

APPLICATION

Cable for power distribution and power supply stations, halogen free and flame retardant used in Utility and Industrial applications, for rated voltages up to 18/30kV.

Applicable for installations where it is necessary to guarantee improved fire behaviour. Suitable for fixed installations, indoor or outdoor, in open air on cable trays, or underground in ducts or directly buried.

Special oversheath compound guarantees low water absorption properties and improved mechanical performance (tear resistance, tensile strength and elongation at break) compared to LSHF standard materials.

CABLE DESIGNATION

Cu / XLPE / Cu Tape screen / PO

Al / XLPE / Cu Tape screen / PO

Cu / XLPE / Cu Wire screen / PO

Al / XLPE / Cu Wire screen / PO

CONSTRUCTION CHARACTERISTICS

Conductor

Plain annealed Copper or Aluminium, circular, stranded, class 2 per IEC 60228.

Insulation

Semi-conductive screen over the conductor, XLPE (cross-linked polyethylene) insulation and semi conductive screen over the insulation (strippable¹), applied by simultaneous extrusion in just one operation.

Metallic Screen

Copper wire screen – annealed copper wires helically wound and an equalising copper tape applied in an open counter-helix.

Poly Propylene tape is applied over the screen.

Or **Copper tape screen** – a copper tape, helically applied with overlap.

Oversheath

Polyolefin type DMZ2 according to HD 620 S2 – LSHF – Low Smoke Halogen Free thermoplastic compound. Flame retardant.

GENERAL CHARACTERISTICS

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| Construction and test standards | IEC 60228 |
| | IEC 60502-2 |
| Rated voltage $U_0/ U(Um)$ | 3.6/6 (7.2) kV · 6/10 (12) kV · 8.7/15 (17.5) kV · 12/20 (24) kV · 18/30 (36) kV |
| Standard cross-section of wire screen (mm ²) | 16 · 25 · 35 |
| Test voltage | 3.5 x U_0 |
| Conductor maximum operating temperature | 90°C |



MEDIUM VOLTAGE CABLES

Cu or Al - XLPE - Cu - PO

Single Core Cable

Unarmoured- XLPE Insulation- Flame Retardant - Halogen Free

| | |
|---|--|
| Maximum short-circuit temperature | 250°C (t ≤ 5s) |
| Minimum bending radius – during installation (mm) | 25 x d |
| Minimum bending radius – after installation (mm) | 20 x d |
| Maximum pulling force over conductor (N) | Copper – 50 x S Aluminium – 30 x S |
| Flame retardant | IEC 60332-1-2 · EN 60332-1-2 (cable vertically mounted, length of charred cable ≤ 540 mm) |

S – conductor cross-section (mm²)

d – cable outer diameter (mm)

ELECTRICAL AND DIMENSIONAL CHARACTERISTICS

Dimensional and electrical characteristics can be consulted in the corresponding table (whether copper or aluminium conductors) of single core XLPE unarmoured cables. (Refer pages 11, 12, 13 & 14)