





Marlow Ropes' certified and NFPA compliant ropes are field proven and trusted by Work Positioning and Working at Height professionals around the world across various industries. Our 200 year heritage and expertise has enabled us to develop a specialised range that suits the demands of this complex sector.

Our consumers range from fire and rescue departments, arborists, event and film riggers, offshore industrial, utilities and restoration professionals.

We are proud of our global distribution network and our range is stocked both at our premises in the Massachusetts and in California, allowing us to deliver shorter shipping times.

Safety is a crucial part of our development at Marlow and we ensure that the high performance of our products is maintained through rigorous ISO 9001:2015 quality standards - our products are tried and tested in various working environments and we work with our consumers to understand the changing needs of the working at height industry.

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ACCESS ROPES



STATIC LSK

Marlow Static LSK is a low-stretch kernmantle rope designed for rope access, work positioning, caving and abseiling. Static LSK ropes are manufactured using high quality high-tenacity polyamide and significantly out perform the standard CE 1891 test standards with outstanding dynamic properties.

Compatible with all rope management, climbing and descending devices, Static LSK also comes in a range of flecked or solid colors and have a visible year of manufacture marker as standard.

Applications

Industrial access, work positioning, abseiling, caving.

Key attributes

High-strength, high flex / soft handling, CE certified.

Benefits

High-strength, high energy absorption, good abrasion resistance, works well with ascenders and descenders, visible year marker

SPECIFICATIONS

TEST STANDARD	
CONSTRUCTION	
COVER CONSTRUCTION	
CORE MATERIAL	
COVER MATERIAL	
TERMINATION OPTIONS	

CE EN 1891 TYPE A (EXCEPT 9MM CERTIFIED EN 1891 TYPE B)

MULTIPLE TWISTED NYLON CORES

16 PLAIT

POLYAMIDE (NYLON)

POLYAMIDE (NYLON)

KNOT, SEWN EYE



REFLECTIVE STATIC

Reflective Static LSK ropes have the same specification and outstanding dynamic properties of our standard Static LSK. Compatible with all rope management, climbing and descending devices, Reflective Static LSK is available in a range of color options.

Designed for rope access, work positioning, caving and abseiling at night or in dark or confined working conditions where visibility of the line is important.

Applications

Industrial access, work positioning. abseiling, caving, confined spaces, working at night.

Key attributes High-strength, high flex, soft handling, high visibility, CE certified.

Benefits

High-strength, high-elongation, high energy absorption, good abrasion resistance, works well with ascenders and descenders, visible year marker, reflective marker yarns are easily visible. Good resistance to most chemicals and UV.

5. 25. 15. 115.1				
DIAMETER	9mm	10.5mm	11mm	12mm
DIAMETER	11/32"	13/32"	7/16"	15/32"
WEIGHT kg/100m	5.30	6.72	7.38	9.03
WEIGHT ibs/100ft	3.56	4.52	4.96	6.07
LENGTHS	50m, 60m,100m, 200m	50m, 60m,100m, 200m	50m, 60m,100m, 200m	50m, 60m,100m, 200m
AV. BREAKLOAD (kN)	25.4kN	33.4kN	35.3kN	42.8kN
AV. BREAKLOAD (lbs)	5710lbs	7510lbs	7830lbs	9620lbs
AV. BREAKLOAD WITH FIG 8 LOOP (kN)	13.7kN	19.5kN	21.1kN	24.3kN
AV. BREAKLOAD WITH FIG 8 LOOP (lbs)	3080lbs	4380lbs	4740lbs	5460lbs

AFTER EXPOSURE

PH-I STATIC REFLECTIVE

pH-I Static Reflective has the same unique color change marker as standard pH-I Static when exposed to strong acids but with the addition of retro-reflective markers for when rope visibility is important whilst working in confined or dark spaces. pH-I Static Reflective is an EN 1891 certified static rope with all the usual benefits of Marlow Static LSK.



PH-I STATIC

pH-I Static has a unique color change marker that will change from yellow to red when exposed to strong acids. Even a 20-second exposure to some acids can weaken a rope by 25%, compromising safety. Longer exposure will increase this strength loss. pH-I Static (Permanent Halochromic Indicating) offers a clearly defined permanent color change, indicating when a rope has been compromised by strong acid chemicals and should be retired. pH-I Static is an EN 1891-certified static rope.

Applications

Industrial access, cleaning with chemicals, paint stripping, lime scale stripping, weld preparation.

Key attributes

High-strength, high flex / soft handling, CE certified.

Renefits

High-strength, high energy absorption, good abrasion resistance, works well with ascenders and descenders, visible year marker, chemical exposure alert.

BEFORE EXPOSURE

Other info

Marlow's pH-i indicator is an aid to retirement and not a definitive indicator for every chemical. There are chemicals that will damage the rope and will not be indicated by the rope. ie/ Peroxide and phenol. Care must be taken to avoid exposing the rope to any chemical. If in doubt, retire the rope.

SPECIFICATIONS

TEST STANDARD
CONSTRUCTION
COVER CONSTRUCTION
CORE MATERIAL
COVER MATERIAL
TERMINATION OPTIONS
COATING (OPTIONS)
00A11140 (01 110140)

CE EN 1891 TYPE A (EXCEPT 9MM CERTIFIED EN1891 TYPE B)	
MULTIPLE TWISTED NYLON CORES	
16 PLAIT	
POLYAMIDE (NYLON)	
POLYAMIDE (NYLON)	
KNOT, SEWN EYE	
HALOCHROMIC COATING (MARKERS ONLY)	

BLACK MARLOW

SPECIFICATIONS

DIAI	METER
DIAI	METER
WEI	GHT kg/100m
WEI	GHT lbs/100ft
COL	ORS
LEN	GTHS
AV.	BREAKLOAD (kN)
AV.	BREAKLOAD (Ibs)
AV.	BREAKLOAD WITH FIG 8 LOOP (kN)
AV.	BREAKLOAD WITH FIG 8 LOOP (lbs)
TES	T STANDARD
CON	NSTRUCTION
CO\	/ER CONSTRUCTION
COF	RE MATERIAL
CO\	/ER MATERIAL
TER	MINATION OPTIONS

9mm	11mm
11/32"	7/16"
6.7	9.54
4.50	6.41
BLACK	BLACK, WHITE
50m, 61m, 100m, 200m, 220m	50m, 61m, 100m, 200m, 220m
20.3kN	30.8kN
4560lbs	6920lbs
	19kN
	4270lbs
	MR 10-81
MULTIPLE TWISTED CORES	MULTIPLE TWISTED CORES
16 PLAIT	16 PLAIT
POLYESTER	POLYESTER
POLYESTER	POLYESTER
KNOT, SEWN EYE	KNOT, SEWN EYE

Known worldwide as "BLACK MARLOW", Marlow Abseil Rope is a tried and tested, high quality rappelling rope used by defense forces around the world.

Specifically designed for rapid descent from helicopters, rock faces and in urban warfare situations, the combiation of special cover construction and low-stretch core ensures high performance and reliability.

Applications

Abseiling, rappelling.

Key attributes

High abrasion resistance, high flex / soft handling, CE Certified (11mm only).

Benefits

Good-strength, excellent abrasion resistance, low-elongation, works well with ascenders and descenders, color contrast core / cover.

HEAT RESISTANT ROPES NEW COLOR NEW COLOR

PROTEC 500

The ProTec 500 is an innovative, CE Certified EN1891 Type A 11mm rope with a 100% Technora® cover, essential for Rope Access professionals who require a work positioning rope with outstanding heat-resistant properties. Ideal for use around hot pipes and in welding operations due to the cover's ability to withstand up to 500°C (932°F) before decomposing.

