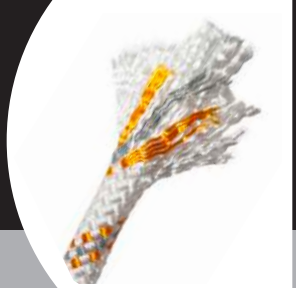
heightec®
with respect to gravity...™

Tectra
Low stretch rope



CE 0408
EN1891: 1998 Type A

Manufactured by;
The heightec Group Ltd, Kendal, Cumbria LA9 6NH, UK

Type approval & Ongoing Assessment;
TUV Austria Services GMBH, Deutschstasse 10, A-1230 Vienna

Declaration of Conformity available at heightec.com
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USER INSTRUCTIONS

heightec.com

WARNING
This product may be utilized only by persons trained in its safe use and having the relevant knowledge and skills, or under the direct supervision of such persons. Whenever possible, the equipment should be provided personally to the user. It may be used only within the specified limited scope of use and for the defined purpose.
Prior to using this product, read this document thoroughly, make sure you understand the User Instructions, and keep them with the product, together with the Inspection Sheet! Keep instructions for future reference. In addition, check national safety regulations regarding personal protective equipment (PPE) use for local requirements.
If the system is sold or passed on to another user, the User Instructions must accompany the equipment. If the system is transferred to another country, it is the responsibility of the seller/ previous user to ensure that User Instructions are in the correct language for that country.
HEIGHTEC is not responsible for any direct, indirect, or incidental consequences/damage occurring during or after the use of the product and resulting from any improper use, especially caused by incorrect assembly of the equipment.

EXPLANATION OF THE MARKING
Product name
A xxx Type, diameter in mm, (example: A 10.5 = Type A rope, 10.5 mm diameter)
EN 1891:1998 Standard for low stretch kernmantel ropes
Ser. No.: Year of manufacture, - serial number
CE 0408 CE confirms that the basic requirements of 89/686/EEC (personal protection equipment) are complied with. The number identifies the inspection institute (0408 for TÜV Austria Services GmbH, Krugerstrasse 16, A-1015 Vienna).
heightec® Manufacturer
Information that the User Instructions have to be read.
The European standard symbols for washing and care instructions of textiles are used.
Sections of the low stretch kernmantel ropes must be marked at both ends with outer strips stating: Type (A or B), diameter in mm, number of the standard (EN 1891).

WARNING
The use of our products can be dangerous. Our products may only be used for their intended purpose. They must particularly not be used for lifting as specified in EU directive 2006/42/EC. The customer is responsible that the user has been trained in the safe use of the product and in accompanying safety precautions. Be aware of the fact that the product can cause damage if wrongly used, stored, cleaned or overloaded. Check national safety regulations, industry recommendations and standards for local requirements.

USE / LIMITATIONS OF USE
USE
Ropes to EN 1891 are for use in systems to EN 341 (descender devices), EN 358 (positioning systems) or EN 363 (fall arrest systems), i.e. for various types of rope-assisted work.
Please bear in mind that new, unused ropes may have a very smooth and even slippery surface. When using them in combination with devices, be sure to observe the respective manufacturer's information for the device.
IMPORTANT! High friction of the rope on a metal part (e.g. in excessively fast abseiling procedures) or of the rope on a rope or other textile material may cause overheating, damage to, and even rupturing of the rope.
End connections for Tectra 10.5 mm and Tectra 11 mm are supplied by us sewn or attached by means of figure of eight knots, all further ropes attached by means of figure of eight knots. If you wish to make the end connections yourself, we recommend the use of figure of eight knots.
A sufficiently long rope end (10cm min.) must remain after the knot.
For free climbing, mountaineering or in caving, different standards such as EN 892 "dynamic mountaineering ropes" must be considered.
The system must include a reliable anchoring point (in accordance with EN 795) above the user. The low stretch kernmantel rope should not be allowed to sag between the user and the reliable anchoring point.

Type A and B ropes:
The performance requirements of Type B ropes are lower than those for Type A ropes. Accordingly, when using Type B ropes, greater care is required for protection against the effects of friction, cuts, general wear and tear etc. Consequently, the possibility of a fall must be minimised by applying maximum caution. Type A ropes are more suitable for rope-assisted work or working place positioning than Type B ropes.

LIMITATIONS OF USE
Do not carry out any rope-assisted work if your physical condition means that your safety could be at risk during normal use or in an emergency.
Any changes or additions to ropes to EN 1891 are forbidden and may only be made by the manufacturer. The breaking load of ropes / ropes with terminations is specified for tension applied in the ropes' longitudinal direction. Therefore, never subject end loops, for example, to transverse loads (2 karabiners in one loop). Check which load in the selected configuration acts on the rope and make sure that you do not overload it. We recommend a safety factor ≥ 7.

