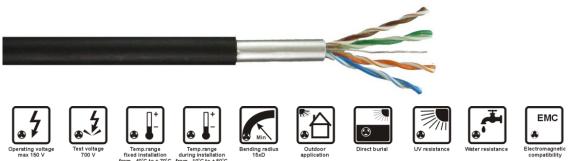
**TECHNOKABEL**<sup>®</sup>



TECHNODATA LAN-T15 kat.5 4x2x0,8 mm

# LOCAL AREA NETWORK CABLES



### **APPLICATIONS**

**TECHNODATA LAN-T15 kat.5 4x2x0,8 mm** cables are intended for multimedia computer networks (data, sound and HDTV transmission), applied in industrial and other dedicated networks sensitive to electromagnetic interferences.

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 selfextinguishing 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 0.8 mm,
- 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,
- 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.

page 1 of 2





#### ISO 9001:2008

TECHNODATA LAN-T15 kat.5 4x2x0,8 mm

## **CHARACTERISTICS**

| Characteristic impedance                                   | $100\pm15~\Omega$                 | Minimum shielding attenuation at the frequency |  |
|--|-----------------------------------|--|--|
| Mutual capacitance of any pair<br>at 1 kHz, approximate    | 50 nF/km                          | f=1 ÷ 200 MHz                                  | 75 dB  |
| Capacitance unbalance of any pair to ground at 1 kHz, max. | 1600 pF/km                        | Shielding impedance<br>at 10 MHz, maximum      | 10 mΩ/m  |
| Insulation resistance, minimum                             | 150 MΩ·km                         | DC loop resistance at 20°C,<br>maximum         | 75 Ω/km  |
| Operating voltage  | 150 V Resistance unbalance of any |  | 75 <u>2</u> /Kiii  |
| Voltage test   | 700 V rms                         | pair of conductors, max.                       | 3 %  |
| Velocity of propagation                                    | 65 %                              | Operating temperature range                    |  |
| Return loss, minimum<br>at f=1÷20 MHz                      | 23 dB                             | during operation<br>during installation        | from - 40 to + 70°C<br>from -10 to + 50°C                    |
| Return loss, minimum                                       |                                   | Minimum bending radius                         | 15 x cable diameter  |
| at f=20÷100 MHz  | 23-10lg(f/20) dB                  | Reference standards                            | PN-EN 50288-2-1, IEC 61156-1<br>ISO/IEC 11801, TIA/EIA 568 A |

| Frequency | Attenuation loss, average | Attenuation loss, maximum | Near end cross-talk for cable length ≥ 100 m |  |
|-----------|---------------------------|---------------------------|--|--|
| MHz       | dB/100m                   | dB/100m                   | minimum                                      |  |
|           |                           |                           | dB   |  |
| 1         | 1.3                       | 2.1                       | 62   |  |
| 4         | 2.4                       | 4.3                       | 53   |  |
| 8         | 3.3                       | 5.9                       | 48   |  |
| 10        | 3.8                       | 6.6                       | 47   |  |
| 16        | 4.7                       | 8.2                       | 44   |  |
| 20        | 5.2                       | 9.2                       | 42   |  |
| 25        | 5.8                       | 10.5                      | 41   |  |
| 31.25     | 6.4                       | 11.8                      | 39   |  |
| 62.50     | 9.0                       | 17.1                      | 35   |  |
| 100       | 11.4                      | 22.0                      | 32   |  |

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

| Product<br>No. | Number<br>of pairs (x 2)<br>x conductor<br>diameter | Cable outer<br>diameter<br>(appr.) | Copper<br>index | Cable<br>weight<br>(appr.) |
|----------------|---|------------------------------------|-----------------|----------------------------|
|                | mm  | mm                                 | kg/km           | kg/km                      |
| 0024 015       | 4 x 2 x 0,8   | 11.9                               | 39.8            | 144                        |

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