

tyed to be free

LONDON



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CLIMBERS, WORKERS AND ADRENALINE SPORTSMEN/SPORTSWOMEN,

RIGHT NOW, YOU ARE HOLDING A TENDON CATALOGUE IN YOUR HANDS WHICH IS FOUNDED ON ALMOST SEVENTY YEARS OF EXPERIENCE IN THE FIELD OF DEVELOPMENT OF ROPES. WE PRODUCE THEM UTILIZING THE STATE-OF-THE-ART PROCEDURES AT LANEX A.S. IN THE CZECH REPUBLIC.

WE CONTINUE WORKING ON OURSELVES, WHICH MAKES US A TECHNOLOGICAL LEADER ON THE MARKET WHO BRINGS YOU EVERY YEAR FUNCTIONAL INNOVATIONS AND TECHNOLOGIES TO MAKE MOVEMENT MORE EFFECTIVE, TO MAKE WORK EASIER AND TO PROVIDE FOR SAFETY. IN ADDITION TO OUR IN-HOUSE DEVELOPMENT TEAM, WE OPENLY PURSUE COOPERATION WITH UNIVERSITIES, RESEARCH INSTITUTES, CERTIFIED LABORATORIES AND LAST BUT NOT LEAST, WITH YOU, OUR CUSTOMERS.

tied to be free

TENDON

THANKS TO QUALITY AND HISTORY, WE HAVE BUILT A WORLDWIDE SALES NETWORK THAT WE ARE GOING TO ENLARGE AND IMPROVE INCESSANTLY. TIE UP YOUR FUTURE STEPS AT WORK AND IN YOUR LEISURE TIME WITH US.



TECHNOLOGY

LOWE

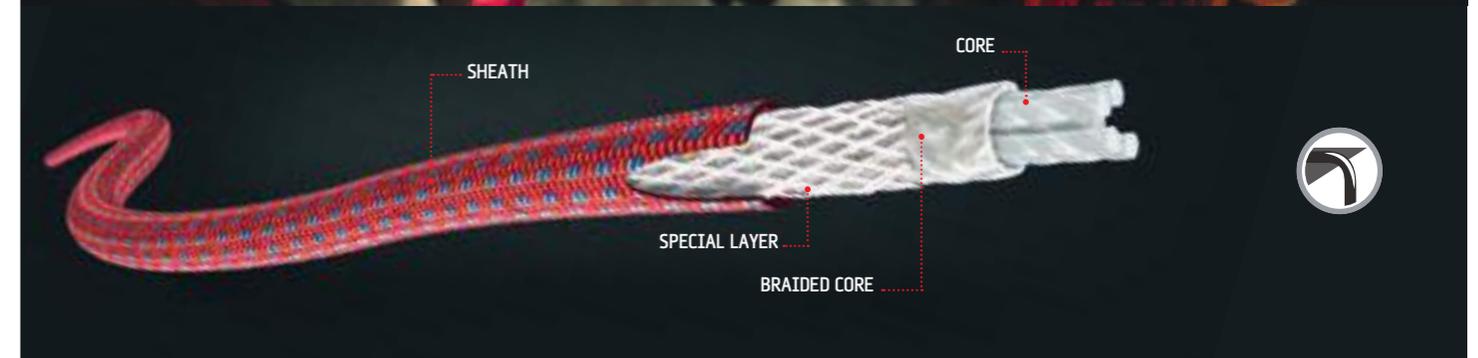
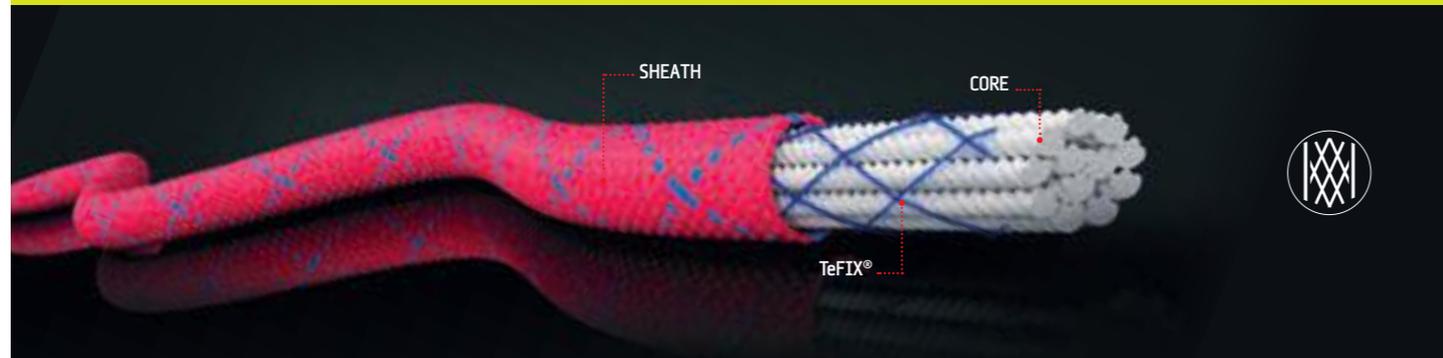
THANKS TO THE UNIQUE COMBINATION OF MATERIALS WHICH WORK TOGETHER JOINTLY AND MEET THE STRINGENT REQUIREMENTS OF THE EN 892 STANDARD, WE WERE ABLE TO REDUCE THE WEIGHT WHILE RETAINING A DIAMETER ACCEPTABLE TO ALL CLIMBERS.



TECHNOLOGY

teFIX®

THE TEFIX® PATENTED TECHNOLOGY PERMANENTLY BONDS THE SHEATH TO THE CORE. IT PREVENTS FROM ANY SLIPPAGE BETWEEN THESE TWO BASIC ROPE PARTS. THIS PARTICULAR FEATURE WAS REACHED BY ADDING A SPECIAL MATERIAL BETWEEN THE CORE AND SHEATH. THIS EXTRA MATERIAL IS ADDED AFTER THE PROCESS SO THE BOND IS FLEXIBLE AND STRONG. ROPE HAS 0% SHEATH SLIPPAGE, MUCH LONGER LIFESPAN, AND BETTER HANDLING.



TECHNOLOGY

SECURE

THANKS TO THE UNIQUE SANDWICH-TYPE CONSTRUCTION OF BRAIDED LAYERS AND THE USE OF SPECIALLY DEVELOPED STAPLE FIBRES, THE ROPE IS ABLE TO HOLD THE SUSPENDED PERSON OR LOAD EVEN IN CASE OF A CONSIDERABLY DAMAGED SHEATH OR CORE WITHOUT A COMPLETE RUPTURE OF THE ROPE AND SUBSEQUENT FALL OF THE SUSPENDED PERSON.



TECHNOLOGY **SBS**

SIMPLE BRAID SYSTEM – IS A SYSTEM WHERE EACH STRAND IS PLAID SEPARATELY INTO THE SHEATH CONSTRUCTION AND NOT IN PAIRS (TANDEM). SBS BRAIDING MAKES THE SHEATH SURFACE MUCH MORE COMPACT AND SMOOTHER. THEREFORE ROPES MADE BY SBS GENERATE MUCH LOWER FRICTION, ARE MORE RESISTANT TO ABRASION AND LAST LONGER WHILE IN CONTACT WITH THE ROCKS.



TECHNOLOGY

COMPLETE SHIELD

MAXIMUM LEVEL OF ROPE PROTECTION AGAINST WATER AND ABRASION. IT IS REACHED BY USING THE NEW PROGRESSIVE NANOTECHNOLOGY METHOD. TINY PARTICLES OF TEFLON®ECO ARE APPLIED TO THE ROPE SHEATH AND CORE AND TO MAKE A FILM OF ALMOST IMPERMEABLE PROTECTIVE LAYER. THE ROPE FIBRES ARE THEN PROTECTED AGAINST DUST AND WATER WHICH WOULD OTHERWISE CAUSE HARM TO THE ROPE CONSTRUCTION. COMPLETE SHIELD IS AN IMPREGNATION WHICH EXTENDS THE GENERAL LIFESPAN OF TENDON ROPES SIGNIFICANTLY. ALL ROPES WITH THE COMPLETE SHIELD FINISH MEET THE UIAA 101 REQUIREMENT FOR WATER REPELLENT TEST.



**LOW WEIGHT
HIGH GOALS
SPORT CLIMBING**

ADAM ONDRA, SILENCE (9C), FLATANGER, PHOTO CREDIT (C) PAVEL BUZEK



ADAM

ONDRA

„ROPES ARE IMPORANT PART OF CLIMBING GEAR AND MY LIFE LITERALLY DEPENDS ON THEM. THAT IS WHY I USE TENDON ROPES. THEY ARE EASY TO HANDLE FOR THE BELAYER, EASY FOR THE CLIMBER TO CLIP, VERY LIGHT TO CARRY. MADE IN THE CZECH REPUBLIC JUST LIKE ME. MY FAVORITE IS LOWE 9.7. FOR SILENCE 9C, I USED THE NEW THIN MASTER 8.6 WHICH WAS PERFECT FOR THIS ROUTE.“

SPORT CLIMBING

NEW! MASTER 9.0 TEFIX®

EXPERT

EN 892 / CE 1019	①	1/2	∞
ROPE DIAMETER	9.0	9.0	9.0 mm
WEIGHT	55	55	55 g/m
NUMBER OF UIAA FALLS	6	19	33
MAX. IMPACT FORCE	8.9	6.5	10.8 kN
SHEATH SLIPPAGE	0	0	0 %
STATIC ELONGATION	9.6	9.6	9.6 %
DYNAMIC ELONGATION	31	29	25 %
KNOTABILITY	0.9	0.9	0.9



 D090MF42C000C • TURQUOISE
 D090MF41C000C • PINK



If you want to have a lightweight rope for sport climbing and if you would like to use it occasionally in the mountains also, Master 9.0 is a good choice. In addition, this rope makes use of the TeFIX® technology which increases resistance and prolongs the lifespan of the rope thanks to the connection of the core and the sheath.

MASTER 8.9

EXPERT

EN 892 / CE 1019	①	1/2	∞
ROPE DIAMETER	8.9	8.9	8.9 mm
WEIGHT	52	52	52 g/m
NUMBER OF UIAA FALLS	5	15	28
MAX. IMPACT FORCE	8.7	6.4	10.3 kN
SHEATH SLIPPAGE	0	0	0 %
STATIC ELONGATION	6.9	6.9	6.9 %
DYNAMIC ELONGATION	34	30	27 %
KNOTABILITY	0.8	0.8	0.8



 D089TM45C000C • TURQUOISE
 D089TM44C000C • PINK



Another aggressive rope with impregnation for hard climbing projects. Certified for use as a single, twin and half rope.

Adam Ondra
ADAM ONDRA

SPORT CLIMBING

MASTER PRO 9.2

EXPERT

EN 892 / CE 1019	①
ROPE DIAMETER	9.2 mm
WEIGHT	58 g/m
NUMBER OF UIAA FALLS	9
MAX. IMPACT FORCE	9.1 kN
SHEATH SLIPPAGE	0.3 %
STATIC ELONGATION	6.1 %
DYNAMIC ELONGATION	31 %
KNOTABILITY	1



 D092TP41C000C • RED
 D092TP43C000C • TURQUOISE



This innovation from 2017 defeats the stigma that thin ropes are not durable. You don't need to carry one rope for practicing and another one for redpoint. Innovated, extremely fine SBS sheath significantly prolongs its lifespan. The rope is at the same time soft enough and easy to work with. If you're looking for a devoted friend for sport climbing, this is your choice.

MASTER 9.4

EXPERT

EN 892 / CE 1019	①
ROPE DIAMETER	9.4 mm
WEIGHT	58 g/m
NUMBER OF UIAA FALLS	6
MAX. IMPACT FORCE	7.1 kN
SHEATH SLIPPAGE	0 %
STATIC ELONGATION	6.2 %
DYNAMIC ELONGATION	37 %
KNOTABILITY	0.9



 D094TM41S000C • VIOLET
 D094TM42S000C • BLUE
 D094TM44S000C • BRIGHT ORANGE



MASTER 9.4 with a small diameter but durable SBS sheath construction. Ideal for average climbers who want to keep pushing their limits.

Adam Ondra
ADAM ONDRA

MASTER 8.6

EXPERT

EN 892 / CE 1019	①
ROPE DIAMETER	8.6 mm
WEIGHT	50 g/m
NUMBER OF UIAA FALLS	5
MAX. IMPACT FORCE	9.1 kN
SHEATH SLIPPAGE	0.3 %
STATIC ELONGATION	4.3 %
DYNAMIC ELONGATION	30 %
KNOTABILITY	0.9



 D086TM42C000C • PINK
 D086TM43C000C • TURQUOISE

The thinnest single rope we offer. The low weight, which is only 50 g, makes it an ideal weapon, which will help you to send your hardest projects.





TENDON GEAR BAG

Backpack with volume of 45 L designed especially for climbers. The zipper, which encircles almost the whole edge enables an easy access into the main chamber, which contains more pockets and hanging loops for your gear. Upper part of the backpack contains a handy pocket for a guidebook or other small pieces of equipment. The back system includes removeable mat for sitting. The anatomically shaped shoulder straps, adjustable sternum strap, hip belt, and padded back ensure that the backpack fits comfortable on your back, even during a long approach. If you completely fill the main chamber, you can always fasten your rope to the top of the backpack using tightening straps. The backpack includes a rope tarp.

- Top material: robust polyester 1000D with PU coating and water-resistant treatment
- Volume 45 L
- Adjustable sternum strap and hip belt
- Padded back
- Includes coated rope tarp
- The rope can be fastened on top of the backpack using tightening straps



XTENDON GEAR BAG Z

XTENDON GEAR BAG S

[WATCH VIDEO](#)


MASTER 9.7 TEFIX®

EXPERT

	①
ROPE DIAMETER	9.7 mm
WEIGHT	61 g/m
NUMBER OF UIAA FALLS	8
MAX. IMPACT FORCE	8.2 kN
SHEATH SLIPPAGE	0 %
STATIC ELONGATION	8.0 %
DYNAMIC ELONGATION	35 %
KNOTABILITY	0.8


D097MF41S000C • TURQUOISE
D097MF42S000C • PINK

Technologies keep advancing. Favorite MASTER 9.7 with TeFIX® technology became even more safer and durable than its older brother. Permanent connection of a core and sheath ensures that the sheath cannot slip. Check the fresh design!



