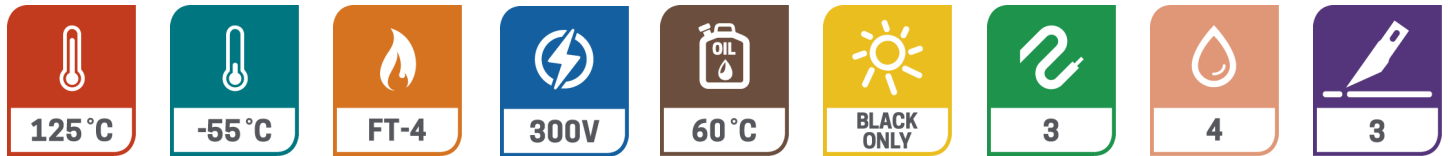




# MMT Marine Low Smoke Halogen Free

## 300V OS Irradiation Cross-Linked Twisted Pair Ethernet Cables



Champlain Cable has introduced Type L: **Low Smoke / Halogen Free CAT5e and CAT6A Ethernet Data Cables** to our Commercial Marine product family addressing **personnel safety** as a key element of our qualified product line.

### Product Construction:

**Conductor:**

- Solid or Stranded Bare or Tinned Copper [Metric Equivalents available]

**Insulation:**

- EXAR® MMT Marine, Banded or Striped

**Twisted Pairs:**

- Tightly Twisted Pairs of Different Lay Lengths and Color Sequence

**Cable:**

- Twisted Pairs with Optional Barrier Tape

**Shielding:**

- Aluminum or Copper Laminate Tape and Tinned Copper Braid

**Sheath:**

- EXAR® LSHF MMT Marine Irradiated Cross-Linked Polyolefin

**Optional Armor and Outer Sheath:**

- Braided 28AWG Bronze Armor (BS)
- EXAR® LSHF MMT Marine Irradiated Cross-Linked Polyolefin

**Applications:**

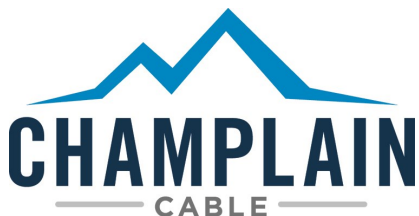
- Offshore oil and gas drilling platforms, support ships and FPSOs



### Compliances:

ISO 9001 SQS

DNV-GL (Pending)





# MMT Marine Low Smoke Halogen Free

## 300V OS Irradiation Cross-Linked Twisted Pair Ethernet Cables

Product Number	Description	Pairs	Conductor	Shield	Nom OD (in)
MMT-HF-5e2PR	Cat 5e 2Pr SF/UTP 105C - LSHF	2Pr	24 Solid BC	SF/UTP	0.260
MMT-HF-5e4PR	Cat 5e 4Pr SF/UTP 105C - LSHF	4Pr	24 Solid BC	SF/UTP	0.273
MMT-HF-6A2PR	Cat 6A 2Pr SF/UTP 105C - LSHF	2Pr	23 Solid BC	SF/UTP	0.260
MMT-HF-6A4PR	Cat 6A 4Pr SF/UTP 105C - LSHF	4Pr	23 Solid BC	SF/UTP	0.273

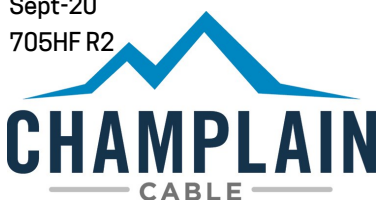
### Cat 5e Electrical Characteristics:

Freq. (MHz)	Attenuation (dB/100m)	NEXT (dB/100m)	PSNEXT (dB/100m)	ACR (dB/100m)	PSACR (dB/100m)	ELFEXT (dB/100m)	PSELFEXT (dB/100m)	RL (dB)
	MAX	MIN	MIN	MIN	MIN	MIN	MIN	MIN
10	6.4	50.3	50.3	43.9	43.9	43.8	40.8	26.0
31.25	11.6	42.9	42.9	31.3	31.3	33.9	30.9	25.0
62.5	16.8	38.4	38.4	21.6	21.6	27.8	24.8	23.5
100	21.7	35.3	35.3	17.1	17.1	23.8	20.8	22.5
<b>Mutual Capacitance (Nominal)</b>			15pf/ft		<b>Delay Skew (Maximum)</b>		45ns/100m	
<b>Capacitance Unbalance (Maximum)</b>			330pf/ft		<b>Delay (Maximum)</b>		538ns/100m	
<b>Velocity of Propagation:</b>			70%					

### Cat 6A Electrical Characteristics:

Freq. (MHz)	Insertion Loss (dB/100m)	NEXT (dB/100m)	PSNEXT (dB/100m)	ELFEXT (dB/100m)	PSELFEXT (dB/100m)	TCL dB	ELTCTL dB/100m	RL (dB)
	MAX	MIN	MIN	MIN	MIN	MIN	MIN	MIN
10	5.9	59.3	57.3	47.8	44.8	40.0	15.0	25.0
31.25	10.5	51.9	49.9	37.9	34.9	35.1	n/s	23.6
62.5	15.0	47.4	45.4	31.9	28.9	32.0	n/s	21.5
100	19.1	44.3	42.3	27.8	24.8	30.0	n/s	20.1
500	45.3	33.8	31.8	13.8	10.8	23.0	n/s	15.2
<b>Mutual Capacitance (Nominal)</b>			15pF/ft		<b>Delay Skew (Maximum)</b>		45ns/100m	
<b>Capacitance Unbalance (Maximum)</b>			330pF/ft		<b>Delay (Maximum)</b>		570ns/100m	
<b>Velocity of Propagation:</b>			70%					

Sept-20  
705HF R2



### Manufacturing Locations:

Colchester, Vermont

El Paso, Texas

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