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#### **MARNING**

Breaking strength: The detail in daN shows the load under which the rope would break. These loads are values which are approved as a result of laboratory testing. Performance in actual conditions may vary. Our sizing recommendations are based on breaking loads that are five times the working load. Using these products can entail risks. Do not use them for any other than the intended purposes. Especially, do not use them for personal protection or lifting purposes as specified in EU Directive 2006/42/EC, unless the products are clearly identified as suitable for such purposes under relevant standards. Customers shall make sure that persons using the products are familiar with their correct use and the necessary safety precautions. Keep in mind that any of these products can cause damage if incorrectly used, stored, cleaned, or overloaded. Check national safety regulations, industry recommendations, and standards for locally applicable requirements (e.g. choice of safety factors).

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# **APEX**

Apex is the workhorse of the MAXIM\* product line. Designed for big wall and trad climbing or for working projects and developing routes, Apex makes an excellent rope for challenge courses and fall protection for safety personnel. It consistantly takes a beating but still delivers reliable clips. All Apex ropes feature an Endura Dry core. Selected models are 2x Dry, which adds an Endura Dry cover for the ultimate dry protection.

### **Features**

#### ✓ All Apex ropes feature Endura Dry on the Core

- ✓ Select models have 2x Endura Dry on the cover
- Designed for big wall and trad climbing
- Great for developing routes

## Specifications

Core: Nylon
Cover: Nylon
Standard: EN 892

UIAA 101

Ø	Weigh	t	Cover	Elongatio	on	Max. Impact Force	Number of Fa	lls
mm	g/m	lbs/100	%	dynamic	static	lbf	minimum	average
9.9	65.5	4.40	35	≤ 40 %	≤ 10%	≤ 2,698	5	7
10.2	67.0	4.50	38	≤ 40 %	≤ 10%	≤ 2,698	7	9
10.5	74.4	5.00	28	≤ 40%	≤ 10%	≤ 2,698	10	12
11.0	81.8	5.50	29	≤ 40%	≤ 10%	≤ 2.698	13	15

Certain sizes and colors are also available in various lengths.



I prefer MAXIM Ropes because they are designed to achieve the perfect combination of handling, knot-ability, and longevity—along with decent impact force without excessive stretch.

Randy Leavitt





Cranberry STD-DRY



Yellow 2x-DRY



Terra Cotta STD-DRY



Coral Snake STD-DRY



Ivy STD-DRY



C.D.O.S STD-DRY

#### 10.2 mm





Autumn STD-DRY



### 10.5 mm



Canyon STD-DRY





Green/Yellow STD-DRY



Amethyst 2x-DRY

## 11.0 mm





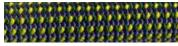
Eggplant STD-DRY



Amber 2x-DRY

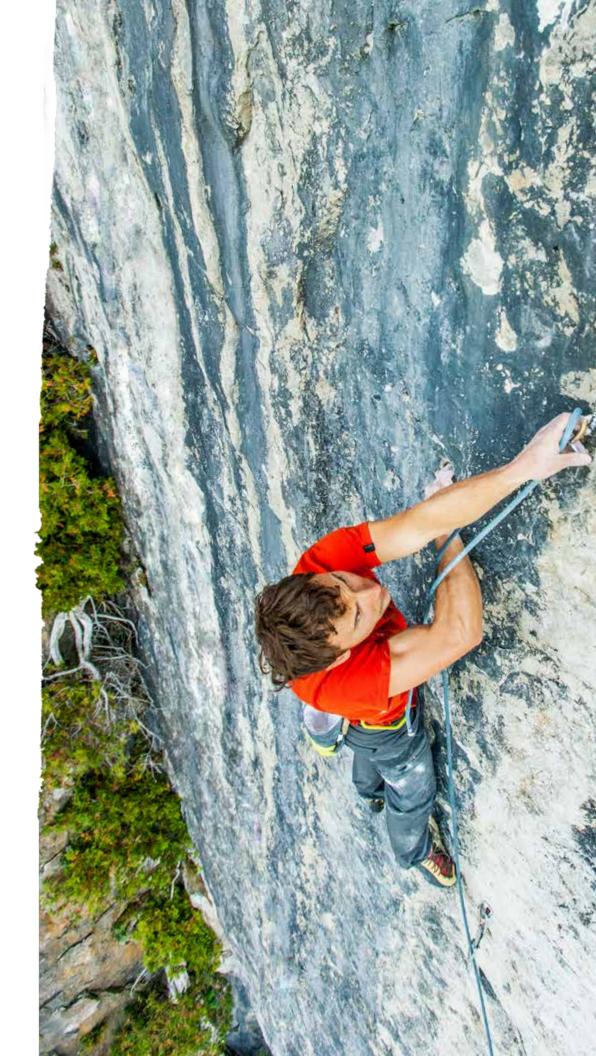


Blue STD-DRY





OD Green STD-DRY



# **GLIDER**

Glider ropes feature our Twill Pattern Technology (TPT), a unique twill sheath design. This unique braiding technology results in a smoother cover that reduces drag. This gives the feeling of lighter weight as you pull the rope through protection on sport routes. What really separates the Glider from other climbing ropes is the supple feel, easy clips, and superior hand.

### **Features**

- ✓ Twill Pattern Technology (TPT)
- ✓ Smoother cover that glides through protection
- ✓ Supple feel
- ✓ Easy Clips

# Specifications

Core: Nylon

Cover: Nylon Standard: EN 892

**UIAA 101** 

Ø	Weigh	t	Cover	Elongation	on	Max. Impact Force	Number of Fa	lls
mm	g/m	lbs/100	<b>%</b>	dynamic	static	lbf	minimum	average
9.9	65.5	4.40	35	≤ 40%	≤ 10%	≤ 2,698	5	7
10.2	67.0	4.50	38	≤ 40 %	≤ 10%	≤ 2,698	7	9
10.5	74.4	5.00	28	≤ 40%	≤ 10%	≤ 2,698	10	12

Certain sizes and colors are also available in various lengths.



MAXIM Ropes are the longest lasting ropes I have ever seen. I've always been super impressed with how much climbing I can get out of one rope.

Alex Honnold



#### 9.9 mm



Teal\* 2x-DRY



Moss\* 2x-DRY

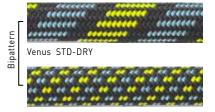


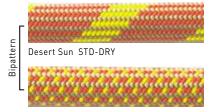
Peak STD-DRY

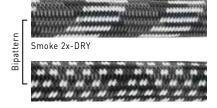


Midnight 2x-DRY









# 10.2 mm Bipattern Green/Yellow 2x-DRY Bipattern Red/Black 2x-DRY Bipattern Digi/Camo 2x-DRY



Surpass 2x-DRY

### 10.5 mm





Camoforest\* 2x-DRY



Mystique STD-DRY



# **PINNACLE**

Pinnacle is a lightweight 9.5mm rope designed to meet the needs of today's sport climber. It's light enough for redpointing, but still has the legendary durability for which MAXIM\* is known. Pinnacle is also an option for the trad climber who wants to climb longer pitches without adding weight or sacrificing durability and abrasion resistance.

