



# 20x110 mm, ŠARAC 99

## Heavy antimatériel rifle



Large-caliber long-range rifle 20mm - "ŠARAC 99" is designed for neutralization and/or destruction of the following targets:

- Defiladed or non-defiladed enemy troops and soft-skinned combat vehicles,
- Light armoured combat vehicles, logistic vehicles, special purpose vehicles and command posts,
- Vulnerable targets such as grounded fixed- and rotary-wing aircraft or UAVs parked on aprons, and
- Light water crafts, drones, communication equipment, electronic surveillance and tracking equipment, GPS devices etc.

The effective range of the large-caliber long-range rifle „ŠARAC 99“ when firing at ground targets or water surfaces is 1.600 m.

The long-range rifle "ŠARAC 99" is set up on adjustable three-legged stand - tripod to enable the firing.

The long-range rifle "ŠARAC 99" is the result of a modification of the 20 mm anti-aircraft gun M55, developed for the purpose of arming the combat vehicles and water crafts, and it is still successfully used today around the world for the purpose of destruction/neutralization of targets both on land and sea.

When designing these modifications, a maximal unification of the subject weapon with the assemblies of 20 mm anti-aircraft gun M55 was carried out.



Upgrading of the 20 mm anti-aircraft gun with new solutions to maximally reduce the recoil when firing, made it possible for the rifle to be fired from the shoulder of the shooter, thus obtaining a very efficient large-caliber long-range rifle. The reduction of recoil, vibrations and the shock wave of the powder gases as well as the efficiency of the large-caliber rifle has been achieved with the installation of the following innovative assemblies:

- Muzzle brake with compensator and bushing,
- Counter weight with spring,
- Hydraulic shock absorber,
- Cocking mechanism with geared rack,
- Optical sight -optoelectronic devices mount with Picatinny rail,
- Grip with triggering mechanism,
- Buttstock-butt plate with bipod adjustable in height and
- Stand adjustable in height - tripod.

The large-caliber long-range rifle "ŠARAC 99" is served by a three-man crew consisting of: a sniper, a sniper assistant - spotter and ammunition bearer.

The large-caliber long-range rifle "ŠARAC 99" can be transported on a motor vehicle. If required, it may also be transported by means of an animal-drawn vehicle or a pack animal. In case of shorter distances, it can be carried by its crew.

## TACTICAL AND TECHNICAL CHARACTERISTICS

• Caliber	20 mm
• Ammunition used	20x110 mm HISPANO
• Twist rate, left to right	381 mm
• Maximal powder pressure	3.500 bar
• Muzzle velocity	840 m/s
• Penetrability of armour-piercing round	25 mm thick steel plate at 200 m (90°)
• Combat rate of fire with aiming	3 - 5 rounds/min
• Effective range	1.600 m
• Field of action in elevation w/o moving the tripod	-3° to +10°
• Field of action in traverse	360°
• Detachable magazine capacity	5 or 7 rounds
• Total length of the rifle with muzzle brake and compensator	1.900 mm
• Barrel length	1.150mm
• Weight of the rifle without the magazine and optical sight	<50 kg
• Weight of magazine loaded with 7 rounds	< 3.5 kg
• Ammunition combat set	3 magazines x 7 rounds = 21 rounds
• Weight of rifle with one combat set	< 65 kg
• Sight which can be used, optical*	Kahles 624i, Shmidtbender PM-II



\*In addition to the recommended optical sights, sights of different models or manufacturers may also be used, as well as passive or thermal imaging sights.

The large-caliber long-range rifle "ŠARAC 99" can use all types of ammunition in cal. 20 x110 mm HISPANO, including projectiles as per the following NATO designations: HE, HEI, HE-T, HEI-T, AP-T, TP-T and BLANK.