

XHHW-2, UL Type SIS1/XHHW-2, VW-1 Rated

Application and Description

Type SIS1/XHHW-2, VW-1 is for use as general purpose wiring in residential, commercial, institutional and industrial construction at a maximum conductor temperature of 90° C in dry and wet locations; for installation in air, conduit or other raceways, in circuits not exceeding 600 volts. All sizes pass the vertical flame test (VW-1). Colors available. Sizes 1/0AWG and larger are for cable tray use and sunlight resistant. Sizes 2AWG and larger are listed and marked sunlight resistant in black only.

Standard and Approval

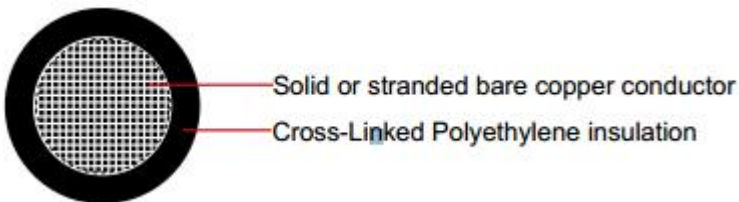
- ▶ UL 44 - Thermoset-Insulated Wires and Cables
- ▶ UL 1685 - CT Flame Exposure Test.
- ▶ UL 1581 - Flame Exposure Test (VW-1)
- ▶ IEEE 383 ((IEEE 1202/FT4 (2/0 AWG and larger)
- ▶ Flame Test (70,000 Btu/hr Vertical Tray Test))
- ▶ ICEA S-95-658 (NEMA WC70)

Cable Construction

Conductor: Single copper conductor, stranded tinned annealed copper per ASTM B33 Class B stranding per ASTM B8

Insulation: Flame-retardant and moisture resistant Cross-Linked Polyethylene (FRXLPE)

Color: upon request, black is preferable



Cable Parameter

AWG/ kcmil	Strand	Nominal Conductor Diameter Inch/mm		Nominal Insulation Thickness Inch/mm		Nominal Overall Diameter Inch/mm		Copper Weight Lbs/kft kg/km		Cable Weight Lbs/kft kg/km	
18	7	0.05	1.27	0.030	0.76	0.11	2.74	5	8	9	14
16	7	0.06	1.47	0.030	0.76	0.12	3.05	8	12	13	20
14	7	0.07	1.80	0.030	0.76	0.13	3.38	13	19	19	28
12	7	0.09	2.29	0.030	0.76	0.15	3.86	20	30	27	41
10	7	0.11	2.87	0.030	0.76	0.18	4.45	32	48	41	61
8	7	0.14	3.56	0.045	1.14	0.24	6.05	51	76	69	102
6	7	0.18	4.57	0.045	1.14	0.28	6.99	81	121	103	153
4	7	0.23	5.84	0.045	1.14	0.32	8.18	129	192	156	232
2	7	0.29	7.37	0.045	1.14	0.38	9.68	205	305	239	355
1/0	19	0.36	9.14	0.055	1.40	0.48	12.14	326	485	373	556
2/0	19	0.41	10.41	0.055	1.40	0.52	13.28	411	612	464	691
3/0	19	0.46	11.68	0.055	1.40	0.57	14.55	518	771	579	862
4/0	19	0.51	12.95	0.055	1.40	0.63	15.98	653	972	722	1075
250	37	0.56	14.22	0.065	1.65	0.70	17.75	772	1149	860	1280
350	37	0.66	16.76	0.065	1.65	0.80	20.37	1081	1609	1185	1764
500	37	0.79	20.07	0.065	1.65	0.93	23.65	1544	2298	1669	2484
600	61	0.87	22.10	0.080	2.03	1.04	26.42	1853	2757	2040	3035
750	61	0.98	24.89	0.080	2.03	1.14	28.96	2316	3446	2515	3742
1000	61	1.08	27.96	0.080	2.03	1.29	32.77	3086	4591	3310	4925