



LOW VOLTAGE XLPE INSULATED POWER CABLES LIST OF GUARANTEED CHARACTERISTICS

GENERAL

• Producer	:	VATAN KABLO / TURKEY
• Cable Code	:	N2XY
• Applied Standards	:	TS IEC 60502-1
• Voltage Rate (U ₀)	(kV) :	0,6
• Voltage Rate (U)	(kV) :	1
• Max Operating Voltage (U _m)	(kV) :	1,2

STRUCTURAL PROPERTIES

CONDUCTOR

• Material	:	Copper
• Cross-Section Area	(mm ²) :	16
• Minimum number of wires in conductor	(No) :	6,00
• Type of Stranding	:	CIRCULAR COMPACTED
• Outer Diameter (Approx.)	(mm) :	4,80
• Number of Core	(No) :	4
• Earth / Notr	(mm ²) :	-
• Core Colours	:	Brown-Black-Grey-Blue

INSULATION

• Material	:	XLPE
• Nominal Thickness	(mm) :	0,70
• Minimum Thickness	(mm) :	0,53
• Outer Diameter (Approx.)	(mm) :	6,20

INNER SHEATH (Filler+Bedding)

• Filler material	:	PVC
• Bedding Material	:	-
• Nominal Thickness	(mm) :	-
• Minimum Thickness	(mm) :	-

ARMOUR

• Material	:	-
• Number & Diameter of Wires	(No x mm) :	-
• Thickness of Galvanize Coated Steel Tape	(mm) :	-
• Width of Steel Tape	(mm) :	-
• Binding Ratio	(%) :	-

OUTER SHEATH

• Material	:	PVC
• Colour	:	Black
• Nominal Thickness	(mm) :	1,80
• Minimum Thickness	(mm) :	1,24

ELECTRICAL PROPERTIES

• Test Voltages of 5 Minute Duration	(kV-rms) :	3,50
• Continuous Current Carrying Capacity in Air at 30 °C	(A) :	98
• Continuous Current Carrying Capacity in Ground at 20 °C	(A) :	112



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Above current carrying capacities are calculated at the following laying conditions:

- Ambient Temperature of Air 30 °C
- Soil Temperature 20 °C
- Depth of Laying 0,8 m
- Thermal Resistivity of Soil 1,5 K m /W

- Max. Continuous Conductor Temperature (°C) : 90
- Max. Conductor Temperature at Short Circuit Condition (°C) : 250 (5 s max. duration)

Maximum Short-Circuit Current

(Start Temperature: 90 °C, End Temperature: 250 °C)

- Duration of 5 seconds (kA) : 1,02
- Duration of 1 seconds (kA) : 2,29
- Duration of 0,5 seconds (kA) : 3,24

Dielectric Loss Factor

- At 20 °C : -
- At 90 °C (Maximum Operating Temperature) : -
- Conductor Resistance at 20 °C (Ω/km) : 1,1500
- Conductor Resistance at 90 °C (Ω/km) : 1,4664
- Partial Discharge (at 2 U₀) (pC) : -

OTHER PROPERTIES

- Outer Diameter of Cable (Approx.) (mm) : 19,50
- Minimum Bending Radius (mm) : 293
- Lowest Laying Temperature (°C) : -5,00
- Weight of Cable (Approx.) (kg/km) : 910
- Weight of Copper (Approx.) (kg/km) : 561
- Weight of Armour (Approx.) (kg/km) : -

Drums

- Type : Wooden
- Flange (Wheel) Diameter (mm) : 1100
- Barrel Diameter (mm) : 550
- Barrel Length (mm) : 730
- Length of Cable (m) : 1000
- Gross Weight (kg) : 990

"Note:Vatan Kablo may change design constructions provided it comply with original standards."

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XLPE Insulated, Galvanized Round Steel Wire Armoured Cable with Copper Conductor**Application**

For indoor, outdoor and underground installation in ducts and in the open where better mechanical protection is required, or for higher tensile stress during installation and operation. Suitable for comparatively high ambient temperature due to high maximum permissible conductor temperature.

Design

1. Stranded Copper Conductor
2. XLPE Insulation
3. PVC Inner Sheath
4. PVC Outer Sheath

