



USER INSTRUCTION MANUAL

KERNMANTLE ROPES

THESE INSTRUCTIONS APPLY TO THE FOLLOWING MODEL:
AFX200010, AFX200010.5, AFX200011 and AFX200012

CE 0598

EN 1891:1998 Type A

Please read and understand the manufacturer's instructions for each component or part of the complete system. Manufacturer's instructions must be followed for proper use, care, and maintenance of this product. These instructions must be retained and be kept available for the user's reference at all times. Alterations or misuse of this product, or failure to follow instructions, may result in serious injury or death.

Note: The user is advised to keep this user instructions document for the life of the product.

- 1. GENERAL INSTRUCTIONS:** It is mandatory to provide this manufacturer's instruction to the user of this product. The Kernmantle Ropes AFX200010, AFX200010.5, AFX200011 and AFX200012 have been shown to comply with the European PPE Regulation (EU) 2016/425 through the Harmonized European Standard EN 1891:1998 Type A.
- 2. INTENDED USE AND THE PURPOSE OF THE EQUIPMENT:** These ropes are designed to be used in rope access, rescue and in speleology. These ropes also can be used in combination with other equipment in ascending, descending and with safety devices for work positioning in rope access; lowering or raising casualties in rescue; horizontal motion in speleology.

This PPE is intended to provide protection from possible falls from height during work at height or all kind of height related works when used in combination with appropriate Fall arrest systems.

The rope line keeps user all time connected through appropriate Fall arrest systems and provides protection during ascent and descent (rope access related activities permissible under the harmonised standards.)

- 3. PERFORMANCE RESULT:** These ropes have been tested in accordance with EN 1891:1998 Type A and have achieved the following performance levels, as tested by- **AUVA, n°511, Vienna (Austria) for AFX200010 and APAVE, France (Notified Body 0082) for rest:**

Test Parameter	AFX200010	AFX200010.5	AFX200011	AFX200012
Diameter	10.1mm	10.60mm	11mm	12mm
Knotability	1.00	1.14	1.14	1.18
Sheath Slippage	0.4%	0.3%	1.0%	1.0%
Elongation	4.9%	2.9%	2.5%	2.3%
Shrinkage	0.5%	2.5%	2.0%	1.9%
Mass per unit length	73g/m	73g/m	77g/m	92g/m
Mass of the Sheath	38.90%	42.10%	39.90%	33.40%
Mass of the Core	61.10%	57.90%	60.10%	66.60%
Fall Arrest Peak Force	5.5kN	5.3kN	5.54kN	5.58kN
Dynamic Performance	N=5	N≥5	N≥5	N≥5
Static Strength (w/o termination)	28.6kN	30.3kN	32.4kN	40.3kN
Static Strength (with termination, during 3 min)	15kN	15kN	15kN	15kN

TECHNICAL SPECIFICATIONS				
Material Used	AFX200010	AFX200010.5	AFX200011	AFX200012
1. Core	Nylon	Nylon	Nylon	Nylon
2. Sheath	Nylon	Nylon	Nylon	Nylon
3. Tracer	Polyester	Polyester	Polyester	Polyester
Construction	AFX200010	AFX200010.5	AFX200011	AFX200012
1. No. of Cables in Core	10	11	12	16
2. No. of Carriers in Sheath	32	56	56	56
3. No. of Spindles/Carriers machine	32	32	32	32

4. PROPER METHOD OF USE :

Type A Ropes: Low stretch kernmantle ropes designed for general use by persons in rope access including all kinds of work positioning and restrain; in rescue and in speleology.

Type B Ropes: Low stretch kernmantle ropes of a lower performance than type A ropes, requiring greater care in use. B type ropes are intended for descending or lowering in case of rescue using appropriate descender, conforming to EN 341. B type ropes are not recommended for use in rope access and work positioning.

5. LIMITATIONS OF USE :

- The rope shall be used only by a trained or competent person or the user should be under direct supervision of such a person.
- User must ensure compatibility of any components intended to be used in conjunction with kernmantle ropes for suitability with the diameter of rope and other relevant standards applicable.
- Attachment of other components of the fall arrest system should be done at the correct attachment element of the kernmantle rope.
- User must ensure that the system in use incorporates a reliable anchorage point above the user.
- User should avoid any slack between kernmantle rope and the reliable anchorage point.
- Cut length of the equipment should be marked as described in marking section.
- Termination at both ends of the rope may be form by making figure of eight knot as shown in adjacent picture.
- Equipment used for climbing rope access, rescue shall take in to account requirements of EN 892.



Note: If type B ropes are chosen, users should be aware that the level of performance will be less than that of type A; that greater care will be required in protecting against the effects of abrasion, cuts, general wear and tear etc., and that in use great care should be taken to minimize the possibility of a fall.

