

## General User Instructions

### Important:

In order to ensure optimum safety and performance, please study and understand these instructions before using the product.

The SAR Work positioning lanyard Incorporating the RAD was designed specifically for Telecommunications/ Electricity Pole work, Technical Rope Access and Technical Access personnel, who require a multi use work positioning piece of equipment/system. Also as a restraint for rope edge safety in Rescue, Quarry work, or as a Belay brake/lowering device in sports climbing.

### Functions:

The RAD can be used in the following ways but we recommend that users be trained in its many uses and learn about its practical and physical strengths and weaknesses.

- Pole rope stop
- Tree rope stop
- Work restraint system
- Work positioning system
- Rescuers Work positioning system
- Controlled personal descent.
- Controlled personnel Lower.
- Belay brake for mountaineering, climbing and related activities.
- Ascender.
- Hauling system brake.
- Work positioning adjustment element.

### Use:

Users must be aware that rope conditioning such as humidity, wet, snow, ice dirt, etc., and size of rope will all produce differing results when the device is used. The RAD must only be used by trained and competent personnel.

### Immediately Prior To Use:

Check your SAR RAD System for any damage or Malfunction. Do this prior to and immediately after use. If there is any doubt about the safe condition of the RAD or Rope it should be withdrawn from use and inspected by a competent person recommended by the manufacturer or returned to the manufacturer. A record of inspections should be completed at regular intervals. It is recommended that a minimum yearly examination be carried out by a competent person. Familiarisation of the braking effect must be carried out prior to use.

### Cleaning:

Keep the product clean and dry. Remove any excess moisture with a clean cloth then allow to dry naturally in a warm room away from direct heat. First rinse in clean cold water. Clean off tar based products with appropriate petroleum solvents following the instructions for use for such products. Afterwards wash, rinse and dry as described above.

### Chemicals:

Avoid all contact with any chemicals which could affect the performance of the product. e.g. these include all acids and strong caustic substances (e.g. vehicle battery acid, bleach, etc.). If used in a marine environment always rinse the product in clean cold water after each use and thoroughly dry.

### Lubrication:

After cleaning and drying and before storing, metal components, particularly those with moving parts should be lubricated sparingly using a light oil, or they may be lightly greased making sure that lubrication does not come into contact with any parts that rely on friction with rope or the rope itself.

### Storage:

After any necessary cleaning dry completely, store packed in a dry place in a chemically neutral environment away from excessively high humidity, corrosives or other possible causes of damage. Do not store wet.

### Transportation:

Care should be taken to protect the equipment against risks such as those detailed under Lifespan. A simple, effective way is to transport the equipment in a suitable bag or other container.

### Lifespan:

It is difficult to estimate this but as a guide we advise as follows: Maximum life indefinite on metal work. Polyester and nylon 10 years from date of manufacture. However working life will be reduced through age, general wear and tear, damage to component parts, inappropriate ancillary equipment, high impact load, prolonged exposure to corrosive atmosphere or chemical agents or failure to store and maintain as recommended. This statement does not remove the need for users to check these items before and after every use, and retire the device if it is not in a satisfactory condition, or taken out of

service by a competent person. This list is not exhaustive.

### Explanation of marking:

CE marking: meets the requirements of European Directive 89/686/EEC. Includes four digit number of notified body monitoring our quality system.

Conforms to and meets the requirements of:

**EN358:1999** - Personal protective equipment for work positioning and prevention of falls from a height - Belts for work positioning and restraint and work positioning lanyards. MAX 200kg; Maximum personal load Kernmantel rope symbol (Bull's eye) Rope diameters 10.5mm to 12.7mm can be used.

**EN12841-C:-2006** - Personal fall protection equipment Rope access systems. Rope adjustment devices.

MAX 200kg; Maximum personal load Kernmantel rope symbol (Bull's eye) Rope diameters 10.5mm to 12.7mm can be used.

