



**MILITARY**

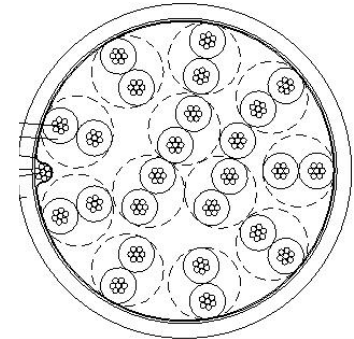
Inventing *the Future* of Wire and Cable



# Champlain Cable Dataclear® Marine /75COTS M24643/75 Compliant Cables Serial Bus RS 232/485/422 Data Cable

**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 construction variants of MIL-DTL-24643/59, /60, and /64.

**Dataclear® Marine /75 COTS** cables are Low Smoke Zero Halogen (LS0H) Serial Bus data Communications cables to serve the shipboard market. Dataclear Marine /75 COTS provides two major solutions for shipboard communications:



1. Replacement of halogenated insulations (PVC, Fluoropolymer) in confined shipboard compartments, thereby eliminating a major source of halogenated toxic and corrosive gases in the event of fire.
2. Maintains exceptional data communication capabilities in accordance with commercial serial bus protocol standards.

### Features and Benefits

- Resistant to fluids normally encountered on or below deck.
- Able to transmit up to 8MBPS over reasonable distances.
- Print legend ensures traceability per ISO standards.

### Applications

- Transmission of RS 232/485/422 and other serial communication protocols
- The cable of choice for Advanced Data Network Systems (ADNS), replacing Fluoropolymer commercial alternatives.

| Product Number      | M24643/75 COTS Type | Pairs | Conductor      | Shield       | Jacket Color | Cable OD (nom) |
|---------------------|---------------------|-------|----------------|--------------|--------------|----------------|
| 24-12.5FUTP-LS0H/75 | LSLCFS-25           | 12 ½  | 24 stranded BC | Foil         | Black        | 0.390"         |
| 24-12.5STP-LS0H/75  | LSLCOS-25           | 12 ½  | 24 stranded BC | Foil / Braid | Black        | 0.405"         |
| 24-7.5FUTP-LS0H/75  | LSLCFS-15           | 7 ½   | 24 stranded BC | Foil         | Black        | 0.342"         |
| 24-7.5STP-LS0H/75   | LSLCOS-15           | 7 ½   | 24 stranded BC | Foil Braid   | Black        | 0.357"         |
| 24-4.5FUTP-LS0H/75  | LSLCFS-9            | 4 ½   | 24 stranded BC | Foil         | Black        | 0.307"         |
| 24-4.5STP-LS0H/75   | LSLCOS-9            | 4 ½   | 24 stranded BC | Foil / Braid | Black        | 0.322"         |

[www.champcable.com](http://www.champcable.com)



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| ELECTRICAL PROPERTIES             |                    |
|-----------------------------------|--------------------|
| DC Resistance, max.               | 9.38 Ohms/100m     |
| DC Resistance Unbalance, max      | 5%                 |
| Input Impedance (10 MHz)          | 100 Ohms $\pm$ 15% |
| Mutual Capacitance (max. at 1kHz) | 45 pF/m            |

| PHYSICAL PROPERTIES                             |            |
|---|------------|
| Tensile Strength                                |            |
| Insulation and Jacket (Un-aged)                 | 1300 min   |
| Insulation (Retention after 168hrs at 136°C)    | 975 min    |
| Jacket (Retention after 168hrs at 136°C)        | 780 min    |
| Elongation                                      |            |
| Insulation and Jacket (Un-aged)                 | 160% min   |
| Insulation (Retention after 168hrs at 136°C)    | 120% min   |
| Jacket (Retention after 168hrs at 136°C)        | 96% min    |
| 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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