

PRODUCT RECORD

THIS DOCUMENTATION SHOULD BE ISSUED WITH AND KEPT FOR EACH ITEM OR SYSTEM

Please see the product label for the details required below.

Consult this guide for advice on inspection, maintenance, lifespan, etc.

USER'S NAME	
DATE OF MANUFACTURE	DATE OF PURCHASE
DATE FIRST USED	
Other components of personal protective equipment against falls from a height with which this product is used should conform to relevant European Standards (EN's) or in their absence other appropriate standards.	
COMMENTS: To fully conform to EN341-B the Descender must be used with the 11mm SAR or Teufelberger 16 plait low stretch rope. EN341-B is a standard for a Rescue/Escape SYSTEM and not an individual item. The number of descents is subject to how good the quality the rope used as it flattens with constant use in quick succession. EN12841-C Rope Adjustment Device, is the standard for a descender that can be used for all types of rope work including rescue on any kernmantle rope that will suit the device. Account must be taken on the test results on the inside pages as different ropes give different feel in use.	

CERTIFICATE OF CONFORMITY

WE CERTIFY THAT THE ISC A-B Descender CONFORMS TO EN12841-C Rope Adjustment Devices & EN341-B Descender for Rescue

Signature:... *Denny M. Moulans*for ISC Ltd

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User Guide



A-B Descender
EN12841-C & EN341-B



Serial No:

IMPORTANT:

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

The **ISC A-B 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 that allows taking the load of two people for the purposes of rescue and with a **Panic Grab Brake (PGB)**.

In Technical Access it must always be used in conjunction with an EN12841 Type A device or EN353-2 back-up device's. This is not always required in Intervention or Rescue.

FUNCTIONS: The **A-B Descender** can be used in the following ways but ISC recommend that users be trained in its many uses and learn about its practical and physical strengths and weaknesses.

- (a) Controlled descent with PGB engaged.
- (b) Controlled speed descent - PGB disengaged.
- (c) Ascender.
- (d) Hauling system brake.
- (e) Tensioned line brake.
- (f) Work positioning adjustment element.

TESTING: The **A-B Descender** has tested to **EN12841-C** Rope Adjustment Devices using **EN1891** Kermantel rope 10.5 x 22 plait Singing Rock Route 44, 11mm SAR & 12.5mm 20 plaits Cousin ropes. This allows all other sizes between these to be acceptable. **Users must be aware that rope conditioning such as wet, snow, ice, dirt, etc., different diameters and rope manufacturers will all produce differing results to any testing or use undertaken.**

IMMEDIATELY PRIOR TO USE: Check your **A-B Descender** for any damage or malfunction. Do this prior to and immediately after all use. If there is any doubt about the safe condition of the **A-B Descender** 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 dependent on usage. **It is recommended that a minimum yearly examination be carried out by a competent person.**

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.

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. ISC recommend that the **A-B Descender** is carried on the side gear loops of the harness when not in use.

LIFESPAN: It is difficult to estimate this but as a guide we advise as follows: do not use more than ten years after date of manufacture. 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 list is not exhaustive but in normal usage and with regular cleaning and lubrication it should be in excess of five years.

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

Conforms to EN12841 type C Rope Adjustment Devices and EN341 type B Descender for rescue.

Kermantel rope symbol (Bull's eye)
ID No: Batch or serial number.

Rope Threading Diagram
NOTIFIED BODY:
SGS United Kingdom Ltd., Weston-super-Mare BS22 6WA, UK.
Notified Body No: 0120

NOTE: 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.

The ISC A-B Descender has been tested by the NOTIFIED BODY in a simulated rescue fall using a 200kg mass as required by EN12841-C on a one metre sling set in a fall factor one scenario with a knot 3M down the rope. It was also tested

by ISC in a more realistic rescue scenario using a 100kg mass loaded on the Descender and 100Kg mass set at 1M FF1. The ISC A-B Descender passed both tests. ISC confirms the A-B Descender can be used in RESCUE with two people.

Tested to EN341-B for a Descent for Rescue System, 100kg, 20 descents each being 100M on SAR 16 plait rope with fig. 10 knot or alternative 22kn termination using an anchor conforming to EN795 or equivalent.

The ISC A-B Descender can be used in two ways – single descent by attaching the A-B Descender to your harness or multiple escape by attaching it to the anchor.

NOTE: EN341-B is a standard for a system to be sold inclusive of the rope. It is not a standard for the descender only.

SPECIFICATIONS:

Rope dia: 10.5mm – 12.5mm (dependent on manufacturer and stiffness)

Rope type: Kermantel

Sample Tests:

Min. Static Slip: 4.5kN-10.5mm x 22plait Route 44 Singing Rock, 5.5kN-11mm x 24 plait SAR. 8kN-12.5mm x 20 plait Cousin

Max. Dynamic Impact and slip with 100kg FF1-1M 10.5mm = 5.1kN & 51cm, 11mm = 6.2kN & 26cm, 12.5mm = 7kN & 15cm

Weight of product: 169g

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, uses it only for the purpose for which it is designed and practices all proper safety procedures. ISC can provide the training if required. If you have any ideas how the guide or the product can be improved, we would welcome your views.

FITTING INSTRUCTIONS For EN12841 Type C Device

1. Connect Descender to karabiner on harness attachment point. (Preferably waist connection). Open swivel cheek (plate) upwards. To allow loading of rope and load rope around main bobbin as in diagram Fig. 1.
2. Close swivel plate and lock onto karabiner. Lift handle and fit rope into gap for PGB. Fig.2 & 3.
3. A-B Descender in normal working position and rope engaged in the PGB function. Fig. 3.
4. A-B Descender with the rope over the back of the descender PGB bobbin for fast descent and NOT engaged in the PGB function. Fig. 4.

5. The A-B Descender has a flip down handle, this gives the user more leverage and control when being used in Intervention or Rescue. Fig 5.
6. To lock off the rope so as not to accidentally activate the descent mode, take a loop from the tail rope and pass it through the karabiner. Loop it over the bobbin arm of the PGB and pull down end of rope to secure it in the groove between the panic bobbin and main body as in Fig. 6 & 7.



Fig 1.



Fig 2.



Fig 3.



Fig 4.



Fig 5.



Fig 6.



Fig 7.