Available with a grey or lime marker.

Applications

Hot work at height, grinding, welding, work positioning, work near hot pipes.

Key attributes

CE Certified, cut/abrasion resistance, heat-resistant cover, high temperature polyester indicators that melt/fuse if exposed to elevated temperatures over 250°c (482°F).

Benefits

High-heat resistant cover. Cover decomposes at 500°c (932°F). Provides additional safety when undertaking 'hot work' or when working in proximity to hot pipes, lighting etc. The hi-visibility markers melt/fuse if exposed to temperatures over 250°c (482°F) providing visual and tactile evidence of high temperature exposure.

DIAMETER
DIAMETER
WEIGHT kg/100m
WEIGHT lbs/100ft
COLORS
LENGTHS
AV. BREAKLOAD
AV. BREAKLOAD
AVERAGE BREAKLOAD WITH FIG 8 LOOP
AVERAGE BREAKLOAD WITH FIG 8 LOOP
TEST STANDARDS
CORE CONSTRUCTION
COVER CONSTRUCTION

11mm
7/16"
8.30
5.58
GREY WITH LIME OR LIGHT GREY FLECK OR GOLD WITH RED FLECK
100m, 200m reels
49.1kN
11000lbs
24.4kN
5480lbs
CE EN 1891 TYPE A
MUTIPLE TWISTED NYLON
32 PLAIT TECHNORA® AND POLYESTER MARKERS





DIABLO

Marlow Diablo is a high quality, CE certified Type A rope with a special heat-resistant cover. Diablo is essential for all Rope Access professionals who require a low-stretch kernmantle rope with added resistance to extreme environments and hard use.

When exposed to direct heat (for example from a blow torch or close proximity to halogen lamps), Diablo's survival time at temperatures exceeding 300°C (572°F) is 5 times that of regular static ropes. In instances of heat exposure up to 300°C (572°F), Diablo continues to maintain load bearing properties in excess of 10kN even after 15 minutes, whereas regular static ropes will catastrophically fail after 45 seconds.

Applications

Abseiling, work positioning, industrial rope access, rapid descent, working near hot pipes.

Key attributes

High-abrasion resistance, high flex / soft handling, CE Certified, heat-resistant.

Benefits

Lightweight, high-strength, good energy absorption, excellent abrasion-resistance, excellent heat-resistance, improved insulation buffer zone, improved cut-resistance, single cover easily inspected for damage, works well with ascenders and descenders.

SPECIFICATIONS

DIAMETER
DIAMETER
WEIGHT kg/100m
WEIGHT ibs/100ft
COLORS
LENGTHS
AV. BREAKLOAD (kN)
AV. BREAKLOAD (lbs)
AVERAGE BREAKLOAD WITH FIG 8 LOOP
AVERAGE BREAKLOAD WITH FIG 8 LOOP
TEST STANDARDS
CONSTRUCTION
COVER CONSTRUCTION
CORE MATERIAL
TERMINATION OPTIONS

11mm
7/16"
8.25
5.54
BLACK OR ORANGE/BLACK OR ORANGE/GOLD
61m, 100m, 200m
35.5kN
7980lbs
18.3kN
4110lbs
CE EN 1891 TYPE A
MULTIPLE TWISTED CORES
24 PLAIT TECHNORA®/POLYAMIDE (NYLON)
POLYAMIDE (NYLON)
KNOT, SEWN EYE

ARAMID ABSEIL

Heat generated from rapid descents can (in some cases) melt the polyester fibers of regular ropes. Marlow has used the heat-resistant properties of Aramid fibers to create a rappelling rope with a cover that doesn't melt and has the decomposition temperature of 500°C (932°F)

Based on the tough Black Marlow abseil rope, Aramid Abseil is essential for all professionals who require a low-stretch rappelling rope with outstanding resistance to extreme environments and hard use.

Applications

Abseiling, rappelling, rapid descent.

Key attributes Low-stretch, high-abrasion resistance, high flex / soft handling, heat-resistant.

Benefits

Outstanding abrasion resistance, outstanding heat-resistance, works well with ascenders and descenders, low-elongation, excellent cut-resistance.

SPECIFICATIONS

DIAMETER

DIAMETER

WEIGHT kg/100m

WEIGHT lbs/100ft

COLORS

LENGTHS

AV. BREAKLOAD

CONSTRUCTION

COVER CONSTRUCTION

CORE MATERIAL

COVER MATERIAL

TERMINATION OPTIONS

*This rope is not CE Certified

*Minimum orders may apply

7/	/16"		
9.	.41		
6.	.32		
Y	ELLOW, BLACK		
1(00m, 200m		
39	9.1kN		
M	ULTIPLE TWISTED CO	RES	
16	6 PLAIT		
Ρ(OLYESTER		
 P/	ARA-ARAMID		
	NOT, SEWN EYE		

DYNAMIC ROPES

SPECIFICATIONS

DYNAMIC CLIMBING ROPES



A combination of good handling, abrasion resistance and outstanding energy absorption, make Marlow Dynamic Climbing ropes ideal for climbing as well as safety and back up lines when abseiling or work positioning.

Applications Climbing, safety line, back up line, fall arrest.

Key attributes High-elongation, CE certified.

Benefits Outstanding energy absorption, good abrasion-resistance, good-strength.

DIAMETER
DIAMETER
WEIGHT kg/100m
WEIGHT lbs/100ft
COLORS
LENGTHS
TEST STANDARD
CONSTRUCTION
COVER CONSTRUCTION
CORE MATERIAL
COVER MATERIAL
TERMINATION OPTIONS

10.5mm	11mm
13/32"	7/16"
6.80	7.80
4.57	5.24
RED, BLACK, OLIVE DRAB	ORANGE, BLACK, OLIVE DRAB
50m, 100m, 200m	50m, 100m, 200m
CE EN 892	CE EN 892
MULTIPLE TWISTED CORES	MULTIPLE TWISTED CORES
20 PLAIT	24 PLAIT
POLYAMIDE (NYLON)	POLYAMIDE (NYLON)
POLYAMIDE (NYLON)	POLYAMIDE (NYLON)
KNOT, SEWN EYE	KNOT, SEWN EYE

NFPA

ROPES

RESQTEC LSK

Marlow ResQtec LSK is a low-stretch kernmantle rope designed for rope access, work positioning, caving and abseiling. ResQtec LSK ropes are manufactured from 100% high tenacity polyester and offer excellent strength with slightly lower elongation than polyamide (nylon) static ropes.

Fully NFPA compliant and compatible with all relevant diameter rope management, climbing and descending devices, ResQtec LSK is available in a range of high visibility solid colours for clear identification.

Applications

Industrial access, work positioning, abseiling, caving.

Key attributes

Low-stretch, high flex / soft handling.



Benefits

High-strength, good elongation, good energy absorption, good abrasion-resistance, works well with ascenders and descenders, hi-visibility colors.

