

NEXUS

Structure Trading Co.



CABLE CATALOGUE

ALL PRODUCTS

Flexible Wire

Inflexible Wire

Flexible 2Core Wire

Flexible Flat Cable

Inflexible Flat Cable

Flexible Cable

Aluminium Cable

Shielded Cable

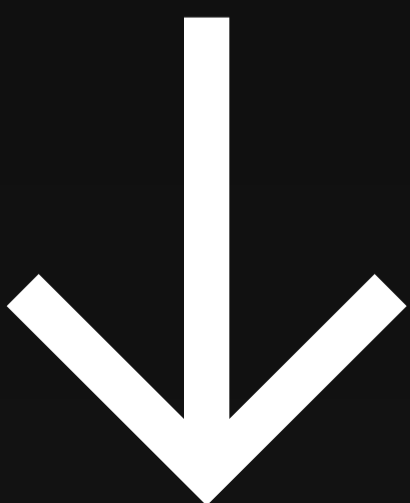
Halogen-Free Cable

Network CAT6

RG Cable

TelecomCable

Linear Lights



Flexible Wire

Electric Cable & Wire

Flexible wire, also known as stranded wire, is a type of electrical wire that is made up of multiple smaller strands of wire twisted together. This design allows the wire to be more flexible and easier to bend compared to solid wire. It's commonly used in applications where flexibility is important, such as in electronic devices or for wiring in tight spaces. Flexible wires have a unique structure that allows them to be more bendable compared to solid wires. Instead of being a single solid piece, flexible wires are made up of multiple smaller strands of wire twisted together. This twisted design gives the wire its flexibility and allows it to easily bend and maneuver without breaking.

Installation:

In conduit, insulated support, ducts... in covered an dry place.
Permissible current and voltage drop are given for conductor laid alone in insulating tube on a wall Temperature = 30°C. Permanent operationIf conditions are different, apply correction factors from NF C 15100 standard or other equivalent national standard.

Design:

1. Conductor: Bare Copper
2. Insulation: PVC in Different Colors

Marking

Nexus Structure . Size . Standards.
meter mark

Voltage Drop

Calculated with Cos phi = 0,8

STANDARDS

1. International:
 - EN 50525231
 - HD 21.3
 - IEC 602271
2. National:
 - NF C 32201/3



Conductor flexibility
Stranded class 2



Lead free
Yes



Rated Voltage
Uo/U (Um)
450 / 750 V



Mechanical
resistance to
impacts Low



Max. conductor
temp. in service
70 °C



Operating temp.
-5 ... 60 °C



Flame retardant
C2, NF C 32-070
& EN 50265-2-1



Weather
resistance
No

Nominal Cross Section	No. of Stands x Diameter	Insulation Thickness	Mean overall Diameter /min	Mean overall Diameter/max	Weight	Max. of conductor Resistance at 20 °c	current Capacity at 25 °c	Min. of conductor Resistance at 70 °c
mm ²	N x mm	mm	mm	mm	Kg/km	Ω/KM	A	MΩ/Km
0.50	1 × 0.97	0.6	2.1	2.5	11	24.5	10	0.012
0.75	1 × 1.13	0.6	2.2	2.7	14	18.1	12	0.011
1	1 × 1.13	0.6	2.2	2.7	14	18.1	12	0.011
1.5	30 × 0.25	0.70	2.8	3.4	21	1.3	16	0.011
2.5	50 × 0.25	0.80	3.4	4.1	32	7.98	21	0.009
4	56 × 0.30	0.80	3.9	4.8	48	4.95	28	0.007
6	84 × 0.30	0.80	4.4	5.3	68	3.3	36	0.006
10	80 × 0.40	1	5.7	6.8	115	1.91	49	0.0056
16	115 × 0.40	1	6.7	8.1	155	1.21	65	0.0046
25	179 × 0.40	1.20	8.4	10.2	240	0.78	85	0.0044

Inflexible Wire

Electric Cable & Wire

Inflexible wire is commonly used in situations where you need stability and rigidity. Some common uses include structural wiring, electrical conduit systems, and fixed installations where the wire needs to stay in place without bending or flexing.



Installation:

In conduit, insulated support, ducts... in covered an dry place.
Permissible current and voltage drop are given for conductor laid alone in insulating tube on a wall Temperature = 30°C. Permanent operationIf conditions are different, apply correction factors from NF C 15100 standard or other equivalent national standard.