**EN15151-1:-2015** - Mountaineering equipment. Breaking devices.

Part 1: Breaking devices with manually assisted locking. Safety requirements and test methods. Dynamic rope symbol (Bull's eye) Rope diameters 9.9mm to 11mm can be used.

Year, batch number & serial number.

### Notified body:

SGS FIMKO OY, Takomotie 8, FI-00380 Helsinki, Finland.  
Notified body number: 0598

## EN358:1999 User Instructions Continued.

The SAR Work positioning lanyard Incorporating the RAD was designed specifically for Telecommunications/ Electricity Pole work, Technical Rope Access and Technical Access personnel, who require a multi use work positioning piece of equipment/system. Also as a restraint for Top rope edge safety.

### Warning's:

All friction brakes create heat which can damage rope if a fall has taken place, not only check the RAD, but also the rope at the point of contact. It is important for users to understand that in actual use it may react differently to the specified test methods and therefore for additional safety it is recommended that the connecting lanyard length is kept to a minimum. Any strengths quoted are when the product is tested new and are in accordance with the standard. Only use Anchorage points that have been designed and approved. Anchorage points wherever possible should be maintained at or above waist level, kept taut and free movement restricted to a maximum of 0.6M. A rescue plan must be in place to deal with any emergencies that may arise. Any medical condition that could effect the safety of the equipment user or others during work or rescue. That the equipment shall not be used outside its limitations or for any purpose other than that for which it was intended and must only be used by trained and competent



Fig.2:

Used as an adjustable work positioning or restraint lanyard, connected to a single point on a harness compliant to EN358, EN813 & EN361



### Fitting Instructions For Replacement Lanyard:

Fig. 3:



Fig. 4:

Open swivel cheek plate to allow loading of rope and load rope around main bobbin.



Fig. 5:

Close swivel plate and re-insert screw lock



Fig. 1:

Work positioning adjustable lanyard working from two points on harnesses compliant to EN358, EN813 & EN361

## User Guide RAD



CE 0598

## User Guide RAD



CE 0598

**Warning in use:**

Always hold the tail rope when descending or lowering to give extra control when in use.

**EN12841-C User Instructions Continued.**

The RAD Descender has been designed specifically for Technical Rope Access and Intervention purposes by Police and Special Forces, who require a multi-use Rope Adjustment Device.

**Testing:**

EN12841-C Rope Adjustment Devices using EN1891 Kernmantel 10.5 to 12.7mm rope. Users must be aware that rope conditioning such as wet, snow, ice, dirt, etc., different rope manufacturers will all produce differing results to any testing or use undertaken. We advise that you test the rope with the device before use.

**Warning:**

All friction brakes create heat which can damage rope if a fall has taken place or on a long fast descent. Any strength quoted is when the product is tested new and is in accordance with the appropriate standards. All anchor lines should be attached to anchor points above the user and slack between the user and anchor should be avoided.

It is recommended that safety back up lines are used where possible. The device is not to be used as a fall arrest device. The RAD Descender can be used in two ways, single descent by attaching the RAD Descender to your harness or multiple escape by attaching it to the anchor to lower people down. All connectors must conform to EN362, EN362:05/Q & 12275 or to the standard relevant to the country it is used in. No alterations/repairs must be made to this equipment without the manufactures consent.

Thank you for taking the time to read this user's guide. The instructions are not exhaustive and CANNOT substitute for comprehensive instruction by trained and/or otherwise competent person. Working at height is dangerous, the consequences of incorrect selection, use and maintenance of the product could result in damage, serious injury or death. It is critical at all times to ensure that the user understands the correct and safe use of the product, use it only for the purpose for which it is designed and practice all proper safety procedures.

**Fitting Instructions:**

- Remove fixing plate screw. (see Fig. 3)
- Open swivel cheek (plate) upwards. To allow loading of rope and load rope around main bobbin. (see Fig. 4)
- Close swivel plate. (see Fig. 5)

**When using the RAD as a descender EN12841-C or as a belay device EN15151-1 there is no need to replace the fixing plate screw.**

Connect Descender to karabiner.