LOWE 9.7

ADVANCED

EN 892 / CE 1019

①

ROPE DIAMETER	9.7 mm
WEIGHT	55 g/m
NUMBER OF UIAA FALLS	6
MAX. IMPACT FORCE	8.6 kN
SHEATH SLIPPAGE	-0.15 %
STATIC ELONGATION	7.4 %
DYNAMIC ELONGATION	32 %
KNOTABILITY	1



 D097TW41S000C • GREEN
 D097TW42S000C • BLUE



AMBITION 9.8

BEGINNER

EN 892 / CE 1019

①

ROPE DIAMETER	9.8 mm
WEIGHT	64 g/m
NUMBER OF UIAA FALLS	9
MAX. IMPACT FORCE	7.1 kN
SHEATH SLIPPAGE	0 %
STATIC ELONGATION	6.2 %
DYNAMIC ELONGATION	35 %
KNOTABILITY	0.8



 D098TR41S000C • YELLOW
 D098TR42S000C • GREEN
 D098TR45S000C • BICOLOUR
 D098TR48S000C • BRIGHT YELLOW



The favorite rope of Adam Ondra. Our unique technology lowers the weight of the rope keeping the ideal diameter. An excellent choice for all sport climbing areas.

As its name suggests, this rope is both for beginners and ambitious climbers who pursue climbing outside and indoors. It offers outstanding value for money. It has a universal diameter.

MASTER 9.7

ADVANCED

EN 892 / CE 1019

①

ROPE DIAMETER	9.7 mm
WEIGHT	61 g/m
NUMBER OF UIAA FALLS	7
MAX. IMPACT FORCE	7 kN
SHEATH SLIPPAGE	0.1 %
STATIC ELONGATION	6.3 %
DYNAMIC ELONGATION	40 %
KNOTABILITY	0.9



 D097TV41S000C • YELLOW
 D097TV42S000C • GREEN
 D097TV45S000C • BICOLOUR



One of the most favorite ropes among our customers. MASTER 9.7 is time-proven - it offers an ideal diameter, SBS sheath and a long lifespan. One of the best ropes for rock climbing you can get. Offers an excellent value for money.

AMBITION 10.0

BEGINNER

EN 892 / CE 1019

①

ROPE DIAMETER	10 mm
WEIGHT	67 g/m
NUMBER OF UIAA FALLS	9
MAX. IMPACT FORCE	8.1 kN
SHEATH SLIPPAGE	0.1 %
STATIC ELONGATION	5.7 %
DYNAMIC ELONGATION	33 %
KNOTABILITY	1



 D100TA41S000C • RED
 D100TA42S000C • BLUE



AMBITION 10.0 is designed especially for beginners. Wider diameter combined with SBS sheath offers an impressive performance and long lifespan.



CLIMB EVERY TIME

INDOOR CLIMBING



ZUZKA

NEMETHOVÁ

WHenever I have an opportunity, I climb in the Sandstone Paradise at Adršpach in our country, the Czech Republic. Regarding wear of the ropes, sandstone is one of the ruthless materials, therefore I use the robust and yet light Ambition 10.2 Tefix the lifespan of which is extended by the core connected to the sheath.

INDOOR 10.2i

BEGINNER

EN 892 / CE 1019

①

ROPE DIAMETER	10.2 mm
WEIGHT	68 g/m
NUMBER OF UIAA FALLS	7
MAX. IMPACT FORCE	8.8 kN
SHEATH SLIPPAGE	0 %
STATIC ELONGATION	7.2 %
DYNAMIC ELONGATION	32 %
KNOTABILITY	0.9



D102T171S000C • RED/YELLOW
D102T172S000C • YELLOW/GREY



HATTRICK 10.2

BEGINNER

EN 892 / CE 1019

①

ROPE DIAMETER	10.2 mm
WEIGHT	66 g/m
NUMBER OF UIAA FALLS	5
MAX. IMPACT FORCE	8.2 kN
SHEATH SLIPPAGE	0 %
STATIC ELONGATION	5.4 %
DYNAMIC ELONGATION	33 %
KNOTABILITY	0.9



D102TH41S000C • BLUE
D102TH42S000C • RED



A rope with braided core developed especially for top-rope climbing at gyms. Suitable for climbing schools and rentals.

A rope with SECURE technology that offers less UIAA falls but has much larger sheath that ensures durability and a long lifespan of the rope. Perfect choice for rentals and permanent use in the climbing gyms (top-roping).

AMBITION 10.5

BEGINNER

EN 892 / CE 1019

①

ROPE DIAMETER	10.5 mm
WEIGHT	69 g/m
NUMBER OF UIAA FALLS	9
MAX. IMPACT FORCE	7.9 kN
SHEATH SLIPPAGE	0 %
STATIC ELONGATION	6 %
DYNAMIC ELONGATION	34 %
KNOTABILITY	0.8



D105TA41S000C • RED
D105TA42S000C • BLUE
D105TA47S000C • BRIGHT GREEN



Thicker ropes are ideal for beginners because they make falls easier to catch using a belay device and thus they make climbing safer. You can use this rope at crags as well.

AMBITION 10.0

BEGINNER

EN 892 / CE 1019

①

ROPE DIAMETER	10 mm
WEIGHT	67 g/m
NUMBER OF UIAA FALLS	9
MAX. IMPACT FORCE	7.8 kN
SHEATH SLIPPAGE	0.1 %
STATIC ELONGATION	5.7 %
DYNAMIC ELONGATION	33 %
KNOTABILITY	1



D100TA41S000C • RED
D100TA42S000C • BLUE



AMBITION 10.0 is designed especially for beginners. Wider diameter combined with SBS sheath offers an impressive performance and long lifespan.

AMBITION 10.2 TEFIX®

BEGINNER

EN 892 / CE 1019

①

ROPE DIAMETER	10.2 mm
WEIGHT	67 g/m
NUMBER OF UIAA FALLS	11
MAX. IMPACT FORCE	8.3 kN
SHEATH SLIPPAGE	0 %
STATIC ELONGATION	6.9 %
DYNAMIC ELONGATION	33 %
KNOTABILITY	0.8



D102AF41S000C • YELLOW
D102AF42S000C • ORANGE

An new version of a robust rope AMBITION 10.2 enriched with TeFIX® technology. The fact that the core is connected with the sheath prevents the sheath from shifting and provides maximum possible safety in case of the sheath damage. An ideal rope which will guide you through many vertical miles.





TRUST 11.0

BEGINNER

EN 892 / CE 1019	①
ROPE DIAMETER	11 mm
WEIGHT	79 g/m
NUMBER OF UIAA FALLS	16
MAX. IMPACT FORCE	8.2 kN
SHEATH SLIPPAGE	0.1 %
STATIC ELONGATION	6.1 %
DYNAMIC ELONGATION	36 %
KNOTABILITY	0.9



- D110TT41S000C • RED
- D110TT42S000C • YELLOW

Massive, safe rope with extremely long lifespan. Designed for heavy usage in rope training centers and climbing schools.



INDOOR 10.4

BEGINNER

EN 892 / CE 1019	①
ROPE DIAMETER	10.4 mm
WEIGHT	72 g/m
NUMBER OF UIAA FALLS	8
MAX. IMPACT FORCE	8 kN
SHEATH SLIPPAGE	0.1 %
STATIC ELONGATION	6.5 %
DYNAMIC ELONGATION	35 %
KNOTABILITY	1



- D110TT41S000C • BLUE/GREEN
- D110TT42S000C • RED/GREY

A rope has a braided core, developed especially for top-rope climbing at gyms. Suitable for climbing schools and rentals.



TRUST 11.4

BEGINNER

EN 892 / CE 1019	①
ROPE DIAMETER	11.4 mm
WEIGHT	84 g/m
NUMBER OF UIAA FALLS	20
MAX. IMPACT FORCE	8.4 kN
SHEATH SLIPPAGE	0.1 %
STATIC ELONGATION	5.5 %
DYNAMIC ELONGATION	34 %
KNOTABILITY	1



- D114TA41S000C • YELLOW
- D114TA42S000C • BLUE

Large diameter safe rope, with extremely long lifespan. Designed for heavy usage in rope training centers and climbing schools.



COSMIN ANDRON - ARÊTE DES CIGNONNES, JARDINELLE DU MIDI, CHAMONIX. PHOTO CREDIT (C) D. J. SOMOGY



**SAFETY FEELING
EVERYWHERE**

**MOUNTAINEERING
AND ALPINISM**



COSMIN

ANDRON

FOR ALPINE, INTRICATE AND NEW MEANDERING ROUTES, MY TRUST RELIES IN MASTER 7.8 TEFIX. AS GUIDE MY BEST TOOL IS THE MASTER 8.9, FOR SPORT CLIMBS I HAVEN'T FOUND ANY ROPE THAT COULD BEAT MASTER PRO 9.2.



COSMIN ANDRON - PHOTO CREDIT (C) CRISTINA POGORAN

MASTER 7.0

EXPERT

EN 892 / CE 1019



ROPE DIAMETER	7 mm
WEIGHT	34 g/m
NUMBER OF UIAA FALLS	14
MAX. IMPACT FORCE	8.9 kN
SHEATH SLIPPAGE	0 %
STATIC ELONGATION	3.6 %
DYNAMIC ELONGATION	33 %
KNOTABILITY	0.9



- D070TM41C000C • RED
- D070TM42C000C • BLUE



The lightest twin rope in the world. Only 34 grams per meter and still perfectly safe. Ideal for extreme climbing projects or as an ultra-light rope for ski-tourists. You won't even notice this rope in your bag due to its weight and size. Certified for use as a twin rope exclusively.

MASTER 7.8

ADVANCED

EN 892 / CE 1019



ROPE DIAMETER	7.8 7.8 mm
WEIGHT	38 38 g/m
NUMBER OF UIAA FALLS	6 16
MAX. IMPACT FORCE	4.8 7.9 kN
SHEATH SLIPPAGE	0 0 %
STATIC ELONGATION	6.5 6.1 %
DYNAMIC ELONGATION	39 33 %
KNOTABILITY	0.9 0.9



- D078TD42S000C • BLUE
- D078TD44S000C • RED



A light weight quality rope, for those who feel at home in the mountains. The Complete Shield technology protects the rope from water and dirt. You can choose from four distinct colour patterns.

NEW!

MASTER 7.8 TEFIX®

EXPERT

EN 892 / CE 1019



ROPE DIAMETER	7.8 7.8 mm
WEIGHT	39 39 g/m
NUMBER OF UIAA FALLS	6 16
MAX. IMPACT FORCE	5.4 8.3 kN
SHEATH SLIPPAGE	0 0 %
STATIC ELONGATION	11.3 7.1 %
DYNAMIC ELONGATION	36 32 %
KNOTABILITY	0.9 0.9



- D078MF41S000C • GREEN
- D078MF42S000C • ORANGE



The TeFIX® technology is also in our lightest ropes for climbing in the mountains. Where else is there a need for good resistance and lifespan of the ropes than in the mountains? Master 7.8 TeFIX®, besides low weight, profits also from better resistances.

MASTER 8.5

BEGINNER

EN 892 / CE 1019



ROPE DIAMETER	8.5 8.5 mm
WEIGHT	46 46 g/m
NUMBER OF UIAA FALLS	10 14
MAX. IMPACT FORCE	5.1 7.9 kN
SHEATH SLIPPAGE	0.1 0.1 %
STATIC ELONGATION	7 7 %
DYNAMIC ELONGATION	38 36 %
KNOTABILITY	0.8 0.8



- D085TF41S000C • GREEN/YELLOW
- D085TF42S000C • KHAKI/BLUE

You will choose this rope if you seek the best ratio of lifespan and a diameter. Perfect as you first rope for mountaineering. Complete Shield coating is a matter-of-course.



MASTER 8.6

EXPERT

EN 892 / CE 1019

①

ROPE DIAMETER	8.6 mm
WEIGHT	50 g/m
NUMBER OF UIAA FALLS	5
MAX. IMPACT FORCE	9.1 kN
SHEATH SLIPPAGE	0.3 %
STATIC ELONGATION	4.3 %
DYNAMIC ELONGATION	30 %
KNOTABILITY	0.9



-  D086TM42C000C • PINK
-  D086TH43C000C • TURQUOISE



The thinnest single rope we offer. The low weight, which is only 50 g, makes it an ideal weapon, which will help you to send your hardest projects.

ALPINE 7.9

EXPERT

EN 892 / CE 1019

1/2 ∞

ROPE DIAMETER	7.9 mm	7.9 mm
WEIGHT	39 g/m	39 g/m
NUMBER OF UIAA FALLS	6	16
MAX. IMPACT FORCE	5.4 kN	8.3 kN
SHEATH SLIPPAGE	0 %	0 %
STATIC ELONGATION	6.7 %	7 %
DYNAMIC ELONGATION	37 %	33 %
KNOTABILITY	0.8	0.8



-  D079TL41S000C • RED
-  D079TL42S000C • YELLOW



An ideal choice for various activities in the mountains. Mountain guides, ski-tourists as well as mountaineers will love its low weight of 39 g. We offer this rope even in short variants of 20 and 30 m.

AMBITION 8.5

BEGINNER

EN 892 / CE 1019

1/2

ROPE DIAMETER	8.5 mm
WEIGHT	45 g/m
NUMBER OF UIAA FALLS	7
MAX. IMPACT FORCE	5 kN
SHEATH SLIPPAGE	0.1 %
STATIC ELONGATION	7 %
DYNAMIC ELONGATION	38 %
KNOTABILITY	1



-  D085TB41S000C • YELLOW
-  D085TB42S000C • BLUE



A lightweight half rope with great versatility and very high durability. All its technical specifications are designed to increase safety and broaden the range of suitable usage.

LOWE 8.4

EXPERT

EN 892 / CE 1019

1/2 ∞

ROPE DIAMETER	8.4 mm	8.4 mm
WEIGHT	41 g/m	41 g/m
NUMBER OF UIAA FALLS	5	12
MAX. IMPACT FORCE	5 kN	8.9 kN
SHEATH SLIPPAGE	0 %	0 %
STATIC ELONGATION	5.4 %	5.3 %
DYNAMIC ELONGATION	31 %	27 %
KNOTABILITY	0.8	0.8



-  D084TW41S000C • BLUE
-  D084TW42S000C • YELLOW



If you don't want extremely thin rope but you still aim for the lowest weight possible? There is no better option than this one. Our LOWE technology lowers the weight of the rope keeping an ideal diameter 8.4. You can save 0.5 kg with sixty-meter long double ropes. That's a deal, isn't it?



BW

SECURITY IS A BASIS
OF COURAGE
BIGWALL

OFER
BLUTRICH

I LOVE TENDON ROPES! I USE THEM AS UNIVERSAL TOOLS FOR DIFFERENT TASKS. BIG WALLS OF WADI RUM WITH LOWE 9.7, FOR REDPOINTING AT NEZER CAVE WITH LIGHT MASTER 8.9, FOR HARD SPORT CLIMBING INCLUDE HANGDOGGING MASTER 9.4 OR MASTER PRO 9.2 FOR THEIR WEIGHT AND NICE HANDLING.



