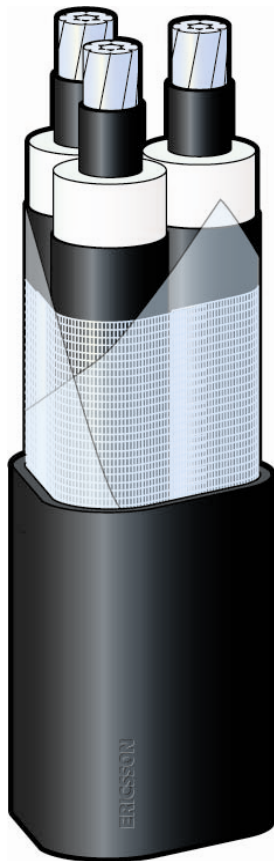


Universal cable, AXCES 12/20(24)kV 3x70/16

Product Information



Design: IEC 60502-2, SS 424 14 16*

Conductor

Aluminum, circular stranded
Nominal cross sectional area: 70mm²
Diameter, nominal: 9.9mm

Inner conductive layer

Extruded PE

Insulation

XLPE, Triple extruded, dry cured vulcanized
Nominal thickness: 4.5mm
Diameter over insulation approx: 19.0mm

Outer conductive layer

Extruded PE, easy strippable

Screen

Band of woven copper threads
Nominal cross sectional area, 16mm²

Tape

PETP-PE tape

Sheath

Black LLD PE. Nominal thickness: 2.6mm
Outer diameter: 45mm
Outer circumscribed circle diameter: 49mm
Weight: 1.8Kg/m
Density: 1.25Kg/dm³

Embossed

"ERICSSON AB AC3 AXCES 12/20(24)kV
3x70/16 (Year of manufacturing YYYY)" +
meter marked

Application

3-core power cable that can be used as a self-supporting cable on poles, direct buried underground or deployed in water

Technical data

AXCES 3x70/16 12/220(24)kV, TjX 312 72

Electrical

Number of conductors x cross sectional area (mm ²)	3x70/16		
Rated voltage U ₀ /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	160A	160A
	90°C	190A	190A
as self supporting suspending cable	65°C	160A	-
Conductor resistance max. at 20°C	0.44Ω/km		
Inductance	0.33mH/km		
Capacitance	0.21μF/km		
Earth fault current	2.7A/km		
Max. short circuit current (1 sec.) at			
250 °C end conductor temp.	8.0kA		
Max. short circuit current, for the screen	3.2kA		

Installation

Minimum bending radius			
at laying, approx.	560mm		
at fixed position, approx.	350mm		
Min. temp. at laying approx.	-20°C		

Data for calculation in pole-setting systems (see handbook)

Area	210mm ²		
Diameter	45mm		
Q _c , Cable weight	1,8kg/m		
E _{ik} , Elasticity-modulus initial, before ice load	55 000N/mm ²		
E _p , Elasticity-modulus after permanent creeping, (after ice load)	64 000N/mm ²		
T _p , Permanent elongation or creeping	0.7%		
Coefficient of linear expansion per °C	23 x 10 ⁻⁶		
Definitude strain 0°C	46N/mm ²		
Maximum force on cable in calculations	27kN		
Approximate fast break load for cable	>56kN		
Approximate long term break load for cable	>49kN		