



1074 Kenran Industrial Dr.
 St. Louis, MO 63137
 Phone: 1-800-381-9968

HUMCO RIGGING/RATCHETS

Rope

Humco Marine Products Supplies A Full Line Of Rope



SUPERPRO®



SUPERPRO®
PLAITED



STARLINE®



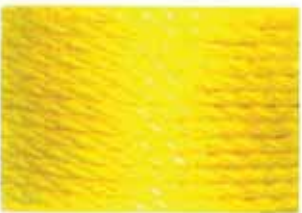
POLY PLUS™



PRO DAC®



LUBE LOCK®



KNOT TITE®



KNOT TITE®
MANILA



SUPERIOR
NYLON



EVER HAUL®



DOUBLE BRAID



EXTRA-LENE®



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Samson Rope

Tug Applications

HIGH PERFORMANCE TUG WORKING LINES

Few environments challenge rope as much as modern tug operations...



SAMSON'S DPX™ FIBER TECHNOLOGY:

Inherently cut and chemical resistant, industry leading 12-strand braids such as AmSteel®-Blue typically have a very low coefficient of friction (COF), limiting their use in applications that require the use of capstans or bits. The engineers in Samson's R&D department developed an entirely new method of combining the high heat resistance and higher COF of polyester with the high strength, lightweight, and high cut and abrasion resistance of Dyneema®. Samson's patented use of DPX™ fiber greatly increases the coefficient of friction to provide the grip of polyester with the ultimate strength of Dyneema®.

DPX™ fiber technology is used in popular winch-based marine ropes like Quantum-8 and in the 12-strand construction of Quantum-12. DPX™-75 incorporates DPX™ fiber technology in the cover of a jacketed product. Tug operators using H-bits and capstans can now take full advantage of the strength and ease of handling of ropes made with Dyneema®.



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Mooring Applications COMPARATIVE DATA

Primary Mooring Line Comparison

Samson vs. wire by size, strength and weight

	AmSteel®-Blue	Force-8	Turbo-75	Wire Rope 6 x 36 W.S.IRWC IPS-Grade B	Wire Rope 6 x 36 W.S.IRWC EIPS-Grade C
Size	28mm [1-1/8 in.]	32mm [1-5/16 in.]	30mm [1-1/4 in.]	28mm [1-1/8 in.]	28mm [1-1/8 in.]
SRT* MBS	60.4 MT	64.7 MT	61.2 MT	55.2 MT	59.0 MT
Kg/100 M	47.5 Kg	56.4 Kg	57.3 Kg	345.0 Kg	345.0 Kg
Size	36mm [1-1/2 in.]	40mm [1-5/8 in.]	40mm [1-5/8 in.]	36mm [1-1/2 in.]	36mm [1-1/2 in.]
SRT* MBS	93.0 MT	96.7 MT	102.0 MT	91.2 MT	97.6 MT
Kg/100 M	76.9 Kg	87.0 Kg	99.7 Kg	570.0 Kg	570.0 Kg
Size	40mm [1-5/8 in.]	44mm [1-3/4 in.]	44mm [1-3/4 in.]	40mm [1-5/8 in.]	40mm [1-5/8 in.]
SRT* MBS	116.0 MT	115.0 MT	125.0 MT	113.0 MT	121.0 MT
Kg/100 M	97.0 Kg	105.0 Kg	120.0 Kg	704.0 Kg	704.0 Kg
Size	44mm [1-3/4 in.]	48mm [2 in.]	48mm [2 in.]	44mm [1-3/4 in.]	44mm [1-3/4 in.]
SRT* MBS	137.0 MT	134.0 MT	149.0 MT	136.0 MT	146.0 MT
Kg/100 M	117.0 Kg	124.0 Kg	138.0 Kg	851.0 Kg	851.0 Kg

* Spliced strength

Primary Mooring Line Strength Comparison

STRENGTHS SHOWN IN METRIC TONNES

SIZE DIAMETER INCHES MILLIMETERS	AmSteel®-Blue		Force-8		DPX™-75		Proton®-8	
	SRT MBS*	ISO/BS EN919	SRT MBS*	ISO/BS EN919	SRT MBS*	ISO/BS EN919	SRT MBS*	ISO/BS EN919
1-1/8 in. 28mm	60.4 MT	67.1 MT	50.9 MT	56.6 MT	51.1 MT	56.7 MT	31.3 MT	34.7 MT
1-1/4 in. 30mm	67.5 MT	75.0 MT	57.6 MT	64.0 MT	61.2 MT	68.0 MT	39.4 MT	43.8 MT
1-5/16 in. 32mm	75.2 MT	83.6 MT	64.7 MT	71.9 MT	67.4 MT	74.8 MT	47.2 MT	52.4 MT
1-3/8 in. 34mm	83.9 MT	93.2 MT	69.0 MT	76.6 MT	75.5 MT	83.9 MT	48.8 MT	54.3 MT
1-1/2 in. 36mm	93.0 MT	103.0 MT	80.0 MT	88.9 MT	85.7 MT	95.3 MT	56.7 MT	63.0 MT
1-5/8 in. 40mm	116.0 MT	128.0 MT	96.7 MT	107.0 MT	102.0 MT	113.0 MT	63.5 MT	70.6 MT
1-3/4 in. 44mm	137.0 MT	152.0 MT	115.0 MT	127.0 MT	125.0 MT	138.0 MT	86.1 MT	95.7 MT

