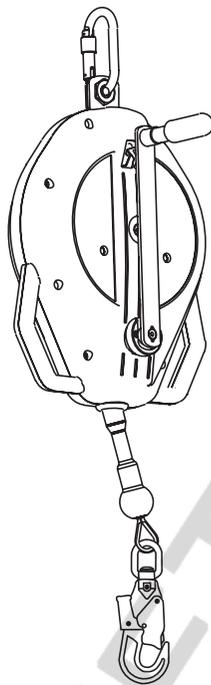
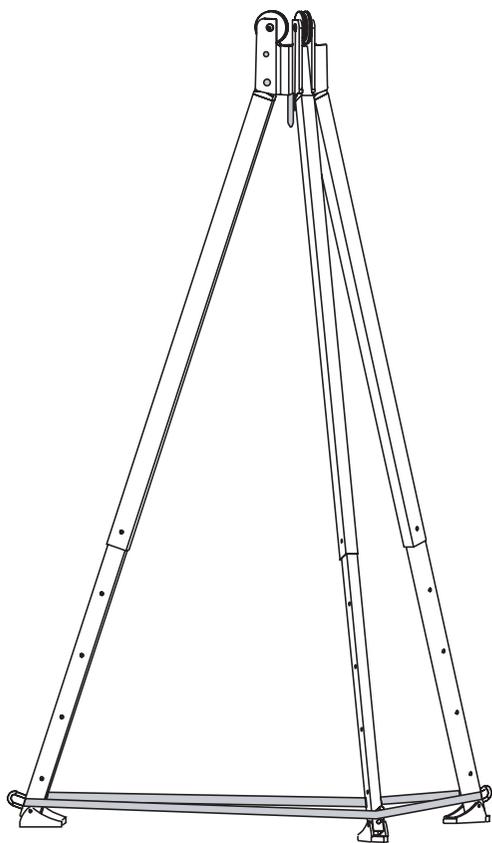


# fall arrest equipment

anchorage device - Tracpode

&

retractable lifeline with elevation rescue device - Blocfor® range



**operating  
and  
maintenance  
instructions**



equipment  
in accordance with  
CE directives

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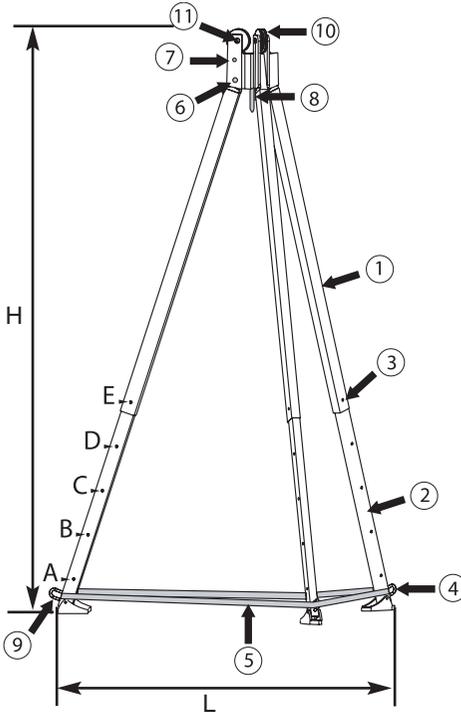
*Always anxious to improve the quality of its products, TRACTEL S.A.S. reserves the right to modify the specifications of the equipment described in this manual.*

*The companies of the TRACTEL Group and their agents or distributors will supply on request descriptive documentation on the full range of TRACTEL products: lifting and pulling machines, permanent and temporary access equipment, safety devices, electronic load indicators, accessories such as blocks, hooks, slings, ground anchors, etc.*

The TRACTEL network is able to provide an after sales and regular maintenance service.

