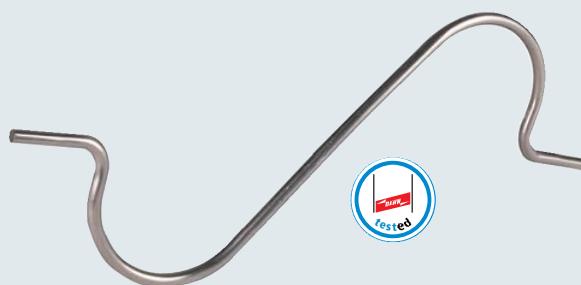
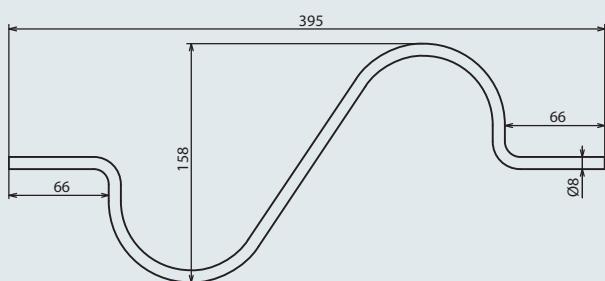
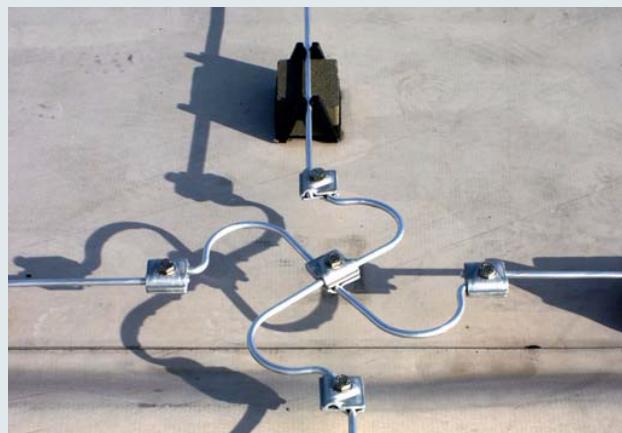


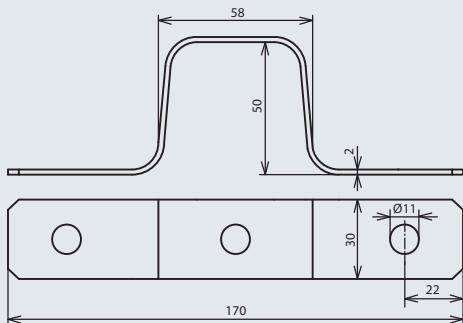
Expansion pieces for temperature-related length compensation of longer conductors  
(requires loose conductor leading in the holders)



For connection e.g. by MV clamp (Part No. 390 051)

Part No.	374 011
Material	Al
Dimension	Ø 8 mm
Length	approx. 395 mm
Standard	EN 50164-(1+2)

### Flat design



For connection e.g. with KS connector (Part No. 301 000)

Note: At crossing points two expansion pieces may be connected with one screw M10x20 mm and nut.

Part No.	374 020
Material	Al
Dimension	30x2 mm
Length	170 mm
Fixing	[2x] Ø 11 mm
Central bore	Ø 11 mm
Standard	EN 50164-1

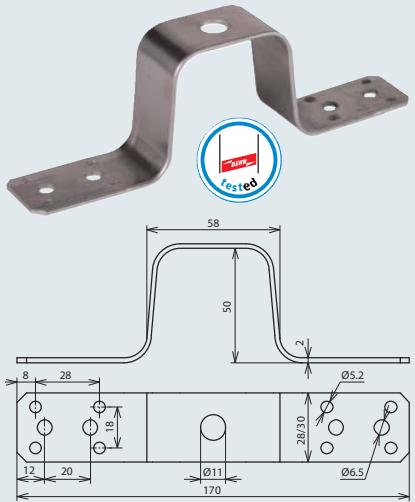


Bridging brackets for connecting and joining of metal claddings, for riveting or screwing

