

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, 10 Gigabit Ethernet (10GBASE-T*), ATM LAN 1,2 Gbit/s

INSTALLATION AND OPERATION CONDITIONS

For stationary installation inside buildings, stations, structures and equipment in conditions of heightened electromagnetic impacts. Operated on frequencies up to 250 MHz.

COMPLIANCE WITH THE REQUIREMENTS

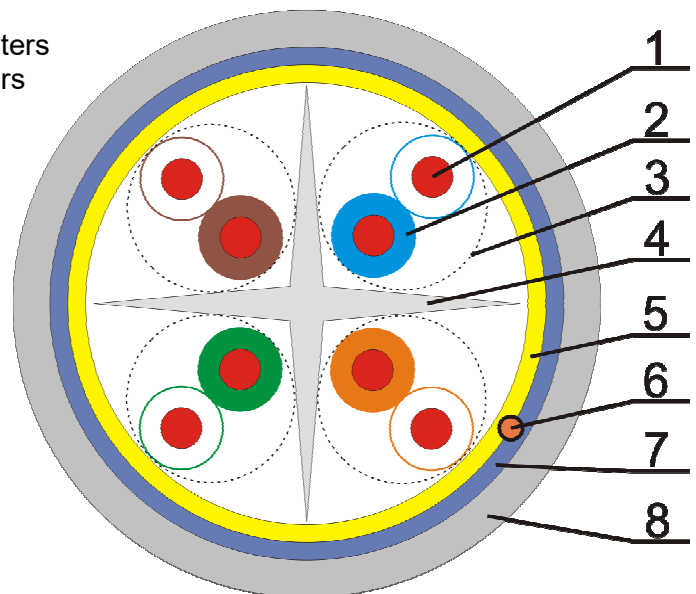
- ISO/IEC 11801:2002
- EN 50173-1:2002
- ANSI/TIA/EIA-568-B.2-1-2002
- IEC 61156-5:2002
- IEC 60332-1

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: soft copper wire
Diameter: 0,54 mm (±0,005 mm)
- 2) Insulation: PE
Conductor diameter: 1,09 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) Cross-web 4x4 mm
- 5) Core wrapping
- 6) Copper tinned contact wire Ø 0,4 mm is applied between the sheath and shield.
- 7) Core shield: aluminum polymer foil (metal outside)
- 8) Sheath: PVC, nominal cable diameter: 7,0 mm



ELECTRICAL CHARACTERISTICS AT 20 °C

Parameter	Unit	Value
Capacitance	pF/m	≤ 56
Direct current resistance	Ohm/km	≤ 85
Insulation resistance	GOhm/km	≥ 5
Resistance unbalance	%	2
Signal propagation velocity	s	0,68
Propagation delay	ns/100 m	≤ 534+36/√f
Delay shift on the frequency 100 MHz	ns/100 m	≤ 30
Characteristic impedance in the frequency range of: 1-100 MHz 100-250 MHz	Ohm	100±15 100±22
Test voltage between cores, (DC, 2 s)	kV	2,5

Frequency, MHz	1	4	10	16	20	31,25	62,5	100	125	200	250
Attenuation, dB, max	2,1	3,8	6	7,6	8,5	10,8	15,5	19,9	22,5	29,1	33
NEXT, dB, min	75,3	66,3	60,3	57,3	55,8	52,8	48,3	45,3	43,8	40,8	39,3
PS NEXT, dB, min	72,3	63,3	57,3	54,3	52,8	49,8	45,3	42,3	40,8	37,8	36,3
ELFEXT, dB, min	68	56	48	44	42	38	32	28	26	22	20
PS ELFEXT, dB, min	65	53	45	41	39	35	29	25	23	19	17
RL, dB, min	20,0	23,0	25,0	25,0	25,0	23,6	21,5	20,1	19,4	18,0	17,3

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

ORDER INFORMATION

P/N	Cable type	Packing	Weight, kg/km
7932020	CATEGORY 6 CABLE - F/UTP - 4x2x0,54 PVC, 250 MHZ	plywood reel, 500 m	55