

# ACOLAN® 200 FU - Eca

Horizontal Cable CAT.5<sub>e</sub> F/UTP  
4P, LSOH-FR, 200MHz



## Applications

- **High speed data transmission** cables are designed for horizontal cable distribution local computer networks.
- These cables are permitted the protocol supported by the **class D**
- They are characterized of up to **200 MHz**.
- They are compatibles with **PoE & PoE+, UPoE** applications.

## Standards / Directive

### Applications

IEEE 802.3: 10Base-T; 100Base-TX; 1000Base-T ;  
IEEE 802.5 / FDDI / ATM / RNIS

### Cables

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

### Cabling system standard

ISO/IEC 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>2</sub><sub>CA</sub>

C<sub>CA</sub>

D<sub>CA</sub>

E<sub>CA</sub>

F<sub>CA</sub>

Eca

## Additional information and references

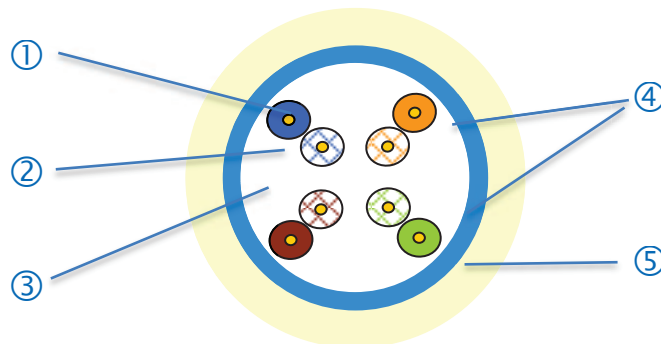
Designation ACOLAN®	Ref.	Colour	Diameter	Weight	Superior calorific capacity (PCS)		Max. pulling tension
			mm	Kg/km	MJ/km	KWh/m	N
200 FU 4P LSOH-FR	M4969A-S	Ivory (RAL 9001)	5.80	36	422	0,117	80

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## Description



- |                           |   |
|---------------------------|---|
| 1- <b>Conductor</b>       | Solid annealed red copper wire, AWG 24<br>Colored polyethylene insulation $\varnothing < 1.00$ mm |
| 2- <b>Cable element</b>   | Cable assembly in Twisted Pairs   |
| 3- <b>Stranding</b>       | 4 pairs assembly  |
| 4- <b>Screen</b>          | Pet/Alu foil and tinned drain wire AWG26  |
| 5- <b>External sheath</b> | LSOH-FR : Low Smoke « Zero » Halogen - Flame Retardant  |

## Fire behaviour

### Europe

Type	Euroclass	Standards	Declaration of performance	
4P	Eca	IEC 60332-1	16FUTP001	 <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	Real-ground	≤ 1200 pF / km	
Characteristic impedance	at 100 MHz	100 ± 5 Ω	
Velocity	nominal	78 %	
Coupling attenuation		≥ 80 dB	<b>TYPE 2</b>
Transfert impedance	at 1 MHz	≤ 50 mΩ / m	<b>GRADE 2</b>
	at 10 MHz	≤ 50 mΩ / m	
	at 30 MHz	≤ 100 mΩ / m	
	at 100 MHz	≤ 200 mΩ / m	
Segregation classification acc.to En 50174.2		"c"	

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## Transmission characteristics at 20° C

Frequency (MHz)		4	10	20	62.5	100	155**	200**
Attenuation (dB/100m)	Typical value	3.8	6	8.5	15.2	19.5	25	28
	Imposition (max)*	4.1	6.5	9.3	17	22	-	-
Next (dB)	Typical value	63	57	52	45	42	39	37
	Imposition (min)*	56.3	50.3	45.8	38.4	35.3	-	-
ACR (dB)	Typical value	59.2	51	43.5	29.8	22.5	14	9
	Imposition (min)*	52.2	43.8	36.5	21.4	13.3	-	-
PS Next (dB)	Typical value	60	54	49	42	39	36	34
	Imposition (min)*	53.3	47.3	42.8	35.4	32.3	-	-
ELFEXT (dB/100 m)	Typical value	63	55	48	39	35	31	29
	Imposition (min)*	52	44	38	28	24	-	-
PS ELFEXT (dB/100 m)	Typical value	60	52	45	36	32	28	26
	Imposition (min)*	49	41	35	25	21	-	-
Return Loss (dB)	Typical value	25	25	25	23.8	23	22	21
	Imposition (min)*	23	25	25	21.5	20.1	-	-

\* Category 5e according IEC 61156-5 2<sup>nd</sup> ed.

\*\* For information only

## Delivery length

References	Individual			Expedition		
	Type	Weight	EAN code	Quantity	Weight	EAN code
M4969A – SC100	Coil of 100 m	3.70 kg	3700223681372	60 coils	240 kg	3700223681389
M4969A – SB305	Acopack of 305 m	11.7 kg	3700223681396	24 boxes	302 kg	3700223681402
M4969A – ST500	Drum of 500 m	20 kg	3700223681419	18 drums	382 kg	3700223681426
M4969A – ST1000	Drum of 1000 m	38 kg	3700223681433	12 drums	476 kg	3700223681440