

ACOLAN[®] 450 FU - Dca

Horizontal Ethernet Cable 2,5Gb CAT6 F/UTP
4P - 2x4P, LSOH-FR, 450MHz



- Small diameter to minimize congestion
- Easy connections

Available in short packaging length

Applications

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

Standards / Directives

Applications

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

Cable

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

Cabling System standards

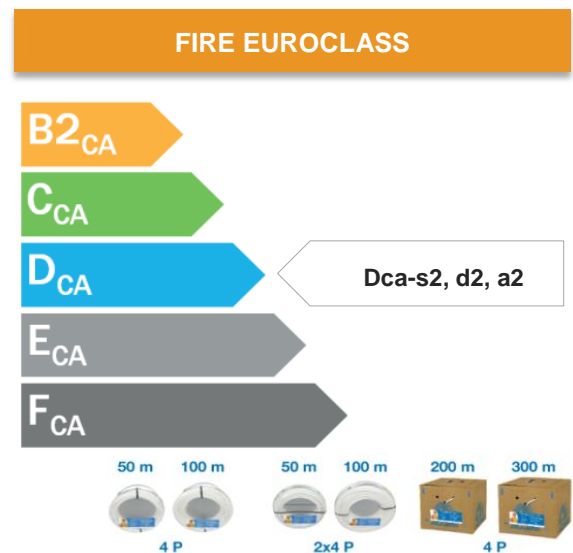
ISO 11801 2nd ed. / EN 50173-1 / TIA-568-C.2

Cabling System installation standards

EN 50174

Directive / Regulation

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



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 FU 4P LSOH-FR *	M5007A	Ivory (RAL 9001)	6.30	42	538	0.150	80
450 FUD 2x4P LSOH-FR	M5009A	Ivory (RAL 9001)	6.30 x 13.30	82	1060	0.294	160

*EC verified : in structure 4P

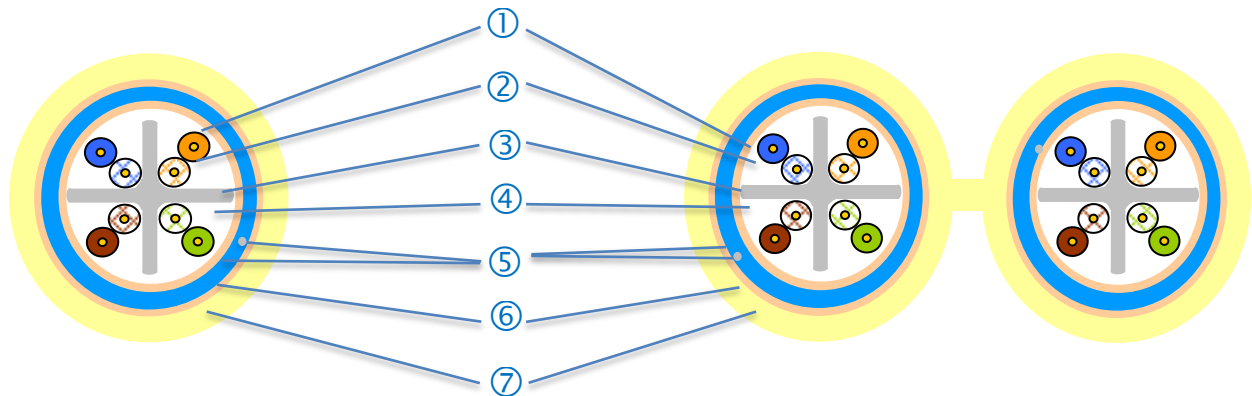
In order to improve production performances, ACOME reserves the possibility to modify present characteristics without previous notice.

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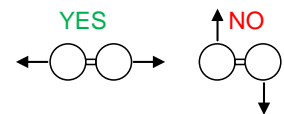


Description




- | | |
|---------------------------|---|
| 1- Conductor | Solid annealed red copper wire AWG 24
Foam skin Pe insulation $\varnothing \leq 1.10$ mm |
| 2- Cable element | Cable assembly in Twisted Pairs |
| 3- Separator | Symmetrical cross separator |
| 4- Cable assembly | 4 pairs assembly with overall polyester tape |
| 5- Screen | Pet/Alu foil (Alu side inwards) and tinned drain wire AWG26 |
| 6- Protection | Polyester tape |
| 7- External sheath | LSOH-FR: Low Smoke « Zero » Halogen - Flame Retardant |

Cable separation



Fire behaviour

Europe

Type	Euroclass	Standards	Declaration of performance	
4P	Dca-s2,d2,a2	IEC 60332-1, EN 50399, IEC 60754-2	16FUTP004	 www.acome.fr
2x4P			17FUTP007	

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	≤ 1600 pF / km	
Characteristic impedance	à 100 MHz	100 ± 5 Ω	
Velocity	nominal	78 %	
Coupling attenuation		≥ 55 dB	TYPE 2
Transfer impedance	At 1 MHz	≤ 40 mΩ / m	GRADE 2
	At 10 MHz	≤ 40 mΩ / m	
	At 30 MHz	≤ 50 mΩ / m	
	At 100 MHz	≤ 200 mΩ / m	
Segregation classification acc. EN 50174-2		"c"	

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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)*	66	60	56	48	45	39	-	-
ACR (dB)	Typical value	67.4	59.3	52.7	38.2	31	13	9	-
	Imposition (min)*	62.2	54	47.5	32.5	25.1	6	-	-
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)*	56	48	42	32	28	20	-	-
PS ELFEXT (dB/100 m)	Typical value	70	62	56	46	42	34	32	29
	Imposition (min)*	53	45	39	29	25	17	-	-
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 61156-5 Ed.2

** For information only

Delivery length

Type	References	Individual			Expedition		
		Type	Weight	EAN code	Quantity	Weight	EAN code
4P LSOH-FR	M5007A-C50	Coil of 50 m	2.1 kg	3700223666102	30 coils	80 kg	3700223676866
	M5007A-C100	Coil of 100 m	4.2 kg	3700223666591	30 coils	140 kg	3700223635092
	M5007A-B200	Acopack of 200 m	10 kg	3700223676873	24 boxes	252 kg	3700223672943
	M5007A-B300	Box of 300 m	15.7 kg	3700223677016	18 boxes	297 kg	3700223677023
	M5007A-T500	KC Drum of 500 m	23 kg	3700223666607	18 drums	432 kg	3700223605446
	M5007A-T1000	XC Drum of 1000 m	46 kg	3700223653805	6 drums	289 kg	3700223605453
2x4P LSOH-FR	M5009A-C50	Coil of 50 m	4.1 kg	3700223677115	30 coils	137 kg	3700223677108
	M5009A-C100	Coil of 100 m	8.20 kg	3700223677122	30 coils	260 kg	3700223677139
	M5009A-T500	XC Drum of 500 m	45 kg	3700223653812	6 drums	285 kg	3700223605507
	M5009A-T1000	AC Drum of 1000 m	92 kg	3700223666645	4 drums	381 kg	3700223605514

Cable 4P also available in larger length

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