SECURITY / TRANSPORT, STORAGE & CLEANING

BEFORE USING, PLEASE NOTE
The rope must be inspected visually before use to check completeness, usable condition and proper operation. If the equipment has been affected by a fall, it must be withdrawn from use immediately. Even if you have only the slightest doubt, the product must be withdrawn and may only be used again once an expert has authorised the use in writing following an inspection.
Knots in the rope reduce the breaking load.
Do not use ropes whose previous usage history is unknown to you.

The user must ensure that the recommendations for use with other elements are complied with. All other elements of the arrester system must be certified and correspond with the relevant standards for PSA such as descender devices EN 341, positioning systems EN 358 or fall arrest systems EN 363.
Adjustment devices on descender devices must be adjusted to the diameter of the rope.
Metal components must not include any burrs or sharp edges that might cause damage to the rope.

You put yourself at risk by combining equipment parts that impair the safe operation of any part of the equipment or of the assembled equipment.
Before use, a plan for rescue measures must be prepared to take account of all possible emergencies. Before and during use, you must consider how the rescue measures can be carried out safely and effectively.

TRANSPORT, STORAGE & CLEANING
Low stretch ropes are made of polyamide fibres. Consequently, they should not be exposed to heat exceeding 100°C. If you notice reactions such as discolouring or hardening, the product must be withdrawn for safety reasons. The rope can shrink by up to 7% if exposed to humidity. Accordingly, the rope should always be protected against dirt and placed in appropriate packaging (rope bag) during transport.
Place the rope in the bag loosely and do not roll it up so as to avoid twisting.

Storage conditions:
- dry and clean
- at room temperature (15 – 25°C),
- protected against the light (UV radiation, welding equipment, ...),
- away from chemicals (liquids, vapours, gases, ...) and other aggressive conditions,
- protected against sharp-edged object.

A light-proof rope bag provides good protection.

To clean the rope, rinse it with lukewarm water and wipe with a damp cloth. The damp rope must be dried before storage. The rope should be left to dry naturally and not close to a fire or other sources of heat.
You put yourself at risk by not complying with these conditions.

REGULAR CHECKS
The equipment must be inspected regularly without fail: your safety depends on the effectiveness and durability of the equipment.
After every use, check the rope for possible damage. Inspect the rope visually from all sides. Feel along a seemingly intact rope (tactile check) in order to detect any hidden core damage that might have been caused by frequent bending or local overloading. If there is visible damage to the sheathing, the rope must not be used under any circumstances. If the rope shows swellings, discolouring or other unusual changes, we recommend withdrawing the rope.
Check the rope end sewing for worn or torn sewing thread.
After every use, the equipment should be checked for abrasion and cuts.
Systems that have been damaged or affected by a fall must be withdrawn from use immediately.
If there is the slightest doubt, the product must be withdrawn or inspected by an expert.

In addition, if the equipment is used in worker safety in accordance with the EN 365, it must be inspected by the manufacturer or an expert complying precisely with the instructions, and replaced if necessary at least every 12 months. Records must be kept of this inspection (documentation
of the equipment, see enclosed inspection sheet).
This inspection must comprise:
- Inspection of the general condition: age, completeness, dirt, correct composition.
- Inspection of the labels: Present? Legible? CE marking present? Year of production visible?
- Inspection of the individual parts for mechanical damage such as cuts, cracks, notches, abrasion, deformation, ribbing, curling, squashing.
- Inspection of all individual parts for damage caused by heat or chemicals, such as fusion or hardening.
- Inspection of the metal parts for corrosion and deformation.
- Inspection of the completeness of the end connections, seams, knots.

Here, too, if there is the slightest doubt, the product must be withdrawn or inspected by an expert.

MAINTENANCE / SERVICE LIFE
MAINTENANCE
Only the manufacturer is permitted to carry out repairs.
SERVICE LIFE
Only if the rope is rarely used (one week a year) and stored correctly (see the section on transport, storage and cleaning) can its useful life (for products made in 2006 and after) be up to 10 years from date of manufacture. Actual useful life depends solely on the condition of the product which is influenced by various factors (see below). The lifespan could be as short as first use under extreme conditions, or even less if damaged (e.g. in transit) prior to first use.
Mechanical wear or other influences such as the effects of sunlight seriously reduce useful life.
Bleached or rubbed fibres / belt straps, discolouring and hardening are a sure sign that the product should be withdrawn from use.
We expressly refrain from making any general statements about the useful life of the product, since it depends on a variety of factors such as UV light, the type and frequency of use, treatment, the effects of weathering such as snow, the environment such as salt, sand, battery acid, and many more factors.
In general, if for whatever reason, no matter how insignificant, the user is not certain that the product satisfies the requirements, it must be withdrawn from use and inspected by an expert.
Any product that shows signs of wear should be withdrawn.

