



Nexans Ref.: P00001342-7
Country Ref.: 10000795

CONTACT

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APPLICATION

In apparatus or equipment subject to movement, winding or vibrations and in all type of mobile installations.

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

CONSTRUCTION

1. Conductor: Flexible soft copper, class 5.
2. Insulation: Compound polyvinyl chloride PVC.
3. Filler: Flexible compound polyvinyl chloride PVC.
4. Outer sheath: Flexible compound polyvinyl chloride PVC.

MAIN CHARACTERISTICS

Great flexibility, resistance to abrasion and moisture, adequate resistance to oils. Flame retardant.

GAUGE

From 8 AWG up to 2/0 AWG.

MARKING

INDECO S.A. NPT 0,6/1 kV - (Nb Cores x Gauge) - FB - Year -(- sequential length m. || sequential length m. +).

PACKING

Non returnable wooden reels.

COLOUR

Insulation: See core identification.

Outer sheath: Black.



Conductor flexibility
Flexible class 5



Lead free
Yes



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



Cable flexibility
Excellent



Oil resistance
Good



Maximum operating
temperature
80 °C



Flame retardant
IEC 60332-1-2; FT1

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.

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 test.

IEC 60811-501:Test for determining the mechanical properties of insulating and sheathing.

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

IEC 60811-505:Low temperature elongation test for insulations and covers.

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

IEC 60811-508:High temperature pressure tests for insulations and covers.

IEC 60811-509:Tests of resistance to cracking of the insulations and covers (thermal shock).

CHARACTERISTICS

Construction characteristics

Conductor material	Soft copper
Conductor flexibility	Flexible class 5
Insulating material	PVC
Outer sheath	PVC Flexible
Sheath colour	Black
Lead free	Yes
Conductor shape	Circular
Insulation	PVC
Insulation colour	White + Black + Red
With Green/Yellow core	No

Dimensional characteristics

Number of cores	3
Conductor cross-section (AWG/KCMIL)	4 AWG
Conductor diameter	6.2 mm
Minimum insulation thickness	1.2 mm
Minimum outer sheath thickness	1.2 mm
Diameter over Sheath	21.6 mm
Approximate weight	979 kg/km

Dimensional characteristics

Conductor cross-section	21.15 mm ²
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Electrical characteristics

Rated Voltage U ₀ /U (U _m)	0.6/ 1 (1.2) kV
Dielectric strength	3.5 kV
Time of application Dielectric strength core to screen AC	5 min.
Max. DC resistance of the conductor at 20°C	0.8892 Ohm/km
Nominal capacitance	1312.0 pF/m
Perm current rating in air 30°C	75 A

Mechanical characteristics

Cable flexibility	Excellent
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Usage characteristics

Oil resistance	Good
Maximum operating temperature	80 °C
Reference	05
Overload maximum core temperature	100 °C
Short-circuit max. conductor temperature	160 °C

Fire safety characteristics

Flame retardant	IEC 60332-1-2; FT1
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CALCULATION OF CURRENT CONDITION NPT

CALCULATION OF CURRENT CONDITION

Current capacity up to 3 loaded conductors, where the fourth (4th) conductor is a neutral of a balanced 3 phase of a 4 wire system.

Maximum conductor temperature : 80°C.

Ambient air temperature : 30°C.