# DATASHEET ONLY SUPERLINE HS 99

Marlow Superline HS is a high strength, low elongation "jacketed" rope that is a lightweight alternative to steel wire. Firm and round in profile, Superline HS has excellent drum spooling properties and is available with a Polyester jacket, or an HMPE jacket offering outstanding cut and abraision resistance. Other cover and coating options are also available which can improve abrasion and cut resistance, protect the load bearing core and improve the rope's coefficient of friction.

Manufactured using SK99 Dyneema®, offering class leading strength, quality and consistency with proven project success and lifetime reliability. In addition, the technical and data support from the experts at Dyneema® and Bio-Dyneema sustainability ensures the product is of superior quality and performance.



Nominal Diameter		Mass (PES Cover)		Mass (HMPE Cover)		Minimum Linear Strength ISO 2307			Minimum Spliced Strength		
mm	Inch	kg/m	lb/100 ft	kg/m	lb/100 ft	kg	lb	kN	kg	lb	kN
22	7/8	0.35	23	0.28	18	35,161	77,514	345	31,964	70,468	31
24	1	0.39	25	0.32	21	43,951	96,893	431	39,955	88,084	39
26	1 1/16	0.49	32	0.42	27	52,741	116,272	517	47,946	105,701	47
28	1 1/8	0.53	35	0.46	30	61,531	135,650	604	55,937	123,318	54
30	1 1/4	0.61	40	0.54	35	79,111	174,407	776	71,919	158,552	70
32	1 5/16	0.69	45	0.62	40	82,041	180,867	805	74,583	164,424	73
34	1 3/8	0.94	61	0.68	44	96,691	213,164	949	87,901	193,786	86
36	1 1/2	0.94	61	0.80	52	96,691	213,164	949	87,901	193,786	86
38	1 9/16	1.02	67	0.88	57	114,272	251,922	1,121	103,883	229,020	1,0
40	1 5/8	1.10	72	0.97	63	131,852	290,679	1,293	119,865	264,253	1,17
42	1 11/16	1.23	80	1.09	71	158,222	348,815	1,552	143,838	317,104	1,4
44	1 3/4	1.31	85	1.17	76	175,803	387,572	1,725	159,820	352,338	1,5
46	1 7/8	1.35	88	1.21	79	184,593	406,950	1,811	167,812	369,955	1,64
48	2	1.55	101	1.37	89	193,383	426,329	1,897	175,803	387,572	1,72
50	2 1/16	1.80	117	1.45	94	210,963	465,086	2,070	191,785	422,806	1,88
52	2 1/8	1.96	128	1.61	105	246,124	542,600	2,414	223,749	493,273	2,19
54	2 3/16	2.04	133	1.77	115	263,704	581,358	2,587	239,731	528,507	2,3
56	2 1/4	2.12	138	1.85	120	281,284	620,115	2,759	255,713	563,741	2,50
58	2 3/8	2.21	143	1.93	126	298,864	658,872	2,932	271,695	598,974	2,6
60	2 1/2	2.37	154	2.10	136	334,025	736,386	3,277	303,659	669,442	2,97
62	2 9/16	2.45	159	2.18	142	351,605	775,143	3,449	319,641	704,676	3,13
64	2 5/8	2.70	175	2.42	157	369,185	813,901	3,622	335,623	739,910	3,29
66	2 21/32	2.86	186	2.58	168	404,346	891,415	3,967	367,587	810,377	3,60
68	2 11/16	3.02	196	2.74	178	439,506	968,929	4,312	399,551	880,845	3,92
70	2 3/4	3.18	207	2.90	189	474,667	1,046,444	4,656	431,515	951,312	4,2
72	2 13/16	3.34	217	3.07	199	509,827	1,123,958	5,001	463,479	1,021,780	4,5
74	2 31/32	3.51	228	3.23	210	544,988	1,201,472	5,346	495,443	1,092,248	4,8
76	3 1/8	3.67	238	3.39	220	580,148	1,278,987	5,691	527,408	1,162,715	5,1
78	3 5/32	3.83	249	3.55	231	615,309	1,356,501	6,036	559,372	1,233,183	5,4
80	3 3/16	3.99	260	3.71	241	650,469	1,434,015	6,381	591,336	1,303,650	5,8

# **Key Specifications:**

### Material:

Dyneema SK99

### **Construction:**

12 strand core / 24 plait cover

### Cover:

**HMPE** or Polyester

### **Relative Density:**

0.97 (HMPE cover), ~1.0 (PES Cover)

## **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.

Dyneema®	Load	Temp.	Creep Rate	Creep Lifetime
SK99	20%	16 Deg. C	1.1% / yr	10 Years

Elongation

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Ropes designed in accordance with ISO 10325:2018 Linear MBL refers to unspliced ropes determined in accordance with ISO 2307:2019

Linear MBL refers to unspliced ropes determined in accordance with ISO 2307:201

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