## DESCRIPTION

### Tracpode



1. Leg
2. Telescopic tube
3. Ball spindle
4. Articulated foot
5. Strap
6. Hinge pin
7. Spring pin
8. Anchoring ring
9. Loop
10. Pulley
11. Spacer

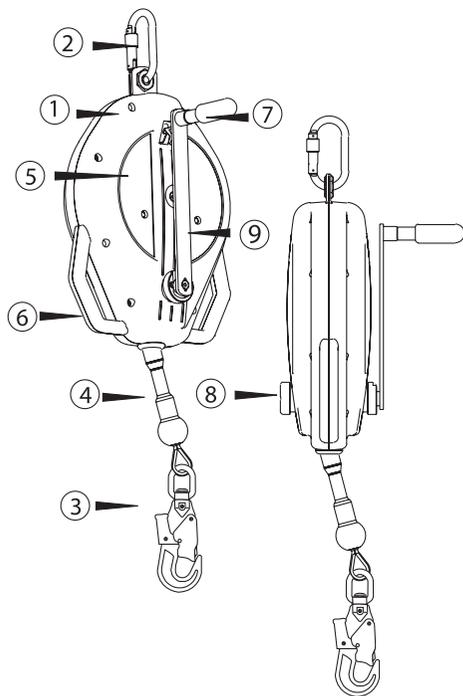
Dimensions during use :

|               |            |            |
|---------------|------------|------------|
| Adjustment A: | H = 1.74 m | L = 1.10 m |
| Adjustment B: | H = 1.92 m | L = 1.20 m |
| Adjustment C: | H = 2.13 m | L = 1.38 m |
| Adjustment D: | H = 2.30 m | L = 1.53 m |
| Adjustment E: | H = 2.48 m | L = 1.63 m |

## SPECIFICATIONS

| Model                   | Tracpode<br>with anchorage point | Tracpode<br>with Blocfor 20R   | Tracpode<br>with Blocfor 30R | Tracpode<br>with Carol TS 250 | Tracpode<br>with Carol TS 500 |
|-------------------------|----------------------------------|--|------------------------------|-------------------------------|-------------------------------|
| Weight (kg)             | 17,7                             | 30   | 36,70                        | 30,70                         | 35,70                         |
| Dimensions L x l (m)    | 1.87 x 0.4                       | 1.87 x 0.4   | 1.87 x 0.4                   | 1.87 x 0.4                    | 1.87 x 0.4                    |
| Length of wire rope (m) |                                  | 20   | 30                           | 20                            | 30                            |
| Capacity (Kg)           | 350                              | 100  | 100                          | 250                           | 350                           |
| Standard                | EN795 class B                    | lifting personnel<br>EN795 class B<br>EN 360, EN 1496 class B, EN 1808 |                              | EN795 class B<br>EN 1808      | EN795 class B<br>EN 1808      |

## DESCRIPTION



### Blocfor<sup>®</sup> 20R & 30R

1. Housing
2. Anchorage on structure
3. Anchorage on harness
4. End stop
5. Identification label
6. Carrying handle
7. Folding operating handle
8. Locking button
9. Hand crank

## SPECIFICATIONS

| Model            |          | Blocfor 20R             | Blocfor 30R |
|------------------|----------|-------------------------|-------------|
| Weight           | (kg)     | 9,34                    | 16          |
| Dimensions       | LxlxH    | 400x275x100             | 600x320x130 |
| Steel cable      | Ø 4 mm   | 20 m                    | 30 m        |
|                  | Ø 4,7 mm | 18 m                    | 27 m        |
| Retraction force | (N)      | 25                      | 25          |
| Braking force    | (kN)     | 5                       | 5           |
| Braking distance | (mm)     | 750                     | 750         |
| Standards        |          | EN 360, EN 1496 class B |             |