Design:

1. Conductor: Bare Copper
2. Insulation: PVC in Different Colors

Marking

Nexus Structure . Size . Standards.
meter mark

Voltage Drop

Calculated with Cos phi = 0,8

STANDARDS

1. International:
 - EN 50525231
 - HD 21.3
 - IEC 602271
- 2.National:
 - NF C 32201/3



Conductor flexibility
Solid class 1



Lead free
Yes



Rated Voltage
Uo/U (Um)
450 / 750 V



Mechanical resistance to impacts
Low



Flame retardant
-



Max. conductor temp.in service
70 °C



Operating temp.
-5 ... 60 °C



Weather resistance
No

Nominal Cross Section	No. of Strands x Diameter	Insulation Thickness	Mean overall Diameter /min	Mean overall Diameter/max	Weight	Max. of conductor Resistance at 20 °c	current Capacity at 25 °c	Min. of conductor Resistance at 70 °c
mm ²	N x mm	mm	mm	mm	Kg/km	Ω/KM	A	MΩ/Km
0.50	1 × 0.80	0.6	1.9	2.3	8.5	36	6.5	0.015
0.75	1 × 0.99	0.6	2.1	2.5	11	24.5	10	0.012
1	1 × 1.13	0.6	2.2	2.7	14	18.1	12	0.011
1.5	1 × 1.38	0.70	2.6	3.2	20	12.1	16	0.011
2.5	1 × 1.78	0.80	2.7	3.3	31	7.41	21	0.010
4	1 × 2.25	0.80	3.3	3.9	46	4.61	28	0.0085
6	1 × 2.76	0.80	3.3	4	67	3.08	35	0.0070
10	1 × 3.57	1	3.6	4.4	110	1.83	48	0.0070
16	7 × 1.71	1	3.8	4.6	180	1.15	65	0.0050
25	7 × 2.14	1.20	4.1	5	278	0.727	88	0.0050

Flexible 2Core Wire

Electric Cable & Wire

Twin core cords cables are commonly used for low voltage applications, such as in electronics and small appliances. They have two insulated conductors that are twisted together, providing a compact and flexible design. These cables are often used for power transmission and signal control in various electrical devices.



Conductor flexibility
Flexible class 5



Halogen free
No



Lead free
Yes



Rated Voltage
Uo/U (Um)
300 / 500 V



Cable flexibility
Flexible



Max. conductor
temp. in service
60 °C



Operating temp.
5 ... 60 °C

Nominal Cross Section	No. of Strands x Diameter	Insulation Thickness	Mean overall Diameter /min	Mean overall Diameter/max	Weight	Max. of conductor Resistance at 25 °C	current Capacity at 25 °C
N x mm ²	N x mm	mm	mm	mm	Kg/km	Ω/KM	A
2 × 0.50	24 × 0.16	0.8	24 × 4.9	3 × 5.9	21	39	6
2 × 0.75	37 × 0.16	0.8	31 × 6.3	3.8 × 6.3	27	26	9
2 × 1	32 × 0.20	0.8	---	--	32	19.5	16
2 × 1.5	30 × 0.25	0.8	---	---	42	13.3	20
2 × 2.5	50 × 0.25	0.8	---	---	61	7.98	27



Flexible Flat Cable

Electric Cable & Wire

Flexible wire, also known as stranded wire, is a type of electrical wire that is made up of multiple smaller strands of wire twisted together. This design allows the wire to be more flexible and easier to bend compared to solid wire. It's commonly used in applications where flexibility is important, such as in electronic devices or for wiring in tight spaces. Flexible wires have a unique structure that allows them to be more bendable compared to solid wires. Instead of being a single solid piece, flexible wires are made up of multiple smaller strands of wire twisted together. This twisted design gives the wire its flexibility and allows it to easily bend and maneuver without breaking.

Installation:

Open air.

Core colours

2 cores = Brown+ Light blue

Marking

S,Y + USE 'harH03VVH2-F N' Usine

Voltage Drop

Calculated with Cos phi = 0.8

For more information on Bipolar extension cords 6 A, see Related information on the bottom of the page.

STANDARDS

1. International:
 - EN 50525-2-11
 - HD 21.5
 - IEC 60227-1
2. National:
 - NFC 32-201/5



Conductor flexibility
Flexible class 5



Lead free
Yes



Rated Voltage
U₀/U (U_m)
300 / 300 V



Mechanical resistance to impacts
Low



Cable flexibility
Flexible



Max. conductor temp. in service
- °C



Operating temp.
-5 ... 60 °C



Flame retardant
C2, NFC 32-070

Nominal Cross Section	No. of Stands x Diameter	Insulation Thickness	Mean overall Diameter /min	Mean overall Diameter/max	Sheath Thickness	Weight	Max. of conductor Resistance at 25 °c	current Capacity at 25 °c
N x mm ²	N x mm	mm	mm	mm	mm	Kg/km	Ω/KM	A
2 × 0.50	16 × 0.2	0.5	3 × 4.9	3.7 × 5.9	0.6	30	39	6
2 × 0.75	24 × 0.2	0.5	3.2 × 5.2	3.8 × 6.3	0.6	36	26	9
2 × 0.50	16 × 0.2	0.5	4.6	5.9	0.6	36	39	6
2 × 0.75	24 × 0.2	0.5	4.9	6.3	0.6	44	26	9
2 × 1	32 × 0.2	0.6	4.2	6.7	0.8	6.2	19.5	16
3 × 0.50	16 × 0.2	0.5	4.9	6.3	0.6	44	39	6
3 × 0.75	24 × 0.2	0.5	5.2	6.7	0.6	55	26	9

