



# Heating mounting materials

**Ceres Support B.V.**

**Bergakkerweg 15**

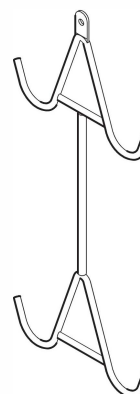
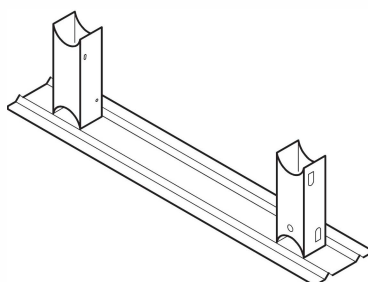
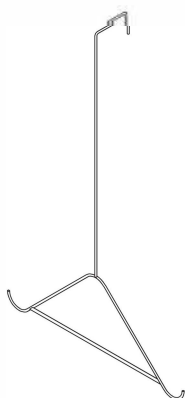
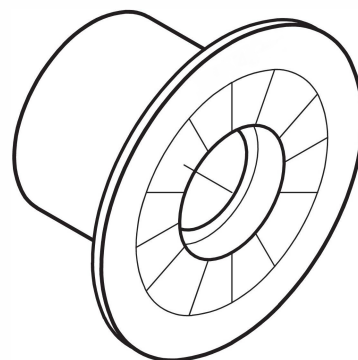
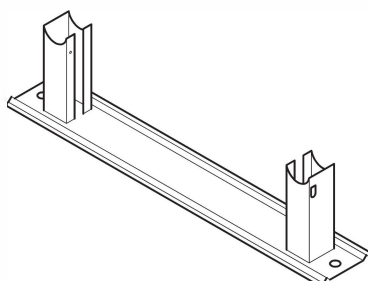
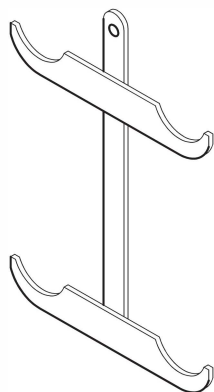
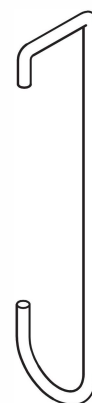
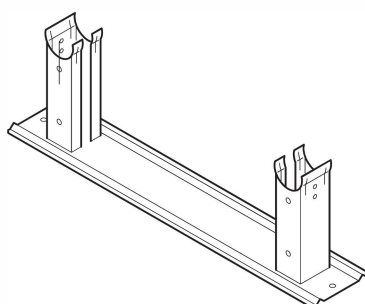
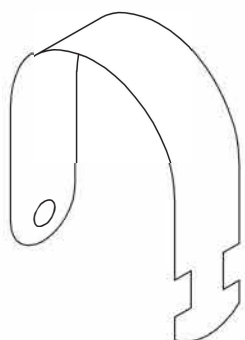
**8071 CC Nunspeet**

**the Netherlands**

**Website: [www.ceressupport.com](http://www.ceressupport.com)**

**E-mail: [info@ceressupport.com](mailto:info@ceressupport.com)**

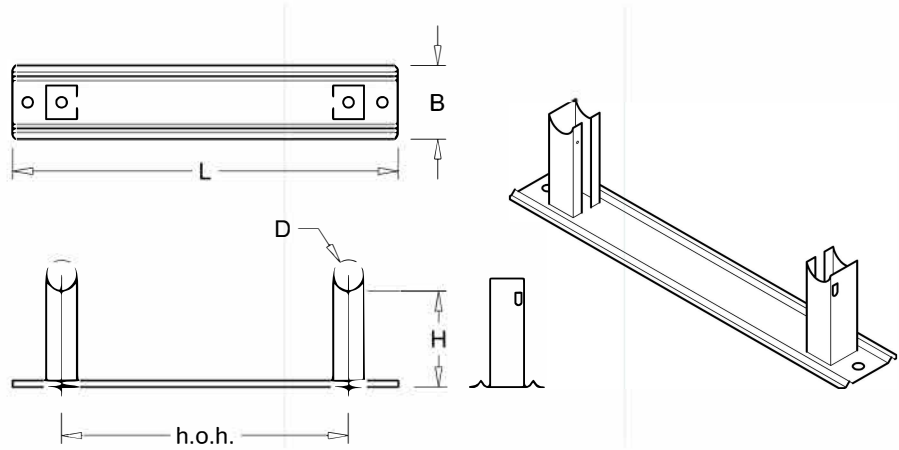
# Tube rail products



**Tube rail support  
clicked model**

**Item Number 405**

provisions for straps and screws  
for pipe D = 45 or 51  
open profile  
standard galvanized material



Above mentioned tube rail supports are custom made. Variables can be:

**H = Height of support (measured from ground level till bottom of tube)**

**D = Suitable for tubesizes : 33, 38, 42.4 (5/4"), 45, 48 (1 1/2"), 51, 57 , 60 (2") mm**

**hoh = centre to centre size of tubes.**

**L = Length of the ground plate**

**B = Width of ground plate (standard = 115 mm)**

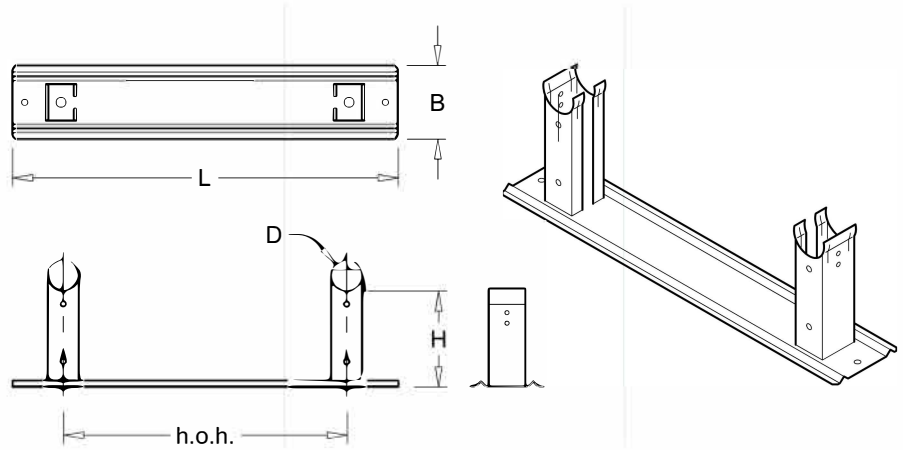
**Option closed profile**

**For more options see page. 2-3 and 2-6**

**Tube rail support  
clicked clamp model**

**Item Number 406**

no straps and screws necessary  
open profile  
standard pre-galvanized  
materialmm