* Spliced strength

Secondary Mooring Line Strength Comparison

STRENGTHS SHOWN IN METRIC TONNES

SIZE DIAMETER INCHES MILLIMETERS	Quantum-12		Proton®-8		RP-12 SSR-1200	
	SRT MBS*	ISO/BS EN919	SRT MBS*	ISO/BS EN919	SRT MBS*	ISO/BS EN919
1-5/8 in. 40mm	98.0 MT	109.0 MT	63.5 MT	70.6 MT	29.4 MT	32.7 MT
1-3/4 in. 44mm	125.0 MT	138.0 MT	86.1 MT	95.5 MT	34.3 MT	38.1 MT
2 in. 48mm	137.0 MT	152.0 MT	108.0 MT	120.0 MT	41.6 MT	46.3 MT
2-1/8 in. 52mm	153.0 MT	170.0 MT	126.0 MT	140.0 MT	49.0 MT	54.4 MT
2-1/4 in. 56mm	169.0 MT	188.0 MT	143.0 MT	159.0 MT	56.7 MT	63.1 MT
2-1/2 in. 60mm	225.0 MT	249.0 MT	180.0 MT	200.0 MT	64.9 MT	72.1 MT
2-5/8 in. 64mm	253.0 MT	281.0 MT	198.0 MT	219.0 MT	71.4 MT	79.4 MT
2-3/4 in. 68mm	278.0 MT	308.0 MT	212.0 MT	236.0 MT	83.3 MT	92.5 MT
3 in. 72mm	316.0 MT	352.0 MT	246.0 MT	273.0 MT	89.8 MT	99.8 MT

* Spliced strength





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Samson Rope



P-7 Mooring Pendants Product Code: 709

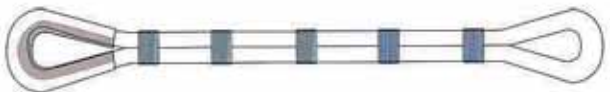
Samson suggests the use of braided Mooring Master P-7 (100% polyester) for primary mooring line pendants. The efficient design of P-7 pendants allows significant size and weight advantages over conventional 8-braid pendants; higher strengths can allow "down-sizing." P-7 mooring pendants meet the recommendations of OCIMF.

P-7 mooring pendants provide the energy absorption to minimize ship excursion in a mooring system, while holding up to the abuse of being dragged on piers and working on rough mooring hooks, cleats and bollards. P-7 has braided polyester strength members covered by a heavy-duty polyester jacket. The core provides the superior flex-fatigue resistance for maximum service life, while the polyester jacket provides the protection necessary in rough working environments. P-7 pendants are available in single leg and strop configurations and can be connected to the primary mooring line by cow-hitching the soft eyes or with a mandrel shackle.



P-7 Single Leg Pendants

Standard length is 11m (over all length), with a 2m soft eye one end and a 1m soft eye the other end. The vertex and splice area are urethane coated for added wear protection.



P-7 Strop Pendants

Standard length is 11m (over all length), with 2m and 1m soft eyes formed by way of lashings. The body of the strop is lashed together 3m in from each eye lashing.

Mooring Master P-7 Strength and Weight Information

Size Diameter		Weight Per 100 FT.	Weight Per 100m	SRT Average Strength	SRT Minimum Strength	SRT Average Strength	SRT Minimum Strength	SRT MBS*	ISO/BS EN919 MBS	GROMMET ISO Minimum
INCHES	MILLIMETERS	POUNDS	KILOGRAMS	POUNDS	POUNDS	KILOGRAMS	KILOGRAMS	METRIC TONNES	METRIC TONNES	METRIC TONNES
1-1/2	36	73.6	110.0	101,000	90,900	45,800	41,200	41.2	45.8	73.3
1-5/8	40	85.8	128.0	117,000	105,000	53,100	47,800	47.8	53.1	84.9
1-3/4	44	98.8	147.0	137,000	123,000	62,100	55,900	55.9	62.1	99.4
1-7/8	46	113.0	168.0	156,000	140,000	70,800	63,700	63.7	70.8	113.0
2	48	127.0	189.0	168,000	151,000	76,200	68,600	68.6	76.2	122.0
2-1/8	52	143.0	213.0	201,000	181,000	91,200	82,100	82.1	91.2	146.0
2-1/4	56	159.0	237.0	226,000	203,000	103,000	92,300	92.3	103.0	164.0
2-3/8	57	177.0	263.0	252,000	227,000	114,000	103,000	103.0	114.0	183.0
2-1/2	60	195.0	290.0	279,000	251,000	127,000	114,000	114.0	127.0	202.0
2-5/8	64	214.0	318.0	307,000	276,000	139,000	125,000	125.0	139.0	223.0
2-3/4	68	234.0	347.0	335,000	302,000	152,000	137,000	137.0	152.0	243.0
2-7/8	69	254.0	378.0	363,000	327,000	165,000	148,000	148.0	165.0	263.0
3	72	276.0	410.0	398,000	358,000	181,000	162,000	162.0	181.0	289.0