All Pinnacle ropes have an Endura Dry-treated core and 3 versions feature a 2x Dry cover, making Pinnacle a good choice for a lightweight single ice rope as well.

#### **Features**

- ✓ Lightweight
- ✓ Durable
- ✓ Abrasion resistant
- ✓ TPT technology
- ✓ Select models have 2x Endura Dry on the cover

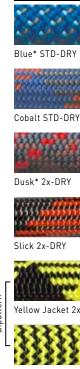
# Specifications

Core: Nylon
Cover: Nylon

Standard: EN 892 UIAA 101

Ø	Weigh	t	Cover	Elongation	on	Max. Impact Force	Number of Fa	lls
mm	g/m	lbs/100	%	dynamic	static	lbf	minimum	average
9.5	61.0	4.10	36	≤ 40 %	≤ 10%	≤ 2,698	5	7

Certain sizes and colors are also available in various lengths.



9.5 mm





Launch STD-DRY



The Yellow Jacket is my go-to single line for all types of climbing from long days in the mountains, to clipping bolts at the local crag. It is perfect for ice, mixed and rock.

Anna Pfaff



#### 9.1 mm



Afterburner 2x-DRY



Jet Stream 2x-DRY



ark Star 2x-DRY

# **AIRLINER**

Airliner is ultra-light, ultra-skinny and perfect for quick ascents on long pitches. But don't let Airliner's small size and light weight fool you. It does not sacrifice an ounce of performance. The Airliner has the same durablity that you have come to expect from MAXIM\* Dynamic Ropes. All Airliner ropes come standard with the Endura 2x Dry treatment. Airliner is dual-certified as both a single and a half rope.

# Features

- Ultra-light
- ✓ Ultra-skinny
- ✓ Durable
- Dual-certified as both a single and a half rope
- ✓ Endura Dry 2x-DRY treated

# Specifications

Core: Nylon
Cover: Nylon
Standard: EN 892

UIAA 101

Ø	Weight	i	Cover	Elongation	on	Max. Impact Force	Number of Fa	lls
mm	g/m	lbs/100	%	dynamic	static	lbf	minimum	average
9.1	52.1	3.50	41	≤ 40 %	≤ 10%	≤ 2,698	5	5

Certain sizes and colors are also available in various lengths.



I've climbed on most of the leading skinny ropes and none can withstand half of the beating that the Airliner can. It is overall without question the very best cord I have used. I really, really love it.

Jonathan Siegrist



# **EQUINOX**

Equinox is the best value in a high quality rope. We minimized manufacturing costs by incorporating more white yarns in the sheath construction, which reduces the expensive yarn dying processes. The durable Equinox features an Endura Dry treated core and is made to the same high standards as our Apex series. With its excellent knotability, ease of clipping, and its slim 9.9mm and 10.2mm diameters, the versatile Equinox is ideal for sport climbing or multi-pitch routes.

#### **Features**

#### Great value

✓ Endura Dry treated core

Excellent knotability

✓ Ease of clipping

✓ Ideal for sport climbing and multi-pitch routes

# **Specifications**

Core: Nylon Cover: Nylon Standard: EN 892

UIAA 101

Ø	Weight	i	Cover	Elongatio	n	Max. Impact Force	Number of Fa	lls
mm	g/m	lbs/100	<b>%</b>	dynamic	static	lbf	minimum	average
9.9	65.5	4.40	35	≤ 40 %	≤ 10%	≤ 2,698	5	7
10.2	67.0	4.50	38	≤ 40 %	≤ 10%	≤ 2,698	7	9

Certain sizes and colors are also available in various lengths.



#### 9.9 mm



Red/White STD-DRY



Yellow/White STD-DRY



Purple STD-DRY

#### 10.2 mm



Green/White STD-DRY







Digi Purple STD-DRY

I love MAXIM Ropes. They make clipping easier on long routes with a lot of rope drag AND they help me keep my bag light when I'm packing alot of stuff for long trips. My ropes get alot of use, but luckily MAXIM can take alot of "abuse" without fraying easily.

Kai Lightner



#### 8.0 mm



Burgundy STD-DRY



Teal 2x-DRY



Fure STD-DRY



Ocean STD-DRY

#### 9.0 mm



Yellow 2x-DRY



Blue 2x-DRY

# UNITY

Unity is a multi-purpose half rope that is perfect for the weight-conscious alpinist. Used as a half rope, the Unity is designed to be alternately clipped to protection and constructed to reduce drag and increase fall protection over sharp edges. The Unity provides outstanding performance on routes with multiple traverses. Unity is also light enough and tough enough to be used as a glacier rope on the world's toughest mountains. Unity is available in 8mm Endura Dry and 2x Dry or 9mm in 2x Dry. Select models feature our exclusive TPT sheath.

#### **Features**

- Multi-purpose half rope
- ✓ Constructed to reduce drag
- ✓ Increases fall protection over sharp edges
- Light and tough enough to be used as a glacier rope

# Specifications

Core: Nylon
Cover: Nylon
Standard: EN 892

UIAA 101

Ø	Weigh	t	Cover	Elongatio	n	Max. Impact Force	Number of Fa	lls
mm	l <sub>g/m</sub>	lbs/100	%	dynamic	static	lbf	minimum	average
8.0	46.9	3.15	41	≤ 40 %	≤ 10%	≤ 1,798	7	8
9.0	50.6	3.40	40	≤ 40 %	≤ 10%	≤ 1,798	10	12

9mm Unity is also available in OD-Green and Tan per military specification AA-59835-Type-II



I trust MAXIM Ropes whether I'm climbing in the Himalayas or on my favorite climbing crag. Regardless of the altitude, remoteness, temperature, or difficulty level, I can always rely on my pair of Unity ropes. They are a like a good climbing partner that I can always count on. At 7000 meters in the heart of Karakoram or on the third pitch of an M6+ route at minus 25 degrees Celsius – I can focus on what I've got to do in some of the world's harshest environments rather than worrying about if my rope is doing its job. Having the right rope is one less thing to worry about.

Louis Rousseau



# CHALK LINE

Chalk Line was specifically developed for the punishment gyms inflict on rope. Whether you have a small gym or big wall, the Chalk Line can take the constant falls and belays. The Str8 Jacket core allows the Chalk Line to hold its shape and keep the cover and core in balance which virtually eliminates sheath slippage. This will reduce flat spots and help maintain the performance of the overall rope. The Chalk Line will provide a safe and easy belay through a variety of devices while still maintaining its shape. Gym owners who use Chalk Line love the line's longevity. Not replacing their ropes as often saves them money.

### **Features**

#### Maintains shape

- ✓ Reduces sheath slippage
- ✓ No flat spots
- ✓ No more baggy rope

# Specifications

Core: Nylon
Cover: Nylon
Standard: EN 892

UIAA 101

Ø	Weight	i	Cover	Elongatio	n	Max. Impact Force	Number of Fa	lls
mm	g/m	lbs/100	%	dynamic	static	lbf	minimum	average
9.7	62.0	4.17	34	≤ 40%	≤ 10%	≤ 2,698	5	6
10.2	67.0	4.50	32	≤ 40%	≤ 10%	≤ 2,698	5	7
10.8	77.4	5.20	39	≤ 40%	≤ 10%	≤ 2,698	5	7

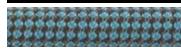
Certain sizes and colors are also available in various lengths.