5. WARNINGS:

- It is essential to verify that the medical condition of the user is fit to use the equipment in normal & emergency use.
- Manufacturer does not allow any alteration or misuse of the equipment without prior written consent.
- Equipment must not be used for any purpose other than for which it is intended.
- Do not use chemicals or disinfectants on rope which may deteriorate the strength.
- Do not expose equipment to extreme temperatures.
- Do not use ropes over sharp edges and other abrasive surfaces.
- Do not use ropes around moving machinery or electrical hazards.
- Do not use equipment for use with combination of items of equipment in which the safe function of any one of them is affected by or interferes with the safe function of another.
- Equipment should be the personal property of its user.
- It is essential for the safety of the user that equipment is withdrawn from use immediately should:-
 - Any doubt arise about equipment's condition for safe use.
 - If equipment has been used to arrest a fall.
- Equipment is not used again until confirmed in writing by a competent person that equipment is acceptable for reuse.
- User of the equipment must verify the requirements of the anchor device or anchor points chosen for minimum required strength, suitability & position. User must refer to anchorage requirements given under section "anchorage requirements".
- Only a full body harness complying to EN 361:2002 shall be used as a body holding device within the fall arrest system. It is advisable to use the dorsal attachment D Ring of the harness for connection to the equipment.
- If product is resold outside the original country of destination then reseller must provide instructions for use, maintenance, periodic examination in language of the country to which product is being resold.

6. PROCEDURE FOR CLEANING, MAINTENANCE AND STORAGE:

a. Cleaning Procedure: Use wet cotton cloth to clean the dirt and loose grime particles from the surface after 30-40 uses. Use natural drying environment.

b. Storage Procedure: User must ensure that ropes are placed in bags and suitably packed to avoid any contact from sharp edges or abrasive surfaces during transportation. Storage of the equipment should be done in the areas away from the heat, light, chemicals, oils or excessive moisture. Store rope in a bag after use or preferably in manufacturer's packing.

c. Maintenance Procedure: Maintenance and repairing should be done only by the manufacturer or the representative of the manufacturer who has been duly trained by the manufacturer.

7. TRANSPORTATION: Ensure that during transportation, the product is preferably packed in manufacturer's original packing or in a sealed polybag & if possible transport in Hard Case which will protect the damage/breakage of the rope during transportation.

8. PERIODIC EXAMINATION RECORD:

- The equipment needs to be periodically examined because the safety of the user depends upon the continued efficiency & durability of the equipment.
- It is important to examine it at least once every year.
- Periodic examination is to be conducted by a competent person and strictly in accordance with the manufacturer's periodic examination procedures.
- Periodic examination also requires checking the legibility of the product markings.

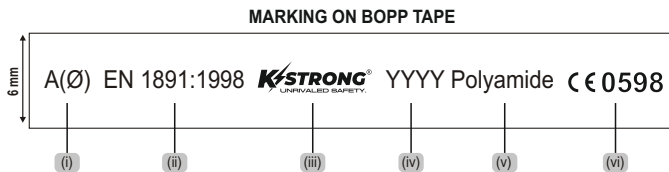
12. **RESCUE PLAN:** Before using the product, it is important to have a rescue plan in place to rescue the user once a fall occurs. It is important that rescue team is well trained and equipped to carry out rescue.
13. **MAXIMUM FREE FALL DISTANCE PERMITTED:** It is to be ensured that maximum free fall distance in the personal fall arrest system is not more than 6 feet in any case.
14. **MARKING ON ROPE :** Kernmantle ropes are marked externally at both ends using a Tape not having a harmful effect on the rope material. The letter A signifies rope type that is suitable for use by persons in rope access including all kinds of work positioning and restraint, rescue & speleology. The letter is followed by the diameter of the rope in mm.
 - (i) Trademark of manufacturer i.e. KStrong
 - (ii) Pictogram to indicate the necessity for users to read the instruction for use.
 - (iii) Conforming to the European PPE Regulation (EU) 2016/425 & ongoing assessment body.
 - (iv) Model No. & Type
 - (v) Rope Type A which signifies that the rope is suitable for use by persons in rope access including all kinds of work positioning and restraint, rescue & speleology.
 - (vi) Rope Dia
 - (vii) Length of Rope i.e. 10, 50, 100, XX...N m
 - (viii) Month & Year of Manufacturing
 - (ix) UID for Traceability
 - (x) Manufacturer's name and address
 - (xi) Material of Rope i.e. Polyamide
 - (xii) Number & Year of the European Standard



➔ **Marking on BOPP Tape:** Every rope is provided with a BOPP band running through entire length of rope and having following markings repeated every 2000mm.

Cut length of the equipment should be marked as described in marking section.

- (i) Type of rope- A (Ø) where Ø is the diameter of the equipment.
- (ii) The number of the standard EN1891:1998.
- (iii) Trademark of the manufacturer i.e. KStrong
- (iv) Year of manufacture in YYYY format
- (v) Material of the equipment.
- (vi) Ongoing Assessment Body and conforming to the European PPE Regulation (EU) 2016/425.



15. HOW TO DISPOSE OF A KERNMANTLE ROPE:

In case of any cut or tear on the rope, or being no longer usable, please dispose it immediately and arrange to send it for recycling or disposal (as appropriate) through authorized agencies as per local or national law.

Certification Body for AFX200010:

Allgemeine Unfallversicherungsanstalt (AUVA), n°0511, Adalbert-Stifter-Straße 65 1200 Wien (AUSTRIA)

Certification Body for rest of ropes:

APAVE SUDEUROPE SAS-B.P. 3-33370 ARTIGUES-PRES-BORDEAUX France
(Notified Body 0082)

Ongoing Assessment Body:

SGS Fimko Oy, Takomotie 8, FI-00380 Helsinki, Finland (Notified Body 0598)

For EU Declaration, please visit <https://kstrong.com/asia/eu-declaration-form/>



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