## GENERAL WARNING



1. **The Tracpode is a mobile anchorage point** (EN 795 class B) to which personal fall arrest equipment is attached, such as a Blocfor 20R (or 30R).
2. **The Blocfor 20R (or 30R) is a retractable lifeline** (EN360) designed to protect the user in the event of a fall. It is **equipped with a rescue device for lifting or lowering** (EN 1496 class B, rescue device).
  - These devices must only be used for individual protection of persons against falling from heights and for rescue purposes.
  - **Never use a Blocfor 20R (30R) for the protection of more than one person at a time.**
  - If a Blocfor 20R (30R) has stopped a fall it must not be re-used. It must be inspected by a competent person from Tractel S.A.S. or its approved repairers.
  - **Caution ! The operating instructions for the rescue device must be followed (see section 3.4).**
  - The instructions for attaching fall arrest equipment together to create a fall arrest system must be followed, in accordance with standard EN 363 (see section 8).
3. Before using the Tracpode and the Blocfor 20R (30R), it is essential that **users read this manual and comply with its instructions**, in order to ensure safe and efficient operation of the equipment. This manual must be kept and made available to all users. Additional copies can be supplied on request.
4. Never use a Tracpode and/or a Blocfor 20R (30R) which is not visibly in good condition. It is recommended that a visual check is carried out before each use. Return any device which is damaged in any way to Tractel or its distributor.
5. Before using this safety device, it is essential that users are trained in its use.
6. Tractel accepts no responsibility for the consequences of dismantling a Tracpode and/or a Blocfor 20R (30R), or any modification not made under its supervision, in particular in the event of replacement of original parts with parts from another source.
7. **Important** : If you are responsible for assigning equipment to an employee or similar person, ensure that you comply with the applicable health and safety at work regulations.

### Special applications

For any special applications, please do not hesitate to contact Tractel S.A.S.

## 1. FUNCTION AND DESCRIPTION

### 1.1 Tracpode

This is an anchorage point for temporary use by a person for access to a confined space eg. well, silo, sewer, etc.

The Tracpode is made of aluminium, and its light weight (17.7 Kg) makes it easy to transport.

The height of the Tracpode can be changed as the telescopic tubes have five adjustment positions.

The articulated feet are non-slip. A strap holds the three legs once the tripod has been adjusted.

The Tracpode has a basic configuration to which fall arrest devices from the Blocfor range and/or hoists from the Carol range can be added.

### 1.2 Blocfor 20R (& 30R)

This is a retractable lifeline with elevation rescue device. It is used vertically for evacuating (upwards or downwards) a person who has fallen. The nominal load for this device is 100 Kg.

The wire rope runs freely when the user is moving at normal speed, but is constantly subject to a slight retraction force from a spring which activates a reel on which the lanyard is wound.

In the event of a fall, the reel is locked by two catches which engage in a ratchet wheel by the operation of the centrifugal force. The energy which is generated when the person falls is dissipated by a disk braking system.

The Blocfor 20R (30R) has a manual hoist, which enables the rescuer to raise and/or lower the user following a fall. This device can be disengaged. It is operated by a removable operating handle coupled to an automatic brake. Pressing on the locking button engages the operating handle which can then be used to wind or unwind the wire rope.

The Blocfor 20R has a 20m cable capacity (the 30R has 30m), and has two carrying handles for easy handling.

The Blocfor 20R (30R) is fixed onto one of the legs of the Tracpode by a bracket..

### 1.3 Carol TS 250 (& TS 500)

The manual drum winch Carol TS enables the winding of 20 or 30 m of wire rope. The winch offers high safety in use thanks to two independent braking systems, a non reversible worm gear and a disk brake. If the Carol winch is used for man riding, a fall arrest system like the Blocfor should be installed on the Tracpode.

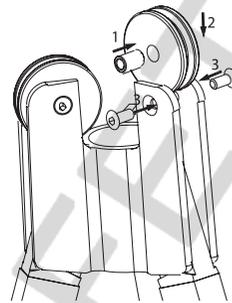
## 2. INSTALLATION

### 2.1 Tracpode



The Tracpode is supplied with two pulleys to be fitted for installing the Blocfor 20R (30R) and/or the Carol winch, as well as a leg strap.

#### 2.1.1 Attachment of the pulleys



After fitting the pulleys in the Tracpode head, tighten them using an 8 mm Allen key.

#### 2.1.2 Setting up the Tracpode

- Remove the ball spindles
- Spread the 3 legs out until the spring pins lock.

