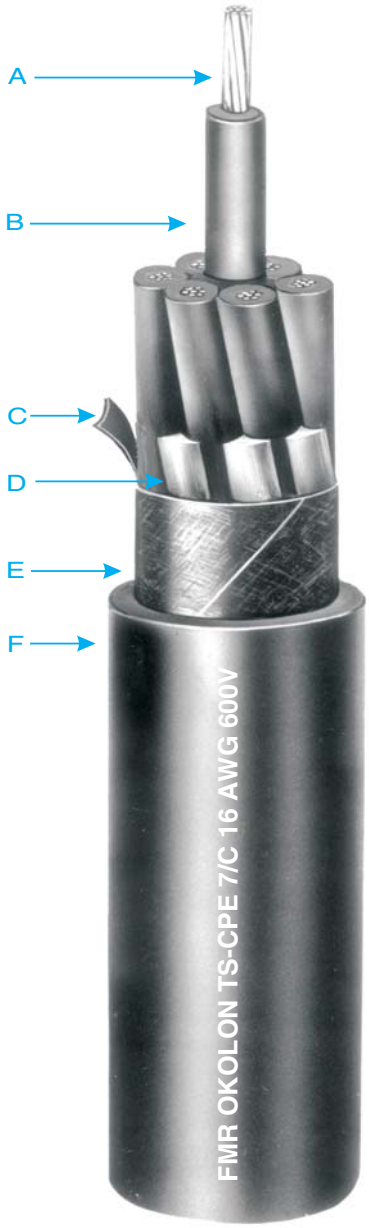
Okonite®-FMR® Okolon® TS-CPE

600 Volt Control Cable

Multiple Copper Conductors/90°C Rating
For Central Station Applications



A Stranded Bare Copper Conductors
B Okonite-FMR Insulation
C Marker Tape
D Flame and Moisture Resistant Fillers
E Cable Tape
F Okolon TS-CPE Jacket

Insulation

Okonite-FMR is Okonite's trade name for its heat, moisture, flame and chemically resistant, mechanically rugged ethylene-propylene insulation compound. It is flame retardant and will pass both the 70,000 BTU/hour and 210,000 BTU/hour tray flame test. Its physical properties and flame retardency permit its use without a jacket on the single conductors thus providing a substantially smaller overall diameter control cable.

The properties of Okonite-FMR insulation substantially enhance the well known features of ethylene propylene rubber insulations.

Nuclear qualified Okonite/FMR cables that meet IEEE Standard - 383 and LOCA criteria are available on special order.

Overall Jacket

The overall Okolon TS-CPE jacket is a thermoset chlorinated polyethylene compound. This combination construction assures circuit security because of its high mechanical strength and excellent resistance to moisture, ozone, oil and most chemicals.

Applications

Okonite-FMR Control Cables are recommended for use in either power generating plants and in substations; designed especially for critical circuits where continuity of service is of prime importance. This premium quality control cable is recommended for wet or dry, ac or dc service at conductor temperatures to 90°C. They may be installed in conduits, ducts, cable troughs, trays, messenger supported, or directly buried in the earth.

Specifications

Conductors: Bare copper per ASTM B-3, Class B stranded per ASTM B-8.

Insulation: Okonite-FMR meets or exceeds the electrical and physical requirements of ICEA S-73-532.

Color Coding: Base colors and tracers as shown on reverse of Data Sheet.

Assembly: Conductors cabled using flame and moisture resistant fillers.

Overall Jacket: The Okolon TS-CPE compound meets or exceeds the requirements of ICEA S-73-532

Product Features

- Flame retardant - passes the IEEE 383 and 1202 flame test requirements. Also passes the ICEA T-29-520 (210,000 BTU/hr) flame test.
- Quality Assurance traceability available on special order.
- 90°C rated control cable, factory assembled for indoor or outdoor installation in cable trays, in raceways, direct burial in the earth, or supported by messenger wire.
- Mechanically rugged.
- Flexible, easy to install and terminate.
- Color coded conductors.
- Resistant to water, oil and most chemicals.
- Thermally stable at elevated temperatures.
- High insulation resistance, even at elevated temperatures.
- Small diameter, lightweight.