Above mentioned tube rail supports are custom made. Variables can be:

**H = Height of support (measured from ground level till bottom of tube)**

**D = Suitable for tubesizes : 38, 42.4 (5/4"), 45, 48 (1 1/2"), 51 mm**

**hoh = centre to centre size of tubes.**

**L = Length of the ground plate**

**B = Width of ground plate (standard = 115 mm)**

**Option closed profile**

**For more options see page. 2-3 and 2-6**

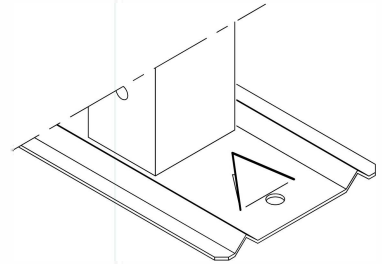
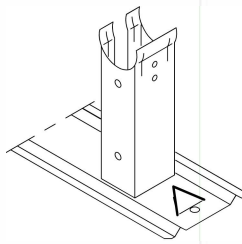
**More information about tube rail support clicked model can be found at page 8-1 and 8-2**



**Foil clip**

**Item Number 405x**

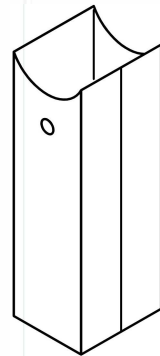
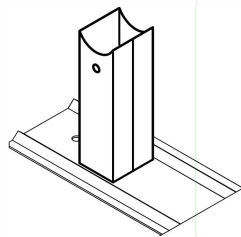
option clip for tube rail supports  
clicked model or clicked  
clampmodel



**Closed profile**

**Item Number 405z**

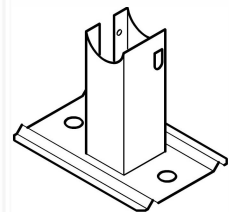
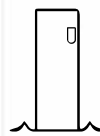
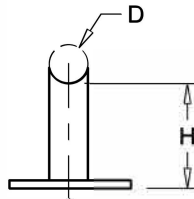
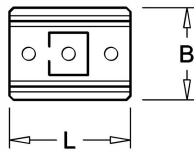
option for tube rail support clicked  
model or clicked clampmodel



**Single tube rail support**

**Item Number 407**

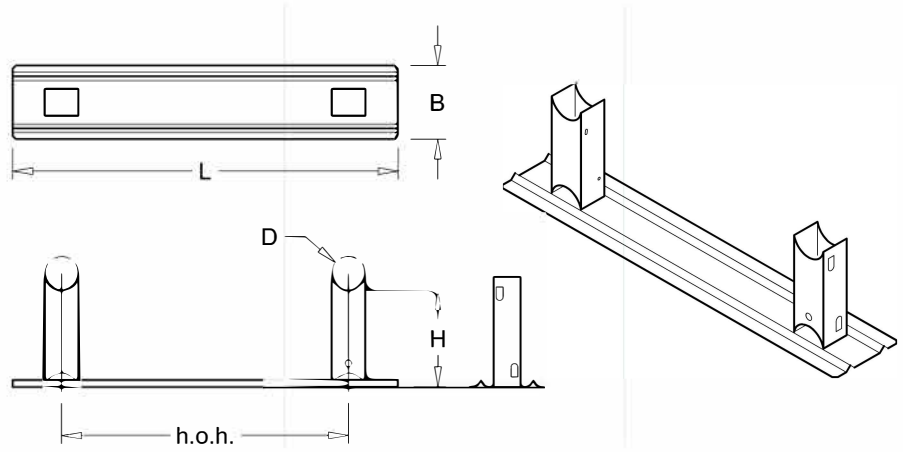
clicked model or clicked  
clampmodel



**Tube rail support welded model**

Item Number 409

provisions for straps and screws  
for pipe D = 45 or 51 mm  
hotdip galvanized  
pressed tube 50x40



Above mentioned tube rail supports are custom made. Variables can be:

- H = Height of support (measured from ground level till bottom of tube)
- D = Suitable for tubesizes : 42.4 (5/4"), 45, 48 (1 1/2"), 51 ,57, 60 (2") mm
- hoh = centre to centre size of tubes.
- L = Length of the ground plate

B = Width of ground plate (standard = 115 mm)  
)

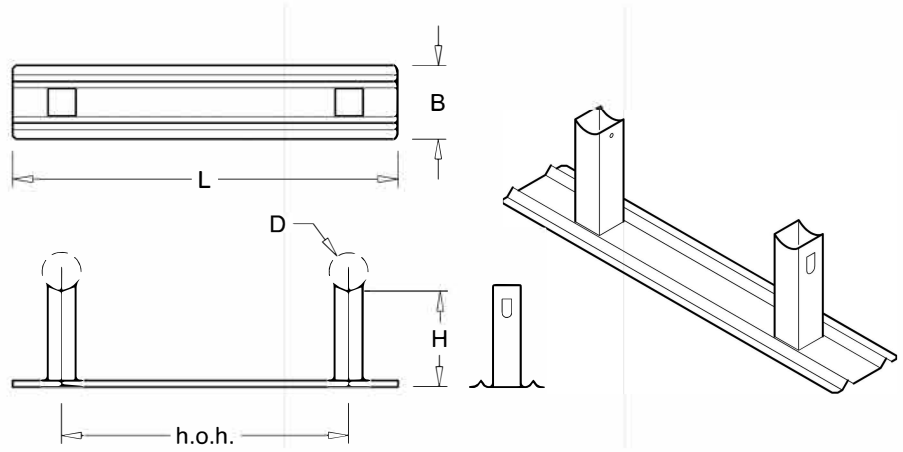
For more options see page. 2-6

More information about tube rail support clicked model can be found at page 8-1 and 8-2