I use MAXIM's Chalk Line at MetroRock because it lasts 3 to 4 times longer than any other gym rope on the market. It's definitely our go-to rope.

Pat Enright, Owner, MetroRock

#### 9.7 mm

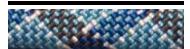


Blue/Gray



Orange/Gray

#### 10.2 mm



Blue



Green/Yellow/Purple



Empire

#### 10.8 mm



Grav



Purple/Black



#### 8 mm



White

#### All diameters



Orange



Red



Safety Green



Blue



Black



OD Green



White

# KM-III

KM-III is an exceptional static rope for rappelling, caving, rescue, top roping, fixed rope applications, hauling, and life safety applications. The unique polyester sheath differentiates KM-III from other static ropes. The polyester sheath is balanced with a nylon core to limit rotation, bouncing, and stretch. KM-III is NFPA and CE approved, and all come with an NFPA certification tag and CE labels. Thirty-two strands provide the correct sheath for the unique demands of static rope and the optimum sheath/core ratio. This allows for an incredibly smooth sheath, higher tensile strengths, and superior handling characteristics.

#### Features

- 32-Strand sheath for optimum sheath / core ratio
- Polyester over nylon with a balanced torque free construction
- Excellent handling and knot holding characteristics
- ✓ High abrasion resistance
- ✓ Excellent UV protection

# Specifications

Core: Nylon
Cover: Polyester

**Standard:** EN 1891 B (5/16, 3/8)

EN 1891 A (10, 10.5, 11, 12mm) NFPA 1983:2012 (5/16, 3/8, 7/16, 1/2, 5/8)

# CE Test Results per EN 1891

Ø		Weight		Shrinkage	Elongation	Min. Brea Free length	king Strength
mm	inch	g/m	lbs/100	1%	1%	daN	lbf
8.0	5/16	59.5	4.00	< 5	2.00	2,135	4,800
9.5	3/8	65.5	4.40	< 5	3.20	2,700	6,070
10.0	N/A	72.0	4.84	< 5	1.70	2,700	6,070
10.5	N/A	85.0	5.71	< 5	1.60	3,000	6,750
11.0	7/16	86.3	5.80	< 5	1.00	3,514	7,900
12.0	1/2	117.5	7.90	< 5	2.10	4,604	10,350
16.0*	5/8	151.8	10.20	Not EN 1891	Not EN 1891	5,100	11,465

Ø			ng Strength		Cover	
		Sewn		With figure 8 k	rnot	
lmm	inch	daN	lbf	daN	lbf	11%
8.0	5/16	1,200	2,698	1,200	2,698	51
9.5	3/8	1,200	2,698	1,200	2,698	48
10.0	N/A	1,500	3,372	1,500	3,372	48
10.5	N/A	1,500	3,372	1,500	3,372	48
11.0	7/16	1,500	3,372	1,500	3,372	46
12.0	1/2	1,500	3,372	1,500	3,372	47
16.0	5/8	1,500	3,372	1,500	3,372	46

# NFPA Test Results

Ø		Elongation			Approved Class
mm	inch	at 1.35 kN (%)	at 2.7 kN (%)	at 4.4 kN (%)	
8.0	5/16	4.30	7.60	11.30	Escape rope
9.5	3/8	3.50	6.20	9.20	Technical use
10.0	N/A	Not NFPA	Not NFPA	Not NFPA	N/A
10.5	N/A	Not NFPA	Not NFPA	Not NFPA	N/A
11.0	7/16	2.40	4.20	6.30	Technical use
12.0	1/2	2.80	4.50	7.00	General use
16.0	5/8	2.50	3.40	5.20	General use

# KM-III MAX

KM-III Max has a well balanced, low rotation, unique twill design. It is a perfect static rope for work placement and smooth descents. Our KM-III Max features our TPT construction that results in a smoother cover reducing drag and creating a more fine control on descents. The smooth, low profile sheath allows for better braking, faster ascending, and exceptional abrasion resistance. Originally designed for work placement applications, KM-III Max is an excellent choice for heavy exposure fixed lines, big wall hauling, caving, and a variety of rescue applications.

#### **Features**

✓ TPT construction

✓ Exceptional abrasion resistance

## Specifications

Core: Nylon
Cover: Polyester

Standard: EN 1891 B (10mm)

EN 1891 A (11, 12mm) NFPA 1983:2012

# CE Test Results per EN 1891

Ø	Weight		Shrinkage	Elongation	<b>Min. Breaking Strength</b> Free length		
mm	inch	g/m	lbs/100	1 1%	%	daN	lbf
10	3/8	65.5	4.40	< 5	3.20	2,700	6,070
11	7/16	87.8	5.90	< 5	1.00	3,514	7,900
12	1/2	116.0	7.80	< 5	2.10	4,604	10,350

\*Not CE certified, only NFPA

Ø		Min. Break	ing Strength			Cover	
		Sewn		With figure 8 I	With figure 8 knot		
mm	inch	daN	lbf	daN	lbf	1%	
10	3/8	1,200	3,698	1,200	2,698	48	
11	7/16	1,500	3,372	1,500	3,372	47	
12	1/2	1,500	3,372	1,500	3,372	47	

## NFPA Test Results

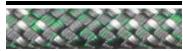
Ø		Elongation			Approved Class
mm	inch	at 1.35 kN (%)	at 2.7 kN (%)	at 4.4 kN (%)	
10	3/8	3.50	6.20	9.20	Technical use
11	7/16	2.40	4.20	6.30	Technical use
12	1/2	2.80	4.50	7.00	Technical use

#### All diameters



Black/Yellow

#### 10.5 mm



Green/Grey/White



Black/Grey

#### 11.5 mm



Green/Grey/Yellow

# PLATINUM® PROTECT PES/PA

PLATINUM® Protect PES/PA has a polyester cover which has made it very successful in all facets of working at height. Especially when it comes to rope access procedures at extreme heights (e.g. window cleaning), PLATINUM® PES/PA is a must-have for every industrial climber because of its novel design and low elongation. PLATINUM® technology creates a permanent mechanical connection between the core and cover of the rope, enhancing it's safety without sacrificing the hand.

### **Features**

- Extremely low elongation
- ✓ Good resistance to acids
- Excellent UV stability
- Stays flexible it wet conditions

# Specifications

Cover: Nylon
Cover: Polyester
Standard: EN 1891 A

NFPA 1983:2012

# CE Test Results per EN 1891

Ø		Weig	ght	Shrink- age	Elongation	Min. Breaking Strength					Cover	
						Free le	ngth	Sewn		With fig.	8 knot	
mm	inch	g/m	lbs/100	%	<b>%</b>	daN	lbf	daN	lbf	daN	lbf	<b>%</b>
10.5	13/32	78.0	5.20	2	2	2,800	6,300	2,200	4,950	1,500	3,375	50.5
11.5	7/16	90.0	6.00	2	2	3,300	7,400	2,500	5,625	1,900	4,275	46

### NFPA Test Results

Ø		Elongation				Approved Class
mm	inch	at 1.35 kN	at 2.7 kN	at 4.4 kN	at 10% of MBL	
10.5	13/32	3.3	6.3	9.4	7.4	Technical use
11.5	7/16	2.8	5.0	8.4	7.4	Technical use



# PLATINUM® PROTECT PA

PLATINUM\* Protect PA comes in 100% nylon which makes it lighter compared to the PLATINUM\* Protect PES/PA. Compared to polyester, in dry conditions nylon is more robust in resisting extreme abrasive forces and thus is especially suitable for use in rough rescue and hoisting equipment scenarios. The permanent mechanical connection between the core and the cover prevents bunching of the cover as the rope runs into the device.

