



# RED™ Rotational Braking Back-up Device.

## General

ISC equipment and components for prevention of falls from height meet or exceed recognised European, American or other International standards. A multi-language user instruction manual should accompany this product. It is the users responsibility to read and understand these instructions before use.

**WARNING** - Activities involving the use of this equipment are inherently dangerous – this equipment should only be used by a competent person or a person specifically trained in its use who is under the direct supervision of a competent person.

## Responsibility

It is the user's responsibility to ensure understanding of the correct safe use of this equipment, to use it only for the purposes for which it is designed, and to practise all proper safety procedures. It is mandatory that a Risk Assessment be carried out prior to any use and a rescue plan be in place for any work at height. Do not exceed loads either specified by the manufacturer or loads derived from the specified MBS using a recognised factor of safety. Do not under any circumstances modify the product as alterations may render it ineffective.

## Compatibility

Always ensure that all components within a safety system are compatible and allow the system to function safely.

## Inspection

Immediately before, during and after use make visual inspections of the product to ensure that it is in a serviceable condition and is operating correctly.

## Use Requirements

It is recommended that the viability of any installation should be verified by a suitably qualified person. Extreme care should be taken when using this product near harmful chemicals, moving machinery, electrical hazards and near sharp edges and abrasive surfaces. Wet and icy conditions may cause the rope to become slippery.

## Testing

All testing at ISC and the Notified body, has been carried out on Marlow 10.5 and 11mm LSK rope, using cows-tail made from 11mm Marlow dynamic rope, with suitable recognised knots at either end producing loops. One-man load 140kg, rescue load 240kg.

Max fall distances using Marlow LSK:

	10.5mm	11mm
One-man load	1600mm	1600mm
Rescue load	300mm	800mm

Please see our separate datasheet containing test results of varying fall distances.

## Cleaning

The product must be cleaned regularly (or after every use in a marine environment) with a mild detergent. Afterwards the product should be rinsed in clean water and allowed to dry naturally. Alternatively an air gun can be used to clear debris from device. Moving parts may be oiled regularly with a light oil. A small drop may be applied to the spring hole on the side frame. Remove all excess oil from the device, with a soft rag/cloth, before use .

## Figure 1 – Installation

### 1a -Installation on rope

Swing the front plate through 180°

Insert the rope, paying particular attention to the direction of the markings.

**WARNING** – RED™ is a directional device and locks in only one direction.

**DO NOT INSTALL DEVICE UPSIDE DOWN.**

### 1b - Installation on rope

Close front frame – reverse of opening.

Attach connector, approved to EN362:2004, through holes on front and back frame.

**WARNING** – Ensure device is closed and frames cannot be rotated with connector attached.

## Figure 2 – Operational check

2a - Before each use, to verify the correct installation on the rope, a test must be carried out. Move the device up and down the rope. It must slide smoothly and easily. Ensure the device self-parks (stays in position when released).

2b – Test the locking on the rope by tugging sharply (on cowstail) in the direction of a fall – ensure the device locks.

**WARNING** – RED™ is a directional device and locks in only one direction.

**DO NOT INSTALL DEVICE UPSIDE DOWN.**

## Figure 3 – Removal

The removal of the device is the reverse of installation.

## Figure 4 – Clearance

The strength of all anchors must be at least as great as that of the terminated ropes attached to them, and not less than 15kN (BS7985:2009). The anchor should be positioned above the user such that the free movement of the system and the fall path is unobstructed. Work as close to directly below the anchor point as is possible to avoid swing -fall injury (pendulum effect). When using 800mm cows-tail (including connectors) the clearance below the user's feet must be 4.6m to avoid collision with a structure or the ground in the event of a fall from height.

## Figure 5 – Towing

The RED™ backup device can be used with a fixed towcord, a towcord with detachable popper™ or without a towcord. It is the responsibility of the user to carry out a risk assessment and determine which method of towing is best for their application.

When using any towcord, but especially the fixed towcord, do not:

tie a knot in the cord.

wrap the cord around a finger.

trap the cord against any surface.

When towing the RED™, it should be towed between first finger and thumb. It is important that the user does not descend out of reach of the RED™ backup device. In a static (i.e towing) scenario, the popper™ will not disengage at less than 3kg but should disengage in a dynamic scenario.

**WARNING**—ISC RED™ RP891—The device **will not function correctly if the user keeps hold of the towcord in a controlled or uncontrolled situation.**

**WARNING**—ISC RED™ RP892—The popper™ is a device designed to help mitigate but not remove risk, and if the user holds the towcord the popper may not disengage (deploy) in an emergency situation and as such the ISC RED™ RP892 should be treated as per the warning for the ISC RED™ RP891.

**WARNING** – Industry best practice dictates that the RED™ backup device shall never be lower than its harness attachment point or the main descending device, whichever is the higher.

## Storage & Transportation

The product should be stored in a clean, dry environment away from exposure to UV, corrosive or chemical substances or extreme heat sources. Care should be taken to protect the product against damage during transportation.

## Product Inspection & Maintenance

In addition to the visual inspections (see Inspection) a thorough examination should be carried out by a competent person in line with applicable legislation and the intensity and environment of use. ISC recommends a thorough examination at least every twelve months. The product should be immediately withdrawn from use and not used again until confirmed in writing by a competent person that it is safe to do so, should any doubt arise about its condition for safe use or, if it has been used to arrest a fall. Extreme temperatures and the effects of chemicals, rust, cuts and abrasions could affect the performance of the equipment. Defective equipment shall be put beyond use to ensure it is not used as safety equipment.

## Rescue

There are many ways in which a rescue can be carried out. A risk assessed rescue plan should be considered for each workplace and training environment. ISC would always recommend that where possible a rescue should be carried out using additional/new ropes installed for that purpose so that the integrity of the ropes used in the casualty's system do not have to be assessed since during a rescue scenario it is possible that a two-person dynamic load could be applied to the back-up rope. Only in the event of a rescue from below that utilises the casualty's existing lines and the casualty's backup line is loaded with a persons weight and where primary line failure might occur should the RED not be used as a back-up device since testing shows its performance to be inconsistent. Where additional/new lines are used to affect a rescue then the RED is the only device proven to be suitable to protect a rescuer/casualty combination of up to 240kg.

## Modifications, repair

There are no serviceable parts on the RED™ device except for the popper and tow cord. If required, repair or replacement of these items may be carried out by a suitably qualified or competent person see our separate instructions—KT892 UIM.

## Manufacturers' responsibility

The manufacturer or distributor will not be held responsible for any eventual damages, injuries or death resulting from an improper use of this equipment. If there is any doubt about the compatibility of the products you have chosen please consult the manufacturer

## Approvals – Declaration of Conformity

The RED™ backup device has been tested and approved by SATRA, notified body number CE0321, in accordance with EN12841:2006 with a maximum rated load of 140kg and is subject to the procedures set out in Article 11b of Directive 89/686/EEC under the supervision of SGS UK Ltd., Unit 202b, Worle Parkway, Weston-super-mare. BS22 6WA., notified body number 0120.