

Essential-6+ Cable

ESS 6+ CAT6 U/UTP CM 4P 23AWG AZC 305

Contact

Communications Department
nexans.brasil@nexans.com

Nexans Ref.: N100.962x30

Construction U/UTP Compliancy with the latest Cat6 standards In accordance with the latest Cat.6 standards Application Class E, bandwidth up to 250 MHz Cable without crossfiler

DESCRIPTION

The Nexans Essential-6+ cable line is the 250MHz bandwidth offer for Class E applications up to 1Gbits. Nexans ESSENTIAL CAT.6+ U/UTP cables are designed for horizontal and vertical applications in structured cabling networks to connect the user outlet to the administration panel or to interconnect administration panels. Their application is focused on current Gigabit Ethernet data networks.

APPLICATION

- FAST ETHERNET 100BASE-TX
- GIGABIT ETHERNET 1000BASE-T
- TOKEN RING (100 Mbps)
- ATM LAN (155 Mbps)
- TP-PMD (100 Mbps)
- ISDN
- POE - POWER OVER ETHERNET
- POE+ - POWER OVER ETHERNET PLUS
- ANALOGUE AND DIGITAL COMMUNICATION FOR VIDEO AND VOICE

CONSTRUCTION

- U/UTP-type 4-wire twisted pair cable composed of solid bare copper conductors, 23 AWG, insulated in high density thermoplastic polyethylene.
- External flame retardant jacket in PVC options CM and LSZH.
- 23AWG.
- Cable without crossfiler.
- Available in Grey and Blue (other colours on request).
- Comply with the pattern of colours Blue / Light Blue, Orange / White, Green / Light Green, Brown / Light Brown, as regards the insulation of pairs.

INSTALLATION

Environment: Inside- non-agressive.

APPLICABLE STANDARDS

International:

- Directive RoHS



Ambient dynamic operating temperature, range
-20 ... 60 °C



Bending factor installed
4 (xD)



Electro magnetic interference resistance
No



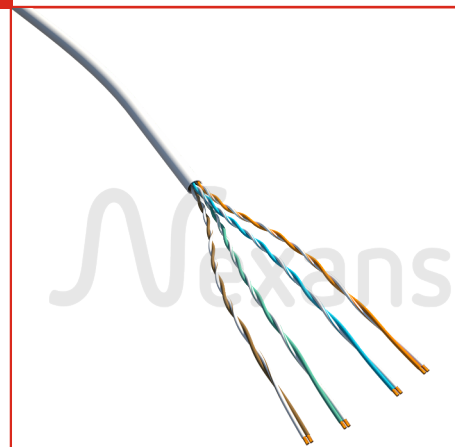
Fire retardant
IEC 60332-3



Inst. temp. range
0 ... 50 °C



U.V resistance
No



You may see a combination of brands on documents or products during the transition.

STANDARDS

International IEC 61156-5; ISO/ IEC 11801

National ANSI/TIA-568.2-D

Essential-6+ Cable

ESS 6+ CAT6 U/UTP CM 4P 23AWG AZC 305

Contact

Communications Department
nexans.brasil@nexans.com

The product complies with the RoHS Directive restricting the use of heavy metals in the manufacture of products and preservation of the environment.

National:

- ABNT NBR 14565
- ABNT NBR 14703
- ABNT NBR 14705

CERTIFICATION

- UL Listed
- ANATEL

PACKAGING

- Box (305m)

CABLE LABEL

NEXANS ESSENTIAL 6+ CABLE CATEGORY 6+ U/UTP 23AWG 4 PARES x RoHS
COMPLIANT 75C ANSI/TIA 568-C.2 "SEMANA/ANO" "1 a 305 m" yyyyyy-yyyyyy

x: CM | LSZH

yyyyy-yyyyyyy: CM : 02081-11-05519

yyyyy-yyyyyyy: LSZH : 02088-11-05519

WARRANTY

- 02 years (Consult the 25-year extended warranty programme).



Ambient dynamic operating
temperature, range
-20 ... 60 °C



Bending factor installed
4 (xD)



Electro magnetic interference
resistance
No



Fire retardant
IEC 60332-3



Inst. temp. range
0 ... 50 °C



U.V resistance
No

All drawings, designs, specifications, plans and particulars of weights, size and dimensions contained in the technical or commercial documentation of Nexans is indicative only and shall not be binding on Nexans or be treated as constituting a representation on the part of Nexans.

Generated 2/21/24 www.nexans.com.br Page 2 / 3

Essential-6+ Cable

ESS 6+ CAT6 U/UTP CM 4P 23AWG AZC 305

Contact

Communications Department
nexans.brasil@nexans.com

CHARACTERISTICS

Construction characteristics

Type of cable	U/UTP
Outer sheath	PVC - CM
Colour	Blue
Armour type	Unarmoured

Dimensional characteristics

Approximate weight	32 kg/km
Conductor cross-section (AWG/KCMIL)	23
Diameter over insulation	1.0 mm
Nominal outer diameter	5.5 mm
Number of pairs	4

Electrical characteristics

Capacitance unbalance pair to ground at 1kHz	330 pF/100m
Characteristic impedance	100 Ohm
Max. DC resistance of the conductor at 20°C	0.938 Ohm/km
Mutual capacitance at 1kHz	5.6 nF/100m
Nominal velocity propagation	68 %

Transmission characteristics

Propagation delay, max. 100 MHz	545 ns/100m
Skew	45 ns/100m

Mechanical characteristics

Maximum operating pulling force	110 N
---------------------------------	-------

Usage characteristics

Length	305 m
Installation type	Indoor
Ambient dynamic operating temperature, range	-20 ... 60 °C
Bending factor when installed	4 (xD)
Category	Cat. 6
Electro magnetic interference resistance	No
Fire retardant	IEC 60332-3
Installation temperature, range	0 ... 50 °C
Packaging	Box
U.V resistance	No

InstruFiber

INSTRUMENTAÇÃO E FIBRA ÓPTICA

11 4172-0606

11 4386-0362

All drawings, designs, specifications, plans and particulars of weights, size and dimensions contained in the technical or commercial documentation of Nexans is indicative only and shall not be binding on Nexans or be treated as constituting a representation on the part of Nexans.

Generated 2/21/24 www.nexans.com.br Page 3 / 3

 Nexans