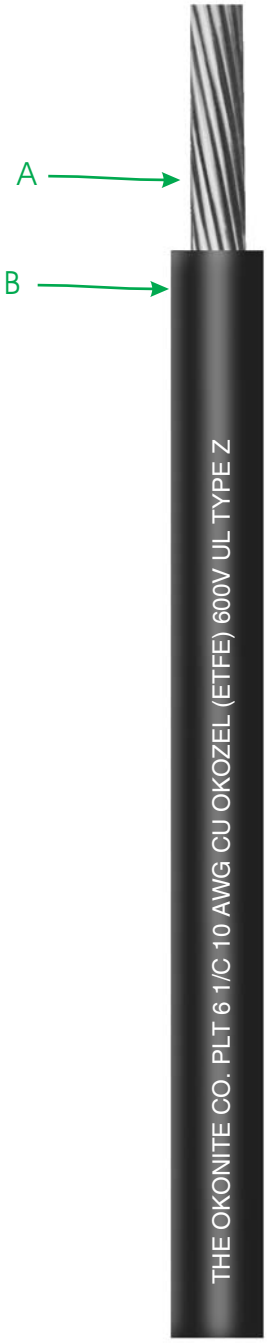
Okozel® Type Z and ZW

600V Power and Control

Copper Conductor/150°C Dry/75°C Wet



A Bare, Stranded Copper Conductor
B Okozel Insulation

Insulation

Okozel is Okonite's trade name for ETFE Fluoropolymer, a modified Ethylene Tetrafluoroethylene. Okozel is extremely rugged with excellent resistance to cut-through and abrasion. It is chemically inert and has low permeability. Okozel is flame retardant and non-propagating, passes the IEEE 383 and UL vertical tray flame test, and is rated "non-burning" under ASTM D635. It is rated for 150°C (302°F) conductor operating temperature for continuous use and retains all useful physical properties at temperatures down to -100°C (-148°F).

Specifications

Conductor: Uncoated soft copper 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: Flame-retardant, radiation-resistant Okozel, a modified ETFE Fluoropolymer per NEMA Std. HP-100.2.

Insulated conductor is rated "non-burning" under ASTM D635.

Listed by Underwriters Laboratories, Inc. as Type Z or ZW.

Applications

Okozel insulated conductors are recommended for use in fossil fueled generating stations where continuity of service in critical circuits is of primary importance. These conductors, which are rated 150°C in dry and 75°C in wet locations, permit smaller conduit use through higher ampacities and thinner insulation walls than comparable XLP or rubber constructions.

Okozel conductors are also recommended for high ambient temperature areas up to 150°C (302°F) in industrial applications or for cold weather installations to -65°C (-85°F).

Product Features

- Passes the vertical tray flame test requirements of UL 1581 at 70,000 Btu/hr.
- 150°C continuous operating temperature.
- Low surface friction provides easier installation.
- Cold installation temperature in excess of -65°C.
- Exceptional abrasion resistance will not cut or tear.
- Lower smoke emission.
- Chemically inert-unaffected by typical acids, bases, solvents and cleaning agents, fuels and hydraulic fluids.
- High dielectric strength.
- Low dielectric constant.
- Special designs available that are qualified for nuclear generating stations at 90°C in accordance with IEEE Standards 383-74 and 323-74.

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Catalog Number	Conductor Size AWG or 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'	Ampacity (1) 150°C Dry*
TYPE Z									
116-75-1411	14	7	15	0.38	0.10	2.5	17	19	15
116-75-1441	12	7	15	0.38	0.12	3.0	25	27	20
116-75-1471	10	7	20	0.51	0.16	4.1	41	44	30
116-75-1491	8	7	25	0.64	0.19	4.8	61	66	76
116-75-1501	6	7	25	0.64	0.23	5.8	93	98	96
116-75-1511	4	7	25	0.64	0.27	6.9	143	154	120
116-75-1521	2	7	35	0.89	0.35	8.9	230	253	160
116-75-1531	1	19	35	0.89	0.38	9.7	285	308	186
116-75-1541	1/0	19	45	1.14	0.44	11.2	365	404	215
116-75-1551	2/0	19	45	1.14	0.48	12.2	454	493	251
116-75-1571	4/0	37	45	1.14	0.58	14.7	704	743	332
TYPE ZW									
116-75-1611	14	7	30	0.76	0.14	3.6	21	24	34
116-75-1641	12	7	30	0.76	0.16	4.1	30	33	43
116-75-1671	10	7	30	0.76	0.18	5.6	45	52	55
116-75-1691	8	7	45	1.14	0.23	6.4	71	76	76
116-75-1701	6	7	45	1.14	0.27	7.4	105	116	96
116-75-1711	4	7	45	1.14	0.31	8.6	157	168	120
116-75-1721	2	7	45	1.14	0.37	10.2	239	262	160

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

(1) Ampacities are based on Table 310-18 of the National Electrical Code.
Not more than three copper conductors in a raceway at an ambient temperature of 40°C (104°F).

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

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
		Brown	8
Example: To order #14 - Red, the catalog number would be 116-75-1413.			

THE OKONITE COMPANY
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