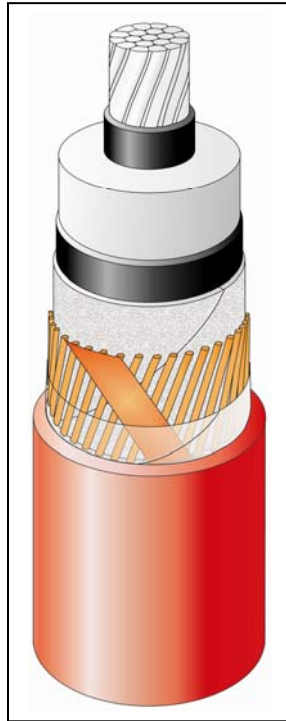


## TECHNICAL SPECIFICATION

### XLPE-cable for electrostatic precipitators (electrostatic filters) YHAKXS-E 1x50RMC/10 111kV acc. to ZN-94/MP13 K2107

#### CONSTRUCTION

- Aluminum conductor, circular, stranded and compacted. Class B
- Extruded semi-conducting conductor screen
- Insulation XLPE – dry cured
- Extruded semi-conducting insulation screen
- Semi-conducting tape
- Metallic screen:
  - o copper wires screen and
  - o copper equalizing tape
- Separator layer
- Outer sheath – Red PVC



The picture is informative only  
– not in scale

#### General Data

- Lowest laying temperature - 5 °C
- Admissible conductor temperature 90 °C
- Admissible conductor short-circuit temp. 250 °C
- A.C testing voltage (r.m.s., 15 minutes) 111kV

#### APPLICATION

The cable is suitable for electrostatic filter equipment with open-circuit voltage of (peak value) 111kV

The cable may be used indoor and outdoor.

#### MARKING

TF KABLE, product name, date of manufacture, standard, meter marking

DESCRIPTION	UNIT	DETAILS
<b>CONSTRUCTION DATA</b>		<b>111kV</b>
Conductor		aluminum
<input type="checkbox"/> material		
<input type="checkbox"/> number of wires	No	18
Nominal cross sectional area	mm <sup>2</sup>	50
Conductor diameter and tolerance	mm	8.15 <sup>+0.10</sup>
Minimum thickness semi-conducting XLPE on conductor	mm	0.3
Insulation thickness: minimum average XLPE	mm	9.0
Insulation thickness: minimum at a point	mm	8.0
Diameter over insulation - nominal	mm	28.3
Minimum thickness semi-conducting XLPE on insulation	mm	0.5
Thickness of semi-conducting tape	mm	~ 0.4
Metallic screen	mm <sup>2</sup>	10
<input type="checkbox"/> Copper wires	No x mm	27 x 0.7
<input type="checkbox"/> Copper equalizing tape	No x mm x mm	1 x 10 x 0.10
Thickness of separator tape	mm	~ 0.1
Nominal outer sheath thickness	mm	2.5
Approximate overall diameter completed cable (De)	mm	37.7
Weight of complete cable (Approx.)	kg/km	1270
<b>DELIVERY DATA</b>		
Diameter of wooden drum	m	1.8
<input type="checkbox"/> type		18
Maximum length per drum	m	820
Weight of heaviest reel, including cable	kg	1400

<b>ELECTRICAL DATA</b>		
Open circuit voltage	kV	111
Maximum D.C. conductor resistance at 20°C	Ω/km	0.6410
Maximum A.C. conductor resistance at 90°C	Ω/km	0.8250
Maximum D.C. metallic screen resistance at 20°C	Ω/km	1.60
operating capacitance	μF/km	0.124
<b>MECHANICAL DATA</b>		
Recommended min. bending radius for laying	m	0.57
Recommended permissible bending radius at final installation	m	0.46
Maximum permissible pulling force	kN	1.5
<b>SHORT CIRCUIT CURRENTS</b>		
Maximum permissible thermal short-circuit Current for 1 sec. ( IEC 60949 )		
Phase conductor 90 → 250°C	kA	4.9
Metallic screen 70 → 350°C	kA	2.0

**Marking: TF-Kable 5 YHAKXS-E 1x50RMC/10 111kV ZN-94/MP13 K2107 2008**

Date: 2008-10-28

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