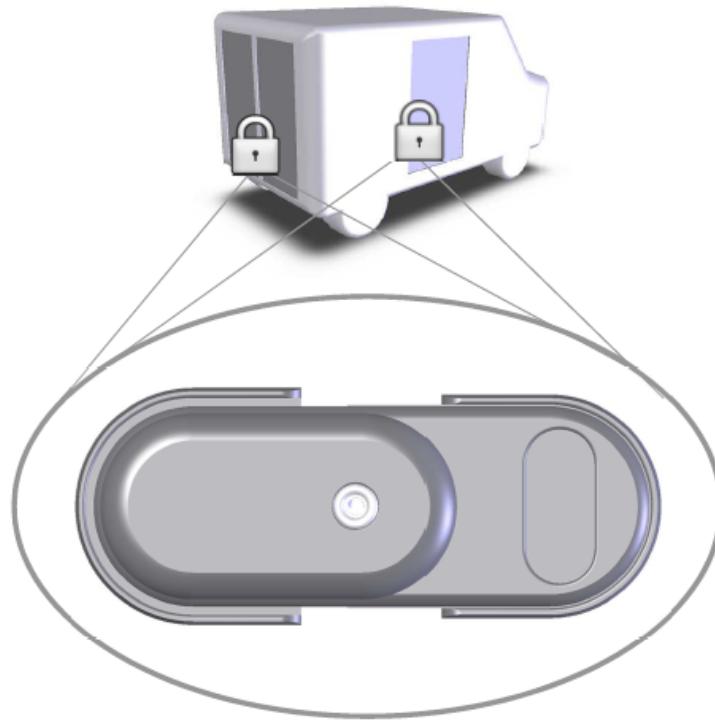


External Locking Solution for Light Commercial Vehicles



GATELOCK VAN MEDIUM

GVM X

REINFORCED VERSION



The GatelockVan Medium, in the *EXTRA version*, has the same peculiarities of the standard series, and in addition, it reveals excellent performance in terms of resistance to cutting with a grinder.

In particular, among the power tools, the most used for burglary are battery-powered ones since they are transportable and easy to handle. Do not overlook the possibility of having two or more batteries for prolonged cutting actions.

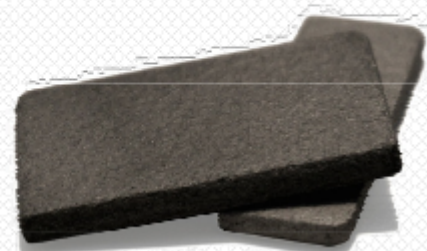
The resistance of the GVM X is linked to the integration in its body of a plate of FEROSAFE with a width of 8mm and a length of 40mm. This plate is positioned along a strategic direction and is incorporated in the upper armor where it offers greater resistance to cutting while in the lower armor there are no conditions for an adequate and useful placement of anti-cut inserts.

Ferosafe is a composite material with a high coefficient of friction able to counteract the cutting action thanks to its tribological properties. These properties are similar to those of the friction materials used on the brakes and clutches of vehicles and have the great ability to progressively reduce the cutting disc which is completely pulverized and the cutting action is effectively neutralized.

The technical data sheet of the product as supplied by the manufacturer is shown below.

PHYSICAL PROPERTIES

PROPERTY	UNITS	FEROSAFE
Ultimate Tensile Strength	MPa	110
Ultimate Compressive Strength	MPa	1850
Flexural Strength	MPa	440
Coefficient of Thermal Expansion	W / mK	12-14 x 10 ⁵
Bulk Hardness	HRC	45-55
Bulk Density	g/ c ³	8.7-9.3



FEROSAFE is the next generation material for defending security products from physical threats.

FEROSAFE is a weldable composite material that effectively resists high power angle grinders and drills at lower thicknesses and weights than what is possible with conventional materials. The material is therefore well suited to increase security performance on safes, locks and any other security devices without increasing weight or altering overall dimensions.

Being weldable with standard welding equipment ensures a high degree of flexibility, cost efficient manufacturing and secure fastening with no specialist training required.