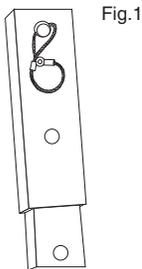


Fig.1

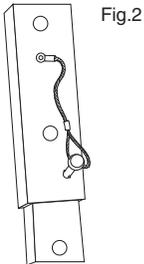


Fig.2

- Adjust the height of the 3 legs (see table of dimensions during use on page 3) and lock them using the ball spindles.
- Insert the strap through the loops and tighten.

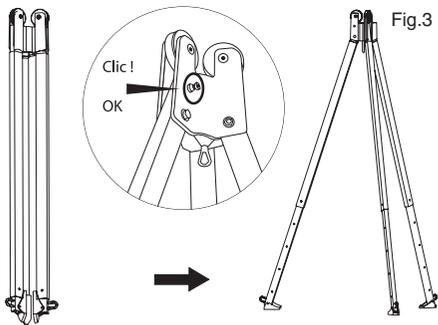
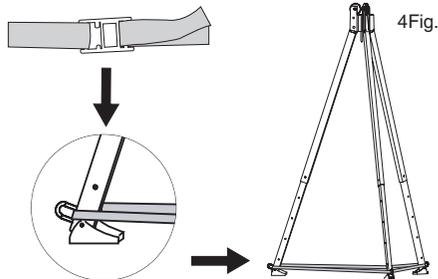


Fig.3

**2.2 Blocfor 10-20-30**

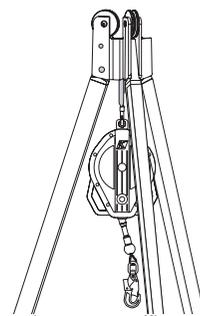


4Fig.

Basic configuration, to secure the Blocfor 10, 20 or 30 to the anchorage ring (4) which is fitted with a fall indicator (figure 5).

**2.3 Blocfor 20R (30R)**

Fig.5



**2.3.1 Fitting the support (figure 6)**

- Position the bracket according to the type of Blocfor used (20R or 30R).
- Remove the spring pin and the spindle from the

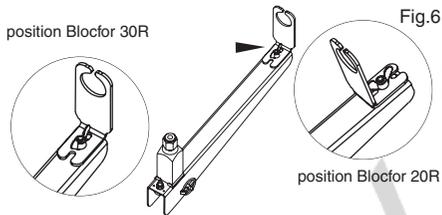


Fig.6

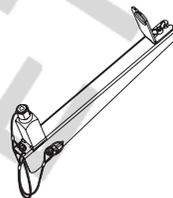
support.(figure 7).

- Remove the locknut (figure 8).

Fig.7



Fig.8



- Install the support on one of the 2 legs of the

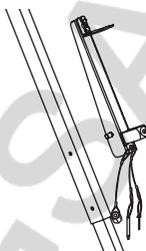


Fig.9

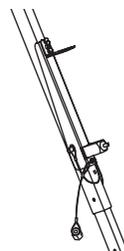


Fig.10

Tracpode which is fitted with a pulley (figure 9).

- Replace the spring pin and the spindle (fig. 10).
- 2.3.2 Fitting the Blocfor 20R
- Pre-tighten the wing nut (Fig.11).

Fig.11

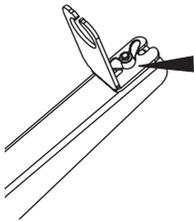
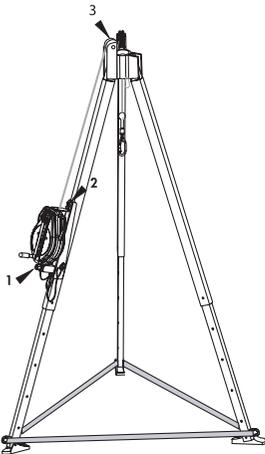


Fig.12



- Position the lower part of the Blocfor first.
- Retighten the locknut (1) and the wing nut (2).

Fig.13



- Insert the wire rope in the pulley (3).

### 2.3 Carol

- First of all fit the Carol hoist on its support, securing it with the 4 screws provided. There are two models of Carol hoist, the TS250 and the TS500.