3/8", 7/16", 1/2", 5/8"

DIAMETER
WEIGHT lbs/100m
COLORS
LENGTHS
AV. BREAKLOAD
TEST STANDARDS
CONSTRUCTION
COVER CONSTRUCTION
CORE MATERIAL
COVER MATERIAL
TERMINATION OPTIONS

4.72, 6.24, 8.03, 13.1
BLACK, BLUE, RED, LIME
61m/ 200ft, 92m/ 300ft, 183m/ 600ft
25kN/ 5611lbf, 32.4kN/ 7279lbf, 38.5kN/ 8652lbf, 53.6kN/ 12046lbf
NFPA 1983
MULTIPLE TWISTED CORES
16 OR 24 PLAIT
POLYESTER
POLYESTER
KNOT, SEWN EYE



CLIMBING ROPE

VEGA



Vega is an innovative, CE certified light-weight arborist climbing rope, a product that boasts the lowest elongation currently on the market (1.2%). Designed specifically for the new generation of mechanical climbing devices and modern climbing techniques.

Vega has a tough polyester core that provides extremely low elongation while also being high energy absorbing - ideal for SRT climbing. The 24 plait polyester jacket gives a rope with exceptional flexibility and handling without compromising on durability.

-	
0	

COLORS ORANGE/GREY OR LIME/GREY

TERMINATIONS SPLICED, UNSPLICED OR SEWN

SPECIFICATIONS

APPLICATIONS
DIAMETER
LENGTHS
WEIGHT
WEIGHT COVER
WEIGHT CORE
AVERAGE BREAKLOAD
TEST STANDARDS
COVER MATERIAL
CORE MATERIAL

CLIMBING	CLIMBING
11.7mm	15/32"
25m, 35m, 45m, 200m	120ft, 150ft, 200ft, 600ft
100.9 (g/m)	6.78 (lbs/100ft)
55.6 (g/m)	3.74 (lbs/100ft)
45.2 (g/m)	3.04 (lbs/100ft)
36.8kN	8270lbs
CE EN 1891 TYPE B	CE EN 1891 TYPE B
24 PLAIT POLYESTER JACKET	24 PLAIT POLYESTER JACKET
MULTIPLE TWISTED POLYESTER	MULTIPLE TWISTED POLYESTER

VENOM

Venom is a lightweight 11.8mm arborist climbing line designed for the new generation of mechanical climbing devices and modern climbing techniques, either on single or doubled rope. Venom has a braided nylon core that works with the 24-plait jacket to give a rope with exceptional flexibility and handling without compromising durability.

Perfect flexibility and diameter for compatibility with the latest climbing devices. Good energy absorption for safety. Lightweight for easy handling. Serial numbered factory terminations for regulatory compliance.



COLORS

ORANGE/RED OR BLUE/YELLOW



TERMINATIONS

SPLICED, UNSPLICED OR SEWN

GECKO FCR 2





GECKO 2





YELLOW/RED. ORANGE/BLUE & PINK/WHITE

TERMINATIONS

SPLICED OR SEWN







SPECIFICATIONS

APPLICATIONS	
DIAMETER	
LENGTHS	
WEIGHT	
WEIGHT COVER	
WEIGHT CORE	
AVERAGE BREAKLOAD	
TEST STANDARDS	
COVER MATERIAL	

CLIMBING	CLIMBING
11.8mm	15/32"
25m, 35m, 45m, 200m	120ft, 150ft, 200ft, 600ft
89.7.9 (g/m)	6.03 (lbs/100ft)
37.7 (g/m)	2.53 (lbs/100ft)
51.8 (g/m)	3.48 (lbs/100ft)
33.5kN	7530lbs
CE EN 1891 TYPE B	CE EN 1891 TYPE B
24 PLAIT NYLON	24 PLAIT NYLON

SPECIFICATIONS

APPLICATIONS DIAMETER LENGTHS WEIGHT WEIGHT COVER WEIGHT CORE AVERAGE BREAKLOAD TEST STANDARDS CORE MATERIAL COVER MATERIAL

CLIMBING 13mm 125.4 (g/m) 91.4 (g/m) 34.0 (q/m) CE EN 1891 TYPE A MUTIPLE TWISTED POLYESTER POLYESTER

CLIMBING 120ft, 150ft, 200ft, 600ft, 1200ft 8.43 (lbs/100ft) 6.14 (lbs/100ft) 2.28 (lbs/100ft) CE EN 1891 TYPE A MUTIPLE TWISTED POLYESTER POLYESTER

Designed as a traditional 13mm climbing rope for double rope technique, Gecko and Komodo has a tough and durable 16 plait polyester cover making the rope supple and hardwearing - ideal for use with friction hitches.

13mm diameter for easy handling. Range of hi-vis colors for identification and safety. Serial numbered factory terminations for regulatory compliance.

ACCESSORY CORDS



BOA CORD



Marlow Boa has a hard-wearing 16 plait polyester cover with a braided polyester core. This anti-kink construction means Boa is ideal for use as a prusik and other friction hitches, offering easy knot tying and good grip.

High-tenacity polyester balances economy and performance. Tough 16 plait construction for durability and flexibility.

BOA LOOP



Factory terminated, CE certified loop made using the tough and proven antikink Boa cord.

High-strength termination conforms to CE EN 566. Serial numbered, factory CNC sewn terminations for regulatory compliance.



COLORS

BLACK/ LIME



TERMINATIONS SEWN LOOP

VIPER LOOP



Factory terminated, CE certified loop made using the durable and heat-resistant Viper cord.

High-stength termination conforms to CE EN 566. Serial numbered, factory CNC sewn terminations for regulatory compliance.



COLORS

BLUE/NATURAL



TERMINATIONS SEWN LOOP

VIPER2 SLING



A factory sewn CE certified eye-to-eye sling made using a high strength cord incorporating the proven Viper Vectran® cover. Viper2 slings have short stitching for efficient technique.

High-strength termination conforms to CE EN 566. Serial numbered, factory CNC sewn terminations for regulatory compliance.

SPECIFICATIONS

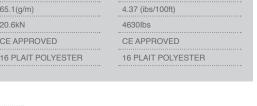
APPLICATIONS DIAMETER LENGTHS WEIGHT AVERAGE BREAKLOAD

TEST STANDARDS

COVER MATERIAL

COLORS TERMINATIONS

BLACK/LIME



PRUSIK

200m reels

11/32"



SPECIFICATIONS

APPLICATIONS

DIAMETER

LENGTHS

UNIT WEIGHT

AVERAGE BREAKLOAD TEST STANDARDS

COVER MATERIAL

CORE MATERIAL

PRUSIK 50cm / 60cm / 70cm 71.6g / 84.6g / 97.7g **CE EN 566** 16 PLAIT POLYESTER POLYESTER

PRUSIK

200m reels

65.1(g/m)

CE APPROVED

20.6kN

PRUSIK 11/32" 50cm / 60cm / 70cm 71.6g / 84.6g / 97.7g 5550lbs **CE EN 566** 16 PLAIT POLYESTER POLYESTER

SPECIFICATIONS

APPLICATIONS

DIAMETER

LENGTHS

UNIT WEIGHT

AVERAGE BREAKLOAD

TEST STANDARDS COVER MATERIAL

PRUSIK PRUSIK 5/16" 8mm 50cm / 60cm / 70cm 50cm / 60cm / 70cm 49.3q / 58.2q / 67.2q 49.3q / 58.2q / 67.2q 27.2kN 6110lbs **CE EN 566 CE EN 566** VECTRAN / POLYESTER VECTRAN / POLYESTER

SPECIFICATIONS

APPLICATIONS

DIAMETER

LENGTHS

UNIT WEIGHT

AVERAGE BREAKLOAD

TEST STANDARDS

COVER MATERIAL

50cm / 60cm / 70cm / 80cm / 57.2g / 64.6g / 72g / 75.5g / 80.9g / 86.2g

PRUSIK

CE EN 566

VECTRAN / POLYESTER

PRUSIK

50cm / 60cm / 70cm / 80cm /

57.2g / 64.6g / 72g / 75.5g / 80.9g / 86.2g

5300lbs

CE EN 566

VECTRAN / POLYESTER



COLORS

PURPLE/NATURAL



TERMINATIONS SEWN EYES

VIPER CORD







Marlow Viper is a Vectran® / polyester accessory cord designed for use as a high performance friction cord where heat generation is an issue. The high melting point of Vectran® prolongs the working life of the cord in tough or heavy use conditions.

