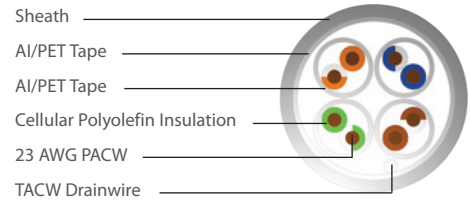


**Cable Standards**

The cable is compliant with:

- ISO/IEC 61156-5, EN 50288-5-1 and ANSI/TIA/EIA 568C



**Independent 3rd Party Certification (3P)**

**PRODUCT DESCRIPTION**

Cat6Plus F/FTP, 100 Ω, 4x2xAWG 23/1 premium grade Class E/Cat 6 cable to support Gigabit Ethernet protocol for installation in horizontal and backbone areas.

**PRODUCT PERFORMANCE**

**Core**

- Conductor: 23 AWG Plain Annealed Copper Wire
- Insulation: Cellular Polyolefin
- Diameter: 1.36mm Nominal
- Pair: 2 of the above cores
- Tape Screen: Individual pair wrapped with aluminium polyester tape applied metal side out
- Pair Colour: Blue-White, Orange-White, Green-White, Brown-White

**Final Assembly**

- Cable: 4 of the above shielded pairs
- Drainwire: Tinned Annealed Copper Wire
- Tape Screen: Wrapped with aluminium polyester tape, applied metal side in
- Sheath: LSHF compound

**Mechanical and Environmental**

- Temp - Installation: 0°C to +50°C
- Temp - Operation: -20°C to +75°C
- Max Tensile Load: 10kg per simplex cable (installation)
- Min Bend Radius: 8 x Outer Diameter (installation), 4 x Outer Diameter (operation)

**Brand-Rex Copper Cables - Cat6Plus**  
Communication Cable, F/FTP, 100 Ω, 4x2xAWG 23/1

Electrical Characteristics @ 20°C	Specification	Typical Performance
Conductor Loop Resistance	Max 19 Ω / 100m	14 Ω / 100m
Conductor Resistance Unbalance	Max 2%	0.5%
Dielectric Strength	1.0kV dc or 0.7kV ac for 1 min	100% in process test
Insulation Resistance	>500MΩ @ 100-500 V test voltage	>500 MΩ.km
Capacitance Unbalance to Earth	Max 160 pF/100m	80 pF/100m
Velocity of Propagation	<537.6 nsec/100m @ 100MHz	417 nsec/100m @ 100MHz (NVP for hand held testers = 0.80)
Skew	Max 40 nsec/100m @ 100MHz	25 nsec/100m @ 100MHz
Mean Characteristic Impedance	100 Ω +/- 5 Ω @ 100MHz	100 Ω +/- 3 Ω @ 100MHz
Transfer Impedance	Max 100 mΩ/m @ 10MHz	30 mΩ/m @ 10MHz (ISO 61156 grade 1 cable)
Coupling Attenuation up to 1Ghz	Min 55 dB	75 dB

Frequency (MHz)		1	4	10	16	20	31.25	62.5	100	155	200	250	300	600
Insertion Loss (dB/100m)	Spec	2.1	3.8	6.0	7.6	8.5	10.7	15.5	19.9	25.3	29.1	33.0	na	na
	Typical	1.9	3.5	5.5	7.0	7.8	9.9	14.1	18.0	22.7	26.1	29.4	32.5	47.6
NEXT (dB)	Spec	66.0	65.3	59.3	56.2	54.8	51.9	47.4	44.3	41.4	39.8	38.3	na	na
	Typical	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	95.0	90.0	90.0
PSNEXT (dB)	Spec	64.0	63.3	57.3	54.2	52.8	49.9	45.4	42.3	39.4	37.8	36.3	na	na
	Typical	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	92.0	87.0	87.0
ELFEXT (dB/100m)	Spec	66.0	58.0	50.0	45.9	44.0	40.1	34.1	30.0	26.2	24.0	22.0	na	na
	Typical	90.0	89.0	85.0	81.0	76.0	72.0	67.0	60.0	52.0	50.0	49.0	40.0	35.0
PSELFEXT (dB/100m)	Spec	64.0	55.0	47.0	42.9	41.0	37.1	31.1	27.0	23.2	21.0	19.0	na	na
	Typical	88.0	86.0	82.0	78.0	73.0	69.0	64.0	57.0	49.0	47.0	46.0	37.0	32.0
Return Loss (dB/100m)	Spec	23.0	23.0	25.0	25.0	25.0	23.6	21.5	20.1	18.8	18.0	17.3	na	na
	Typical	30.0	30.0	30.0	30.0	30.0	27.0	25.0	24.0	22.0	21.0	20.0	19.0	17.0
ACR (dB/100m)	Typical	96.5	96.5	94.5	93.0	92.2	90.1	85.5	82.0	77.3	74.0	65.6	57.5	42.4
PSACR (dB/100m)	Typical	93.5	93.5	91.5	90.0	89.2	87.1	82.9	79.0	74.3	71.0	62.6	54.5	39.4

**Product Part Numbering**

Part Number	Length (m)	Cable type	Colour	Nominal Cable Diameter (mm)	Nominal Weight (Kg/Km)	Calorific Value kWh/m	Fire Safety Rating
C6F/FTP-HF1-500VT	500	LSHF	Violet	7.2	51	0.13	IEC 60332-1-2
C6F/FTP-HF1-1000VT	1000						
C6F/FTP-HF1-D500VT	500	LSHF	Violet	14.5 x 7.2	102	0.26	IEC 60332-1-2
C6F/FTP-HF1-D1000VT	1000						
C6F/FTP-HF3-500BU	500	LSHF	Blue	7.6	60	0.15	IEC 60332-3-24
C6F/FTP-HF3-1000BU	1000						