

## R7291A-T1000 ACOLAN® COPPER

F/UTP Cat.6A 550 MHz LSOH 4P DRUM 1000m - IVORY

### BENEFITS

- Small diameter to minimize congestion
- Easy connections

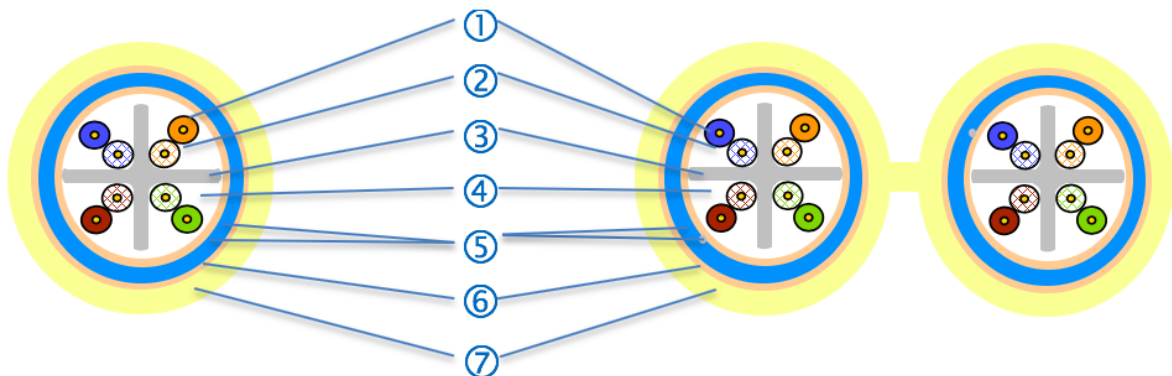
Available in short packaging length

### 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.

See our White Paper on installation conditions on [www.acle.com](http://www.acle.com) also available on demand

### GENERAL CHARACTERISTICS



|                    |  |
|--------------------|--|
| 1. Conductor       | Solid annealed red copper wire AWG 24<br>Foam skin Pe insulation $\Delta E \leq 1.10$ mm |
| 2. Cable element   | Cable assembly in Twisted Pairs  |
| 3. Separator       | Symmetrical cross separator  |
| 4. Cable           | 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                                    |

## GENERAL

| Designation<br>ACOLAN | Ref.   | Colour           | Diameter     | Weight | Superior calorific Capacity (PCS) |       | Max pulling tension |
|-----------------------|--------|------------------|--------------|--------|-----------------------------------|-------|---------------------|
|                       |        |                  | mm           | Kg/km  | MJ/km                             | KWh/m | N                   |
| 550 FU 4P LSOH-FR *   | R7291A | Ivory (RAL 9001) | 6,70         | 48     | 710                               | 0,197 | 90                  |
| 550 FUD 2x4P LSOH-FR  | R7292A | Ivory (RAL 9001) | 6.90 x 14.10 | 95     | 1422                              | 0,395 | 180                 |

\*EC verified : in structure 4P and 2x4P

## MECHANICAL

| Characteristics   |                        | Values           |
|-------------------|------------------------|------------------|
| Bending radius    | Dynamic (installation) | $\geq 50$ mm     |
|                   | Static (installed)     | $\geq 25$ 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                            |                    | Values                                      |         |
|--|--------------------|---|---------|
| Complete conductor resistance              |                    | $\leq 190 \Omega / \text{km}$               |         |
| Resistance unbalance                       |                    | $\leq 2 \%$                                 |         |
| Dielectric strength                        | Continuous current | 1kV during 1 minute = No breakdown          |         |
| 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                       |                    | $\geq 55 \text{ dB}$                        | TYPE 2  |
| Transfer impedance                         | At 1 MHz           | $\leq 40 \text{ m}\Omega / \text{m}$        | GRADE 2 |
|  | At 10 MHz          | $\leq 40 \text{ m}\Omega / \text{m}$        |         |
|  | At 30 MHz          | $\leq 50 \text{ m}\Omega / \text{m}$        |         |
|  | At 100 MHz         | $\leq 200 \text{ m}\Omega / \text{m}$       |         |
| Segregation classification acc. EN 50174-2 |                    | "c"   |         |

## NORMS AND STANDARDS

### GENERAL



## EC Certified

#### Applications

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

#### Cable

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

#### Cabling system standards

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

#### Cabling system installation standards

EN 50174

#### Directive / Regulation

RoHS 2011/65/UE

## EUROCLASS



## FIRE BEHAVIOUR

Europe

| Type | Euroclass    | Standards                             | Declaration of performance |
|------|--------------|---------------------------------------|----------------------------|
| 4P   | Dca-s2,d2,a2 | IEC 60332-1, EN 50399,<br>IEC 60754-2 | 16FUTP009                  |
| 2x4P |              |                                       | 17FUTP010                  |



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

## RECOMMENDATIONS

## DELIVERY LENGTH

| Type         | References   | Individual        |          |               | Expedition |        |               |
|--------------|--------------|-------------------|----------|---------------|------------|--------|---------------|
|              |              | Type              | Weight   | EAN code      | Quantity   | Weight | EAN code      |
| 4P LSOH-FR   | R7291A-C50   | Coil of 50 m      | 2.35 kg  | 3700223699216 | 30 coils   | 85 kg  | 3700223699209 |
|              | R7291A-C100  | Coil of 100 m     | 4.70 kg  | 3700223699223 | 30 coils   | 155 kg | 3700223699230 |
|              | R7291A-B300  | Box of 300 m      | 14.10 kg | 3700223699247 | 18 boxes   | 268 kg | 3700223699254 |
|              | R7291A-T500  | KC Drum of 500 m  | 26 kg    | 3700223666829 | 18 drums   | 483 kg | 3700223632657 |
|              | R7291A-T1000 | XC Drum of 1000 m | 51 kg    | 3700223666836 | 6 drums    | 323 kg | 3700223633029 |
| 2x4P LSOH-FR | R7292A-C50   | Coil of 50 m      | 4.70 kg  | 3700223699278 | 30 coils   | 155 kg | 3700223699261 |
|              | R7292A-C100  | Coil of 100 m     | 9.40 kg  | 3700223699292 | 30 coils   | 296 kg | 3700223699285 |
|              | R7292A-T500  | XC Drum of 500 m  | 52 kg    | 3700223666843 | 6 drums    | 324 kg | 3700223633036 |