#### Application note:

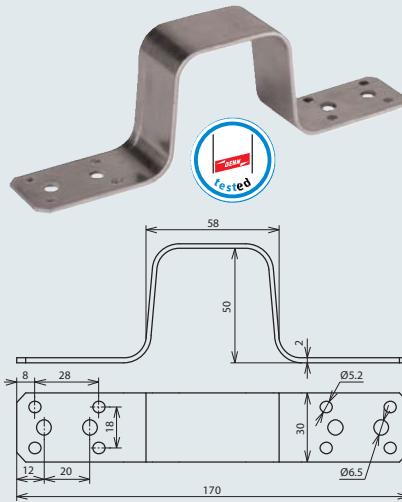
According to DIN EN 62305-3 Suppl. 1, four rivets Ø5 mm shall be used to connect material of  $\geq 0.5$  mm thickness, or two StSt tapping screws Ø6.3 mm (on both sides) for material of  $\geq 2$  mm thickness.

### Short design with central bore



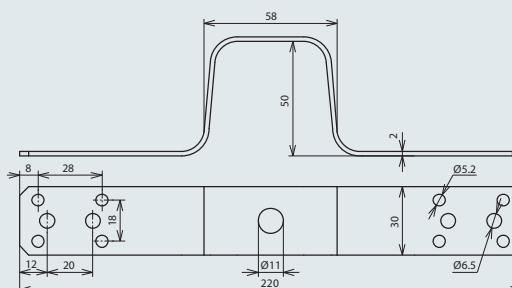
Part No.	377 006	377 027
Material	Al	Cu
Dimension	30x2 mm	28x2 mm
Length	170 mm	170 mm
Fixing	[8x] Ø5.2 / [4x] Ø6.5 mm	[8x] Ø5.2 / [4x] Ø6.5 mm
Central bore	Ø11 mm	Ø11 mm
Standard	EN 50164-1	EN 50164-1

### Short design without central bore



Part No.	377 016
Material	Al
Dimension	30x2 mm
Length	170 mm
Fixing	[8x] Ø5.2 / [4x] Ø6.5 mm
Standard	EN 50164-1

### Long design with central bore



Part No.	377 026
Material	Al
Dimension	30x2 mm
Length	220 mm
Fixing	[8x] Ø5.2 / [4x] Ø6.5 mm
Central bore	Ø11 mm
Standard	EN 50164-1

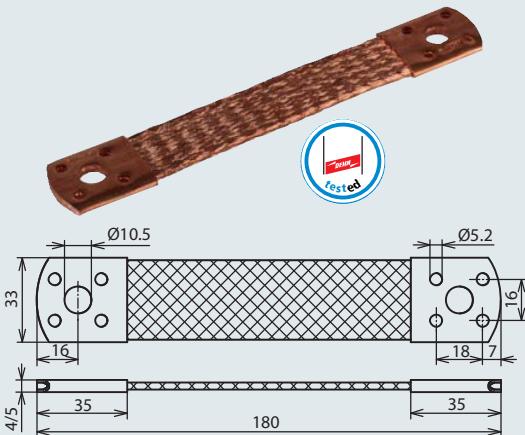
Bridging braids for connecting metal claddings (riveting or screwing) or as expansion compensation piece for round wires; connection e.g. by KS connector Part No. 301 019

#### Application note:

According to DIN EN 62305-3 Suppl. 1, four rivets Ø5 mm shall be used to connect material of  $\geq 0.5$  mm thickness, or two StSt tapping screws Ø6.3 mm (on both sides) for material of  $\geq 2$  mm thickness.

