

Product Specifications

Product Family	Zybrnet 10G
Category	Cat.6A
Product	Cat. 6A U/UTP 23AWG Solid LSZH Dca 500M
Item no.	ZN604605000
Edition	1.0



Approvals

UL444 Certified ANSI/TIA-568.2-D IEC 660332

Compliance

RoHS Compliant. EU Directive 2002/95/EC



Applications & Features

✓ Flame rate: Dca -s2, d2, a1
✓ 10Gb Ethernet
✓ Certified up to 500MHz

Construction & Dimensions

Conductor

Size
Material
Dimension

23 AWG X 4P

Solid Bare Copper

1 / $0.566 \pm 0.02\text{mm}$

Insulation

Material
Diameter

Foamed PE & HDPE

 $1.12 \pm 0.05\text{mm}$ (Blue, Green)

 $1.03 \pm 0.05\text{mm}$ (Orange, Brown)

1. Blue x White / Blue

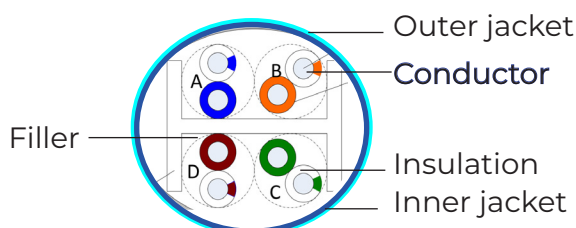
2. Orange x White / Orange

3. Green x White / Green

4. Brown x White / Brown

Identification

Cross section



Core Assembly

Core twist
Construction
Assembly pair
Filler

2 Core twist

U/UTP

4 Pair assembly

Yes

Inner Jacket

Material
Min. average thickness
Outer diameter
Color

PE

0.2 mm

 $5.6 \times 6.4 \pm 0.5 \text{ mm}$

Natural color

Outer Jacket

Material
Thickness
Outer diameter
Color

LSZH

0.70 mm

 $7.35 \times 8.1 \pm 0.5 \text{ mm}$

Grey

Electrical & Physical poperties

Conductor Resistance
Mutual Capacitance
DC. Resistance Unbalance
Pair-to-Ground Capacitance Unbalance
Operating Voltage
Insulation resistance
Cold Bend Test

9.38 Ω /100m 20 °c Max.
5.6 nF/m Max.
5% Max.
160 pF/100m Max.
300 V
5000 M Ω /km
-20 °c x 4hrs No Crack.



Jacket

Unaged

Tensile strength
Elongation

8.3 MPa
100% Min.

Aged

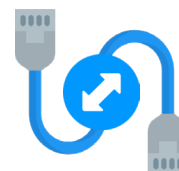
Tensile strength
Elongation

Min. 75% (UL444)
Min. 75% (UL444)

UV Resistance (UL1581-1200)

Tensile strength
Elongation

Min. 80% before aging
Min. 80% before aging



Installation temperature

0°C to 50°C

Operating temperature

-20°C to 75°C

Minimum bending radius

≥ 4 times of overall diameter

Maximum pulling tension

≤ 110 N

Delay Skew

45 ns/100m

Marking

ZN604605000 EUROCLASS Cca-s2, d2, a1 ZYBRNET 10G CAT. 6A 4PR
23AWG SOLID U/UTP IEC60332 LSZH PRESTAQ ***M
(***)Meter marking 500 to 0)

Frequency MHz	R.L. MIN. dB/100m	Att. MAX. dB/100m	NEXT MIN. dB/100m	PSNEXT MIN. dB/100m	ACRF MIN. dB/100m	PSACRF MIN. dB/100m	Propagation MAX. ns/100m
4.00	23,0	3,8	66,3	63,3	56,0	53,0	552,0
10.00	25,0	5,93	60,3	57,3	48,0	45,0	546,7
16.00	25,0	7,49	57,2	54,2	43,9	40,9	543,0
20.00	25,0	8,38	55,8	52,8	42,0	39,0	542,0
31.25	23,6	10,50	52,9	49,9	38,1	35,1	540,4
62.50	21,5	14,99	48,4	45,4	32,1	29,1	538,6
100.00	20,1	19,14	45,3	42,3	28,0	25,0	537,6
200.00	18,0	27,58	40,8	37,8	22,0	19,0	536,5
250.00	17,3	31,07	39,3	36,3	20,0	17,0	536,3
300.00	16,8	34,27	38,1	35,1	18,5	15,5	536,1
400.00	15,9	40.05	36,3	33,3	16,0	13,0	535,8
500.00	15,2	45.26	34,8	31,8	14,0	11,0	535,6

Electrical Performance