



# MIL-DTL-24643/61 Cat 5e Patch Cables

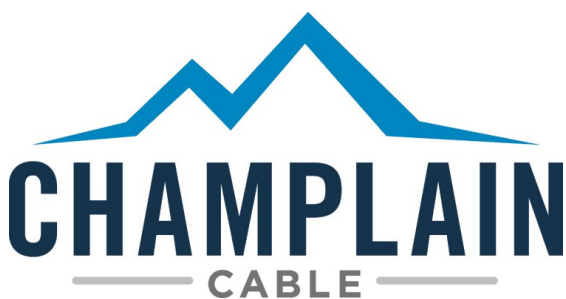
## 24AWG and 26AWG, Non Water-Blocked

**Champlain Cable** has a long history of success in the development and manufacture of data communication cables. We are the *first* supplier to be qualified by the US Naval Sea Systems Command (NAVSEA) for supply of all variants of MIL-DTL 24643/59. With over 10 years of QPL approval and *over 30 million* feet installed on Naval vessels, no one else comes close. **DATACLEAR®** is the brand you can count on for Reliability, Service and Price.

**DATACLEAR® Marine /61** patch cables are Low Smoke Zero Halogen (LSZH) Category 5e patch cables to serve the shipboard market. **DATACLEAR Marine /61** provides two major solutions for shipboard communications:

- Replacement of halogenated insulations (PVC, Fluoropolymers) in confined shipboard compartments, thereby eliminating a major source of halogenated toxic gases in the event of fire.
- Maintains exceptional patch data communication capabilities in accordance with current ANSI/TIA/EIA 568.2 standards for Local Area Network (LAN) premise wiring.

Military Part No. MIL-DTL 24643/61	Type	Pairs	Conductor	Shield	Water-blocked	Jacket Color	Cable OD (nom)
-01UN	LSC5P-4	4	24, stranded TC	None	No	Black	.255"
-02UD	LSC5POS-4	4	24, stranded TC	Foil + Braid	No	Black	.330"
-03UD	LSC5POSR-4	4	26, stranded TC	Foil + Braid	No	Black	.255"





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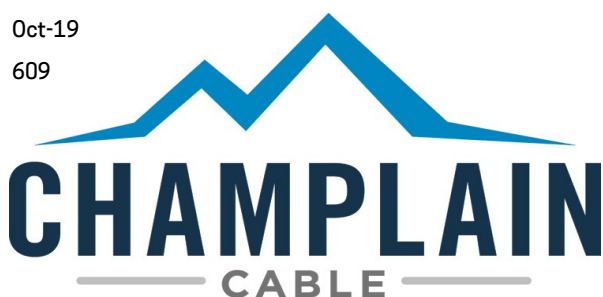
## Cat 5e Patch Cables

<b>ELECTRICAL PROPERTIES (M-24643/61 Cat5e Patch Cable)</b>					
DC Resistance Ohms/100m (max)	24AWG 9.38; 26AWG 14.0				
DC Resistance Unbalance	5% max				
Input Impedance (1 MHz - 100MHz)	100 Ohms ±15%				
<b>Frequency</b>	<b>1.0</b>	<b>10.0</b>	<b>31.25</b>	<b>62.5</b>	<b>100.0</b>
<b>Return Loss dB/100m (min)</b>	20.0	25.0	23.6	21.5	20.1
<b>Insertion Loss 24AWG dB/100m (max)</b>	2.4	7.8	14.0	20.4	26.4
<b>Insertion Loss 26AWG dB/100m (max)</b>	3.0	9.8	17.6	25.5	33.0
<b>NEXT dB/100m (min)</b>	65.3	50.3	42.9	38.4	35.3
<b>ELFEXT dB/100m (min)</b>	63.8	43.8	33.9	27.9	23.8
<b>PS NEXT dB/100m (min)</b>	62.3	47.3	39.9	35.4	32.3
<b>PS ELFEXT dB/100m (min)</b>	60.8	40.8	30.9	24.9	20.8
<b>Propagation Delay ns/100m (max)</b>	570	545	540	539	538
<b>Delay Skew ns/100m (max)</b>	45	45	45	45	45

<b>PHYSICAL PROPERTIES (M-24643/61)</b>	
Tensile Strength	
Insulation / Jacket (lb/in <sup>2</sup> , Un-aged, min)	700 / 1300
Insulation and Jacket % Retention (after 168hrs at 136°C)	75% / 60%
Elongation	
Insulation and Jacket (Un-aged, min)	160%
Insulation and Jacket (Retention after 168hrs at 136°C)	75% / 60%
Cross-link proof test (Jacket, Percent maximum)	50%
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.

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**Manufacturing Locations:**  
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**El Paso, Texas**  
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