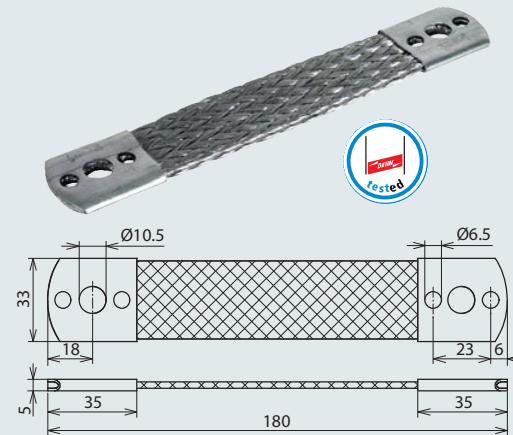


**Short design**



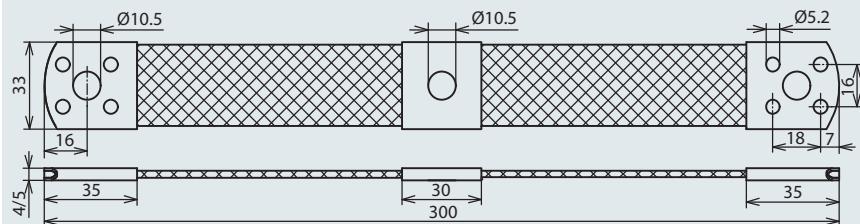
Part No.	377 015	377 007
Material	Al	Cu
Length	180 mm	180 mm
Cross section	50 mm <sup>2</sup>	50 mm <sup>2</sup>
Fixing	[8x] Ø5.2 / [2x] Ø10.5 mm	[8x] Ø5.2 / [2x] Ø10.5 mm
Fixing possibility	blind rivets/screws	blind rivets/screws
Standard	EN 50164-1	EN 50164-1

**Short design for fixing with drilling screws**



Part No.	377 045
Material	Al
Length	180 mm
Cross section	50 mm <sup>2</sup>
Fixing	[4x] Ø6.5 / [2x] Ø10.5 mm
Fixing possibility	drilling screws/screws
Standard	EN 50164-1

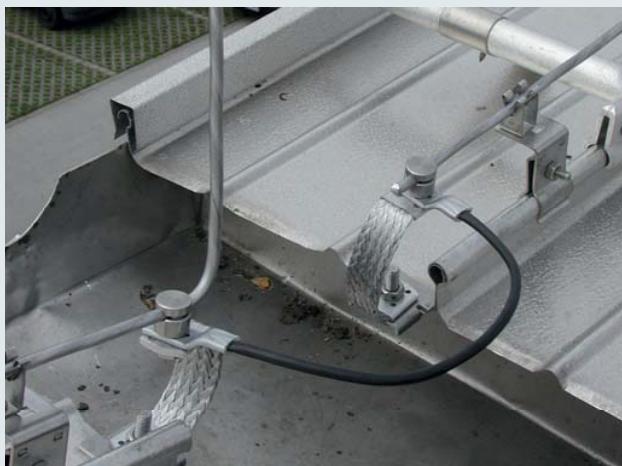
**Long design with central bore**



Note: At crossing points two bridging braids can be connected with a screw M10x20 mm and nut.

Part No.	377 115	377 107
Material	Al	Cu
Length	300 mm	300 mm
Cross section	50 mm <sup>2</sup>	50 mm <sup>2</sup>
Fixing	[8x] Ø5.2 / [3x] Ø10.5 mm	[8x] Ø5.2 / [3x] Ø10.5 mm
Central bore Ø	10.5 mm	10.5 mm
Fixing possibility	blind rivets/screws	blind rivets/screws
Standard	EN 50164-1	EN 50164-1

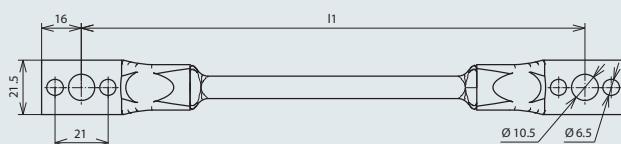




Bridging cables for connecting/bridging of metal claddings by screwing or as expansion compensation piece for round wires connection e.g. with KS connector Part No. 301 019

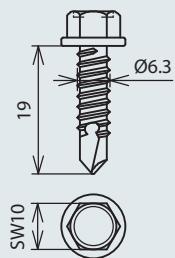
#### Application note:

According to DIN EN 62305-3 Suppl. 1, two rivets Ø6 mm shall be used to connect material of  $\geq 0.5$  mm thickness, or two StSt tapping screws Ø6.3 mm (on both sides) for material of  $\geq 2$  mm thickness.