Inflexible Flat Cable

Electric Cable & Wire

These cables are designed to be rigid and not easily bendable. They are commonly used in applications where a fixed and stable connection is required, such as in power distribution systems or industrial equipment. The inflexibility of these cables ensures a consistent and secure power transmission



Conductor flexibility
Flexible class 5



Halogen free
No



Lead free
Yes



Rated Voltage
U₀/U (Um)
300 / 500 V



Cable flexibility
Flexible



Max. conductor temp. in service
60 °C



Operating temp.
5 ... 60 °C

Nominal Cross Section	No. of Stands x Diameter	Insulation Thickness	Sheath Thickness	Mean overall Diameter	Max. of conductor Resistance at 20 °C	Weight	current Capacity at 25 °C
N x mm ²	N x mm	mm	mm	mm	Ω/KM	Kg/km	A
2 × 0.75	1 × 0.97	0.6	0.9	6.1 × 4	24.5	43	10
2 × 1	1 × 1.13	0.6	0.9	6.5 × 4.1	18.1	53	16
2 × 1.5	1 × 1.38	0.7	0.9	7.4 × 4.6	12.1	68	20
2 × 2.5	1 × 1.78	0.8	0.9	8.6 × 5.2	7.41	98	27
2 × 4	1 × 2.25	0.8	1	10.3 × 6.2	4.61	142	36
2 × 6	1 × 2.76	0.8	1.1	11.6 × 7	3.08	196	47
3 × 0.75	1 × 0.97	0.6	0.9	8.3 × 4	24.5	62	10
3 × 1	1 × 1.13	0.6	0.9	8.8 × 4.1	18.1	73	16
3 × 1.5	1 × 1.38	0.7	0.9	10.1 × 4.6	12.1	98	20
3 × 2.5	1 × 1.78	0.8	0.9	11.9 × 5.2	7.41	144	27
3 × 4	1 × 2.25	0.8	1.1	14.7 × 6.4	4.61	209	36
3 × 6	1 × 2.76	0.8	1.1	16.4 × 7	3.08	285	36
3 × 10	1 × 3.57	1	1.2	20.6 × 8.5	1.83	447	65

Flexible Cable

Electric Cable & Wire

Flexible electrical cable, also known as flex cable, is a type of wire that is designed to be flexible and bendable. It is commonly used in applications where the cable needs to be moved or flexed frequently, such as in robotics, machinery, or portable devices. Its capability lies in its ability to withstand repeated bending without damaging the conductors inside. This makes it ideal for applications that require flexibility and durability. Step into the world of electric wire, where power meets versatility. Our premium wire is designed to deliver a reliable flow of electricity, providing the backbone for all your electrical projects. With its durable construction and superior performance, you can trust our wire to keep your connections strong and your devices running smoothly. Whether you're tackling a DIY project or working on a professional installation, our electric wire is the perfect companion for your electrical adventures. Let us power up your world!"



Design:

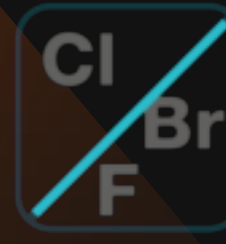
1. Conductor: flexible copper class 5 according to DIN VDE 0295
2. Insulation: PVC-compound T12 acc. to DIN VDE 0281, part 1
3. Core configuration : 2-5 cores twisted
4. Outer Sheath : PVC compound TM3 acc. to DIN VDE 0281, part 1

STANDARDS

1. International:
 - HD 21.5
2. National:
 - DIN VDE 0281 part 1
 - DIN VDE 0281 part 5
 - DIN VDE 0293 part 308
 - DIN VDE 0295