#### Features

- ✓ Lighter compared to PLATINUM® PES/PA
- ✓ Good abrasion resistance in dry conditions
- ✓ Good ability to absorb shock loads

# Specifications

Core: Nylon
Cover: Nylon
Standard: EN 1891 A

## CE Test Results per EN 1891

Ø	Ø Weight		Shrinka	ge Elongatio	Min. Brea	aking Strength	
mm	inch	g/m	lbs/100	1%	1%	daN	lbf
10.5	13/32	72.0	4.80	4	3	2,800	6,300
11.5	7/16	84.0	5.60	4	3	3,300	7,400

Ø	Ø Min. Breaking Strength					Cover	
Sewn			With figure	8 knot			
mm	inch	daN	lbf	daN	lbf	1%	
10.5	13/32	2,200	4,950	1,800	4,050	46	
11.5	7/16	2,500	5,625	1,900	4,275	41	

# MULTILINE II

Multiline II is a 3-strand composite rope, constructed by twisting three strands of a blend of spun and filament polyester around cores of fibrillated polyolefin. The polyolefin keeps the strands firm and round without adding weight, which improves abrasion resistance and handling. The spun polyester gives Multiline II its characteristic fuzzy feel and makes it easier to grip, even when wet. Multiline II provides the greatest durability, highest strength, lightest weight, and most consistent supple feel over time of any commercially available composite rope. Multiline is easily identified by its familiar two orange markers.

#### **Features**

- Spun polyester improves grip and knot holding even when wet
- Cores of fibrillated polyolefin keep strands firm and round, enhancing knot holding and hand
- Consistently supple feel over the service life of the rope
- ✓ Great for natural crotch rigging

# Specifications

Core: Polyolefin
Cover: Polyester

#### Ø Weight Min. Breaking Strength Free length g/m lbs/100 daN lbf inch 8 5/16 827 39.6 2.66 1,860 10 3/8 62.5 4.20 1,290 2,900 11 4.70 1,779 4,000 7/16 69.9 12 1/2 99.7 6.70 2,269 5,100 16 5/8 154.7 10.40 3,781 8,500 19 215.7 14.50 4.493 10.100 3/4 22 7/8 266.3 17.90 5,783 13,000 25 313.9 21.10 6,895 15,500 28 11/8 447.8 30.10 9,342 21,000

#### 10.5 mm



Blue/Grey/White

#### 11.5 mm



Blue/Grey/Yellow

#### All diameters



White

#### All diameters



White



Green Fleck



Red Fleck



Blue Fleck



Green



Red



Blue



Black

# STA-SET

Sta-Set is a low-stretch polyester double braid. This low-stretch durable line is ideal for all applications requiring control, positioning, lifting, or lowering lines.

## **Features**

- ✓ Low stretch
- ✓ Strong
- ✓ Flexible
- ✓ Durable
- Long wearing

# Specifications

Core: Polyester
Cover: Polyester

Ø		Weight		Min. Breaking Strength Free length		
mm	inch	g/m	lbs/100	daN	lbf	
5	3/16	16.4	1.10	534	1,200	
6	1/4	29.8	2.00	979	2,200	
8	5/16	46.1	3.10	1,557	3,500	
10	3/8	64.0	4.30	1,779	4,000	
11	7/16	89.3	6.00	2,313	5,200	
12	1/2	116.0	7.80	3,937	8,850	
14	9/16	150.3	10.10	4,226	9,500	
16	5/8	177.0	11.90	5,783	13,000	
19	3/4	252.9	17.00	9,786	22,000	
22	7/8	352.6	23.70	11,833	26,600	
25	1	482.0	32.40	14,858	33,400	
28	11/8	592.1	39.80	16,681	37,500	
32	11/4	732.0	49.20	16,948	38,100	



# NYLON ACCESSORY CORD

Nylon Accessory Cords feature a kernmantle construction designed and engineered with the same attention to detail as our dynamic climbing ropes. Nylon Accessory Cords are perfect multi-purpose lines for stringing accessories, keeping personal items off the ground, tie-down ropes, or as a decorative accessory for packs or other gear. Each diameter is available in complementary light and dark versions as well as black.

#### Features

- Perfect for balancing anchors and creating self-equalizers
- ✓ Perfect multi-purpose line for stringing accessories
- ✓ Great for tie-downs
- ✓ Perfect way to keep personal items off the ground

# Specifications

Core: Nylon
Cover: Nylon

Standard: EN 564 (7mm)

UIAA 102 (7mm)

Ø		Weight		<b>Min. Breaking Strength</b> Free length		
mm	inch	g/m	lbs/100	daN	lbf	
3	1/8	6.0	0.40	169	380	
4	5/32	10.4	0.70	205	460	
5	3/16	18.9	1.27	498	1,120	
6	1/4	25.3	1.70	778	1,750	
7	9/32	28.3	1.90	912	2,050	
8	5/16	40.2	2.70	1,379	3,100	
9	11/32	52.1	3.50	1,779	4,000	

