

# ACOLAN® FIREPROTECT

## 550 SF-S - Cca

Horizontal Ethernet Cable 10Gb CAT.6<sub>A</sub> S/FTP  
4P - 2x4P, LSOH-FR, 550MHz



### Applications

- **10 Gigabit 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<sub>A</sub> class** for the 10 GBASE-T applications.
- They are characterized of up to **550 MHz**.
- They are compatibles with **PoE & PoE+ & UPoE** applications.

### Standards / Directives

#### Applications

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

#### Cables

IEC 61156-5 ed.2 / EN 50288-10-1

#### Cabling system standard

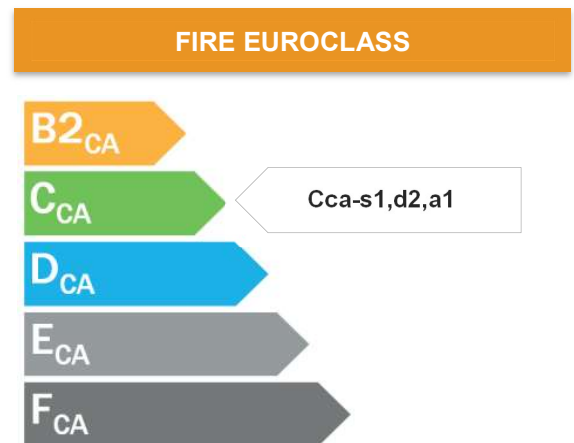
ISO/IEC 11801 2<sup>nd</sup> ed. / EN 50173-1 / TIA-568-C.2

#### Cabling system installation standards

EN 50174

#### Directive / Regulation

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



### Additional information and references

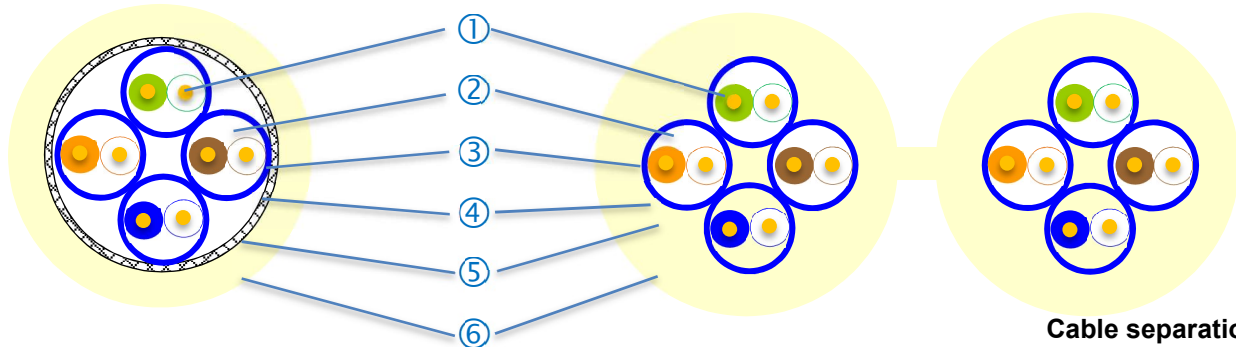
Designation ACOLAN® FIREPROTECT	Ref.	Colour	Diameter	Weight	Superior calorificcapacity (PCS)		Max pulling tension
			mm	Kg/km	MJ/km	KWh/m	N
550 SF-S 4P LSOH-FR	R7297A	Ivory (RAL 9001)	7.40	55	626	0.174	98
550 SFD-S 2x4P LSOH-FR	R7298A	Ivory (RAL 9001)	7.50 x 15.50	116	1301	0.361	196

# ACOLAN® FIREPROTECT 550 SF-S - Cca

Horizontal Ethernet Cable 10Gb CAT.6<sub>A</sub> S/FTP  
4P - 2x4P, LSOH-FR, 550MHz

