

Lyon dynamic rope for the UK made by Beal



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Certification
CE 0120
EN 892:1997.

Approved body
EC Type-examination for
Directive 89/686/EEC by:
Notified Body No. 0082
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Notified Body controlling the manufacturing:
Notified Body No. 0120
SGS, 217-221 London Road,
Camberley, Surrey, GU15 3EY, UK.

WARNING

Make sure that you have read and understood these instructions before using this equipment. These user instructions are to be read and kept along with any other information provided.

When new, the braking effect of descenders and belaying devices is reduced. Before using the rope together with any friction device, check that the combination works effectively and securely to avoid any braking surprises.

The various cases of wrong use shown in this notice are not exhaustive, there are innumerable wrong uses possible, it is not feasible to show them all.

This product is designed for climbing and mountaineering only.

Climbing and mountaineering are inherently dangerous.

Special knowledge and training are required to use this product.

This product must only be used by competent and responsible persons, or those placed under the direct control of a competent person.

Failure to follow these warnings increases the risk of injury or death.

The use of "second-hand" equipment is strongly discouraged.

You are responsible for your own actions and decisions.

Use

This product is a dynamic rope intended for use in climbing. It is capable of use as a link in a safety chain designed to hold a fall.

(Figure 1) Types of ropes:

- Single rope. May be used as a single rope as a link in the safety chain.
- Half rope. Use in adventure climbing, mountaineering or long climbs where abseil descent may be necessary.
- Twin rope. For mountain and icefall use. Clipping 2 strands essential.

You must never use just one strand of half, or twin, rope, except as a walker's aid.

During a climb it is necessary to take into account the effects of arresting a dynamic fall by using or placing protection points to prevent hitting the ground.

(Figure 3) For abseils or top roping from the pitch base check that the rope is at least twice the pitch length. For greater abseil safety knot the end of the ropes.

The various components of the safety chain (harness, karabiners, tape, slings, anchors, belaying devices, descenders) should conform to UIAA or EN Standards. Select an appropriate belay device for use with thinner diameter ropes.

In case of use with a mechanical device, ensure that the diameter of the rope and its other characteristics are adapted to, and compatible with the device.

Please note: When a rope is new, the braking effectiveness of belay devices is significantly reduced.

(Figure 4) The recommended knot for tying-on is a well-tightened figure of 8 loop.

Do not use a karabiner for tying-in if there is the risk of a fall.

(Figure 5) To tie 2 ropes together in preparing an abseil, use a double fisherman's knot or a tape knot or a figure of 8 loop.

Precautions

(Figure 2) Before first use, it's essential to unwind the rope as shown in the diagrams to avoid twists and kinking.

(Figure 6) The rope must be protected against sharp edges, stone fall, ice axes, crampons, anything which could cut the internal or external fibres of the rope.

Attention: The "UIAA Sharp Edge Resistance" test is no guarantee that the rope will hold a fall over a sharp or abrasive rock edge.

(Figure 7) Rubbing together of two ropes through karabiners or mailons induces heat which could result in rupture.

(Figure 8) Doubling the rope for abseiling or top roping from the base of a pitch must be through a karabiner or a Maillon Rapide:

- Not through slings.
- Not over branches.
- Not through the eye of a piton or hanger.

Avoid over-rapid abseiling or lowering which could burn the rope and accelerate sheath wear. The melting temperature of polyamide is 230°C. This temperature may be attained during very rapid descents.

Check that there are no burrs or snags on karabiners or descenders.

Do not switch the role of karabiners. Reserve some exclusively for running the rope through, and use different ones for clipping anchors. The latter use may score the karabiner, leading to deterioration of any rope running through it.

When affected by water or ice the rope becomes much more sensitive to abrasion and loses strength: redouble your precautions.

The temperature in which the rope is stored or used must never exceed 80°C.

Before and during use, the possibility of rescue in case of difficulty must be considered.

Care and maintenance

A rope must not be allowed contact with chemical agents, particularly acids which may destroy the fibres without visible evidence.

