

# Marlow®

## DEFENDER

Specifically designed for use in the harshest working environments. The Defender is manufactured with a D12 Max 99 or D12 Max 78 core and a thin protective Dyneema cover that ensures optimum strength is maintained without significant diameter increase.

Manufactured using a 12x1 12-strand construction and colour coated with Marlow's proprietary ArmourCoat, the Defender's core undergoes our "Max" special heating and pre-stretching process which takes the Dyneema material to it's limits, but delivers class leading strength and low stretch.



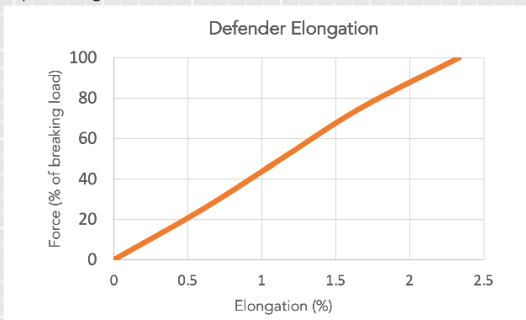
The Dyneema cover is tough and cut resistant, but the contrasting core & cover colour provides clear retirement criteria if the cover is compromised. All Defender Ropes are factory terminated and machine finished and can be supplied with a choice of hook depending on the application.

Material	Nominal Diameter		Mass (Weight)		Minimum Linear Strength ISO 2307			Minimum Spliced Strength			Average Spliced Strength		
	Dyneema*	mm	Inch	g/m	lb/100ft	kg	lb	kN	kg	lb	kN	kg	lb
SK78	7	1/4	30.8	2.07	4,722	10,422	46.3	4,250	9,380	41.7	4,570	10,100	44.8
SK78	8	5/16	48.4	3.25	7,756	17,111	76.1	6,980	15,400	68.5	7,510	16,600	73.7
SK78	9	3/8	57.3	3.84	9,700	21,333	95.1	8,730	19,200	85.6	9,390	20,700	92.1
SK78	10	13/32	71.1	4.77	11,111	24,556	109	10,000	22,100	98.1	10,800	23,800	106
SK78	12	15/32	88.6	5.94	13,000	28,667	128	11,700	25,800	115	12,600	27,800	124
SK78	14	9/16	110	7.35	15,667	34,444	153	14,100	31,000	138	15,100	33,300	148
SK78	15	19/32	124	8.32	18,556	41,000	182	16,700	36,900	164	18,000	39,700	177
SK78	16	5/8	141	9.46	21,889	48,222	214	19,700	43,400	193	21,100	46,600	207
SK78	18	11/16	185	12.4	27,333	60,222	268	24,600	54,200	241	26,400	58,300	259
SK78	20	25/32	235	15.8	34,000	74,889	333	30,600	67,400	300	32,900	72,400	323

Material	Nominal Diameter		Mass (Weight)		Minimum Linear Strength ISO 2307			Minimum Spliced Strength			Average Spliced Strength		
	Dyneema*	mm	Inch	g/m	lb/100ft	kg	lb	kN	kg	lb	kN	kg	lb
SK78	7	1/4	30.8	2.07	4,722	10,422	46.3	4,250	9,380	41.7	4,570	10,100	44.8
SK78	8	5/16	48.4	3.25	7,756	17,111	76.1	6,980	15,400	68.5	7,510	16,600	73.7
SK78	9	3/8	57.3	3.84	9,700	21,333	95.1	8,730	19,200	85.6	9,390	20,700	92.1
SK78	10	13/32	71.1	4.77	11,111	24,556	109	10,000	22,100	98.1	10,800	23,800	106
SK78	12	15/32	88.6	5.94	13,000	28,667	128	11,700	25,800	115	12,600	27,800	124
SK78	14	9/16	110	7.35	15,667	34,444	153	14,100	31,000	138	15,100	33,300	148
SK78	15	19/32	124	8.32	18,556	41,000	182	16,700	36,900	164	18,000	39,700	177
SK78	16	5/8	141	9.46	21,889	48,222	214	19,700	43,400	193	21,100	46,600	207
SK78	18	11/16	185	12.4	27,333	60,222	268	24,600	54,200	241	26,400	58,300	259
SK78	20	25/32	235	15.8	34,000	74,889	333	30,600	67,400	300	32,900	72,400	323

Ropes designed in accordance with ISO 10325:2018

Linear MBL refers to unspliced ropes determined in accordance with ISO2307:2019



Dyneema®	Load	Temperature	Creep Rate	Creep Lifetime
SK78	20%	16 Deg. C	0.5% / yr	15 Years
SK99	20%	16 Deg. C	1.1% / yr	10 Years

### Key Specifications:

- Material:** Dyneema SK99 /SK78
- Construction:** 12 x 1 single braid construction
- Coating:** Marlow ArmourCoat Polyurathane
- Relative Density:** 0.97 (floats)
- Chemical Resistance:** Excellent resistance to most chemicals
- UV Resistance:** Very good
- Melting Point:** 140°C
- Critical Temperature:** 80°C (exposure to temperatures over this will result in permanent strength loss)
- Creep:** Creep is a factor of load, temperature and time. Increasing any of these factors will increase creep.

Marlow Ropes Ltd  
Ropemaker Park  
Hailsham  
East Sussex, BN27 3GU  
England

Marlow Ropes, Inc.  
Cordage Business Park  
Plymouth  
MA 02360  
USA

UK: +44 (0) 1323 444 444  
sales@marlowropes.com  
US: +1 508 830 444  
salesusa@marlowropes.com

