

The cable is compliant with:

• ISO 61156-5 ed 2 and ANSI/TIA/EIA 568C

It is also designed to be compliant with EN50288-10-1 standards when it is published:

These cables are also fully backwards compatable with Category 5 and Category 6 systems

# **Brand-Rex Copper Cables - 10GPlus**

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	>5 GΩ.km		
Capacitance Unbalance to Earth	Max 120 pF/100m	80 pF/100m		
Velocity of Propagation	<537.6 nsec/100m @ 100MHz	445 nsec/100m @ 100MHz (NVP for hand held testers = 0.80)		
Skew	Max 20 nsec/100m @ 100MHz	5 nsec/100m @ 100MHz		
Mean Characteristic Impendance	100 Ω +/- 5 Ω @ 100MHz	100 Ω +/- 3 Ω @ 100MHz		
Transfer Impendance	Max 100 mΩ/m @ 10MHz	25 mΩ/m @ 10MHz (ISO 61156 grade 1 cable)		
Coupling Attenuation up to 1Ghz	Min 55 dB	75 dB		

Characteristic	Typical Headroom vs Cat6 (250MHz)	Typical Headroom vs AC6 (500MHz)		
Return Loss	5dB	5dB		
Insertion Loss	6%	2%		
NEXT	20dB	20dB		
PSNEXT	20dB	20dB		
ELFEXT	15dB	15dB		
PSELFEXT	15dB	15dB		
PSANEXT	NA	10dB		
PSAELFEXT	NA	10dB		

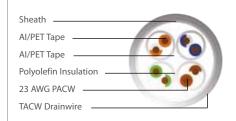
Typical headroom on key S/N characteristics - for information only

	Typical Headroom vs Cat6 (250MHz)	Typical Headroom vs AC6 (500MHz)		
PSACR-N @ 500MHz	NA	35dB		
PSAACR-N* @ 500MHz	NA	20dB		

<sup>\*</sup> Power Sum Attenuation to Alien Crosstalk (near end) Ratio The Alien crosstalk performance of cables is assessed using a '6 round 1' or '4 on a drum' method.

## **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
AC6F/FTP-HF1-500VT	500	LSHF	Violet	7.20	51	0.15	IEC 60332-1-2
AC6F/FTP-HF1-1000VT	1000						
AC6F/FTP-HF1-D500VT	500	LSHF	Violet	14.5 x 7.2	102	0.30	IEC 60332-1-2
AC6F/FTP-HF1-D1000VT	1000						
AC6F/FTP-HF3-500BU	500	- LSHF	Blue	7.6	60	0.23	IEC 60332-3-24
AC6F/FTP-HF3-1000BU	1000						



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

#### PRODUCT DESCRIPTION:

10GPlus F/FTP, 100  $\Omega$ , 4x2xAWG 23/1 is a premium grade Class EA / Augmented Category 6 cable to support 10 Gigabit Ethernet protocol for installation in horizontal and backbone areas.

### PRODUCT PERFORMANCE:

Core

Conductor: 23 AWG Plain Annealed

Copper Wire

Insulation: Cellular Polyolefin Diameter: 1.45mm Nominal Pair: 2 of the above cores

Tape Screen: Individual pair wrapped with

> aluminium polyester tape, applied metal side out Blue-White, Orange-White, Green-White, Brown-White

**Final Assembly** 

Pair Colour:

Cable: 4 of the above shielded pairs 0.5mm Tinned Annealed Drainwire:

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)

Halogen Free cable types (LSHF) meet IEC 60754-1

and IEC 61034