Safe in stormy times! Mounting bracket dimensioned according to Eurocode



Max. wind speeds in km/h for installations on metal roofs using the mounting bracket

Mounting bracket for the installation of air-termination systems on metal roofs

The stainless steel mounting bracket (Part No. 105 241) is suitable for mounting air-termination rods and HVI air-termination systems on metal roofs. It can be set to roof angles of 5-53°. Not only can DEHNcon-H systems be attached to the top, HVI supporting tubes and D40 air-termination rods can also be fastened to the side of the bracket.

Dimensioning of air-termination systems with the mounting bracket for installation on metal roofs according to Eurocode

When dimensioning air-termination systems with the mounting bracket for installation on metal roofs, the wind load or wind strength must be considered in compliance with the Eurocode. When determining potential wind loads, the location and surroundings are decisive parameters. Aside from the basic wind speed and the terrain category, the height of the object itself and the location also come into the calculation. By combining the different factors, one arrives at the gust wind speed to be used as the basis for designing air-termination systems and installations. The gust wind speed therefore depends on the object itself.

Wind load calculations based on Eurocode differ due to country-specific definitions. The maximum gust wind speeds for possible product combinations mentioned in the following table only apply to Germany and are a rough orientation for other countries. The gust wind speeds have to be newly calculated according to the country-specific calculation methods. These possible product combinations consist of a mounting bracket for installation on metal roofs and an air-termination system and should be taken into account during dimensioning/installation.

Combinations				
System / air-termination system	Mounting bracket for installation on metal roofs (Part No. 105 241) combined with supporting tube (L) or air-termination rod (ATR)	HVI® / DEHNcon-H systems		Max. permissible
		Number of conductors outside	Number of conductors inside	gust wind speed for the combination
DEHNcon-H / HVI [®] Conductor attached to top	Part No. 819 247 Al or Part No. 105 281 Al Total length (L) = 1955 mm / ATR = 2500 mm (Al)	0	1	137 km/h
		1	0-1	124 km/h
		2-4	0-1	116 km/h
DEHNcon-H / HVI®light Conductor attached to top	Part No. 819 243 Al or Part No. 105 288 Al Total length (L) = 2875 mm / ATR = 1000 mm (StSt)	0	1	149 km/h
DEHNcon-H / HVI®light Conductor supporting tube fastened to side (fixing length a = 460 mm)	Part No. 819 255 Al or Part No. 105 272 Al Total length (L) = 1990 mm / ATR = 500 mm (StSt)	0	1	232 km/h
	Part No. 819 256 Al or Part No. 105 273 Al Total length (L) = 1990 mm / ATR = 1000 mm (StSt)	0	1	197 km/h
	Part No. 819 257 Al or Part No. 105 274 Al Total length (L) = 2640 mm / ATR = 500 mm (StSt)	0	1	196 km/h
	Part No. 819 258 Al or Part No. 105 280 Al Total length (L) = 2640 mm / ATR = 1000 mm (StSt)	0	1	184 km/h
	Part No. 819 259 Al Total length (L) = 5040 mm / ATR = 500 mm (StSt)	0	1	99 km/h
HVI®Conductor supporting tube fastened to side (fixing length a = 460 mm)	Part No. 105 330 Al or Part No. 819 326 / 819 336 Al	0	1	124 km/h
		1	0-1	107 km/h
	Total length (L) = 3200 mm / ATR = 1000 mm (StSt)	2-4	0-1	94 km/h
	Part No. 105 314 StSt Total length (L) = 3200 mm / ATR = 1000 mm (StSt)	0	1	122 km/h
		1	0-1	104 km/h
		2-4	0-1	93 km/h
Air-termination rods D40 supporting tube fastened to side (fixing length a = 460 mm)	Part No. 105 170 Al Total length (L) = 4000 mm		_	180 km/h
	Part No. 105 190 StSt Total length (L) = 4000 mm	_	_	172 km/h
	Part No. 105 175 Al Total length (L) = 4500 mm	_	_	157 km/h
	Part No. 105 195 StSt Total length (L) = 4500 mm	_	_	149 km/h

Please note:

Specific installation conditions should be coordinated on site with the building contractor. Further safety/installation notes can be found in the installation instructions DS 2004.