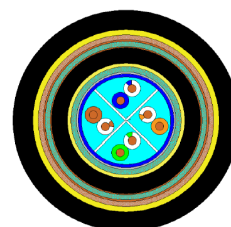




MIL-DTL-24643/84* Category 6A Topside

Multi-Shielded Cat6A Ethernet Water-Blocked and Non Water-Blocked

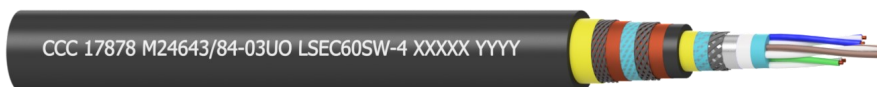
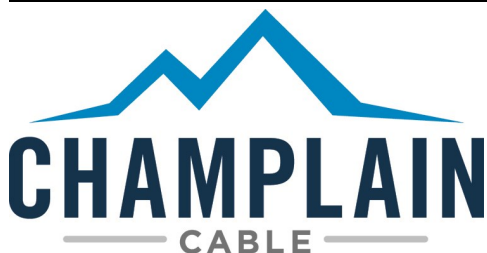
Topside CAT6A Ethernet cable is designed to be fully functional in exposed areas vulnerable to EMI/RFI/EMP.



- MIL-DTL-24643/77 Cat6A 4-Pair Ethernet Core
- Multiple Shields for Protection on Ship Decks and High EMI/RFI areas
- Cost Savings vs. Conduit
- Smaller Bend Radius
- Supports 10GBASE-T Systems (10,000BASE-T)
- Swept Electrical Performance to 500MHz

* At time of posting MIL-DTL-24643/84 is in interim status and has not been formally released by NAVSEA.

MIL-DTL 24643/84 PN	Type	No. of Pairs	AWG	Shields	Water-blocked	Jacket Color	Weight lb/1000ft (nom)	Bend Radius (inch min)	Nom Cable OD (in)
-01U0	LSEC6FS-4	4	24, solid BC	Yes	No	Black	225 lbs	2.8	0.560
-02U0	LSEC6OS-4	4	23, solid BC	Yes	No	Black	240 lbs	2.9	0.575
-03U0	LSEC6OSW-4	4	23, solid BC	Yes	Yes	Black	280 lbs	5.0	0.612





MIL-DTL-24643/84*

Category 6A Topside

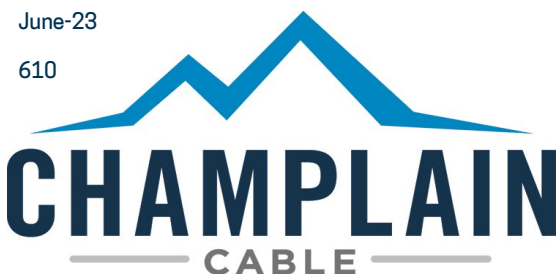
ELECTRICAL PROPERTIES						
DC Resistance (Ohms/100m @ 20°C)	9.38 max					
DC Resistance Unbalance	4% max					
Input Impedance (1 MHz - 500MHz)	100 Ohms ±15%					
Frequency	1.0	10.0	31.25	62.5	100.0	500.0
Return Loss dB/100m (min)	20.0	25.0	23.6	21.5	20.1	15.2
Insertion Loss dB/100m (max)	2.1	5.9	10.5	15.0	19.1	45.3
NEXT dB/100m (min)	74.3	59.3	51.9	47.4	44.3	33.8
PS NEXT dB/100m (min)	72.3	57.3	49.9	45.4	42.3	31.8
ACRF [ELFEXT] dB/100m (min)	67.8	47.8	37.9	31.9	27.8	13.8
PSACRF [PS ELFEXT] dB/100m (min)	64.8	44.8	34.9	28.9	24.8	10.8
TCL dB (min)	40.0	40.0	35.1	32.0	30.0	23
Propagation Delay ns/100m (max)	570	545	540	539	538	536
Delay Skew ns/100m (max)	45	45	45	45	45	45

PHYSICAL PROPERTIES	
Tensile Strength (lb/in², min)	
Insulation (Un-aged)	450
Insulation (Retention after 48hrs at 100°C)	75%
Jacket (Un-aged)	1300
Jacket (Retention after 168hrs at 136°C)	60%
Elongation (Percent min)	
Insulation (Un-aged,)	75%
Insulation (Retention after 48hrs at 100°C)	75%
Jacket (Un-aged, percent min)	160%
Jacket (Retention after 168hrs at 136°C)	60%
Cross-link Proof Test (Jacket, Percent max)	50%
Tear (lb/in thickness, min)	35
EMP Response (dB, min)	80
Flame Propagation (Cable)	No Failure

We cannot anticipate all conditions under which this information and our products or the products of other manufacturers in combination with our products may be used. We accept no responsibility for results obtained by the application of this information or the safety and suitability of our products alone or in combination with other products. Users are advised to make their own tests to determine the safety and suitability of each such product combination for their own purpose. Unless otherwise agreed in writing, we sell the products without warranty, and buyers and users assume all responsibility and liability for loss and damage arising from the handling and use of our products whether used alone or in combination with other products.

June-23

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