

MIRABEL CABLES

XHHW/XHHW-2

Aluminum AA-8000

XLPE Insulated, 600/1000 V



APPLICATION

These cables are used for general purpose wiring in circuits not exceeding 600/1000 volts as indicated for the sizes.

May be used in wet or dry locations, installed in conduit, duct, or open air in accordance with requirements of the NEC®.

Suitable for use in low leakage circuits per NEC requiring a dielectric constant less than 3.5.

CONSTRUCTION

Conductor

Aluminum AA-8000 alloy compacted conductor, Class B stranding, as per ASTM B801 and B901. Sizes: 6 # through 1000 kcmil. On request, larger sizes are available.

Separator

A suitable opaque tape, as required.

Insulation

Blue Thermoset flame retardant cross-linked polyethylene (XLPE). On request, more colored insulation is preferred and optional.

CHARACTERISTICS

Electrical performance

operating voltage: 600 / 1000V

Thermal performance

Maximum conductor operation temperatures:
90° C wet and dry

Installation Performance

A significant reduction (30%) in the pulling force is achieved for XHHW /XHHW-2 when compared to the pulling force required for Standard XHHW/ XHHW-2 without any lubricant. Further, this reduction is comparable to the reduction achieved when the Standard XHHW/XHHW-2 conductors are pulled using a lubricant in identical installation. These results

demonstrate that it is feasible to install the XHHW/ XHHW-2 conductors without the use of a lubricant in an NFPA 70 (NEC®) compliant installation.

STANDARDS / COMPLIANCE

ASTM B-800 Specification for 8000 Series Aluminum Alloy Wire for Electrical Purposes—Annealed and Intermediate Tempers.

ASTM B-801 Specification for Concentric-Lay-Stranded Conductors of 8000 Series Aluminum Alloy for Subsequent Covering or Insulation.

ASTM B-901 Specification for Compressed Round Stranded Aluminum Conductors Using Single Input Wire Construction.

UL 44 Thermoset-Insulated Wire and Cable

ICEA S-95-658/ NEMA WC70 Nonshielded 0–2 kV Cables



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DIMENSIONS & ADMISSIBLE INTENSITIES

Size (AWG or kcmil)	Diameter (in)	Weight (lb/kft)	Number of strands	Ampacity (A)			Impedance (Ohm/1000ft)	
				Cable with no more than 3 current-carrying conductors in Raceway, Cable or Direct Buried Max. 90°C conductor Temp.	Single Cable in Free Air Max. 90°C conductor operation and 30°C ambient temp.	Cable installed on a Messenger Max. 90°C conductor Temp.	Impedance Triplexed Conductor Installation	Impedance Equally Spaced Flat S=1.26A
6	0.26	43	7	55	85	69	0.8645	0.8647
4	0.31	62	7	75	115	91	0.5443	0.5447
2	0.36	92	7	100	150	123	0.3436	0.3441
1	0.41	116	19	115	175	144	0.2729	0.2736
1/0	0.45	140	19	135	205	167	0.2175	0.2183
2/0	0.49	170	19	150	235	193	0.1734	0.1744
3/0	0.54	208	19	175	270	224	0.1388	0.1400
4/0	0.59	255	19	205	315	262	0.1114	0.1128
250	0.66	307	37	230	355	292	0.0958	0.0979
300	0.71	360	37	260	395	328	0.0817	0.0850
350	0.75	413	37	280	445	364	0.0715	0.0765
400	0.8	466	37	305	480	395	0.0639	0.0709
500	0.87	570	37	350	545	458	0.0539	0.0640
600	0.98	699	61	385	615	514	0.0478	0.0588
750	1.08	856	61	435	700	598	0.0417	0.0528
900	1.17	1000	61	480	790	669	0.0379	0.0482
1000	1.23	1116	61	500	845	716	0.0361	0.0458

*Data are approximate and subject to normal manufacturing tolerance.

DELIVERY & SHIPMENT

Size (AWG or kcmil)	Product code	Standard packages for shipment
6		Standard of 10000ft, 5000ft, 1000ft per reel
4		Standard of 10000ft, 5000ft, 1000ft per reel
2		Standard of 10000ft, 5000ft, 1000ft per reel
1		Standard of 10000ft, 5000ft, 1000ft per reel
1/0		Standard of 10000ft, 5000ft, 2500ft per reel
2/0		Standard of 10000ft, 5000ft, 2500ft per reel
3/0		Standard of 10000ft, 5000ft, 2500ft per reel
4/0		Standard of 10000ft, 5000ft, 2500ft per reel
250		Standard of 5000ft, 2500ft, 1000ft per reel
300		Standard of 5000ft, 2500ft, 1000ft per reel
350		Standard of 5000ft, 2500ft, 1000ft per reel
400		Standard of 5000ft, 2500ft, 1000ft per reel
500		Standard of 5000ft, 2500ft, 1000ft per reel
600		Standard of 5000ft, 2500ft, 1000ft per reel
750		Standard of 5000ft, 2500ft, 1000ft per reel
900		Standard of 5000ft, 2500ft, 1000ft per reel
1000		Standard of 5000ft, 2500ft, 1000ft per reel