**Tube rail support  
special model for pipe  $\varnothing$   
1" /  $\varnothing$  38**

Item Number 109

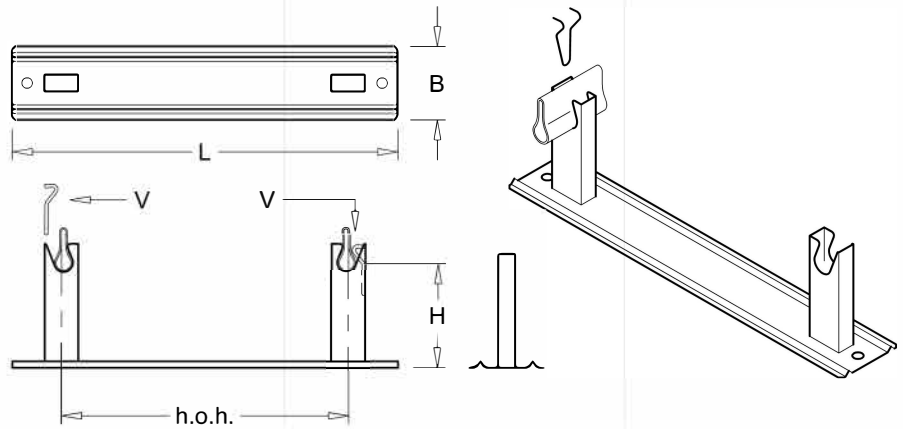
provisions for straps and screws  
welded hotdip galvanized



**Tube rail support  
special model for  
drop-tube**

Item Number 112

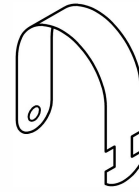
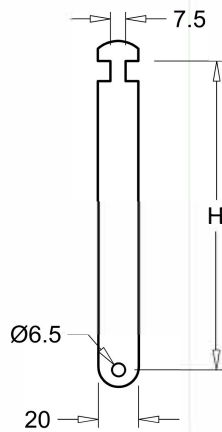
welded hotdip galvanized  
inclusive clamps  
tube 50x25 mm  
long or short ground plate



**Tube rail strap type 1**

**Item Number 024**

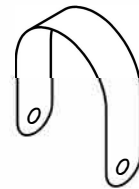
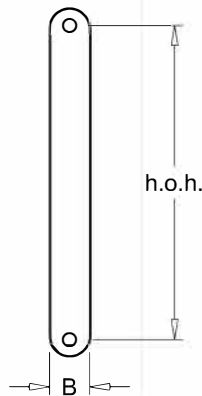
pre-galvanized material  
flat 20x1 mm  
without screws  
per strap 1 screws is necessary  
the length of the strap depends on  
the type tube rail support and the  
applied pipe



**Tube rail strap type 2**

**Item Number 010**

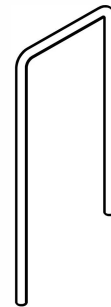
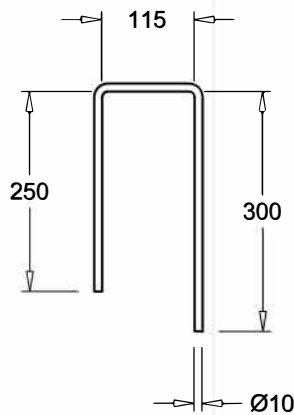
pre-galvanized material  
flat 20x1 mm  
without screws  
per strap 2 screws or 2  
-superteks- are necessary



**Locking pin**

**Item Number 176**

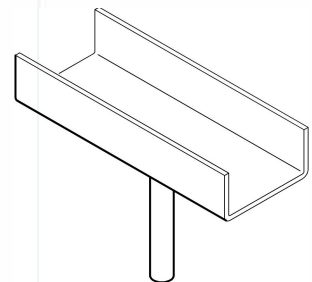
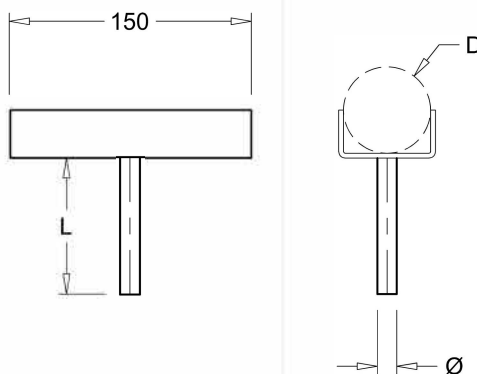
material Ø 10  
pre-galvanized



**U-trailguide**

**Item Number 885**

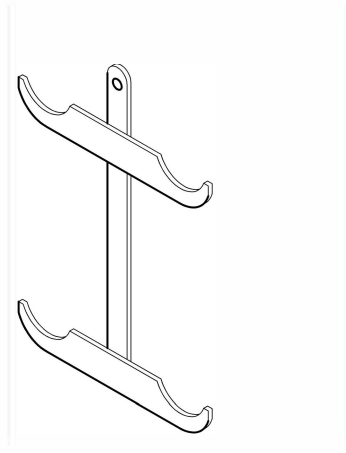
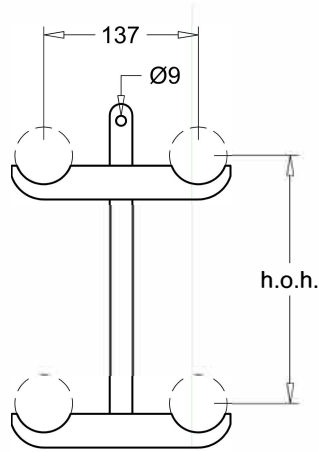
for tube Ø 45 or Ø 51



**Double cowhornhook welded model**

Item Number 104

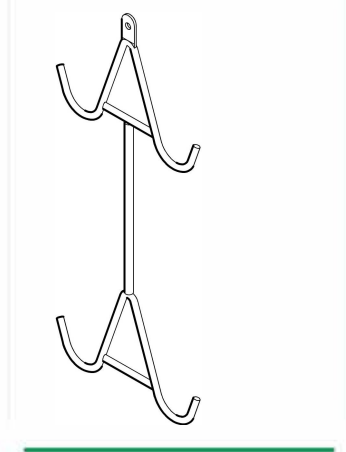
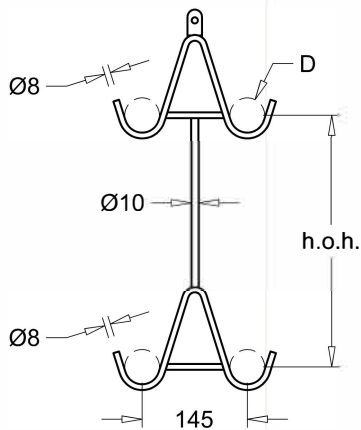
hotdip galvanized  
flat 20x5 mm and 40x4 mm  
centre to centre H.O.H. 41,5 cm



