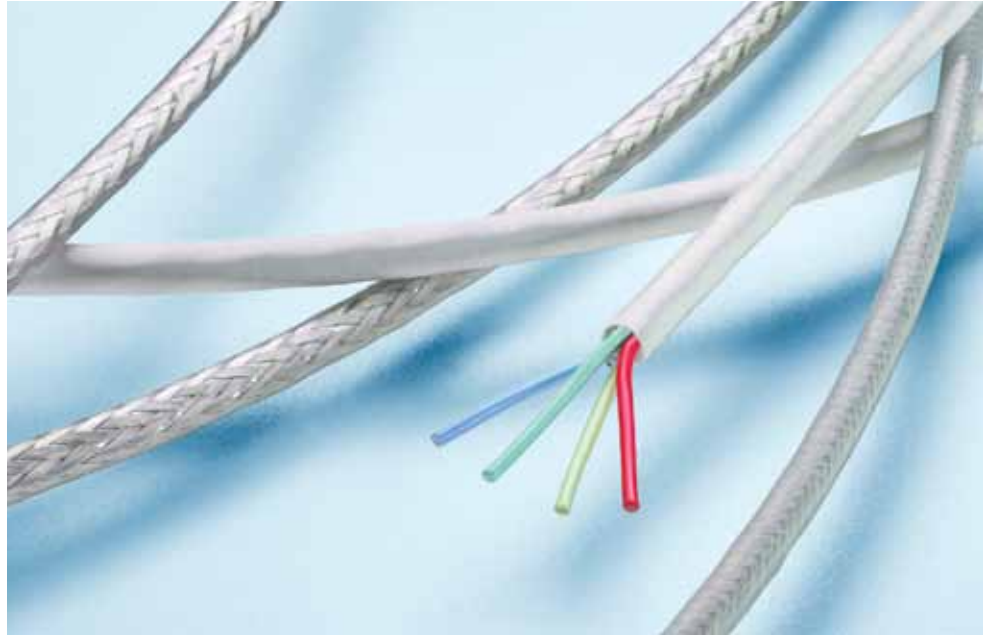


## QUADLITE Quad coaxial Cables

### Product Facts

- 100 ohm and 150 ohm cables
- Materials rated from -65°C to +200°C
- Low outgassing materials (PTFE, FEP)
- Custom design capabilities
- Proven technologies and materials
- Lightweight
- Low smoke and low toxicity
- Available in 150°C and 200°C rated construction



TE's Quadlite family of lightweight, fluoropolymer cables are for use in high speed, high bandwidth applications such as 100Base-T, Gigabit Ethernet, IEEE 1394 and Fibre Channel employed in commercial avionics systems, aircraft data networks, in-flight entertainment systems and military communications.

The Quadlite cables are designed to meet the flammability requirements of FAR Part 25 and the rigorous smoke and toxicity requirements found in commercial aerospace standards such as EN3475.

Quadlite cables are to be used with the Quadrax contacts and connectors.

### Applications

Cables are used in communications, control and instrumentation for:

- In-Flight Entertainment
- Satellite TV
- Flight Subsystems
- Military Communications

### Materials

**Dielectrics** — Foamed FEP  
**Jacket** — FEP

### Standards and Specifications

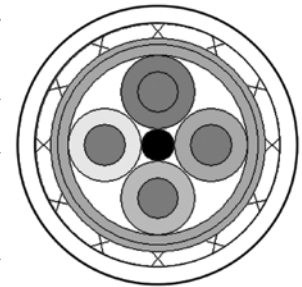
TE Specification 1200  
 ANSI/TIA-568-B.2  
 IEEE 1394  
 ARINC 664