OFER BLUTRICH, PHOTO CREDIT (C) MIKULAS ZUBEC

MASTER 9.7 TEFIX® EXPERT

EN 892 / CE 1019 ①	
ROPE DIAMETER	9.7 mm
WEIGHT	61 g/m
NUMBER OF UIAA FALLS	8
MAX. IMPACT FORCE	8.2 kN
SHEATH SLIPPAGE	0 %
STATIC ELONGATION	8.0 %
DYNAMIC ELONGATION	35 %
KNOTABILITY	0.8



-
- D097MF41S000C • TURQUOISE
- D097MF42S000C • PINK

For big walls you need a rope, which you can rely on. Even when you damage a sheath in one part, you don't have to be afraid. TeFIX® technology connects the sheath with a core so that you can pass the damaged part and reach safety. That's not what an ordinary rope would offer you.

AMBITION 10.2 TEFIX® ADVANCED

EN 892 / CE 1019 ①	
ROPE DIAMETER	10.2 mm
WEIGHT	67 g/m
NUMBER OF UIAA FALLS	11
MAX. IMPACT FORCE	8.3 kN
SHEATH SLIPPAGE	0 %
STATIC ELONGATION	6.9 %
DYNAMIC ELONGATION	33 %
KNOTABILITY	0.8



-
- D102AF41S000C • YELLOW
- D102AF42S000C • ORANGE

The most robust and safest rope for big walls from our catalogue. TeFIX® technology holds the core and the sheath firmly together so that in case of emergency you can use the rope even when the sheath is ripped.

HATTRICK 9.7 ADVANCED

EN 892 / CE 1019 ①	
ROPE DIAMETER	9.7 mm
WEIGHT	61 g/m
NUMBER OF UIAA FALLS	5
MAX. IMPACT FORCE	8.4 kN
SHEATH SLIPPAGE	0 %
STATIC ELONGATION	9.0 %
DYNAMIC ELONGATION	29 %
KNOTABILITY	1



-
- D097TH41S000C • GREEN/BLUE
- D097TH42S000C • RED/BLUE

If you prefer small diameters but you don't want to underestimate the safety, there is no better option than Hattrick 9.7 or Master TeFIX® 9.7. SBS construction of the sheath together with a SECURE technology make this rope safe, long-lasting and prevents the sheath from shifting.

HATTRICK 10.2 BEGINNER

EN 892 / CE 1019 ①	
ROPE DIAMETER	10.2 mm
WEIGHT	66 g/m
NUMBER OF UIAA FALLS	5
MAX. IMPACT FORCE	8.2 kN
SHEATH SLIPPAGE	0 %
STATIC ELONGATION	5.4 %
DYNAMIC ELONGATION	33 %
KNOTABILITY	0.9



-
- D102TH41S000C • BLUE
- D102TH42S000C • RED

The massive sheath of this rope ensures safety and a long lifespan. As other ropes for big wall climbing, this one offers SECURE technology for your security.

LOWE 9.7 ADVANCED

EN 892 / CE 1019 ①	
ROPE DIAMETER	9.7 mm
WEIGHT	55 g/m
NUMBER OF UIAA FALLS	6
MAX. IMPACT FORCE	8.6 kN
SHEATH SLIPPAGE	-0.15 %
STATIC ELONGATION	7.4 %
DYNAMIC ELONGATION	32 %
KNOTABILITY	1

-
- D097TW41S000C • GREEN
- D097TW42S000C • BLUE

The favorite rope of Adam Ondra. Our unique technology lowers the weight of the rope keeping the ideal diameter. An excellent choice for all sport climbing areas.



**ENJOY WATER
CONDITIONS**
**SPELEO
AND CANYONING**

LASO SCHALLER, CANYON VALEGIOM, PHOTO CREDIT (C) JINES RIPL

SPELEO AND CANYONING

SALAMANDER 10.2

CE 1019

DIAMETER	10.2* mm
WEIGHT	60 g/m
NUMBER OF FALLS	20** min.
RELATIVE MASS OF SHEATH	47 %
SHEATH SLIPPAGE	0 mm
ELONGATION (50 – 150 KG)	2.6 %
SHRINKAGE	0 %
TENACITY	23 kN
MIN. TENACITY WITH KNOTS	12 kN
USED MATERIAL	PA/PPV
TYPE	-
FLOATING	Yes



C102TS41S000C • YELLOW/RED • SALAMANDER

The best choice among the canyoning ropes. Light, floating rope with our SECURE technology keeps its outstanding qualities for a long time. Its construction and applied materials help to minimize shrinking of the rope in wet conditions. It has stronger, coarser sheath and thanks to the production technology, this rope is minimally dynamic.



CANYON DRY 9.0

EN1891 / CE1019

DIAMETER	9 mm
WEIGHT	59 g/m
NUMBER OF FALLS	16 min.
RELATIVE MASS OF SHEATH	44 %
SHEATH SLIPPAGE	0.20 mm
ELONGATION (50 – 150 KG)	3.6 %
SHRINKAGE	1 %
TENACITY	28 kN
MIN. TENACITY WITH KNOTS	18 kN
USED MATERIAL	PA
TYPE	A



C090TD41C000C • RED

New polyamide rope with a smaller diameter of 9 mm it has a teflon finish in comparison with the other types, which increases its water and abrasion resistance considerably. The highly visible colour guarantees that the user has under control any situation where bad conditions prevail. The rope is flexible and retains its softness even after a long period of use. CANYON DRY 9.0 will be appreciated especially by experienced canyoneers who strive for a quick and smooth advancement above all and who care about every gram of weight.



LASO

SCHALLER

THE SALAMANDER IS PERFECT FOR FAST RAPPPELLING AND IN HIGH WATER LEVEL CONDITIONS BECAUSE IT'S FLOATING. ALSO NICE IS THAT THE COAT IS STITCHED WITH THE CORE. WHEN YOU HAVE A LITTLE DAMAGE, THEN YOU CAN USE IT STILL "NORMAL". THE CANYON DRY 9.0 IS FINE WHEN I NEED THE MINIMUM OF THE WEIGHT AND PLACE. AND THE COLOUR IS AMAZING. IT LOOKS LIKE IT'S GLOWING IN THE WATER. THAT MAKES IT HIGH VISIBLE.

LASO SCHALLER, PHOTO CREDIT (C) ALEX ARNOLD



CANYON WET, CANYON GRANDE 10.0

CE 1019

	CANYON GRANDE**	CANYON WET
DIAMETER	10	10 mm
WEIGHT	61	66 g/m
NUMBER OF FALLS	20*	12 min.
RELATIVE MASS OF SHEATH	49	33 %
SHEATH SLIPPAGE	2.6	2.7 mm
ELONGATION (50 - 150 KG)	3.2	2.1 %
SHRINKAGE	1.7	0.8 %
TENACITY	18	30 kN
MIN. TENACITY WITH KNOTS	12	17 kN
USED MATERIAL	PA/PPV	PA
TYPE	-	A / EN 1891
FLOATING	Yes	No

* TESTED ACCORDING TO EN 1891 TYPE B EXCEPT MIN. TENACITY AND MATERIAL
 ** WEIGHT 55 KG, FALL FACTOR 1



CANYON WET 10	+	+	+	+	+
CANYON GRANDE 10	+	+	-	+	+

- C100TC41S000C • YELLOW • CANYON GRANDE
- C100TW48W000C • ORANGE • CANYON WET

CANYON GRANDE This rope is easily knotted and soft even after repeated immersion into the water. Its bright colours contrast well with the colour of the water, it is highly resistant to abrasion and offers increased water-resistance. Thanks to the materials used, the rope has lower absorbability and floats on the surface.

CANYON WET Rope variation which doesn't float on water due to materials used (PA) meets requirement of EN 1891 type A.

SPELEO 9.0 - 11.0

EN 1891 / CE 1019

10.5 SPECIAL



DIAMETER	9	10	10.5	10.5 Special	11 mm
WEIGHT	48	66	72	76	77 g/m
NUMBER OF FALLS	12	20	20	12	20 min.
RELATIVE MASS OF SHEATH	44	42	46	51	42 %
SHEATH SLIPPAGE	1	0	2	1	2 mm
ELONGATION (50 - 150 KG)	4.1	3.5	3.4	3.5	3.3 %
SHRINKAGE	2.2	1.8	1.9	0.3	1.8 %
TENACITY	23	29	30	33	34 kN
MIN. TENACITY WITH KNOTS	12	16	17	15	19 kN
USED MATERIAL	PA	PA	PA	PES/PA	PA
TYPE	B	A	A	A	A
FLOATING	-	-	-	-	-



SPELEO	+	+	+	+
SPELEO SPECIAL	+	+	-	+

S105TG41S000C SPECIAL • WHITE/BLUE

S090TS41S000C • WHITE/ORANGE S105TS41S000C • WHITE/ORANGE
 S100TS41S000C • WHITE/ORANGE S110TS41S000C • WHITE/ORANGE

Low stretch, high static strength, and exceptional resistance to abrasion are the qualities most valued among cavers. Polyester sheath is built to endure higher thermal stress during abseiling on 10.5 special rope.



IN HARMONY WITH NATURE

ARBORIST





NEW!

TIMBER EVO 11.0
EN 1891 / CE 1019

DIAMETER	11 mm
WEIGHT	88 g/m
NUMBER OF FALLS	20 min.
RELATIVE MASS OF SHEATH	57 %
SHEATH SLIPPAGE	0 mm
ELONGATION (50 – 150 KG)	3.1 %
SHRINKAGE	0.7 %
TENACITY	30 kN
MIN. TENACITY WITH KNOTS	18 kN
USED MATERIAL	PES/PA
TYPE	A



L110TT41S000C
BRIGHT YELLOW

The Timber Evo 11.5 rope enjoys great popularity, so we decided to offer additional diameters in this product line. Timber Evo 11.0 is a rope with good handling and fast run.

SPliced LOOP AVAILABLE - ON REQUEST



NEW!

TIMBER EVO 11.5
EN 1891 / CE 1019

DIAMETER	11.5 mm
WEIGHT	90 g/m
NUMBER OF FALLS	20 min.
RELATIVE MASS OF SHEATH	54 %
SHEATH SLIPPAGE	10 mm
ELONGATION (50 – 150 KG)	3 %
SHRINKAGE	1 %
TENACITY	30 kN
MIN. TENACITY WITH KNOTS	18 kN
USED MATERIAL	PES/PA
TYPE	A



L115TE42S000C
ORANGE/YELLOW

The improved version of the Timber Evo 11.5 working rope is characterized by a better abrasion resistance and consequently a longer service life thanks to the new construction of the sheath.

SPliced LOOP AVAILABLE - ON REQUEST



NEW!

TIMBER EVO 12.5
EN 1891 / CE 1019

DIAMETER	12.5 mm
WEIGHT	104 g/m
NUMBER OF FALLS	20 min.
RELATIVE MASS OF SHEATH	48 %
SHEATH SLIPPAGE	0 mm
ELONGATION (50 – 150 KG)	3 %
SHRINKAGE	0.6 %
TENACITY	39 kN
MIN. TENACITY WITH KNOTS	22 kN
USED MATERIAL	PES/PA
TYPE	A



L125TT41S000C
BRIGHT ORANGE

The combination of polyamide and polyester lends, among other features, an excellent abrasion resistance and also a high strength in the ropes of the Timber Evo series. The diameter of 12.5 mm guarantees good control during handling.

SPliced LOOP AVAILABLE - ON REQUEST

TIMBER SIT

EN 813 / EN 358 / CE 1019



XPTH-030

Is a fully adjustable harness for positioning which has been developed for the needs of arborists. It is equipped with a cushioned back support and leg loops adapted to work in hanging position, with adjustable buckles, lateral eyes and a suspension point according to EN 813:2008 and has adjustable aluminium shackles that exclude the risk of accidental unfastening. It is intended to be used primarily as a fall arrester, a protective equipment against falls from a height when working on trees. It provides a comfortable support in the lumbar area, great freedom of movement and high positioning comfort at work.

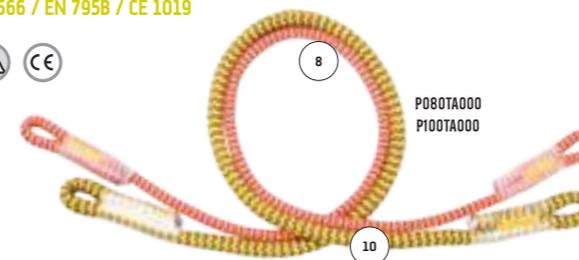
Timber sit	Weight
Size M-XL	1 780 g
Size XXL	1 820 g

TIMBER SET

The Set is completed with a throwline, an accessory cord, a throw bag, prusiks and harness, all in high quality and in colours that are markedly visible in treetops.

PRUSIKS 8 AND 10 MM

EN 566 / EN 795B / CE 1019



The use of the PES/TECHNORA material combination results in a better thermal and mechanical resistance of the sheath. Supplied in any length or as prusiks made to measure with sewn eyes.

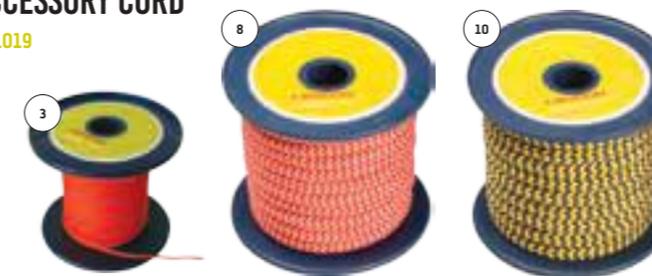
THROW BAG



XTIMBERBAG300 / XTIMBERBAG350 / XTIMBERBAG400
300 g 350 g 400 g

ACCESSORY CORD

CE 1019



A030TT41S000C **A080TP41S000C** **A100TP41S000C**
EN 564

ROPE DIAMETER	3	8	10 mm
WEIGHT	2.5	54.3	73 g/m
TENACITY	0.8	20	25 kN
USED MATERIAL	PE	PES/TECHNORA	



TIMBER 3	-	-
TIMBER 8	+	+
TIMBER 10	+	-



LOWERING ROPE 15.0

DIAMETER	15 mm
WEIGHT	172 g/m
TENACITY	61 kN
USED MATERIAL	PES



L150TT41S000C - YELLOW/BLACK

Lowering rope 15 mm of a new construction with increased strength and reduced diameter. Very good handling during lowering and braking of loads.



SAFETY FIRST!

