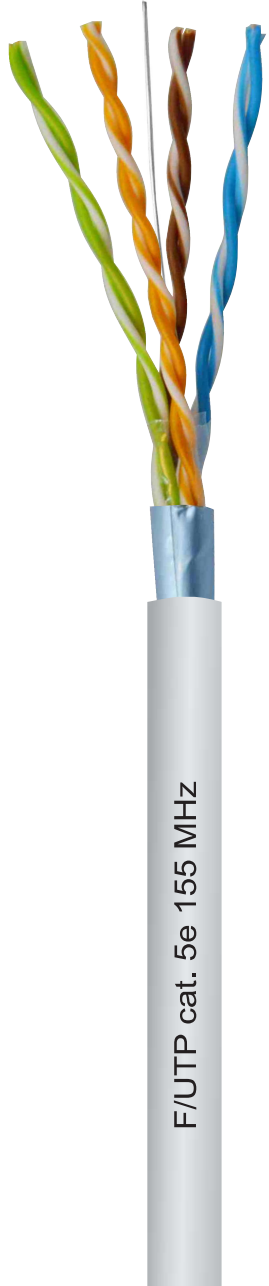
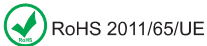


# F/UTP cat. 5e 155 MHz Data transmission cable



## Technical data:

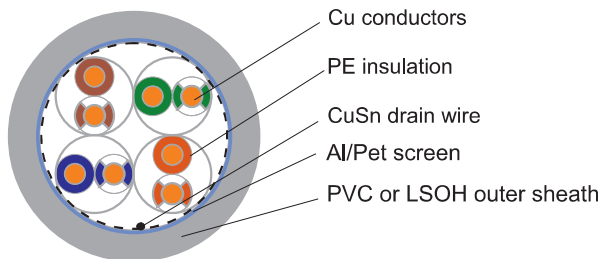
**Temperature range:**  
**Operating temperature:** -30°C to +70°C  
**Installation temperature:** -10°C to +50°C  
**Bending radius:** 6xO.D.  
**DC loop resistance at 20°C (max):** 205 Ω/km  
**Insulation resistance (min):** 5GΩ x km  
**Resistance unbalance:** ≤ 2%  
**Capacitance at 1kHz:** 50 ± 5 nF/km  
**Capacitance unbalance at 1kHz (max):**  
 1600 pF/km  
**Nominal voltage:** 150V  
**Test voltage:**  
 AC 50 Hz: 700V  
 DC: 1000V  
**Characteristic impedance:** 100 ± 5Ω  
**NVP value:** 69%  
**Return loss (min):**  
 f = 4 ÷ 10 MHz: 20 + 5lg(f)  
 f = 10 ÷ 20 MHz: 25  
 f = 20 ÷ 155 MHz: 25 - 7lg(f/20)  
**Coupling attenuation within the range of 30 ÷ 200 Mhz (min.):** 50 dB  
**Transfer impedance at 10 Mhz (max):**  
 100 mΩ/m

## Construction:

**Conductors:** solid round copper conductors  
**Insulation:** special polyolefin compound  
**Core identification:** wh/bu-bu, wh/or-or, wh/gn-gn, wh/bn-bn  
**Core arrangement:** cores twisted in pairs, pairs twisted together  
**Screen:** Al/Pet screen with tinned copper drain wire Ø-0,4mm  
**Outer sheath:** PVC or special LSOH compound  
**Outer sheath colour:** grey RAL 7035 for PVC or orange RAL 2003 for LSOH; other colours available on customer's request.

## Application:

BiTLAN F/UTP cat. 5e cables are applicable to computer networks with operating frequency band up to 155 MHz. Suitable for transmission of data, audio and video signals, with bitrate up to 1 Gb/s. Additional collective Al/Pet screen with CuSn drain wire acts as a protection against external electromagnetic interferences. Dedicated for fixed installations within indoor structured cabling systems as per EN 50173-2011, ISO/IEC 11801 2nd ed., ANSI/TIA 568-C.2 standards, as well as within industrial networks exposed to external electromagnetic interferences. Cables with flame retardant LSOH outer sheath ensuring low smoke emission acc. to EN 50268-2, IEC 61034-2 and limited emission of corrosive gases acc. to EN 50267-2-3 and IEC 60754-2 should be installed in places with increased fire safety requirements.



internal application



EN 60332-1



data transmission

Name	Construction	Outer diameter [mm]	Cu [kg/km]	Cable weight [kg]	Bandwidth [MHz]
F/UTP cat.5e	4P	5,8	15	35	155

# F/UTP cat. 5e 155 MHz Data transmission cable

## Performance test charts and data:

Frequency MHz	1	4	10	16	20	30	45	60	80	100	120	130	155
Attenuation $\leq$ dB/100m	2,1	4,0	6,3	8,0	9,0	11,2	13,9	16,2	18,9	21,3	23,6	24,7	27,2
NEXT $\geq$ dB/100m	65,3	56,3	50,3	47,2	45,8	43,1	40,5	38,6	36,7	35,3	34,1	33,6	32,4
PS NEXT $\geq$ dB/100m	62,3	53,3	47,3	44,2	42,8	40,1	37,5	35,6	33,8	32,3	31,1	30,6	29,5
ELFEXT $\geq$ dB/100m	63,8	51,8	43,8	39,7	37,8	34,3	30,7	28,2	25,7	23,8	22,2	21,5	20,0
PS ELFEXT $\geq$ dB/100m	60,8	48,8	40,8	36,7	34,8	31,3	27,7	25,2	22,7	20,8	19,2	18,5	17,0
RL $\geq$ dB	20,0	23,0	25,0	25,0	25,0	23,8	22,5	21,7	20,8	20,1	19,5	19,3	18,8

