

Category 6_A Zone EuroClass D_{ca} Cables

Datasheet: GD103582v4

Brand-Rex a **LEVITON** company

APPLICATION

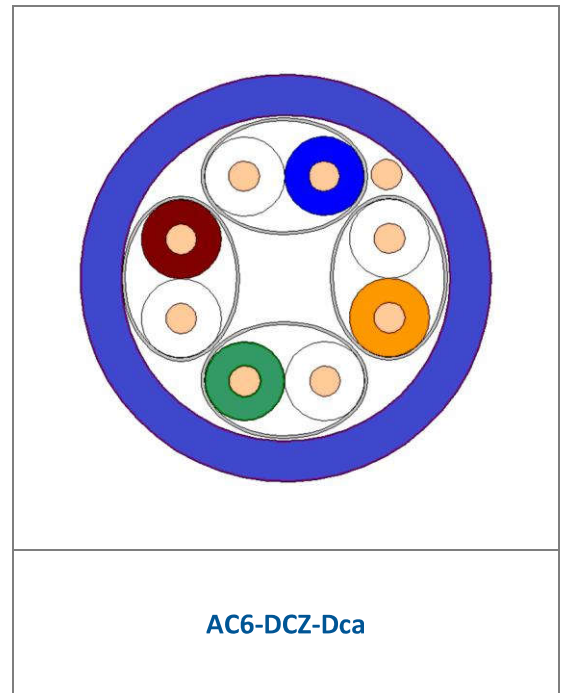
Brand-Rex 10GPlus Zone cables exceed the Category 6_A performance standards in a channel of up to 70m in length. They are specified to 500MHz and are suitable for use in all Class E_A structured wiring cable systems. Zone cables have been designed specifically for the challenges in the data centre environment. They are smaller and lighter than equivalent conventional cables. The 10GPlus Zone cable supports 10 Gigabit Ethernet, Gigabit Ethernet, PoE, 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
- Designed to support all Class E_A protocols including 10GBASE-T
- Supports Power Over Ethernet (PoE) and Power Over Ethernet Plus (PoE+) applications
- HFFR-LS* sheath enables cable to meet the requirements of the Construction Products Regulation (CPR) EuroClass D_{ca}
- Blue† coloured jacket to identify EuroClass D_{ca}
- Included in the Leviton and Brand-Rex 25 Year System Warranties when used in conjunction with Leviton or Brand-Rex copper connectivity. System warranties available for qualified projects installed by certified contractors.

* Halogen Free Flame Retardant – Low Smoke

† Also available in a range of non-standard colours



STANDARDS

Applicable Cable Standards: IEC 61156-6 and EN50288-10-2

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	D _{ca} s2 d1 a1

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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	<534nsec/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	3.1	5.7	8.9	12.6	28.7	41.4	46.6	67.9	na
	<i>Typical</i>	2.4	4.4	6.8	9.7	22.0	31.7	35.7	52.0	54.8
NEXT (dB)	Standard	na	66.3	60.3	55.8	45.3	40.8	39.3	34.8	na
	<i>Typical</i>	100.0	100.0	100.0	100.0	94.3	88.9	87.1	81.7	81.0
PSNEXT (dB)	Standard	na	63.3	57.3	52.8	42.3	37.8	36.3	31.8	na
	<i>Typical</i>	97.0	97.0	97.0	97.0	91.3	85.9	84.1	78.7	78.0
ELFEXT (dB/100m)	Standard	na	56.0	48.0	42.0	28.0	22.0	20.0	14.0	na
	<i>Typical</i>	90.0	90.0	90.0	84.8	70.8	64.8	62.8	56.8	56.0
PSELFEXT (dB/100m)	Standard	na	53.0	45.0	39.0	25.0	19.0	17.0	11.0	na
	<i>Typical</i>	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	17.3	na
	<i>Typical</i>	27.0	30.0	30.0	30.0	25.1	23.0	22.3	20.2	19.9
PSANEXT (dB)	Standard	67.0	67.0	67.0	67.0	62.5	58.0	56.5	52.0	na
	<i>Typical</i>	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
PSAACR-F (dB)	Standard	67.0	66.2	58.2	52.2	38.2	32.2	30.2	24.2	na
	<i>Typical</i>	98.1	96.5	94.5	92.2	82.0	73.9	70.6	57.0	54.6

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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	0.80
Segregation Class	Class C		

NB: Network designers should use an attenuation factor of 1.5 when designing with these cables

PRINT LEGEND

Example print legend:

[Length Mark]m BRAND-REX a LEVITON company AC6-DCZ-Dca ZONE CABLE Cat 6A U/FTP EN 50399 EuroClass Dca s2 d1 a1
NVP 0.80 MADE IN UK [ID number] [Week/Year]

STANDARD PACKAGING SPECIFICATIONS - REELS

Brand-Rex Part Number	Packaging Length (m)	Colour	Nominal Cable Diameter (mm)	Nominal Cable Weight (kg/km)	Reel Size Flange 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

Brand-Rex Part Number	Packaging Length (m)	Colour	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-RIx-305BU	305	Blue†	5.6	32.6	405 x 265 x 405	10.0	27 or 18

†Also available in a range of non-standard colours

“Brand-Rex 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. Brand-Rex a Leviton Company reserves the right to modify details without notice in light of subsequent standard/specification changes and ongoing technical developments.