Typical Applications

- Safes
- ATMs
- Security Doors
- Lock Boxes

Customer Benefits

- Use conventional welding equipment
- Reduce weight of product
- Increase safety performance without adding weight
- Effectively prevent any grinding or drilling attacks

Key Features

- Weldable
- Highly resistant to angle grinders
- Highly resistant to drills
- Relatively tough to prevent chiselling



✓ Resistant to angle grinder attacks



✓ Resistant to carbide tipped drills



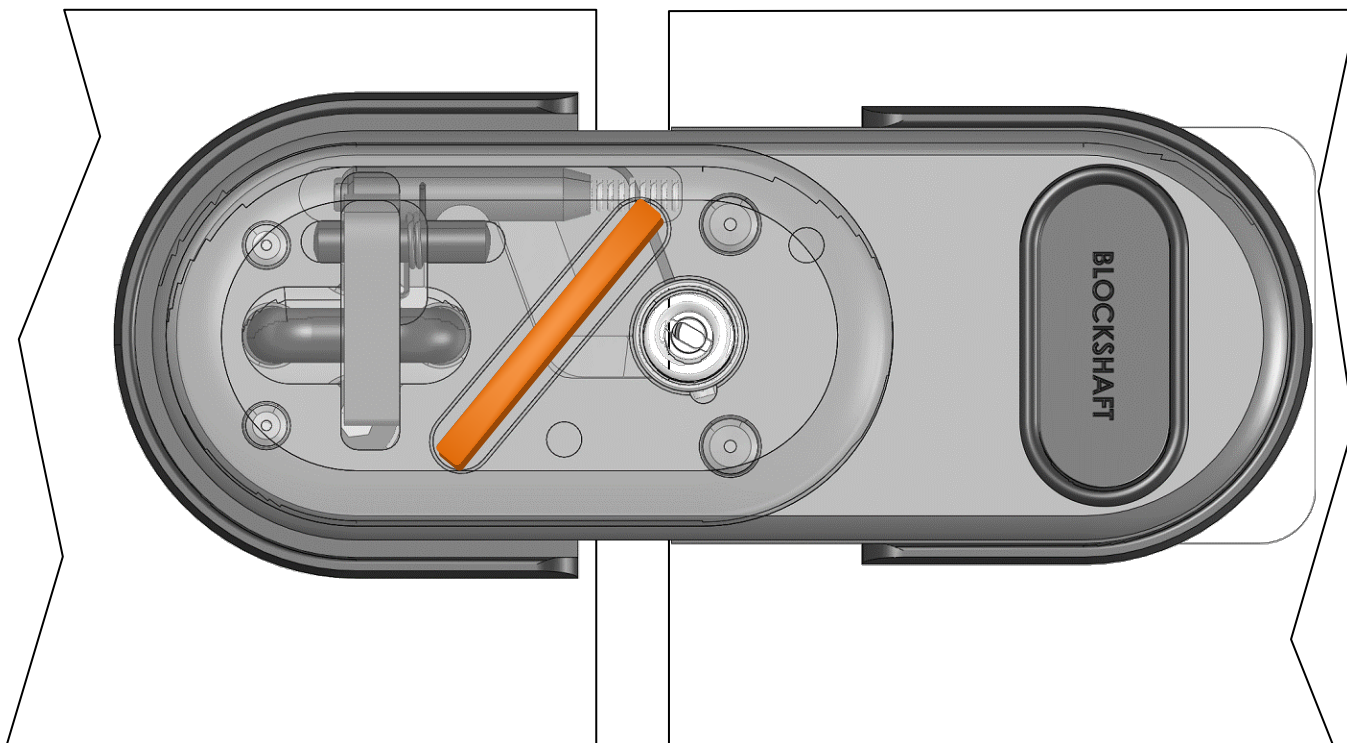
✓ Resistant to diamond discs

Availability

Thickness (mm)	Width (mm)	Length (mm)
4	8	40
4	15	40
4	25	60
4	40	40
4	8	200
4	15	200
4	25	200
4	60	200
4	200	200

Other sizes are available on request. We can also supply bespoke 2D shapes. Please contact us for more information.

Below is one of the possible positions of the plate inside the padlock. Remember that it is applied where the potential attack is easier and more probable, as well as harmful, while in other areas an extra protection is inappropriate if not really useless..



The dynamics of the cut, simulated on the bench and made with commonly available equipment, is characterized by the following points:

1. Use of battery powered power tool with features:

- Battery: 18 V | 3000 mAh | Li-Ion
- Disc diameter: 115 mm
- Max rpm: 8500 / min
- Max. Cutting depth: 28 mm

2. Abrasive disc 115x1.0x22.23 A60S - BF41 for steel, stainless steel;

3. Start of the cut of the steel armor: the cut proceeds with the times and characteristics of a common cut. In particular, there are sparks, fumes, dust and noise.

4. Once the plate is reached, the dynamics of the cut change. The sparks disappear and the emission of dust increases, the wear of the disc and the temperatures on the piece and on the disc. The disc wears out quickly and it may happen that even the battery of the power tool overheats up to block for thermal protection.

5. The battery discharges quickly and requires replacement.

6. In the test, it was not possible to cut the lock and the bars.

After about 10 minutes of attack they appear partially intact as in the condition shown in the following photo. The test was suspended after the replacement of the second disk and the battery.

It should be noted that this type of padlock is recommended to protect vehicles intended for the transport of goods of high economic value and in areas particularly critical for safety.