**Double A-hook 2 x A-Hook 3S**

Item Number 101

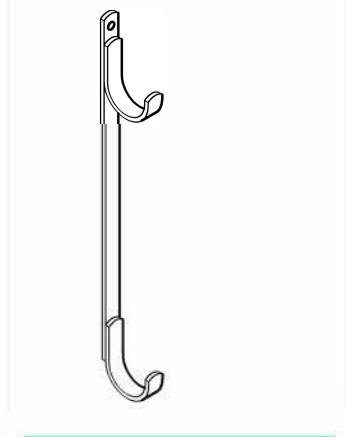
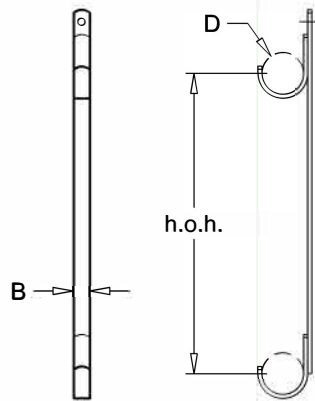
welded hotdip galvanized  
material Ø 8 mm  
centre to centre H.O.H. 41,5 cm  
for pipe 51 mm



**Double J-hook welded model**

Item Number 448

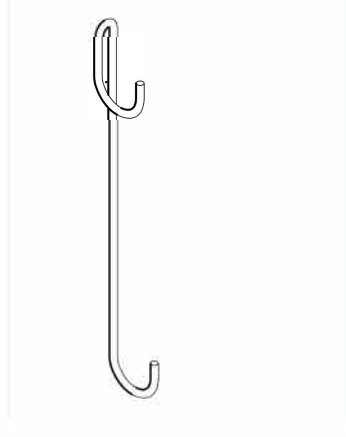
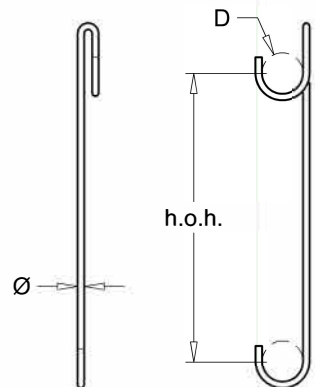
hotdip galvanized  
material 20x5 mm  
centre to centre H.O.H. 41,5 cm  
for pipe D = 51 mm



**Double J-hook bended model**

Item Number 448a

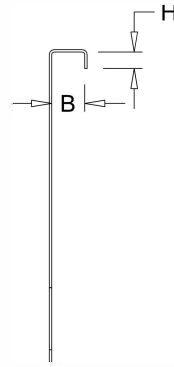
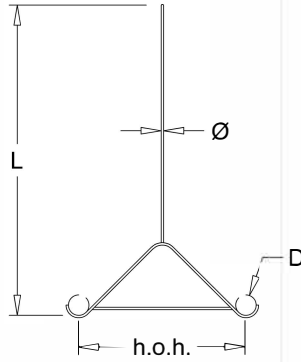
hotdip galvanized  
material Ø 8  
centre to centre H.O.H. 41,5 cm  
for pipe D = 51 mm



**Coathook welded model**

Item Number 027

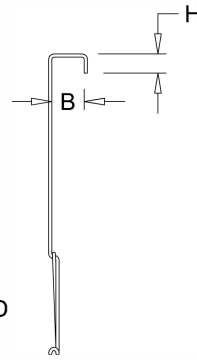
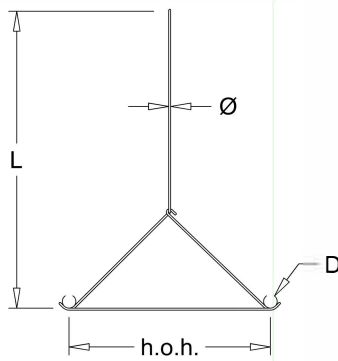
material  $\varnothing$  8 or  $\varnothing$  10 mm  
 for pipe D = 51 mm  
 centre to centre H.O.H. 41,5 cm



**Coathook bended model**

Item Number 027a

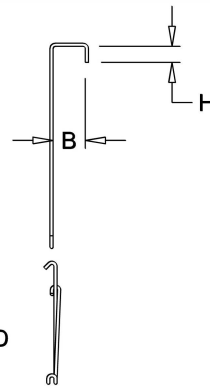
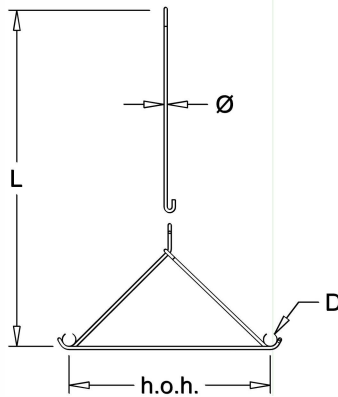
pre-galvanized material  
 for pipe D = 51 mm  
 material  $\varnothing$  8 or  $\varnothing$  10 mm



**Coathook bended model  
 in 2 parts**

Item Number 027b

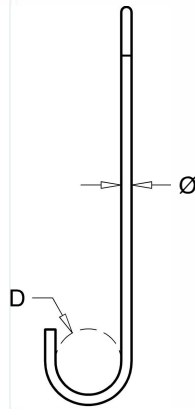
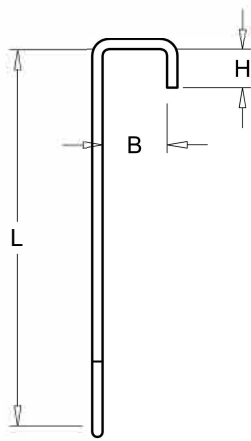
pre-galvanized material  
 for pipe D = 51 mm  
 material  $\varnothing$  8 or  $\varnothing$  10 mm



**Spek hook**

**Item Number 025**

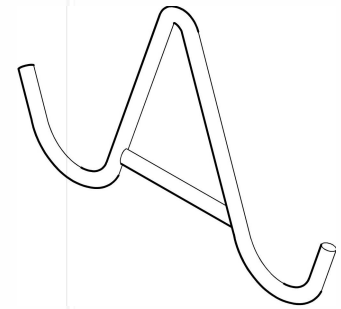
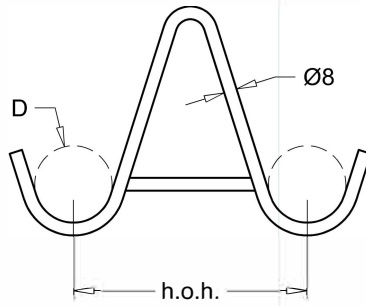
material  $\varnothing$  6, 7, 8 or 10 mm  
 for tube D = 33, 38, 51 or 60 mm  
 black or galvanized  
 L = 70-5000 mm



