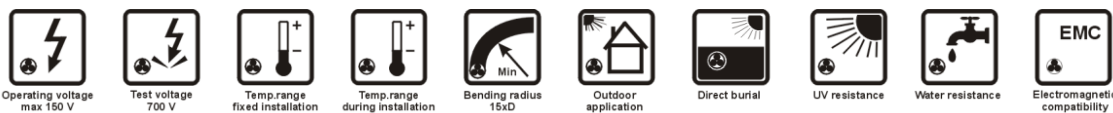


**TECHNODATA LAN-T11 kat.6 4x2x0,57 mm**

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**LOCAL AREA NETWORK CABLES****APPLICATIONS**

**TECHNODATA LAN-T11 kat.6 4x2x0,57 mm** cables are intended for multimedia computer networks (data, sound and HDTV transmission), applied in industrial and other dedicated networks sensitive to electromagnetic interferences.

The cables are also applied in computer networks of increased binary transfer where simultaneous transmission in both directions in all 4 symmetrical circuits is used (full duplex, Gigabit Ethernet technique).

Moisture barrier is made of plastic laminated aluminium tape longitudinally applied over a cable core and bonded to polyethylene (PE) cable sheath. The cable core is filled with petro-gel to protect the cable against moisture penetration along the cable.

Sheathing polyethylene (PE) is halogen free and UV radiation and weather resistant, however, it is not self-extinguishing and flame retardant.

The cable is suitable for outdoor installations, laying in ducts and direct earth burial.

**CONSTRUCTION**

- annealed copper single wire conductors of diameter 0.57 mm (23 AWG),
- polyethylene (PE) insulation coloured: white-blue and blue, white-orange and orange, white-green and green, white-brown and brown,
- insulated conductors twisted into pairs,
- pairs laid-up into a cable core on cross-shaped filler,
- cable core filled-up with petro-gel and wrapped in a polyester tape,
- moisture barrier and additional cable shielding made of a plastic laminated aluminium tape and a drain wire under the tape longitudinally applied over the cable core,
- black polyethylene (PE) cable sheath.

**AVAILABLE UPON REQUEST**

**TECHNODATA LAN-T11-FOR kat.6 4x2x0,57 mm** - cables with additional covering which is then made of special oil-resistant, self-extinguishing PVC of higher oxygen index. Cables are dedicated for indoor installations and in locations where oil-resistant and flame retardant is required.

## TECHNODATA LAN-T11 kat.6 4x2x0,57 mm

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### CHARACTERISTICS

|   |                  |  |                              |
|---|------------------|--|------------------------------|
| Characteristic impedance                                      | 100 ± 15 Ω       | Shielding impedance at 10 MHz, maximum               | 100 mΩ/m                     |
| Mutual capacitance of any pair at 1 kHz, approximate          | 50 nF/km         | DC loop resistance at 20°C, maximum                  | 188 Ω/km                     |
| Capacitance unbalance of any pair to ground at 1 kHz, max.    | 1600 pF/km       | Resistance unbalance of any pair of conductors, max. | 2 %                          |
| Insulation resistance, minimum                                | 5000 MΩ·km       | Phase delay dispersion of symmetrical circuits       | 45 ns/100 m                  |
| Operating voltage   | 150 V            | Phase delay T  | 534+36/√f ns/100 m           |
| Voltage test  | 700 V rms        | Operating temperature range during operation         | from - 40 to + 70°C          |
| Velocity of propagation                                       | 65 %             | Operating temperature range during installation      | from -10 to + 50°C           |
| Return loss, minimum at f=4÷10 MHz                            | 20+5 lg(f) dB    | Minimum bending radius                               | 15 x cable diameter          |
| at f=10÷20 MHz  | 25 dB            | Reference standards                                  | PN-EN 50288-5-1, IEC 61156-5 |
| at f=20÷100 MHz   | 25-7 lg(f/20) dB |  | ISO/IEC 11801, TIA/EIA 568 A |
| Minimum shielding attenuation at the frequency f=30 ÷ 250 MHz | 40 dB            |  |                              |

| Frequency MHz | Attenuation loss, maximum dB/100m | Near end cross-talk between pairs, minimum dB |        |      | Far end cross-talk between pairs, minimum dB |          |
|---------------|-----------------------------------|---|--------|------|--|----------|
|               |                                   | NEXT  | PSNEXT | ACR  | ELFEXT                                       | PSELFEXT |
| 1             | 2.1                               | 66.0  | 64.0   | 64.0 | 66.0   | 64.0     |
| 4             | 3.8                               | 65.3  | 63.3   | 61.0 | 58.0   | 55.0     |
| 10            | 6.0                               | 59.3  | 57.3   | 53.0 | 50.0   | 47.0     |
| 16            | 7.6                               | 56.2  | 54.2   | 49.0 | 45.9   | 43.0     |
| 20            | 8.5                               | 54.8  | 52.8   | 41.3 | 44.0   | 41.0     |
| 31.25         | 10.8                              | 51.9  | 49.9   | 41.0 | 40.1   | 37.1     |
| 62.50         | 15.5                              | 47.4  | 45.4   | 32.0 | 34.1   | 31.1     |
| 100           | 19.9                              | 44.3  | 42.3   | 24.0 | 30.0   | 27.0     |
| 155           | 25.3                              | 41.4  | 39.4   | 16.0 | 26.2   | 23.2     |
| 200           | 29.1                              | 39.8  | 37.8   | 11.0 | 24.0   | 21.0     |
| 250           | 33.0                              | 38.3  | 36.3   | 5.0  | 22.0   | 19.0     |

**CE** = the cable meets requirements of the low voltage directive 2014/35/EU

| Product No. | Cable type | Number of pairs (x 2) x conductor diameter | Cable outer diameter (appr.) | Copper index | Cable weight (appr.) | Product No. | Cable type  | Number of pairs (x 2) x conductor diameter | Cable outer diameter (appr.) | Copper index | Cable weight (appr.) |
|-------------|------------|--|------------------------------|--------------|----------------------|-------------|-------------|--|------------------------------|--------------|----------------------|
|             |            | mm   | mm                           | kg/km        | kg/km                |             |             | mm   | mm                           | kg/km        | kg/km                |
| 0024 019    | LAN-T11    | 4 x 2 x 0,57                               | 9.9                          | 22.2         | 98                   | 0502 002    | LAN-T11-FOR | 4 x 2 x 0,57                               | 11.9                         | 22.2         | 147                  |

TECHNOKABEL S.A. reserves the right to change specifications without prior notice.