Connect Descender to your harness attachment point.

**Warning in use:**

Always hold the tail rope when descending or lowering to give extra control when in use.

**EN15151-1:2012 Type 6 User Instructions Continued.**

The SAR RAD can be used in mountaineering or climbing as a belay device or as a descender for lowering a climber.

**Before use:**

It is important that The RAD is tested before use to ensure that it works and the operator familiarises there self with the breaking and lowering effect. We also recommend a buddy/partner check of all equipment/ systems before use.

**Rope types:**

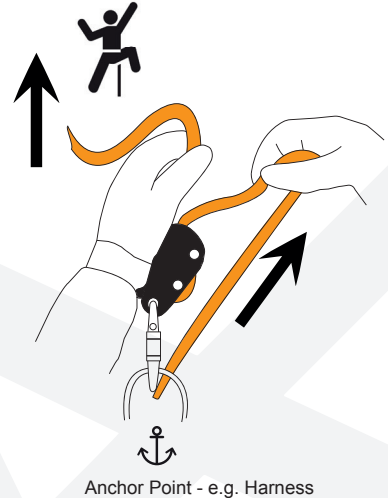
The RAD is compatible with climbing/dynamic rope from 9.9mm to 11mm conforming to EN 892. Different types of rope in this size range will have different effectiveness when in use. Ropes that are muddy icy or wet will also have different affects. Warning: Commercially stated rope diameters have a tolerance up to  $\pm 0.2$  mm.

**System:**

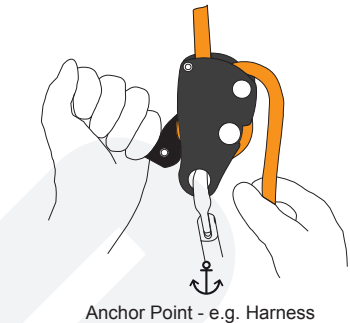
Connectors used with the RAD when belaying or descending/lowering must conform to EN362 & EN12275. Also insure that the gate of the karabiner/connector does not become side loaded when belaying or descending/

lowering **Warning: The free end/breaking side of the rope must be controlled by hand at all times.**  
The climbing rope being used must have knot tide in to the free end of the rope.

**Belaying:**

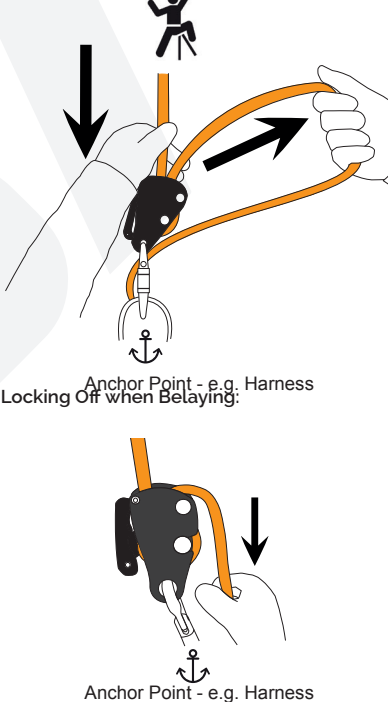


**Lowering & Decending:**



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**Taking in slack:**



Inspection Record	Next date of Inspection	Name of Inspector	Reason for entry: Periodic examination or repair	Date

**Declaration Of Conformity**

The EU Declaration of conformity is available by scanning the QR code or visiting:  
[www.sar-products.com/eu-doc/](http://www.sar-products.com/eu-doc/)



User's Name:
Date Of Manufacture:
Date First Used:
Date Of Purchase:
Product Serial No.:

**Certificate Of Conformity**

We certify that the RAD conforms to EN12841:2006-C, & EN358:1999 and is rated to 200kg. Also conforms to EN15151:2012 Type 6

Other components used with this product must conform to the relevant EN standards.

Signature .....  
For SAR Products Ltd.