

# **DATA SHEET**

2170051

valid from:

**Twinax Cable 78 Ohm** 

02.02.2004

## **Application**

Twinax Cable 78 Ohm 2Y2YCY 2 x 0.56 mm² (2 x 20 AWG).

Computer cable for high data transmission rates for data systems as well as entire areas of high-frequency engineering and electronic.

The cable is suitable for fixed and flexible application in dry and damp rooms as well as stationary outdoor application.

Allen Bradley P/N 1770-CD, Belden P/N 9463

### Design

Conductor: tinned copper wire 0.56 mm<sup>2</sup> (7 x 0.32), 20 AWG

Insulation PE, outer diameter approx. 2.0 mm

Color code transparent and blue

Stranding Cores twisted to pairs with two fillers

Screening Aluminium laminated plastic foil with metal part outside,

braid of tinned copper wires

Sheath PVC, blue similar RAL 5015

Outer diameter approx. 6.17 mm

Sheath marking LAPP KABEL STUπGART UNITRONIC® TWINAX 78 Ω ART. 2170051

## Electrical properties at 20°C

Conductor resistance		max. Ω/km	31
Insulation resistance		min. $G\Omega$ x km	5
Capacitance at	800 Hz	nom. nF/km	64.6
Impedance ( core / core ) at	> 1,0 MHz	nom. $\Omega$	78
Attenuation at	500 kHz	nom. dB/100 m	1,4
	1 MHz	nom. dB/100 m	2,0
	10 MHz	nom. dB/100 m	6.9
	50 MHz	nom. dB/100 m	16,4
	100 MHz	nom. dB/100 m	24.6
	200 MHz	nom. dB/100 m	36.1
	400 MHz	nom. dB/100 m	52.5
Velocity of propagation		nom. %	66
Transfer impedance at	30 MHz	max. mΩ/m	10
Operating voltage (not for power purposes) core/core		peak value V	250
Test voltage	core/core	$U_{eff.}$ $V$	2000
Test voltage	core/screen	$U_{eff.}$ $V$	1000

#### Mechanical and thermal characteristics

Tensile stress		max. N	35
Minimum bending radius / fixed installation	า	mm	45
Permissible temperature range	flexible	°C	-5 to 70
	fixed	°C	-30 to 80
Fire load		kWh/m	0.39

Flame retardant acc. to VDE 0482, part 265-2-1 / IEC 60 332-1

elaborated by: TE-K: M. Herb	Document:	DB2170051_2EN	page 1 of 1
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