Conductor flexibility
Flexible class 5



Halogen free
No



Lead free
Yes



Rated Voltage
U_c/U_i(U_m)
300 / 500 V



Cable flexibility
Flexible



Max. conductor temp. in service
60 °C



Operating temp.
5 ... 60 °C

Nominal Cross Section	No. of Strands x Diameter	Insulation Thickness	Mean overall Diameter	Weight	Max. of conductor Resistance at 25 °C	current Capacity at 25 °C	Minimum insulation Resistance at 70 °C	Voltage
2 × 0.50	16 × 0.2	0.6	0.8	41	39	7	0.011	300/500
2 × 0.75	24 × 0.2	0.6	0.8	56	26	13	0.011	300/500
2 × 1	32 × 0.20	0.6	0.8	64	19.5	16	0.010	300/500
2 × 1.5	30 × 0.25	0.7	0.8	83	13.3	20	0.010	300/500
2 × 2.5	50 × 0.25	0.8	1.0	126	7.98	27	0.009	300/500
2 × 4	56 × 0.30	0.8	1.3	172	4.95	36	0.0076	450/750
2 × 6	84 × 0.30	0.8	1.3	340	3.3	44	0.0065	450/750
2 × 10	80 × 0.40	1.0	1.3	370	1.91	61	0.0063	450/750
2 × 16	126 × 0.40	1.0	1.3	510	1.21	82	0.0046	450/750
3 × 0.75	24 × 0.20	0.6	0.8	105	26	13	0.011	300/500
3 × 1	32 × 0.20	0.6	0.8	165	19.5	16	0.010	300/500
3 × 1.5	30 × 0.25	0.7	0.9	295	13.3	20	0.010	300/500
3 × 2.5	50 × 0.25	0.8	1.1	365	7.98	27	0.009	300/500
3 × 4	56 × 0.30	0.8	1.3	210	4.95	36	0.0076	450/750
3 × 6	84 × 0.30	0.8	1.3	310	3.3	44	0.0065	450/750
3 × 10	80 × 0.40	1.0	1.3	490	1.91	61	0.0063	450/750
3 × 16	115 × 0.40	1.0	1.3	710	1.21	82	0.0046	450/750
4 × 0.75	24 × 0.20	0.6	0.3	130	26	13	0.011	300/500
4 × 1	32 × 0.20	0.6	0.9	193	19.5	16	0.010	300/500
4 × 1.5	30 × 0.25	0.7	1	345	13.3	20	0.010	300/500
4 × 2.5	50 × 0.25	0.8	1.1	450	7.98	27	0.009	300/500
4 × 4	56 × 0.30	0.8	1.3	280	4.95	36	0.0076	450/750
4 × 6	84 × 0.30	0.8	1.3	375	3.3	44	0.0065	450/750
4 × 10	80 × 0.40	1.0	1.3	610	1.91	61	0.0063	450/750
4 × 16	115 × 0.40	1.0	1.3	850	1.21	82	0.0046	450/750
5 × 0.75	24 × 0.20	0.6	0.9	160	26	13	0.011	300/500
5 × 1	32 × 0.20	0.6	0.9	235	19.5	16	0.010	300/500
5 × 1.5	30 × 0.25	0.7	1.1	172	13.3	20	0.010	300/500
5 × 2.5	50 × 0.25	0.8	1.2	245	7.98	27	0.009	300/500
5 × 4	56 × 0.30	0.8	1.3	354	4.95	36	0.0076	300/500
5 × 6	84 × 0.30	0.8	1.3	470	3.3	44	0.0065	450/750
5 × 10	80 × 0.40	1.0	1.3	822	1.91	61	0.0063	450/750
5 × 16	115 × 0.40	1.0	1.8	---	1.21	82	0.0046	450/750



Aluminium Cable

Electric Cable & Wire

Nexus U-1000 AR2V aluminium cables can be used in all low voltage power installations. This product can complete our range of photovoltaic applications (branded Nexus KEYLIOS®).

Our range also offers Nexus TWISTAL®, the twisted single-core version of U-1000 AR2V, specially designed to make three-phase links with neutral. TWISTAL® simplifies your life and offers many advantages :

- Each core is spotted with a color band
- The twisted core reduces the number of drums and cables pulling
- This solution can allow to reduce the section of used cables (in parallel circuits)
- TWISTAL® is more flexible and light than a multiconductor, allowing to increase comfort and saving of time

Installation:

These cables can be fixed on cable trays, within conduits or fixed to walls. They also can be buried directly with extra mechanical protection.

Design:

1. Conductor: stranded circular aluminium - class 2
2. Insulation: XLPE - cores identification by colours
3. Core configuration : with non hygroscopic filler
4. Outer Sheath : Lead free black PVC

