

### FAST ROPE DESCENDERS USER INSTRUCTIONS

Innovators in the field of rope technology, Marlow Ropes Ltd designed and developed the original Fast Rope in conjunction with the British Special Forces. These ropes are now in use by traditional Special Forces and SWAT teams across the globe.

Marlow have launched the Fast Rope Descenders (FRR)\* to aid the rapid insertion of units. This innovative British-made device is the only recognised device to be used with Marlow Ropes' 40mm and 32mm Fast Rope. Benefits include:

- Quick and easy installation
- Ideal for the insertion of non-Fast Rope qualified personnel such as Medics, Interpreters, Guides, Bomb Disposal specialists as well as for descending with dogs.
- Available with various fitting options to help with the deployment of equipment considered too heavy for insertion in normal Fast Roping conditions.



Machine readable UID in accordance with Stanag



### **DETAILED SPECIFICATIONS**

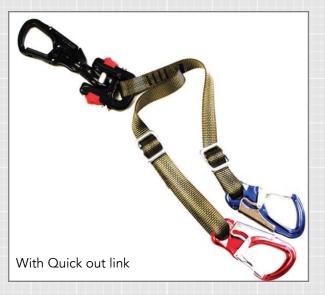
The Marlow Fast Rope Descender is available to order in two versions with both supplied in protective pouch:

#### Lanyard with Quick Out detachment device (40mm version)

- Personal leg adjustable from 550mm to 650mm with blue 2-way CE Certified 33kN locking snap-hook Karabiner.
- Cargo leg adjustable from 650mm to 850mm with red 2-way CE Certified 33kN locking snap-hook Karabiner.
- 2-way CE Certified 27kN locking swivel snap-hook for attachment for Fast Rope Rack.
- Optional 20kN quick-out detachment device which can also be used when the system is under load.

### FAA126: Standard Lanyard (40mm version)

- Personal leg adjustable from 550mm to 650mm with blue 2-way CE Certified 33kN locking snap-hook Karabiner.
- Cargo leg adjustable from 650mm to 850mm with red 2-way CE Certified 33kN locking snap-hook Karabiner.



#### Material

Type 316 Stainless steel

#### Coating

Black Oxide coating for corrosion resistance and elimination of light reflection

#### Weights

40mm:

Complete – including Lanyards but without quick-out: 1600g <sup>-</sup> Complete – including Lanyards and quick-out: 1830g FRR without lanyards or quick-out: 980g

#### 32mm:

Complete – including Lanyards but without quick-out: 1480g Complete – including Lanyards and quick-out: 1720g FRR without lanyards or quick-out: 870g



**Dimensions (of the rack, excluding lanyards)** 40mm: 330mm H x 105mm W x 45mm D 32mm: 300mm H x 90 mm W x 45mm D

Working Load Limit 250kg

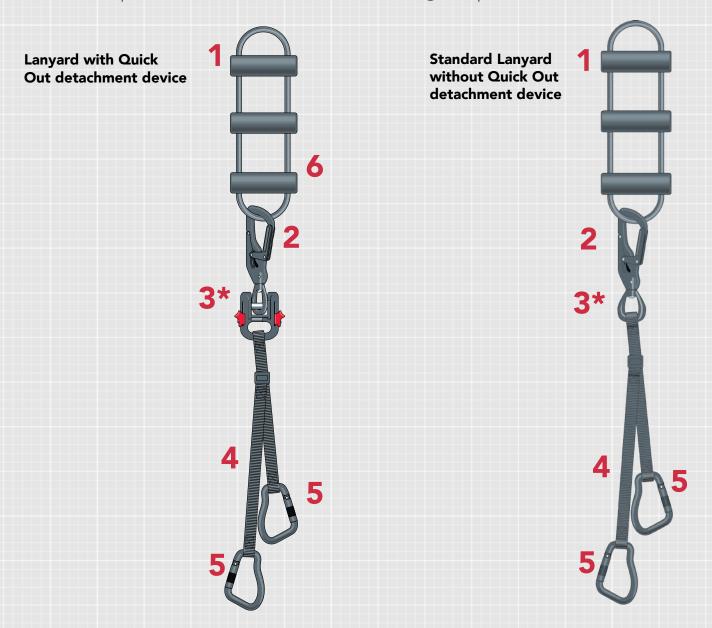
#### Recommended working temperature range