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Catalog Number	Conductor Size (AWG)	Number of Conductors	Insulation Thickness-mils	Jacket Thickness - mils	Jacket Thickness - mm	Approx O.D. - Inches	Approx O.D. - mm	Approx Net Weight (lbs/1000')	Approx Ship Weight (lbs/1000')	90°C Wet or Dry Ampacity (1)
202-10-2033	16 (7x) 1.31 mm^2	3	25 0.64 mm	45	1.14	0.35	8.98	82	93	18
202-10-2034		4		45	1.14	0.38	9.71	98	109	14
202-10-2035		5		45	1.14	0.41	10.51	114	137	14
202-10-2037		7		45	1.14	0.45	11.36	144	167	13
202-10-2039		9		45	1.14	0.52	13.10	186	209	13
202-10-2042		12		60	1.52	0.61	15.48	249	273	9
202-10-2049		19		60	1.52	0.71	18.03	371	403	9
202-10-2067		37		80	2.03	0.98	24.89	1121	1176	7
202-10-2152	14 (7x) 2.08 mm^2	2	30 0.76 mm	45	1.14	0.33	9.65	97	108	25
202-10-2153		3		45	1.14	0.41	10.35	114	137	25
202-10-2154		4		45	1.14	0.44	11.25	141	164	20
202-10-2155		5		45	1.14	0.48	12.23	171	194	20
202-10-2157		7		45	1.14	0.52	13.27	207	230	18
202-10-2159		9		60	1.52	0.64	16.21	288	320	18
202-10-2162		12		60	1.52	0.72	20.82	374	413	13
202-10-2169		19		80	1.52	0.88	22.35	569	624	13
202-10-2187		37		80	2.03	1.16	29.46	998	1078	10
202-10-2302	12 (7x) 3.31 mm^2	2	30 0.76 mm	45	1.14	0.42	10.70	124	147	30
202-10-2303		3		45	1.14	0.45	11.33	151	174	30
202-10-2304		4		45	1.14	0.49	12.36	188	211	24
202-10-2305		5		45	1.14	0.53	13.46	230	254	24
202-10-2307		7		60	1.52	0.61	15.45	300	324	21
202-10-2309		9		60	1.52	0.71	18.03	407	439	21
202-10-2312		12		60	1.52	0.79	20.02	498	537	15
202-10-2319		19		80	2.03	0.97	24.64	762	817	15
202-10-2337		37		80	2.03	1.29	32.77	1365	1455	12
202-10-2452	10 (7x) 5.26 mm^2	2	30 0.76 mm	45	1.14	0.47	11.92	166	189	40
202-10-2453		3		45	1.14	0.50	12.65	205	228	40
202-10-2454		4		60	1.52	0.58	14.65	276	300	32
202-10-2455		5		60	1.52	0.63	15.92	334	358	32
202-10-2457		7		60	1.52	0.68	17.28	415	447	28
202-10-2459		9		60	1.52	0.79	20.06	587	626	28
202-10-2462		12		80	2.03	0.94	23.88	731	786	20
202-10-2652	9 (7x) 6.63 mm^2	2	30 0.76 mm	45	1.14	0.49	12.45	192	215	50
202-10-2653		3		45	1.14	0.53	13.36	239	262	50
202-10-2654		4		60	1.52	0.61	15.44	321	345	40
202-10-2655		5		60	1.52	0.66	16.81	374	426	40
202-10-2657		7		60	1.52	0.72	18.27	490	529	35
202-10-2659		9		60	1.52	0.84	21.25	673	712	35
202-10-2662		12		80	2.03	0.99	25.15	868	923	25

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

(1) Ampacities are based on 90°C rated conductors at an ambient temperature of 30°C.

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Conductor Color Coding Sequence — Sizes 16 - 9 AWG

Conductor Number	Background or Base Color	Tracer Color
1	Black	
2	White	
3	Red	
4	Green	
5	Orange	
6	Blue	
7	White	Black
8	Red	Black
9	Green	Black
10	Orange	Black
11	Blue	Black
12	Black	White
13	Red	White
14	Green	White
15	Blue	White
16	Black	Red
17	White	Red
18	Orange	Red
19	Blue	Red
20	Red	Green
21	Orange	Green

Color Coding per ICEA Method 1, E-1

Alternate color code shall be used for greater than 21 conductor count.

THE OKONITE COMPANY
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