**QUADLITE Quad coaxial Cables** (Continued)

**100Base-T Ethernet Cables**  
**100 Ohms - 150°C**

TE Part No.	CEC-RWC-18634		CEC-RWC-18664		CEC-RWC-18666	
Conductor AWG Size (19 Strand)	26		24		22	
Conductor Material:	SCCA		SCCA		SCC	
Nom. Conductor Diameter (in.):	0.0185		0.0235		0.0295	
Insulation Material:	Formed FEP		Formed FEP		Formed FEP	
Nom. Insulation OD ± 0.002 (in.):	0.037		0.042		0.057	
Nom. Cable OD (in.):	0.145		0.154		0.195	
Nom. Cable Weight (lb/1 kft):	17.7		20.3		32.0	
Shield Material:	TCC		TCC		TCC	
Jacket Material:	FEP		FEP		FEP	
Impedance ± 10% (Ω):	100		100		100	
Temp. Rating:	150°C		150°C		150°C	
Nom. Capacitance (pF/ft):	13.5		13.0		12.9	
Nom. Attenuation (dB/100 m):						
1 MHz	4.0		2.2		1.6	
10 MHz	10.5		6.8		5.9	
100 MHz	36.0		24.8		21.0	
Min. NEXT (dB)	10 MHz	100 MHz	10 MHz	100 MHz	10 MHz	100 MHz
Min. SRL (dB)	50	35	50	35	50	35
	23	16	23	16	23	16

TE Part No.	CEC-RWC-20555		CEC-RWC-20333	
Conductor AWG Size (19 Strand)	26		24	
Conductor Material:	SCCA		SCCA	
Nom. Conductor Diameter (in.):	0.0185		0.0235	
Insulation Material:	Formed FEP		Formed FEP	
Nom. Insulation OD ± 0.002 (in.):	0.037		0.042	
Nom. Cable OD (in.):	0.144		0.153	
Nom. Cable Weight (lb/1 kft):	18.7		22.2	
Shield Material:	TCC		TCC	
Jacket Material:	FEP		FEP	
Impedance ± 10% (Ω):	100		100	
Temp. Rating:	150°C		150°C	
Nom. Capacitance (pF/ft):	13.5		13.0	
Nom. Attenuation (dB/100 m):				
1 MHz	4.0		2.2	
10 MHz	10.5		6.8	
100 MHz	36.0		24.8	
Min. NEXT (dB)	10 MHz	100 MHz	10 MHz	100 MHz
Min. SRL (dB)	50	35	50	35
	23	16	23	16


**100Base-T Ethernet**

**QUADLITE Quad coaxial Cables**(Continued)

**100Base-T Ethernet Cables  
100 Ohms - 200°C**

TE Part No.	CEC-RWC-18658		CEC-RWC-18687		CEC-RWC-18665	
Conductor AWG Size (19 Strand)	26		24		22	
Conductor Material:	SCCA		SCCA		SCC	
Nom. Conductor Diameter (in.):	0.0185		0.0235		0.0295	
Insulation Material:	Formed FEP		Formed FEP		Formed FEP	
Nom. Insulation OD $\pm$ 0.002 (in.):	0.037		0.042		0.057	
Nom. Cable OD (in.):	0.144		0.153		0.194	
Nom. Cable Weight (lb/1 kft):	18.7		22.2		34.3	
Shield Material:	SCC		SCC		SCC	
Jacket Material:	FEP		FEP		FEP	
Impedance $\pm$ 10% ( $\Omega$ ):	100		100		100	
Temp. Rating:	200°C		200°C		200°C	
Nom. Capacitance (pF/ft):	13.5		13.0		12.9	
Nom. Attenuation (dB/100 m):						
1 MHz	4.0		2.2		1.6	
10 MHz	10.5		6.8		5.9	
100 MHz	36.0		24.8		21.0	
Min. NEXT (dB)	<b>10 MHz 100 MHz</b>		<b>10 MHz 100 MHz</b>		<b>10 MHz 100 MHz</b>	
	50 35		50 35		50 35	
Min. SRL (dB)	23 16		23 16		23 16	

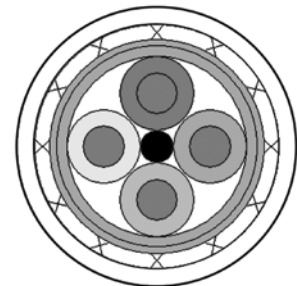
**QUADLITE Quad coaxial Cables** (Continued)