High-strength and heat-resistant Vectran® cover for longevity in heavy use. 24 plait construction offers easy knotability in a smaller diameter and consistent friction performance.

SPECIFICATIONS APPLICATIONS PRUSIK PRUSIK PRUSIK PRUSIK DIAMETER 5/16" 10mm* 13/32" 8mm LENGTHS 200m reels 200m reels 100m reels WEIGHT 44.8 (g/m) 3.01 (lbs/100ft) 57.0g/m 3.83 (lbs/100ft) AVERAGE BREAKLOAD 18.8kN 4420lbs 27.9kN 6260lbs TEST STANDARDS CE EN 564 CE EN 564 N/A

	COLORS	BLUE/NATURAL	GREY/NATURAL
0	TERMINATIONS	N/A	N/A

* 10mm (13/32") is not CE Certified

ACCESSORY CORD

Strong, light, polyamide (Nylon) accessory cord provides ideal performance for a variety of applications.

Key attributes CE Certified (4mm, 5mm, 6mm and 8mm only).

Applications General purpose accessory cord.

Benefits Strong, light, good-elongation.

DIAMETER
DIAMETER
WEIGHT kg/100m
WEIGHT ibs/100ft
LENGTHS
AV. BREAKLOAD (kN)
AV. BREAKLOAD (lbs)
TEST STANDARD
CORE CONSTRUCTION
COVER CONSTRUCTION
CORE MATERIAL
COVER MATERIAL
TERMINATION OPTIONS

3mm	4mm	5mm	6mm	7mm	8mm
1/8"	5/32"	3/16"	1/4"	9/32"	5/16"
0.70	1.3	1.42	2.27	3.00	3.79
0.47	0.87	0.95	1.53	2.02	2.55
100m, 200m					
2.00kN	3.60kN	5.60kN	8.00kN	10.9kN	14.2kN
448lbs	809lbs	1260lbs	1800lbs	2450lbs	3190lbs
	CE EN 564	CE EN 564	CE EN 564		CE EN 564
TWISTED	TWISTED	TWISTED	TWISTED	TWISTED	TWISTED
16 PLAIT					
POLYAMIDE (NYLON)	POLYAMIDE (NYLON)	POLYAMIDE (NYLON)	POLYAMIDE (NYLON)	POLYAMIDE (NYLON)	POLYAMIDE (NYLON)
POLYAMIDE (NYLON)	POLYAMIDE (NYLON)	POLYAMIDE (NYLON)	POLYAMIDE (NYLON)	POLYAMIDE (NYLON)	POLYAMIDE (NYLON)
KNOT	KNOT	KNOT	KNOT	KNOT	KNOT

SMALL CORDS



WIRECORE **FLIPLINE**

Marlow Fliplines are CE certified work positioning lanyards made using flexible and strong 7x19 galvanized steel wire core with tough 16 plait polyester cover.

Galvanized 7x19 wire provides zero stretch, resistance and gives ideal balance of flexibility and weight for improved flip performance. 16 plait polyester cover for excellent abrasion resistance and provides grip against the tree. 13mm diameter compatible with rope grabs and other adjustment methods.

SPLIT TAILS

Marlow Split Tails are made from our **CE** certified Gecko climbing ropes and finished with strong factory sewn eye termination. Available in 3 lengths.

Serial numbered, sewn terminations for regulatory compliance.



MARLOW WINCHLINE



Marlow Winchline has a low-stretch, high-strength 12 strand construction. Improved abrasion resistance which protects from ingress of dirt, grit and oil.

Available pre-spliced with a choice of 'standard' or 'competition' hook.

SPECIFICATIONS

APPLICATIONS	WORK POSITIONING
DIAMETER	13mm
DIAMETER	1/2"
LENGTHS	2m / 3m / 4m / 5m
UNIT WEIGHT	646g / 864g / 1082g / 1300g
AVERAGE BREAKLOAD	30kN
AVERAGE BREAKLOAD	6740lbs
TEST STANDARDS	CE EN 354
CORE MATERIAL	GALVANIZED STEEL WIRE
COVER MATERIAL	POLYESTER

COLORS

ORANGE/BLUE OR DARK ORANGE/BLUE







TERMINATIONS FERRULED EYE WITH OR WITHOUT SNAP HOOKS (FIXED OR SWIVEL)

SPECIFICATIONS

APPLICATIONS	CLIMBING SYSTEMS
DIAMETER	13mm
DIAMETER	1/2"
LENGTHS	1.5m / 3.5m / 5m
UNIT WEIGHT	188g/ 439g/ 627g
AVERAGE BREAKLOAD	28.3kN
AVERAGE BREAKLOAD	6360lbs
TEST STANDARDS	CE EN 1891
COVER MATERIAL	POLYESTER



COLORS VARIOUS





TERMINATIONS SEWN EYE





DIAMETER		WEIGHT		AVERAGE SPLICED LENGTH				MIN BREAK LOAD (kN)		
mm	inch	g/m	lb/100ft	kg	lb	kN	kg	lb	kN	
6	7/32	19.6	1.32	3130	6900	30.7	2880	6350	28.3	
8	5/16	24.5	2.30	6340	14000	62.2	5830	12900	57.2	
9	23/64	34.3	2.80	7640	16800	75.0	7030	15500	69.0	
10	13/32	41.7	3.46	9530	21000	93.5	8770	19300	86.0	
11	7/16	51.5	4.11	11700	25800	114.9	10800	23800	105.7	
12	15/32	71.1	4.77	13400	29500	131.4	12300	27200	120.9	



MINI-SPOOL DISPENSER - RETAIL DISPLAY

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Marlow's Mini-Spool Dispenser is a great point-of-sale display for cashdesk spaces and table-tops, available free of charge when purchased with 16 mini-spool reels from our Throwline range.

Spools can be re-ordered as and when required.



DISPENSER MEASUREMENTS

200 X 70 X 315mm (HXWXD)



THROWLINE

Supplied on handy 50m mini-spools, our popular 2mm Throwline has a smooth and hardwearing polyester cover.

Excellent handling characteristics and longevity.

SPECIFICATIONS

APPLICATIONS
DIAMETER
LENGTHS
WEIGHT
MINIMUM BREAKLOAD
MATERIAL

THROWLINE	THROWLINE
2mm	5/64"
50m	164"
2.7g/m	0.18 (ibs/100ft)
0.97kN	218lbs
POLYESTER	POLYESTER



COLOR

ORANGE OR LIME



DYNEEMA THROWLINE

For easier handling and higher breaking strength, the Dyneema® Throwline is over 3 times as strong as our standard polyester product, but is 12% lighter.



Light, strong and hardwearing.