The product must be replaced without fail after a fall!

Rope Journal

Product:
Model/Type:
Manufacture Date:

ID Number:
PO/Certificate No:
Purchase Date:
First Use Date:

Date	Observations / Comments	Actions	Inspector	Next Due

1 - Personal issue and traceability:
If this product is classed as personal protective equipment it should be individually issued to the person who will be using it. The product should remain traceable to the original certificate of conformity and a permanent record should be kept of its use. This user instruction forms part of the permanent product record. All users must receive and read a copy of these instructions and should understand what the instructions mean and be familiar with them, including, but not limited to function, suitability, compatibility of the product and inspection for defects arising from damage. A copy of this user instruction should be kept with the equipment, and referred to before and after each use. In the event of a rescue, these instructions should be provided to the rescuer.
2a - Anchor Points:
The anchor device or anchor point used should be of sufficient strength to sustain foreseeable loads in all permitted directions. Specific standards requirements:
EN: Anchor device should conform to EN795, with minimum static strength of 12kN. heightec recommend a higher strength of 15kN as specified in the IRATA ICOP and BS7985.
When more than one system is attached to an anchorage, these strengths should be multiplied by the number of systems. Anchorages should be positioned to minimise the potential for falls, and the distance and consequences of any potential fall, ideally above the user. Verify there is sufficient free space beneath the user to avoid collision with the ground or other obstacles and minimise sideways or pendulum falls. The connecting system instructions should give advice on clearance required, but a fall arrest energy absorber may extend by up to 1.75m.
2b - Further Requirements for Anchor Points in US (ANSI):
ANSI: (a) where certified, twice the maximum arrest force, or (b) where not certified 22.2kN (5,000lbf) for fall arrest, 13.3kN (3,000lbf) for work positioning, or 4.5kN (1,000lbf) for restraint. When designing, selecting, and certifying a fall arrest anchorage, the qualified person shall include the limitations on use of the system in fall protection procedures described in ANSI Z359.2. Design, selection and installation of certified fall arrest anchorages shall include determining a safe location where and how to connect those anchorages by taking into consideration the forces generated by arresting a fall, total existing and anticipated loading, load path, structural member strengths, connection and support strengths, stability, clearance requirements, swing fall, rescue deflection of the system, and impact on the structural members to which the fall arrest system is attached.
Anchorages selected for rescue systems shall have a strength capable of sustaining static loads, applied in the directions permitted by the rescue system of at least 3,100lbf for connection of rescue system only, or meet a Factor of Safety of 5:1 based on the static load placed on the system when the system is designed, installed and used under the supervision of a qualified person.

Persons engaged in rescue operations that are exposed to a fall hazard, must be provided an anchorage suitable for fall arrest in accordance with ANSI Z359.1.
Anchorage connectors shall not be attached to anchorages where such attachment would reduce the anchorage system strength below the applicable level set forth above or reduce the anchorage strength below the allowable level set by applicable structural codes. A suitable anchorage connector shall be used for rigging the connection of lanyards and lifelines to structural members. A lanyard shall not be connected back onto itself for use as an anchorage connector unless specifically designed for this purpose.
Anchorage connections shall be stabilised to prevent unwanted movement or disengagement of the rescue system from the anchorage. Verify system connections by pre-tensioning the system before applying the intended load.
Other components used in fall protection or work positioning systems must conform to the relevant standards, be compatible with each other and be used in accordance with their user instructions.
3a - Inspection and care:
The strength of this product may be affected by cuts, nicks, deep scratches, wear, abrasion, deformation, chemical contamination, UV degradation, exposure to flame, extreme termperatures and other factors. Keep this equipment away from such sources of damage. Use this product with caution near moving machinery, electrical hazards, sharp edges and abrasive surfaces.
This product must be inspected before and after use, and particularly after being used for rescue, to ensure the product is in a suitable condition and operates correctly. Written records should be kept of all inspections.
If there is any doubt about condition of the product, or it has been subjected to a fall or substantial shock load, withdraw it from use until confirmed to be safe, in writing, by a person deemed to be competent by The heightec Group.
No repairs of this product should be undertaken, any attempt to do so may invalidate it's compliance and/ or certification.
The safety of users depends upon the continued efficiency and durability of this equipment, which must subjected to detailed visual and tactile examination by a competent person* at intervals of no greater than 6 months for textiles or 12 months for metals, taking into account relevant legislation, equipment type, frequency of use and environmental conditions. These examinations should be carried out strictly in accordance with the manufacturer's periodic examination procedures. Detailed examinations should include confirmation of the legibility of product markings.

