

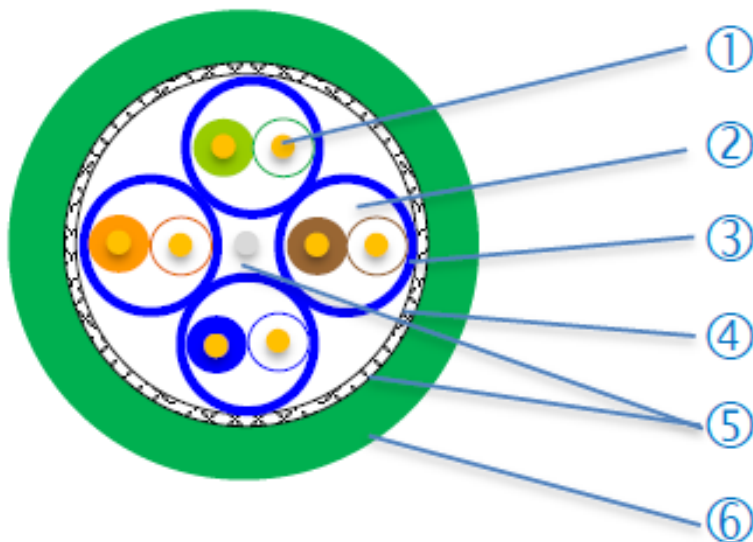
ACOLAN® COPPER FIREPROTECT+

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

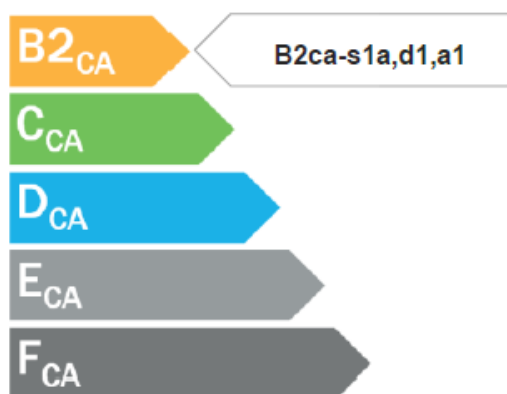
Cabling system installation standards

- 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 |