SPECIFICATIONS

APPLICATIONS			
DIAMETER			
LENGTHS			
WEIGHT			
MINIMUM BREAKL	OAD		
MATERIAL			
•••••			

THROWLINE	THROWLINE
1.8mm	1/16"
61m, 50m	200", 164"
2.4g/m	0.16 (ibs/100ft)
4.0kN	901lbs
DYNEEMA®	DYNEEMA [®]



COLOR

YELLOW

WHIPPING TWINE



Marlow's waxed polyester Whipping Twine is widely regarded as the best Whipping Twine on the market.

Available in four sizes and a variety of colors (no.4 only). The waxed finish makes for easier whipping and a better finish. Available in "display boxes" of spools or on 1kg cops.

SPECIFICATIONS

J		_							
SIZE	NO.2 (Thin)	NO.4 (Med.)	NO.8 (Lge)						
DIAMETER (mm)	0.5	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.1
COLOR	WHITE	WHITE	RED	BLUE	BLACK	GREEN	GOLD	BEIGE	WHITE

SEAMLESS TUBE BANDANA/ NECK BUFF •••••

These 100% polyester tubes are the perfect multi-use accessory to any arborists kit. Can be used as a neck/face buff, bandana or wristband.



COLORS BLACK/RED

25 x 50cm





ROPE STORAGE BAG

The handy Marlow rope storage bag is able to accommodate up to 45m of climbing rope.



COLOR BLACK





RIGGING SLINGS

WHOOPIE EXTREME



COLOR

GREY



TERMINATIONS

FIXED EYE SPLICE ONE END, ADJUSTABLE SPLICE OTHER FND

Manufactured from Dyneema®, Whoopie Extreme is 5 times lighter than our standard Whoopie Sling yet 40% stronger. Lighter handling, increased safety factors and minimal elongation make this the ultimate tree rigging sling.

Very high-strength, low-stretch & very lightweight. Does not absorb water. Excellent abrasion resistance, and supplied with an adjustable factory splice.

SPECIFICATIONS	Dynosma [*]
APPLICATIONS	SLING
DIAMETER	10mm
DIAMETER	13/32"
LENGTHS	1.1-3.6m
UNIT WEIGHT	350g
MINIMUM BREAKLOAD	6690kg
MINIMUM BREAKLOAD	14700lbs
MATERIAL	DYNEEMA [®]

MINI WHOOPIE EXTREME



COLOR



TERMINATIONS

FIXED EYE SPLICE ONE END, ADJUSTABLE SPLICE OTHER **END**

The Mini Whoopie is small enough to be carried as an emergency rescue sling or redirect as well as rigging applications.

Very high-strength & low-stretch, very lightweight. Does not absorb water. It has excellent abrasion-resistance, and is supplied with an adjustable factory splice.



WHOOPIE SLINGS



COLORS

LIME/BLUE/RED



FIXED EYE SPLICE ONE END. TERMINATIONS ADJUSTABLE SPLICE OTHER END

Whoopie Slings are adjustable in length so that one sling can do the job of many. With one fixed eye and one adjustable, Marlow Whoopie Slings are manufactured using a unique multi-braided construction for improved durability without the need for PU coating.

Unique multi-braided construction that is hardwearing, strong and adjustable, with high elongation for superior energy absorption. Supplied pre-spliced.

SPECIFICATIONS

APPLICATIONS
DIAMETER
DIAMETER
LENGTHS (m)
UNIT WEIGHT
MINIMUM BREAKLOAD
MINIMUM BREAKLOAD
MATERIAL

18mm 11/16 0.9-1.83m, 0.9-2.4m, 0.9-3.6m 1079g, 1320g, 2050g 4740kg 10400lbs POLYESTER

SCORPION RIGGING SLING



@

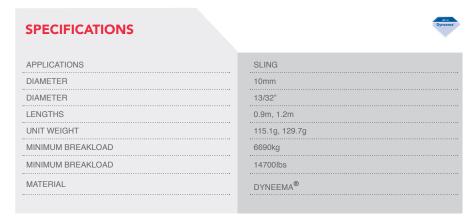
COLOR

GREY

TERMINATIONS

LARGE EYE SPLICE ONE END, SMALL EYE SPLICE ONE END The Scorpion is a rigging sling which is a stronger, lighter option to an endless sling used for tree rigging applications. With a large splice on one end to choker around the branch or stem and a smaller splice at the other end to clip in a carabiner or connector directly to the rigging rope, it removes the chance of the connecter rolling on the large loop of the endless sling and lessens the chances of it opening.

Very high-strength & low-stretch, very lightweight and does not absorb water. It has excellent abrasion-resistance.



RAPTOR DEAD-EYE SLINGS



These traditional tree-rigging slings are made using our unique Raptor construction. Raptor Dead-Eye Slings are high-strength, low-stretch and a hardwearing polyester cover with a PU coating. Available in two sizes with pre-spliced 100mm eyes.

Made from high-tenacity polyester offering hardwearing, high-strength and low-stretch properties. Supplied pre-spliced.



LOWERING LI

RAPTOR BULL ROPES

Braid-on-braid construction, easily spliced. ArmourCoated to reduce water absorption and for 30% improvement in abrasion-resistance. Raptor Bull Ropes are supplied with a spliced stainless steel thimble.

High-tenacity polyester, with a hardwearing, abrasion-resistant ArmourCoated cover. High-strength and low-stretch. Supplied pre-spliced.

SPECIFICATIONS

APPLICATIONS DIAMETER DIAMETER LENGTHS **UNIT WEIGHT** MINIMUM BREAKLOAD COVER MATERIAL CORE MATERIAL COVER COATING

LOWERING LINE
12mm, 14mm, 16mm, 18mm
1/2", 9/16", 5/8", 3/4"
50m
5.6kg, 7.8kg, 9.7kg, 11.6kg
3940kg, 5010kg, 5990kg, 6550kg BRAIDED 24 PLAIT POLYESTER
12 STRAND POLYESTER ARMOURCOAT





COLORS

12mm (1/2") BLUE, 14mm (9/16") GREEN, 16mm (5/8") RED, 18mm (3/4") YELLOW





TERMINATIONS SPLICED STAINLESS STEEL THIMBLE AT ONE END

Raptor rigging line is the next generation of lowering lines from Marlow. Using soft and supple yet high-strength doublebraid polyester rope, Raptor rigging has Marlow's proprietary color coded ArmourCoat for improved abrasion-resistance and reduced water absorption.

High-tenacity polyester, with a hard wearing abrasion resistant ArmourCoated cover. High-strength and low-stretch. Supplied pre-spliced.



12mm (1/2") BLUE, 14mm (9/16") GREEN, 16mm (5/8") RED, 18mm (3/4") YELLOW





SPECIFICATIONS

ADDI ICATIONS

ALL LICATIONS	
•	
DIAMETER	
•	
DIAMETER	
LENGTHS	
WEIGHT (g/m)	
VVLICITI (g/III)	
MEIGHT (III (1000))	
WEIGHT (lbs/100ft)	

MINIMUM BREAKLOAD MINIMUM BREAKLOAD

COVER MATERIAL CORE MATERIAL

12mm,14mm, 16mm, 18mm
1/2", 9/16", 5/8", 3/4"
100m/ 200m
111g/m, 156g/m, 193g/m, 232g/m
7.44,10.4, 12.9, 15.5
4380kg, 5570kg, 6650kg, 7280kg
9650lbs, 12300lbs, 14700lbs, 16000lbs

BRAIDED 24 PLAIT POLYESTER 12 STRAND POLYESTER

LOWERING LINE

DOUBLEBRAID



The Doublebraid option is a lowering line while maintaining similar break loads to the Raptor.

High-strength, soft and flexible. Very easily spliced.



