



### Features

- Wide temperature range -55°C to 125°C\*
- Thermoset Insulation
- Superior mechanical properties
- Flexible construction
- Flame retardant
- Excellent fluid/oil resistance
- Moisture and sunlight resistant
- REACH and RoHS compliant

### Performance Standards

- Meets AAR RP-585/S-501
- Insulation IAW ICEA S-66-524 (S-95-658)
- Passes NFPA 130-2010, 2014, 2017, 2020
- Meet the requirements of UL 1685 (FT4/IEEE 1202 flame with smoke measurement)
- Meet the requirements of 49 CFR Part 238 for flame (ICEA S-19-81) and smoke requirements (ASTM E662)
- Meet the transit toxicity requirements when tested in accordance with BSS 7239
- Passes UL VW-1 flame test
- Passes IEEE-383 1974 vertical tray flame test
- Meet APTA PR-E-RP-009-98 2021 Publication

### Construction

**Conductor:** Annealed, Tinned copper per ASTM B33, B172, AAR S-501, and AAR RP-585

**Insulation:** Irradiated Crosslinked polyolefin XLPO Exane®, (colors – as required)

\*Rated 125°C, 130°C overload, 250°C short circuit

\*\*2KV heavy duty available on request

### Scope

Exane®-1093 single conductor 600 and 2000 volt cable is an extremely tough construction ideally suited for use in rugged diesel electric locomotive applications. The insulation has outstanding resistance to abrasion, cut-through, low and high temperatures, petrochemical fluids, sunlight, and moisture. The material also has excellent flame retardance, acid gas, and electrical characteristics. Due to Exane's 125°C temperature rating, ampacity levels are higher. This leads to important benefits regarding size, weight, and ease of installation, for use in locomotive, transit, motor lead and other industrial applications.

Made in the USA



Marmon Electrical

A Berkshire Hathaway Company

# Exane<sup>®</sup>-1093 Locomotive Wire

## 600 Volt Class

Product Description	Cond. Size (AWG)	Stranding	Max. Cond Diameter		Insulation Wall		Nom. Diameter		Ampacity* @125°C	Aprox. Weight	
			(Inch)	(mm)	(Inch)	(mm)	(Inch)	(mm)		(lbs/1000ft)	(kg/km)
HXE-22-600V	22	19/34	0.031	0.79	0.030	0.76	0.092	2.34	11	4	6
HXE-20-600V	20	19/32	0.039	0.99	0.030	0.76	0.100	2.54	14	8	11.9
HXE-18-600V	18	19/30	0.049	1.24	0.030	0.76	0.109	2.77	19	10.6	15.8
HXE-16-600V	16	19/29	0.055	1.40	0.030	0.76	0.116	2.95	25	12.6	18.8
HXE-14-600V	14	19/27	0.068	1.73	0.030	0.76	0.129	3.28	42	17.8	26.5
HXE-12-600V	12	19/25	0.086	2.18	0.030	0.76	0.147	3.73	55	26	38.8
HXE-10-600V	10	27/24	0.118	3.00	0.030	0.76	0.178	4.52	72	43.5	64.9
HXE-8-600V	8	37/24	0.140	3.56	0.045	1.14	0.232	5.89	97	63.7	95.0
HXE-6-600V	6	61/24	0.190	4.83	0.045	1.14	0.279	7.08	131	102	152.1
HXE-5-600V	5	91/24	0.244	6.20	0.045	1.14	0.332	8.43	156	152.1	226.8
HXE-4-600V	4	105/24	0.264	6.71	0.045	1.14	0.352	8.94	172	169.3	252.4
HXE-3-600V	3	125/24	0.288	7.31	0.045	1.14	0.372	9.44	194	193.7	288.8
HXE-2-600V	2	150/24	0.325	8.26	0.045	1.14	0.411	10.44	232	230.8	344.1
HXE-1-600V	1	225/24	0.390	9.91	0.055	1.40	0.501	12.73	266	347.7	518.4

## 2000 Volt Class

Product Description	Cond. Size (AWG)	Stranding	Max. Cond Diameter		Insulation Wall		Nom. Diameter		Ampacity* @125°C	Aprox. Weight	
			(Inch)	(mm)	(Inch)	(mm)	(Inch)	(mm)		(lbs/1000ft)	(kg/km)
HXE-18-2000V	18	19/30	0.049	1.24	0.045	1.14	0.139	3.53	19	15	22.4
HXE-16-2000V	16	19/29	0.055	1.40	0.045	1.14	0.146	3.71	25	17	25.3
HXE-14-2000V	14	19/27	0.068	1.73	0.045	1.14	0.159	4.04	42	22	32.8
HXE-12-2000V	12	19/25	0.086	2.18	0.045	1.14	0.177	4.50	55	31	46.2
HXE-10-2000V	10	27/24	0.118	3.00	0.045	1.14	0.208	5.28	72	50	74.5
HXE-8-2000V	8	37/24	0.140	3.56	0.055	1.40	0.252	6.40	97	69	102.9
HXE-6-2000V	6	61/24	0.190	4.83	0.055	1.40	0.300	7.62	131	108	161.0
HXE-5-2000V	5	91/24	0.244	6.20	0.055	1.40	0.354	8.99	156	155	231.1
HXE-4-2000V	4	105/24	0.264	6.71	0.055	1.40	0.376	9.55	172	177	263.9
HXE-3-2000V	3	125/24	0.288	7.31	0.055	1.40	0.396	10.05	194	202	301.2
HXE-2-2000V	2	150/24	0.325	8.26	0.055	1.40	0.431	10.95	232	240	357.8
HXE-1-2000V	1	225/24	0.390	9.91	0.065	1.65	0.523	13.28	266	359	535.2
HXE-1/0-2000V	1/0	275/24	0.435	11.04	0.065	1.65	0.563	14.30	309	431	642.6
HXE-2/0-2000V	2/0	325/24	0.445	11.30	0.065	1.65	0.585	14.86	355	478	712.7
HXE-3/0-2000V	3/0	450/24	0.555	14.10	0.065	1.65	0.683	17.35	410	673	1003.4
HXE-4/0-2000V	4/0	550/24	0.575	14.61	0.065	1.65	0.708	17.98	481	786	1171.9
HXE-262-2000V	262	650/24	0.632	16.05	0.075	1.90	0.785	19.94	565	920	1371.6
HXE-313-2000V	313	775/24	0.700	17.78	0.075	1.90	0.853	21.67	637	1090	1625.1
HXE-373-2000V	373	925/24	0.758	19.25	0.075	1.90	0.908	23.06	709	1285	1915.8
HXE-444-2000V	444	1100/24	0.830	21.08	0.075	1.90	0.978	24.84	792	1520	2266.2
HXE-535-2000V	535	1325/24	0.905	22.99	0.090	2.29	1.085	27.56	893	1850	2758.2
HXE-646-2000V	646	1600/24	1.002	25.45	0.090	2.29	1.17	29.75	1005	2148	3196.0
HXE-777-2000V	777	1925/24	1.080	27.43	0.090	2.29	1.25	31.86	1130	2571	3826.0
HXE-1111-2000V	1111	2750/24	1.350	34.29	0.120	3.05	1.57	39.90	1353	3778	5622.0

\* These ampacities are based on single conductors in air with an ambient of 40°C and insulation ratings of 125°C.