STANDARDS

1. International:
 - IEC 60228
 - IEC 60502-1
2. National:
 - XPC 32-321



Conductor flexibility
Stranded class 2



Lead free
Yes



Rated Voltage
U₀/U (U_m)
0.6/1 (1.2) kV



Cable flexibility
Rigid



Mechanical resistance to impacts
Good



Max. conductor temp. in service
90 °C



Operating temp.
-25 ... 60 °C



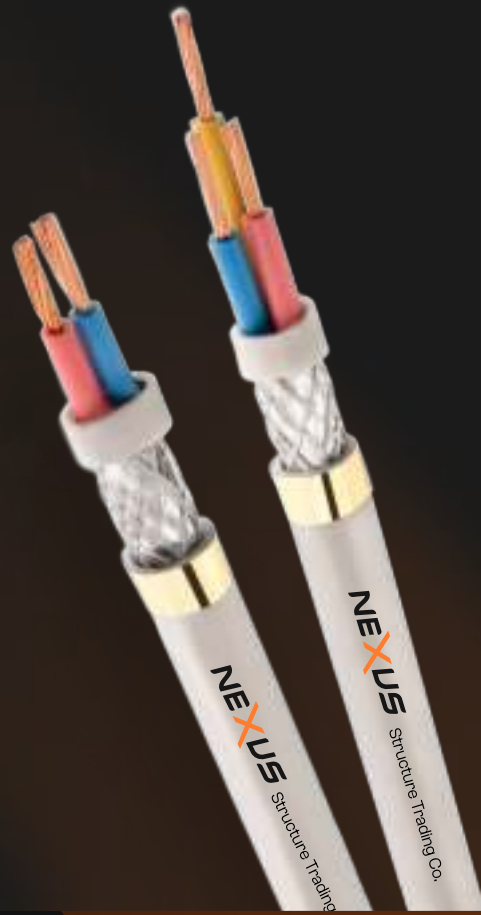
Weather resistance
AN3

Nominal Cross Section	Conductor No. of Strands	Conductor Dia. of Strands	Insulation thickness Normal Value	Insulation thickness Min. Value	Filter Thickness	Sheath Thickness	Overall Diameter	Weight
N x mm ²	N	mm	mm	mm	mm	mm	mm	Kg/km
3 × 25 + 16	7/7	2.16 / 1.74	1.2 / 1	0.98 / 0.8	1	1.8	24.5	312
3 × 35 + 16	7/7	2.57/1.74	1.2/1	0.98/0.8	1	1.8	26.8	970

Shielded Cable

Electric Cable & Wire

Shielded cables are commonly used in environments with high electromagnetic interference, such as industrial settings or areas with a lot of electrical noise. They help to minimize signal interference and maintain signal integrity.



Nominal Cross Section	No. of Stands x Diameter	Insulation Thickness	No. of Sheathed x Diameter	AL/PE Thickness	Sheathed Thickness	Weight
mm ²	N x mm	mm	N x mm	micron	mm	Kg/km
2 × 0.50	16 × 0.2	0.6	48 × 0.12	20	1	81
2 × 0.75	24 × 0.20	0.60	48 × 0.12	25	1	93
2 × 1	32 × 0.20	0.60	48 × 0.16	25	1	108
2 × 1.5	30 × 0.25	0.70	48 × 0.16	25	1	135
2 × 2.5	50 × 0.25	0.80	56 × 0.16	30	1.3	204
2 × 4	56 × 0.30	0.80	64 × 0.16	35	1.3	260
2 × 6	84 × 0.30	0.80	64 × 0.16	50	1.3	326
3 × 0.50	16 × 0.20	0.60	48 × 0.12	25	1	90
3 × 0.75	24 × 0.20	0.60	48 × 0.12	25	1	104
3 × 1	32 × 0.20	0.60	48 × 0.16	25	1	121
3 × 1.5	30 × 0.25	0.70	48 × 0.16	30	1	154
3 × 2.5	50 × 0.25	0.80	56 × 0.16	35	1.3	234
3 × 4	56 × 0.30	0.80	64 × 0.16	50	1.3	304
3 × 6	84 × 0.30	0.80	72 × 0.16	50	1.3	397

Halogen-Free Cable

Electric Cable & Wire

These power cables are used for electricity supply in low voltage installation systems. They are well adapted to underground use in industrial applications where chemical and mechanical protections are needed (refinery areas, chemical plant...)



Design:

1. Conductor: Stranded bare copper class 2 acc. to IEC 60228
2. Insulation: Cross Linked Polyethylene "XLPE"
3. Fire Barrier : Mica Glass tape
4. Outer Sheath : Halogen Free Flame retardant "HFFR".

Options :

- Flame retardant : "CAT A, CAT B, CAT C" to BS 4066 or equivalent. - Ozone resistant.
- Oil resistant.
- Anti termite.

Fire test :

As per BS 6387 :

- C-Resistance to fire at 950 Deg for 180 mins.
- W-Resistanace to fire and water at 650 Deg for 30 mins.
- Z-Resistance to fire and mechanical shock at 950 Deg for 15 mins.

Installation Conditions:

1. Air Temperature : 30 Deg.
2. Ground Temperature: 20 Deg.
3. Soil Thermal Resistivity : 2.5 k.m/w
4. Depth of lay : 0.7 m

All dimensions have tolerance +- 7 %

Marking

no. of cores x conductor sizes mm² Cu / Mica / XLPE / HFFR
600/1000 V BS 6724 QICC-NexusYear Meters



Halogen free
Yes



Conductor flexibility
Stranded class 2



Rated Voltage
U₀/U (Um)
0.6 / 1 kV



Max. conductor temp. in service
90 °C



Bending Factor
when laying
15 (xD)



Smoke Density
IEC 61034



Gases
Corrosivity
IEC 60754-2



Bending Factor
Installed 8 (xD)

