

Category 6 F/UTP EuroClass Dca Cables

Datasheet: GD103594v4



APPLICATION

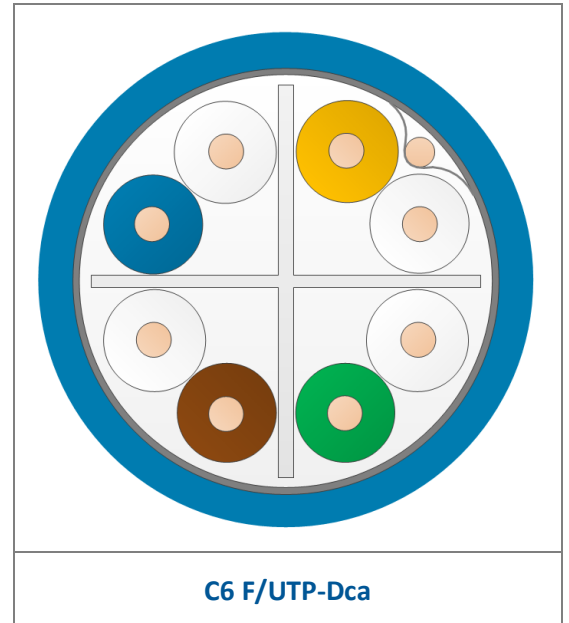
Leviton Category 6 F/UTP cables exceed Category 6 performance standards. They are specified to 250MHz and are suitable for use in all Class E structured wiring cable systems. The applications supported include Gigabit Ethernet, Power over Ethernet and broadband video transmissions at frequencies up to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

FEATURES AND BENEFITS

- 23 AWG solid annealed copper wire
- 4 unshielded twisted pairs cabled together
- Aluminium polyester screen
- Designed to support all class E protocols including Gigabit Ethernet
- HFFR-LS* material enables cable to meet 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



STANDARDS

- Designed and constructed to give optimal electrical performance to the following standards:
 - ISO/IEC 11801 Class E, IEC 61156-5
 - EN 50173-1 and EN 50288-5-1
 - ANSI/TIA 568C.2
- Recommended for PoE standards: IEEE 802.3af, 802.3at, 802.3bt, Cisco UPoE and Power over HDBaseT™ (PoH) up to 100 watts

REACTION TO FIRE

CHARACTERISTIC	STANDARD	RATING
Single Cable Flame Rating	IEC/EN 60332-1-2	Pass
Acid Gas Emission / Acidity	EN 50267-2-3	Pass
Classification	EN 13501-6	Dca s2 d2 a1

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PRIMARY ELECTRICAL PARAMETERS

CHARACTERISTIC	SPECIFICATION	TYPICAL PERFORMANCE @ 20°C
Conductor Loop Resistance	Max 19Ω/100m	15Ω/100m
Conductor Resistance Unbalance	Max 2%	0.1%
Insulation Resistance	>5GΩ.km	>490GΩ.km
Dielectric Strength	2500 Vdc/2secs	Pass

SECONDARY ELECTRICAL PARAMETERS

CHARACTERISTIC	SPECIFICATION	TYPICAL PERFORMANCE @ 20°C
Velocity of Propagation	<534nsec/100m @ 100MHz	502nsec/100m @ 100MHz
Delay Skew	Max 45nsec/100m @ 100MHz	23nsec/100m @ 100MHz
Mean Characteristic Impedance	100Ω +/- 5Ω @ 100MHz	100Ω ± 3Ω @ 100MHz
Coupling Attenuation	Type 1b	86dB
Transfer Impedance	Grade 2	80mΩ/m @ 10MHz

ELECTRICAL PERFORMANCE

Frequency (MHz)		1	4	10	20	100	200	250	500	550
Insertion Loss (dB/100m)	Standard	2.1	3.8	6.0	8.5	19.9	29.1	33.0	N/A	N/A
	<i>Typical</i>	1.9	3.5	5.5	7.8	18.0	26.1	29.4	43.0	45.4
NEXT (dB)	Standard	66.0	65.3	59.3	54.8	44.3	39.8	38.3	N/A	N/A
	<i>Typical</i>	80.0	71.0	65.0	60.5	50.0	45.5	44.0	39.5	38.9
PSNEXT (dB)	Standard	64.0	63.3	57.3	52.8	42.3	37.8	36.3	N/A	N/A
	<i>Typical</i>	80.0	71.0	65.0	60.5	50.0	45.5	44.0	39.5	38.9
ELFEXT (dB/100m)	Standard	66.0	58.0	50.0	44.0	30.0	24.0	22.0	N/A	N/A
	<i>Typical</i>	82.0	70.0	62.0	56.0	42.0	36.0	34.0	28.0	27.2
PSELFEXT (dB/100m)	Standard	64.0	55.0	47.0	41.0	27.0	21.0	19.0	N/A	N/A
	<i>Typical</i>	79.0	67.0	59.0	53.0	39.0	33.0	31.0	25.0	24.2
Return Loss (dB)	Standard	N/A	23.0	25.0	25.0	20.1	18.0	17.3	N/A	N/A
	<i>Typical</i>	27.0	30.0	30.0	30.0	25.1	23.0	22.3	20.2	19.9
ACR (dB/100m)	<i>Typical</i>	78.1	67.4	59.5	52.6	32.0	19.4	14.6	-3.5	-6.5
PSACR dB/100m)	<i>Typical</i>	78.1	67.4	59.5	52.6	32.0	19.4	14.6	-3.5	-6.5

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 per simplex cable	Field Test NVP Value	0.68
Segregation Class	Class C		

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PRINT LEGEND

Example print legend:

[Length Mark]m BRAND-REX a LEVITON company C6F/UTP-Dca Cat 6 F/UTP EN50399 EuroClass Dca s2 d2 a1 NVP 0.68 MADE IN UK [ID number] [Week/Year]

STANDARD PACKAGING SPECIFICATIONS - REELS

Part Number	Packaging Length (m)	Color	Nominal Cable Dimension (mm)	Nominal Cable Weight (kg/km)	Reel Size Flange x Width (mm)	Gross Weight (kg/Item)	Reels Per Pallet
C6F/UTP-Dca-500BU	500	Blue†	7.1	51.5	400 x 390	28.3	12
C6F/UTP-Dca-1000BU	1000	Blue†	7.1	51.5	600 x 315	57.5	6
C6F/UTP-Dca-D500BU††	500m	Blue†	7.1 x 14.4	103.1	600 x 315	58	6

STANDARD PACKAGING SPECIFICATIONS – 305m BOXES

Part Number	Color	Nominal Cable Diameter (mm)	Nominal Cable Weight (kg/km)	Box Size L x W x H (mm)	Gross Weight (kg/Item)	Items Per Pallet
C6F/UTP-Dca-Rlx-305BU†	Blue†	7.1	51.5	475 x 295 x 475	16.7	12

† Also available in a range of non-standard colors

†† Duplex Cable

*“Leviton is **dedicated to designing, developing and manufacturing** sustainable **high performance** structured cabling and speciality **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.