

FAA-L-824 Underground primary cable for Airport lighting circuits

Type C - brass tape screened 5 kv (SXC7E)

1/1

Reference standard :

FAA AC 150/5345-7E

Construction

1. Stranded tinned copper conductor
2. Extruded semi-conducting compound
3. XLPE Insulation
4. Semi-conducting tape, helically applied
5. One lay of brass tape, helically applied, 30% overlapping
6. Separation tape
7. PE outer sheath - black

Properties

- Abrasion resistant
- Oil resistant
- UV resistant
- Deicer resistant (FR/KAc)
- Halogen-free
- Service temperature: -40 ... +85 °C (for a max. current of 6,6 A)
- Min. bending radius: 12x outer diameter
- Max. pulling force: copper cross-section (in mm²) x 50 N/mm² exceeded on the conductor
- Min. laying temperature: -10 °C

Dimensions

Cross-section	Conductor assembly	Insulation thickness mm	Screen tape mm	Sheath thickness mm	Overall diameter mm	Weight kg/km
1 x 6 mm ² ⁽¹⁾	7-stranded	2,3	0,08 x 22	1,14	11,2	170
1 x AWG 8	7-stranded	2,3	0,08 x 22	1,14	11,6	200

Electrical characteristics

Cross-section	Conductor resistance ⁽²⁾ Ω/km @ 20 °C	Voltage test ⁽²⁾ kV _{dc} -min.	Insulation resistance ⁽²⁾ MΩ.km @ 15,6 °C	Partial discharge ⁽³⁾ pC @ 4 kV
1 x 6 mm ² ⁽¹⁾	<3,11	35 - 15	>2220 ⁽⁴⁾	≤ 5
1 x AWG 8	<2,18	35 - 15	>2060 ⁽⁴⁾	≤ 5

⁽¹⁾ acc. IEC 60228 ⁽²⁾ routine test ⁽³⁾ sample test ⁽⁴⁾ K_i=20000 MΩ . 1000 ft

Options

- Different outer sheath colour (with consequently decreased UV resistance)
- Termite protected outer sheath
- Corrugated steel tape armour + bonded HDPE-sheath as rodent protection
- PVC outer sheath with flame retardance acc. to IEC 60332-1