-30 to +50 degrees

- Manufactured In the UK
- Serial numbered with full traceability
- Rack Descender shelf life: 10 years
- Lanyards shelf life: 10 years
- Service life: subject to conditions and inspection
- Maximum life from date of manufacture: 10 years

# **SYSTEM COMPONENTS**

The Fast Rope Descenders consist of the following components:



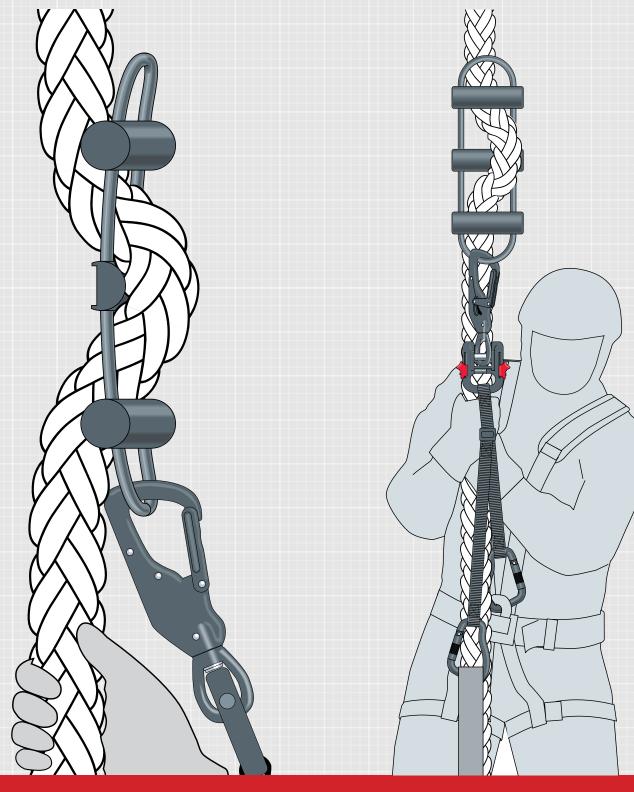
- **1** Rack/Descenders: Stainless steel construction with hard-wearing black oxide finish. Symmetrical design that will operate in either orientation.
- 2 Swivel snap hook: 27kN
- 3 \*Optional quick out link
- 4 0.4m webbing slings 22kN. One sling for the operator and one for additional equipment
- 5 Karabiners
- 6 Serial number information & machine readable UID in accordance with Stanag

All parts should be inspected for damage and correct operation prior to use. If in doubt, do not use. 250kg maximum load.

### **OPERATION INSTRUCTIONS**

In normal operations the Fast Rope Descenders would be used to deploy a specialist operator or additional equipment after the normal fast roping deployment. To facilitate a rapid change from normal operations to descend on the Fast Rope Desender it can be pre-installed on the rope.

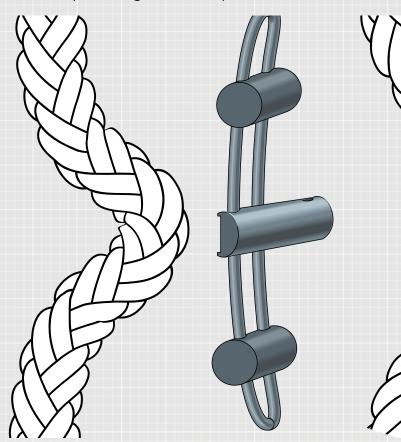
The Descender should be positioned as high as possible on the rope to allow normal fast roping operations. If required, the Desender can be secured with a sling attached to the upper attachment loop.

