



# MIL-DTL 24643/64 Communication Cable

## 600V, 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 24643/64. With over 10 years of various first-QPL approvals totaling over 25 million feet of data cables installed on Naval vessels, no one else comes close. **Dataclear**<sup>®</sup> is the brand you can count on for Reliability, Service and Price.

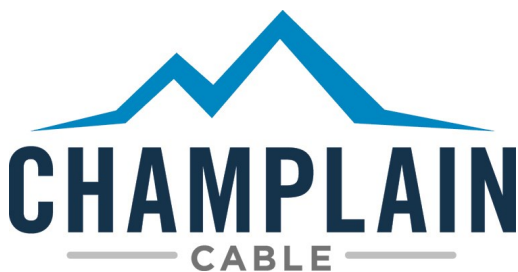
**Dataclear<sup>®</sup> Marine Secure Voice/64** cables are Low Smoke Zero Halogen (LSZH) communication cables specifically designed for secure voice and other electronic, signal, and voice/data applications used on US Naval warships and submarines where fluoropolymer (Teflon<sup>™</sup>) cables have typically been used.

**Dataclear<sup>®</sup> Marine/64** provides two major solutions for shipboard communications:

- Replacement of halogenated insulations (PVC, Fluoropolymer) in confined shipboard compartments, thereby eliminating a major source of halogenated toxic gases in the event of fire.
- EMI-protected cable for critical voice communication, low voltage signal, and low-speed analog and digital data transmission.

### Primary Wire Dimensions

AWG	Strand	Nom. Conductor Diameter	Nom. Insulated Diameter	Conductor Resistance (Ω/1000 ft)
24	19 X 36	0.024	0.044	24.91
22	19 X 34	0.030	0.050	15.59
20	19 X 32	0.039	0.059	9.57
18	19 X 30	0.049	0.069	6.10
16	19 X 29	0.056	0.076	4.73
14	19 X 27	0.070	0.090	2.99





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## Cable Types and Dimensions

MIL-DTL 24643/64 Product No.	Type	AWG	# of Pairs	Nominal Cable OD**		MIL-DTL 24643/64 Product No.	Type	AWG	# of Pairs	Nominal Cable OD**
-01UN	LS1TPSJ 24	24	1	0.170		-13UN	LS3TPSJ 24	24	3	0.275
-02UN	LS1TPSJ 22	22	1	0.182		-14UN	LS3TPSJ 22	22	3	0.285
-03UN	LS1TPSJ 20	20	1	0.200		-15UN	LS3TPSJ 20	20	3	0.325
-04UN	LS1TPSJ 18	18	1	0.220		-16UN	LS3TPSJ 18	18	3	0.390
-05UN	LS1TPSJ 16	16	1	0.234		-17UN	LS3TPSJ 16	16	3	0.450
-06UN	LS1TPSJ 14	14	1	0.262		-18UN	LS3TPSJ 14	14	3	0.490
-07UN	LS2TPSJ 24	24	2	0.260		-19UN	LS4TPSJ 24	24	4	0.295
-08UN	LS2TPSJ 22	22	2	0.285		-20UN	LS4TPSJ 22	22	4	0.325
-09UN	LS2TPSJ 20	20	2	0.325		-21UN	LS4TPSJ 20	20	4	0.395
-10UN	LS2TPSJ 18	18	2	0.390		-22UN	LS4TPSJ 18	18	4	0.450
-11UN	LS2TPSJ 16	16	2	0.420		-23UN	LS4TPSJ 16	16	4	0.480
-12UN	LS2TPSJ 14	14	2	0.465		-24UN	LS4TPSJ 14	14	4	0.540

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