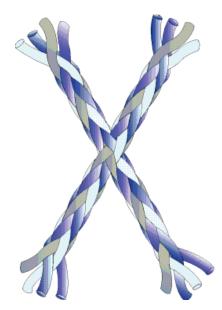


## ULTRA CROSS NETTING INC.

ULTRA CROSS KNOTLESS NETTING is a highly advanced four-strand braided, continuous monofilament, knotless netting used for heavy duty commercial fishing applications. Ultra Cross netting delivers superior strength and performance over conventional netting. Our manufacturing process maximizes the use of UHMWPE (such as Dyneema®), high tenacity polyethylene, nylon, and polyester fiber attributes.



HIGH STRENGTH: Synthetic fibers lose 30 to 60% of their strength when knotted. In Ultra Cross netting, fibers are always aligned so 100% twine tenacity is maintained throughout the mesh intersect.

REDUCED DRAG: The aggregate resistance existing of knots in standard netting is considerable and becomes an important factor where water flow through the mesh is a concern.

LOW FRICTION, HIGH ABRASION RESISTANCE: Without knots, Ultra Cross netting does not have high spots to abrade on stern ramps, ship rails, net rollers, or even rough bottom. In the case of purse seines, the netting shoots very smoothly as there is no inter-knot friction.

LESS BULK AND WEIGHT: Less twine is used to make the meshes, which in some cases can mean a savings of 50% of the raw material. Without knots, the bulk of the netting is also reduced. A single layer of Ultra Cross netting can replace two or three layers of double knotted netting, reducing bulk, weight, and improve the "fishability" of a net.

STABLE MESH SIZE: Knots can tighten or distort throughout the life of netting, dramatically changing mesh size. Hollow braided twines can hold sediment which

not only wears on the twine from the inside, but also changes mesh size. Ultra Cross netting maintains nearly 100% of its original mesh size throughout the life of the product, does not hold sediment because of the four-strand braiding process, and has no knots to distort.

PERFECT FOR SQUARE MESH APPLICATIONS: Ultra Cross netting has proven to be the best material for square mesh and selectivity applications. The Danish Fisheries Institute, the Institute of Marine Research in Bergen, the National Research Institute of Fisheries in Japan, and many other fishery agencies around the world have endorsed Ultra Cross knotless netting as the ideal square mesh material. Ultra Cross is also used where size selectivity is important for onboard mechanized fish handling systems, where a specific size fish is targeted to maximize machine efficiency.

ENDS OF STRANDS DO NOT FRAY: The unique four-strand construction of Ultra Cross netting produces a very stable twine. This twine resists fraying, and broken bars do not unravel.

REDUCE DAMAGE TO FISH: Ultra Cross netting is very kind to fish with less bruising and abrasion from knots. This fact has been proven in many of the world's fisheries where product quality cannot be compromised.

LESS DISTORTION AND TEARING: Distortion and tearing are major concerns in webbing. The four-strand braid construction of Ultra Cross results in a positive lock at strand intersections, virtually eliminating netting distortion and slippage of the intersections. Such a positive lock cannot be obtained with twisted cross netting which utilizes a two-strand twist construction. Because of it's inherent stability and resistance to slippage, Ultra Cross is ideal for mesh size regulated fisheries and is easy to repair even if a mesh breaks.



Dyneema is a registered trademark owned by Royal DSM N.V.

# UC Silver - Ultra Cross Knotless Netting with UHMWPE (Ultra High Molecular Weight Polyethylene) Fiber

Twine Size	Diameter	Minimum Mesh Size (Approximate)	Maximum Mesh Size (Approximate)	Breaking Strength per Bar of Netting	
	mm	mm	mm	lb	kg
2 Ply	0.9	38	9999	99	45
3ply	1.1	38	9999	148	67
4 Ply	1.2	35	9999	185	84
8 Ply	1.9	35	9999	359	163
12 Ply	2.3	42	9999	536	243
16 Ply	2.7	45	9999	716	325
20 Ply	3.1	45	9999	864	392
24 Ply	3.3	45	9999	1074	487
28 ply	3.6	48	9999	1241	563
32 Ply	3.8	48	9999	1440	653
36 Ply	4.0	48	9999	1638	743
40 ply	4.2	48	9999	1909	866
48 Ply	4.6	50	9999	2183	990
60 Ply	5.1	71	230 **	2782	1262
72 Ply	5.6	71	220 **	3298	1496
84 ply	6.1	71	9999	3845	1744
96 Ply	6.5	100	9999	4389	1991
108 Ply	6.8	100	9999	4663	2115
240 ply	10.8	110	9999	8607	3904
312 Ply	13.1	110	9999	9623	4365

### Note:

<sup>\*</sup> Additional twine diameters and minimum and maximum mesh sizes may be available upon request.

<sup>\*\*</sup> Due to jacquard chain limits.

