Category 6A U/FTP Zone EuroClass Dca Cables
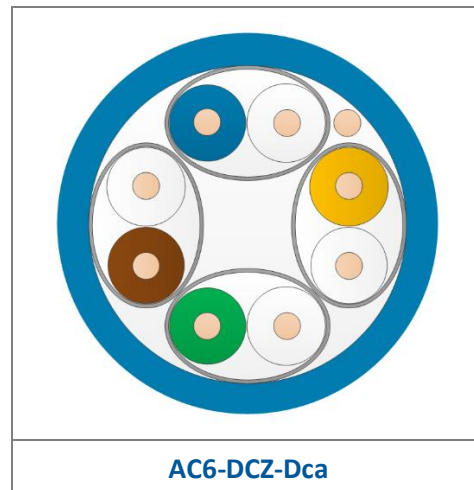
Datasheet: GD103582v11

APPLICATION

Leviton Zone cables exceed the Category 6A performance standards in a channel of up to 70m in length. They are specified to 500MHz and are suitable for use in all Class E_A structured wiring cable systems. Zone cables have been designed specifically for the challenges in the data center environment by being smaller and lighter than equivalent conventional cables. Zone cables support 10 Gigabit Ethernet, Gigabit Ethernet, Power over Ethernet, voice, and broadband video transmissions at frequencies up to 500MHz.

FEATURES AND BENEFITS

- 26 AWG solid annealed copper wire
- 4 twisted pairs individually screened and cabled together – providing EMI immunity
- HFFR-LS[*] jacket material to suit a variety of installation environments, including CPR fire performance ratings Eca, Dca, Cca and B2ca and color coded for identification
- 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
- Designed and manufactured in a carbon neutral facility in the UK
- Delivered in 100% recyclable packaging

* Halogen Free Flame Retardant – Low Smoke

AC6-DCZ-Dca

STANDARDS

- Designed and constructed to give optimum electrical performance to the following standards:
    - ISO/IEC 11801 Class E_A, IEC 61156-6
    - EN50173-1 and EN 50288-10-2
- Supports 10GBASE-T
- Meets design requirements for 802.11ac wireless
- Recommended for PoE standards:
    - IEEE 802.3bt PoE Type 1 (15.4 Watts) formerly 802.3af
    - IEEE 802.3bt PoE Type 2 (30 Watts) formerly 802.3at
    - IEEE 802.3bt PoE Type 3 (60 Watts)
    - IEEE 802.3bt PoE Type 4 (90 Watts)
    - Cisco UPoE (60 Watts)
    - Cisco UPoE+ (90 Watts)
    - Power over HDBaseT™ PoH (95 Watts)

REACTION TO FIRE

CHARACTERISTIC	IEC STANDARD	EN STANDARD	CPR RATING
Classification / EuroClass	-	EN 13501-6	Dca s2 d1 a1
Single Cable Flame Rating	IEC 60332-1-2	EN 60332-1-2	Pass
Smoke Emission	-	EN 50399	s2
Acid Gas Emission	IEC 60754	EN 60754	Pass

Category 6A U/FTP Zone EuroClass Dca Cables

PRIMARY ELECTRICAL PARAMETERS

CHARACTERISTIC	SPECIFICATION	TYPICAL PERFORMANCE @ 20°C
Conductor Loop Resistance	Max 28.5 Ω/100m	23Ω/100m (<17Ω/70m)
Conductor Resistance Unbalance	Max 2%	0.2%
Insulation Resistance	>5GΩ.km	>50GΩ.km
Dielectric Strength	2500 Vdc/2secs	Pass

SECONDARY ELECTRICAL PARAMETERS

CHARACTERISTIC	SPECIFICATION	TYPICAL PERFORMANCE @ 20°C
Velocity of Propagation	<537.6nsec/100m @ 100MHz	413nsec/100m @ 100MHz
Delay Skew	Max 45nsec/100m @ 100MHz	3nsec/100m @ 100MHz
Mean Characteristic Impedance	100Ω +/- 5Ω @ 100MHz	100Ω ± 3Ω @ 100MHz
Coupling Attenuation	Type 1b	77dB
Transfer Impedance	Grade 2	15mΩ/m @ 10MHz

ELECTRICAL PERFORMANCE

Frequency (MHz)		1	4	10	20	100	200	250	500	550
Insertion Loss (dB/100m)	Standard (Max)	3.1	5.7	8.9	12.6	28.7	41.4	46.6	67.9	N/A
	Typical	2.4	4.4	6.8	9.7	22.0	31.7	35.7	52.0	54.8
NEXT (dB)	Standard (Min)	N/A	66.3	60.3	55.8	45.3	40.8	39.3	34.8	N/A
	Typical	100.0	100.0	100.0	100.0	94.3	88.9	87.1	81.7	81.0
PSNEXT (dB)	Standard (Min)	N/A	63.3	57.3	52.8	42.3	37.8	36.3	31.8	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 (Min)	N/A	56.0	48.0	42.0	28.0	22.0	20.0	14.0	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 (Min)	N/A	53.0	45.0	39.0	25.0	19.0	17.0	11.0	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 (Min)	20.0	23.0	25.0	25.0	20.1	18.0	17.3	17.3	N/A
	Typical	27.0	30.0	30.0	30.0	25.1	23.0	22.3	20.2	19.9
PSANEXT (dB)	Standard (Min)	67.0	67.0	67.0	67.0	62.5	58.0	56.5	52.0	N/A
	Typical	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
PSAACR-F (dB)	Standard (Min)	67.0	66.2	58.2	52.2	38.2	32.2	30.2	24.2	N/A
	Typical	98.1	96.5	94.5	92.2	82.0	73.9	70.6	57.0	54.6

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 C		

NB: Network designers should use an attenuation factor of 1.3 when designing with these cables

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
AC6-DCZ-Dca-500BU	500	Blue†	5.6	32.6	400 x 315	18.3	18
AC6-DCZ-Dca-1000BU	1000	Blue†	5.6	32.6	465 x 390	35.6	6

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
AC6-DCZ-Dca-Rlx-305BU§	305	Blue†	5.6	32.6	405 x 265 x 405	10.0	27 or 18††

§ = 305m box
† Also available in a range of non-standard colors
†† 3 Layer pallet is 27 boxes, 2 layers is 18

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.