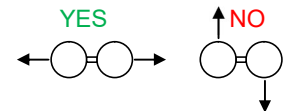


## Description




- |                           |  |
|---------------------------|--|
| 1- <b>Conductor</b>       | Solid annealed red copper wire, AWG 23<br>Foam skin Pe insulation $\varnothing \leq 1.45$ mm |
| 2- <b>Cable element</b>   | Cable assembly in Twisted Pairs  |
| 3- <b>Pair screening</b>  | Pet/Alu foil around each pair  |
| 4- <b>Standing</b>        | 4 pairs screening assembly   |
| 5- <b>Screen</b>          | Tinned copper braid  |
| 6- <b>External sheath</b> | LSOH-FR : Low Smoke « Zero » Halogen - Flame Retardant                                       |

### Cable separation



## Fire behaviour

### Europe

Type	Euroclass	Standards	Declaration of performance	
4P	Cca-s1,d2,a1	IEC 60332-1, EN 50399, IEC 60754-2	17SFTP002	 www.acome.fr
2x4P			17SFTP005	

For construction works which are not subject to reaction to fire requirements (depending on national regulation), we can provide on demand C1 classification certificate (tests realized by an external laboratory, 4P only). Please contact us for such requests.

### Outside Europe

No flame propagation	IEC 60332-1 / EN 60332-1
No fire propagation	NF C 32-070 2.2 (C1)
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

# ACOLAN® FIREPROTECT 550 SF-S - Cca

Horizontal Ethernet Cable 10Gb CAT.6<sub>A</sub> S/FTP  
4P - 2x4P, LSOH-FR, 550MHz



## Mechanical characteristics

Characteristics		Values
Bending radius	Dynamic (installation)	≥ 60 mm
	Static (installed)	≥ 30 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		≤ 146.4 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	at 100 MHz	100 ± 5 Ω	
Velocity	nominal	78 %	
Coupling attenuation		≥ 70 dB	<b>TYPE 1b</b>
Transfer impedance	At 1 MHz	≤ 10 mΩ / m	<b>GRADE 1</b>
	At 10 MHz	≤ 10 mΩ / m	
	At 30 MHz	≤ 20 mΩ / m	
	At 100 MHz	≤ 30 mΩ / m	
Segregation classification acc. to EN 50174-2		"c"	

# ACOLAN® FIREPROTECT 550 SF-S - Cca

Horizontal Ethernet Cable 10Gb CAT.6<sub>A</sub> S/FTP  
4P - 2x4P, LSOH-FR, 550MHz



## Transmission characteristics at 20° C

Frequency (MHz)		4	10	20	62.5	100	250	500	550**
Attenuation (dB/100m)	Typical value	3.6	5.5	7.9	14.5	18.5	29.6	42.9	50
	Imposition (max)*	3.8	5.9	8.4	15	19.1	31.1	45.3	-
Next (dB)	Typical value	95	95	95	95	95	88	84	83
	Imposition (min)*	65.3	59.3	54.8	47.4	44.3	38.3	33.8	-
PS Next (dB)	Typical value	92	92	92	92	92	85	81	80
	Imposition (min)*	63.3	57.3	52.8	45.4	42.3	36.3	31.8	-
ELFEXT (dB/100 m)	Typical value	85	85	84	82	78	70	56	55
	Imposition (min)*	56	48	42	32.1	28	20	14	-
PS ELFEXT (dB/100 m)	Typical value	82	82	81	79	75	67	53	52
	Imposition (min)*	53	45	39	29.1	25	17	11	-
Return Loss (dB)	Typical value	26	28	28	26	24	22	19	18
	Imposition (min)*	23	25	25	21.5	20.1	17.3	17,3	-
PS ANEXT (dB)	Typical value	85	85	85	85	80	73	68	67
	Imposition (min)*	76.5	72.5	69.5	64.5	62.5	56.5	52	-

\* Category 6a according IEC 61 156-5 Ed. 2

\*\* For information only

## Delivery length

Type	References	individual			Expedition		
		Type	Weight	EAN code	Quantity	Weight	EAN code
4P LSOH-FR	R7297A-T500	Drum KT de 500 m	30 kg	3700223655052	18 drums	540 kg	3700223632671
	R7297A-T1000	Drum XL de 1000 m	60 kg	3700223653768	4 drums	252 kg	3700223633067
2x4P LSOH-FR	R7298A-T500	Drum XL de 500 m	61 kg	3700223653775	4 drums	257 kg	3700223633074
	R7298A-T1000	Drum AC de 1000 m	120 kg	-----	4 drums	500 kg	-----