# ULTRA CROSS NETTINGING

UC PE - Ultra Cross Knotless Netting with High Tenacity PE (Polyethylene) Fiber

Twine Size	Diameter	Minimum Mesh Size (Approximate)	Maximum Mesh Size (Approximate)	Breaking Strength per Bar of Netting	
	mm	mm	mm	lb	kg
40 ply	2.0	43	9999	121	55
60 ply	2.9	43	9999	176	80
80 ply	3.2	43	9999	231	105
120 ply	3.8	43	9999	342	155
160 ply	4.4	48	9999	463	210
200 ply	4.9	48	9999	573	260
240 ply	5.4	48	9999	728	330
300 ply	6.0	71	230 **	904	410
320 ply	6.2	71	240 **	959	435
360 ply	6.7	71	260 **	1080	490
420 ply	7.1	105	280 **	1190	540
480 ply	7.6	105	300 **	1323	600
600 ply	8.8	62	9999	1698	770
720 ply	9.4	76	9999	2183	990
800 ply	9.8	78	9999	2337	1060
1000 ply	10.8	90	9999	2734	1240
1200 ply	11.9	100	9999	3527	1600

### Note:

<sup>\*</sup> Additional twine diameters and minimum and maximum mesh sizes may be available upon request.

<sup>\*\*</sup> Due to jacquard chain limits.

UC Nylon - Ultra Cross Knotless Netting with Nylon Fiber

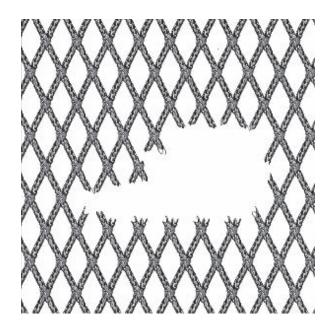
Twine Size	Diameter	Minimum Mesh Size (Approximate)	Maximum Mesh Size (Approximate)	Breaking Strength per Bar of Netting	
	mm	mm	mm	lb	kg
24 ply	1.3	31	9999	55	25
32 ply	1.5	31	9999	77	35
40 ply	1.7	31	9999	93	42
48 ply	1.8	31	9999	108	49
56 ply	2.0	31	9999	123	56
60 ply	2.1	31	9999	143	65
64 ply	2.2	31	9999	148	67
72ply	2.3	31	9999	154	70
80 ply	2.4	31	9999	176	80
92 ply	2.7	33	9999	201	91
120 ply	2.9	33	9999	267	121
140 ply	3.3	33	9999	331	150
160 ply	3.4	33	9999	364	165
180 ply	3.6	36	9999	397	180
200ply	3.7	36	9999	419	190
240ply	4.1	36	9999	463	210
360 ply	5.0	38	9999	617	280
420 ply	5.4	46	9999	705	320
440 ply	5.6	46	9999	739	335
600 ply	6.5	46	9999	1014	460
720 ply	7.1	56	9999	1213	550
800 ply	7.5	56	9999	1356	615
1000 ply	8.4	65	9999	1698	770
1200 ply	9.2	75	9999	2028	920

### Note:

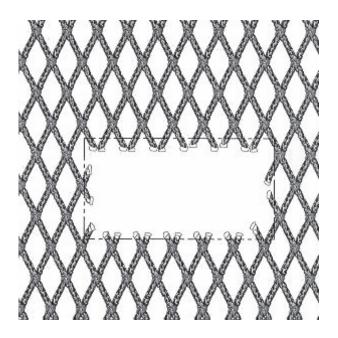
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<sup>\*</sup> Additional twine diameters and minimum and maximum mesh sizes may be available upon request.

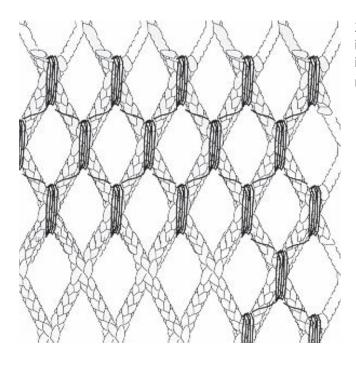
### **Patch Repair Instructions**



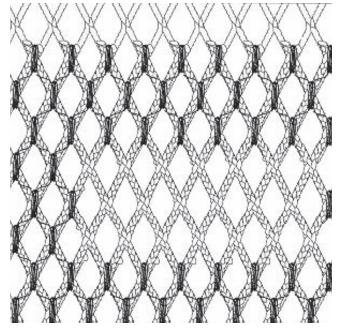
**1**) Shown here is a typical hole that might need patch repair



2) Clean the hole by melting the ends of the twine around the edge of the hole. This prevents the twines from unbraiding. Count the meshes that you need to replace. Prepare a patch using Ultra Cross netting that is the same diameter and strength of the net needing to be patched. The patch should be two meshes larger in each direction than the cleaned-up hole to provide sufficient netting to overlap the edges of the hole. Clean the patch by melting the ends of the twine around the edge of the patch.



3) Lay the patch over the hole and lace it to the existing netting using appropriate braided twine, as shown in the illustration. Make sure to lace the crosses of the netting together.



4) Continue lacing around the hole so that you have at least two rows of lacing around the patch. The patched hole will resemble this illustration when finished.