

Separator

Copper

Conductor

↑

XLP Insulation

XHHW-2 XLP Insulation, 600 Volts

APPLICATION:

- 1. General purpose wiring for lighting and power residential, commercial, industrial buildings in accordance with National Electrical Code, maximum conductor temperature of 90°C in wet or dry locations, 600 volts, for installation in conduit or other recognized raceways.
- 2. Suitable for use in low leakage circuits requiring a dielectric constant of $3.5\,$ or less, such as isolated circuits supplying anesthetizing locations per Article 517-160 of the NEC.
- 3. Suitable for use as low leakage inductive (loop) vehicle detector wire in accordance with state and municipal requirements.

STANDARDS:

- 1. Listed by UL as Type XHHW-2 per Standard 44 for Rubber-Insulated Wires and Cables.
- 2. Conforms to ICEA S-95-658/NEMA WC70, utilizing Column B thicknesses.
- 3. Conforms to Federal Specification J-C-30B.

CONSTRUCTION: Annealed copper conductor, XLP thermosetting chem-

ically crosslinked polyethylene insulation, surface printed.								
	Size AWG		Insulation Thick-	Nom. Diam. Inches	Ampacity*		Approx. Wt. Ibs/1000 ft	
USAWC Part #	or kcmil	No. of Strands	ness Mils		75°C	90°C	Net	Copper
Stranded								
14-01XHHW-2	14	7	30	.14	20	25	18	13
12-01XHHW-2	12	7	30	.16	25	30	27	20
10-01XHHW-2	10	7	30	.18	35	40	40	32
8-01XHHW-2	8	7	45	.24	50	55	66	50
6-01XHHW-2	6	7	45	.28	65	75	96	81
4-01XHHW-2	4	7	45	.32	85	95	145	129
3-01XHHW-2	3	7	45	.35	100	110	182	163
2-01XHHW-2	2	7	45	.38	115	130	225	205
1-01XHHW-2	1	19	55	.44	130	150	290	258
1/0-01XHHW-2	1/0	19	55	.48	150	170	360	326
2/0-01XHHW-2	2/0	19	55	.52	175	195	450	411
3/0-01XHHW-2	3/0	19	55	.58	200	225	555	518
4/0-01XHHW-2	4/0	19	55	.63	230	260	700	653
250-01XHHW-2	250	37	65	.70	255	290	830	772
300-01XHHW-2	300	37	65	.75	285	320	990	926
350-01XHHW-2	350	37	65	.80	310	350	1150	1081
400-01XHHW-2	400	37	65	.85	335	380	1310	1235
500-01XHHW-2	500	37	65	.93	380	430	1620	1544
600-01XHHW-2	600	61	80	1.04	420	475	1980	1853
750-01XHHW-2	750	61	80	1.14	475	535	2445	2316
1000-01XHHW-2	1000	61	80	1.29	545	615	3240	3088

*Ampacity in accordance with NEC for not more than three conductors in raceway at the conductor temperature indicated, in wet or dry locations, 30°C ambient temperature.



Specification

XHHW-2

XLP Insulation, 600 Volts

1. SCOPE

1.1 This specification describes single conductor XHHW-2, a general purpose building wire insulated with crosslinked polyethylene (XLP) intended for lighting and power circuits at 600 volts or less, in residential, commercial and industrial buildings. The wire may be operated at 90°C maximum continuous conductor temperature in wet or dry locations and is listed by Underwriters Laboratories for use in accordance with Article 310 of the National Electrical Code.

2. APPLICABLE STANDARDS

- 2.1 The following standards form a part of this specification to the extent specified herein:
 - 2.1.1 Underwriters Laboratories Standard 44 for Rubber-Insulated Wires and Cables.
 - 2.1.2 ICEA Pub. No. S-95-658, NEMA Pub. No. WC70 for Nonshielded Power Cables Rated 2000 Volts or Less.
 - 2.1.3 Federal Specification J-C-30B.

3. CONDUCTORS

3.1 Conductors shall be Class B stranded annealed uncoated copper per UL Standard 44.

4. SEPARATOR

4.1 A suitable separator over the conductor may be used at the option of the manufacturer.

5. INSULATION

- 5.1 Each conductor shall be insulated with XLP, a crosslinked polyethylene complying with the physical and electrical requirements of UL Standard 44 for Type XHHW-2.
- 5.2 The average thickness of insulation, for a given conductor size, shall be as specified in UL Standard 44 for Type XHHW-2. The minimum thickness at any point shall be not less than 90% of the specified average thickness. The insulation shall be applied tightly to the conductor and shall be free-stripping.

6. IDENTIFICATION

6.1 The wire shall be identified by surface marking indicating manufacturer's identification, conductor size and metal, voltage rating, UL Symbol and type designation.

7. TESTS

- 7.1 Wire shall be tested in accordance with the requirements of UL Standard 44 for Type XHHW-2.
- 8. LABELS
 - 8.1 The wire shall bear the Underwriters Laboratories label for Type XHHW-2.