels produced by Cold Forging Machines. All barrels are %100 controlled and verified dimensionally and visually.

**7. QUALITY INSPECTION:** Following tests are applied to the weapons produced. Their details is presented at PL.KL.SS.020 KAGL40 40 mm (HV) Grenade Launcher Acceptance Test Procedure.

**7.1 Dimensional and Visual Inspections:** All critical and functional dimensions at all components are measured and verified %100 during production process. All critical and functional visual characteristics are controlled %100 during production process.

**7.2 Assembly Inspection and Verification:** All assembled components and subassemblies are %100 inspected as per Manufacturer Quality Control Plans and Inspection Check Lists.

**7.3 Acceptance Tests:** During customer acceptance process following tests are performed based on agreed Purchase Order and/or Contract.

- First Inspection and Functional Test
- Interchangeability Test
- Dispersion Test
- High Temperature Test
- Low Temperature TestMIL-STD-810



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## 8. KAGL40 OPTIC MOUNT

KAGL40 Optic Mount that is compatible with standard MK19 Dovetail Side Plate allows mounting of optics on to the gun via military specification picatinny rails.

KAGL40 Optic Mount is optional and can be provided upon request.

- a) Compact and lightweight mount easy to handle
- b) Allow one operator usage at the same time
- c) Hard Anodized per Mil. spec. MIL-A-8625 Aluminum Body
- d) Up to 2.000m range adjustable
- e) Allow Precise levelling via threaded adjustment.
- f) MIL-STD-1913 Compatible Picatinny rail on top allows all type of compatible optics mount
- g) Endurance for environmental conditions as per MIL-STD-810



TECHNICAL SPECIFICATIONS	
Weight	2500 gr / 5.5 lbs.
Dimensions (mm)	150x170x240
Color	Default – Black, *Optional Upon Customer Request
Materials	Steel and Aluminum
Compatible Optics	Standard Optics, Thermal sights, NV sights





# KAGL40 Automatic Grenade Launcher

## 9. PACKAGING

KAGL40 and its accessories will be shipped in a wooden box. The box layout can be seen from below picture.

All accessories given in this quotation will be located in the box. KALEKALIP is able to provide hard cases for KAGL40 upon request.