#### 3 mm



Blue/Purple



Purple/Blue

#### 4 mm



Orange/Black



Black/Orange

### $5\,mm$



Red/Teal



Teal/Red

#### 6 mm



Tan/Purple



Purple/Tan

## 7 mm



Yellow/Red



Red/Yellow



Tan



OD/Green

## 8 mm



Blue/Gold



Gold/Blue

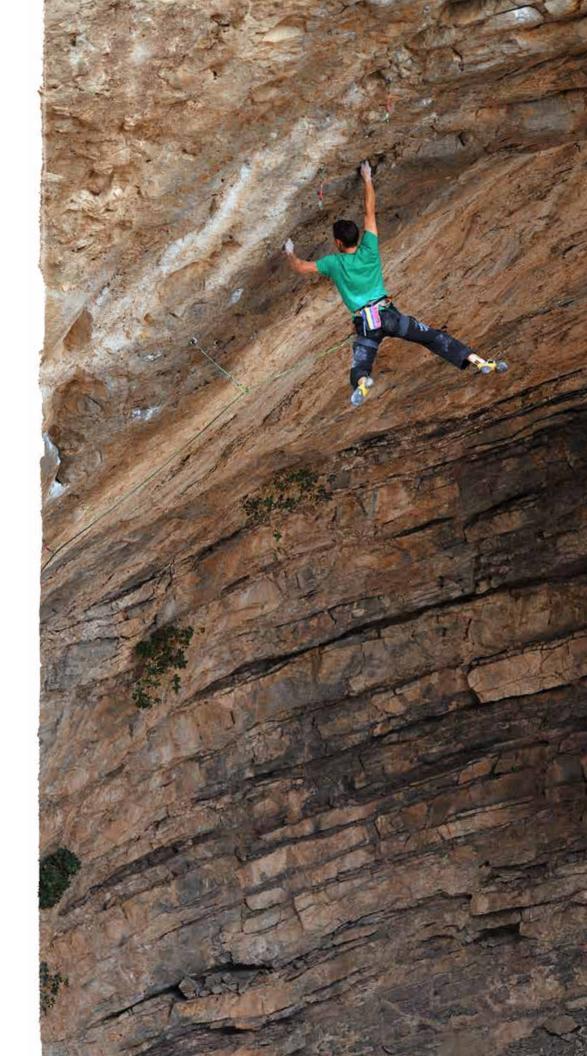


OD/Green

## All diameters



Black



# POLYESTER ACCESSORY CORD

Polyester Accessory Cords offer the best of both worlds. Polyester resists water, has less stretch, has super vibrant colors and has greater UV resistance. Polyester is also more durable than nylon and its lower stretch offers more abrasion resistance. The Polyester Accessory Cords carries UIAA 102 and EN 564 certification.

#### **Features**

#### Resists water

✓ Less stretch

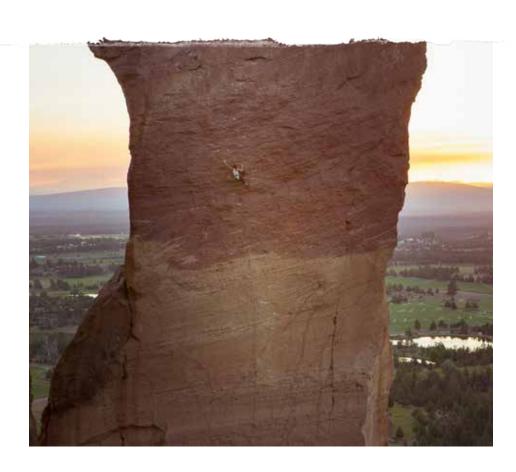
✓ UV resistant

# Specifications

Core: Polyester
Cover: Polyester
Standard: EN 564 (4-8mm)

UIAA 102

Ø	Weight			Min. Breaking Strength Free length		
mm	inch	g/m	lbs/100	daN	lbf	
3	1/8	6.7	0.45	133	300	
4	5/32	12.3	0.83	294	660	
5	3/16	18.9	1.27	476	1,070	
6	1/4	26.8	1.80	690	1,550	
7	9/32	34.2	2.30	934	2,100	
8	5/16	46.1	3.10	1,090	2,450	



#### 3 mm



Blue/Yellow



Red/Black

#### 4 mm



Grey/Orang



Orange/Grey

### $5\,mm$



Yellow/Blue



Yellow/Black

#### 7 mm



Blue/Green



 $8\,mm$ 



Yellow/Red



Red/Yellow

#### 5 mm



Green



Yellow

#### 6 mm



Red



Light Blue

### $7\,mm$



Gold



Teal

#### 8 mm



Burgundy



Green

### 9 mm



Blue



Yellow

# PRUSIK CORD

Prusik Cord strikes the perfect balance between firm and supple. We engineered Prusik Cord so that the rope has enough give to grip the climbing rope but is not so mushy that the knot locks up. This results in a smooth, controlled movement over the climbing rope and makes untying the prusik knot easier. Prusik Cord is available in assorted colors in 5mm – 9mm diameters.

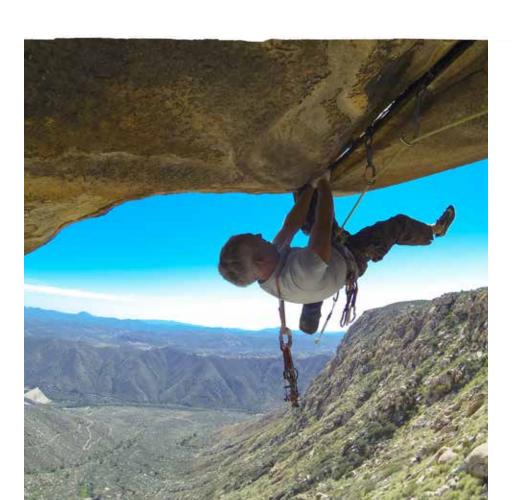
### **Features**

- ✓ Perfect balance between firm and supple
- Provides the ability to have a great grip on the climbing rope without letting the knot lock up

# Specifications

Core: Nylon
Cover: Nylon

Ø	Weight				<b>Min. Breaking Strength</b> Free length		
mm	inch	g/m	lbs/100	daN	lbf		
5	1/7	18.9	1.2	500	1,100		
6	1/4	25.3	1.7	780	1,750		
7	9/32	28.6	1.92	870	1,955		
8	5/16	40.2	2.7	1,380	3,100		
9	7/20	52.1	3.5	1,780	4,000		



# SHOCK CORI

Shock Cord is comprised of top quality rubber which makes it compact, stable, and durable. The outer cover is made of extremely abrasion-resistant polyester.

# Specifications

Core: Parallel rubber Cover: Polyester

#### Sizes

3mm	4mm	5mm	6mm	7mm	8mm	10mm

These cords are not intended for climbing on or rappelling on

#### All diameters



Black



Blue



Red



Yellow

# TECH CORD

Tech Cord is an exceptionally strong cord that is very abrasion resistant and is perfect for cordelette. The polyester sheath surrounds a parallel fiber core of 100% Technora\*, resulting in a cord that gets extremely high tensile strength (3,000 pound tensile for 3mm; 4,700 pound tensile for 5mm). Tech Cord is perfect for balancing anchors, slinging chocks and hexes, and can be used as an emergency rap line. The reported tensile strength of Tech Cord, as with any rope, can be significantly reduced when used with a knot. The most recommended knot for this cord is a double fishermans. Tech cord is available in 2 diameters and in 4 colors (3mm available in black only).

### **Features**

# **Specifications**

Core: Technora®

•	Excep	liona	ıy	3110

✓ Abrasion resistant

✓ Perfect for codelette

Cover: Polyester

Ø		_		<b>Min. Breaking Strength</b> Free length		
mm	inch	g/m	lbs/100	daN	lbf	
3	1/8	11.3	0.76	1,335	3,000	
5	3/16	23.4	1.57	2,091	4,700	

#### 3 mm



Black

### $5 \, mm$



Green



Orange



Blue

#### 8 mm



Yellow/Red

# NFPA - THROW LINE

The NFPA - Throw Line is a double braid that features a polypropylene cover with a Dyneema® core. This extremely strong and versatile rope has a good hand and a high visibility cover. Designed to be light, strong, and easily packable, it also floats indefinitely.

#### **Features**

- Meets the NFPA specification for a floating water throwline
- ✓ Double braid construction
- ✓ Soft hand
- Good grip
- Easily packable

# Specifications

Cover: Dyneema®
Cover: Polypropylene
Standard: NFPA 1983:2012

Ø		Weight		Min. Breaking Strength Free length			
mm	inch	g/m	lbs/100	daN	lbf		
8	5/16	29.8	2.0	1,223	2,750		

### All diameters



# FLOATING SECURITY LINE

Floating Security Line is made of a 16-plait XLF hollow weave. This makes the line buoyant and easy to splice. Its high visibility colors make it easy to be see.