WORKS AT HEIGHT AND RESCUE



PHOTO CREDIT (C) DAVID BERNARD

STATIC 9.0 – 13.0

EN 1891 / CE 1019

DIAMETER	9	10	10.5	11	12	13	mm
WEIGHT	50	69	72	80	92	109	g/m
NUMBER OF UIAA FALLS	20	20	20	20	20	20	min.
RELATIVE MASS OF SHEATH	49	39	36	40	35	46	%
SHEATH SLIPPAGE	2	4	3	5	4	0	mm
ELONGATION (50 – 150 KG)	3.8	3.4	3.4	3.3	3.2	3.3	%
SHRINKAGE	2.1	2	1.9	1.9	1.8	1.8	%
TENACITY	23	31	32	33	42	42	kN
MIN. TENACITY WITH KNOTS	13	17	18	20	25	27	kN
USED MATERIAL	PA	PA	PA	PA	PA	PA	
TYPE	B	A	A	A	A	A	



- L100TS41S000C • WHITE
- L090TS42S000C • RED
- L105TS43S000C • BLUE



Sewn termination is available on some types - on request.

WORKS AT HEIGHT AND RESCUE

SECURE 10.5, SECURE 11.0

EN 1891 / CE 1019

DIAMETER	10.5	11	mm
WEIGHT	75	84.6	g/m
NUMBER OF UIAA FALLS	17	20	min.
RELATIVE MASS OF SHEATH	48.5	33.1	%
SHEATH SLIPPAGE	0	0	mm
ELONGATION (50 – 150 KG)	4.6	4.5	%
SHRINKAGE	1.2	0.8	%
MIN. TENACITY WITH KNOTS	18	19.8	kN
TENACITY	28	35	kN
MAX. IMPACT FORCE	4.5	4.3	
TYPE	A	A	



- L105TE41S000C • RED
- L105TE42S000C • YELLOW/RED
- L110TE43S000C • YELLOW/BLUE
- L110TE44S000C • BLUE
- L110TE57S000C • BLACK



A rope for any application where the sheath and the core may suffer damage. When using this rope you will significantly increase your safety margins, in cases where mechanical damage to the rope due to sharp edges or falling objects. Thanks to the unique sandwich-type construction of braided layers and the use of specially developed staple fibers, the rope is able to hold the suspended person or load even in the event of considerable sheath or core damage. Even if the rope is heavily damaged, the suspended person has enough time to abseil to the ground or to a safe anchor point.

PROTECTED BY UTILITY MODEL.

Sewn termination is available on request.



STATIC NFPA 10.5 – 12.0

EN 1891 / CE 1019 / NFPA 1983 2017 EDITION

EN 1891

DIAMETER	12	11	10.5	mm
WEIGHT	87	83	74	g/m
NUMBER OF FALLS (MIN.)	20	20	20	min.
RELATIVE MASS OF SHEATH	35	33	34	%
SHEATH SLIPPAGE	4	0	0	mm
ELONGATION (50 – 150 KG)	3.2	3.5	3.6	%
SHRINKAGE	1.8	4.5	0.3	%
TENACITY	42	42	32	kN
MIN. TENACITY WITH KNOTS	25	15	17	kN
USED MATERIAL	PA	PA	PA	
TYPE	A	A	A	

NFPA

DIAMETER	12	11	10.5	mm
DIAMETER	0.472	0.433	0.413	in
MBS*	42	40.5	32	kN
MBS*	9 442	9 105	7194	lbs
WEIGHT	87	83	74	g
ELONGATION AT 10% MBS	7.4	8.4	8.6	%
ELONGATION AT 1.35 kN (300 LBF)	2.3	3.6	2.8	%
ELONGATION AT 2.70 kN (600 LBF)	4.7	6.2	7.1	%
ELONGATION AT 4.40 kN (1000 LBF)	7.8	9.5	10.7	%
NFPA 1983 2012 EDITION	Yes	Yes	Yes	
CLASSIFIED	General use	Technical use		



-  L105NS41S000C • WHITE
-  L110NS41S000C • WHITE
-  L120NS41S000C • WHITE

The excellent ropes with low elongation and high static strength are intended primarily for work at height and for securing people above vertical drops. Recommended use are rescue operations, work positioning and military and police use. Occasional use for NFPA certificated ropes meet the life safety rope requirements of NFPA 1983 Standard on fire service life safety rope and equipment for emergency services, 2017 edition.

STATIC 9.0 TYPE A

EN 1891 / CE 1019

DIAMETER	9	mm
WEIGHT	61	g/m
NUMBER OF FALLS (MIN.)	8	min.
RELATIVE MASS OF SHEATH	41	%
SHEATH SLIPPAGE	0	mm
ELONGATION (50 – 150 KG)	2.8	%
SHRINKAGE	1.9	%
TENACITY	28	kN
MIN. TENACITY WITH KNOTS	15	kN
USED MATERIAL	PA	
TYPE	A	
NFPA 1983 2012 EDITION	No	



 L090TS41A000C • WHITE



Thanks to the unique construction and the state-of-the-art technological finishing, the static rope offers a strength higher than 22 kN with a falling mass of 100 kg (in comparison with the standard falling mass of 80 kg for type B ropes). The strength of the rope with knots exceeds 15 kN for a period of 3 minutes without any damage to the core and the sheath (type B ropes are tested for 12 kN for a period of 3 minutes). This is an advantage which workers working at heights and rescue teams are eager for, because having a stronger rope in critical situations with full outfit and gear brings them to a higher standard.



100% SURE
MILITARY

MILITARY 9.0 – 12.0

EN 1891 / CE 1019

DIAMETER	9	10	10.5	11	12	mm
WEIGHT	50	69	72	80	92	g/m
NUMBER OF FALLS (MIN.)	20	20	20	20	20	min.
RELATIVE MASS OF SHEATH	49	39	36	40	35	%
SHEATH SLIPPAGE	2	4	3	5	4	mm
ELONGATION (50 – 150 KG)	3.8	3.4	3.4	3.3	3.2	%
SHRINKAGE	2.1	2	1.9	1.9	1.8	%
TENACITY	23	31	32	33	42	kN
MIN. TENACITY WITH KNOTS	13	17	18	20	25	kN
USED MATERIAL	PA	PA	PA	PA	PA	
TYPE	B	A	A	A	A	



- L100TS44S000C • BLACK
- L100TS45S000C • GREEN
- L100TS46S000C • CAMOUFLAGE
- L100TS4KS000C • DESERT STORM
- L100TS47S000C • SOLID BLACK

Excellent ropes with low elongation and high static strength are designed for army and police.

Sewn termination is available on some types - on request.

ARAMID 10.0, 11.0

EN 1891 / CE 1019

DIAMETER	10*	11	mm
WEIGHT	66.4	80	g/m
NUMBER OF FALLS (MIN.)	10	18	min.
RELATIVE MASS OF SHEATH	50	47	%
SHEATH SLIPPAGE	0	1	mm
ELONGATION (50 – 150 KG)	0	3	%
SHRINKAGE	1.5	0.9	%
TENACITY	37	45	kN
MIN. TENACITY WITH KNOTS	15	15	kN
USED MATERIAL	Aramid/PA	Aramid/PA	
TYPE	*	A / EN 1891	

* TESTED ACCORDING TO EN 1891 EXCEPT IMPACT FORCE



- L100TA42S000C • BLACK
- L110TA41S000C • BLACK



A unique rope with aramid sheath and polyamide core, which features high firmness and increased resistance to cutting and abrasion. The rope is resistant to naked flame and radiant heat of up to 400 °C for short periods of time! This characteristic will be appreciated in particular by special police and army emergency squads for quick descent from a helicopter, when ordinary ropes are not able to tackle the heat energy.

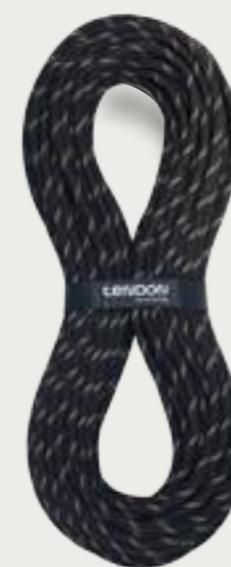
REFLECTIVE 11.0

EN 1891 / CE 1019

DIAMETER	11	mm
WEIGHT	80	g/m
NUMBER OF FALLS (MIN.)	20	min.
RELATIVE MASS OF SHEATH	40	%
SHEATH SLIPPAGE	5	mm
ELONGATION (50 – 150 KG)	3.3	%
SHRINKAGE	1.9	%
TENACITY	33	kN
MIN. TENACITY WITH KNOTS	20	kN
USED MATERIAL	PA	
TYPE	A	



- L110TS49S000C • BLACK



The newly developed rope with reflection control weaving reflects a beam of direct light, making it easier to identify the rope in the dark and in poor lighting conditions. The rope is particularly useful for rescue work, speleology, diving and as a tracing rope for mines.

Sewn termination is available on request.

FORCE 10.0, 11.0

EN 1891 / CE 1019

DIAMETER	10*	11**	mm
WEIGHT	68	82	g/m
NUMBER OF FALLS (MIN.)	5	5	min.
RELATIVE MASS OF SHEATH	40	41	%
SHEATH SLIPPAGE	0	5	mm
ELONGATION (50 – 150 KG)	2	3.4	%
SHRINKAGE	2	1.8	%
TENACITY	24	26	kN
MIN. TENACITY WITH KNOTS	13	15	kN
USED MATERIAL	PA/Steel	PA/Steel	
TYPE	*	**	

* TESTED ACCORDING TO EN 1891 TYPE B EXCEPTED MATERIAL, MARKING AND FALLS
** TESTED ACCORDING TO EN 1891 TYPE A EXCEPTED MATERIAL, MARKING AND FALLS



- L100TF41S000C • BLACK
- L110TF41S000C • BLACK

PATENT PENDING

A special rope which makes use of a technology of combination of materials and the rope construction itself. There is internal sheath made of stainless steel wires in the rope. The product for use in extremely severe conditions (for instance rescuers, firemen, policemen and other special forces) due to its increased resistance to cutting.



FAST ROPE

ROPE FOR RAPID DEPLOYMENT FROM HELICOPTERS FAST ROPE AND VERSION FOR TRANSPORTATION AND EVACUATION F.R.I.E.S.

ROPE DIAMETER, PRE-TENSIONED ACCORDING TO EN ISO 2307 (245 KG)	44	40	32	mm
ROPE DIAMETER, LOOSE (ZERO TENSION)	50	46	38	mm
ROPE WEIGHT, PRE-TENSIONED ACCORDING TO EN 2307 (245 KG)	77	60	42	kg/100 m
ROPE WEIGHT, LOOSE (ZERO TENSION)	96	75	52	kg/100 m
MINIMUM ROPE STRENGTH WITH SPLICED EYE	12 000	10 000	7 500	kg
MINIMUM ROPE STRENGTH WITH SEWN LOOP WITH TEXTILE PROTECTION	6 000	6 000	6 000	kg
MINIMUM ROPE STRENGTH WITH STEEL TERMINATION	3 000	3 000	-	kg
MINIMUM STRENGTH OF SUSPENSION SLING (F.R.I.E.S.)	2 250	2 250	2 250	kg
ROPE ELONGATION, PRE-TENSIONED ACCORDING TO EN ISO 2307 (245 KG)	25	25	25	%

In the production of the unique Fast Rope, special PA BCF fibres are used which give superior protection during descending, having high resistance to wear and rupture. The rope with a diameter of 44 mm and a unique construction offers the user good control during descending without additional belay. We are able to supply our key military clients in many countries with Fast Ropes also in diameters 40 mm and 32 mm.

- spliced eye with high strength and resistance, for frequent straining and loading (e.g. in practising).
- eye made of express slings (ST-short termination) - lightweight and especially short eye with high strength. Easy examination of seams and express slings after removal of the protector. In emergency the rope may be simply cut at the termination.
- eye with metal termination (MT-metal termination) for different types of metal connectors and hooks.

A) ROPE F.R.I.E.S. FOR TRANSPORTATION AND EVACUATION PERSONNEL



B) FAST ROPE USED FOR RAPID DEPLOYMENT FROM HELICOPTERS



STANDARD TYPE OF TERMINATIONS

- A) Metal multifit termination
- B) Metal termination with connecting pin
- C) Short termination (sewn loop) with textile protection
- D) Spliced loop with textile protection





EVERYTHING IS IMPORTANT

ACCESSORIES

PHOTO CREDIT (C) MARTIN POSTULKA

ACCESSORY CORDS

CORD DIAMETER / mm
WEIGHT / g/m
MIN. STRENGTH / daN

CORD DIAMETER / mm	4	5	6	7	8	ARAMID	REFLECTIVE	TOUCH
WEIGHT / g/m	12.7	18.9	23.2	34	39.8	6 22.9	6 23.2	6 23.2
MIN. STRENGTH / daN	340	510	1000	1300	1640	1700	1000	1000
	 A040TR41S100R • blue / yellow A040TR42S100R • red	 A050TR41S100R • yellow A050TR42S100R • blue	 A060TR41S100R • green A060TR42S100R • red	 A070TR41S100R • red A070TR42S100R • yellow	 A080TR42S100R • red A080TR41S100R • orange	 A060TR41S100R • black	 A060TR44S100R • black	 A060TR41S000R • white/red A060TR42S000R • white/blue

CE
EN 564 / CE 1019

Aramid accessory cord has an extremely high strength in spite of having the same weight as a standard PA accessory cord. You will appreciate also its low elongation and maintenance of high strength even with damaged sheath thanks to the braided core made of 100% aramid.

POWER CORDS

CORD DIAMETER / mm
WEIGHT / g/m
MIN. STRENGTH / daN

CORD DIAMETER / mm	2	3	9
WEIGHT / g/m	2.8	6.5	54.4
MIN. STRENGTH / daN	120	190	1900
	 A020TH41S100R • blue A020TH42S100R • yellow	 A030TH41S100R • blue A030TH42S100R • black	 A090TR41S100R • red

CE 1019

TUBULAR TAPE

WIDTH	TENACITY
19 mm	15 kN
25 mm	20 kN

A tubular tape for different applications, such as connection of a chest harness and a sit harness. Different widths, strengths and colours are available.

12C3PAPOPEXP20		19 mm
12C3PAPOPEXP25Ž		19 mm
12C3PAPOPEXP25Č		25 mm
12C3PAPOPEXP25Ā		25 mm

DUCK

EN 576

Weight 70 g / X888



Duck - a new rope clamp/positioner made by Kong, designed for ropes with diameters between 8 and 13 mm. The first and only device that may be used also with 10 to 15 mm wide flat and tubular slings. Due to its small dimensions, it is possible to use Duck with one hand only, the large diameter enables the karabiner to rotate. Intended for ascending activities, daisy chain positioning, self-belaying.