Nominal Cross Section	No. of Strands x Diameter	Insulation Thickness	Mica Tape Thickness	sheathed thickness	Overall Diameter	Weight	Max. Conductor Resistance at 25 °C
mm ²	N x mm	mm	mm	mm	mm	Kg/km	Ω/KM
2 × 1.5	30 × 0.25	0.7	0.13	1.2	9.8	98.86	13.3
2 × 2.5	50 × 0.25	0.8	0.13	1.2	11.1	130.4	7.98
2 × 4	56 × 0.30	0.8	0.13	1.3	12.45	177.4	4.95
2 × 6	84 × 0.30	0.8	0.13	1.4	13.8	231.6	3.3
3 × 1.5	30 × 0.25	0.7	0.13	1.2	10.3	124.6	13.3
3 × 2.5	50 × 0.25	0.8	0.13	1.2	11.7	168.6	7.98
3 × 4	56 × 0.30	0.8	0.13	1.4	13.5	239.6	4.95
3 × 6	56 × 0.30	0.8	0.13	1.5	14.75	315.8	3.3
4 × 1.5	30 × 0.25	0.7	0.13	1.2	11.14	152.8	13.3
4 × 2.5	50 × 0.25	0.8	0.13	1.4	13.1	221.3	7.98
4 × 4	56 × 0.30	0.8	0.13	1.4	14.5	299.5	4.95
4 × 6	84 × 0.30	0.8	0.13	1.5	16.1	397.5	3.3

Network CAT6

Network Cable



Nexus CAT6 cables are the ideal solution for most of today's network requirements in normal office environments. They are manufactured and tested to the latest Category 6 specifications defined in the International and American cable standards and are designed to meet the quality and performance criteria needed to support all applications up to 250 MHz.

- 10baseT Ethernet
- 100baseTX Fast Ethernet
- 1000baseTX Gigabit Ethernet
- 155 MBit ATM
- 622 MBit ATM
- 1.2 Gbit ATM
- Future class E applications

Installation:

To support the correct set-up of hand held analysers for installation testing, the actual cable NVP value is given in the cable's print legend.

Design:

The CAT6 U/UTP cables have a central cross element which helps maintaining the stability of the cable geometry and reduces the risk of a reduction in performance when bending the cable. The cables are available with a Dark Grey PVC or an Orange LSZH sheath. Both versions have flame retardant properties compliant with IEC 60332-1.

STANDARDS

1. International:

- EN 50173-1
- EN 50288
- IEC 61156-5
- ISO/IEC 11801

2. National:

- ANSI/TIA-568-B

Performance

Tested to 350 MHz and with guaranteed performance to 250 MHz, Nexus CAT6 cables exceed the requirements of the International, European and American cable standards, including ISO/IEC 11801, IEC 61156-5, EN 50173, EN 50288 and TIA/EIA 568-B.

Ferequency	Max. Insertion Loss	Min. NEXT	Min. PSNEXT	Min. ACR	Min. PSACR	Min. ACRF (ELFEXT)	Min. PSACRF (PSELFEXT)	Min. RL (Return Loss)	Max/Min. Input Impedance (unfitted)	Max/Min. Fitted Impedance
MHz	dB/m	dB	dB	dB	dB	dB	dB	dB	Ω	Ω
1	1.5 dB/100m	95	85.3	79	83.8	69.8	68.4	27.2	100 ± 15	---
4	2.4 dB/100m	88	78.4	78	76	62.9	61.8	23.6	100 ± 15	100 ± 12
8	3.2 dB/100m	82.5	77.8	76	68.9	59.9	58.9	26.9	100 ± 15	100 ± 10.4
10	4.8 dB/100m	79.2	70.3	71	66	56.5	54.8	29.8	100 ± 15	100 ± 8
16	6.5 dB/100m	75.9	68	69	61	59.5	53.6	31.2	100 ± 15	100 ± 7.3
20	7.6 dB/100m	71.6	64	62	57	64.3	53.7	36.2	100 ± 15	100 ± 5.7
25	8.3 dB/100m	68.3	62	61	54	55.7	48.7	37	100 ± 15	100 ± 5
31.25	8.7 dB/100m	65.3	59.7	51	51	47.8	47.2	31	100 ± 15	100 ± 5
62.5	13.5 dB/100m	60.7	56.5	50	42.5	45.5	39	33.8	100 ± 15	100 ± 5
100	18.9 dB/100m	57.3	51.8	43	35.6	37.4	36	32	100 ± 15	100 ± 5
155	19.9 dB/100m	54.5	51	39	30.9	39.9	33.2	25.2	100 ± 22	100 ± 5
200	25.3 dB/100m	54.2	50.5	35	28.6	29.1	27.8	28.9	100 ± 22	100 ± 5
250	28.4 dB/100m	51.1	48	28	21.7.3	28.2	27.4	24.9	100 ± 32	100 ± 5
300	31.7 dB/100m	49.7	46.5	22	14.4	27.4	24.7	26.6	100 ± 32	100 ± 5
350	34.2 dB/100m	47	44.1	---	---	25.93	22.9	22.7	100 ± 32	100 ± 5
400	41.5 dB/100m	45.3	43.3	---	---	24.81	21.8	19.5	100 ± 32	100 ± 5
450	44.3 dB/100m	44.5	42.5	---	---	23.72	20.7	19.2	100 ± 32	100 ± 5
500	47.1 dB/100m	43.8	41.8	---	---	22.82	19.8	19.0	100 ± 32	100 ± 5
550	49.7 dB/100m	43.2	41.2	---	---	22.04	19.0	18.8	100 ± 32	100 ± 5
600	52.3 dB/100m	42.6	40.6	---	---	21.25	18.2	18.7	100 ± 32	100 ± 5
650	54.8 dB/100m	42.1	40.1	---	---	20.54	17.5	18.5	100 ± 32	100 ± 5



