



X-Olene® - FMR Type XHHW-2

600/1000V Power and Control

Copper Conductor/90°C Wet or Dry

Sunlight Resistant



A Solid or Stranded
Copper Conductor
B X-Olene FMR Insulation

Insulation

X-Olene-FMR is Okonite's trade name for its chemically cross-linked polyethylene insulating compound with outstanding electrical and physical properties. Its excellent chemical physical resistance permits X-Olene's use in areas exposed to alcohol, ketones and dilute acids and bases, without additional coverings.

Applications

X-Olene-FMR Type XHHW-2 600/1000 Volt Cables are recommended for general low voltage power and control applications. Where the National Electrical Code applies, Type XHHW-2 may be used up to 90°C in wet or dry locations. These cables may be installed in wet or dry locations, indoors or outdoors, in raceways, underground ducts, or lashed to a messenger for aerial installation.

Specifications

Conductor: Uncoated soft copper per ASTM B-3. Solid per ASTM B-3. Sizes smaller than #8 are compress stranded per ASTM B-8. Sizes #8 and larger are compact stranded per ASTM B-496.

Insulation: Meets or exceeds all requirements of ICEA S-95-658, NEMA WC-70, and UL Standards.

Listed by Underwriters Laboratories, Inc. as Type XHHW-2.

Product Features

- Small diameter, permits use of smaller conduit or more wires per conduit.
- Excellent heat resistance.
- Rated 90°C in dry or wet locations.
- Mechanically rugged.
- Stable electrical properties.
- Low moisture absorption.
- Highly resistant to weather and most chemicals.
- UL Listed.
- Oil resistant, PR I & PR II.
- Gasoline and oil resistant, GR I & GR II.
- Sunlight resistant.
- VW-1.
- Passes the IEEE 1202/FT4 Vertical Tray Flame Test (sizes 1/0 AWG and larger).
- -40°C.

X-Olene® - FMR Type XHHW-2

600/1000V Power and Control

Copper Conductor/90°C Wet or Dry

Sunlight Resistant



Product Data Section 3: Sheet 15

Catalog Number	Conductor size AWG kcmil	Number of Strands	Insulation Thickness - mils	Insulation Thickness - mm	Approx. O.D. - Inches	Approx. O.D. - mm	Approx. Net Weight lbs./1000'	Approx. Ship Weight lbs./1000'	90°C Wet (1)* NEC Ampacity	75°C Wet (1)* NEC Ampacity	ICEA Ampacity (2)
112-36-3251	14 1	30	0.76	0.13	3.30	18	23	15	15	24	
112-36-3261	14 7	30	0.76	0.14	3.56	19	24	15	15	24	
112-36-3271	12 1	30	0.76	0.15	3.81	26	31	20	20	30	
112-36-3281	12 7	30	0.76	0.15	3.81	28	33	20	20	30	
112-36-3291	10 1	30	0.76	0.17	4.32	39	44	30	30	42	
112-36-3301	10 7	30	0.76	0.18	4.57	42	47	30	30	42	
112-36-3321	8 1	45	1.14	0.23	5.84	66	71	55	50	55	
112-36-3331	8 7	45	1.14	0.23	5.84	66	71	55	50	55	
112-36-3351	6 7	45	1.14	0.27	6.89	99	110	75	65	75	
112-36-3371	4 7	45	1.14	0.31	7.87	150	161	95	85	97	
112-36-3391	2 7	45	1.14	0.37	9.40	230	253	130	115	130	
112-36-3401	1 19	55	1.40	0.42	10.7	243	316	150	130	156	
112-36-3411	1/0 19	55	1.40	0.46	11.7	365	404	170	150	179	
112-36-3421	2/0 19	55	1.40	0.50	12.7	451	490	195	175	204	
112-36-3431	3/0 19	55	1.40	0.54	13.7	562	601	225	200	242	
112-36-3441	4/0 19	55	1.40	0.60	15.2	700	739	260	230	278	
112-36-3451	250 37	65	1.65	0.66	16.8	835	868	290	255	317	
112-36-3461	300 37	65	1.65	0.71	18.0	993	1032	320	385	320	
112-36-3471	350 37	65	1.65	0.72	18.3	1150	1209	350	310	384	
112-36-3481	500 37	65	1.65	0.87	22.1	1618	1696	430	380	477	
112-36-3491	750 61	80	2.03	1.07	27.2	2426	2612	535	475	598	
112-36-3501	1000 61	80	2.03	1.22	31.0	3206	3443	615	545	689	

Okonite's web site, www.okonite.com contains the most up to date information.

To order a color other than black, change the last digit of the catalog number as follows:

White	2	Orange	5
Red	3	Blue	6
Green	4	Yellow	7

Example: To order #14/Sol - Red, the catalog number would be 112-31-3063.

(1) **Ampacities** are based on Table 310.16 of the National Electrical Code for these 90°C rated conductors at an ambient temperature of 30°C. The 75°C wet column is provided for additional information.

The ampacities shown apply to open runs of cable, installation in any approved raceway, direct burial in the earth, or as aerial cable on a messenger. Derating for more than three current carrying conductors within a raceway is in accordance with NEC 310.15(C)(1).

(2) Based on three (3) conductors in a single enclosed or exposed conduit. Capacities based on 40°C air ambient using ICEA methods. For 30°C ambient multiply values by 1.10; for 50°C multiply by .90. For other ambients or installation conditions refer to Okonite's Engineering Data Book EHB.

*Current limited to 15, 20 and 30 amps per Section 240.4(D)(3) of the NEC for #14, #12 and #10 AWG, respectively.