ASCENDERS AND DESCENDER



	ASCENDERS TENDON 13	ASCENDERS TENDON 14	ASCENDERS TENDON 15	FIGURE 8 DESCENDER TENDON 09
WEIGHT / g	160	225	225	110
	EN 567	EN 567	EN 567	-

CARABINERS



CARABINERS	TENDON 01	TENDON 02	TENDON 03	TENDON 04	TENDON 16	TENDON 17	TENDON 18	TENDON 19	TENDON 20
MAJOR AXIS STRENGTH / kN	22	30	27	27	27	23	23	23	21
MINOR AXIS STRENGTH / kN	8	10	10	10	10	10	10	9	8
OPEN GATE STRENGTH / kN	6	10	9	9	9	9	9	10	7
WEIGHT / g	90	70	56	55	60	55	55	39	31
EN	12275, 362 B	12275, 362 B	12275	12275	12275, 362 B	12275	12275	12275	12275

HELMETS ORBIX

CE (EN 12492)



- low weight: 240 g
- ergonomic and padded interior
- ventilation with 17 vents
- 3 Headlamp clips
- size: UNI 54/62 cm, new easily and conveniently adjustable system
- fully adjustable chinstrap
- material: external shell polycarbonate, internal shell from EPS

- XT-ORBIXGREEN
- XT-ORBIXWHITE
- XT-ORBIXRED

TENDON GEAR BAG

- Top material: robust polyester 1000D with PU coating and water-resistant treatment
- Volume 45 l
- Adjustable sternum strap and hip belt
- Padded back
- Includes coated rope tarp
- The rope can be fastened on top of the backpack using tightening straps



XTENDON GEAR BAG Z

XTENDON GEAR BAG S

QUICKDRAW AND SEWN SLINGS

EN 566 / CE 1019

	PA					
LENGTH / cm	10	15	20	60	120	180
WIDTH / mm	19	19	19	19	19	19
MIN. TENACITY / kN	22	22	22	22	22	22
	DYNEEMA®					
LENGTH / cm	10	15	20	60	120	180
WIDTH / mm	13	13	13	13	13	13
MIN. TENACITY / kN	22	22	22	22	22	22



DYNAPROT 10

CE 1019

STATIC TENACITY / kN	FALL FACTOR 1		FALL FACTOR 2	
	IMPACT FORCE / kN	NUMBER OF FALLS	IMPACT FORCE / kN	NUMBER OF FALLS
22	7.4	min. 20	10.7	9



DynaProt 10, the dynamic sling, is made of a dynamic rope and is therefore capable of absorbing the energy of a dynamic fall and to dampen this fall thanks to its elongation. DynaProt 10 has been tested with fall factors 1 and 2. It is able to arrest nine falls with a fall factor of 2. Even with a fall factor of 2, the impact force is lower than the maximum force permitted by EN 892.

Why a dynamic sling?

Standard static tape slings are sized for static loads only = they are not capable of arresting a fall at the level of or above the belaying point. Such a fall loads the belaying point and the climber's body with a high impact force which can lead to a bodily injury or cause the belaying point to be torn out.

In case of slings made of DYNEEMA® this force is even higher and the sling can break even during the first fall.

DYNAPROT 10 CLASSIC:

length 45 cm - DP100C045
length 60 cm - DP100C060
length 75 cm - DP100C075

DYNAPROT 10 Y:

length 75 cm - DP100Y000

DYNAPROT 10 Y SHORT:

length 45 cm and length 75 cm - DP100YS000

ULTIMO

EN 12277 / CE 1019

SIZE	WAIST / cm		LEG LOOPS / cm	
	min.	max.	min.	max.
XS	65	75	49	49
S	70	80	52	52
M	75	85	55	55
L	80	90	58	58
XL	85	95	60	60
WEIGHT / g	352			

XT-ULTIMO-XS XT-ULTIMO-L
XT-ULTIMO-S XT-ULTIMO-XL
XT-ULTIMO-M

The Ultimo is an extremely lightweight and ideally sized harness with comfortable leg loops, suitable mainly but not exclusively for sport climbing. Made with low weight and comfort in mind, ensuring that the Ultimo will be appreciated in climbing contests and extreme route climbing.



STORM

EN 12277 / CE 1019

SIZE	WAIST / cm		LEG LOOPS / cm	
	min.	max.	min.	max.
XS	65	75	50	55
S	70	80	50	55
M	75	85	55	60
L	80	90	55	60
XL	85	95	65	70
XXL	90	100	65	70
WEIGHT / g	429			

XT-STORM-XS XT-STORM-L
XT-STORM-S XT-STORM-XL
XT-STORM-M XT-STORM-XXL

The Storm is a comfortable harness with reinforced attachment points and a differently coloured belaying eye. The leg loop diameter of the Storm can be adjusted to ensure comfort. The Storm has been designed especially for sport climbing.



TALUNG

EN 12277 / CE 1019



SIZE	WAIST / cm		LEG LOOPS / cm	
	min.	max.	min.	max.
S	65	80	50	55
M - L	75	90	60	65
XL	85	100	65	70
WEIGHT / g	465			

XT-TALUNG-S
XT-TALUNG-M/L
XT-TALUNG-XL



This multi-purpose harness is intended especially for mountain, big wall climbing and a full day at the crag. It features excellent adjustability via four stainless steel buckles. This should ensure the Talung gives maximum comfort during long and strenuous ascents.

COMP

EN 12277 / CE 1019



SIZE	WAIST / cm		LEG LOOPS / cm	
	min.	max.	min.	max.
ONE SIZE	65	120	42	66
WEIGHT / g	505			

XT-COMP



Harness for via ferratas and for beginners. With reinforced leg loops and attachment points, with one loop for material attachment. It optimizes the position of the body when hanging on the rope or after a fall. It prevents the body from taking the upside down position.

CANYON SIT

EN 12277 / CE 1019



SIZE	WAIST / cm		LEG LOOPS / cm	
	min.	max.	min.	max.
ONE SIZE	60	120	42	66
WEIGHT / g	550			

XT-CANYON

A simple, uncushioned harness for canyoning, based on the design of the popular sport harness Jammy. It is made of a strong material which is resistant to the water environment. With its removable neoprene protector, ergonomic design and reinforced attachment points, this harness is an ideal part of your gear for canyons.



JAMMY

EN 12277 / CE 1019



SIZE	WAIST / cm		LEG LOOPS / cm	
	min.	max.	min.	max.
ONE SIZE	60	120	42	66
WEIGHT / g	370			

XT-JAMMY



Very lightweight uncushioned harness designed especially for via ferratas, mountains and glaciers. Available in one universal size for all figures, with reinforced attachment point, colour-differentiated belay loop for safe fastening and one loop for material attachment. The right choice also for artificial climbing walls, climbing schools and skialpinism.

SCOUT

EN 12277 / CE 1019



SIZE	GIRTH OF CHEST / cm
ONE SIZE	75 -110
WEIGHT / g	240



XT-SCOUT



Chest harness SCOUT must be used in combination with a sit harness. It has two buckles for adjustment purposes and the height of attachment may be selected according to its position.



HELP WITH ANYTHING

ADDITIONAL SERVICES

LASO SCHALLER, CANYON TURNIGLA, PHOTO CREDIT (C) ALEX ARNOLD

MIDPOINT OF ROPE

The rope is distinctly marked in the midpoint of its length with an ink which does not affect its structure and its mechanical properties. In case of new ropes, the flexibility in the area of marking may be slightly stiff but this phenomenon disappears during the first use of the rope.

THE MIDPOINT MARK:

- clearly identifies the rope midpoint during abseiling and guarantees that both rope ends have the same length,
- assists in quickly finding the rope midpoint and the climber knows when abseiling,
- that both rope ends hanging down have the same length without measuring,
- in sport climbing, informs the belayer that the climber is higher than a half of the rope and his/her descending or abseiling may be difficult,
- in the mountains, informs the belayer that a half of the rope (still or just) remains,
- assists in coiling the rope "from the midpoint".



If there is no midpoint mark on your rope or the mark is poorly visible, use the Tendon Rope Marker for making permanent black marks.

XROPEMARKER



YOU SHOULD ALWAYS KNOW WHERE THE MIDPOINT OF YOUR ROPE IS, ESPECIALLY IF THE ROPE HAS BEEN SHORTENED.



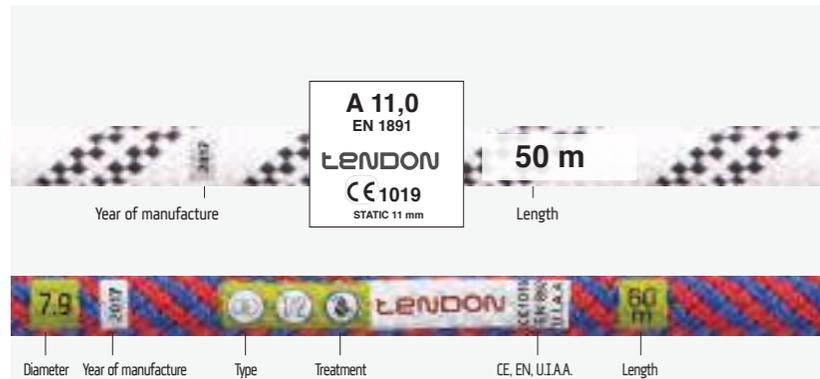
We develop a new, revolutionary conception of the overall administration and registration of ropes which, thanks to NFC technology, offers amazing possibilities and brings user comfort to a new level. With a PC and a mobile phone you obtain a quick, effective and smart tool for examination and maintenance of your ropes.

OUR ROPES WILL COMMUNICATE WITH YOU

Innovative and mobile access to identification, marking and registration of static and dynamic ropes.

MORE INFORMATION ON WWW.MYTENDON.COM





END MARKING OF ROPES

End marking of ropes by Tendon Thermotransfer is relatively permanent, does not come off and doesn't cause formation of rope end widenings that could get caught when pulling down the rope after abseiling.

ROPE IDENTIFICATION AND MARKING

STATIC ROPE

There is an identification tape (two tapes in case of NFPA certified ropes) inside the rope which contains the following information: rope manufacturer, standard, rope type, material used, year of manufacture.

DYNAMIC ROPE

Inside a dynamic rope there is a colour marker thread (one or more) identifying the calendar year of manufacture of the rope (e.g. 2014 red/black, 2015 green).

MORE INFORMATION ON WWW.MYTENDON.COM OR IN USING INSTRUCTION.



SEWN AND SPLICED EYE

Certain types of ropes can be delivered with a sewn or spliced eye on request. Sewn and spliced eyes are always in conformity with relevant standards.



ROPE TERMINATION

A perfect rope termination is done by the COMPACT technology - the core of the last 15 mm of the rope is joined to the sheath by means of ultrasound to form a compact end. This technology is currently considered to be the best method of rope termination.



ROPE CUTTER + CUTTING BLADE

CUTTING BLADE TYPE R - XCEPEL-R
HEAT CUTTER HSG - XPAJKA-HSGO

Rope shortening device.



ROPE PROTECTOR

LENGTH 60 CM - XPROTECTOR60
LENGTH 100 CM - XPROTECTOR100

Rope protector against rubbing when the rope runs over an edge. A resistant sleeve made of PVC with easy closing by a velcro fastener.



ROPE MADE TO MEASURE

We can make a rope in a length as required by you. Thanks to this possibility there is no need for you to shorten and mark the rope later. Just think economically and effectively - you can save time and money and avoid making useless waste.

TENDON ROPE CLEANER

XPRACIGEL01



Do not use any detergent for cleaning and washing of ropes. Tendon Rope Cleaner is a highly effective detergent for safe and thorough washing of ropes in washing machines as well as by hand. It does not damage the rope in any way and in addition the rope is ageing more slowly and is easier to use after washing and proper drying.

NOTICE

IF YOU BUY A NEW STATIC ROPE AND A SITUATION OCCURS THAT YOU HAVE TO USE IT IN A WET ENVIRONMENT, WE RECOMMEND YOU TO WASH THE NEW ROPE BEFORE THE FIRST USE. THIS WAY YOU WILL REMOVE GREASY ADDITIVES (USED DURING PRODUCTION OF PA FIBRE) THAT WOULD GET RELEASED FROM THE ROPE ON THE FIRST CONTACT WITH MOISTURE.

STORAGE LIFE AND LIFESPAN OF DYNAMIC ROPES

STORAGE LIFE THE MAXIMUM STORAGE LIFE IN UNUSED CONDITION WITHOUT LIMITATION TO LIFE SPAN MAKES UP TO 5 YEARS.

This is conditional on optimum storage conditions: clean place protected against light, without chemical, physical and mechanical effects, in a normal climate of 15 - 25 °C and a relative humidity of about 65 %. An examination of the rope by a competent person (person authorized by the manufacturer) once every six months is mandatory.

In the process of rope production, the fibres are mechanically doubled, twisted and braided in several stages. In this way the fibres finally attain a condition of mechanically induced stress. A long-term storage leads to retardation and relaxation. This means that stress in macromolecules is "relieving". This phenomenon is not harmful, on the contrary it is connected with an improvement of dynamic properties. Research works showed that the results of tests of dynamic performance of ropes that had been (optimally) stored for several years were often better than values measured immediately after production. Polyamide also does not contain additives and softeners like, for example, PVC that could diffuse out. This is the reason why no embrittlement occurs.

In addition, the in-the-meantime standardized finishing of fibres by nanotechnological treatment offers an additional protection. In case of present-time advanced materials, a considerable negative change of properties of the product in a time interval of 5 years can be excluded provided that optimum storage conditions are maintained.

Safety investigations performed by mountaineering associations in the past showed that some used and duly stored ropes made early in the sixties (!) still had a residual capacity of two standard falls!

LIFESPAN AGEING OF DYNAMIC ROPES IN USE

Due to different influences on use and specialities of use it is impossible to give an exact numerical value, only a roughly estimated time value can be specified.

Depending on frequency and intensity of use, external effects as abrasion, contamination, mechanical loading (static), rope work (lowering and/or abseiling), loading by falls (dynamic), intensive action of UV radiation, aggressive climatic conditions etc. lead to reduction of safety reserve of the dynamic rope.

- The consequences of abseiling and lowering are reduction of dynamic performance and reduction of safety reserve of the rope.
- Abrasion leads to gradual weakening of consistency of the sheath. Heavier abrasion makes the sheath "hairier" and reduces the loadability of the sheath and its protective effect on the rope core.
- Particles of impurities and rocks inside the rope, especially in combination with heavy performance of the rope, result in abrasion of fine fibres of the core and the sheath. The particles act as abrasive sand and lead to reduction of the load-bearing cross section of the fibres, especially during frequent abseiling/lowering.
- Dynamic load results in loss of rope performance - the ability of arresting dynamic (impact) energy decreases. This depends on the hardness of the fall considerably (hardness of the fall is given by the belay method and the fall factor; falls with a fall factor of > 1 are classified as hard falls according to the general state of the art).

Safety investigations performed by mountaineering associations reveal that if the rope sheath is not excessively damaged and shows no signs of heavy abrasion, a loading by falls with a fall factor of < 0.5 and correct dynamic belaying does not represent a safety risk provided that the rope is not resting on sharp edges.