**A-hook 3S welded model**

Item Number 034

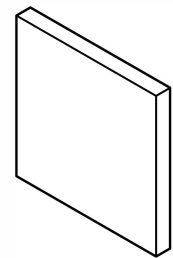
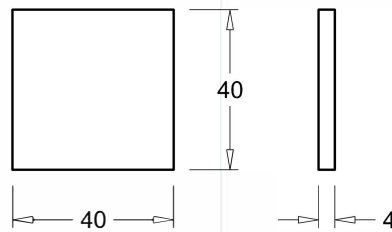
hotdip galvanized  
 Ø 8 mm  
 centre to centre H.O.H. 145 mm  
 for pipe D = 51 mm



**Bumper plate**

Item Number 447

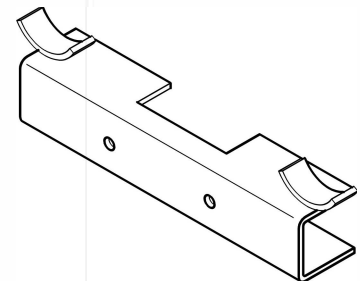
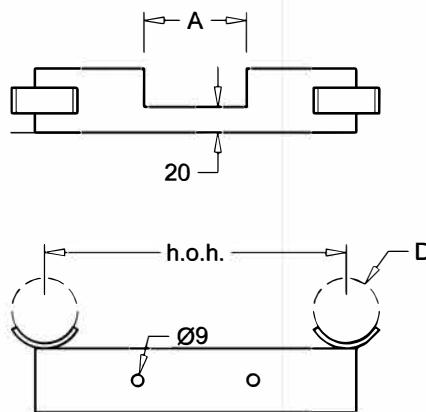
black (not galvanized)  
 flat 40x4 mm  
 length 40 mm



**Container hooks**

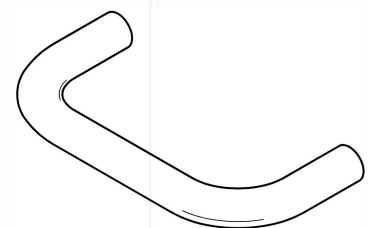
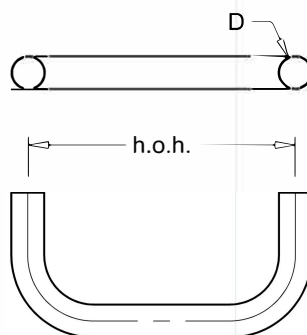
Item Number 026

welded hotdip galvanized  
 for pipe D = 51 mm  
 U50x50x4 mm



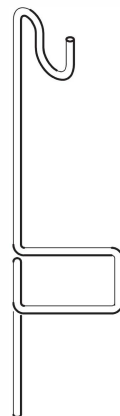
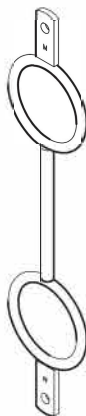
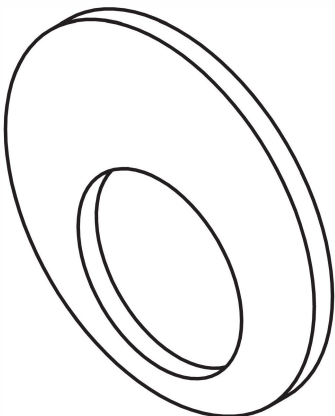
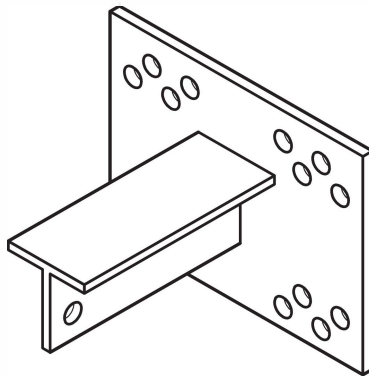
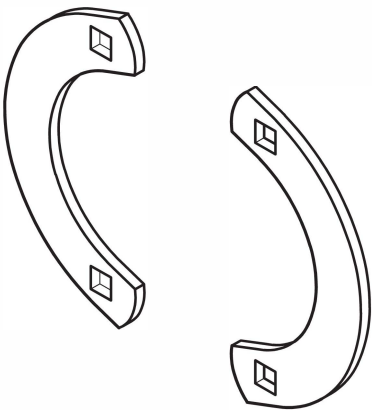
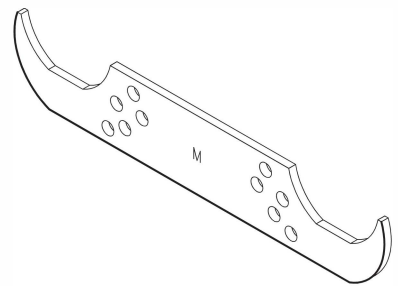
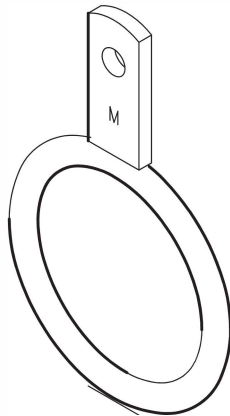
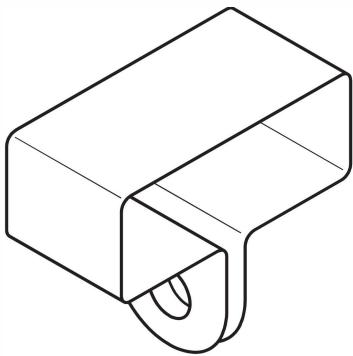
**Head piece pulled elbows**

Item Number 570



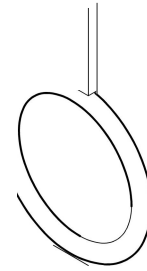
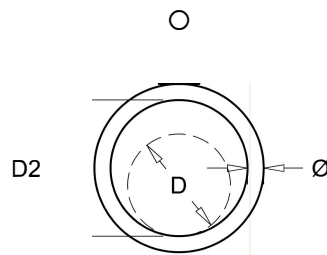


# Support material



**Ring with single lug**Item Number **040**

hot-dip galvanized  
length of the lug 47 mm  
material lug 20x5 mm  
centre hole 15 mm from top

**Tube size D**

51 mm  
63 mm  
76 mm  
89 mm  
102 mm  
114 mm  
127 mm  
133 mm  
140 mm  
159 mm  
168 mm

**Inside size D2**

60 mm  
72 mm  
88 mm  
96 mm  
110 mm  
120 mm  
135 mm  
140 mm  
150 mm  
170 mm  
180 mm