#### **Features**

Specifications

Material: Polypropylene

Good handling

Excellent floating characteristics

Ø		Weight		Min. Breaking Free length	g Strength	
mm	inch	g/m	lbs/100	daN	lbf	
8	5/16	21.0	1.41	630	1,410	
10	3/8	33.0	2.22	810	1,820	

# WATER RESCUE ROPE

Water Rescue Rope is a spliceable floating rope for use in swift-water rescue applications. The rope has a durable nylon sheath that protects the braided multifilament polypropylene (MFP) core from damaging UV rays. This combination results in a strong product that floats just under the surface of the water.

The high visibility yellow color (with contrasting red or blue flecks) is easily seen in the water.

#### **Features**

### **Specifications**

Core: MFP
Cover: Nylon

- High load capacityFloats
- High visibility
- night visibility
- Good grip ability

Ø	Weight		Min. Breaking Strength Free length			
mm	inch	g/m	lbs/100	daN	lbf	
11	7/16	78.9	5.30	1,646	3,700	

# All diameters



Yellow/Red



Yellow/Blue

# MICRO RAPPEL KIT

Designed in collaboration with the U.S. Army Research, Development and Engineering Center for the U.S. Military Special Forces, the Micro Rappel system is a compact, lightweight two-mode system that converts from a belt to a harness in seconds. The system includes the rappel harness/belt, descender, two carabiners, deployment bag, usage log, instruction sheet, and 82 feet of 5mm Tech Cord with chafe guard. The leg straps for the harness are stowed in the belt. To deploy, the user pulls the leg loop out of the side pouches in the belt, pulls them down the front, in-between the legs, around the back of the leg, and back up. The leg loops and belay loop are then connected with a carabiner (included). The attached deployment bag holds the rope, carabiners, and descent device. The Micro Rappel kit provides a quick means of escape from any potentially volatile situation and requires special instruction and training.

# Specifications rope

Core: Technora®
Cover: Polyester
Standard: CI 1500

Ø		Weight		<b>Min. Breaking Streng</b> Free length	th
mm	inch	g/m	lbs/100	daN	lbf
5	3/16	23.4	1.57	2,091	4,700





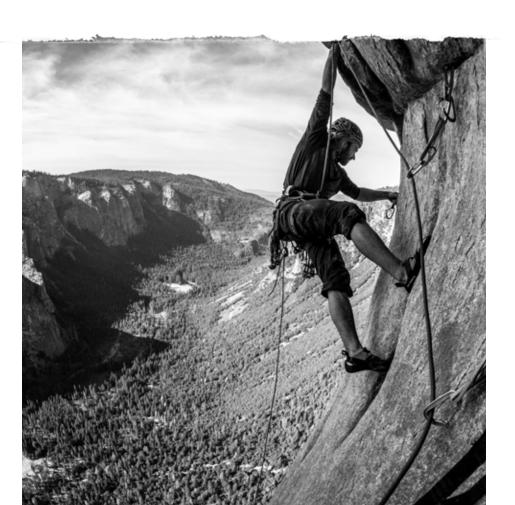
# PLATINUM®

PLATINUM® stands for an entirely novel breed of safety ropes made with cutting-edge technology.

This technology is characterized by the permanent mechanical interconnection between the rope's core and its cover. Core and cover yarns are interlaced with one another at regular intervals, which keeps any core/cover displacement from happening. These interconnection sites effectively stop any bunching of the cover and core. Thus, PLATINUM® enables the excellent transmission of forces from the cover to the core region and, in this way, prevents any overloading of the cover.

In addition, PLATINUM\* also includes the mechanical interconnection of the various twisted cores with one another. This optimizes the distribution of the load among the various cores. The outcome is a dimensionally stable, compact core bundle and thus an equally dimensionally stable, compact rope. PLATINUM\* technology makes it possible, for the first time ever, to braid compact, and yet soft and flexible ropes that eliminate any core/cover displacement.

- ✓ Better handling
- ✓ Higher safety



# CRITICAL SITUATIONS

PLATINUM® ensures higher safety and better handling. A direct comparison will make these advantages more clear.

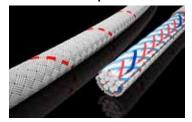
# Coreless end of cover

#### Conventional Rope



- A surplus length of the cover results in a coreless rope section
- This may be extremely dangerous for inexperienced climbers

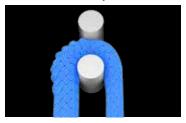
#### **PLATINUM®** Rope



PLATINUM\* fully avoids displacement at the end of the rope and gurantees greater safety and comfort.

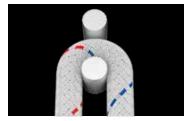
# Pushing together of cover and core

#### **Conventional Rope**



- A cover that has been pushed together on the core will impair the use of climbing devices
- Danger! Climbers are no longer able to rappel down by themselves

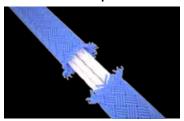
#### **PLATINUM®** Rope



 PLATINUM® prevents the cover from being pushed together on the core and greater safety.

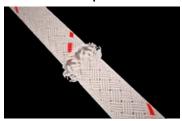
### Sheath break

#### **Conventional Rope**



 If the sheath is cut by abrasion over an edge, it slides down and gathers over some meters. It then becomes very difficult to pass this section, whether ascending or descending.

#### PLATINUM® Rope



PLATINUM® If the sheath is cut by abrasion over an edge, the core and sheath remain bonded together due to the mechanical connection between cover and core.

# FIBER STRUCTURES

#### Monofilaments

The yarns consist of one single element of a relatively large diameter and are braided into a rope.

#### Characteristics:

- Very good abrasion resistance
- Low dirt take-up
- Stiff structure

### Textured fibers

A certain degree of disorder is caused in a formerly straight bundle of synthetic fibers to generate characteristics which are usually seen only on natural fibers.

#### **Characteristics:**

- Good grip
- High elasticity
- Traditional look and feel

#### Multifilaments

A bundle of thin fibers processed into twines which then are braided into a rope. The majority of fiber ropes follow this basic design.

#### Characteristics:

- High flexibility
- High tensile strength

### Staple fiber

This type of material consists of spun pieces of short filaments instead of a bundle of long ones.

#### Characteristics:

- Excellent grip
- Soft handling

# RAW MATERIALS

#### PBO (Polybenzoxazoles, Crystal Polymer)

The generic fiber PBO refers to Zylon\* which is a high performance fiber with the highest strength and lowest stretch of any commercially available fiber. It is extremely expensive and experiences progressive strength loss when exposed to UV-rays.

#### **UHMWPE (Ultra High Molecular Weight Polyethylene)**

UHMWPE (also known as UHMPE or HMPE Dyneema") is an extremely high strength fiber of ultra high molecular polyethylene. For the same weight it has 15 times the tensile strength of steel. Rope made from this type of fiber shows very low elongation and tensile strength. If very high loads are being applied for a long period of time, UHMWPE fiber tends to creep. The rope then is irreversibly extending its length. At the same time, these robust fibers show excellent performance in terms of abrasion resistance and good UV-resistance.