(Figure 9) Avoid unnecessary exposure to UV, store the rope in a cool, shaded place, away from dampness and direct heat.

It is preferable to use a rope sack for transporting and for laying the rope out at the base of the cliff to protect against dirt and reduce twisting.

(Figure 10) If the rope is dirty, it may be washed in clear cold water, if necessary with a washing agent designed for delicate textiles, using a brush made with synthetic bristles. Disinfect only using materials that have no effect on the synthetic materials used.

If the rope is wet, after use or washing, leave to dry in a cool, shaded place.

(Figure 11) Before and after each use inspect the rope visually and manually along its entire length.

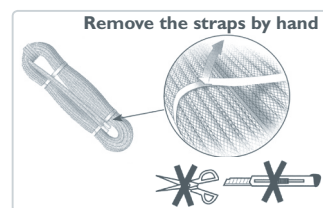
This product must be inspected periodically and meticulously, every 3 months if in frequent use, annually for occasional use.

The rope is personal equipment. During any use away from you it may be subject to grave damage, which may not be visible.

If a rope is cut into a number of lengths, repeat and affix to each new end the markings of the original ends.

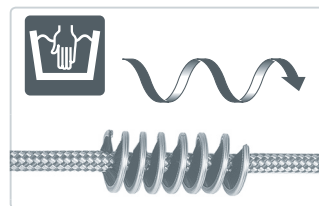
How to uncoil a rope

Also refer to Figure 2.



How to wash and dry a rope

Hand washing



- Dilute 10% of Beal "Rope Cleaner" in a volume of tepid water <30°C.
- Wash the rope with many passes of a Beal "Rope Brush".
- Rinse in clean water.

Machine washing



Slip the rope loosely into a pillowcase. Put 75ml of Beal "Rope Cleaner" into the machine, set at a maximum temperature of 30°C, without spin drying.

Drying

Drying should be done naturally, for example by hanging on a line, whilst avoiding exposure to bright sunlight.

Materials

The yarns used in this rope is polyamide (Nylon).

Lifetime

$$\text{Lifetime} = \frac{\text{Time of storage}}{\text{before first use}} + \frac{\text{Time}}{\text{in use}}$$

The working life depends on the frequency and the type of use.

Abrasion, UV exposure and humidity gradually degrade the properties of the rope. Note that with use, a rope thickens and thus loses up to 10 % length.

Storage time: In good storage conditions this product may be kept for 5 years before first use without affecting its future lifetime duration in use.

The potential lifetime of this product in use is 10 years.

Attention: This is only a potential lifetime, a rope could be destroyed during its first use. It is the inspections which determine if the product must be scrapped more quickly. Proper storage between uses is essential. The lifetime of the rope in use must never exceed 10 years. The total maximum lifetime (storage before use + lifetime in use) is thus limited to 15 years.

(Figure 12) The rope must be retired earlier:

- if it has held a major fall, approaching fall factor 2.
- if inspection reveals or even indicates damage to the core.
- if the sheath is very worn.
- if it has been in contact with any active or dangerous chemicals.
- if there is the slightest doubt about its security.

BEAL guarantee

This product is guaranteed for 3 years against any faults in materials or manufacture. Exclusions from the guarantee: normal wear and tear, modifications or alterations, incorrect storage, poor maintenance, damage due to accidents, to negligence, or to improper or incorrect usage.

Responsibility

BEAL is not responsible for the consequences, direct, indirect or accidental, or any other type of damage befalling or resulting from the use of its products.

Marking

Lyon Equipment	Distributor
ID No.	Serial number. The last 2 digits indicate the year of manufacture
	Single rope. EN 892: Standard reference
11 mm	Diameter of the rope
XX m	Length of the rope (where XX is the length in m)
UIAA	International Mountaineering and Climbing Federation Safety Label (under Beal brand name)
CE 0120	CE mark and the notified body number overseeing the control of manufacturing, SGS 217-221 London Road, Camberley, Surrey, GU15 3EY