**Material ø**

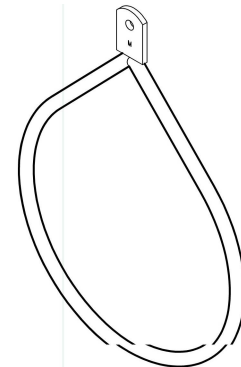
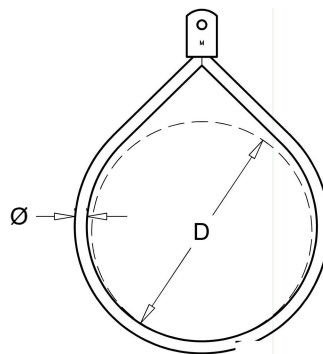
8 mm  
8 mm  
8 mm  
8 mm  
8 mm  
10 mm  
10 mm  
10 mm  
10 mm  
10 mm  
10 mm

**Article number**

040051  
040063  
040076  
040089  
040102  
040114  
040127  
040133  
040140  
040159  
040168

**Ring Onion-model with single lug**Item Number **040ui**

hot-dip galvanized  
length of the lug 47 mm  
material lug 20x5 mm  
centre hole 15 mm from top



193 mm  
219 mm

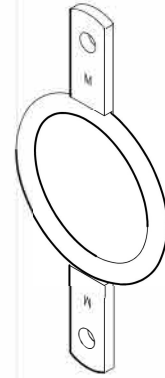
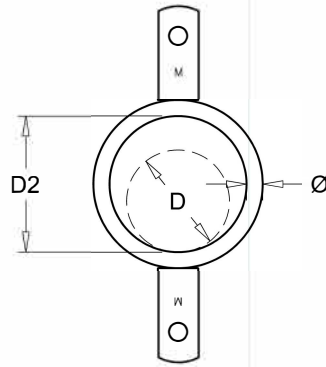
12 mm  
12 mm

040193  
040219

**Ring with double lug**

Item Number 041

hot dip galvanized  
length of the lugs 47 mm  
material lugs 20x5 mm

**Tube size D**

51 mm  
63 mm  
76 mm  
89 mm  
102 mm  
114 mm  
127 mm  
133 mm  
140 mm  
159 mm  
168 mm

**Inside size B**

60 mm  
72 mm  
88 mm  
96 mm  
110 mm  
127 mm  
135 mm  
140 mm  
150 mm  
170 mm  
180 mm

**Material**

8 mm  
8 mm  
8 mm  
8 mm  
8 mm  
10 mm  
10 mm  
10 mm  
10 mm  
10 mm  
10 mm

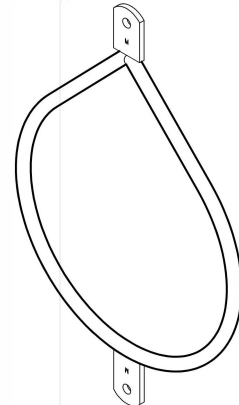
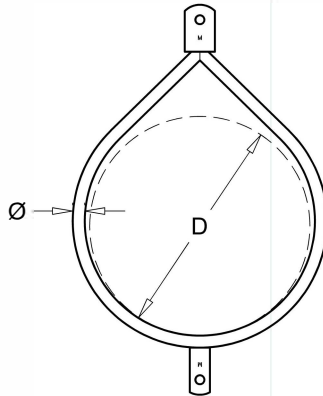
**Article number**

041051  
041063  
041076  
041089  
041102  
041114  
041127  
041133  
041140  
041159  
041168

**Ring Onion-model with double lug**

Item Number 041ui

hot dip galvanized  
length of the lugs 47 mm  
material lugs 20x5 mm



193 mm  
219 mm

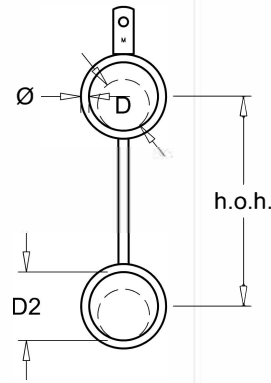
12 mm  
12 mm

041193  
041219

**Gable hook 2 x ... with single lug**

Item Number 060

hotdip galvanized  
centre to centre H.O.H. 300 mm  
length of the lug 47 mm  
material lug 20x5 mm



**For tube D**

- 51 mm
- 63 mm
- 76 mm
- 89 mm
- 102 mm
- 114 mm
- 127 mm
- 133 mm
- 140 mm
- 159 mm
- 168 mm

**Inside size D2**

- 60 mm
- 72 mm
- 88 mm
- 96 mm
- 110 mm
- 127 mm
- 135 mm
- 140 mm
- 150 mm
- 170 mm
- 180 mm

**Material ø**

- 8 mm
- 8 mm
- 8 mm
- 8 mm
- 8 mm
- 10 mm
- 10 mm
- 10 mm
- 10 mm
- 10 mm
- 10 mm

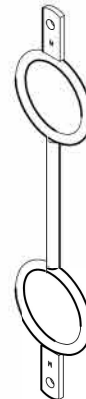
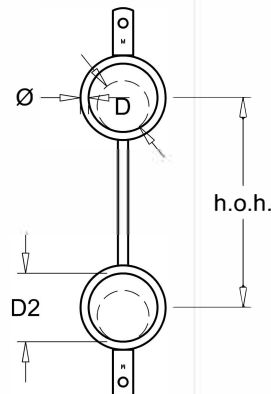
**Article number**

- 060051
- 060063
- 060076
- 060089
- 060102
- 060114
- 060127
- 060133
- 060140
- 060159
- 060168

**Gable hook 2 x ... with double lug**

Item Number 061

hotdip galvanized  
centre to centre H.O.H. 300 mm  
length of the lugs 47 mm  
material lugs 20x5 mm



**For tube D**

- 51 mm
- 63 mm
- 76 mm
- 89 mm
- 102 mm
- 114 mm
- 127 mm
- 133 mm
- 140 mm
- 159 mm
- 168 mm

**Inside size D2**

- 60 mm
- 72 mm
- 88 mm
- 96 mm
- 110 mm
- 127 mm
- 135 mm
- 140 mm
- 150 mm
- 170 mm
- 180 mm

**Material ø**

- 8 mm
- 8 mm
- 8 mm
- 8 mm
- 8 mm
- 10 mm
- 10 mm
- 10 mm
- 10 mm
- 10 mm
- 10 mm