**Fibre Channel Cables**  
**150 Ohms - 150°C**

TE Part No.	CEC-RWC-18680	CEC-RWC-18681	CEC-RWC-18682
Conductor AWG Size (19 Strand)	26	24	22
Conductor Material:	SCCA	SCCA	SCC
Nom. Conductor Diameter (in.):	0.0185	0.0235	0.0295
Insulation Material:	Formed FEP	Formed FEP	Formed FEP
Nom. Insulation OD $\pm$ 0.002 (in.):	0.058	0.077	0.094
Nom. Cable OD (in.):	0.193	0.224	0.281
Nom. Cable Weight (lb/1 kft):	23.4	38.3	57.2
Shield Material:	TCC	TCC	TCC
Jacket Material:	FEP	FEP	FEP
Impedance $\pm$ 10% ( $\Omega$ ):	150	150	150
Temp. Rating:	150°C	150°C	150°C
Nom. Capacitance (pF/ft):	6.0	6.0	6.0
Nom. Attenuation (dB/100 m):			
531 MHz	13	11	9
1062 MHz	21	17	13

**150 Ohms - 200°C**

TE Part No.	CEC-RWC-18684	CEC-RWC-18685	CEC-RWC-18686
Conductor AWG Size (19 Strand)	26	24	22
Conductor Material:	SCCA	SCCA	SCC
Nom. Conductor Diameter (in.):	0.0185	0.0235	0.0295
Insulation Material:	Formed FEP	Formed FEP	Formed FEP
Nom. Insulation OD $\pm$ 0.002 (in.):	0.058	0.077	0.094
Nom. Cable OD (in.):	0.192	0.247	0.284
Nom. Cable Weight (lb/1 kft):	25.8	38.3	57.2
Shield Material:	SCC	SCC	SCC
Jacket Material:	FEP	FEP	FEP
Impedance $\pm$ 10% ( $\Omega$ ):	150	150	150
Temp. Rating:	200°C	200°C	200°C
Nom. Capacitance (pF/ft):	6.0	6.0	6.0
Nom. Attenuation (dB/100 m):			
531 MHz	13	11	9
1062 MHz	21	17	13


**Fibre Channel**

**QUADLITE Quad coaxial Cables** (Continued)

**4-Pair Cat 5E Constructions**  
**100 Ohms - 150°C/200°C**

TE Part No.	CEC-RWC-20412		CEC-RWC-21064		CEC-RWC-20638	
Conductor AWG Size (19 Strand)	24		24		26 (7 strand)	
Conductor Material:	SCHSCA		SCC		SCC	
Nom. Conductor Diameter (in.):	0.0235		0.0235		0.019	
Insulation Material:	Formed FEP		Formed FEP		Formed FEP	
Nom. Insulation OD ± 0.002 (in.):	0.046		0.046		0.036	
Nom. Cable OD (in.):	0.279		0.249		0.204	
Nom. Cable Weight (lb/1 kft):	46.2		39.5		29.8	
Shield Material:	TCC		TCC		SCC	
Jacket Material:	FEP		XL-ETFE		FEP	
Impedance ± 10% (Ω):	100		100		100	
Temp. Rating:	150°C		150°C		200°C	
Nom. Capacitance (pF/ft):	13.5		13.5		13.5	
Nom. Attenuation (dB/100 m):						
1 MHz	2.4		2.2		2.4	
100 MHz	7.5		6.8		8.8	
100 MHz	26.4		24.8		30.5	
Min. NEXT (dB)	10 MHz	100 MHz	10 MHz	100 MHz	10 MHz	100 MHz
Min. SRL (dB)	50	35	50	35	50	35
	25	19	25	19	23	16

**Cat 6 Constructions**  
**100 Ohms - 100°C/90°C**

TE Part No.	CEC-RWC-20837		CEC-RWC-21088	
Conductor AWG Size (19 Strand)	23		23	
Conductor Material:	Bare Copper		Bare Copper	
Nom. Conductor Diameter (in.):	0.021		0.021	
Insulation Material:	Foamed PE		PE	
Nom. Insulation OD ± 0.002 (in.):	0.046		0.046	
Nom. Cable OD (in.):	0.350		0.249	
Nom. Cable Weight (lb/1 kft):	52.6		39.5	
Shield Material:	TCC		TCC	
Jacket Material:	FDR-25		Raythane	
Impedance ± 10% (Ω):	100		100	
Temp. Rating:	100°C		90°C	
Nom. Capacitance (pF/ft):	13.5		13.5	
Nom. Attenuation (dB/100 m):				
1 MHz	1.8		1.8	
100 MHz	5.5		5.5	
100 MHz	18.3		18.3	
250 MHz	30.4		30.4	
Min. NEXT (dB)	10 MHz	250 MHz	10 MHz	250 MHz
Min. SRL (dB)	70	52	70	52
	36	24	36	24