Fig.14

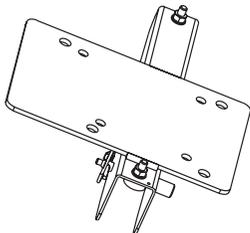
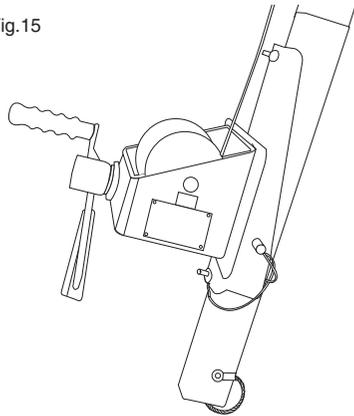


Fig.15



- Then fit the hoist on the Tracpode.

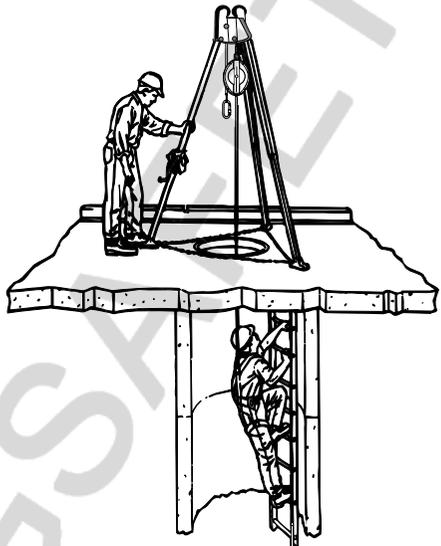
*NB: A Blocfor and a Carol can be fitted on the Tracpode at the same time, as a deflection pulley is fitted on two of the three legs of the Tracpode.*

### ▲ CAUTION ▲

**Do not exceed the Working Load Limit (WLL) of the Tracpode. WLL = 350Kg.**

## 3. OPERATION

### 3.1 Basic configuration



▲ CAUTION ▲

It is advisable not to exceed an angle of 20°, and not to move more than 3 m from vertical.

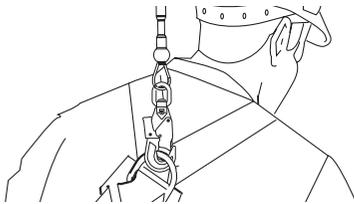
**3.2 Anchoring the Blocfor to the structure**

The anchorage point of the Blocfor 20R (30R) should have a minimum resistance of 10kN (EN 795).

The anchorage point of the Blocfor 20R (30R) must always be above the user, or level with the user's feet. It must never be below the user.

**3.3 Anchoring to the harness**

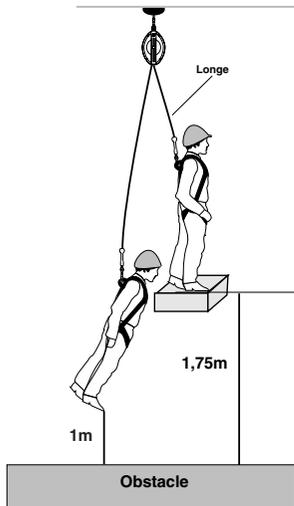
The connector fitted on the end of the lanyard must be attached to the borch or chest attachment point on the harness. The M44 connector has a fall indi-



icator. This is a red ring which is visible after a fall.

**3.4 Clearance**

The mandatory clearance is the distance between the obstacle and the user's feet (in this case a minimum of 1.75 m). After a fall there must be a mini-



mum of 1 m clearance beneath the user's feet.

**3.5 Operating environment of the Blocfor**

- Conditions generally found on an outdoor building site
- A temperature range between - 35°C and + 60°C
- Conditions in explosive atmospheres (all internal metal parts are non-sparking)
- For work which involves spraying products (sand-blasting, painting, etc) it is recommended that the Blocfor is protected against any of the product being sprayed entering the casing.

**3.6 Rescue operation with Blocfor R**

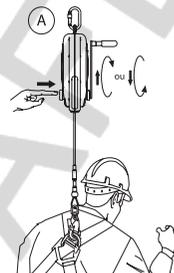
▲ CAUTION ▲

It is essential to have a second person nearby who can carry out an evacuation if necessary.

