N2XOH-PC 0,6/1 kV Single-core; METRIUM

Special application in places with poor ventilation and places public attendance high.

APPLICATION

In low voltage power distribution networks. Special application in places with poor ventilation, direct application in places with public attendance high. It can be installed in ducts in dry and wet places.

STANDARDS

PRODUCT

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

TEST

IEC 60332-1-2; IEC 60332-3-24; IEC 60754-1; IEC 60754-2; IEC 61034-2; UL 2556

CONSTRUCTION

1. Conductor: Flexible soft copper.

2. Insulation: Cross linked polyethylene XLPE.

3. Outer sheath: HFFR halogen free thermoplastic compound.

MAIN CHARACTERISTICS

The cable has excellent electric properties. The cross-linked polyethylene insulation allows a higher power capacity current under any operation conditions, lower dielectric losses, high insulation resistance.

The outer sheath have the following characteristics: Fire retardant, low emission dense smoke and halogen free. Adequate resistance to oils.

The new attributes of this product are:

Greater flexibility, helping in the installation and handling process, due to its new configuration of conductors and flexible raw materials for insulations and coating.

Greater protection to the external cover, against dragging during the process of installation on non-smooth surfaces, guaranteeing compliance with the thickness of the same.

CROSS SECTION

From 120 mm2 up to 500 mm2.

MARKING

INDECO BY NEXANS N2XOH-PC 0,6/1 kV - Section - Year (- sequential length m. || sequential length m. +).

Halogen free
Low content Halogen IEC 60754-1

Conductor flexibility
Flexible

Gases corrosivity
Low Corrosivity IEC 60754-2

Smoke density
Low Smoke Emission IEC 61034-2

Flame retardant
IEC 60332-1-2; FT1

Fire retardant
EN IEC 60332-3-24 (cat C)

U.V resistance
UL 2556 - Sunlight Resistance

Maximum operating temperature
90 °C

CONTACT

Local Sales
ventas.peru@nexans.com

PACKING

Non returnable wooden reels.

COLOUR

Insulation: Natural.

Outer sheath: Black.

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.

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.

TESTING STANDARDS

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

IEC 60332-3-24: Test for vertical flame spread of vertically-mounted bunched wires or cables - Category C.

IEC 60754-1: Test on gases evolved during combustion of materials from cables. **Part 1:** Determination of the halogen acid gas content.

IEC 60754-2: Test on gases evolved during combustion of materials from cables. **Part 2:** Determination of acidity (by pH measurement) and conductivity.

IEC 61034-2: Measurement of smoke density of cables burning under defined conditions.

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

CHARACTERISTICS

Construction characteristics	
Conductor material	Soft copper
Insulating material	XLPE
Halogen free	Low content Halogen IEC 60754-1
Conductor flexibility	Flexible
Electrical characteristics	
Dielectric strength	3.5 kV
Time of application Dielectric strength core to screen AC	5 min.
Usage characteristics	
Gases corrosivity	Low Corrosivity IEC 60754-2
Smoke density	Low Smoke Emission IEC 61034-2
Flame retardant	IEC 60332-1-2; FT1
Fire retardant	EN IEC 60332-3-24 (cat C)
U.V resistance	UL 2556 - Sunlight Resistance
Metric marking	Double marking of sequential footage METRIUM

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Usage characteristics	
Maximum operating temperature	90 °C
Short-circuit max. conductor temperature	250 °C

DIMENSIONAL DATA

Cross section [mm²]	Conductor diam. [mm]	Min. insulation thick. [mm]	Min. outer sheath thick. [mm]	Diam. over sheath [mm]	Approx. weight [kg/km]
120	12.8	1.2	1.0	17.4	1187
150	14.2	1.4	1.1	19.4	1451
185	18.1	1.6	1.2	23.9	1751
240	20.7	1.7	1.2	26.8	2271
300	23.2	1.8	1.3	29.7	2822
500	30.3	2.2	1.6	38.3	4791

ELECTRICAL DATA

Cross section [mm²]	Max. DC Resist. Cond. 20°C [Ohm/km]	Perm. Current buried/duct 20°C [A]	Perm. current rating in air 30°C - flat formation [A]	current rating in air 30°C - trefoil [A]	Nominal capacitance [pF/m]
120	0.153	223	400	383	778.0
150	0.124	251	464	444	747.0
185	0.106	281	533	510	803.0
240	0.0801	324	634	607	866.0
300	0.0641	365	736	703	916.0
500	0.0384	501	998	946	983.0

PRODUCT LIST

Nexans Ref.	Country Ref.	Name	Sheath colour	Approximate weight [kg/km]
P00040308-2	10055495	N2XOH-PC 0,6/1 kV 185 mm2	Black	1751
P00040310-2	10055497	N2XOH-PC 0,6/1 kV 240 mm2	Black	2271
P00050855-0	10056497	N2XOH-PC 0,6/1 kV 120 mm2	Green	1187
P00050751-0	10056352	N2XOH-PC 0,6/1 kV 500 mm2	Black	4791
P00040305-3	10055493	N2XOH-PC 0,6/1 kV 120 mm2	Black	1187
P00040521-1	10055641	N2XOH-PC 0,6/1 kV 300 mm2	Black	2822
P00040306-2	10055494	N2XOH-PC 0,6/1 kV 150 mm2	Black	1451

= Make to order, = In stock,

CALCULATION OF CURRENT CONDITION: COPPER CONDUCTOR SINGLE-CORE L.V.; HALOGEN FREE 90°C

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

TABLE B.52.5 (METHOD D1: Buried ducts in tringular formation).
TABLE B.52.12 (METHOD F6: Air in flat formation and in contact).
TABLE B.52.12 (METHOD F5: Air in tringular formation).

Maximum conductor temperature : 90°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.