COLORS

WHITE WITH RED FLECK, BLUE FLECK, NAVY FLECK, GREEN FLECK & BLACK FLECK



APPLICATIONS
DIAMETER
DIAMETER
LENGTHS
WEIGHT (g/m)
WEIGHT (lbs/100ft)
MINIMUM BREAKLOAD
MINIMUM BREAKLOAD
COVER MATERIAL
CORE MATERIAL

LOWERING LINE
12mm,14mm, 16mm, 18mm
1/2", 9/16", 5/8", 3/4"
100m/ 200m
111g/m, 156g/m, 193g/m, 232g/m
7.44,10.4, 12.9, 15.5
4380kg, 5570kg, 6650kg, 7280kg
9650lbs, 12300lbs, 14700lbs, 16000lbs
BRAIDED 24 PLAIT POLYESTER
12 STRAND POLYESTER

DRACO



Specially developed for the most demanding arborist rigging applications, Draco's proven 16 plait cover is paired with a braided high-tenacity core to give a tough but high-strength lowering line. The fully braided construction prevents twisting and allows for a supple rope without compromising on durability.

The polyester construction ensures performance, durability and economy from a single rope.

SPECIFICATIONS

APPLICATIONS DIAMETER

DIAMETER

LENGTHS WEIGHT (g/m)

WEIGHT (lbs/100ft)

MINIMUM BREAKLOAD

MINIMUM BREAKLOAD COVER MATERIAL

CORE MATERIAL

LOWERING LINE

12mm, 14mm, 16mm

1/2", 9/16", 5/8"

50m/ 200m

100.6g/m, 130.4g/m, 197.0g/m

6.75, 8.74, 13.2

3590kg, 5036kg, 7550kg

7810lbs, 11100lbs, 16600lbs

16 PLAIT POLYESTER

12 STRAND POLYESTER

COLORS

WHITE WITH 12mm (1/2") BLUE FLECK, 14mm (9/16") GREEN FLECK, 16mm (5/8") RED FLECK









D12

For larger winches and high-load applications where diameter versus break load is critical. Marlow also manufactures D12 in SK99. Which offers 15% greater strength.

D12 99 offers exceptional strength and low stretch characteristics and maintains the same flex fatigue performance around sheaves and pulleys as regular D12. Perfect for camera rigs, catenary systems, dolly systems and winches



COLOURS

BLACK/ BLUE/ GREEN/ WHITE/ RED



TERMINATIONS SPLICED EYE

SPECIFICATIONS

APPLICATIONS

DIAMETER (mm)

DIAMETER (inches)

LENGTHS (m)

WEIGHT (g/m)

WEIGHT (lbs/100ft)

MINIMUM BREAKLOAD (kN)

MINIMUM BREAKLOAD (Ibs)

MATERIAL

COATING

EVENT RIGGING

2.5mm, 3mm, 3.5mm, 4mm, 5mm, 6mm, 6.5mm, 7mm, 8mm, 9mm, 10mm, 11mm, 12mm, 13mm, 15mm, 16mm,

7/64, 1/8", 9/64", 5/32", 3/16", 7/32", 1/4", 1/4", 5/16", 3/8", 13/32", 7/16", 15/32", 1/2", 9/16", 5/8"

UPON REQUEST

3.7, 5.3, 7.4, 9.8, 12.8, 17.7, 22.0, 28.0, 33.0, 37.6, 48.3, 58.2, 65.0, 80,0, 98.0,118.0

0.25, 0.36, 0.50, 0.66, 0.86, 1.19, 1.48, 1.88, 2.21, 2.52, 3.24, 3.90, 4.36, 5.37, 6.57, 7.91

4.8, 8.4, 10.5, 18.1, 20.8, 30.8, 39.1, 48.4, 55.9 61.3, 83.7, 105, 114.0, 140, 163.0, 186

1080, 1880, 2360, 4080, 4670, 6920, 8810, 10900, 12600 13800, 18800, 23500, 25500, 31500, 36500, 41900

HMPE / DYNEEMA®

ARMOURCOAT



D12 MAX (SK78)

For high-load, diameter or safety critical applications, D12 MAX is the only choice. Stiffer than standard D12, D12 MAX is taken to the limit of its physical properties during the manufacture process resulting in a rope unrivalled in strength and low elongation.

D12 Max is manufactured using Dyneema® SK78 for guaranteed quality, strength and minimal creep.



COLOURS

BLACK/ BLUE/ GREEN/ WHITE/ RED

SPECIFICATIONS

APPLICATIONS

DIAMETER (mm)

DIAMETER (inches)

LENGTHS (m)

WEIGHT (g/m)

WEIGHT (lbs/100ft)

MINIMUM BREAKLOAD (kN)

MINIMUM BREAKLOAD (lbs)

MATERIAL

EVENT RIGGING

2.5mm, 3mm, 4mm, 5mm, 6mm, 7mm, 8mm, 9mm, 10mm, 11mm, 12mm, 13mm,15mm, 17mm,

3/32", 1/8", 5/32", 3/16", 1/4", 9/32", 5/16", 11/32", 13/32", 7/16", 15/32", 1/2", 19/32', 21/32"

UPON REQUEST

4.5, 6.8, 11.1, 15.6, 22.3, 35.6, 44.5, 54.0, 63.0, 75.5, 90.0,107,134,184w

 $0.30, 0.46, 0.74, 1.05, 1.50, 2.39, 2.98, 3.62, 4.22, 5.06, \\6.04, 7.18, 8.99, 12.3$

 $9.2,\,13.7,\,22.6,\,29.2,\,41.7,\,68.5,\,85.6,\,98.1,\,115,\,138,\\164,\,193,\,241,\,300$

 $2060, 3090, 5080, 6560, 9380, 15400, 19200, 22100, 25800, 31000, \\ 36900, 43400, 54200, 67400$

HMPE / DYNEEMA®



D12 PLUS

Marlow manufactures a range of 12 strand HMPE ropes, where higher break loads for a given diameter are required. D12 Plus is also available in Dyneema® SK99.

Size for size, D12 Plus displays the same strength as steel wire yet is a fraction of the weight and also floats.



COLOURS

BLACK/ BLUE/ GREEN/ WHITE/ RED



TERMINATIONS SPLICED EYE

SPECIFICATIONS

APPLICATIONS

DIAMETER (mm)

DIAMETER (inches)
LENGTHS (m)

WEIGHT (g/m)

WEIGHT (lbs/100ft)

MINIMUM BREAKLOAD (kN)

MINIMUM BREAKLOAD (lbs)

MATERIAL

COATING

EVENT RIGGING

18mm, 20mm, 22mm, 24mm, 28mm, 32mm, 36mm, 40mm, 44mm

2 1/4", 2 1/2", 2 3/4", 3", 3 1/2",4",4 1/2", 5", 5 1/2"

UPON REQUEST

195, 239, 289, 318, 434, 579, 694, 868, 1040

13.1, 16.0, 19.4, 21.3, 29.1, 38.8, 46.6, 58.2, 69.8

308, 370, 436, 478, 629, 830, 959, 1.180, 1.360

 $69,\!200,\,83,\!200,\,97,\!900,\,107,\!000,\,141,\!000,\,187,\!000,\,216,\!000,\\265,\!000,\,306,\!000$

HMPE

ARMOURCOAT



T12

Marlow T12 is manufactured from Black Technora® and offers a high-stength, low-stretch rope which has been a staple of the film and event rigging industry for many years.