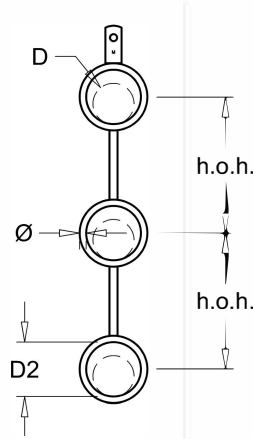
**Article number**

- 061051
- 061063
- 061076
- 061089
- 061102
- 061114
- 061127
- 061133
- 061140
- 061159
- 061168

**Gable hook 3 x ... with single lug**

Item Number 062

hotdip galvanized  
centre to centre H.O.H. 300 mm  
length of the lug 47 mm  
material lug 20x5 mm



**For pipe**

- 51 mm
- 63 mm
- 76 mm
- 89 mm
- 102 mm
- 114 mm
- 133 mm
- 140 mm
- 159 mm
- 168 mm

**Inside size D2**

- 60 mm
- 72 mm
- 88 mm
- 96 mm
- 110 mm
- 127 mm
- 140 mm
- 150 mm
- 170 mm
- 180 mm

**Material ø**

- 8 mm
- 8 mm
- 8 mm
- 8 mm
- 8 mm
- 10 mm
- 10 mm
- 10 mm
- 10 mm
- 10 mm

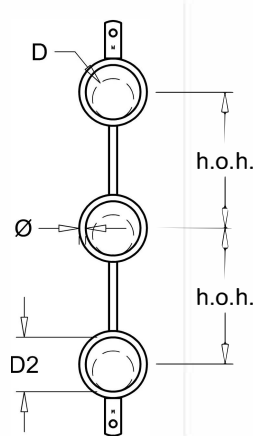
**Article number**

- 062051
- 062063
- 062076
- 062089
- 062102
- 062114
- 062133
- 062140
- 062159
- 062168

**Gable hook 3 x ... with double lug**

Item Number 063

hotdip galvanized  
centre to centre H.O.H. 300 mm  
length of the lugs 47 mm  
material lugs 20x5 mm



**For pipe**

- 51 mm
- 63 mm
- 76 mm
- 89 mm
- 102 mm
- 114 mm
- 133 mm
- 140 mm
- 159 mm
- 168 mm

**Inside size D2**

- 60 mm
- 72 mm
- 88 mm
- 96 mm
- 110 mm
- 127 mm
- 140 mm
- 150 mm
- 170 mm
- 180 mm

**Material ø**

- 8 mm
- 8 mm
- 8 mm
- 8 mm
- 8 mm
- 10 mm
- 10 mm
- 10 mm
- 10 mm
- 10 mm

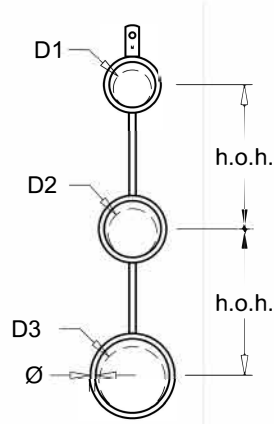
**Article number**

- 063051
- 063063
- 063076
- 063089
- 063102
- 063114
- 063133
- 063140
- 063159
- 063168

**Gable hook special with single lug**

Item Number 064

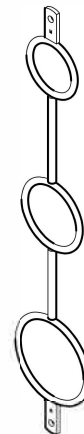
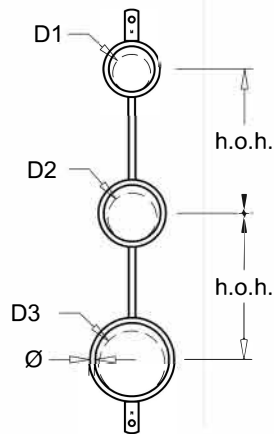
hotdip galvanized  
centre to centre H.O.H. 300 mm  
material lug 20x5 mm



**Gable hook special with double lug**

Item Number 065

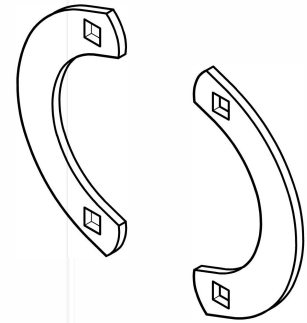
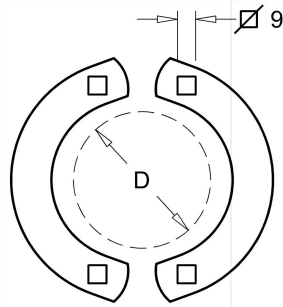
hotdip galvanized  
centre to centre H.O.H. 300 mm  
material lugs 20x5 mm



## Half ring

Item Number 048

hotdip galvanized  
material flat 20x4  
without matching lockbolt



## For tube size

63 mm  
76 mm  
89 mm  
108 mm  
133 mm  
159 mm

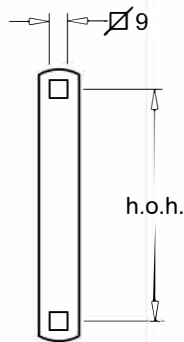
## Article number

048063  
048076  
048089  
048108  
048133  
048159

Suspension strap  
"Walraven" model

Item Number 049

galvanized material  
flat 20x3  
without matching lockbolt



## Centre to centre H.O.H size Article number

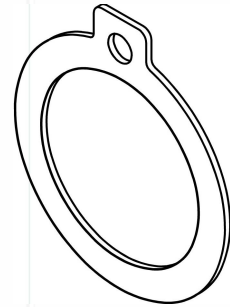
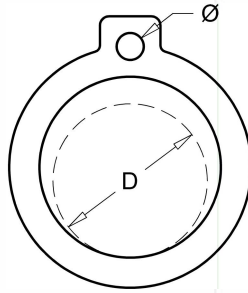
30 mm  
50 mm  
100 mm  
150 mm  
200 mm  
250 mm  
300 mm  
350 mm  
400 mm  
500 mm  
800 mm

049030  
049050  
049100  
049150  
049200  
049250  
049300  
049350  
049400  
049500  
049800

### Flat ring for pipe 51 with hole

Item Number 059

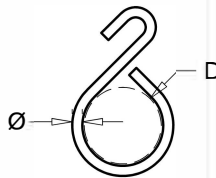
hotdip galvanized  
thickness 3 mm  
hole for M8