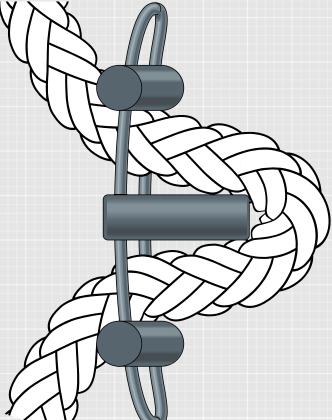


### **INSTALLATION OF RACK ONTO ROPE**

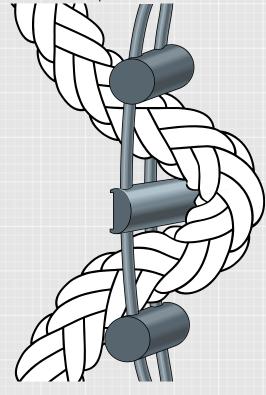
Push loop through centre space of rack

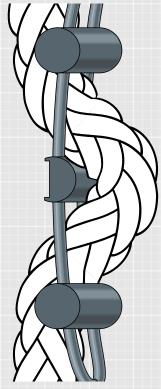
Close middle bar under the loop of rope





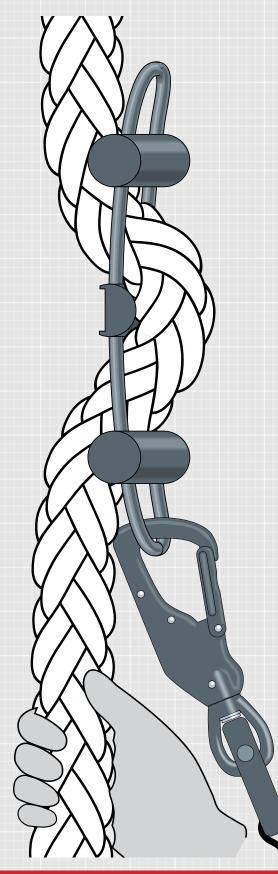
The rope should be positioned on the rounded side of the middle bar and tension on the ropes should close the bar. Verify that the green marking is visible to ensure curved orientation of rope.

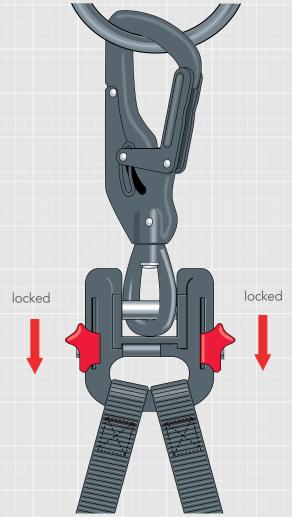




### **CONNECTION TO THE RACK**

Before deployment the operator and load can be pre-connected to the webbing slings. If you have a system with the Quick Out link, ensure that the red locking tabs are in their lower/locked position.





Connecting the Quick Out Link:

**1.** Slide open the security sleeves.

**2.** Lay the karabiner insert on the bearings in such a way that the red marker points on the housing and the insert are aligned with one another.

3. Press down the insert until you hear it click into place.

**4.** Slide the security sleeves all the way down in the direction of the release buttons.

**5.** Release check: The heads of both buttons have to be positioned above the security sleeves. After securing the release buttons, both security sleeves must be placed level with one another. If the release has not properly snapped into place, then the right-hand security sleeve cannot be slipped all the way down.

