

RAILWAY INSPECTION VEHICULE

VIGILIS 100



TABLE OF CONTENT

1.	GENERAL DESCRIPTION	3
1.1.	Requirements	3
1.2.	Standard equipment	3
2.	TECHNICAL CHARACTERISTICS	4
3.	OPTIONS.....	5
3.1.	Projector ramp	5
3.2.	Off-track kit.....	5
3.3.	Electric winch	5
3.3.1.	Description	5
3.3.2.	Technical characteristics	5
3.4.	Insulated wheels.....	5
3.5.	Storage cover	6
3.6.	Four blues LED penetration lights (specific for emergency use)	6
3.7.	Drawer box from 1 to 4 units	6
3.8.	Trailer	6
3.8.1.	Description	6
3.8.2.	Technical characteristics	7
3.8.3.	Trailer options.....	7

1. GENERAL DESCRIPTION

1.1. Requirements

The **VIGILIS 100** was designed to carry a group of up to four people. It operates in both directions and has a dual driver's station for this purpose. It requires only minimal periodic maintenance to reduce downtime and very low operating costs.



The **VIGILIS 100** can be used to tow or push a **1T** trailer (optional) for the transport of materials and equipment.

1.2. Standard equipment

- Full two-way operation with duplicate pipe controls at each end.
- Digital speed and distance counter (kilometers or miles).
- A dedicated gearbox with **forward / neutral / reverse** positions that allows you to select the direction of travel with a simple lever operation.
- Automatic clutch.
- Complete control by lever.
- Automatic parking brake acting on all four wheels, foot operated.
- Hydraulic service disc brake acting on all four wheels, operated by lever.
- Removable control lever without tools for safety reasons.
- Design for low maintenance needs with minimal procedures.
- Cast aluminum wheels (not insulated - optionally insulated) mounted on steel axles over their entire length.
- All fasteners are sealed and maintenance-free.
- Four seats with low backrests, upholstered with safety belt.
- Red / white LED position lights with automatic selection (mounted at the front and rear of the vehicle).
- Electrical control of the parking brake to prevent the operator from controlling the motor when the parking brake is applied.
- 12 V LED spotlight (automatic selection according to direction of travel).
- Alternator 12V 35 A.
- Horn.
- Two front and rear towing brackets including a quick electrical and hydraulic connection between vehicle and trailer for signaling and service braking.
- User manual and warning labels in French language.
- Dry powder extinguisher (1-liter capacity).
- Retractable side handling bars.

2. TECHNICAL CHARACTERISTICS

Track gauge (<i>others on request</i>):.....	1,000 or 1,435 mm
Honda GX200..... (four-stroke with manual start)	4.3 kW gas at 3,600 rpm (5.8 HP)
Minimum curve radius	10 m
Max. slope	40‰
Loading capacity	~350 kg
Max. overflow.....	180 mm
Loading gauge	UIC505-1 compliant
Chassis	Tubular welded structure
Non-insulated cast aluminum wheel, mounted on axles	4 (made of steel)
Wheel diameter	383 mm
Seats, lowered backrests, upholstered	4
Speed from.....	0 to 20 kph
Service brake	Hydraulic disc brake (acting on both axles, lever operated)
Automatic parking brake (dead man).....	Electromagnetic disc brake (acting on both axles, equipped with return spring)
Traffic lights..... (color automatically selected according to the direction of traffic)	Red/High intensity white LED
High intensity LED headlights	2 (automatic selection according to traffic direction)
Autonomy.....	~ 3 hours
Alternator.....	12V, 35A
Electric horn	12V DC ~ 100 Db(A)
Dimensions	
Length.....	~ 2,715 mm
Width.....	~ 1,650 mm
Height	~ 1,000 mm
Weight (base unit without any option).....	~ 445 kg

3. OPTIONS

3.1. Projector ramp

This tilting ramp allows the track to be illuminated 360° all around the vehicle. This equipment is powered by the vehicle's electrical system.

It is composed of:

- 10 high intensity LED lamps, mounted on a tilting gantry
- 4 LED lights placed under the chassis.



3.2. Off-track kit

This kit allows the **VIGILIS 100** to be taken off track. It consists of two assemblies (one on each side of the vehicle). Each set consists of two braked and height-adjustable wheels for easy passage on the rail. This kit also works on the trailer.

3.3. Electric winch

3.3.1. Description

This electric winch is characterized by its maneuverability (manual electric control) and ease of installation. It is distinguished by its small size, its robustness and has numerous application possibilities. It has its own independent electrical box.



3.3.2. Technical characteristics

Cable length with hook	15 m
Electric motor	12V DC 0.89 kW
Pulling force	1,361 kg

Dimensions

Length.....	440 mm
Width.....	380 mm
Height	260 mm
Weight.....	~ 15 kg

3.4. Insulated wheels

The **VIGILIS 100** can be equipped with insulated aluminum wheels with a diameter of 383 mm.

3.5. Storage cover

This storage cover protects the **VIGILIS 100** from atmospheric changes when not in use.

3.6. Four blues LED penetration lights (specific for emergency use)

These lights are used exclusively for emergency interventions. They are placed on the projector ramp, two on each side (red box).



3.7. Drawer box from 1 to 4 units

These drawer boxes are used to store small items. They are placed under the seats.

Overall dimensions: L475 x P550 x H358

3.8. Trailer

3.8.1. Description

Trailer type **1T** is versatile, designed for specific use with the **VIGILIS 100** :

- code **H117500** for Track 1,435 mm
- code **H117840** for Track 1,000 mm

This trailer is equipped with a hydraulic disc service brake acting on the front axle - controlled directly from the **VIGILIS 100** service brake. It allows full-service braking of the trailer, operated from the **VIGILIS 100** lever, which is recommended in the case of frequent use of the trailer with heavy loads and/or steep slopes.



The **1T** trailer is equipped:

- An elongated tubular steel frame.
- Two electromagnetic parking brakes - Controlled by the **VIGILIS 100**.
- A hydraulic service brake mounted on the front axle.
- A set of side panels
- An aluminium tray.
- Four anchor points.
- Two retractable handling handles.
- Red/white LED position lights.
- Orange/yellow reflector.
- Four mudguards.
- An articulated drawbar with spindle.

3.8.2. Technical characteristics

Track gauge (<i>other on request</i>)	1,000 or 1,435 mm
Loading gauge	UIC505-1 compliant
Non-insulated cast aluminium wheel, mounted on axles	4 (made of steel)
Wheel diameter	383 mm
Towing speed	Up to 20 kph
Maximum transportable load	1,000 kg
Maximum spillage	180 mm
Automatic parking brake	Electromagnetic disc brake (acting on the front and rear axle, equipped with a return spring)
Height of the removable sides	200 mm

Dimensions

Length.....	~ 2,700 mm
Width.....	~ 1,650 mm
Height	~ 500 (without drop sides)

Dimensions of the tray:

Length.....	~ 2 100 mm
Width.....	~ 1,500 mm
Weight.....	~ 250 kg

3.8.3. Trailer options

- Insulated aluminum wheels with a diameter of 383 mm.

In the interest of our customers and in anticipation of the constant improvements that we wish to bring to our equipment, we reserve the right to modify certain characteristics (without modifying its functions) during production. The track gauge and network type should be sent to us beforehand for verification, to ensure that the equipment offered is compatible.

Any modification and / or technical change arising after the date of the offer may result in a revision of the commercial offer.

Drawings and pictures may include some options and are not contractual.

Masses and dimensions may vary by $\pm 5\%$.