RG Cable

RG Cable

Coaxial cable is used as a transmission line for radio frequency signals. Its applications include feed lines connecting radio transmitters and receivers to their antennas, computer network (e.g., Ethernet) connections, digital audio and its highly used for CCTVs and Used to carry baseband video in closed-circuit television, previously used for cable television. In general, it has poor shielding but will carry an HQ HD signal or video over short distances , and distribution of cable television signals.

One advantage of coaxial over other types of radio transmission line is that in an ideal coaxial cable the electromagnetic field carrying the signal exists only in the space between the inner and outer conductors. This allows coaxial cable runs to be installed next to metal objects such as gutters without the power losses that occur in other types of transmission lines. Coaxial cable also provides protection of the signal from external electromagnetic interference. Coaxial cable conducts electrical signal using an inner conductor (usually a solid copper, stranded copper or copper plated steel wire) surrounded by an insulating layer and all enclosed by a shield, typically one to four layers of woven metallic braid and metallic tape. The cable is protected by an outer insulating jacket. Normally, the outside of the shield is kept at ground potential and a signal carrying voltage is applied to the center conductor. When using differential signaling, coaxial cable provides an advantage of equal push-pull currents on the inner conductor and inside of the outer conductor that restrict the signal's electric and magnetic fields to the dielectric, with little leakage outside the shield.[citation needed] Further, electric and magnetic fields outside the cable are largely kept from interfering with signals inside the cable, if unequal currents are filtered out at the receiving end of the line. This property makes coaxial cable a good choice both for carrying weak signals that cannot tolerate interference from the environment, and for stronger electrical signals that must not be allowed to radiate or couple into adjacent structures or circuits.[2] Larger diameter cables and cables with multiple shields have less leakage. RG Combo's (Power) is consist of 2 power wire which also provide power for applicator so it doesn't need to provide an other power cable for cabling.

RG59 type N Combo Series Comes with CCAM as conductor for power part of the cable.
RG59 type U Combo Series Comes with Bare Copper as conductor for power part of the cable.

Type of Cable	Inner Conductor Diameter	Insulation Thickness	No. of Shield Braiding	Sheath Thickness	Mean Overall Diameter	Weight	Capacitance	Attenuation	Impedance	Test Voltage
---	N x mm	mm	N x mm	mm	mm	Kg/km	nf/km	db/km	Ω	V(rms)
RG59/U70	1 × 0.70	3.8	96 × 0.12	0.8	5.8-6.2	32	67±3	75	75±3	200
RG6/U CU	1 × 0.98	3.8	128 × 0.12	0.9	6-6.4	46	67±3	69	75±3	200
RG59/ N7096	1 × 0.67	3.8	96 × 0.12	0.9	5.8-6.2	26-32	67±3	52	75±3	200
RG59/U80	1 × 0.81	3.8	96 × 0.12	0.9	5.8-6.2	30-34	67±3	75	75±3	200

Telecom Cable

Telecom Cable



Telecommunication cables are like the magical threads that connect the world! They enable us to make phone calls, send text messages, and access the internet. These cables are made up of optical fibers or copper wires, which transmit signals over long distances. They're responsible for carrying all sorts of information, from phone conversations to internet data. Telephone cables are like the superheroes of communication! They're the ones that make sure your voice travels through the wires to reach the person you're calling. They use electrical signals to carry your voice from your phone to the other person's phone. It's like a superpower that lets you have conversations with people even if they're far away!

Number of Pairs	Sheath Thickness	Overall Diameter	0.60 (Max. of conductor Resistance AT20c)	0.40 (Max. of conductor Resistance AT20c)	Insulation Resistance	Mutual Capacitance At 1000HZ	One conductor with all other 2.4kv(DC) (Dielectric Strength)	Between core to shield 5kv(DC) (Dielectric Strength)	Weight
N	mm	mm	Ω/KM	Ω/KM	GΩ/Km	nf/km	s	s	Kg/km
2	1	6	65	147	20	52±4	3	3	30
4	1	7.4	65	147	20	52±4	3	3	48
6	1	8.1	65	147	20	52±4	3	3	62
8	1	8.9	65	147	20	52±4	3	3	77
10	1	9.6	65	147	20	52±4	3	3	93
20	1.1	12.5	65	147	20	52±4	3	3	168

