

Copper, XLPE Insulated and LSZH Sheathed (Non-Halogenated) Single Cable 0,6/1kV – Safetymax

Conductor

Made of electrolytic bare copper wires, soft temper, stranding class 4 (1,50 a 6,00 mm²) and class 5 (10,00 a 400,00 mm²).

Insulation

Thermoset polyolefin compound 90 °C, black color, nonhalogenated with low smoke emission.

Sheath

SHF1 - Non-halogenated thermoplastic polyolefin compound, with low smoke emission, with special characteristics regarding the non-spread and self-extinguishing of fire.

Identification

Black, Light Blue, Green

Note: Other colors on request

Maximum Operational Temperatures

- 90° in continuous operation
- 130° in overload
- 250° in short circuit

Application

SafetyMax cables are non-halogenated and have low smoke and toxic gas emission and non-fire propagation characteristics. Used in installations in places with high density of occupation of people and difficult escape conditions, such as: Cinemas, Shopping Centers, Restaurants, Supermarkets, Hospitals, Train / Subway, Educational / Sports / Fair Establishments, as well as in electronic and computer areas

Applicable Standards

- ICEA S-95-658: Standard for Power Cables Rated 2000 Volts or Less for the Distribution of Electrical Energy
- NEMA WC-70: Standard for Power Cables Rated 2000 Volts or Less for the Distribution of Electrical Energy
- NEMA WC-7: Standard for Cross-Linked-Thermosetting-Polyethylene-Insulated Wire and Cable for the Transmission and Distribution of Electrical Energy
- IEC 60754-2: Test on Gases Evolved during Combustion of Materials from Cables – Part 2: Determination of the Amount of Halogen Acid Gas
- ASTM B3: Standard Specification for Hard-Drawn Copper Wire
- ASTM B8: Standard Specification for Concentric-Lay-Stranded Copper Conductors
- ASTM B230: Standard Specification for Aluminum 1350–H19 Wire for Electrical Purposes
- ASTM B231: Standard Specification for Concentric-Lay-Stranded Aluminum 1350 Conductors
- ASTM B232: Standard Specification for Concentric-Lay-Stranded Copper Conductors

Dimensional Datasheet

SINGLE CONDUCTOR CABLE					
Size (AWG/Kcmil)	Conductor Diameter (inch)	Insulation Thickness (inch)	Insulation Diameter (inch)	Sheath Thickness (inch)	Sheath Diameter (inch)
16	0.058	0.028	0.115	0.035	0.188
14	0.073	0.028	0.130	0.035	0.205
12	0.093	0.028	0.150	0.035	0.224
10	0.117	0.028	0.174	0.035	0.249
9	0.133	0.028	0.190	0.035	0.265
8	0.149	0.028	0.208	0.039	0.291
7	0.167	0.028	0.226	0.039	0.309
6	0.188	0.028	0.247	0.039	0.330
5	0.211	0.028	0.270	0.039	0.353
4	0.236	0.035	0.311	0.043	0.404
3	0.266	0.035	0.341	0.043	0.433
2	0.298	0.035	0.372	0.043	0.465
1	0.334	0.035	0.411	0.043	0.504
1/0	0.377	0.039	0.462	0.047	0.562
2/0	0.421	0.043	0.513	0.047	0.616
3/0	0.473	0.043	0.565	0.051	0.676
4/0	0.532	0.047	0.634	0.051	0.744
250	0.580	0.047	0.682	0.051	0.793
300	0.634	0.055	0.752	0.055	0.872
350	0.683	0.063	0.819	0.055	0.939
400	0.733	0.063	0.869	0.055	0.989
450	0.781	0.067	0.925	0.059	1.055
500	0.826	0.067	0.970	0.059	1.100
550	0.858	0.071	1.012	0.063	1.150
600	0.900	0.071	1.053	0.063	1.191