

STANDARDS

ANSI/TIA-568-C.2
IEC 61156-5
EN 50288-5-1
EN 50173
ISO/IEC 11801
EN 50575
EN 50399
EN 13501-6

APPLICATIONS

10BASE-T (IEEE 802.3)
4/16 Mbps TOKEN RING (IEEE 802.5)
100BASE-VG-AnyLAN
100 Mbps TP-PMD (ANSI X3T9.5)
100BASE-T (IEEE 802.3)
55/155 Mbps ATM
1000BASE-T (Gigabit Ethernet)
1.2 Gbps ATM
10G BASE-T (Length<50m)

REACTION TO FIRE

Class: D_{ca}-s2,d2,a1
E_{ca}
(according to EN 13501-6)

CERTIFICATION



COLOUR CODES

Pairs	Colours Combinations
1	Light Blue / Blue
2	White / Orange
3	Light Green / Green
4	Light Brown / Brown

Outer sheath colour (D_{ca}): White [BL]
(E_{ca}): Grey [GR]

PART NUMBER / PACKAGING

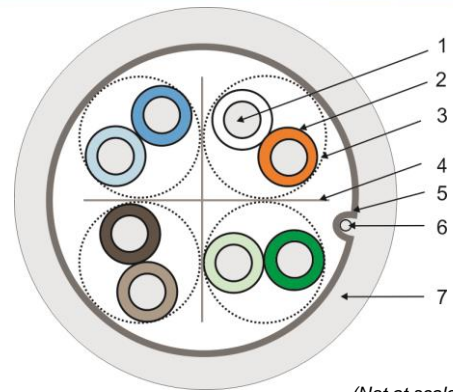
D_{ca}: 582D041BLP / Reels 500m
D_{ca}: 582D042BLP / Reels 1000m
E_{ca}: 582E041GRP / Reels 500m
E_{ca}: 582E042GRP / Reels 1000m

OTHER CHARACTERISTICS

Storage Temperature -20°C to 70°C
Operating Temperature -20°C to 70°C

Laying Temperature -5°C to +50°C
(recommendation: between -5°C and +5°C,
prior storage 24h at 20°C)

Edition: March 2017



(Not at scale)

CONSTRUCTION

- 1 – Conductor: 23 AWG, Solid Bare Annealed Copper.
- 2 – Insulation: Polyolefin.
- 3 – Varying short pair lay-length (4 pairs).
- 4 – Cross Filler.
- 5 – Aluminium/Polyester foil.
- 6 – Tinned copper drain wire.
- 7 – Sheath: LSZH material (for Euroclass D_{ca} cable).
- 7 – Sheath: PVC material (for Euroclass E_{ca} cable).

ELECTRICAL AND MECHANICAL CHARACTERISTICS

Max. dc Resistance (Ω/km) @20°C:	95.0
Nom. Mutual Capacity (nF/km)@1kHz:	56
NVP (% of light speed):	72
Mean input Impedance (Ω):	100 ± 5 @ 100MHz
Propagation delay (ns@10MHz):	max. 518
Delay Skew (ns/100m):	max. 40
Coupling Att dB (min.):	@30-100MHz 55 @100-1000MHz 55-20log(f/100)
Max. pulling tension (N):	80

	Approx. outer diameter (mm)	Approx. weight (kg/km)	Min. bending radius (mm)
Euroclass D _{ca}	7.3	49.2	29
Euroclass E _{ca}	7.1	46.8	28

TRANSMISSION CHARACTERISTICS

Freq (MHz)	ATTN (dB/100m (max.))	NEXT (dB (min.))	PS-NEXT (dB (min.))	ELFEXT (ACR-F) (dB/100m (min.))		PS-ELFEXT (PSACR-F) (dB/100m (min.))	ACR (dB/100m (min.))	PS-ACR (dB/100m (min.))	RL (dB/100m (min.))
				ELFEXT (dB/100m (min.))	PS-ELFEXT (dB/100m (min.))				
1*	2.1	75.3	72.3	68.0	65.0	73.2	70.2	20.0	
4	3.8	66.3	63.3	58.0	55.0	62.5	59.5	23.0	
8	5.2	61.8	58.8	51.9	48.9	56.5	53.5	24.5	
10	5.9	60.3	57.3	50.0	47.0	54.4	51.4	25.0	
16	7.4	57.2	54.2	45.9	42.9	49.9	46.9	25.0	
25	9.2	54.3	51.3	42.0	39.0	45.0	42.0	24.3	
31.25	10.3	52.9	49.9	40.1	37.1	42.6	39.6	23.6	
62.5	14.5	48.4	45.4	34.1	31.1	33.8	30.8	21.5	
100	18.4	45.3	42.3	30.0	27.0	26.9	23.9	20.1	
155	22.9	42.4	39.4	26.2	23.2	19.5	16.5	18.8	
200	26.1	40.8	37.8	24.0	21.0	14.7	11.7	18.0	
250	29.2	39.3	36.3	22.0	19.0	10.1	7.1	17.3	
300*	32.0	38.1	35.1	20.5	17.5	6.1	3.1	17.3	
350*	34.7	37.1	34.1	19.1	16.1	2.5	1.0	17.3	

* For information only.

Note: DATA cables are not suitable for low impedance applications as: heating, lighting, etc...

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