# **ELEVATING SOLUTIONS**



GRAVITY | VERTICAL SYSTEM

# CABLE LIFELINE FOR VERTICAL WORKS



The Gravity Vertical System is a vertical safety line that can be installed quickly and easily. The Vertical System is modular and provides integrable anchors, making it the ideal companion for works on pylones, windmills and any vertical structure.



# **EASILY ACCESS AND WORK VERTICALLY**

The Gravity Vertical System has been tested and certified according to European and North American standards.

- · Crimping-free system
- · Openable glider
- · Continuous connection over intermediate anchors
- Span between anchors: 10m (32'8")
- · For stainless steel cables, approved on galvanized cables
- · Cable vibration absorption system
- · Intermediate anchors clipped on the cable, can easily be retrofitted on a lifeline.

#### Multi-User:

Apart from the above mentioned features, each lifeline can accommodate between 1 and 4 simultaneous users, making the system customizable to the client's needs and operations, with built-in capacity that exceeds most other brands on the market.

# **Applications:**



Ladders



Pylones

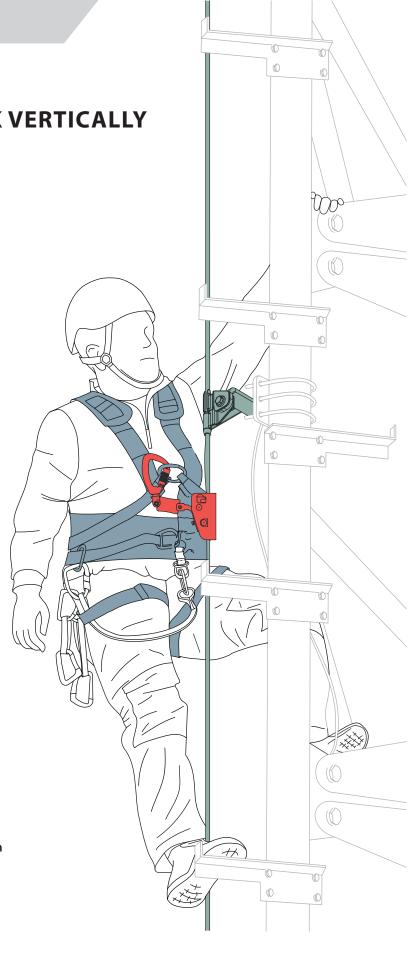


Windmills





Industry



# ABSORBER ON THE LIFELINE **ABSORBER ON THE GLIDER** $\mathbf{x}$ 1 $\left(\begin{array}{c} AISI \\ 304 \end{array}\right)$ x4 | (AISI 304) LDV232 LDV233-LDV006 LDV255 LDV250 LDV240 LDV240 Intermediate anchors clipped on the cable, can easily be retrofitted on a lifeline. Span between anchors 10m (32'8") LDV006 -LDV266 -LDV266

# **EASY MOUNTING IN THREE STEPS**

## 1. Install the Top Anchor

LDV232 or LDV233 (with energy absorber)





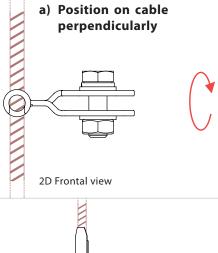
#### 2. Install the intermediate anchors

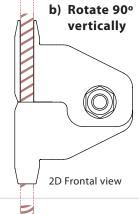
LDV240

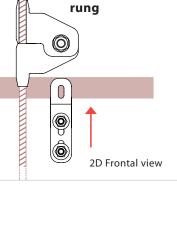


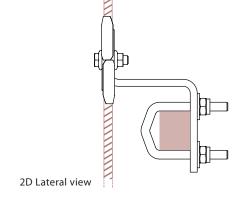
Intermediate anchors clipped on the cable, can easily be retrofitted on a lifeline

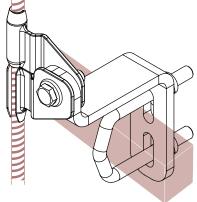
c) Secure to an anchor on











3D Diagonal view

### 3. Install the bottom anchor and tension

LDV266

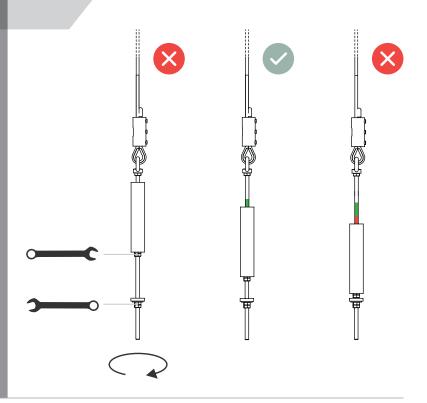


# BOTTOM TENSIONER INDICATOR



When tensionning the lifeline, take the colour code into account. Green indicates proper tension, red too high tension and no colour insufficient tension.

Insufficient tension Min. tension required Max. tension required Over tension



# THE FALL ARRESTING GLIDER ZIP!

An automatic brake mechanism is integrated in the glider. The glider follows the operator without manipulation in any direction (up and down). The glider can be opened by the user. A clip-lock system avoids handling errors.



### With energy absorber

Energy absorber fixed on the glider. The glider locks instantly in case of a fall, triggering the energy absorption device.

For a lifeline with up to 4 users simultaneously.

