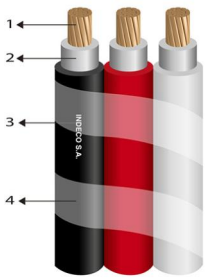
NYY(80°) 0,6/1 kV Double or Triple



CONTACT

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APPLICATION:

General use as power cable. In low voltage distribution networks, industrial installations, buildings and operating centers. For fixed installations, in indoor areas (trays, ducts), in underground ducts or buried direct in ground, in dry or wet locations.

STANDARDS

PRODUCT

NTP-IEC 60228; NTP-IEC 60502-1; IEC 60228; IEC 60502-1

TEST

IEC 60332-1-2; UL 2556; IEC 60811-401; IEC 60811-402; IEC 60811-501; IEC 60811-504; IEC 60811-505; IEC 60811-506; IEC 60811-508; IEC 60811-509; ICEA S-95-658

CONSTRUCTION

1. Conductor: Soft copper, class 1 or class 2.

2. Insulation: Compound polyvinyl chloride PVC.

3. Outer sheath: Compound polyvinyl chloride PVC.

4. Tape: Polyester tape.

MAIN CHARACTERISTICS

Good electrical and mechanical properties. The PVC outer sheath provides an adequate resistance to grease, oils and abrasion. better dissipation of heat allowing a higher current capacity. Flame retardant.

CROSS SECTION

From 6 mm2 up to 500 mm2.

MARKING

INDECO BY NEXANS NYY(80º) 0,6/1 kV - Section - Year - Sequential length.

PACKING

Non returnable wooden reels.

COLOUR

Insulation: White.

Outer sheath: Black and white or Black, red and white or Black, red, blue.

Conductor flexibility
Class 1 & Class 2 IEC 60228

Rated Voltage Uo/U (Um)
0.6/ 1 (1.2) kV

Oil resistance
ICEA S-95-658

Flame retardant
IEC 60332-1-2; FT1

U.V resistance
UL 2556 - Sunlight Resistance

Maximum operating temperature
80 °C

PRODUCT STANDARDS

NTP-IEC 60228: Conductors of insulated cables.

NTP-IEC 60502-1: Power cables with extruded insulation and their accessories for rated voltages from 1 kV and 3 kV.

TESTING STANDARDS

IEC 60228: Conductors of insulated cables.

IEC 60502-1: Power cables with extruded insulation and their accessories for rated voltages from 1 kV and 3 kV.

IEC 60332-1-2: Test for vertical flame propagation for a single insulated wire or cable - Procedure for 1 kW pre-mixed flame.

UL 2556: Wire and Cable Test Methods. Section 9.3: FT1 (Vertical-Specimen) Flame Test.

IEC 60811-401: Thermal ageing methods. Ageing in an air oven.

IEC 60811-402: Water absorption tests.

IEC 60811-501: Test for determining the mechanical properties.

IEC 60811-504: Bending test at low temperature for insulation and sheaths.

IEC 60811-505: Elongation at low temperature for insulations and sheaths.

IEC 60811-506: Impact test at low temperature for insulations and sheaths.

IEC 60811-508: Pressure test at high temperature for insulation and sheaths.

IEC 60811-509: Test for resistance of insulations and sheaths to cracking.

ICEA S-95-658: Power cables rated 2000 volts or less for the distribution of electrical energy. Section 6.4.2: Oil: Oil Immersion Test.

UL 2556: Wire and Cable Test Methods. Section 4.2.8.5: Carbon-Arc and Xenon-Arc Tests- Sunlight resistance.

CHARACTERISTICS

Construction characteristics	
Conductor material	Soft copper
Insulating material	PVC
Individual sheath	PVC
Conductor flexibility	Class 1 & Class 2 IEC 60228
Electrical characteristics	
Rated Voltage Uo/U (Um)	0.6/ 1 (1.2) kV
Dielectric strength	3.5 kV
Time of application Dielectric strength core to screen AC	5 min.
Usage characteristics	
Oil resistance	ICEA S-95-658
Flame retardant	IEC 60332-1-2; FT1
U.V resistance	UL 2556 - Sunlight Resistance
Maximum operating temperature	80 °C
Short-circuit max. conductor temperature	160 °C

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DIMENSIONAL DATA

Nb. of cores	Cross section [mm²]	Total nb wires	Conductor diam. [mm]	Min. insulation thick. [mm]	Min. outer sheath thick. [mm]	Height [mm]	Width [mm]	Approx. weight [kg/km]
2	6	7	3.0	1.0	0.9	7.1	14.1	190
3	6	1	2.7	1.0	0.9	6.9	20.3	280
3	10	1	3.5	1.0	0.9	7.7	22.7	406
3	10	7	3.7	1.0	0.9	7.8	23.2	411
3	16	7	4.6	1.0	0.9	8.8	26	591
3	25	7	5.8	1.2	0.9	10.4	30.8	894
3	35	7	6.8	1.2	0.9	11.4	33.8	1169
3	50	19	7.9	1.4	0.9	12.9	38.3	1545
3	70	19	9.5	1.4	0.9	14.5	43.1	2150
3	95	19	11.2	1.6	1.0	16.9	50.3	2952
3	120	37	12.8	1.6	1.1	18.7	55.7	3688
3	150	37	14.2	1.8	1.1	20.5	61.1	4506
3	185	37	15.8	2.0	1.2	22.6	67.5	5634
3	240	37	18.0	2.2	1.2	25.3	75.5	7294
3	300	37	20.2	2.4	1.3	28	83.9	9096
3	400	61	23.3	2.6	1.4	31.5	94.2	11819
3	500	61	26.2	2.8	1.5	35.3	105.5	14933

