

# ACOLAN® 450 UU - Dca

Horizontal Cable 2,5Gb CAT.6 U/UTP  
4P, LSOH-FR, 450MHz



## Applications

- **2,5 Gigabit high speed data transmission** cables are designed for backbone distribution local computer networks.
- These cables are permitted the protocol supported by the **class E**.
- They are characterized of up to **450 MHz**.
- They are compatibles with **PoE & PoE+, UPoE** applications.

## Standards / Directive

### Applications

IEEE 802.3: 10Base-T; 100Base-T-X; 1000Base-T ; 2,5G Base-T  
IEEE 802.5 / FDDI / ATM / RNIS

### Cables

IEC 61156-5 ed.2 / EN 50288-6-1

### Cabling system standard

ISO 11801 2<sup>nd</sup> ed. / EN 50173-1 / TIA-568-C2

### Cabling system installation standards

EN 50174

### Directive / Regulation

RoHS 2011/65/UE  
REACH 1907/2006/EC

### FIRE EUROCLASS

B<sub>2CA</sub>

C<sub>CA</sub>

D<sub>CA</sub>

E<sub>CA</sub>

F<sub>CA</sub>

Dca-s2,d2,a2

## Additional information and references

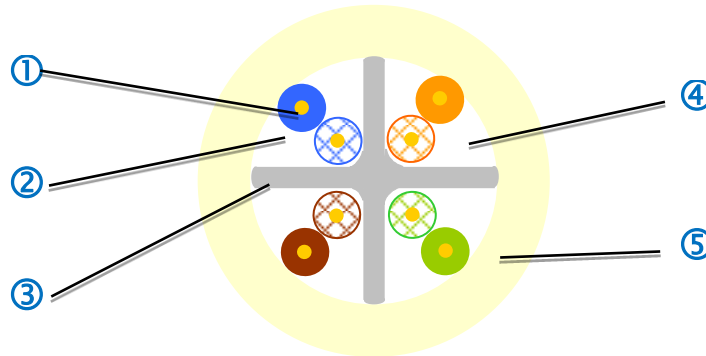
Designation ACOLAN®	Ref.	Colour	Diameter	Weight	Superior calorific capacity (PCS)		Max. pulling tension
			mm	Kg/km	MJ/km	KWh/m	N
450 UU 4P LSOH-FR	M5001A-S	Ivory (RAL 9001)	5.85	38	401	0.111	98

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## Description



- |                           |  |
|---------------------------|--|
| 1- <b>Conductor</b>       | Solid annealed red copper wire, AWG 23<br>Colored polyethylene insulation $\varnothing \leq 0.98$ mm |
| 2- <b>Cable element</b>   | Cable assembly in Twisted Pairs  |
| 3- <b>Cross separator</b> | Symetrical cross separator   |
| 4- <b>Stranding</b>       | 4 pairs assembly   |
| 5- <b>External sheath</b> | LSOH-FR : Low Smoke « Zero » Halogen - Flame Retardant   |

## Fire behaviour

### Europe

Type	Euroclass	Standards	Declaration of performance	
4P	Dca-s2,d2,a2	IEC 60332-1, EN 50399, IEC 60754-2	16UUTP004	 <a href="http://www.acome.fr">www.acome.fr</a>

### Outside Europe

No flame propagation	IEC 60332-1 / EN 60332-1
Low smoke opacity	IEC 61034-2 / EN 61034-2
Low gas corrosivity	IEC 60754-2 / EN 50267-2-2 / EN 50267-2-3
Low toxicity	IEC 60754-1 / EN 50267-1

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## Mechanical characteristics

Characteristics		Values
Bending radius	Dynamic (installation)	≥ 50 mm
	Static (installed)	≥ 25 mm
Temperature range	In service	- 20°C at + 60°C
	At the installation	0°C at + 50°C
	Transport and storage	0°C at + 50°C

## Electrical characteristics at 20° C

Characteristics		Values	
Complete conductor resistance		≤ 190 Ω / km	
Resistance unbalance		≤ 2 %	
Dielectric strength	Continuous current	1kV during 1 minute = No breakdown	
Insulation resistance	(500 V)	≥ 5000 MΩ . km	
Capacitance unbalance	Réel-terre	≤ 1600 pF / km	
Characteristic impedance	at 100 MHz	100 ± 5 Ω	
Velocity	nominal	66 %	
Coupling attenuation		≥ 40 dB	<b>TYPE 3</b>
Segregation classification acc.to En 50174.2		"b"	

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## Transmission characteristics at 20° C

Frequency (MHz)		4	10	20	62.5	100	250	300**	450**
Attenuation (dB/100m)	Typical value	3.6	5.7	8.3	14.8	19	31	34	43
	Imposition (max)*	3.8	6	8.5	15.5	19.9	33	-	-
Next (dB)	Typical value	71	65	61	53	50	44	43	40
	Imposition (min)*	65.3	59.3	54.8	47.4	44.3	38.3	-	-
ACR (dB)	Typical value	67.4	59.3	52.7	38.2	31	13	9	-
	Imposition (min)*	61.5	53.3	46.3	31.9	24.4	5.3	-	-
PS Next (dB)	Typical value	68	62	58	50	47	41	40	37
	Imposition (min)*	63.3	57.3	52.8	45.4	42.3	36.3	-	-
ELFEXT (dB/100 m)	Typical value	73	65	59	49	45	37	35	32
	Imposition (min)*	58	50	44	34.1	30	22	-	-
PS ELFEXT (dB/100 m)	Typical value	70	62	56	46	42	34	32	29
	Imposition (min)*	55	47	41	31.1	27	19	-	-
Return Loss (dB)	Typical value	27	27	27	25.8	25	22	22	21
	Imposition (min)*	23	25	25	21.5	20.1	17.3	-	-

\* Category 6 according IEC 61 156-5 2<sup>nd</sup> ed.

\*\* For information only

## Delivery length

References	Individual			Expedition		
	Type	Weight	EAN code	Quantity	Weight	EAN code
M5001A - SB305	Acopack of 305 m	12.4 kg	3700223681280	24 boxes	316 kg	3700223681297
M5001A - ST1000	Drum of 1000 m	40 kg	3700223681303	12 drums	500 kg	3700223681310