# DESCENT

With the operator and cargo attached to the Descender, deployment can commence:

- **1.** Hold the rope with both hands below the Descender
- **2.** Swing out of the aircraft so that the weight is held onto the Descender
- **3.** To descend, push the rope away from the body
- **4.** To slow the descent, pull the rope towards the body

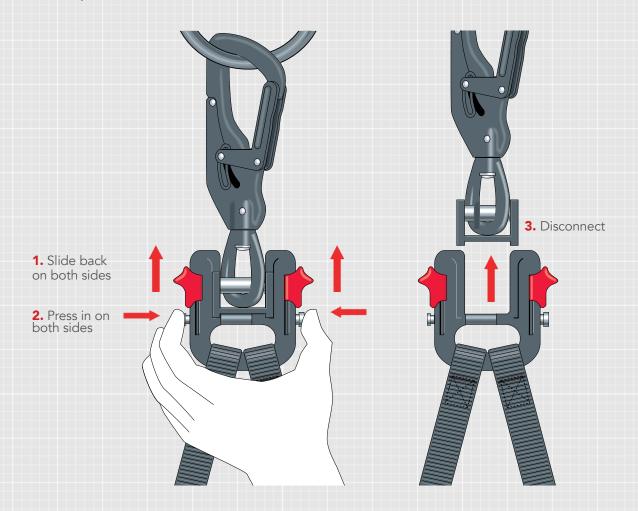
The mass of the rope below the user will influence the speed of descent and may require the user to push the rope out more. The descent can be slowed by an operator on the ground pulling on the rope.

Maximum weight load: 250kg



### **RELEASE (WITH QUICK OUT LINK)**

The optional Quick Out Link positioned between the swivel and the slings allows the operator to rapidly disengage from the Fast Rope even if there is some tension still in the rope.



Releasing the Quick Out Link:

**1.** Slide back both security sleeves. When dangerous situations demand a fast release of the Quick-Out, it is recommended that the security sleeves are slid back in advance.

**2.** Open the Quick-Out by simultaneously and completely pressing down on both release buttons.

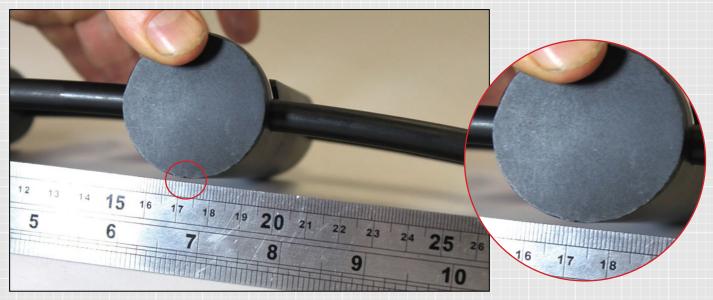
Operating test: The Quick-Out karabiner must be held vertically. When both release buttons are pressed simultaneously, the insert must fall out of the housing simply due to their own weight.

### **INSPECTION** For 40mm versions only

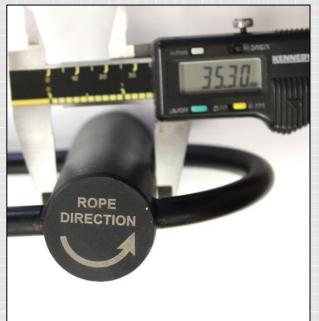
Before and after use, the Fast Rope Descender should be inspected for damage, excessive wear and distortion. Visually inspect the bar and welds for signs of damage or cracking - retire if any damage is observed.

Note, it is normal that the black oxide coating will wear with use and show through the stainless steel surface, this is not cause to retire.

Place the Descender on a flat surface as shown below, with the moving bar positioned in the centre there should be between 0 and 5mm between the bar and the surface the Desender is on. If the gap is not in this range then the Fast Rope Descender has been distorted in use and should be retired.



Measure the diameter of the top and bottom bar at 90 degrees difference as shown in the pictures below. If the difference between these measurements is greater than 1mm then the bar has been worn excessively and the Fast Rope Descender should be retired.







For further information and a demonstration on how to operate the Fast Rope Descender, find Marlow Ropes at www.youtube.com

### www.marlowropes.com



Marlow Ropes Ltd

**Ropemaker Park** Hailsham East Sussex, BN27 3GU England

Marlow Ropes, Inc. Cordage Business Park Plymouth MA 02360 USA

www.marlowropes.com UK: +44 (0) 1323 444 444 sales@marlowropes.com US: +1 508 830 444 salesusa@marlowropes.com A member of





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