



DEHNiso Roof Conductor Holder

- Variable range of conductor holders to keep the separation distance for the installation of conductors on flat roofs
- Spacer bar made of glass-fibre reinforced plastic (GRP) Ø 10 mm, UV-stabilised, light grey colour
- Spacer with concrete block and base plate for conductors Rd 8 mm
- Spacer with concrete block and base plate, loose conductor leading



Conductor holder material	Length	Insulating clearance	PU pcs.	Part No.
P/GRP	295 mm	220 mm	24	253 115
P/GRP	435 mm	360 mm	24	253 125



Spacer Bar with Conductor Holder

For fixing of conductors with concrete block and base plate, loose conductor leading

Conductor holder material	Length	Insulating clearance	PU pcs.	Part No.
Plastic	280 mm	220 mm	24	253 315
Plastic	420 mm	360 mm	24	253 325



Conductor Holder With Lock Bush

For fixing of conductors at the GRP bar

Material	Colour	Conductor holder support Rd	PU pcs.	Part No.
Plastic	●	8 mm	24	253 302



Spacer Bar

For cutting variable lengths

Material	Diameter Ø	Length	PU pcs.	Part No.
GRP	10 mm	3000 mm	10	253 310



Concrete Block

For stabilising the base plate with spacer bar or air-termination tip (Ø 10 mm, max. length of 1000 mm)

Block	Weight	PU pcs.	Part No.
Concrete (C35/45)	4.6 kg	24	253 301



Base Plate

For insertion (lock bush) of the spacer bar (Part No. 253 315, 253 325) or air-termination tip (e.g. Part No. 101 000) and for the protection of roof sheeting under the concrete block (Part No. 253 301)

Material	Colour	Diameter Ø (d1)	Lock bush diameter Ø (d2)	PU pcs.	Part No.
Plastic	●	300 mm	10 mm	24	253 300



Concrete block and base plate can be alternatively used for installing air-termination tips (Ø 10 mm, max. length of 1000 mm), suitable for wind load zone I and II

Lightning Protection
Surge Protection
Safety Equipment

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For more information
and services e.g.

- Surge protection catalogue
- Lightning protection catalogue
- Appointment with our local partner

please visit us at
www.dehn.de (Service section)

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DEHNiso Roof Conductor Holder

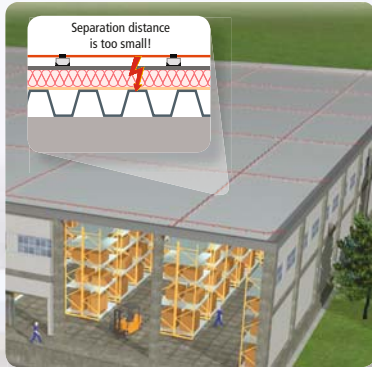


DS177/E/1010

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If the separation distance is not observed, flashover may occur from the conductors of the external lightning protection system to the electrical and metal installations inside the structure. Nevertheless, electrical isolation is often disregarded when installing external lightning protection systems. The result of this is that e.g. the air-termination system of the external lightning protection system is intermeshed on a flat roof without observing the necessary separation distance with regard to lower metal parts and electrical systems.

One reason for the fact that the necessary separation distance is often disregarded in large-scale installations such as logistics centres, high rack warehouses or production facilities is that the components available on the market make it often very difficult to observe the necessary separation distance.



The system-specific separation distance can be determined by means of the calculation method described in the EN 62305-3 standard. DEHN Distance Tool is a considerably simpler and more comfortable calculation option. Simple and clearly structured calculation by means of the DEHN Distance software tool allows a detailed determination of the separation distance.



Example: Calculation of the separation distance up to the edge of the roof e.g. in case of reinforced concrete or steel supports

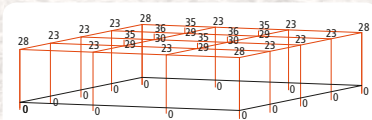
DEHN + SÖHNE developed the new DEHNiso roof conductor holder consisting of a glass-fibre reinforced plastic (GRP) rod with a plastic conductor holder and a concrete block with base plate for easy and practice-oriented implementation of electrical isolation when installing external lightning protection systems. The new roof conductor holder is available in two lengths (295 mm, 435 mm). This corresponds to a separation distance in air of 150/250 mm. All components can be ordered separately which makes it easier to cope with unexpected scenarios on site. During the development of this product family particular attention was paid to a minimum area exposed to wind and maximum stability.

Due to the specifications in the EN 62305-3 standard (recommended value for the roof conductor holder spacing: 1 m) and the wind load, the DEHNiso roof conductor holder allows a maximum spacing of 1.2 m between the individual holders irrespective of the material chosen. This value applies to both models (295 and 435 mm in length) in wind load zones I to III.

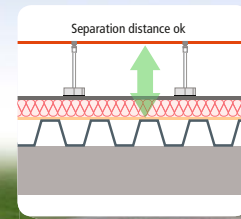
Combined air-termination rods made of GRP and aluminium complete the system. Separation distances for higher roof superstructures can also be realised since the base of the air-termination rods is made of GRP and the top of aluminium. The air-termination rods can be installed in two wedged concrete bases stacked on top of one another up to a length of 2 m. Several down conductors (2 to 4) can be connected to them. Thus, the lightning current is distributed and the separation distance can be maintained without problems.

The DEHNiso Combi system allows to integrate even larger/higher roof superstructures into the area protected against lightning strikes (zone 0_b). The components also consist of two materials (GRP/Al) and can be installed in a tripod. The down conductor is routed separately by means of spacers so that no lightning current is coupled into the tripod.

Lightning protection systems can be easily installed in practice by means of the DEHNiso roof conductor holder and the DEHNiso Combi product families and components from DEHN + SÖHNE, which help to maintain the separation distance with regard to lower metal parts and electrical systems at the place of installation. This allows to prevent uncontrolled flashover across the roof and possible consequences thereof.



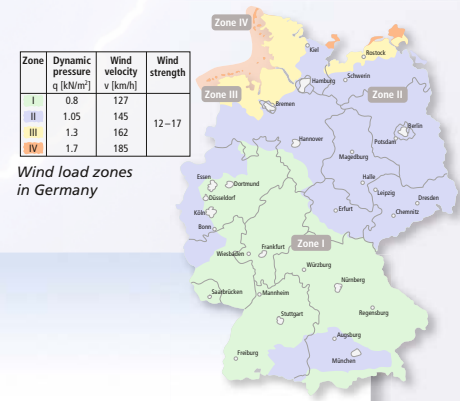
Example: Calculation of the separation distance up to the earth-termination system



Air-termination rod with insulating clearance made of GPR and Al



Roof superstructure protected by DEHNiso Combi and DEHNiso roof conductor holder



Wind load zones in Germany

Zone	Dynamic pressure q [kN/m ²]	Wind velocity v [km/h]	Wind strength
I	0.8	127	12-17
II	1.05	145	
III	1.3	162	
IV	1.7	185	