#### LDV255



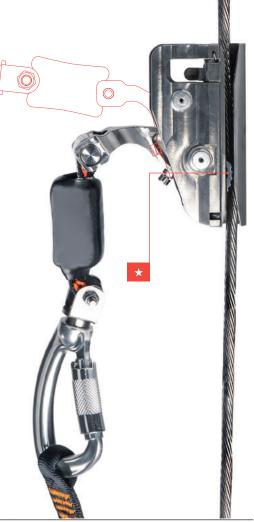
# Without energy absorber

Energy absorber must be permanently fixed on the top anchor.

For a lifeline with max. 1 user.

#### LDV250





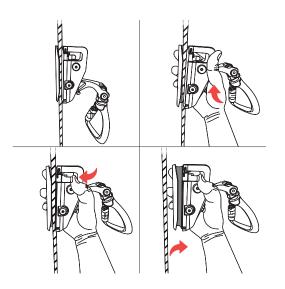
# **ASSEMBLY AND DISMANTLING**

# **Assembly:**

Rotate the cam upwards and introduce the Gravity glider on the wire cable, the security will automatically be opened by pushing the Gravity glider on the wire cable.

#### Dismantling:

Rotate the cam upwards, push the trigger to open the security and take the Gravity glider out of the line.





# **GLIDER ENCLOSURE**

The Glider is available as either removable or stored on the system as captive gliders that are protected against the elements by a unique Gravity Glider enclosure.

That means maximum durability and lifespan as the most vulnerable parts of the system is properly protected against the elements, including UV exposure.



# **MOUNTING AND USER EQUIPMENT**



# Anchorage

Structure capable of supporting a fall arrest situation.

#### **Gravity lifeline systems**

The Gravity Vertical System is available in two configurations: with energy absorber on top of the lifeline or with energy absorber on the glider. Both systems are suitable for intensive use in complex environments. All components are in stainless steel for greater durability.

### Fixing brackets

Gravity has designed an entire range of fixing assemblies suitable for various rung sizes.

The internal engineering department also offers bespoke fixation assemblies on demand.



# Connecting Devices

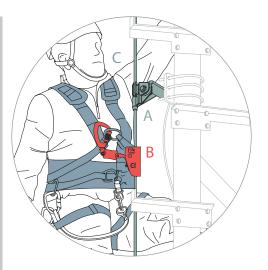
PPE connecting the operator to the system, restraining them in case of a fall. The PPE are designed to limit the energy transmitted to the user to a maximum of 6KN.

# **Gravity PPE**

#### LDV255:

Glider without energy absorber, to be combined with a lifeline fitted with energy absorber on its top anchor. I DV250:

Glider with energy absorber. Compatible with all systems.





# **Body Support**

A safety harness is a personal protective equipment (PPE) that is designed to catch a person in the event of a fall. Our Fall Arrest harness diffuses fall arrest energy across the shoulders, thighs and pelvis.



# **ANCHORAGE ELEMENTS - EN353-1: 201**



**Vertical System extension** on ladder without energy absorber NSV018











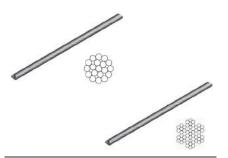
Vertical System extension on ladder with energy absorber NSV021

Kg 11,4



b 25,1





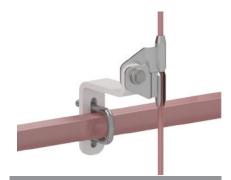
Stainless steel cable LDV006 (7x7)

LDV005 (1x19)



b 0,66





Intermediate anchor on ladder between rungs LDV241









AISI 304



Top anchor on ladder without energy absorber LDV232











Top anchor on ladder with energy absorber LDV233













Bottom anchor on ladder fitted with tensioner LDV266

Kg 2,3



b 5,1





# **BODY SUPPORT**

**Gravity Gear Fall Arrest Full Body Harness** 

- EN361:2012

2 anchor points, lightweight harness. Sizes M, L or XL

M-L: GB01GGFAH XL: GB01GGFAH#XL



Kg 2,2

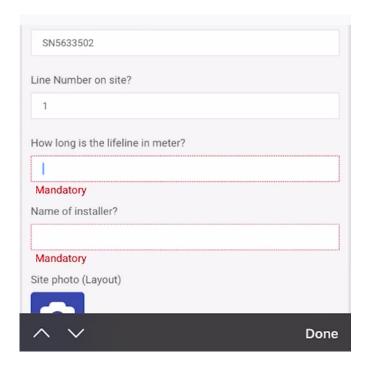


# **GRAVITY QUALITY SYSTEM**

The Gravity Quality System ensures that the Gravity Vertical System is installed correctly before it is certified as safe for use.

A Gravity smartphone app is used to guide the installer through the process of installing and capturing the required data:

- The data for each installation is reviewed by a Gravity technical team prior to approval and certification;
- Each lifeline is checked independently to guarantee correct installation, user safety and the dependability of the lifeline system;
- Gravity effectively manages the liability on behalf of the customer.







# GRAVITY 'S VERTICAL SYSTEMS WORLDWIDE



# CHOOSING GRAVITY MEANS







- One reference for global assistance
- Certified by notifying bodies as per latest European standard
- Quality control: ISO9001:2015. E.C. Quality of Production « Article 11B »
- Product liability insurance
- Warranty
- One-Stop-Shop

- Certified for up to 4 users at the same time
- Captive or Removable Gliders
- System with a permanently fixed, protective enclosure to keep the Gliders from exposure to the elements
- Virtual management and quality assurance system, ensuring correct installation and peace of mind
- Quick and easy to install.
   Requiring no special tools or equipment, saving time and costs











# **GRAVITY GROUP**

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