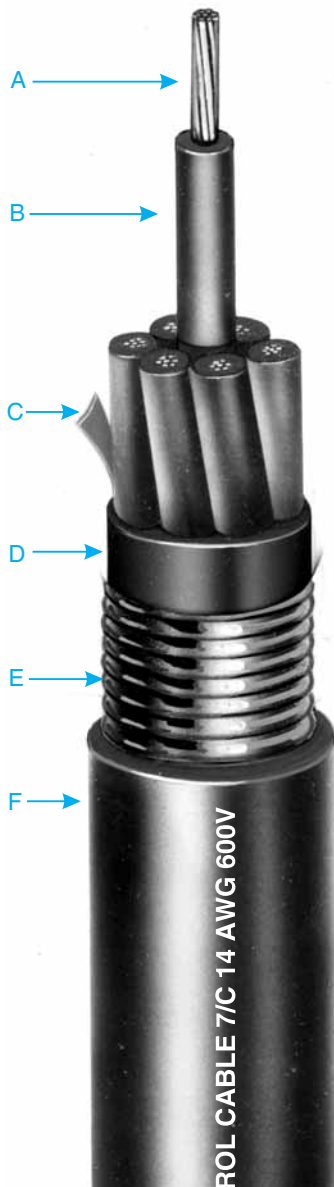




# Okonite®-FMR-LCS® Okolon® TS-CPE 600 Volt Shielded Control Cable

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



- A Bare, Stranded Copper Conductors
- B Okonite-FMR Insulation
- C Marker Tape
- D Extruded Fill And Belt
- E 5 mil Longitudinal Corrugated Copper Shield
- 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 retardancy 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.

## Shield

The shield system consists of a 5 mil copper tape which is longitudinally applied over the extruded belt and fill. The Longitudinal Corrugated Shield (LCS) maintains uniformly low resistance and a low reactance path for optimum shielding against external high frequency interference.

## 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 where electrostatic shielding is required.

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 per ICEA Method 1, Table E-1. Sequence shown on reverse of this sheet.

**Assembly:** Conductors cabled using flame and moisture resistant fillers.

**Shield:** A 5 mil corrugated copper tape, longitudinally applied.

**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, light weight.

# Okonite-FMR-LCS Okolon TS-CPE

## 600 Volt Shielded Control Cable

Multiple Copper Conductors/90°C Rating  
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## Product Data Section 4: Sheet 22

### Longitudinal Corrugated Shielded Okonite FMR Control Cable 600V

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)		
202-10-6052	16 (7x) 1.31 mm <sup>2</sup>	2	25 0.64 mm	60	1.52	0.67	17.02	262	294	18		
202-10-6053		3		60	1.52	0.67	17.02	270	302	18		
202-10-6054		4		60	1.52	0.67	17.02	275	307	14		
202-10-6055		5		60	1.52	0.67	17.02	279	311	14		
202-10-6057		7		60	1.52	0.67	17.02	292	324	13		
202-10-6059		9		60	1.52	0.67	17.02	294	326	13		
202-10-6062		12		60	1.52	0.74	18.72	356	411	9		
202-10-6069		19		60	1.52	0.83	21.11	476	543	9		
202-10-6087		37		80	2.03	1.13	28.78	858	964	7		
202-10-6152	14 (7x) 2.08 mm <sup>2</sup>	2	30 0.76 mm	60	1.52	0.67	17.02	262	294	25		
202-10-6153		3		60	1.52	0.67	17.02	275	307	25		
202-10-6154		4		60	1.52	0.67	17.02	283	315	20		
202-10-6155		5		60	1.52	0.67	17.02	289	321	20		
202-10-6157		7		60	1.52	0.68	17.27	315	347	18		
202-10-6159		9		60	1.52	0.77	19.45	387	442	18		
202-10-6162		12		60	1.52	0.84	21.36	468	535	13		
202-10-6169		19		80	2.03	1.00	25.35	687	754	13		
202-10-6187		37		80	2.03	1.28	32.51	1149	1292	10		
202-10-6302	12 (7x) 3.31 mm <sup>2</sup>	2	30 0.76 mm	60	1.52	0.67	17.02	269	301	30		
202-10-6303		3		60	1.52	0.67	17.02	288	320	30		
202-10-6304		4		60	1.52	0.67	17.02	303	335	24		
202-10-6305		5		60	1.52	0.67	17.02	326	358	24		
202-10-6307		7		60	1.52	0.74	18.69	396	451	21		
202-10-6309		9		60	1.52	0.83	21.10	487	554	21		
202-10-6312		12		80	2.03	0.96	24.33	642	709	15		
202-10-6319		19		80	2.03	1.09	27.64	892	998	15		
202-10-6337		37		80	2.03	1.43	36.42	1567	1731	12		
202-10-6452	10 (7x) 5.26 mm <sup>2</sup>	2	30 0.76 mm	60	1.52	0.67	17.02	280	312	40		
202-10-6453		3		60	1.52	0.67	17.02	310	342	40		
202-10-6454		4		60	1.52	0.70	17.89	356	388	32		
202-10-6455		5		60	1.52	0.75	19.16	416	471	32		
202-10-6457		7		60	1.52	0.81	20.52	518	573	28		
202-10-6459		9		80	2.03	0.96	24.36	684	751	28		
202-10-6462		12		80	2.03	1.06	26.86	851	941	20		
202-10-6652		9 (7x) 6.63 mm <sup>2</sup>		2	30 0.76 mm	60	1.52	0.67	17.02	288	320	50
202-10-6653				3		60	1.52	0.69	17.02	333	365	50
202-10-6654	4		60	1.52		0.74	18.69	404	459	40		
202-10-6655	5		60	1.52		0.79	20.05	473	528	40		
202-10-6657	7		60	1.52		0.89	22.61	633	700	35		
202-10-6659	9		80	2.03		1.01	25.56	787	877	35		
202-10-6662	12		80	2.03		1.11	28.24	981	1087	25		

COLOR CODE		
No. of Cond.	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

Visit Okonite's web site, [www.okonite.com](http://www.okonite.com) for the most up to date dimensions.

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