Part No.	377 210	377 310	377 410	377 510
Length (l1)	200 mm	300 mm	400 mm	500 mm
Material of cable lug	Al	Al	Al	Al
Material of cable	Cu	Cu	Cu	Cu
Cross section	16 mm <sup>2</sup>	16 mm <sup>2</sup>	16 mm <sup>2</sup>	16 mm <sup>2</sup>
Fixing	[4x] Ø6.5 / [2x] Ø10.5 mm			
Insulation	rubber EM5 black	rubber EM5 black	rubber EM5 black	rubber EM5 black
Standard	EN 50164-1	EN 50164-1	EN 50164-1	EN 50164-1

## Drilling Screw

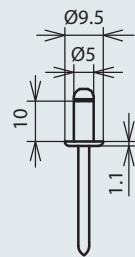


Drilling screw, self-tapping with hexagon head and collar, for connecting bridging brackets or cables e.g. to the metal capped parapet (for materials of  $\geq 2$  mm thickness)

Part No.	528 619
Material	StSt
Dimension	6.3x19 mm
Head	SW 10
Standard	DIN 7504

Blind rivet with StSt pin according to DIN EN 62305-3 Suppl. 1, for the connection of bridging brackets, bridging braids or bridging cables.

Part No.	528 610
Material	Al / StSt
Head	Ø5 mm
Length	10 mm
Standard	similar to DIN 7337



NEW

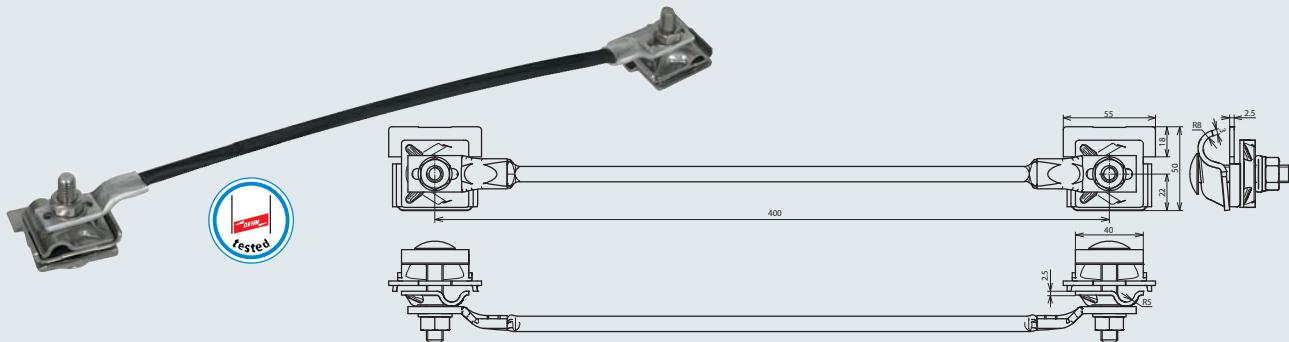
## Bridging Cable with Saddle Clamps

Bridging cable with saddle clamps for connecting or bridging of metal claddings (e.g. metal cappings of roof parapet segments) without boring.

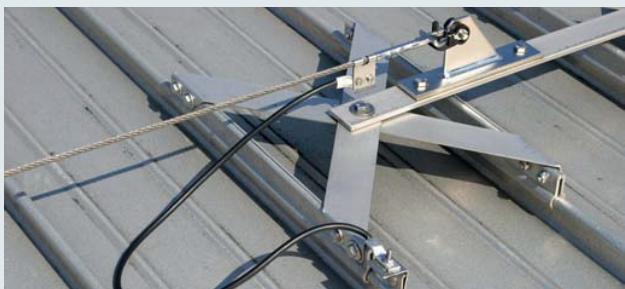
No pollution by bore chippings.

