

## ATV ZETOR GERLACH 4x4 – main features



### A solution for maximum security

GERLACH uses multi-stage construction elements to maximize the protection of the crew and the vehicle itself. The vehicle is constructed on a special chassis called Rolling Chassis ZETOR. Its gantry frame concept is able to withstand high dynamic effects, thus being one of the main pillars of anti-mine protection of the entire vehicle.

- The vehicle cabin is designed as an **overpressure armored capsule**. It is **fitted independently** on the chassis, so when damaged by the mine, the crew remains protected. Its unprecedented **SAFETY space of 7.7 m<sup>3</sup>** offers space for up to 6 crew members with a height of up to 190 cm and 120 kg in weight, including gear. In the event of an emergency, it will provide space for two other crew members (without a seat).
- Crew safety is also assured by an additional modular armor plating along with a separate and laminate double flooring with an anti-mine “V” shield. At the same time, the cabin construction allows for its fast abandonment.
- In addition to safety, comfort was also taken into consideration. The cabin has incorporated unique features ensuring a high ergonomics with minimal noise and vibration.

### Can withstand 8 kg of TNT

GERLACH is ready to assemble various levels of a ballistic and anti-mine protection according to the client's requirements.

- It obtained a ballistic resistance certificate from certified authority at **NATO STANAG 4569 Volume 1 Level 3**. This means that the crew does not have to be afraid of shooting from hand-held assault weapons used in the current conflicts.
- Regarding the anti-mine resistance, the vehicle is ready to resist an anti-tank mine of up to 8 kg of TNT under the axle and under the cabin (**NATO STANAG 4569 Volume 2 Level 3a, 3b**). The cabin's resistance has already been successfully proven within company's tests.



### Excellent terrain skills

GERLACH provides above-standard abilities in demanding terrain. Besides the incorporated knowledge of real-world military conflicts and the Dakar Rally it also has a 1 300 Nm torque and wheel size (R20) to help significantly.

- During testing in military areas, with a load of 14 tons, it overcame a **terrain step of 0.5 m and a 1 m wide trench**.
- Comfortably handles a terrain rise of up to **70% (30° angle)**. During testing, it also reached 100% (45° angle) under full load.
- It confirmed excellent abilities on different surfaces, including sand.



### Excellent dynamics

The GERLACH is powered by a 6-cylinder MTU engine with **240 kW (326 Hp)**, German manufacturing, with an above-standard torque of **1300 Nm**, working with a 6-speed automatic gearbox to maximize its performance over a full range of revolutions. The power distribution to the independently suspended wheels is transferred by a set of balanced gears through the Meritor descending gearbox, which is one of the world leaders in all-wheel drive torque distribution. With this solution, GERLACH has achieved an exceptional dynamics with its power-to-weight ratio reaching **17.1 kW/ton** (at a load of 14 tons).

- On the Slovakiaring racing circuit, it reached a maximum speed of **125 km/h**, even under rainy conditions. It also demonstrated its pulling power when it was pulling a 28-ton tractor and circled for 1 hour on the circuit while maintaining the required temperature parameters.



### High variability

GERLACH has a highly variable cargo space that **can carry another 1.5 tons** of gear, armaments or equipment. The vehicle version can be changed to suit the mission requirements.

- The basic version with a standby weight of 12 tons is already fitted with an air-conditioning and a chemical, biological and nuclear protection ventilation.



### Weapons systems integration

The roof of the vehicle can be fitted with mechanical or remote- controlled machine gun towers from various manufacturers, anti-tank guided missiles, mortars or grenade launchers.

