
EXCEL 12/20(24) kV 3x10/10

Product information

Standards

IEC 60502-2

HD 620 S2:2010 Part 10 Section M

Conductor

Copper, hard drawn, circular, solid.

Nominal cross sectional area: 10 mm²

Diameter, nominal: 3.55 mm

Inner conductive layer

Extruded PE

Insulation

XLPE, Triple extruded, dry cured vulcanized

Nominal thickness: 5.5 mm

Diameter over insulation approx. 15.3 mm

Outer conductive layer

Extruded PE, easy strippable

Screen

Band of woven copper threads

Nominal cross sectional area, 10mm²

Tape

Cu-PET tape

Sheath

Black LLD PE Nominal thickness: 2.6 mm

Outer diameter: 42 mm

Weight: 1.2 kg/m

Density: 1.2 kg/dm

Embossed

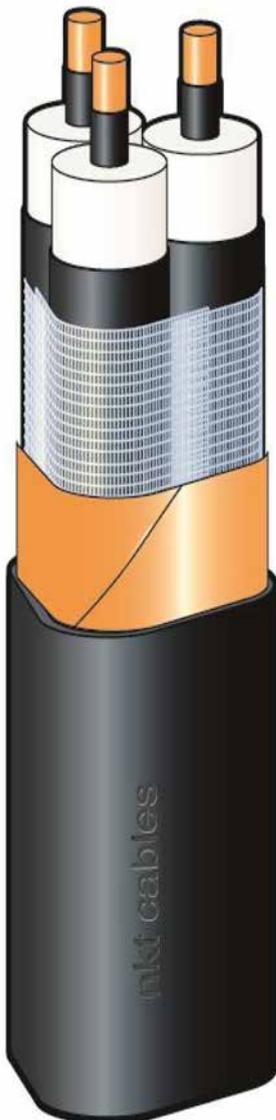
nkt cables

EXCEL 12/20(24) kV 3x10/10 (Year of manufacturing YYYY)" +

meter marked

Application

Self suspending 3-core cable, for use as aerial cable on poles, and in the ground and water.



Technical data EXCEL 12/20 (24) kV 3x10/10

Electrical characteristics

number of conductors x cross sections area (mm ²)	3 x 10/10		
rated voltage (U _o /U/U _m)	12/20(24) kV		
Rated current according to IEC287		in air 25°C	in the ground 15°C
maximum conductor temperature	65°C	71 A	81 A
	90°C	90 A	90 A
as self supporting suspending cable	65°C	71 A	
Conductor resistance max. at 20 °C	1,83 Ω/km		
Inductance	0,49 mH/km		
Capacitance	0,10 μF/km		
Earth fault current	1,14 A/km		
Max. short circuit current (1 sec.) at 250 °C end conductor temp.	2,0 kA		
Max. short circuit current, for the screen	2,0 kA		

Installation

Minimum bending radius	
at laying	450 mm
at fixed position	350 mm
Min. temp. at laying approx.	-20°C

Data for calculation in pole-setting systems

Area	40 mm ²
Diameter	40 mm
Qc, Cable weight	1,2 kg/m
E _{ik} , Elasticity-modulus initial, before ice load	75.000 N/mm ²
E _p , Elasticity-modulus after permanent creeping	87.000 N/mm ²
T _p , Permanent elongation or creeping	0,5 %
Coefficient of linear expansion per °C	20 x 10 ⁻⁶
Definitude strain 0 °C	80 N/mm ²
Maximum force on cable in calculations	8.5 kN
Approximate fast break load for cable	> 22 kN
Approximate long term break load for cable	> 15 kN



The product is part of The Ericsson Energy Cables & Interconnect business which has been divested to nkt cables

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