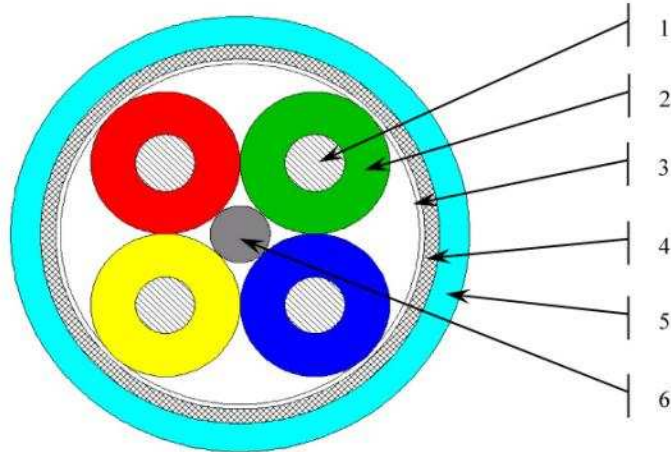


1 - CONSTRUCTION

Item	Designation	Component details	Characteristics
1	Conductor	Silver Coated Copper AWG 24 (19 strands)	Nominal \varnothing 0.62 mm (0.0245 inch)
2	Insulation	Extruded Fluoropolymer	$1.44 \leq \varnothing \leq 1.54$ (0.057 $\leq \varnothing \leq$ 0.061 inch)
3	Protection tape	Synthetic	
4	Braid	Round Silver Coated Copper	Coverage 80%
5	Jacket	Extruded Fluoropolymer	Maximal \varnothing : 5 mm (Max. \varnothing : 0.197 inch) Nominal \varnothing : 4.45 mm (Nom. \varnothing : 0.175 inch)
6	Filler	Fluoropolymer	

COLOUR CODE AND MARKING

- Insulation : - Pair n°1 : Core 1-R : Red (Tx +) - Pair n°2 : Core 2-Y : Yellow (Rx +)
 Core 1-B : Blue (Tx -) Core 2-G : Green (Rx -)

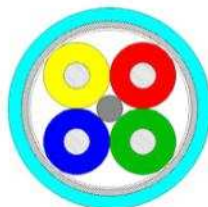
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Draka Fileca SAS D 1001 60730 Sainte-Geneviève France Tel : +33 (0)3 44 08 21 21 Fax : +33 (0)3 44 08 98 86	D	20/10/11	PIG	New lay out
	C	20/01/11	CBO	New lay out
	B	14/04/05	CEA	Add of ABS reference
	A	20/08/03	CEA	First Issue
Approval : EBA	Date	Author		Modifications

- Jacket : Colour : light blue UV laser markable

- Marking : « KB24 FR A xx yy KB24 FR A xx »

xx = Year code
yy = extremity code
(A-B ou B-A)



View extremity "A"



View extremity "B"

2 – PHYSICAL AND ENVIRONMENTAL CHARACTERISTICS:

- Operating temperatures: - 65°C to + 125°C
- Storage temperatures: -65°C to +200°C
- Mass: 45 kg/km max (3.45 Lb/100 ft max)
- Flame propagation: Following FAR 25.869 and EN3475-407
- Smoke density & toxicity: Following ABD 031C (test time 4 mn)
- Fluid resistance: Following EN 3475 § 411
- Laser markability: ≥ 50 % (following EN 3838, EN 3475-705 and EN 3475-706)

3 – ELECTRICAL CHARACTERISTICS AT 20°C:

- Maximal Voltage: 600 V AC
- Dielectric withstand: Between conductor and between conductor/shield :
 - DC = 1 kV 1mn
 - AC = 0,7 kV 1mn
- Maximal loop resistance: 192 Ω/km (58.5 Ω/1000 ft)
- Insulation Resistance: ≥ 1500 MΩ.km (about 5000 MΩ. 1000 ft)

Transmission parameters:

- Characteristic Impedance: Z_c RMS : 100 ± 15 Ω [1-100 MHz] at 20°C
- Velocity of propagation: > 70 at 31.25 MHz
- Capacitance: 60 pF/m Max. (18.3 pF/ft Max.) at 1 kHz

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Frequency In MHz	Attenuation at 20°C Maximal value in dB/100m (dB/100 ft)	Near End crosstalk (NEXT) Minimal value in dB
1	2.1 (0.64)	68
4	4.3 (1.31)	59
10	6.6 (2.01)	53
16	8.7 (2.65)	50
20	9.7 (2.96)	48
31.25	12.5 (3.8)	46
62.5	18.0 (5.5)	41
100	25.0 (7.6)	38

- SRL (Min.) :
1 < F < 20 Mhz = 23 dB
20 < F < 100 Mhz = 23 – 10 log(F/20)

- Transfer Impedance (Max.) :
0.01Mhz to 5 Mhz = 2,0 10⁻² Ω/m (0.61 Ω/100ft)
at 10 Mhz = 3,0 10⁻² Ω/m (0.92 Ω/100ft)
at 20 Mhz = 4,5 10⁻² Ω/m (1.37 Ω/100ft)
at 50 Mhz = 10 10⁻² Ω/m (3.05 Ω/100ft)
at 100 Mhz = 40 10⁻² Ω/m (12.2 Ω/100ft)

4 – MECHANICAL CHARACTERISTICS:

Minimum bend radius: Dynamic: 47 mm
Static (installed): 24 mm
Jacket abrasion resistance: Following EN 3475 § 503
Tensile strength of the cable : ≥ 500N

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