#### **Aramid (Aromatic Nylon)**

Aramid fibers have an extremely high breaking load and show almost no stretch. On the other hand they are sensitive to UV-rays, bending over sharp edges, and abrasion. It is mainly used in places where high temperature resistance is essential, for example on winches, in hot air balloon ropes, or for any other application where heat exposure needs to be considered.

#### LCP (Liquid Crystal Polymer)

LCP (known as Vectran\*, a brand name of Hoechst Celanese), combines extremely low elongation with extremely high breaking loads. However, its UV-resistance is not very high. It is heat resistant and not very sensitive to bending over sharp edges. The big advantage of Vectran\* is, however, that compared to UHMWPE it does not creep.

#### PES (Polyester)

Static ropes made of polyester fibers are characterized by good breaking loads and low stretch. This material offers both chemical and physical advantages such as UV resistance salt water resistance, and good abrasion strength in both dry and wet conditions. However, the dynamic energy absorption capacity is much lower than that of polyamide ropes and therefore only to a limited extent suitable for types of use involving high impact forces.

#### NY (Nylon)

Nylon has a high breaking load as well as high elongation. Preferably, it is used in products that are required to absorb shock loads. The abrasion resistance of nylon is better in wet conditions than in dry conditions because it tends to take up water (up to 7%). Kept in wet conditions for too long, the material can become stiff. Another disadvantage compared to polyester is the lower resistance to UV-radiation in sunlight.

#### PP (Polypropylene)

Due to its limited technical characteristics, polypropylene is only used for simple applications. PP is very light and even buoyant in water. Its abrasion resistance and temperature resistance are lower than those of most other fibers.

#### PLA (Polylactide)

In technical aspects, PLA yarn is not different from regular synthetic fibers: PLA fiber products also look and feel the same. Polylactic acid is derived from natural sugar resources – which are in turn photosynthesized from  $CO_2$  in plants. They are biodegradable under a specific industrial process. The material can be regarded as " $CO_2$ -neutral" and is therefore renewable.

# Technical properties of available raw materials

	PBO Polybenzoxa zoles, Crystal Polymer	UHMWPE Ultra High Molecular Weight Polyethylene	<b>Aramid</b> Aromatic Nylon	LCP Liquid Crystal Polymer	PES Polyester	<b>NY</b> Nylon	<b>PP</b> Polypropylene	<b>PLA</b> Polylactide
Typical Marketing Term	Zylon®	Dyneema®	Technora®/ Twaron®/ Kevlar®	Vectran®	PES	PA	PP	-
Strength (daN/mm²)	574	345	300	300	110	81	52	51
Specific weight (g/cm³)	1.54	0.97	1.4	1.41	1.4	1.14	0.91	1.25
Water intake (%)	0.5 - 2.0	0	2	<0.1	<0.5	4 - 6	0	0.4 - 0.6
UV-resistance	low	good	limited	limited	very well	average	good	limited
Elongation (%)	2.5 - 3.5	3.5	3.5	3.5	10 - 16	20 - 25	18 - 22	50
Abrasion resistance (dry)	good	very good	limited	very good	good	very good	sufficient	limited
Abrasion resistance (wet)	good	very good	limited	very good	very good	good	good	limited
Creep	almost not measurable	at high loads	almost not measurable	not measurable	almost not measurable	low	at high loads	-
Melting temp. (°C)	charred at 650	140	charred at 500	330	260	230	165	170



# ROPE CONSTRUCTIONS

At TEUFELBERGER we go the extra mile to get the maximum performance out of each of our ropes. Whatever you expect from your rope, we have the right product for you.

## 3-Strand

A special stabilization process and a solid, balanced construction produce a durable, long-lasting, flexible and easy-to-handle rope that won't harden with age.

### Single braid

A supple construction that absorbs twist and does not kink. This simple construction provides great ease of splicing.

#### Double braid

A braided core inside a braided cover produces an easy-to-handle rope that is strong and very durable. Since the rope consists of two individual parts, it is possible to combine different fibers to create ropes merging specific characteristics of different raw materials. For example, a high tensile core with a heat resistant cover.

### Kernmantle

Features a 32-carrier, 40-carrier or 48-carrier sheath that protects the core from grit and particle absorption. The sheath is designed to generate some grab and friction for rappelling and lowering operations. The core is comprised of bundles of fiber that are loosely twisted. These bundles help to keep the rope firm yet flexible.

### **PLATINUM®**

PLATINUM\* is the name of TEUFELBERGER's new and innovative braiding technology. For the first time in the history of rope making, previously independent elements of a rope are interconnected into one unit.

What makes PLATINUM\* so special compared to the kernmantle ropes currently available on the market? In conventional kernmantle ropes, there is no connection between the core and the cover. The two components are loose and movable. With the new and innovative PLATINUM\* technology, TEUFELBERGER successfully obtained a mechanical and durable connection between the core and the cover. Moreover, PLATINUM\* connects parallel cores to one another, thus relieving the load the previously heavily loaded outer yarns are exposed to.

#### Str8 Jacket Core™

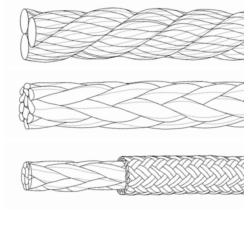
The Str8 Jacket core allows the rope to hold its shape and keep the cover and core in balance which virtually eliminates sheath slippage.

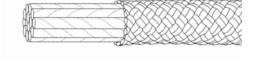
### TPT Technology

Twill Pattern Technology (TPT) is a special cover design resulting in a twill pattern (under two over one) or weave. This design results in a cover/sheath that has a smaller profile in cross-section than plain pattern sheaths – the more traditional-looking climbing rope cover/sheath. For the climber, this means improved abrasion resistance over abrasive surfaces due to the smaller profile, as well as significantly reduced drag in carabiners and mechanical devices.

# Fides III Technology

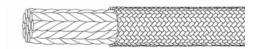
This type of rope structure is characterized by a 32-plait braided cover and three braided cores. Its design makes this rope particularly well suited for use around sheaves. Furthermore, it provides above average breaking forces in combination with various types of hardware.

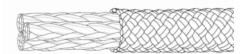












# ROPE CARE

We take great care in manufacturing the highest-quality ropes. A few guidelines about its use will help you increase the life of the rope and assist you in achieving the best performance using our products.

#### **Abrasion and Sharp Edges**

Abrasion and sharp edges are a rope's worst enemies. Check all equipment prior to use to make sure there are no burrs or sharp edges. Always inspect ropes after climbing in abrasive environments to assess damage from wear.

#### Cleaning

Dirt can penetrate a rope resulting in abrasion. To clean your rope, wash it with fresh water and air-dry out of direct sunlight. For a more thorough cleaning, soak your ropes in warm water with a rope cleaning agent. When possible, use a front-loading washer; otherwise, wash your rope in a mesh bag or pillowcase to avoid tangling. Rinse thoroughly and then hang up to dry out of direct sunlight.

