

# Essential-5 cable

## Contact

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- Construction U/UTP
- Compliancy with the latest category 5e standards
- Supports Class D applications up to 1Gbits

## DESCRIPTION

The Essential-5e Nexans cable line is the 100MHz bandwidth offer for class D applications up to 1Gbits. Nexans ESSENTIAL 5e cables are designed for horizontal applications in structured cabling networks to connect the user outlet to the administration panel or to interconnect administration panels. Their application is limited to 100MHz bandwidth, Class D applications.

## APPLICATION

- FAST ETHERNET 100BASE-TX
- GIGABIT ETHERNET 1000BASE-T
- TOKEN RING (100 Mbps)
- ATM LAN (155 Mbps & 622 Mbps)
- ISDN
- POE - POWER OVER ETHERNET
- POE+ - POWER OVER ETHERNET PLUS
- ANALOGUE AND DIGITAL COMMUNICATION FOR VIDEO AND VOICE

## CONSTRUCTION

- Category 5e U/UTP;
- PVC: CMX | CM or LSZH;
- 4 twisted pairs matching the colour pattern Blue / Light Blue, Orange / White, Green / Light Green, Brown / Light Brown, as for pair insulation.
- 24 AWG;
- Composed of bare copper conductors, insulated in high density thermoplastic polyethylene.

## INSTALLATION

### Environment:

Indoor - non-aggressive (7 standard colors : Blue, Red, Grey, Black, White, Yellow, Green e other colours on request)  
Indoor/Outdoor- non-aggressive (only the CMX black sheath)

## APPLICABLE STANDARDS

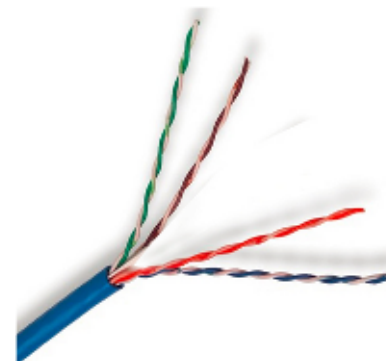
### International:

- Directive RoHS

The product complies with the RoHS Directive by 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



# essential

## STANDARDS

**International** IEC 61156-5; ISO/IEC 11801

**National** ANSI/TIA-568-C.2

## CERTIFICATIONS

- UL Listed
- ANATEL

## PACKAGING

- Box of 100m (CMX)
- Box of 305m (CMX / CM / LSZH)

## CABLE LABEL

### Indoor:

NEXANS ESSENTIAL CABLE CATEGORY 5e U/UTP 24AWG 4PAIRS  
RoHS COMPLIANT 75C ANSI/TIA 568-C.2 "SEMANA/ANO" "1 a 305 m"  
ANATEL **yyyyy-yy-yyyyy**

x:CMX | CM | LSZH

**yyyyy-yy-yyyyy**: CMX | CM : 02082-11-05519

**yyyyy-yy-yyyyy**: LSZH : 02084-11-05519

### Indoor/Outdoor:












NEXANS ESSENTIAL CABLE CATEGORY 5e U/UTP 24AWG 4PAIRS CMX  
RoHS COMPLIANT 75C ANSI/TIA 568-C.2 INTERNO/EXTERNO "SEMANA/  
ANO" "1 a 305 m" ANATEL **yyyyy-yy-yyyyy**

**yyyyy-yy-yyyyy**:00242-12-05519

## WARRANTY

- 02 years (Consult our 25 years extended warranty program).

