Category 6 F/FTP EuroClass Dca Cables
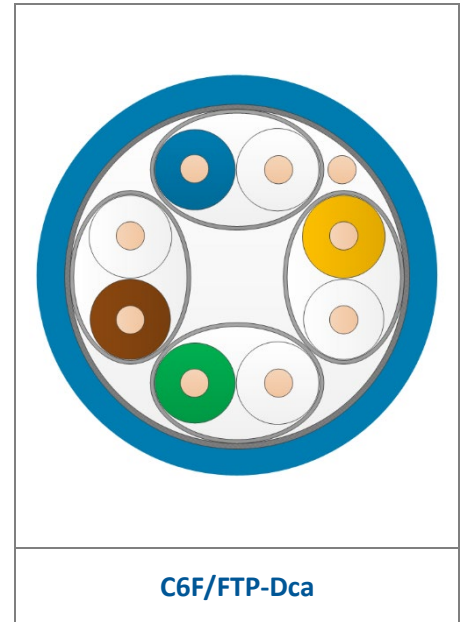
LEVITON

APPLICATION

Leviton Category 6 F/FTP cables exceed Category 6 performance standards. They are rated to 250MHz and are suitable for use in all Class E structured wiring cable systems. The applications supported include Gigabit Ethernet, Power over Ethernet, and broadband video transmissions at frequencies as high as 250MHz.

FEATURES AND BENEFITS

- 23 AWG solid annealed copper wire
- 4 twisted pairs individually screened and cabled together – providing EMI immunity
- Overall aluminum polyester screen – for improved shielding efficiency and increased heat dissipation
- Designed to support all Class E protocols including Gigabit Ethernet
- HFFR-LS* material meets the requirements of the Construction Products Regulation (CPR) EuroClass Dca
- Blue† jacket to identify EuroClass level Dca
- Included in the Leviton Limited 25-Year System Warranty when used in conjunction with Leviton copper connectivity. System warranties are available for qualified projects installed by certified contractors

* Halogen Free Flame Retardant – Low Smoke

† Also available in a range of non-standard colors

C6F/FTP-Dca

STANDARDS

- Designed and constructed to give optimum electrical performance to the following standards:
    - ISO/IEC 11801 Class E, IEC 61156-5, EN50173-1 and EN 50288-5-1
    - ANSI/TIA 568.2-D
- Recommended for PoE standards:
    - IEEE 802.3bt PoE Type 1 (15.4 Watts) formerly 802.3af and IEEE 802.3bt PoE Type 2 (30 Watts) formerly 802.3at
    - IEEE 802.3bt PoE Type 3 (60 Watts) and IEEE 802.3bt PoE Type 4 (90 Watts)
    - Cisco UPoE (60 Watts), Cisco UPoE+ (90 Watts) and Power over HDBaseT™ PoH (95 Watts)

REACTION TO FIRE

CHARACTERISTIC	STANDARD	RATING
Single Cable Flame Rating	IEC 60332-1-2	Pass
Bundled Cable Flame Rating	EN 50399 20.5kW source	Dca
Smoke Production	EN 50399	s1
Flaming Droplets/Particles	EN 50399	d2
Acid Gas Emission/Acidity	EN 50267-2-3	a1
Classification/EuroClass	EN 13501-6	Dca s1 d2 a1

Category 6 F/FTP EuroClass Dca Cables

Datasheet: GD103610v8

PRIMARY ELECTRICAL PARAMETERS

CHARACTERISTIC	SPECIFICATION	TYPICAL PERFORMANCE @ 20°C
Conductor Loop Resistance	Max 19 Ω / 100m	14Ω / 100m
Conductor Resistance Unbalance	Max 2%	0.1%
Insulation Resistance	>5GΩ.km	>50GΩ.km
Dielectric Strength	2500 Vdc/2secs	Pass