* Spliced strength

Note: Grommet ISO strength column information for P-7 Strops only.

Tenex-TEC Secondary Mooring Line Stopper

Product Code: 825

Tenex-TEC is a 12-strand Samthane coated, high tenacity polyester single braid that offers high strength, low stretch and outstanding abrasion resistance. Tenex-TEC makes an excellent mooring line stopper because, during its initial use, the design will flex-conform to the specific mooring line rope construction and improve its holding capability. As Tenex-TEC wears, its coefficient of friction increases even more. It should only be used with synthetic fiber secondary mooring lines, or mooring lines not on winches. Tenex-TEC should not be used on high performance synthetic ropes that have external outer fibers with a low coefficient of friction material such as Dyneema®



Stopper Strength Comparison

Size Diameter	Weight Per 100 FT.	SRT MBS*	ISO/BS EN919 Strength	Size Diameter	Weight Per 100 m	SRT MBS*	ISO/BS EN919 Strength
INCHES	INCHES	POUNDS	POUNDS	MILLIMETERS	KILOGRAMS	METRIC TONNES	METRIC TONNES
1-1/4	55.0	55,800	62,000	30	81.8	25.3	28.1

* Spliced strength



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Samson Rope

Innovative Chafe Protection

Samson has the most innovative chafe solutions to extend the life of your synthetic ropes



Wherever chafe can effect performance, Samson chafe protection solutions will ensure a safe and successful operation.



Protecting ropes from abrasion and cutting significantly increases service life.



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Samson Rope

MOORING | TUG | OFFSHORE | INLAND RIVER | COMMERCIAL FISHING



High performance chafe protection – tough enough for the most demanding situations

Samson high performance synthetic ropes have been engineered to provide ease of handling, extreme strength, and long service life. Dyneema® a major component in many of Samson's high performance ropes, is the most cut resistant fiber. While properly designed and engineered ropes take maximum advantage of this resistance, in the real world environment of the commercial marine industry, protecting ropes from abrasion and cutting significantly increases service life.

Chafe protection engineered to combat cutting and abrasion

Samson has committed substantial research and development resources to designing a line of chafe protection products that maximizes the service life of our ropes. The result is a family of products perfectly suited to combat the causes of cutting and abrasion encountered in offshore, mooring and tug operations. Because each application has its own characteristic requirements, Samson has developed a full range of options to protect your investment and ensure the longest service life for your working ropes. All chafe options can be factory-installed on your ropes prior to shipment from our plants, or are available in bulk for field installation.

When replacing wire ropes with synthetics, it is important to prepare or repair the surfaces of deck equipment damaged by abrasion. Chocks, fairleads, bollards, bits or other hardware contacting the rope need to be smooth and free of rust to ensure your ropes' longest life.

ADDITIONAL CHAFE PROTECTION PRODUCTS:

Pro-Gard Eye Protector | CODE 973

Pro-Gard | CODE 974

Pro-Moor | CODE 977

IFH Chafe-Guard | CODE 999601

Cordura® Chafe Protector | CODE R6

CHAFE SOLUTIONS

Dynalene | CODE 975

- > Fixed or adjustable for easy positioning
- > Lightweight, floats
- > Easy inspection without removing
- > Field repairable
- > Excellent durability
- > Made with Dyneema®



DC Gard | CODE 706

- > Fixed or adjustable for easy positioning
- > Light and flexible, floats
- > Can be removed for rope inspection
- > Cut resistant
- > Superior durability
- > Made with Dyneema®
- > PATENT PENDING



DC Moor-Gard | CODE 706

- > Fixed or adjustable for easy positioning
- > Light and flexible, floats
- > Can be removed for rope inspection
- > Cut resistant
- > Superior durability
- > Made with Dyneema®
- > PATENT PENDING



Technolene | CODE 976

- > Fixed or adjustable for easy positioning
- > Excellent heat resistance for high heat environments / applications
- > Easy to inspect without removing
- > Excellent durability and cut resistance
- > Made with Technora®

