

# DECLARATION OF MANUFACTURER



DEHN + SÖHNE

**Product:** HVI® Conductor Standard

<b>Part Nos.:</b>	819 020	819 320
	819 021	819 321
	819 022	819 322
	819 023	819 323
	819 024	819 324
	819 025	819 325
	819 135	819 360
	819 136	819 361
	819 245	819 362
	819 246	819 420
		819 422
		819 423
		819 425
		819 720
		819 750

**Manufacturer:** DEHN + SÖHNE GmbH + Co.KG.  
Hans-Dehn-Str. 1  
D-92318 Neumarkt i.d.OPf.

## Application:

The HVI® Conductor is a voltage-controlled, high-voltage insulated conductor with a special outer sheath. It can be used as an insulated down conductor for controlling the separation distance **s** according to IEC 62305-3:2010-12 "Protection against lightning - Part 3: Physical damage to structures and life hazard."

## Electrical resistance of the insulating down conductor

The electrical resistance of the HVI® Conductor was determined and is controlled continuously within the scope of our quality management system.

According to standard IEC 62305-3:20110-12, subclause 6.3, the equivalent separation distance **s** for the above mentioned conductor corresponds to

a max. distance of  **$s \leq 0.75 \text{ m}$**  in air (material factor  $k_m = 1$ )

a max. distance of  **$s \leq 1.5 \text{ m}$**  in solid material, e.g. brickwork (material factor  $k_m = 0.5$ )

These values for separation distance **s** of the HVI<sup>®</sup> Conductor can only be guaranteed when the specifications of the installation instructions of the articles concerned are observed.

### Lightning current carrying capacity

The lightning current carrying capacity of the connection components of the HVI<sup>®</sup> Conductor was determined and controlled continuously within the scope of our quality management system.

According to DIN EN 50164-1 (VDE 0185 Part 201):2009-03 "Lightning Protection Components (LPC) - Part 1: Requirements for connection components", the lightning current carrying capacity is provided according to

#### Classification H (100 kA / 10/350 µs)

### Thermal stress

When discharging lightning currents, the inner conductor of the HVI<sup>®</sup> Conductor is expected to heat up temporarily ( $\Delta T$ ) by max.

**9 K** in lightning protection systems type **III/IV** ( $I_{imp} = 100 \text{ kA}_{10/350 \mu s}$ )

or

**95 K** in lightning protection systems type **II** ( $I_{imp} = 150 \text{ kA}_{10/350 \mu s}$ )

The HVI<sup>®</sup> Conductor is not thermally overloaded with the above mentioned lightning currents.

Neumarkt i.d.OPf., 30.08.2012



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