With one cleat each e.g. for connection to the air-termination system and for erection of air-termination rods (Rd 8-10 mm)

For use at parapet capping seams angled 0°-45° and up to max. 18 mm long



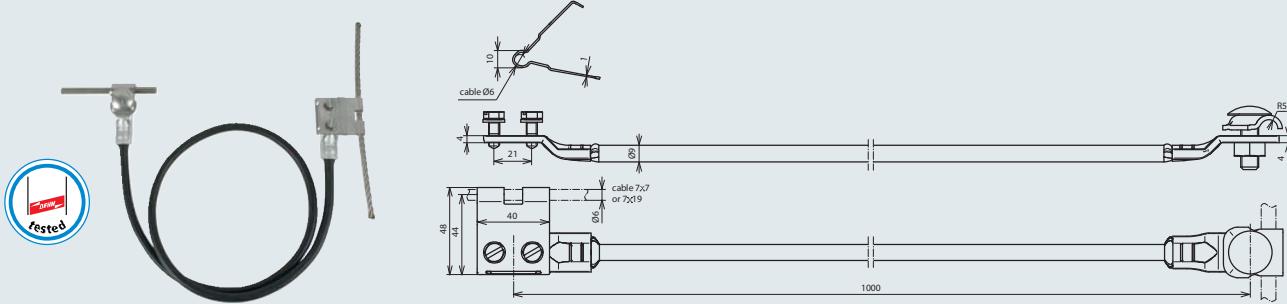
Part No.	365 419
Clamping range of seam	0.7-10 mm
Material of saddle clamps	StSt
Length	200 mm
Material of cable	Cu
Cross section	16 mm <sup>2</sup>
Standard	EN 50164-1



System for connecting the safety rope systems on roofs with the air-termination system

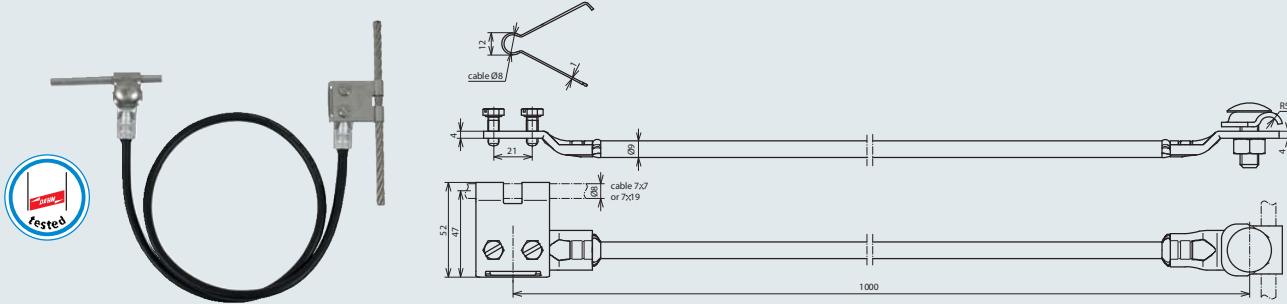
With premounted connection lug for the safety rope ( $\varnothing 6$  mm or  $\varnothing 8$  mm) and clamping frame (Rd 6-10 mm)

### Rope diameter 6 mm



Part No.	365 509
Clamping range of connection lug	$\varnothing 6$ mm
Rope structure	7x7 / 7x19
Material of connection lug	StSt
Clamping range of clamping frame	Rd 6-10 mm
Material of clamping frame	StSt
Length	1000 mm
Material of rope	Cu
Cross section	16 mm <sup>2</sup>
Temperature range	-40 to +80 °C
Type of cable	flexible
Insulation	rubber EM5 black
Standard	EN 50164-1

### Rope diameter 8 mm



Part No.	365 519
Clamping range of connection lug	$\varnothing 8$ mm
Rope structure	7x7 / 7x19
Material of connection lug	StSt
Clamping range of clamping frame	Rd 6-10 mm
Material of clamping frame	StSt
Length	1000 mm
Material of rope	Cu
Cross section	16 mm <sup>2</sup>
Temperature range	-40 to +80 °C
Type of cable	flexible
Insulation	rubber EM5 black
Standard	EN 50164-1

More details in installation instructions No. 1732