



# PLASMA<sup>®</sup> 12 STRAND

T3/T33 REV 012  
04 FEB 08

Plasma<sup>®</sup> 12 strand is the highest strength synthetic rope available. Plasma<sup>®</sup> 12 strand is manufactured from Honeywell Spectra<sup>®</sup> Fiber that has been enhanced by Puget Sound Rope's patented recrystallization process. This process is especially effective in medium to large diameter ropes where strengths are over 50% higher and creep is significantly less than that of standard Spectra<sup>®</sup> 12 strand.

Plasma<sup>®</sup> 12 strand comes standard with a polyurethane finish and is easily spliced using a simple lockstitch type splice, 4-3-2 or 5-4-3 Tuck splice. Its soft, torque free braided construction provides easy handling.

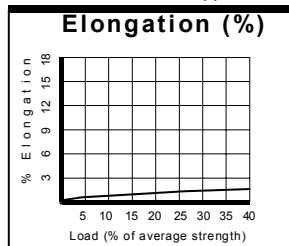
- Highest strength
- Lowest stretch
- Low creep
- Soft hand
- Torque free
- Easy splicing
- Floats

## Type Approved Product



	Nominal Diameter		Size Number (circ)	Approximate Weight		Minimum Tensile Strength	
	Inch	MM		Lbs/100ft	Kg/100m	Pounds	kN
12 STRAND	.04	1	.12	.05	0.1	270	1.2
	.05	1.25	.15	.07	0.1	390	1.7
	.06	1.5	.18	.1	0.1	475	2.1
	.07	1.75	.21	.14	0.2	750	3.3
	.1	2.5	.3	.27	0.4	1,400	6.2
	1/8	3	3/8	.54	0.8	2,800	12.5
	3/16	5	9/16	1.12	1.7	5,500	24.5
	1/4	6	3/4	1.6	2.4	8,000	35.6
	5/16	8	15/16	2.5	3.7	11,700	52.0
3/8	9	1-1/8	3.7	5.5	17,500	77.8	
<b>ABS AND DNV TYPE APPROVED SIZES</b>							
12 STRAND	7/16	11	1-1/4	4.2	6.3	21,000	93.4
	1/2	12	1-1/2	6.4	9.5	31,300	139.2
	9/16	14	1-3/4	7.9	11.8	37,900	168.6
	5/8	16	2	10.6	15.8	51,400	228.6
	3/4	18	2-1/4	13.3	19.8	68,500	304.7
	13/16	20	2-1/2	15.9	23.7	74,000	329.2
	7/8	22	2-3/4	19.6	29.2	92,600	411.9
	1	24	3	23.4	34.8	110,000	489.3
	1-1/16	26	3-1/4	27.5	40.9	129,200	574.7
	1-1/8	28	3-1/2	31.9	47.5	147,000	653.9
	1-1/4	30	3-3/4	36.2	53.9	165,000	734.0
	1-5/16	32	4	41.7	62.1	196,000	871.9
	1-1/2	36	4-1/2	51.7	76.9	221,000	983.1
12 X 12 STRAND	1-5/8	40	5	65.7	97.8	291,000	1294.4
	1-3/4	44	5-1/2	78.4	116.7	314,000	1396.7
	2	48	6	91.4	136.0	355,000	1579.1
	2-1/8	52	6-1/2	109	162.2	428,000	1903.8
	2-1/4	56	7	122	181.6	481,000	2139.6
	2-1/2	60	7-1/2	148	220.2	530,000	2357.7
	2-5/8	64	8	167	248.5	596,000	2651.1
	2-3/4	68	8-1/2	187	278.3	660,000	2935.8
	3	72	9	214	318.5	780,000	3469.6
	3-1/8	76	9-1/2	235	349.7	850,000	3780.8
3-1/4	80	10	261	388.4	940,000	4181.3	
3-5/8	88	11	324	482.2	1,250,000	5560.3	
4	96	12	394	586.4	1,520,000	6761.3	

Tensile Strengths are determined in accordance with Cordage Institute 1500, Test Methods for Fiber Rope. Weights are calculated at linear density under standard preload (200d<sup>2</sup>) plus 4%. See reverse side for application and safety information.



Specific gravity	0.98*
Melting point	284° F (140° C)*
Critical temp.	150° F (65° C)*
Coefficient of friction	0.09-0.12*
Elongation at break	4%-5%
Fiber water absorption	0%
UV resistance	moderate
Wet abrasion	superior
Dry abrasion	superior

\* - value based on data supplied by the fiber manufacturer for new, dry fiber



1012 SECOND STREET  
ANACORTES, WA 98221 USA  
TOLL FREE: 888-525-8488  
TEL: 360-293-8488  
FAX: 360-293-8480  
www.thecortlandcompanies.com  
sales@psrope.com

