



NEMA HP 5 TYPE "LX" EXTRAD 3000 Volt

(Replaces MIL-DTL 16878/16<>Inactive)

NEMA HP 5 Type "LX" EXTRAD is a high performance power/battery cable designed specifically for Military Equipment and Applications. It exceeds MIL-DTL 16878/16 (specification rendered inactive). As engine compartments grow smaller, operating temperatures become hotter and electronics proliferate within this equipment & engine compartments. NEMA HP 5 TYPE "LX" EXTRAD fulfills these demands.

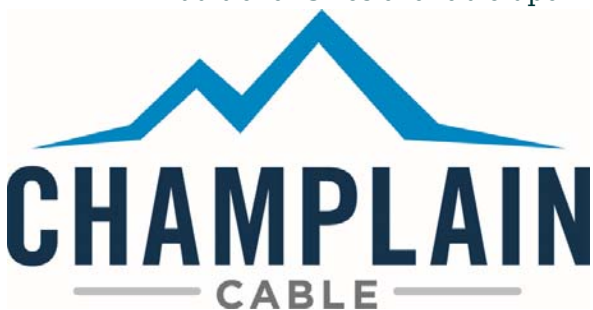
NEMA HP 5 Type "LX" EXTRAD has an irradiated cross-linked polyolefin insulation capable of withstanding of 240°C and higher.

NEMA HP 5 Type "LX" EXTRAD can provide the solution to the complex demands of the current military environments. Thinner and Lighter than other conventional cables, it is flexible enough for easy routing yet tough enough to withstand the harshest environments. The end result is a military cable wire ideally suited for applications where a combination of flexibility, long-life and performance is required.

CCC Part Number	Standard Conductors [Tinned Copper]	Nom. Diameter of Conductor		Nom. Insulation Thickness (inches)	Nom. OD (inches)	Finished Weight (lbs./mft)	Ampacity*
		Min.	Max.				
HP5-LX BMG	10 (37/26)	.106	.115	.032	.181	39.8	80
HP5-LX BNM	8 (168/30)	.160	.175	.036	.247	65.4	106
HP5-LX BPL	6 (133/27)	.198	.217	.037	.291	100.7	155
HP5-LX BRL	4 (133/25)	.250	.274	.041	.356	155.3	190
HP5-LX BSP	2 (665/30)	.320	.342	.042	.425	243.1	255
HP5-LX BTN	1 (259/25)	.370	.398	.042	.478	301.2	293
HP5-LX BUS	1/0 (1045/30)	.405	.431	.048	.528	370.2	339
HP5-LX BWT	2/0 (1330/30)	.450	.486	.050	.587	472.1	390
HP5-LX BYV	3/0 (1672/30)	.518	.545	.062	.669	599.2	451
HP5-LX BZW	4/0 (2109/30)	.580	.635	.071	.722	791.6	529

• Ampacity 125°C rated single-insulated conductor in free air at 40°C ambient air temperature.

• Additional Sizes available upon request

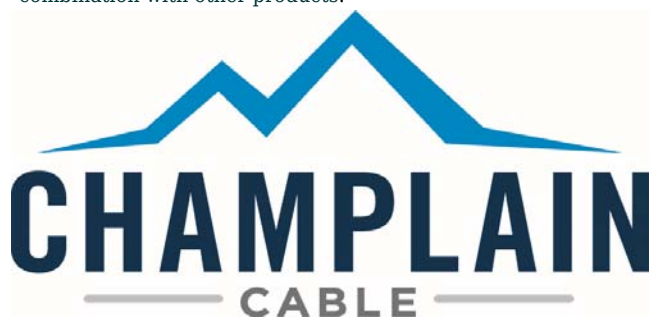




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NEMA HP 5 TYPE "LX" EXRAD				
Property / Attribute			Requirements	
			PARA. REF.	DATA REF
Flex Life				
Flex Test	Per Modified ISO 14572		TBD	TBD
Dielectric Strength				
Dielectric Test	Wet Dielectric after 1 hr. soak [min] *H.F. Spark		6.2.3	3.4KV <> 5.0KV <> 7.5KV
Flame Test	VW-1 <> U.L. Method 1581		6.1.6	Pass
Thermal Performance				
Cold Bend	Per FED-STD-228 Method 2011		6.1.9	Pass @ -65°C
Heat Aging	Per FED-STD-228 Method 4031		6.1.7	Pass
Temperature Rating	3000 Hours @150°C		N/A	150°C
Temperature Rating	10000 Hours @125°C		NA	125°C
Mechanical Properties				
Tensile	ASTM D3032, Section 17--Minimum psi		6.1.3	1800 psi
Elongation	ASTM D3032, Section 17--Minimum %		6.1.3	100%
Abrasion	Sand Paper Resistance Length in.		N/A	75
Abrasion	Scrape Cycles		N/A	NA
Pinch	Pounds		N/A	10.2
Ozone Resistance				
Ozone Test	192 Hours @ 65°C 100 pphm no cracks		N/A	Pass
Fluids				
Engine Oil	ASTM D471, IRM-902	50 +/-3 °C	N/A	1.8%
Ethanol	85% Ethanol +15% [Max] ASTM D471, Ref. Fuel C	23 +/-5 °C	N/A	<1%
Diesel Fuel	ASTM D471, 90% IRM-903 + 10% p-xylene	23 +/-5 °C	N/A	1.3%
Engine Coolant	50% Ethylene Glyco + 50% Distilled Water—15% [Max]	50 +/-3 °C	N/A	<1%
Battery Acid	H ₂ SO ₄ Specific Gravity = 1.260 +/- .005—5% [Max]	23 +/-5 °C	N/A	<1.4%

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.



Manufacturing Locations

Colchester, Vermont

El Paso, Texas

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