Semi-static Rope/Low Stretch Kernmantle Rope Information And Guidlines

Xmonster
ABSOLUTE RELIABILITY

Warning

Activities involving the use of equipment are inherently dangerous and can lead to severe injury or even death. You must be responsible for your actions and decisions.
Proper training and practice are essential before use.
You must read and understand this instruction before use. If you have any doubt or difficulty in understanding this instruction. Please contact Xmonster.
Web: www.xmonstersafety.com Email: info@xmonstersafety.com.

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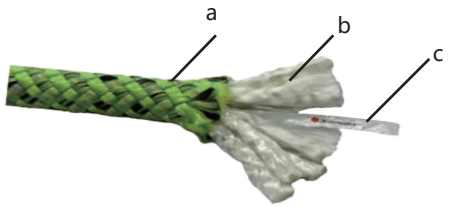
Product: Low stretch kernmantle rope/ semi-static rope (General Instruction)

Type and use: This product is designed to be used in personal protective equipment (PPE) for fall protection systems. For rope access, positioning, protection and rescue operation in sports and industrial environments.

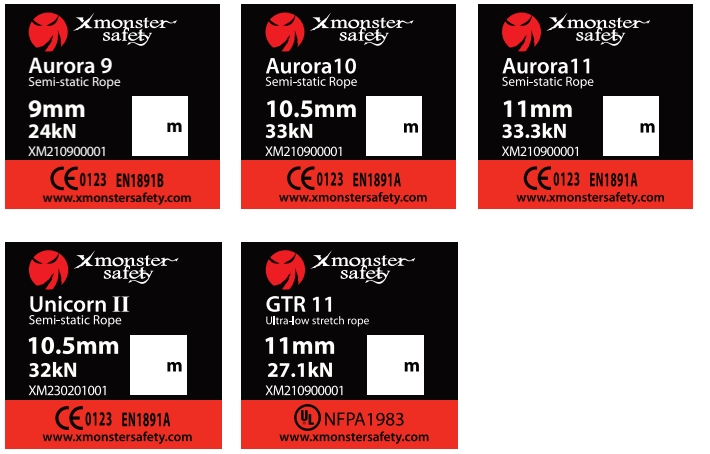
Warning: semi-static rope must not be used in a high fall factor environment such as lead climbing.

1. Nomenclature:

a: sheath, b: core, c: identification tape,



2. Marking:



3. Specification:

Model/name	Aurora 9	Aurora 10	Aurora 11	Unicorn II	GTR 11
Standard	EN1891B	EN1891A	EN1891A	EN1891A	NFPA1983
Type	Semi-static rope	Semi-static rope	Semi-static rope	Semi-static rope	Ultra-low stretch rope
Diameter	9mm	10.5mm	11mm	10.5mm	11mm
Weight per meter	60g	74g	78g	77g	96g
Mass of the outer sheath	49%	35%	39%	45%	38%
Min. breaking strength, free length	24kN	33kN	33.3kN	32kN	27.1kN
Figure 8 knot breaking strength	13.5kN	16.5kN	19kN	20kN	＞18kN
Sewn termination breaking strength	≥15kN	≥22kN	≥22kN	≥22kN	≥22kN
Number of falls (FF1)	5	6	16	15	--
Impact force (FF0.3)	5.0kN(±0.7)	5.0kN(±0.7)	5.0kN(±0.9)	5.6kN(±0.3)	--
Elongation@1.35kN @2.7kN @4.4kN	--	--	--	--	1.3% 2.0% 3.3%
Elongation(50/150kg)	2.9%	3.0%	2.8%	2.1%	--
Knotability	0.8	0.8	0.8	0.8	--
Sheath slippage	0%	0%	-0.3%	0%	--
Shrinkage	1.1%	2.0%	2.4%	0.2%	--
Material (sheath/core)	Sheath/Nylon Core/Nylon	Sheath/Nylon Core/Nylon	Sheath/Nylon Core/Nylon	Sheath/Polyester Core/Nylon	Sheath/Polyester Core/Polyester

The melting point of Nylon is about 230℃, The melting point of polyester is about 260℃ and carbonization point of aramid is about 450℃.