#### **Eliminating Twist**

Twist increases the likelihood of kinking and jamming in equipment. Severe twist can cause the rope to get out of round, resulting in higher wear rates and reduced strength. Eliminating twist from a rope makes the rope easier to handle and increases its life. Eliminate twist by uncoiling properly and laying the rope out straight and dragging it while the loose end is left free to unwind. Coiling in figure eights or stuffing in a rope bag will prevent twist in a rope during storage.

#### Chemicals

Synthetic fibers have good chemical resistance. However, exposure to harsh chemicals, such as acids and alkalis, should be avoided.

#### Damage

Inspect all ropes before every use for signs of wear or damage. Retire any rope that is cut or abraded.

#### Sunlight

With time, all synthetic fibers will undergo degradation when exposed to sunlight.

#### **Bipattern**

Bipattern ropes change pattern at their midpoint to permanently mark the center of the rope in a way that is easily visible to the climber. Unlike bi-color ropes, the midpoint of a bipattern rope is the result of a change in pattern by repositioning the bobbins on the braider during the manufacturing process. No fibers are cut, tied or spliced during this process. Bipatterns are a safer alternative to marking the midpoint because there is no danger of fiber quality becoming compromised by pigments or other chemicals in commercially available markers and pens.

#### **Endura Dry and 2x-Dry**

Endura Dry is a multi-stage application process. For standard dry ropes, the coating is applied to the individual core yarns prior to the braiding process. All New England Ropes have dry-treated cores surrounded by a durable, protective nylon sheath to lock in the water-blocking power of the coating. Select models of New England Ropes are 2x-Dry (have a dry treated core and cover) – ropes treated a second time by submerging the finished rope in our proprietary dry coating. We then cure the finished product using an environmentally controlled process, creating a chemical bond between coating and fibers. Endura Dry does more than keeps water out of your rope. The coating also lubricates individual core fibers, improving resistance to internal abrasion that can occur beneath the surface where you cannot see it.

	Ø	Length*			Maximum impact	Elongation	ilongation		
	mm	meter	min.	avg.	g/m	lbs/100	lbf	dynamic (%)	static (%)
APEX	9.9	35, 60, 70, 80, 200	5	7	65.5	4.40	≤ 2,698	≤ 40	≤ 10
	10.2	35, 60, 70, 200	7	9	67.0	4.50	≤ 2,698	≤ 40	≤ 10
	10.5	35, 60, 70, 80, 200	10	12	74.4	5.00	≤ 2,698	≤ 40	≤ 10
	11.0	35, 60, 70, 80, 200	13	15	81.8	5.50	≤ 2,698	≤ 40	≤ 10
GLIDER	9.9	35, 60, 70, 80, 200	5	7	65.5	4.40	≤ 2,698	≤ 40	≤ 10
	10.2	35, 60, 70, 80, 200	7	9	67.0	4.50	≤ 2,698	≤ 40	≤ 10
	10.5	35, 60, 70, 80, 200	10	12	74.4	5.00	≤ 2,698	≤ 40	≤ 10
PINNACLE	9.5	35, 60, 70, 80	5	7	61.0	4.10	≤ 2,698	≤ 40	≤ 10
AIRLINER	9.1	60, 70, 80	5	5	52.1	3.50	≤ 2,698	≤ 40	≤ 10
EQUINOX	9.9	40, 60, 200	5	7	65.5	4.40	≤ 2,698	≤ 40	≤ 10
	10.2	60, 200	7	9	67.0	4.50	≤ 2,698	≤ 40	≤ 10
UNITY	8.0	30, 50, 60, 70, 200	7	8	46.9	3.15	≤ 1,798	≤ 40	≤ 10
	9.0	30, 50, 60, 70, 200	10	12	50.6	3.40	≤ 1,798	≤ 40	≤ 10
CHALK LINE	9.7	Per foot or 200m spools	5	6	62.0	4.17	≤ 2,698	≤ 40	≤ 10
	10.2	Per foot or 200m spools	5	7	67.0	4.50	≤ 2,698	≤ 40	≤ 10
	10.8	Per foot or 200m spools	5	7	77.4	5.20	≤ 2,698	≤ 40	≤ 10

 $<sup>{}^\</sup>star\mathsf{The}$  lengths are depending on certain diameters and colors.

- All of our products begin with the highest quality of raw materials.
- We are rope specialists and only manufacture rope.
- Our products are rigorously inspected for quality compliance.

Precautions have been taken to assure accuracy of the information in this catalog. Typographic or pictorial errors that are brought to our attention will be corrected in subsequent issues.

TEUFELBERGER Fiber Rope Corporation reserves the right to make product changes from time to time without prior notification which may change the dimensions shown. We therefore recommend at all information be checked and verified before using for customer projects or product development and specification. The designs and dimensions of the products listed in this catalog were correct at the date of publication and are subject to change without notice.

#### Photo credits

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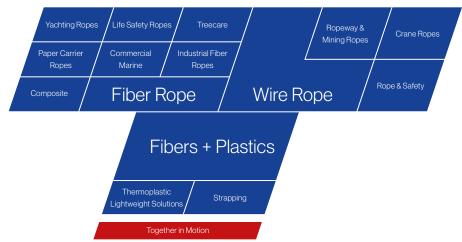


# EXPERTISE FROM 225 YEARS OF EXPERIENCE

What started back in 1790 with simple hemp ropes has since evolved into a globally successful group of enterprises specializing in the development and production of fiber and steel wire ropes, strapping, and composites.

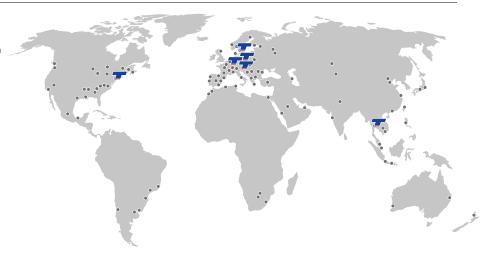
### Vast diversity

Its products are designed for a wide variety of applications ranging from cranes and marine applications to packaging and through to the automotive sector. It is the continuity and stability of a family business that makes us the reliable partner who supports you, competently and effectively, in coping with your daily challenges.



# Global presence ensures customer proximity

Manufacturing operations in various countries allow us to meet local quality and certification standards as well as customer requirements without difficulty. From our sites in Austria, the Czech Republic, the U.S., Sweden, and Thailand, and backed by a close-knit global network of distribution partners, we continue to satisfy the expectations of our customers.



# Innovative solutions through synergies

TEUFELBERGER is a leading specialist for fiber and steel wire ropes, strapping, and fiber composite components. The spectrum of technologies in TEUFELBERGER 's portfolio generates various synergies between the extrusion of thermoplastics, braiding of high performance fibers, and processing of wires into ropes, strapping, and lightweight composite components.

Especially fiber and steel wire products brought about valuable synergies with regard to both application and manufacturing technologies, which have benefited our customers tremendously. This makes TEUFELBERGER your ideal partner right from the project planning phase.

5% of TEUFELBERGER's employees are active in research and development and make sure that our customers have access to the latest, innovative rope technologies. 10% of the entire investment volume are committed to development and quality assurance.



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