

### Description

23 AWG bare copper wire Insulated with Polyethylene. Two insulated conductors twisted together to form a pair and four such pairs laid up with cross filler to form the basic unit, Rip Cord, Jacketed with Flame-Retardant LSZH or PVC Compound.

### Standards

ANSI/TIA/EIA -568-C.2 and ISO/IEC 11801-2nd Edition,EU Directive 2002/95/EC (RoHS)

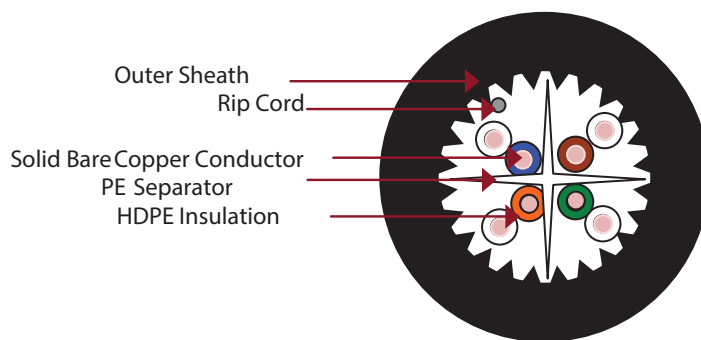
### Application

These structure cable suitable for 10Gigabyte Ethernet Applications and compatible with all known connection Systems, Ideal for high performance workstation applications including voice/data systems, Digital video, Broadband and Voice over internet protocol etc.

### Features

- Complies to the requirements of TIA/EIA 568 C.2 and ISO/ IEC 11801–2nd Edition.
- Superior in highly EMI Environment.
- Performance Designed to support 10Gb/S Ethernet requirements
- Performance specification up to 650 MHz.
- LSZH Properties: IEC 60332 -1, 60754-1&2

### CABLE CONSTRUCTION & CROSS-SECTION



Conductor	23 AWG Solid Bare Copper
Insulation	High Density Polyethylene, Diameter (1.08 ± 0.05mm)
Pairs	Two Insulated conductors Twisted together to form pair
Twisting	4 pairs laid together and separated by cross element
Sheath	LSZH or PVC Compound, as per request
Cable Diameter	7.1 ± 0.50 mm

### Colour Code

- Pair 1: White – Blue, Blue
- Pair 2: White Orange, Orange
- Pair 3: White – Green, Green
- Pair 4- White – Brown,Brown



# COPPER SYSTEM

## ELECTRICAL CHARACTERISTICS (at 20°C on 100m cable length)

DC loop Resistance	Max.16.5 Ω/100m
Conductor Resistance Unbalance	Max.2 %
Mutual Capacitance	Max. 5.6 nF/100m
Capacitance Earth Unbalance	Max. 330 pF/100m
Propagation Delay @ 1, 10, 100 & 500MHz	Max. 570, 545, 538 & 536 ns/100 m
Propagation DeLaySkew 1 –500MHz	Max.40 ns/100 m
Characteristic Impedance:	100 ± 15Ω
Nominal velocity of propagation:	68%

### Transmission Performance

Freq (MHz)	Attenuation dB/100@20°C	NEXT (dB)	PSNEXT (dB)	ACRF (dB)	PSACRF (dB)	Return Loss (dB)
	Max.	Min.	Min.	Min.	Min.	Min.
1.0	2.3	65	62.0	63.3	60.3	19.0
4.0	4.2	63.0	60.5	51.2	48.2	19.0
8.0	5.8	58.2	55.6	45.2	42.2	19.0
10.0	6.5	56.6	54.0	43.3	40.3	19.0
16.0	8.2	53.2	50.6	39.2	36.2	18.0
20.0	9.2	51.6	49.0	37.2	34.2	17.5
25.0	10.2	50.0	47.3	35.3	32.3	17.0
31.25	11.5	48.4	45.7	33.4	30.4	16.5
62.5	16.4	43.4	40.6	27.3	24.3	14.0
100	20.9	39.9	37.1	23.3	20.3	12.0
200	30.1	34.8	31.9	17.2	14.2	9.0
250	33.9	33.1	30.2	15.3	12.3	8.0
300	37.4	31.7	28.8	13.7	10.7	7.2
400	43.7	28.7	25.8	11.2	8.2	6.0
500	49.3	26.1	23.2	9.3	6.3	6.0

### Mechanical Properties

Maximum installation tension: 110 N (max.)

Breaking strength: 400 N (max.)

Sheath Tensile Strength: Before Aging > 13.5 Mpa, After Aging (100 ±2° C,168H): > 12.5 MPa

Sheath Elongation: Before Aging: > 150, %, After Aging (100 ±2° C,168H): > 125 %

Sheath Tensile Strength & Elongation variation: ±20%

Sheath Cold Bend (-20 ±2° C, 4H, 8D) : No Crack

### Thermal Characteristics

Installation Temperature range 0° C to +50° C

Operating Temperature range -20° C to +60° C

### ORDERING INFORMATION

PART NUMBER	DESCRIPTION
APC-4-C6AVU	Apsys Networks Category 6A U/UTP 23 AWG 305m PVC Cable,Violet
APC-4-C6AGY	Apsys Networks Category 6A U/UTP 23 AWG 305m PVC Cable,Grey
APCZH-4-C6AVU	Apsys Networks Category 6A U/UTP 23 AWG 305m LSZH Cable,Violet
APCZH-4-C6AGY	Apsys Networks Category 6A U/UTP 23 AWG 305m LSZHCable,Grey
APCZH-4-C6A5VU	Apsys Networks Category 6A U/UTP 23 AWG 500m LSZH Cable,Violet
APCZH-4-C6A5GY	Apsys Networks Category 6A U/UTP 23 AWG 500m LSZHCable,Grey