INVESTIGATIONS BY THE SAFETY COMMISSION OF THE GERMAN ALPINE CLUB

Investigations performed by the Safety Commission of the German Alpine Club in the nineties revealed that there was a hyperbolic relation between the loss in safety reserve and the rope performance. There is also a linear relation between the rope quality and the loss in safety reserve.

The higher the safety reserve (number of falls) of the rope, the longer the life span of the rope, because the loss starts from the higher initial level.

In practical use of mountaineering ropes, two factors of rope work with different effects on the rope may be defined essentially:

- The rope is drawn by dead weight and friction only (metres of climbing). The leader climbs up and draws the rope behind to the next belay station, the rope is drawn from above or by change of rope direction without being loaded by the weight of the climber. The influencing factors are only the surface of the ground and friction when drawing the rope, as well as ambient conditions (UV radiation, moisture, impurities etc.).

The general load is very low.

- The rope is used for lowering and abseiling (metres of abseiling).

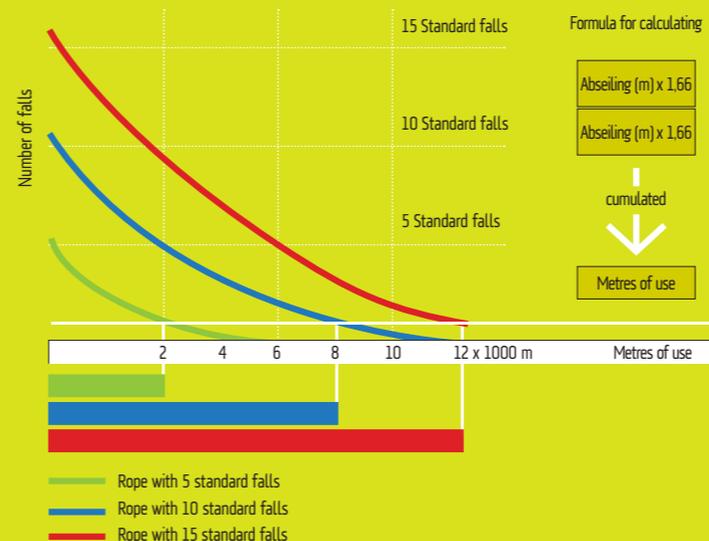
When using the rope for lowering with bending, a high performance induced by friction and movement is generated both in the belay/braking system (HMS, descender or belay device) and in the place of bending in the sheath and the core and is often connected with twisting which is brought about by the frequently-occurring false twist effect.

The general load is much higher than in the aforementioned case!

The user may use the following simple equation for making an approximate calculation:

$$\text{metres of climbing} \times 0.33 + \text{metres of abseiling} \times 1.66 = \text{metres of use}$$

When documenting the metres of use cumulatively, the user may estimate the safety condition of the rope (safety reserve of the number of falls) from the number of metres of use of the rope since the first day of use.



GENERAL VALUES OF SAFETY CONDITION (SAFETY RESERVE)

According to curves depicted in the graph for individual rope types:

TENDON 11.4 mm Trust	20 standard falls on the day of production
TENDON 11.0 mm Trust	16 standard falls on the day of production
TENDON 10.5 mm Ambition	11 standard falls on the day of production

The number of cumulated metres may be used to estimate the remaining safety condition/safety reserve (number of standard falls) of the rope.

Estimated safety condition of ropes used with different intensity (TENDON 11 mm Trust):

- **Safety condition >= 5 standard falls (up to approx. 6,000-8,000 metres of use)**
If the rope is in perfect condition, it may be used to secure any climbing situation up to a fall factor of 2.
- **Safety condition > 2 standard falls (up to approx. 12,000-14,000 metres of use)**
If the rope is in perfect condition, it may be used to secure any climbing situation up to a fall factor of 1.
- **Safety condition <= 2 standard falls**
If the rope is in perfect condition, it may be used to secure any climbing situation up to a fall factor of 0.3, if the rope sheath shows no signs of damage or extreme hairiness.
It is not easy to specify an exactly defined life span.

The following information can be used as a guide:

- occasional use (e.g., five times a year, training use) with no heavy performance of the rope (no abseiling), without loading by hard falls, with the rope being correctly used and loaded by not more than 600-800 metres of use = the rope may be used safely for 10 years maximum.

Extreme loading by falls or other strong mechanical, physical, climatic or chemical effects can damage the rope so heavily that it must be discarded immediately.

The rope must be discarded immediately also in case the user has the slightest doubt about the safety and the perfect condition of the rope.

STORAGE LIFE AND LIFE SPAN OF STATIC ROPES

STORAGE LIFE THE MAXIMUM STORAGE LIFE IN UNUSED CONDITION WITHOUT LIMITATION TO LIFE SPAN MAKES UP TO 5 YEARS.

This is conditional on optimum storage conditions: clean place protected against light, without chemical, physical and mechanical effects, in a normal climate of 15 - 25 °C and a relative humidity of about 65 %. An examination of the rope by a competent person once every six months is mandatory.

In the process of rope production, the fibres are mechanically doubled, twisted and braided in several stages. In this way the fibres finally attain a condition of mechanically induced stress. A long-term storage leads to retardation and relaxation. This means that stress in macromolecules is "relieving". This phenomenon is not harmful, on the contrary it is connected with an improvement of dynamic properties. Research works showed that the results of tests of dynamic performance of ropes that had been (optimally) stored for several years were often better than values measured immediately after production. Polyamide also does not contain additives and softeners like, for example, PVC that could diffuse out. This is the reason why no embrittlement occurs.

In case of present-time advanced materials, a considerable negative change of properties of the product in a time interval of 5 years can be excluded provided that optimum storage conditions are maintained.

LIFE SPAN

As to ageing of static ropes, it is impossible to give an exact numerical value, only a roughly estimated time value can be specified. This information does not relieve the user of the mandatory examination of the rope by a competent person (person authorized by the manufacturer) after use.

Depending on frequency and intensity of use, external effects as abrasion, contamination, mechanical loading (static), rope work (lowering and/or abseiling) loading by falls (dynamic), intensive action of UV radiation, aggressive climatic conditions etc. lead to reduction of static and dynamic performance (safety reserve) of the static rope.

The crucial influencing factors for safety of static ropes are external effects, as for instance:

- Sharp edges that may have fatal consequences even at a slight tension of the rope!
- Abseiling and lowering (rope work) lead to loss of dynamic and static performance. For instance, frequent abseiling with high load forms clusters of fused (melted) fibres in the rope sheath as a result of the heat inevitably developed by friction.
- Abrasion leads to gradual weakening of consistency of the sheath. Heavier abrasion makes the sheath "hairier".
- Internal wear - particles of impurities and rocks inside the rope, especially in combination with heavy performance of the rope, result in abrasion of fine fibres of the core and the sheath. The particles act as abrasive sand and lead to reduction of the load-bearing cross section of the fibres, especially during frequent abseiling.
- Loading by falls
Due to the low dynamic elongation, loading by falls with a fall factor of 0.3 or greater must be essentially excluded.

Because, unlike dynamic ropes, the main task of static ropes does not consist in safe arrest of falls but in a quasi-static loading with a minimum dynamic stress only, a macromolecular stretching occurs when the rope is used correctly which, however, has no adverse effects on the maximum tensile force and the elongation of the rope. In case of an alternating to repeated (cyclic) loading of up to 20 % of the maximum tensile strength of the rope with approximately 10,000 loading cycles, a residual force at break of the rope of > 75 % may be expected.

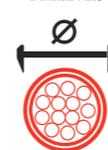
EXAMPLE:

- TENDON 11 mm Static
- maximum tensile force: 40.0 kN
 - residual force at break - knot: 16.5 kN
 - residual force at break after 10,000 cycles of repeated (cyclic) loading of up to 20 % (= 6 kN): 30.0 kN

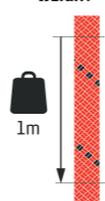
The above parameters exceed the minimum requirements of EN 1891 for Type A static rope significantly.

OCCASIONAL USE (SEVERAL TIMES A YEAR) WITH AN INTENSITY OF USE UNWORTHY OF NOTICE, WITHOUT CONSIDERABLE MECHANICAL LOADING OR FALL ARREST, WITHOUT RECOGNIZABLE WEAR OR CONTAMINATION.	8 - 10 YEARS
OCCASIONAL USE (SEVERAL TIMES A YEAR) WITH HIGH INTENSITY OF USE, MECHANICAL LOADING (SUSPENSION, OCCASIONAL LOWERING OR ABSEILING), WITHOUT FALL ARREST. SIGNS OF USE: SLIGHT WEAR, SLIGHT CONTAMINATION, NEGLIGIBLE HAIRINESS.	5 - 8 YEARS
FREQUENT USE (SEVERAL TIMES A MONTH) WITH LOW INTENSITY OF USE, WITHOUT CONSIDERABLE MECHANICAL LOADING (SUSPENSION, OCCASIONAL LOWERING OR ABSEILING) OR FALL ARREST. SIGNS OF USE: NO SIGNS OF HEAVY WEAR, SLIGHT CONTAMINATION, HARDLY RECOGNIZABLE HAIRINESS.	3 - 5 YEARS
VERY FREQUENT USE (SEVERAL TIMES A WEEK) WITH LOW INTENSITY OF USE, WITHOUT CONSIDERABLE MECHANICAL LOADING OR FALL ARREST. SIGNS OF USE: SIGNS OF HEAVY WEAR, SLIGHT CONTAMINATION, RECOGNIZABLE HAIRINESS.	
VERY FREQUENT USE (SEVERAL TIMES A WEEK) WITH HIGH INTENSITY OF USE, MECHANICAL LOADING (SUSPENSION), BUT WITHOUT FALL ARREST. SIGNS OF USE: SIGNS OF WEAR, OBVIOUS HAIRINESS, SLIGHT VITRIFICATION.	1 - 3 YEARS
INTENSIVE USE (EVERY DAY) WITH NORMAL INTENSITY OF USE, WITHOUT CONSIDERABLE MECHANICAL LOADING OR FALL ARREST. SIGNS OF USE: OBVIOUS WEAR, OBVIOUS HAIRINESS, HEAVY CONTAMINATION.	
INTENSIVE USE (EVERY DAY) WITH HIGH INTENSITY OF USE, MECHANICAL LOADING (SUSPENSION), BUT WITHOUT FALL ARREST. SIGNS OF USE: HEAVY WEAR, VITRIFICATION, CONTAMINATION AND HAIRINESS.	< /=1 YEAR
EXTREME LOADING BY FALLS OR OTHER STRONG MECHANICAL, PHYSICAL, CLIMATIC OR CHEMICAL EFFECTS CAN DAMAGE THE ROPE SO HEAVILY THAT IT MUST BE DISCARDED IMMEDIATELY. THE ROPE MUST BE DISCARDED IMMEDIATELY ALSO IN CASE THE USER HAS THE SLIGHTEST DOUBT ABOUT THE SAFETY AND THE PERFECT CONDITION OF THE ROPE.	

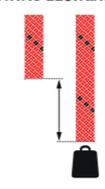
DIAMETER



WEIGHT



STATIC ELONGATION



SHEATH SLIPPAGE



TESTING OF CLIMBING ROPES IN ACCORDANCE WITH EN 892

DIAMETER

This parameter is measured with a 10 kg load for single ropes, 6 kg for half ropes and 5 kg for twin ropes. This would imply that testing the exact diameter of ropes under domestic conditions is quite difficult.

WEIGHT

The mass of a rope is measured for a length of one meter. A single rope without any added finish weights 52 to 88 grams per meter, a half rope about 50 grams and twin rope approximately 42 grams per meter. The rope's core must account for at least 50 % of its total mass.

STATIC ELONGATION

Usable static elongation is tested by applying an 80 kg load to the rope. Elongation may not exceed 10 % for single ropes (one strand) and twin ropes (two strands tested in tandem) and 12 % for half ropes (one strand).

SHEATH SLIPPAGE

Using a special machine, this test determines how much the surface of a rope will slip relative to the core when subjected to a load. The EN 892 establishes that slippage may not exceed 1 % (20 mm) when stretching a length of rope measuring 2250 (+ - 10 mm). If the sheath slides over the core during actual climbing, it can lead to bulges and so-called stockings. If the ends of ropes have not been sealed properly, the core at the end of the rope can come loose from the sheath or the sheath may extend longer than the core.

The ends of our ropes are sealed with ultrasound into one indivisible whole and if the limits for slippage are complied with, the situation described above will not occur.

NUMBER OF STANDARD FALLS

This gives the number of falls the rope being tested under conditions given by the EN 892. This standard requires a minimum of 5 falls with a load of 80 kilograms for single ropes. Half ropes are tested with a 55 kg load. For twin ropes, the two ropes are under a constant load of 80 kilograms and the minimum number of falls is 12. The number of falls withstood during testing is a direct measurement of a rope's margin of safety (strength). In practice, no new rope will break under a sudden load if the rope is in good condition and has been properly handled. A rope will gradually become less

safe as its material ages and as it becomes worn from use, as these factors reduce its strength. Moisture can also reduce a rope's strength by degrading the polyamide fibers used for making the rope.

MAXIMUM IMPACT FORCE

Impact force is the force that occurs during a first fall under defined conditions (mass of the load, fall factor, etc.) and that is absorbed by the rope. Under testing, the impact force increases for each additional test fall the rope is subjected to. How fast the impact force increases determines the number of standard falls withstood. The higher the number of standard falls, the longer the service life of the rope for the user. The practical use of ropes in real climbing or on training walls is different from laboratory conditions. During standard rope tests, the end of the rope is firmly secured, but in real climbing, belaying equipment and systems allow for some slippage of the rope, breaking the fall dynamically. Dynamic belaying dissipates some of the fall's energy, thereby lowering the impact force. For that reason, it is important to know how to use appropriate dynamic belaying.

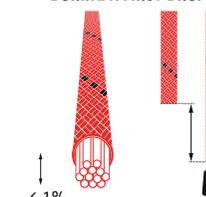
DYNAMIC ELONGATION DURING A FIRST DROP

This parameter measures the elongation of the rope during the first standard drop. The maximum allowable dynamic elongation is 40 %. This measurement is a better indicator of the rope's properties than the static elongation value.

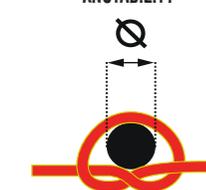
KNOTABILITY

One of the most important requirements for mountain climbing rope is outstanding flexibility. How is this measured? A section of the tested rope is tied into a simple knot. Weight is then applied to the rope (10 kg for a single rope). Then the interior diameter of the knot is measured. The ratio between that diameter and the diameter of the rope gives the coefficient of knotability.