## PRODUCT LIST

Nexans ref.	Country ref.	Name	Type of cable	Outer sheath	Colour	Length [m]	Installation type
 N100.562330	17562	ESS CAT5E U/UTP CM 4P 24AWG AZC 305	U/UTP	PVC - CM	Blue	305	Indoor
 N100.562730	17582	ESS CAT5E U/UTP CM 4P 24AWG CZ 305	U/UTP	PVC - CM	Grey	305	Indoor
 N100.561330	17490	ESS CAT5E U/UTP CMX 4P 24AWG AZC 305	U/UTP	PVC - CMX	Blue	305	Indoor
 N100.561130	17493	ESS CAT5E U/UTP CMX 4P 24AWG BC 305	U/UTP	PVC - CMX	White	305	Indoor
 N100.561730	17492	ESS CAT5E U/UTP CMX 4P 24AWG CZ 305	U/UTP	PVC - CMX	Grey	305	Indoor
 N100.561231	17520	ESS CAT5E U/UTP CMX 4P 24AWG PT 305 I/O	U/UTP	PVC - CMX	Black	305	Indoor/Outdoor
 N100.564330	17549	ESS CAT5E U/UTP LSZH 4P 24AWG AZC 305	U/UTP	LSZH	Blue	305	Indoor
 N100.564130	17584	ESS CAT5E U/UTP LSZH 4P 24AWG BC 305	U/UTP	LSZH	White	305	Indoor
 N100.561300	17654	ESS CAT5e U/UTP CMX 4P 24AWG AZC 100	U/UTP	PVC - CMX	Blue	100	Indoor
 N100.561100	17658	ESS CAT5e U/UTP CMX 4P 24AWG BC 100	U/UTP	PVC - CMX	White	100	Indoor
 N100.561201	17676	ESS CAT5e U/UTP CMX 4P 24AWG PT 100 I/O	U/UTP	PVC - CMX	Black	100	Indoor/Outdoor

 = Make to order,  = In stock

## CARACTERÍSTICAS DE TRANSMISSÃO

### CARACTERÍSTICAS DE TRANSMISSÃO

Freq. (MHz)	NEXT (dB)		Return Loss (dB)		Insertion Loss (dB/100m)		PSNEXT (dB)		ACRF (dB/100m)		PSACRF (dB/100m)	
	Mínimo	típico	Mínimo	típico	Máximo	típico	Mínimo	típico	Mínimo	típico	Mínimo	típico
1	65.3	80.2	20.0	28.4	2.0	1.9	62.3	75.6	63.8	79.4	60.8	72.0
4	56.3	71.8	23.0	33.3	4.1	3.8	53.3	65.3	51.8	65.8	48.8	60.3
8	51.8	62.8	24.5	40.4	5.8	5.5	48.8	57.4	45.7	60.4	42.7	53.2
10	50.3	61.8	25.0	32.4	6.5	6.1	47.3	57.1	43.8	57.3	40.8	50.5
16	47.2	61.0	25.0	36.4	8.2	7.8	44.2	57.3	39.7	52.9	36.7	46.2
20	45.8	58.3	25.0	34.5	9.3	8.8	42.8	53.2	37.8	51.6	34.8	44.6
25	44.3	56.5	24.3	37.6	10.4	9.8	41.3	50.6	35.8	49.2	32.8	42.9
31.25	42.9	55.9	23.6	39.6	11.7	11.0	39.9	50.9	33.9	47.3	30.9	40.8
62.5	38.4	50.2	21.5	37.7	17.0	15.9	35.4	46.2	27.9	41.6	24.9	34.6
100	35.3	48.8	20.1	47.5	22.0	20.4	32.3	44.8	23.8	36.7	20.8	30.9
200	-	43.9	-	31.6	-	29.4	-	39.3	-	27.0	-	30.7
250	-	41.0	-	30.7	-	33.2	-	34.9	-	27.5	-	30.1
300	-	37.2	-	32.1	-	36.6	-	32.6	-	27.4	-	26.9
400	-	39.2	-	39.7	-	42.8	-	32.0	-	31.1	-	24.8
500	-	37.6	-	30.9	-	48.4	-	28.5	-	28.9	-	22.3
600	-	34.9	-	28.6	-	53.9	-	26.0	-	25.5	-	17.6
1000	-	27.5	-	29.1	-	72.4	-	21.3	-	13.7	-	6.3