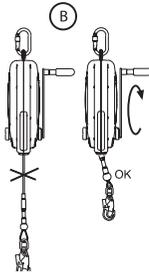
A survey should have been carried out to define how (in terms of personnel and equipment) an injured person is to be rescued within less than 15 minutes. Any longer will endanger the life of the person being rescued.

**3.6.1 Engaging the operating handle**

- Press the red locking button.
- Turn the handle to evacuate the user (clockwise to raise the user, anti-clockwise to lower the user).



- When the evacuation is complete, wind the wire

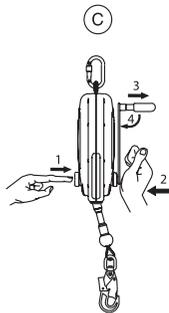


rope back into the unit (turning the handle clockwise).

#### ▲ CAUTION ▲

**Never unlock the system if the wire rope is not completely wound in the unit as it will rewind at high speed.**

- To disengage the hoist mechanism, press the red button and the hinge pin of the operating handle simultaneously. The operating handle must be in the vertical position, with the knob at the top, in order to carry out this operation.



- Folding operating handle (3) and (4).

### 3.7 Lifting operation with Blocfor R

The hoisting mechanism of the Blocfor R may be used occasionally ( 20 times a year ), to gain access of a person from top or bottom. ( see chapter 3.4 for operation of Blocfor R );

A comfortable harness is required for this type of operation ( Promast harness ).

### 3.8 Lifting operation with Carol TS hoist

The hoisting mechanism of the Blocfor R may be

The user attaches himself to the chest anchor point of his harness with the wire rope end of the Carol TS hoist and to the back anchor point of his harness with the wire rope end of the Blocfor. In case of a failure of the Carol hoist or a breakage of the lifting wire rope, the blocfor stops the fall of the user.

In case of a fall, if the injured person is to be rescued within a short period of time, the Blocfor R (retrieval model) is required to raise or lower the person.

## 4. INSPECTION BEFORE USE

### 4.1 Tracpode

Check :

- That the spring pins, in the upper part of the Tracpode, are correctly engaged (see diagram 3 page 7)
- The stability of the Tracpode.
- That each of the 3 telescopic legs is locked with the ball spindles.
- That the strap linking the 3 legs is correctly tensioned.
- That the Blocfor support is correctly attached to the leg of the Tracpode (figure 9 page 7).
- That the Blocfor is correctly attached to its support (figure 11 page 7).

### 4.2. Blocfor

Check :

- That the housing is not distorted.
- That the fall indicator is not visible.
- The condition of the lanyard along its entire length.
- That the lanyard is completely wound on the reel (the rubber end stop should come into contact with the housing).
- That the lanyard locks correctly, by pulling sharply on the end.
- The condition of the attachments (harness, connectors, etc).
- That the device is set to operate as a fall arrest device.
- That there is a second person nearby, in case

he/she is needed for a rescue operation.

- That the device is fixed to an anchorage point with a minimum resistance of 10 kN eg. the Tracpode tripod..
- That the connector is correctly locked (in the case of anchorage to the Tracpode ring).
- That there is no obstacle in the path of the user.
- That the wire rope is not likely to run over a sharp edge.

#### ▲ CAUTION ▲

**The user must adjust the harness to his size and check that the harness is correctly anchored to the lanyard.**

### 5. STORAGE

The Blocfor and the Tracpode must be stored away from adverse weather conditions and kept at a temperature of between -10°C and +40°C.

### 6. MAINTENANCE AND REPAIR

The devices must be regularly maintained by the user. In addition to the inspections described in section 4.

#### 6.1 Blocfor

The following maintenance operations should be performed:

- Clean the wire rope lanyard with a cloth impregnated with oil.
- Clean the housing with soapy water.
- If the lanyard does not rewind, unwind it fully, check that it is in good condition and rewind it.
- If it still does not rewind correctly, send the Blocfor for repair.
- If the lanyard does not unwind when pulled using a constant force (friction point), go past the friction point by pulling on the lanyard with a force not exceeding 100 Kg, check the condition of the lanyard and re-wind it. If the problem persists, send the device for repair.