DYNAMIC ELONGATION DURING A FIRST DROP

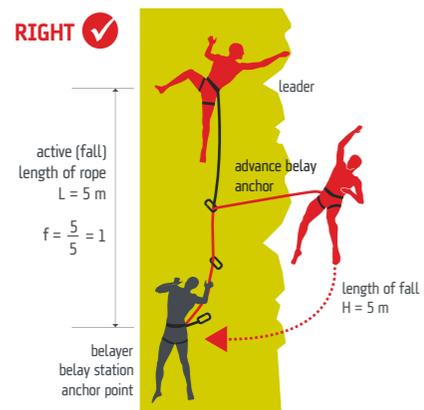


KNOTABILITY

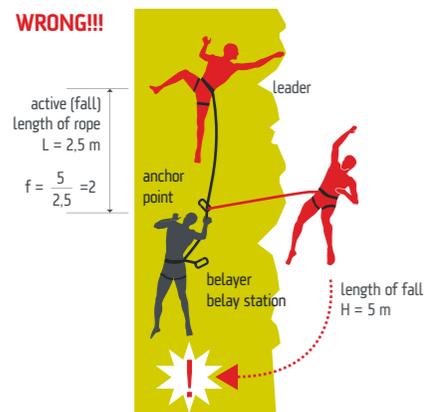


! WARNING THE FALL FACTOR IS ALSO OF KEY IMPORTANCE FOR THE AMOUNT OF IMPACT FORCE. HOW FAR YOU FALL IS VIRTUALLY INSIGNIFICANT FOR THE IMPACT FORCE. THE AMOUNT OF THE FALL FACTOR IS MUCH MORE IMPORTANT. A FIVE METER FALL WITH A FALL FACTOR OF $F = 1$ WILL RESULT IN A MUCH LOWER IMPACT FORCE THAN A FALL OF THE SAME LENGTH WITH A FACTOR OF $F = 2$. THE ENERGY OF THE CLIMBER'S FALL IS ABSORBED BY THE ACTIVE LENGTH OF THE ROPE (SHOWN IN THE ILLUSTRATIONS IN RED).

RIGHT ✓



WRONG!!!



! WARNING A ROPE WITH POOR FLEXIBILITY IS HARDER TO TIE IN KNOTS AND SLIDES LESS EFFICIENTLY THROUGH THE CARABINERS OF A BELAYING SYSTEM. THE EFFECTS OF THE ELEMENTS OR OF IMPROPER CARE CAN REDUCE A ROPE'S FLEXIBILITY.

LANEX has built its own laboratory for testing its TENDON ropes, including its own drop tower. Newly developed ropes to European labs for certification already fully prepared and with known technical parameters. Most TENDON ropes are tested at the accredited TÜV Lab in Vienna.

REQUIREMENTS OF THE NORM EN 892 - DYNAMIC CLIMBING ROPES

MONITORED PARAMETER	REQUIRED VALUES		
	SINGLE ROPE	HALF ROPE	TWIN ROPE
Rope diameter	Undefined	Undefined	Undefined
Rope weight	Undefined	Undefined	Undefined
Sheath slippage	1 % (± 20 mm)	1 % (± 20 mm)	1 % (± 20 mm)
Static elongation	max. 10 % *	max. 12 % *	max. 10 % **
Dynamic elongation	max. 40 % +	max. 40 % ***	max. 40 % ++
Impact force of the first fall	max. 12 kN +	max. 8 kN ***	max. 12 kN ++
Number of falls	min. 5 +	min. 5 ***	min. 12 ++

* test of one strand of rope / ** test of two strands of rope / *** test of one strand of rope, load: 55 kg
+ test of one strand of rope, load: 80 kg / ++ test of two strands of rope, load: 80 kg

TESTING OF ACCESSORY CORD

DIAMETER

Accessory cords are tested in a manner similar to testing of ropes, except that the pretensioning is less. According to EN 564, cords should have diameters of 4, 5, 6, 7 and 8 mm. Smaller diameters (2 mm - avalanche cords, 3 mm - hammer cord and 9 mm - force cord) do not comply with the norm.

STRENGTH

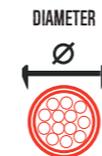
The minimum strength under to EN 564 is shown on the table below:

diameter (mm)	minimum strength kN
4	3.2
5	5.0
6	7.2
7	9.8
8	12.8

TESTING ROPES WITH LOW ELONGATION (STATIC ROPES) IN ACCORDANCE WITH EN 1891

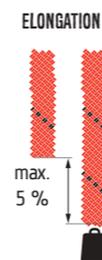
DIAMETER

This quantity is measured with a 10 kg load on the rope. The ropes may have a minimum diameter of 8.5 mm and a maximum of 16 mm.



ELONGATION

Usable static elongation is measured by applying a test load of 150 kg (after 50 kg pretensioning). Elongation may not exceed 5 %.



STATIC STRENGTH

This is always stated on tags on the ropes. It varies according to the diameter of the rope and the kind of Used material. EN 1891 requires that group A ropes have a minimum static strength of 22 kN and that Type B ropes have a minimum static strength of 18 kN.

! WARNING THE MAXIMUM RECOMMENDED LOAD IS 1/10 OF THE NOMINAL STRENGTH STATED ON THE PRODUCT LABEL.

REQUIREMENTS WITH RESPECT TO MATERIAL PROPERTIES

According to EN 1981, static ropes must be manufactured from a material that has a melting point higher than 195 °C, so they may not be made using polyethylene and polypropylene. Ropes made for those materials for canyoning are not subject to that norm, although they fulfill the norm with respect to static strength and other parameters.

REQUIREMENTS OF THE NORM EN 1891 - STATIC ROPES

MONITORED PARAMETER	REQUIRED VALUES	
	ROPE TYPE A	ROPE TYPE B
Rope diameter	8.5 - 16 mm	8.5 - 16 mm
Knotability coefficient	max. 1.2	max. 1.2
Sheath slippage	max. 20 mm*	max. 15 mm*
Elongation	max. 5 %	max. 5 %
Shrinkage	Undefined	Undefined
Impact force	max. 6 kN	max. 6 kN
No. of falls with a fall factor of 1	min. 5	min. 5
Strength without knots	min. 22 kN	min. 18 kN
Strength with knots	min. 15 kN (3 minutes)	min. 12 kN (3 minutes)

* 20 mm + 10 for ropes to diameter 12 mm. 20 mm + 5 for ropes with diameter between 12.1 - 16 mm

SHEATH SLIPPAGE

This parameter is important mainly during rappelling on static ropes - if this parameter of a rope is insufficient, a safe descent could be endangered by the bunching of the rope's sheath in front of the rappelling brake.

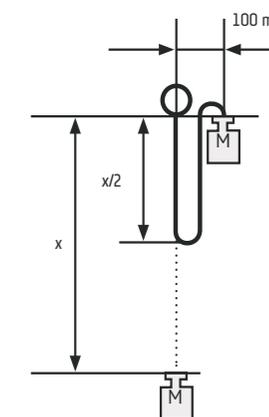
For Type A ropes, slippage may not exceed ca. 20 mm for a 2 m length of rope (this applies to ropes with a diameter of up to 12 mm). For Type B ropes, slippage may not exceed 15 mm.

KNOTABILITY

This is tested in the same way as mountain climbing ropes: it must not be possible to insert a bar with a diameter greater than a multiple of 1.2 times the diameter of the rope into the opening in the knot tightened by the testing force.

DYNAMIC PERFORMANCE

The testing equipment is similar to that used for testing climbing ropes, except that the rope is ca. 2 m long. At the ends it is tied in figure eight knots and it is tested with five falls with a fall factor of 1. During the test, the rope must withstand all five falls. Type A ropes are tested with a load of 100 kg. Type B ropes are tested with a load of 80 kg.





SINGLE ROPES

For ascent where only one rope is used. This is the most basic and widely used method of using rope for ascents.



HALF ROPES

Separate ropes are anchored in alternating belaying points. This system reduces the risk of rope breakage by falling rocks and provides maximum protection in alpine conditions or on tough climbs.



TWIN ROPES

The same ropes are always used in pairs, secured at common belaying points. Twin ropes guarantee a high level of safety, especially for classic alpine climbing.



STANDARD

Improved basic finishing of dynamic ropes. The new technological process enables the application of impregnation agents early in the standard finishing of the ropes.



COMPLETE SHIELD

Maximum level of rope protection against water and abrasion. It is reached by using the new progressive NANOTECHNOLOGY method. Tiny particles of TEFLON®Eco are applied to the rope sheath and core and make a film of almost impermeable protective layer. The rope fibres are then protected against dust and water which would otherwise cause a harm to the rope construction. COMPLETE SHIELD is an impregnation which extends the general lifespan of TENDON ropes significantly. All ropes with the Complete Shield finish meet the UIAA 101 requirement for water repellent test.



TEFIX®

The TeFIX® patented technology permanently bonds the sheath to the core. It prevents from any slippage between these two basic

rope parts. This particular feature was reached by adding a special material between core and sheath. This extra material is later also processed so that the bond is flexible and strong. The rope has a 0% sheath slippage, much longer lifespan, and better handling.



LOWE

Thanks to the unique combination of materials which work together jointly and meet the stringent requirements of the EN 892 standard, we were able to reduce the weight while retaining a diameter acceptable to all climbers.



SECURE

Rope with a zero sheath slippage is made with utilization of the unique patented technology named Secure. Thanks to the unique sandwich-type construction of braided layers and the use of specially finished fibres, the rope is safe even in case of a heavily damaged sheath.



SBS — SIMPLE BRAID SYSTEM

SBS - is system where each strand is plaited separately into the sheath construction and not in pair (tandem). SBS braiding makes the sheath surface much more compact and smoother. Therefore ropes made by SBS generate much lower friction, are more resistant to abrasion and last longer while in contact with rocks.



COMPACT

Our own special technology has been used for the ends of the rope. In a length of 15 mm, the core strand and sheath are connected into one unit.



MIDPOINT OF ROPE

At half of the length, the rope is visibly marked by coloured band, which does not

affect the core structure and its mechanical properties. Lengths 30 - 80 m only.



BICOLOUR

A new, clearly identifiable change of rope pattern in the middle. Bicolour brings comfort in rope handling and is advantageous especially for descending. The change of pattern is practical also when climbing with half ropes and contributes to improvement of ropework as well as to safety in general.



CE — SYMBOL OF COMPLIANCE

This symbol confirms that the product meets safety requirements specified in the relevant European regulations. The number following symbol (e.g. CE1019) is number of notified body which performs checking of production: VVUÚ, a.s., Pikartská 1337/7, 71607 Ostrava-Radvanice, Czech Republic.



UIAA

Products marked with this symbol meet UIAA requirements. The UIAA is the International Mountaineering and Climbing Federation.



TENOTE

New, revolutionary conception of the overall administration and registration of ropes which, thanks to NFC technology, offers unthought-of possibilities and brings user comfort to a hitherto unrecognized level. Rope includes microchip. ☺ With a PC and a mobile phone you obtain a quick, effective and smart tool for examination and maintenance of your ropes.



TENDON ELECTRONIC NOTE SYSTEM (TENOTE)

Rope marking system by means of a microchip.

EN 1891

This European norm establishes safety requirements and testing procedures for static ropes at European Union accredited laboratories. Products labeled with the symbol of this European norm satisfy the given safety requirements.

EN 892

This European norm establishes safety requirements and testing procedures for dynamic climbing ropes at European Union accredited laboratories. Products labelled with the symbol of this European norm satisfy the given safety requirements.

NFPA

These ropes meet the life safety rope requirements of NFPA 1983, standard on fire service life safety rope and equipment for emergency services, 2017 edition.



EXPERT - If climbing is your lifestyle and you always go for the best equipment available. You need aggressive ropes that never fail and support your impressive performance.



ADVANCED - It seems that you are serious about climbing and that you care about the gear you use. The fact that you've already achieved quite difficult routes only confirms it. Go for the ropes labeled as Advanced.



BEGINNER - Ropes ideal for your first moves on rock or occasional climbing. Thicker diameters and long lifespan.

ENVIRONMENTAL FRIENDLY BRAND



TO SUSTAIN OUR UNIQUE NATURAL RICHES, IT IS NECESSARY THAT ALL ECONOMIC SUBJECTS CONTRIBUTE BY A MORE RESPONSIBLE APPROACH TO SUSTAIN OUR PLANET FOR FUTURE GENERATIONS. WE CANNOT JUST TAKE, WE ALSO HAVE TO GIVE. WE TOO ALSO TRY TO ADHERE TO THIS APPROACH – THEREFORE ALL OF OUR CUSTOMERS CAN RETURN THEIR OLD AND DAMAGED ROPE TO US AND WE WILL ENSURE A COMPLETELY FREE OF CHARGE RECYCLING OF IT AT OUR COSTS. INFORMATIVE LABELS ON ROPES AS WELL AS THE REELS, ON WHICH OUR ROPES ARE WOUND, ARE MADE OF AN ECOLOGICALLY RECYCLABLE MATERIAL. THE REELS THEMSELVES ARE RETURNABLE AND WE REUSE THEM TO PACK NEW ROPES. PACKAGINGS OF OUR DYNAMIC ROPES ARE PACKAGINGS WITH AN ADDITIONAL UTILITY VALUE – THEY MAY BE REUSED FOR MANY OTHER PURPOSES AFTER REMOVING THE ROPES FROM THEM.

WE ARE GLAD THAT WE CAN CONTRIBUTE TO THE MAINTENANCE OF A HIGH-QUALITY ENVIRONMENT BY OUR APPROACH.