Notice: for the rope models with reflective strips, the reflective strips are more easily to be damaged by the high temperature caused by descent.

4. Use:

--The new ropes need to be recoiled before use to avoid entanglement during use.
--It is recommended to use water to soak the new rope (nylon semi-static rope) for 24 hours to eliminate the lubricant and shrink the rope. After soaking, do not use heat sources to dry the rope. The length of the rope will be shortened.
--Before using the rope, confirm that the equipment is compatible with the type and diameter of the rope. Check the instructions of the equipment used with the rope and conduct corresponding training.
--Use common knots for rope operations, such as figure 8 knot, which must be tightened after the knots are tied.

5. Notice:

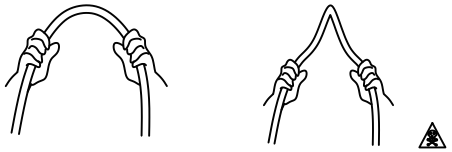
--The rope will shorten with the use of time, check the length of the rope frequently, or reserve ample length of the rope.
--Ice, snow, and wet environments will cause the rope's abrasion resistance to decrease and reduce the rope's friction.

--The friction of the new rope will be lower, pay attention to control the brake hand of rope.
--Use rope protection device when using ropes on sharp edges or rough surfaces.
--The friction between the ropes will cause high temperature to damage the rope sheath, or even cut the rope.
--The tail of the rope needs to be knotted to prevent accidental releasing during operation.
--High-speed descent will cause high temperature, which will wear out the rope faster.
--After cutting the rope, the length of the rope needs to be remarked on the end of the rope. To cut the rope, heat the rope end to prevent the rope end fiber from dispersing.

6. Information related to working at height

--Working at height must comply with relevant standards and regulations of your country or region.
--In the fall arrest system, the user must take measures to limit the impact force, and the maximum impact force must not exceed 6kN.
--A harness is the only device allowable for supporting the body.
--Make sure there's enough clearance in fall arrest system.
--Suspension in the harness unconsciously can result in serious injury or even death.
--There must be at least two persons who are working at height.
--In a safety system, the strength of the system is based on the lowest strength part of the entire system.
--Risk assessment is necessary before work, and take corresponding safety measures. You must make a rescue plan and be able to implement it rapidly in case of danger.

7. Inspection and retirement



This product is a consumable. Any misuse or operation accident may cause damage to the product, even when the product is used for the first time. The replacement of the product depends on the method, frequency and environment (bad environment, rough surface, chemical contact, high temperature, long-term UV exposure, etc.) of using the product.
Before and after use, check whether the sheath , core and sewn termination are seriously worn, cut, unstitched, melted and discolored. If yes, do not use the product.
It is suggested that a comprehensive inspection should be carried out every 12 months. During each inspection, record the product information, inspection results and comments, inspector's signature and date.

When to retire the device :
--Use history+ storage time more than 10 years.
--It fails to pass PPE inspection.
--You don't know the product's full usage history. You have any doubt about the reliability of the equipment.
--It has been subjected to a massive load, fall or accident.
--The marking on the equipment is not legible.
--Changes in regulations or standards.

8. Storage and maintenance

The product needs to be stored in a clean, dry, room temperature, and dark environment. Don't contact with sharp objects, chemicals, heat sources and other environments that may damage the product. It is recommended to use a rope bag or mat to store the rope.
Use clean water below 30℃, a neutral laundry detergent and a soft brush to clean it, and rinse it with clean water and dry it in a cool place.
Notice: the rope cannot be stored in a car exposed to direct sunlight for a long time.
Warning: Any unauthorized modification, replacement of parts or repairs to the product is not allowed. Repairs can only be carried out in the X Monster's manufacturer.

9.Limited warranty

Xmonster provides a 3 years warranty against any material or manufacturing defects.

Exclusions: normal wear and tear, deformation, oxidation, modifications or alterations, miscues, incorrect storage, poor maintenance, uses for which this product is not designed.

Xmonster is not responsible for any direct or indirect non-quality induced consequences.



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