Flexible and easily spliced, extra abrasion resistance thanks to the ArmourCoat coating. Care must be taken when specifying T12 in systems as it requires a large D:d ratio of 20:1 or more in order to maintain optimum strength. Perfect for camera rigs, catenary systems, dolly systems and winches



COLOURS

BLACK/ NATURAL/ GREEN



TERMINATIONS SPLICED EYE



APPLICATIONS

DIAMETER (mm)

DIAMETER (inches)

LENGTHS (m)

WEIGHT (g/m)

WEIGHT (lbs/100ft)

MINIMUM BREAKLOAD (kN)

MINIMUM BREAKLOAD (Ibs)

MATERIAL

COATING

EVENT RIGGING

3mm, 4mm, 5mm, 6mm, 7mm, 8mm, 9mm, 10mm, 11mm, 12mm, 13mm

1/8", 5/32", 3/16", 7/32", 1/4", 5/16", 3/8", 13/32" 7/16", 15/32", 1/2

UPON REQUEST

6.8, 13.7, 18.2, 25.0, 29.6, 38.8, 50.1, 61.6, 73.0, 87.0, 119

0.46, 0.92, 1.22, 1.68, 1.99, 2.60, 3.36, 4.13,

4.90, 5.83, 7.98 7.7, 15.3, 20.4, 28.1, 33.2, 43.4, 56.2, 69.0

81.8, 97.1, 133

1720, 3450, 4600, 6320, 7470, 9760, 12600, 15500 18400, 21800, 29900

12 STRAND TECHNORA® (HEAT RESISTANT PARA-ARAMID)

ARMOURCOAT

V12

V12 offers an alternative to T12 in that it maintains the same high strength and low stretch as well as heat resistance, but also exhibits virtually zero creep and performs better on sheaves and pulleys.

Whilst not naturally black, V12 can be coated with Black ArmourCoat. Perfect for camera rigs, catenary systems, dolly systems and winches



COLOURS

BLACK/ NATURAL



TERMINATIONS SPLICED EYE

SPECIFICATIONS

APPLICATIONS

DIAMETER (mm)

DIAMETER (inches)

LENGTHS (m)

WEIGHT (g/m)

WEIGHT (lbs/100ft)

MINIMUM BREAKLOAD (kN)

MINIMUM BREAKLOAD (lbs)

MATERIAL

COATING

EVENT RIGGING

2.5mm, 3mm, 4mm, 5mm, 6mm, 7mm, 9mm, 10mm, 11mm, 13mm, 15mm, 16mm, 18mm

3/32", 1/8", 5/32", 3/16", 7/32", 1/4", 3/8", 13/32", 7/16", 1/2", 9/16", 5/8", 3/4"

UPON REQUEST

4.5, 6.7, 13.4, 17.9, 22.4, 33.6, 53.8, 67.2, 89.6, 107.5, 141.1, 170.2, 188.2

0.30, 0.45, 0.90,1.20, 1.50, 2.25, 3.61, 4.51, 6.01, 7.21, 9.46, 11.42, 12.62

5.5, 8.8, 14.8, 21.2, 29.6, 50.8, 76.6, 96.9,106, 130, 163, 200, 222

1240, 1970, 3330, 4770, 6650, 11400, 17200, 21800, 23700, 29200, 36500, 45000, 49800,

12 STRAND BRAIDED VECTRAN®

ARMOURCOAT



STATIC LSK (FOR ROPE ACCESS)

Marlow Static LSK is a low stretch kernmantle rope designed for rope access, work positioning, and abseiling. Static LSK ropes are manufactured using high quality high tenacity polyamide and significantly out perform the standard CE 1891 test standards with outstanding dynamic properties.

Compatible with all relevant diameter rope management, climbing and descending devices, Static LSK also comes in a range of flecked or solid colours and have a visible year of manufacture marker as standard.



COLOURS

BLACK/ RED/ YELLOW/ GREEN / BLUE / WHITE



TERMINATIONS KNOT, SPLICED EYE (OPTIONAL)

SPECIFICATIONS

APPLICATIONS

DIAMETER (mm)

DIAMETER (inches)

LENGTHS (m)

WEIGHT (kg/100m)

AVERAGE BREAKLOAD (kN)

AVERAGE BREAKLOAD WITH FIG. 8 (kN)

MATERIAL

STANDARD

EVENT RIGGING

9mm, 10.5mm, 11mm, 12mm

3/8", 13/32", 7/16", 1/2"

UPON REQUEST

5.30, 6.72, 7.38, 9.03

25.4, 33.4, 35.3, 42.8

13.7, 19.5, 21.1, 24.3

16 PLAIT POLYAMIDE (NYLON)

EN1891

MATTBRAID

Soft handling and good flexibility make this a great rope for any manual task undertaken by engineers and technicians.

Matt black in colour, easily spliced and great handling make this a firm favourite in theatres.



COLOURS



TERMINATIONS SPLICED EYE (OPTIONAL)

3 STRAND POLYESTER

The classic 3 strand line. Marlow's 3 Strand Polyester is manufactured using the highest quality materials to produce a rope of the highest quality with the perfect flexibility and firmness.

Unlike Nylon, Polyester won't degrade in UV and remains supple and strong even when wet. Available in white or solid black



COLOURS

BLACK / WHITE



TERMINATIONS SPLICED EYE (OPTIONAL)

8 PLAIT STANDARD

Polyester cord in 8 plait construction for flexible, easy handling and good roundness.



COLOURS



8 PLAIT PRE-STRETCHED

Tried and tested cord for multiple uses. The knobbly 8 plait construction provides good grip in the hands, in cleats and is a great rope where grip, abrasion resistance and low stretch are needed.



COLOURS

BLACK

SPECIFICATIONS

APPLICATIONS

DIAMETER (mm)

DIAMETER (inches)

LENGTHS (m)

WEIGHT (g/m)

WEIGHT (lbs/100ft)

MINIMUM BREAKLOAD (kN)

MINIMUM BREAKLOAD (lbs)

COVER MATERIAL

CORE MATERIAL

EVENT RIGGING

6mm, 8mm, 10mm, 12mm, 14mm, 16mm

7/32". 5/16". 3/8". 1/2". 9/16'. 5/8"

100m, 200m

28, 50, 70, 99, 126, 178

1.88, 3.35, 4.69, 6.64, 8.45, 11.9

5.30, 9.89, 17.5, 24.8, 29.1, 47.9

1190, 2220, 3930, 5580, 6550, 10800

POLYESTER

POLYESTER

SPECIFICATIONS

APPLICATIONS

DIAMETER (mm)

DIAMETER (inches)

LENGTHS (m)

WEIGHT (g/m)

WEIGHT (lbs/100ft)

MINIMUM BREAKLOAD (kN)

MINIMUM BREAKLOAD (lbs)

MATERIAL

EVENT RIGGING

4mm, 5mm, 6mm, 8mm, 10mm, 12mm, 14mm, 16mm, 18mm, 20mm

5/32", 3/16", 7/32", 5/16", 13/32", 15/32", 9/16", 5/8",

100m, 200m

12.1, 20, 29.1, 51, 80.5, 116, 157, 205, 259.1, 318.19

0.81, 1.34, 1.95, 3.42, 3.23, 4.45, 5.52, 7.15, 9.92,

2.80, 4.25, 6.00, 10.60, 16.0, 22.4, 30.0, 40.0, 50.0,

629.46, 955.44, 1348.85, 2382.97, 3596.94, 5035.71, 6744.26, 8992.34, 11240.43, 13488.51