	MASTER 7.8 TEFIX® NEW!		MASTER 8.6		MASTER 8.9			MASTER 9.0 TEFIX® NEW!		
	⑫	Ⓢ	①		①	⑫	Ⓢ	①	⑫	Ⓢ
	ART. NO. - COLOUR		ART. NO. - COLOUR		ART. NO. - COLOUR			ART. NO. - COLOUR		
ROPE DIAMETER • [mm]	7.8	7.8	8.6		8.9	8.9	8.9	9.0	9.0	9.0
WEIGHT • [g/m]	39	39	50		52	52	52	55	55	55
NUMBER OF UIAA FALLS	6	16	5		5	16	29	6	19	33
MAX. IMPACT FORCE • [kN]	5.4	8.3	9.1		8.7	6.1	9.6	8.9	6.5	10.8
SHEATH SLIPPAGE • [%]	0	0	0.3		0	0	0	0	0	0
STATIC ELONGATION • [%]	11.3	7.1	4.3		6.9	6.9	6.9	9.6	9.6	9.6
DYNAMIC ELONGATION • [%]	36	32	30		33	30	27	31	29	25
KNOTABILITY	0.9	0.9	0.9		0.8	0.8	0.8	0.9	0.9	0.9

	MASTER PRO 9.2		MASTER 9.4		MASTER 9.7		MASTER 9.7 TEFIX®	
	①		①		①		①	
	ART. NO. - COLOUR		ART. NO. - COLOUR		ART. NO. - COLOUR		ART. NO. - COLOUR	
ROPE DIAMETER • [mm]	9.2		9.4		9.7		9.7	
WEIGHT • [g/m]	58		58		61		61	
NUMBER OF UIAA FALLS	9		5-7		7-8		8	
MAX. IMPACT FORCE • [kN]	9.1		7		7		8.2	
SHEATH SLIPPAGE • [%]	0.3		0		0.1		0	
STATIC ELONGATION • [%]	6.1		6.2		6.3		8.0	
DYNAMIC ELONGATION • [%]	31		37		36		35	
KNOTABILITY	1		0.9		0.9		0.8	

	MASTER 7.0		MASTER 7.8		MASTER 8.5		AMBITION 9.8	
	Ⓢ		⑫	Ⓢ	⑫	Ⓢ	①	
	ART. NO. - COLOUR		ART. NO. - COLOUR		ART. NO. - COLOUR		ART. NO. - COLOUR	
ROPE DIAMETER • [mm]	7		7.8	7.8	8.5	8.5	9.8	
WEIGHT • [g/m]	34		38	38	46	46	64	
NUMBER OF UIAA FALLS	14		6	16	10	14-17	9	
MAX. IMPACT FORCE • [kN]	8.9		5.2	7.9	5.1	7.7	7.1	
SHEATH SLIPPAGE • [%]	0		0	0	0.1	0.1	0	
STATIC ELONGATION • [%]	3.6		6.5	6.1	7	7	6.2	
DYNAMIC ELONGATION • [%]	33		32	33	35	33	35	
KNOTABILITY	0.9		0.9	0.9	0.8	0.8	0.8	

	AMBITION 10.0		AMBITION 10.2 TEFIX®		AMBITION 10.5		AMBITION 8.5	
	①		①		①		⑫	
	ART. NO. - COLOUR		ART. NO. - COLOUR		ART. NO. - COLOUR		ART. NO. - COLOUR	
ROPE DIAMETER • [mm]	10		10.2		10.5		8.5	
WEIGHT • [g/m]	67		67		69		45	
NUMBER OF UIAA FALLS	9		11		9-10		7	
MAX. IMPACT FORCE • [kN]	7.8		8.3		7.9		5	
SHEATH SLIPPAGE • [%]	0.1		0		0		0.1	
STATIC ELONGATION • [%]	5.7		6.9		6		7	
DYNAMIC ELONGATION • [%]	33		33		34		38	
KNOTABILITY	1		0.8		0.8		1	

	ALPINE 7.9		TRUST 11.0	
	⑫	Ⓢ	①	
	ART. NO. - COLOUR		ART. NO. - COLOUR	
ROPE DIAMETER • [mm]	7.9	7.9	11	
WEIGHT • [g/m]	39	39	79	
NUMBER OF UIAA FALLS	6	16	16	
MAX. IMPACT FORCE • [kN]	5.4	7.8	8.1	
SHEATH SLIPPAGE • [%]	0	0	0.1	
STATIC ELONGATION • [%]	6.7	7	6.1	
DYNAMIC ELONGATION • [%]	34	32	34	
KNOTABILITY	0.8	0.8	0.9	

	LOWE 8.4		HATRICK 9.7	
	⑫	Ⓢ	①	
	ART. NO. - COLOUR		ART. NO. - COLOUR	
ROPE DIAMETER • [mm]	8.4	8.4	9.7	
WEIGHT • [g/m]	41	41	61	
NUMBER OF UIAA FALLS	5	12	5	
MAX. IMPACT FORCE • [kN]	5	8.9	8.4	
SHEATH SLIPPAGE • [%]	0	0	0	
STATIC ELONGATION • [%]	5.4	5.3	9.0	
DYNAMIC ELONGATION • [%]	31	27	29	
KNOTABILITY	0.8	0.8	1	

	INDOOR 10.4		CANYON DRY 9.0		CANYON WET 10.0	
	①		9		10	
	ART. NO. - COLOUR		ART. NO. - COLOUR		ART. NO. - COLOUR	
ROPE DIAMETER • [mm]	10.4		9		10	
WEIGHT • [g/m]	72		59		66	
NUMBER OF UIAA FALLS	8-9		16		12	
MAX. IMPACT FORCE • [kN]	7.7		44		33	
SHEATH SLIPPAGE • [%]	0.1		0,20		2.7	
STATIC ELONGATION • [%]	6.5		3,6		2.1	
DYNAMIC ELONGATION • [%]	35		1		0.8	
KNOTABILITY	1		30		30	

	CANYON GRANDE 10.0**		SALAMANDER 10.2	
	10		10.2*	
	ART. NO. - COLOUR		ART. NO. - COLOUR	
ROPE DIAMETER • [mm]	10		10.2*	
WEIGHT • [g/m]	61		60	
NUMBER OF FALLS (MIN.)	20*		20**	
RELATIVE MASS OF SHEATH	49		47	
SHEATH SLIPPAGE • [%]	2.6		0	
ELONGATION (50 - 150 KG)	3.2		2.6	
SHRINKAGE • [%]	1.7		0	
TENACITY • [kN]	18		23	
MIN. TENACITY WITH KNOTS • [kN]	12		12	
USED MATERIAL	PA/PPV		PA/PPV	
TYPE	-		-	
FLOATING	Yes		Yes	

* weight 55 kg, fall factor 1
 ** tested according to EN 1891 type B except min. tenacity and material

	TRUST 11.4		LOWE 9.7	
	①		①	
	ART. NO. - COLOUR		ART. NO. - COLOUR	
ROPE DIAMETER • [mm]	11.4		9.7	
WEIGHT • [g/m]	84		55	
NUMBER OF UIAA FALLS	20		6	
MAX. IMPACT FORCE • [kN]	8.4		8.6	
SHEATH SLIPPAGE • [%]	0.1		-0.15	
STATIC ELONGATION • [%]	5.5		7.4	
DYNAMIC ELONGATION • [%]	34		32	
KNOTABILITY	1		1	

	HATRICK 10.2		INDOOR 10.2i	
	①		①	
	ART. NO. - COLOUR		ART. NO. - COLOUR	
ROPE DIAMETER • [mm]	10.2		10.2	
WEIGHT • [g/m]	66		68	
NUMBER OF UIAA FALLS	5		7	
MAX. IMPACT FORCE • [kN]	8.2		7.8	
SHEATH SLIPPAGE • [%]	0		0	
STATIC ELONGATION • [%]	5.4		7.3	
DYNAMIC ELONGATION • [%]	33		36	
KNOTABILITY	0.9		1	

	CANYON DRY 9.0		CANYON WET 10.0	
	9		10	
	ART. NO. - COLOUR		ART. NO. - COLOUR	
ROPE DIAMETER • [mm]	9		10	
WEIGHT • [g/m]	59		66	
NUMBER OF FALLS (MIN.)	16		12	
RELATIVE MASS OF SHEATH	44		33	
SHEATH SLIPPAGE • [%]	0,20		2.7	
ELONGATION (50 - 150 KG)	3,6		2.1	
SHRINKAGE • [%]	1		0.8	
TENACITY • [kN]	30		30	
MIN. TENACITY WITH KNOTS • [kN]	18,4		17	
USED MATERIAL	PA		PA	
TYPE	A / EN 1891		A / EN 1891	
FLOATING	No		No	

	SPELEO			
	9	10	10.5	10.5 Special
	ART. NO. - COLOUR			
ROPE DIAMETER • [mm]	9	10	10.5	10.5 Special
WEIGHT • [g/m]	48	66	72	76
NUMBER OF FALLS (MIN.)	12	20	20	12
RELATIVE MASS OF SHEATH	44	42	46	51
SHEATH SLIPPAGE • [%]	1	0	2	1
ELONGATION (50 - 150 KG)	4.1	3.5	3.4	3.5
SHRINKAGE • [%]	0	2.2	1.8	1.9
TENACITY • [kN]	23	29	30	33
MIN. TENACITY WITH KNOTS • [kN]	12	16	17	15
USED MATERIAL	PA	PA	PA	PES/PA
TYPE	B	A	A	A
FLOATING	-	-	-	-

* tested according to EN 1891 type B except material and number of falls
 ** weight 55 kg, fall factor 1

	TIMBER EVO 11.0 NEW!	TIMBER EVO 11.5	TIMBER EVO 12.5 NEW!	LOWERING ROPE
ROPE DIAMETER • [mm]	11	11.5	12.5	15
WEIGHT • [g/m]	88	90	104	172
NUMBER OF FALLS (MIN.)	20	20	20	-
RELATIVE MASS OF SHEATH	57	54	48	-
SHEATH SLIPPAGE • [%]	0	0	0	-
ELONGATION (50 – 150 KG)	3.1	3	3	-
SHRINKAGE • [%]	0.7	1	0.6	-
TENACITY • [kN]	30	30	39	61
MIN. TENACITY WITH KNOTS • [kN]	18	18	22	-
USED MATERIAL	PES/PA	PES/PA	PES/PA	PES
TYPE	A	A/ EN 1891	A	-

	TIMBER CORD 3.0	TIMBER CORD 8.0	TIMBER CORD 10.0
ROPE DIAMETER • [mm]	3	8	10
WEIGHT • [g/m]	2.5	54.3	73
TENACITY • [kN]	0.8	20	25
USED MATERIAL	PE	PES/TECHNORA	PES/TECHNORA

	MILITARY 9.0	MILITARY 10.0	MILITARY 10.5	MILITARY 11.0	MILITARY 12.0
ROPE DIAMETER • [mm]	9	10	10.5	11	12
WEIGHT • [g/m]	50	69	72	80	92
NUMBER OF FALLS (MIN.)	20	20	20	20	20
RELATIVE MASS OF SHEATH	49	39	36	40	35
SHEATH SLIPPAGE • [%]	2	4	3	5	4
ELONGATION (50 – 150 KG)	3.8	3.4	3.4	3.3	3.2
SHRINKAGE • [%]	2.1	2	1.9	1.9	1.8
TENACITY • [kN]	23	31	32	33	42
MIN. TENACITY WITH KNOTS • [kN]	13	17	18	20	25
USED MATERIAL	PA	PA	PA	PA	PA
TYPE	B	A	A	A	A

	REFLECTIVE 11.0	ARAMID 10.0	ARAMID 11.0	FORCE 10.0	FORCE 11.0
ROPE DIAMETER • [mm]	11	10*	11	10*	11**
WEIGHT • [g/m]	80	66.4	80	68	82
NUMBER OF FALLS (MIN.)	20	10	18	5	5
RELATIVE MASS OF SHEATH	40	50	47	40	41
SHEATH SLIPPAGE • [%]	5	0	1	0	5
ELONGATION (50 – 150 KG)	3.3	0	3	2	3.4
SHRINKAGE • [%]	1.9	1.5	0.9	2	1.8
TENACITY • [kN]	33	37	45	24	26
MIN. TENACITY WITH KNOTS • [kN]	20	15	15	13	15
USED MATERIAL	PA	Aramid/PA	Aramid/PA	PA/Steel	PA/Steel
TYPE	A	*	A	*	**

* tested according to EN 1891 except impact force

* tested according to EN 1891 type B excepted material, marking and falls
** tested according to EN 1891 type A excepted material, marking and falls

	STATIC 9.0	STATIC 9.0 TYPE A	STATIC 10.0	STATIC 10.5	STATIC 11.0
ROPE DIAMETER • [mm]	9	9	10	10.5	11
WEIGHT • [g/m]	50	61	69	72	80
NUMBER OF FALLS (MIN.)	20	8	39	20	20
RELATIVE MASS OF SHEATH	49	41	39	36	40
SHEATH SLIPPAGE • [%]	2	0	4	3	5
ELONGATION (50 – 150 KG)	3.8	2.8	3.4	3.4	3.3
SHRINKAGE • [%]	2.1	1.9	2	1.9	1.9
TENACITY • [kN]	23	30	31	32	33
MIN. TENACITY WITH KNOTS • [kN]	13	15	17	18	20
USED MATERIAL	PA	PA	PA	PA	PA
TYPE	B	A	A	A	A

	STATIC 12.0	STATIC 13.0	SECURE 10.5	SECURE 11.0
ROPE DIAMETER • [mm]	12	13	10.5	11
WEIGHT • [g/m]	92	109	75	84.6
NUMBER OF FALLS (MIN.)	20	20	min. 17	min. 20
RELATIVE MASS OF SHEATH	35	46	48.5	33.1
SHEATH SLIPPAGE • [%]	4	0	0	0
ELONGATION (50 – 150 KG)	3.2	3.3	4.6	4.5
SHRINKAGE • [%]	1.8	1.8	1.2	0.8
TENACITY • [kN]	42	42	18	19.8
MIN. TENACITY WITH KNOTS • [kN]	25	27	28	35
USED MATERIAL	PA	PA	4.5	4.3
TYPE	A	A		

	STATIC (NFPA)		
DIAMETER • [mm]	10.5	11	12
DIAMETER • [in]	0.413	0.433	0.472
MBS* • [kN]	32	40.5	42
MBS* • [LB]	6519	9 105	9 442
WEIGHT • [g/m]	74	83	87
ELONGATION AT 10% MBS • [%]	8.6	8.4	7.4
ELONGATION AT 1.35 KN (300 LBF) • [%]	2.8	3.6	2.3
ELONGATION AT 2.70 KN (600 LBF) • [%]	7.1	6.2	4.7
ELONGATION AT 4.40 KN (1000 LBF) • [%]	10.7	9.5	7.8
NFPA 1983 2012 EDITION CLASSIFIED	Yes	Yes	Yes
	Technical use	General use	General use

	ACCESSORY AND POWER CORDS									REEP ARAMID	REEP REFLECTIVE	REEP TOUCH
CORD DIAMETER • [mm]	4	5	6	7	8	2	3	9		6	6	6
WEIGHT • [g/m]	12.7	18.9	23.2	34	39.8	2.8	6.5	54.4		22.9	23.2	23.2
MIN. STRENGTH • [daN]	340	510	1000	1300	1640	120	190	1900		1700	1000	1000
ART. NO. • COLOUR	A060T44S100R • BLUE/YELLOW A040T42S100R • RED	A060T44S100R • YELLOW A050T42S100R • BLUE	A060T44S100R • GREEN A060T42S100R • RED	A070T44S100R • RED A070T42S100R • YELLOW	A080T44S100R • RED A080T41S100R • ORANGE	A020T44S100R • BLUE A020T42S100R • YELLOW	A030T44S100R • BLUE A030T42S100R • BLACK	A090T44S100R • RED		A060T44S100R • BLACK	A060T44S100R • BLACK	A060T44S100R • WHITE/RED A060T42S100R • WHITE/BLUE

DISTRIBUTORS

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