Number of Pairs	Sheath Thickness	Overall Diameter	0.60 (Max. of conductor Resistance AT20c)	0.40 (Max. of conductor Resistance AT20c)	Insulation Resistance	Mutual Capacitance At 1000HZ	One conductor with all other 2 minute (Dielectric Strength)	Between core to shield 2minute (Dielectric Strength)	Weight
N	mm	mm	Ω/KM	Ω/KM	MΩ/Km	nf/km	(V)AC	(V)AC	Kg/km
2	0.8	5.8	65	147	500	100	500	500	35
4	0.8	7.1	65	147	500	100	500	500	56
6	1	8.5	65	147	500	100	500	500	82
8	1	9.4	65	147	500	100	500	500	100
10	1	10.1	65	147	500	100	500	500	118
20	1.1	12.4	65	147	500	100	500	500	200



Linear Lighting

Lighting

Linear lighting refers to a type of lighting that consists of long, narrow fixtures. These fixtures are typically designed with LED or fluorescent light sources, which provide a bright and energy-efficient illumination. Linear lights are often used in various settings, including residential, commercial, and architectural spaces. One of the key advantages of linear lighting is its versatility. These lights can be installed in a straight line to create a seamless and continuous illumination, or they can be arranged in different patterns and configurations to add visual interest and enhance the overall aesthetic of a space. Whether you're looking to highlight certain architectural features, provide task lighting, or create an ambient atmosphere, linear lighting can be a great choice. In terms of functionality, linear lights offer several benefits. They are known for their even and consistent light distribution, which helps to minimize shadows and provide uniform illumination. Additionally, linear lights are often dimmable, allowing you to adjust the brightness level according to your needs and preferences. This can be particularly useful in settings where different lighting levels are required, such as offices, retail stores, or residential spaces.

Another advantage of linear lighting is its energy efficiency. LED linear lights, in particular, consume less energy compared to traditional lighting sources, resulting in reduced electricity costs and a smaller carbon footprint. Additionally, LED linear lights have a longer lifespan, which means less frequent replacements and maintenance. When it comes to design options, linear lights come in various sizes, colors, and finishes, allowing you to find the perfect fit for your space. Whether you're going for a sleek and modern look or a more traditional style, there are plenty of options available to suit your aesthetic preferences. In summary, linear lighting is a versatile and efficient lighting solution that can enhance the visual appeal of any space. With its even light distribution, dimmable capabilities, and energy efficiency, it's a popular choice for both residential and commercial applications. So, whether you're looking to illuminate a hallway, accentuate a feature wall, or create a stylish ambiance, linear lighting is definitely worth considering!

Code	Description	Kepper	Coloring	Product Picture
L11	Inside the structure 1line	The holder has 2 springs	White / Black	
L12	Inside the structure 1line	Holder on the back	White / Black	
L13	Outside the structure 1line	Holder on the back	White / Black	
L14	Inside the structure / 90 degree corner 1line		White / Black	
L15	Outside the structure 1line		White / Black	
L16	Inside the structure 1line		White / Black	
L30 - Z	Out side the structure /90 degree corner/cornice 1line		White / Black	
L21	Inside the structure 2line	The holder has 2 springs	White / Black	
L22	outside the structure /Pendant 2line	Holder on the back	White / Black	
L31	Inside the structure 2line	The holder has 2 springs	White / Black	
L32	outside the structure /Pendant 2line	Holder on the back	White / Black	
L33	Inside the structure 2line		White / Black	
L34	Outside the structure 2line		White / Black	
L35	Inside the structure / Installation on the knauf Structure 2line		White / Black	
L41	Inside the structure 2line / 3line	The holder has 1 springs	White / Black	
L42	Outside the structure / Pendant 2line / 3line	Holder on the back	White / Black	
L43	Inside the structure 2line / 3line	The holder has 1 springs	White / Black	
L44	Outside the structure / Pendant 2line / 3line	Holder on the back	White / Black	
L45	Inside the structure 2line / 3line		White / Black	
L46	Outside the structure 2line / 3line		White / Black	
L47	Inside the structure / Installation on the knauf structure 2line/ 3line		White / Black	
L51	Inside the structure 2line / 3line / 4line	The holder has 1 springs	White / Black	
L52	Outside the structure / Pendant 2line/ 3line / 4line	Holder on the back	White / Black	
L54	Outside the structure / Pendant 2line/ 3line / 4line	Holder on the back	White / Black	
L61	Inside the structure 2line/ 3line / 4line	The holder has 1springs	White / Black	
L62	Outside the structure /Pendant 2line / 3line / 4line	Holder on the back	White / Black	
L71	Inside the structure 2line / 3line / 4line / 5line	The holder has 1springs	White / Black	
L72	Outside the structure /Pendant 2line / 3line / 4line / 5line	Holder on the back	White / Black	
L81	Inside the structure 2line / 3line / 4line / 5line	The holder has 1 springs	White / Black	
L91	Inside the structure 2line / 3line / 4line / 5line / 6line	The holder has 2 springs	White / Black	