SECONDARY ELECTRICAL PARAMETERS

CHARACTERISTIC	SPECIFICATION	TYPICAL PERFORMANCE @ 20°C
Velocity of Propagation	<534nsec/100m @ 100MHz	413nsec/100m @ 100MHz
Delay Skew	Max 45nsec/100m @ 100MHz	4nsec/100m @ 100MHz
Mean Characteristic Impedance	100Ω +/- 5Ω @ 100MHz	100Ω ± 3Ω @ 100MHz
Coupling Attenuation	Type 1b	84dB
Transfer Impedance	Grade 2	11mΩ/m @ 10MHz

ELECTRICAL PERFORMANCE

Frequency (MHz)		1	4	10	20	100	200	250	500	550
Insertion Loss (dB/100m)	Standard	2.0	3.8	6.0	8.5	19.8	29.0	32.8	N/A	N/A
	Typical	*1.9*	*3.5*	*5.5*	*7.8*	*18.0*	*26.1*	*29.4*	*43.0*	*45.4*
NEXT (dB)	Standard	75.3	66.3	60.3	55.8	45.3	40.8	39.3	N/A	N/A
	Typical	*100.0*	*100.0*	*100.0*	*100.0*	*94.3*	*88.9*	*87.1*	*81.7*	*81.0*
PSNEXT (dB)	Standard	72.3	63.3	57.3	52.8	42.3	37.8	36.3	N/A	N/A
	Typical	*97.0*	*97.0*	*97.0*	*97.0*	*91.3*	*85.9*	*84.1*	*78.7*	*78.0*
ACR-F (dB)	Standard	67.8	58.0	50.0	44.0	30.0	24.0	22.0	N/A	N/A
	Typical	*90.0*	*90.0*	*90.0*	*84.8*	*70.8*	*64.8*	*62.8*	*56.8*	*56.0*
PSACR-F (dB)	Standard	64.8	55.0	47.0	41.0	27.0	21.0	19.0	N/A	N/A
	Typical	*87.0*	*87.0*	*87.0*	*81.8*	*67.8*	*61.8*	*59.8*	*53.8*	*53.0*
Return Loss (dB)	Standard	20.0	23.0	25.0	25.0	20.1	18.0	17.3	N/A	N/A
	Typical	*27.0*	*30.0*	*30.0*	*30.0*	*25.1*	*23.0*	*22.3*	*20.2*	*19.9*

- *The standard values shown are the most demanding taken from the relevant IEC, TIA and EN specifications. These standard values are the maximum permittable for Insertion loss and the minimum permittable for other parameters*

- *N/A – Not Applicable*

INSTALLATION

Temperature *(Installation)*	0°C to +50°C	Min Bend Radius *(Installation)*	8 x Outer Diameter
Temperature *(Operation)*	-20°C to +75°C	Min Bend Radius *(Operation)*	4 x Outer Diameter
Max Tensile Load *(Installation)*	10kg	Field Test NVP Value	0.80
Segregation Class	Class D		

STANDARD PACKAGING SPECIFICATIONS

Part Number	Packaging Length (m)	Color	Nominal Cable Diameter *(mm)*	Nominal Cable Weight *(kg/km)*	Reel Size *Flange Diameter x Width (mm)*	Gross Weight *(kg/Item)*	Items Per Pallet
C6F/FTP-Dca-500BU	500	Blue†	7.1	50.4	465 x 390	27.7	12
C6F/FTP-Dca-1000BU	1000	Blue†	7.1	50.4	600 x 325	56.4	6

†Also available in a range of non-standard colors

COUNTRY OF ORIGIN

COO: United Kingdom

*"Leviton is **dedicated** to **designing, developing** and **manufacturing**
sustainable **high-performance** structured cabling and specialty **cabling solutions."***

The information contained in this document is valid and correct at the time of issue. Leviton reserves the right to modify details without notice in light of subsequent standard/specification changes and ongoing technical developments.