ELECTRICAL DATA

Nb. of cores	Cross section [mm²]	Max. DC Resist. Cond. 20°C [Ohm/km]	Perm. current rating in air 30°C - flat formation [A]	current rating in air 30°C - trefoil [A]	Perm. Current buried 20°C [A]	Perm. Current in duct 20°C [A]	Nominal capacitance [pF/m]
2	6	3.08	53	-	48	46	838.0
3	6	3.08	50	47	44	41	772.0
3	10	1.83	69	66	58	54	989.0
3	10	1.83	69	66	58	54	989.0
3	16	1.15	94	90	76	69	1182.0
3	25	0.727	125	121	99	89	1240.0
3	35	0.524	157	151	119	106	1420.0
3	50	0.387	191	184	140	125	1421.0
3	70	0.268	248	238	175	154	1668.0
3	95	0.193	303	290	208	183	1676.0
3	120	0.153	353	339	238	207	1887.0
3	150	0.124	409	392	266	234	1874.0
3	185	0.0991	470	450	300	262	1885.0
3	240	0.0754	558	534	346	302	1953.0
3	300	0.0601	646	617	388	341	2010.0
3	400	0.047	758	722	454	399	2116.0
3	500	0.0366	868	824	512	449	2222.0

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PRODUCT LIST

Nexans Ref.	Country Ref.	Name	Type of conductor	Sheath colour
P00039369-2	10053816	NYY(80°) 0,6/1 kV 3-1x10 mm2	Class 2	Individual Sheath Red-Black-Blue
P00040248-0	10054733	NYY(80°) 0,6/1 kV 3-1x10 mm2	Class 2	Individual sheath White-Black-Red
P00001440-13	10001096	NYY(80°) 0,6/1 kV 3-1x16 mm2	Class 2	Individual sheath White-Black-Red
P00001591-13	10001094	NYY(80°) 0,6/1 kV 3-1x120 mm2	Class 2	Individual sheath White-Black-Red
P00001623-8	10001104	NYY(80°) 0,6/1 kV 3-1x95 mm2	Class 2	Individual sheath White-Black-Red
P00001624-10	10001100	NYY(80°) 0,6/1 kV 3-1x300 mm2	Class 2	Individual sheath White-Black-Red
P00001625-12	10001099	NYY(80°) 0,6/1 kV 3-1x25 mm2	Class 2	Individual sheath White-Black-Red
P00001626-3	10047088	NYY(80°) 0,6/1 kV 3-1x500 mm2	Class 2	Individual sheath White-Black-Red
P00001627-15	10001103	NYY(80°) 0,6/1 kV 3-1x70 mm2	Class 2	Individual sheath White-Black-Red
P00001631-11	10001095	NYY(80°) 0,6/1 kV 3-1x150 mm2	Class 2	Individual sheath White-Black-Red
P00001632-9	10001097	NYY(80°) 0,6/1 kV 3-1x185 mm2	Class 2	Individual sheath White-Black-Red
P00001633-7	10001098	NYY(80°) 0,6/1 kV 3-1x240 mm2	Class 2	Individual sheath White-Black-Red
P00001634-13	10001101	NYY(80°) 0,6/1 kV 3-1x35 mm2	Class 2	Individual sheath White-Black-Red
P00001641-11	10001102	NYY(80°) 0,6/1 kV 3-1x50 mm2	Class 2	Individual sheath White-Black-Red
P00007971-9	10001092	NYY(80°) 0,6/1 kV 3-1x6 mm2	Class 1	Individual sheath White-Black-Red
P00008462-15	10001093	NYY(80°) 0,6/1 kV 3-1x10 mm2	Class 1	Individual sheath White-Black-Red
P00001635-4	10043199	NYY(80°) 0,6/1 kV 3-1x400 mm2	Class 2	Individual sheath White-Black-Red
P00039367-0	10053812	NYY(80°) 0,6/1 kV 3-1x70 mm2	Class 2	Individual Sheath Red-Black-Blue
P00039368-0	10053813	NYY(80°) 0,6/1 kV 3-1x50 mm2	Class 2	Individual Sheath Red-Black-Blue
P00039373-0	10053815	NYY(80°) 0,6/1 kV 2-1x6 mm2	Class 2	Individual sheath Black-Red

= Make to order, = In stock,

CALCULATION OF CURRENT CONDITION: COPPER CONDUCTOR DOUBLE OR TRIPLE L.V.; 80°C

CURRENT CAPACITY VALUES AND CURRENT CALCULATION CONDITIONS BASED ON IEC 60364-5-52:2009 :

TABLE B.52.4 (METHOD D1: Buried ducts in contact).
TABLE B.52.4 (METHOD D2: Buried in contact).
TABLE B.52.10 (METHOD F: Air in flat formation and in contact).
TABLE B.52.10 (METHOD F: Air in tringular formation).

The cited values were corrected with a correction factor for the maximum conductor temperature at 80°C.
Maximum conductor temperature : 80°C.
Ambient air temperature : 30°C.
Ground temperature : 20°C.
Depth of laying up to: 0,7 m.
Thermal resistivity of soil : 2,5 K.m/W.