

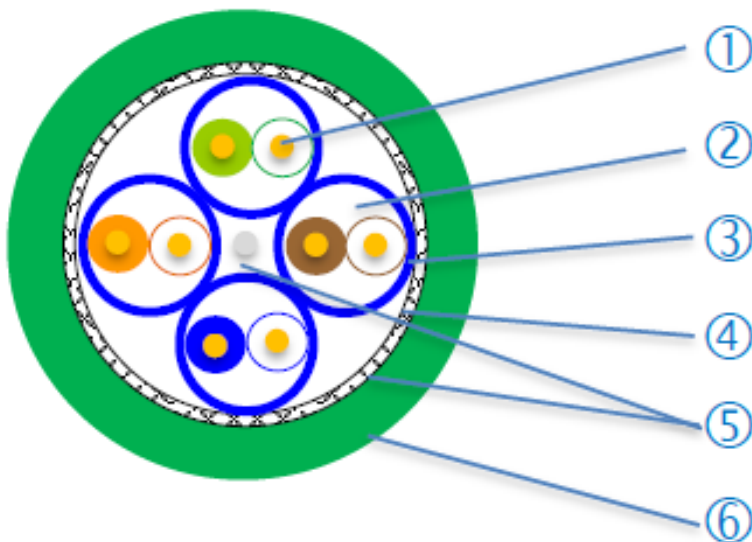
ACOLAN® COPPER FIREPROTECT+

S/FTP Cat.6a 550 MHz LSOH-FR 4P TOURET 1000m GREEN

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 EA class for the 10 GBASE-T applications.
- They are characterized of up to 550 MHz.
- They are compatibles with PoE & PoE+, UPoE & 4PPoE (PoE++) applications.

GENERAL CHARACTERISTICS



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

GENERAL

Designation ACOLAN FIREPROTECT+	Ref.	Colour	Diametre	Weight	Superior calorific capacity (PCS)		Max pulling tension
			mm	Kg/km	MJ/km	KWh/m	N
550 SF-P 4P LSOH-FR	R8597A	Green	7.70	63	597	0.166	95

MECHANICAL

Characteristics		Values
Bending radius	Dynamic (installation)	≥ 60 mm
	Static (installed)	≥ 30 mm
Temperature range	In service	- 20°C à + 60°C
	At the installation	0°C à + 50°C
	Transport and storage	0°C à + 50°C

ELECTRICAL

Electrical characteristics at 20°C (68°F)

Characteristics		Values	
Complete conductor resistance		$\leq 146.4 \Omega / \text{km}$	
Resistance unbalance		$\leq 2 \%$	
Dielectric strength	Continuous current	1kV pendant 1 minute = pas de claquage	
Insulation resistance	(500 V)	$\geq 5000 \text{ M}\Omega \cdot \text{km}$	
Capacitance unbalance	Real-ground	$\leq 1600 \text{ pF} / \text{km}$	
Characteristic impedance	at 100 MHz	$100 \pm 5 \Omega$	
Velocity	nominal	78%	
Coupling attenuation		$\geq 85 \text{ dB}$	TYPE 1
Transfer impedance	à 1 MHz	$\leq 8 \text{ m}\Omega / \text{m}$	GRADE 1
	à 10 MHz	$\leq 8 \text{ m}\Omega / \text{m}$	
	à 30 MHz	$\leq 10 \text{ m}\Omega / \text{m}$	
	à 100 MHz	$\leq 20 \text{ m}\Omega / \text{m}$	
Segregation classification acc. to EN 50174-2		"d"	

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 61156-5 Ed. 2

** For information only

NORMS AND STANDARDS

GENERAL



Applications

- IEEE 802.3: 10Base-T; 100Base-T; 1000Base-T; 2,5G Base-T, 5G Base-T, 10G Base-T
- IEEE 802.3 af (PoE) / 802.3 at (PoE+) / 802.3 bt (4PPoE 90W)
- IEEE 802.5 / FDDI / ATM / RNIS

Cables

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

Cabling system standard

- ISO/IEC 11801 2nd ed. / EN 50173-1 / TIA-568.2-D

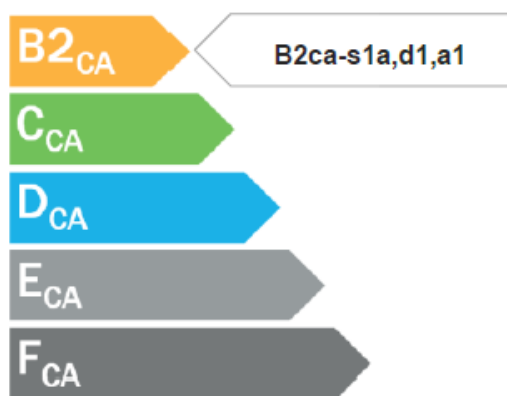
Cabling system installation standards

- EN 50174

Directive / Regulation

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

EUROCLASSE



Fire behaviour

Europe

Type	Euroclass	Standards	Declaration of performance
4P	Cca-s1,d2,a1	IEC 60332-1, EN 50399, IEC 60754-2	17SFTP013

Hors 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 60754-2
Low toxicity	IEC 60754-1 / EN 60754-1

RECOMMENDATIONS

CONDITIONNEMENTS

Type	References	individual			Expedition		
		Type	Weight	EAN code	Quantity	Weight	EAN code
4P LSOH-FR	R8597A-T500	Drum KT de 500 m	33 kg	3700223697809	18 Drums	615kg	3700223697816
	R8597A-T1000	Drum XL de 1000 m	67 kg	3700223697823	4 Drums	284kg	3700223697830