*A competent person may be defined as someone who "...has appropriate theoretical and practical knowledge and experience..."

The results of examinations should be recorded. Intermittent inspections of components which may be subject to excessive wear may also be appropriate. The results of these need not be recorded. It is recommended that this product is marked with the date of the next or last inspection. Contact your distributor for information on suitable inspection procedures.
3b - Inspection criteria:
Textile products or elements: check material and stitching for damage including cuts, nicks, abrasion, fraying, discolouration, heat or chemical damage etc. Ensure stoppers are present on ends of adjustment webbing.
Metal devices or components: check for damage, corrosion, excessive tightness, sharp edges, excessive play, deformation, cracking or anything that might affect strength. Check security and correct operation of any moving parts e.g. side plates, return action of springs, cams, operating handles, bearings. Check function of closure mechanisms, where present (e.g. screwlink thread, connector gates).
3c - Cleaning, maintenance and storage:
Wash textiles by hand with non-detergent soap at approx 25°C (cool). Rinse and dry naturally, away from direct sources of heat and sunlight. If necessary use a disinfectant compatible with polyamide and polyester. Use diluted and rinse thoroughly in clean water. Dry as previously stated. These cleaning procedures must be strictly adhered to.
Mechanical metal products with moving parts should be occasionally oiled, at bearings or pivot points, with excess oil removed. Store and transport in a dry, clean condition, away from sources of severe vibration, humidity, direct heat, sunlight and any physical or chemical contaminants.
4 - Lifespan:
Textile products or elements: maximum 10 year lifespan from date of manufacture, subject to competent use, maintenance and examination programme.
Metal products: indefinite lifespan, subject to competent use, care and examination programme. The lifespan of all products will be reduced by normal wear and tear, particularly when used in abrasive or corrosive environments. In extreme circumstances, the life of an item may be reduced to a single use.
5a - General usage:
Users should be suitably trained and competent to work in situations where a risk of falling may be present or under the direct supervision of such a person, fully trained in the use of this product and free of medical contra-indications for work at height or rescue. Do not use this product outside of its limitations or if you are unsure of any aspect of its use. No alterations or additions may be made to the product. The heightec Group do not take any responsibility for injury or accident of any kind arising from the use of this product.

INSPECTION RECORDS		ID Number:		
Product:		PO/ Certificate No.:		
Model/Type:		Purchase Date:		
Manufacture Date:		First Use Date:		
Date	Observations / Comments	Actions	Inspector	Next Due

It is essential a rescue plan is in place to deal with emergencies and in particular to consider treatment and recovery of a fallen or suspended person. Rescue equipment must be present and personnel should be competent in its use. Orthostatic intolerance can occur when a person is suspended motionless in a harness, and is potentially fatal. Ensure that the rescue of a suspended person is carried-out promptly.
Contamination with oils, lubricants, water or solvents may alter the performance of the product. For rope devices behaviour will vary according to the age, type, diameter and characteristics of the rope used.
5b - Care of rope during use:
Take any steps necessary to protect the rope from damage during use, including rope protectors, edge protectors, intermediate anchor points or deviations to avoid sharp or rough edges. Consider also the position of the rope below the user. Ensure rope cannot suffer from the effects of wind, or become trapped around obstacles.
6 - Guarantee:
This product is guaranteed for three years against faults arising from manufacturing errors or materials defects. This guarantee does not include normal wear and tear, faults arising from uses for which the product was not designed and accidental damage.
7 - Notes:
If this product is re-sold outside the original country of destination the reseller shall provide these instructions in the language of the country in which the product is to be used.

Markings:
The following markings may be present on the product:

CE mark - European Conformity.

Read these instructions before use.

For use with kernmantel ropes conforming to EN1891 type A

XX-YY - Diameter range of rope which this product may be used, in mm

Direction of use

Date of manufacture is marked on the product in the form: DAY MONTH YEAR, DDMMYY eg.120510.

The ID no. is unique to this item.
Do not remove or obscure the product labels or markings.
Unique ID should be read in conjunction with product code and batch number e.g. D01 120510 123