#### 6.2 Tracpode

The following maintenance operations should be performed:

- Oil the spindles.
- Check that the structure is in good condition.

Annual servicing and repairs must be carried out by Tractel or an approved repairer.

### 7. WARNINGS AGAINST HAZARDOUS OPERATIONS

#### 7.1 Blocfor

- Do not use a device which has not been inspected for the past 12 months.
- Never let go of the lanyard before it is completely rewound.
- Do not re-use a device which has stopped a fall and has not been inspected.
- **Do not use a device to protect more than one person.**
- Do not create slack on the lanyard by preventing it from rewinding.
- Do not attach the device by any means other than its anchorage point.
- Do not use the lanyard as a hoisting device.
- Do not open the Blocfor and grease or oil the mechanism.
- Do not tamper with the fall indicator.

### 8. PERMISSIBLE ATTACHMENTS

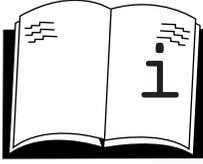
In accordance with standard EN 363, the Blocfor 20R (30R) is used in a fall arrest system, which must consist of :

- An anchorage device (EN 795),
- A connector (EN 362),
- **The retractable lifeline (EN360) with elevation rescue device (EN 1496),**
- A connector (EN 362),
- A fall arrest harness (EN 361),
- (back anchorage point recommended).

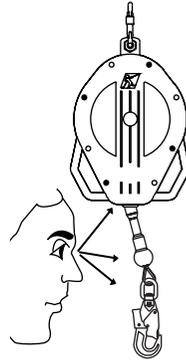
#### All other configurations are prohibited

In the European Union these devices are subject to CE marking. This is the result of an EC type-examination by the APAVE Lyonnaise (177, route de Saint Bel- B.P. 3,69811 Tassin la Demi Lune cedex). The "CE" quality assurance system is carried out by Tractel S.A.S. (CE body no. 0197, in accordance with article 11.B of the European Directive dated December 1989).

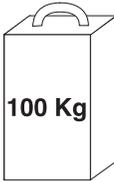




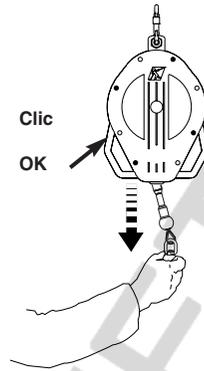
**Read the operating and maintenance instructions**



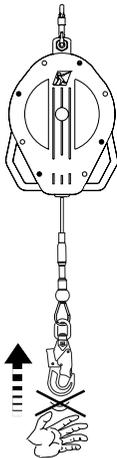
**Visual inspection of the device and its lanyard**



**The nominal load for this device is 100 Kg.**



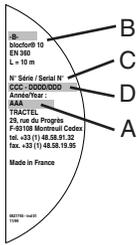
**Check that the lanyard locks by pulling sharply on the end**



**Do not let go off the lanyard before it is completely rewound inside the Blocfor**



**Do not dismantle the Blocfor**



**▲ Warning ▲**

\* Please copy these into the table below :



|                          |  |
|--------------------------|--|
| Date of manufacture* (A) |  |
| Type of product* (B)     |  |
| Product reference* (C)   |  |
| Serial number* (D)       |  |
|                          |  |
| Name of user             |  |
| Date of purchase         |  |
| Date of first use        |  |

| ANNUAL INSPECTION |                                |                                   |
|-------------------|--------------------------------|-----------------------------------|
| DATE              | INSPECTIONACTIONS              | INSPECTED BY                      |
|                   | <input type="radio"/> ACCEPTED | <input type="radio"/> REPAIR      |
|                   | <input type="radio"/> REFUSED  | <input type="radio"/> DESTRUCTION |
|                   | <input type="radio"/> ACCEPTED | <input type="radio"/> REPAIR      |
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|                   | <input type="radio"/> REFUSED  | <input type="radio"/> DESTRUCTION |

Connecting other fall arrest items - see Permissible attachments section

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