

## High Voltage Insulating Down Conductor Cable (KHV)



**KHV Cable** with a voltage-controlled sheath is typically used as an isolated down conductor in the field of lightning protection for control the separation distance according to IEC 62305-3

**Separation distance** : There is a risk of uncontrolled flashover between parts of the external lightning protection system and metal and electrical installations in the building if the distance between the air termination system or down conductor and metal, electrical installations in the structure requiring protection is not sufficient. The separation distance is calculated according to IEC 62305-3. Advantage of KHV cable is the decrease of separation distance.

Code No.	KHV 50 II
Cross-section of the inner conductor (Cu)	50 mm <sup>2</sup>
Equivalent separate distance s (air)	≤ 0.50 m
Equivalent separate distance s (solid material)	≤ 1.00 m
Cable weight (approx.)	1058 (kg/km)
Cable length / Coil	50 (m)
Colour of conductor	Black
Diameter Ø conductor	28.4 mm + 10%



**Test Certificate**  
IEC 62561 Part 8

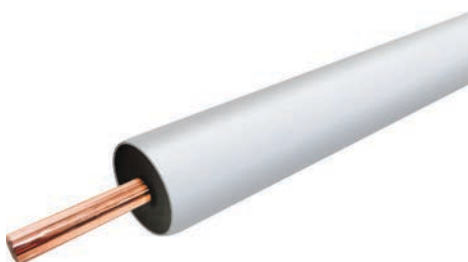


**Material**  
Copper



**Application**  
- LPS installation shall be consider the safety separation distance (SSD) to prevent the consequences of lightning current from LPS components to nearby equipment e.g. satellite, solar panel, chiller, AHU, etc.  
- Using for installation in explosion hazardous areas Ex zone 1 (gases, vapours, mists) as well as Ex zone 21 (dusts).

## Insulating Cable (KIC)



The area at risk of touch voltages for persons outside a building is located within a distance of 3 m. around the down conductor and at a height of 3 m from ground level.

The Insulation of the down-conductor is tested by a 100 kV, 1.2/50 µs impulse withstand voltage shall be adopted for protect dangerous of touch voltage.

The KIC conductor has a copper core and a high voltage resistant XLPE insulation.

Code No.	KIC 50
Material of conductor	Cu
Material of insulation	XLPE
Outer sheath	UV-Resistant, Flame Retardant
Overall diameter	20 mm
Cross-section of the inner conductor	50 mm <sup>2</sup>
Colour of conductor	Gray



**Test Certificate**  
IEC 62561 Part 2  
High Voltage 100 kV (1.2/50 us)



**Material**  
Conductor : Copper  
Insulation : XLPE  
Sheath : UV resistant PO



**Application**  
- The KIC Conductor is used as part of a down conductor system installed near the entrance of sheltering areas of buildings with high visitor frequency, such as theatres, cinemas, shopping centres, etc. Buildings or structures with public access (e.g. shelters).