

**APPLICATION**

PBX, V.11, X.21, ISDN, Ethernet (10Base-T), ATM-25/52/155 Mbit/s, 100VG-AnyLAN, Fast Ethernet (100BASE-TX), Token Ring 16/100 Mbit/s, Gigabit Ethernet (1000BASE-T), Firewire 100 Mbit/s, ATM LAN 1,2 Gbit/s

**INSTALLATION AND OPERATION CONDITIONS**

For the manufacture of patch-cords. Operated on frequencies up to 100 MHz.

**COMPLIANCE WITH THE REQUIREMENTS**

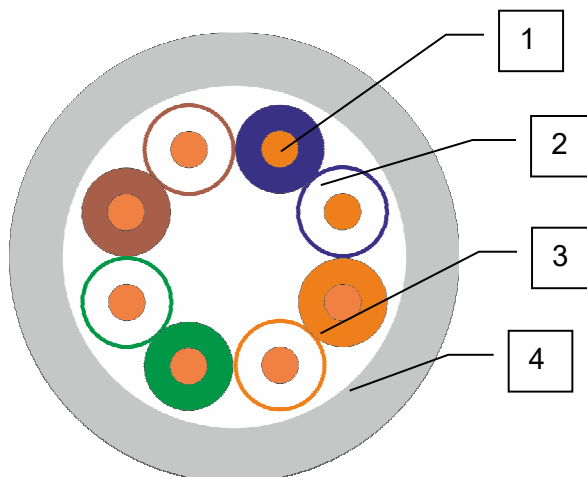
- ISO/IEC 11801:2002
- EN 50173-1:2002
- ANSI/TIA/EIA-568-B.2-1-2002
- IEC 61156-5:2002
- IEC 60332-1

**MECHANICAL CHARACTERISTICS**

- Temperature range:
  - During installation -10 °C ... +60 °C
  - After installation -20 °C ... +60 °C
- Bending radius:
  - During installation ≥ 8 cable diameters
  - After installation ≥ 4 cable diameters
- Tensile stress ≤ 85 N

**DESIGN**

- 1) Conductor: twisted copper wires 7x0,175 mm  
Diameter: 0,525 mm
- 2) Insulation: PE  
Conductor diameter: 0,9 mm
- 3) Pair: two conductors twisted together  
Color identification of pairs:  
pair 1: white-blue / blue  
pair 2: white-orange / orange  
pair 3: white-green / green  
pair 4: white-brown / brown
- 4) Sheath: PVC, nominal cable diameter: 5,0 mm



**ELECTRICAL CHARACTERISTICS AT 20 °C**

Parameter	Unit	Value
Capacitance	pF/m	≤ 56
Direct current resistance	Ohm/km	≤ 115
Insulation resistance	GOhm/km	≥ 5
Resistance unbalance	%	2
Signal propagation velocity	s	0,65
Characteristic impedance in the frequency range of:	Ohm	100±15
Test voltage between cores, (DC, 2 s)	kV	2,5

## ELECTRICAL CHARACTERISTICS AT 20 °C

Frequency, MHz	1	4	10	16	20	31,25	62,5	100
Attenuation, dB, max	2,5	4,9	7,8	9,9	11,1	14,1	20,4	26,4
NEXT, dB, min	65,3	56,3	50,3	47,2	45,8	42,9	38,4	35,3
PS NEXT, dB, min	62,3	53,3	47,3	44,2	42,8	39,9	35,4	32,3
ELFEXT, dB, min	64	52	44	40	38	34	28	24
PS ELFEXT, dB, min	61	49	41	37	35	31	25	21
RL, dB, min	20,0	23,0	25,0	25,0	25,0	23,3	20,7	19,0

IEC 61156-5, values lower than 4 MHz are given for information only

## ORDER INFORMATION

P/N	Cable type	Packing	Weight, kg/km
49283	CATEGORY 5E 4x2x0,51 U/UTP patch 100 MHz PVC, AWG24	box, 305 m	31