POLYESTER

SPECIFICATIONS

APPLICATIONS

DIAMETER (mm)

DIAMETER (inches)

LENGTHS (m)

WEIGHT (g/m)

WEIGHT (lbs/100ft)

MINIMUM BREAKLOAD (kN)

MINIMUM BREAKLOAD (lbs)

MATERIAL

EVENT RIGGING

1mm, 1.5mm, 2mm, 3mm, 4mm, 5mm

5/32", 3/16", 7/32", 1/4", 5/16", 3/16"

100m, 200m

1, 2.5, 3.3, 7, 11.6, 21

0.07, 0.17, 0.22, 0.47, 0.78, 1.41

0.34, 0.70, 1.01, 1.63, 2.8, 4.61

77, 157, 227, 366, 628, 1036

POLYESTER

SPECIFICATIONS

APPLICATIONS

DIAMETER (mm)

DIAMETER (inches)

LENGTHS (m)

WEIGHT (g/m)

WEIGHT (lbs/100ft)

MINIMUM BREAKLOAD (kN)

MINIMUM BREAKLOAD (lbs)

MATERIAL

EVENT RIGGING

4mm, 5mm, 6mm, 7mm, 8mm

5/32", 3/16", 7/32", 1/4", 5/16"

100m, 200m

13, 21, 29, 43, 55

0.92, 1.22, 1.68, 1.99, 2.60

3.24, 5.20, 6.87, 7.65, 12.1

728, 1170, 1540, 1720, 2710

POLYESTER

TECHNICAL INFORMATION - PHYSICAL PROPERTIES- CARE IN USE

CHEMICAL RESISTANCE

This table shows the residual strengths of synthetic fibres after chemical exposure under specific conditions.

CHEMICAL	CONC (W/W%)	TEMP. (°C)	TEMP (°F)	TIME (HOURS)	NYLON	POLYESTER	POLYPROPYLENE	ARAMID	НМРЕ
ACIDS									
HYDROCHLORIC	34	20	68	100	0	90	100	95	100
NITRIC	66	20	68	100	0	70	100	95	95
SULPHURIC	96	20	68	100	0	100	100	40	90
FORMIC	90	20	68	100	0	95	100	90	100
ACETIC	100	20	68	10	85	95	100	100	100
ALKALIS									
CAUSTIC SODA	40	20	68	100	50	0	90	90	100
CAUSTIC SODA	20	70	158	150	100	0	100	85	90
CAUSTIC POTASH	40	20	68	100	90	0	90	90	100
SOLVENTS			•						
TRICHLOROETHYLENE	100	30	86	150	100	95	80	100	100
CARBON TETRACHLORIDE	100	20	68	150	100	100	100	98	100
BENZENE	100	70	158	150	100	100	100	98	95
METACRESOL	100	100	212	4	0	0	100	80	100
OXIDISING AGENTS					-				
HYDROGEN PEROXIDE	10	20	68	100	0	100	90	95	100

ROPE STRENGTHS AND WEIGHTS

Rope strengths are tested according to Marlow's QA25 and 26 quality procedures. Generally these procedures are in line with BS EN ISO 2307, however, a number of other internationally recognised test standards are used including EN 1891 and EN 564. Rope mass is determined be weighing a sample of rope whose length has been measured at a reference load. For most ropes this load is calculated as:

REFERENCE LOAD (kg) = D²/8

Where D is the rope nominal diameter (mm)

Most rope strengths in this catalogue are given in kilograms (kg). However, the correct measure of force or breaking strength is kilonewtons (kN). Conversion factors from one to the other are:

kg to kN x 0.0098¹ kN to kg x 101.972

WORKING LOADS

Marlow Ropes specify a minimum breaking load. It is the responsibility of the user to determine an appropriate factor of safety and safe working load. This factor of safety must be determined after considering all the risks, the strength reducing factors, and the expected life of the rope.

CARE IN USE:

STORAGE: Ropes should be stored in a suitable clean, dry place out of direct sunlight and away from extreme temperature. Do not store ropes on dirty floors or drag over rough ground – dirt and grit can work between the fibres and cause abrasion damage. Keep ropes away from chemicals and in cases of long term storage, hose down with fresh water to reduce dirt and salt that can affect the life and efficiency.

Braided ropes can have excessive twist imparted into them by incorrect handling. Ideally these ropes should be "hanked" in a figure of 8 fashion this avoids putting twist in and will ensure free running when deployed. If supplied on a reel, this must be allowed to rotate freely on a central pin so that the rope may be drawn off from the top layer. Never take the rope from a reel lying on its side unless placed onto a turntable.

SHEAVES, PULLEYS AND ROLLERS: When any rope is used around a sheave there will be a reduction in its strength and life. For most non-specialised applications a sheave diameter 8-10 times the rope diameter will suffice, however certain materials such as Aramids may require a sheave size of up to 20 times diameter.

The profile of the groove in a sheave should support the entire rope. Normally a semicircle of 10% greater diameter than that of the rope is appropriate. 'V' groove sheaves should be avoided since they compress the rope and have points of local friction reducing the life of the rope. Sheaves should be maintained so that they rotate freely in use.

TERMINATIONS:

SPLICES: Most Marlow ropes can be spliced, this is normally the preferred method of termination. A good splice using the recommended method should not reduce the strength of a rope by more than 10%.

KNOTS: A knot will reduce the strength of the rope, sometimes very significantly. This loss is caused by the tight bends and compression found in any knot. The amount a rope will be weakened will depend on the knot, type of rope and the material from which it is made but can be up to 60%.

EYE SIZES: Wherever possible the angle formed at the throat of a splice when it is loaded should be 30 degrees or less. This means that the length of the eye when flat must be at least 2.7 times the diameter of the object over which the eye is to be used and the distance from the bearing point to the throat when in use should be at least 2.4 times the diameter. Some materials like Aramids and HMPEs (Dyneema®) will require a larger eye with an angle at the throat of 15 degrees or less.

INSPECTION & RETIREMENT:

INSPECTION: It is important that a rope is regularly inspected to ensure that it is undamaged and is still fit for service. The entire length of rope should be examined. The following are some of the points that should be checked. The degree to which any of the following may be allowed before the rope is retired will be dependant on the assumptions made when the rope and safety factors were determined.

EXTERNAL ABRASION: When a multifilament rope is subjected to abrasion the outer filaments will quickly become broken and a furry finish will develop. This furry layer will protect the yarns underneath preventing further abrasion. If this condition does not stabilise and continues to develop then there may be excessive abrasion that could lead to significant strength loss.

INTERNAL ABRASION: The rope should be opened up so that the condition of the internal yarns can be assessed. If they show signs of abrasion then there could be some exposure to abrasive particles or there may be inter yarn abrasion.

GLAZING: If a rope has been subjected to excessive heat then there may be glazed or glossy areas of rope. The glazing is caused when the yarns melt, if this has happened then the nearby yarns will also have been exposed to elevated temperatures and will have been affected. This type of damage is often seen if ropes slip on winch barrels or capstans.

DISCOLOURATION: This could indicate the presence of dirt that may cause internal abrasion or could be an indication of chemical damage. If chemical damage is suspected then the amount that the rope has been weakened is very difficult to assess and the rope should be retired.

INCONSISTENCIES: If any section of the rope is found to contain lumps, flat areas or thin bits then this could indicate that the rope has been damaged internally. This type of damage is often caused by overloading or shock loads.

No rope will last forever and it is important to ensure that if there are any risks if a rope fails then it should be retired after an appropriate period.

