



MILITARY

Inventing *the Future* of Wire and Cable



Champlain Cable Dataclear® Marine /61 COTS M24643/61 Compliant Cables Unshielded Category 5e Stranded Conductor Data Cables 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 construction variants of MIL-DTL-24643/59 and /60.

Dataclear® Marine /61 COTS cables are Low Smoke Zero Halogen (LS0H) Category 5e data cables to serve the shipboard market. Dataclear Marine /61 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 gases in the event of fire.
2. Maintains exceptional main link data communication capabilities in accordance with current ANSI/TIA/EIA 568B.2 standard for Local Area Network (LAN) premise wiring.

Features and Benefits

- Exceeds requirements of ANSI/EIA/TIA-568-B.2 premise wiring standard
- Resistant to many fluids normally encountered on or below deck.
- Print legend ensures traceability per ISO standards.

Applications

- Backbone data rates up to 1,000Mb/s
- Shipboard Voice & Data networks.
- Compartments subject to exposure of fuel and hydraulic fluids.
- Voice & Data networks requiring non-halogenated materials (PVC and Fluoropolymers).

Product Number	M24643/61 COTS Type	Pairs	Conductor	Shield	Water-blocked	Jacket Color	Cable OD (nom)
24/7-4UTP-LS0H/61	LSC5P-4	4	24 str BC	None	No	Black	0.255"
24/7-4STP-LS0H/61	LSC5POS-4	4	24 str BC	Yes	No	Black	0.330"
26/7-4STP-LS0H/61	LSC5POSR-4	4	26 str BC	Yes	No	Black	0.255"

www.champcable.com



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ELECTRICAL PROPERTIES					
DC Resistance (Ohms/100m)	9.38 max				
DC Resistance Unbalance	5% max				
Input Impedance (1 MHz – 100MHz)	100 Ohms ±15%				
Frequency	1.0	10.0	31.25	62.5	100.0
Return Loss dB/100m (min)	20.0	25.0	23.6	21.5	20.1
Insertion Loss dB/100m (max)	2.0	6.5	11.7	17.0	22.0
NEXT dB/100m (min)	65.3	50.3	42.9	38.4	35.3
ELFEXT dB/100m (min)	63.8	43.8	33.9	27.9	23.8
PS NEXT dB/100m (min)	62.3	47.3	39.9	35.4	32.3
PS ELFEXT dB/100m (min)	60.8	40.8	30.9	24.9	20.8
Propagation Delay ns/100m (max)	570	545	540	539	538
Delay Skew ns/100m (max)	45	45	45	45	45

PHYSICAL PROPERTIES	
Tensile Strength	
Insulation and Jacket (Un-aged)	1300 min
Insulation and Jacket (Retention after 168hrs at 136°C)	780 min
Elongation	
Insulation and Jacket (Un-aged)	160% min
Insulation and Jacket (Retention after 168hrs at 136°C)	96% min
Cross-link proof test (Jacket, Percent maximum)	50%
Flame Propagation (Cable)*	No Failure

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