

FDT Cat 6A F/UTP Euroclass B2ca Cables

APPLICATION

Leviton reduced diameter FDT Cat 6A F/UTP Cables exceed Cat 6A performance standards. They are rated to 500 MHz and are suitable for use in all Class E_A structured cabling systems. FDT cables support 10 Gigabit Ethernet, Gigabit Ethernet, Power over Ethernet (PoE), voice, and broadband video transmissions at frequencies up to 500 MHz.



COUNTRY OF ORIGIN

UK

WARRANTY INFORMATION

For Leviton product warranties, go to [Leviton.com/ns/warranty](https://www.leviton.com/ns/warranty)

FEATURES & BENEFITS

- Reduced diameter (6.2 mm) shielded cable
- 23 AWG solid annealed copper wire
- 4 unshielded twisted pairs cabled together
- F/UTP construction delivers superior heat management and noise-cancelling performance
- HFFR-LS (Halogen Free Flame Retardant – Low Smoke) jacket enables the cable to meet the requirements of the Construction Products Regulation (CPR) Euroclass B2ca
- CE marked for CPR
- Characterized to 550 MHz
- Exceeds PoE standards
- Guaranteed system margins when deployed with Leviton ATLAS-X1™ connectivity
- Designed and manufactured in Leviton's carbon neutral UK facility
- Living Building Challenge Red List free
- Available in REELEX boxes with TekLok™, enabling faster and easier cable pulling during installation
- Packaging is 100% recyclable
- Elimination of cable cross-filler increases speed of installation and reduces jobsite waste for a more sustainable future

STANDARDS & REGULATIONS

- ISO/IEC 11801 Class E_A and IEC 61156-5
- EN50173-1 and EN 50288-10-1
- ANSI/TIA 568.2-D
- IEEE 802.3bt PoE Type 1, 2, 3, 4 (90 watts max)
- Exceeds IEEE 802.3bt standard up to 0.5 amps per conductor (100 watts) continuously
- Cisco UPOE, UPOE+ (90 watts max)
- Power over HDBaseT™ PoH (95 watts max)

PRODUCT SPECIFICATIONS
FDT Cat 6A F/UTP Euroclass B2ca Cables

CHARACTERISTICS

Installation Characteristics	
Min Bend Radius (Installation)	8 x Outer Diameter
Min Bend Radius (Operation)	4 x Outer Diameter
Field Test NVP Value	0.67
Temp. (Storage)	-20 °C to +60 °C
Temp. (Installation)	0 °C to +50 °C
Temp. (Operating)	-20 °C to +60 °C
Segregation Class	Class C
Max. tensile load (Installation)	10 kg

REACTION TO FIRE

Characteristic	IEC Standard	EN Standard	CPR Rating
Classification / Euroclass	—	EN 13501-6	B2ca
Single Cable Flame Rating	IEC 60332-1-2	EN 60332-1-2	—

TECHNICAL SPECIFICATIONS

Primary Electrical Properties (20 °C)

CHARACTERISTIC	SPECIFICATION	TYPICAL PERFORMANCE
Conductor Loop Resistance	Max 19 Ω/100 m	14.5 Ω/100 m
Conductor Resistance Unbalance	Max 2%	0.1%
Insulation Resistance	>5GΩ.km	>50GΩ.km
Dielectric Strength	2500 Vdc/2secs	Pass

TECHNICAL SPECIFICATIONS

Secondary Electrical Properties (20 °C)

CHARACTERISTIC	SPECIFICATION	TYPICAL PERFORMANCE
Velocity of Propagation	<538nsec/100m @ 100 MHz	510nsec/100m @ 100 MHz
Delay Skew	Max 45nsec/100m @100 MHz	20nsec/100m @ 100 MHz
Characteristic Impedance (Fitted)	100Ω +/- 5Ω @ 100 MHz	100Ω ± 3Ω @ 100 MHz

PRODUCT PERFORMANCE TRANSMISSION CHARACTERISTICS

Freq. MHz	RL (dB)		NEXT (dB)		PSNEXT (dB)		IL (dB)	
	Standard	Typical	Standard	Typical	Standard	Typical	Standard	Typical
1	20.0	33.9	75.3	99.6	72.3	93.2	2.1	2.0
4	23.0	35.6	66.3	87.0	63.3	80.9	3.8	3.6
10	25.0	39.4	60.3	78.8	57.3	73.2	5.9	5.7
20	25.0	38.8	55.8	73.6	52.8	67.6	8.4	8.0
100	20.1	35.8	45.3	64.7	42.3	58.5	19.1	18.1
200	18.0	36.4	40.8	61.1	37.8	54.8	27.6	25.9
250	17.3	35.1	39.3	57.0	36.3	51.3	31.1	29.1
500	17.3	33.4	34.8	51.5	31.8	45.6	45.3	41.3
550	N/A	31.8	N/A	51.3	N/A	45.0	N/A	43.4

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PRODUCT PERFORMANCE TRANSMISSION CHARACTERISTICS, CONTINUED

Freq.	ACRF (dB)		PSACRF (dB)		PSANEXT (dB)		PSAACRF (dB)	
	Standard	Typical	Standard	Typical	Standard	Typical	Standard	Typical
MHz								
1	68.0	102.3	65.0	95.5	67.0	107.7	67.0	105.8
4	56.0	90.0	53.0	82.1	67.0	114.1	66.2	110.9
10	48.0	82.2	45.0	74.3	67.0	116.1	58.2	111.3
20	42.0	74.6	39.0	67.8	67.0	118.3	52.2	111.2
100	28.0	57.2	25.0	51.7	62.5	116.5	38.2	98.4
200	22.0	50.7	19.0	44.6	58.0	107.7	32.2	84.6
250	20.0	48.8	17.0	42.3	56.5	110.3	30.2	82.5
500	14.0	42.5	11.0	36.2	52.0	111.0	24.2	69.9
550	N/A	31.8	N/A	35.4	N/A	88.8	N/A	75.9

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

STANDARD PACKAGING SPECIFICATIONS - REELS

Part Number	Packaging Length (m)	Color	Nominal Cable Diameter (mm)	Nominal Cable Weight (kg/km)	Reel Size Flange Dia. x Width (mm)	Gross Weight (kg/Item)	Items Per Pallet
FDT-B2ca-500OR	500	Orange †	6.2	47.9	395 x 300	26	18

† Also available in a range of non-standard colors

STANDARD PACKAGING SPECIFICATIONS - BOXES

Part Number	Packaging Length (m)	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
FDT-B2ca-B305OR	305	Orange †	6.2	47.9	445 x 295 x 430	15.4	12

† Also available in a range of non-standard colors

For further support information, visit Leviton.com/ns/support

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