### Pear hook

Item Number 044

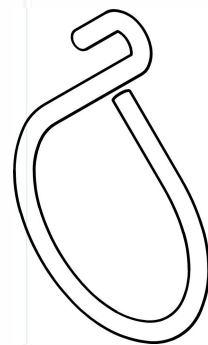
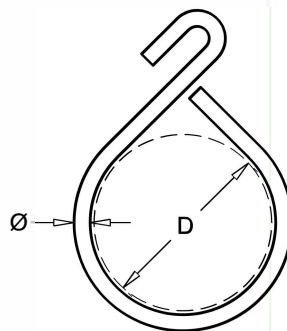
electrolytic galvanized  
material thickness  $\varnothing$  5 mm  
for pipe  $\varnothing$  38



### Pear hook heavy model

Item Number 044a

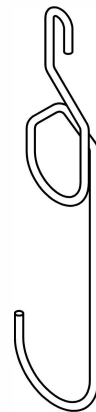
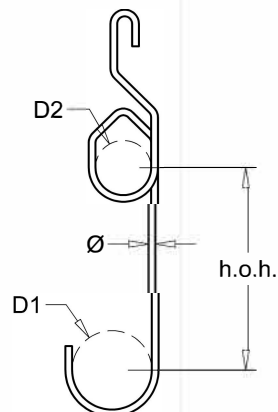
pre-galvanized material  
material  $\varnothing$  6,  $\varnothing$  8 or  $\varnothing$  10 mm



### CO2 Hook

Item Number 067

material  $\varnothing$  4 mm





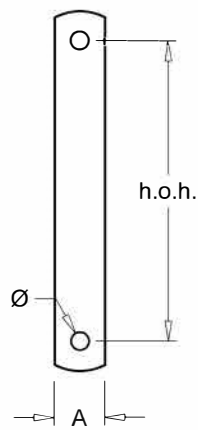
**Suspension strap**

**Item Number 125**

pre-galvanized material  
material flat 25x3, 20x5 or 25x5  
mm

holes for M8

Also available in 30x5 and 30x6



**Length (H.O.H.)**

**25 x 3 mm**

**20 x 5 mm**

**25 x 5 mm**

- 50 mm
- 100 mm
- 150 mm
- 200 mm
- 250 mm
- 300 mm
- 350 mm
- 400 mm
- 450 mm
- 500 mm
- 550 mm
- 600 mm
- 650 mm
- 700 mm
- 750 mm
- 800 mm
- 850 mm
- 900 mm
- 950 mm

- 125B050
- 125B100
- 125B150
- 125B200
- 125B250
- 125B300
- 125B350
- 125B400
- 125B450
- 125B500
- 125B550
- 125B600
- 125B650
- 125B700
- 125B750
- 125B800
- 125B850
- 125B900
- 125B950

- 125C050
- 125C100
- 125C150
- 125C200
- 125C250
- 125C300
- 125C350
- 125C400
- 125C450
- 125C500
- 125C550
- 125C600
- 125C650
- 125C700
- 125C750
- 125C800
- 125C850
- 125C900
- 125C950

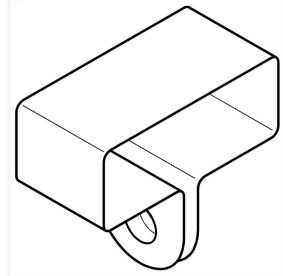
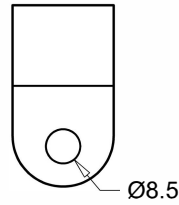
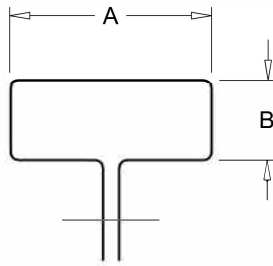
- 125D050
- 125D100
- 125D150
- 125D200
- 125D250
- 125D300
- 125D350
- 125D400
- 125D450
- 125D500
- 125D550
- 125D600
- 125D650
- 125D700
- 125D750
- 125D800
- 125D850
- 125D900
- 125D950

Sizes listed are standard.  
Other sizes also possible.

**Truss-clip centric model**

**Item Number 001**

pre-galvanized material  
material fl at 25x1,25 mm  
holes for M8



**Truss size A x B**

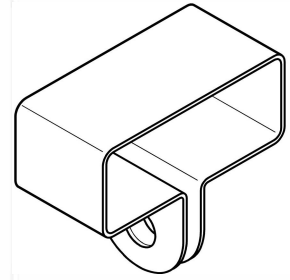
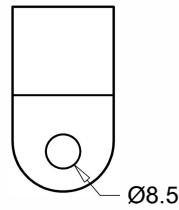
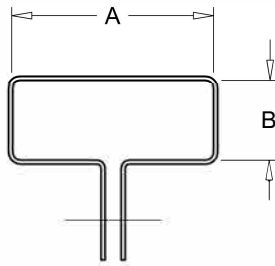
**Article number**

20 x 20 mm	001020020
20 x 40 mm	001020040
20 x 50 mm	001020050
20 x 60 mm	001020060
25 x 25 mm	001025025
25 x 50 mm	001025050
30 x 30 mm	001030030
30 x 50 mm	001030050
30 x 60 mm	001030060
35 x 35 mm	001035035
40 x 20 mm	001040020
40 x 30 mm	001040030
40 x 40 mm	001040040
40 x 50 mm	001040050
40 x 60 mm	001040060
40 x 70 mm	001040070
40 x 80 mm	001040080
45 x 45 mm	001045045
50 x 20 mm	001050020
50 x 25 mm	001050025
50 x 30 mm	001050030
50 x 35 mm	001050035
50 x 40 mm	001050040
50 x 50 mm	001050050
50 x 80 mm	001050080
50 x 100 mm	001050100
55 x 25 mm	001055025
60 x 20 mm	001060020
60 x 25 mm	001060025
60 x 30 mm	001060030
60 x 40 mm	001060040
60 x 60 mm	001060060
60 x 120 mm	001060120
70 x 25 mm	001070025
70 x 30 mm	001070030
70 x 40 mm	001070040
70 x 50 mm	001070050
80 x 40 mm	001080040
80 x 50 mm	001080050
100 x 40 mm	001100040
100 x 50 mm	001100050
100 x 60 mm	001100060

**Truss-clip centric heavy model**

Item Number 001z

pre-galvanized material  
material flat 25x2 mm  
holes for M8



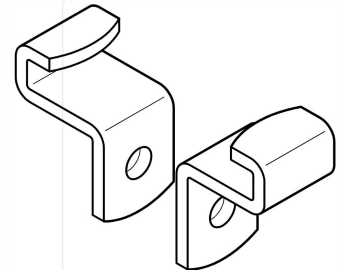
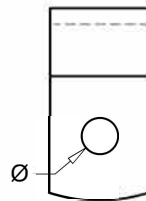
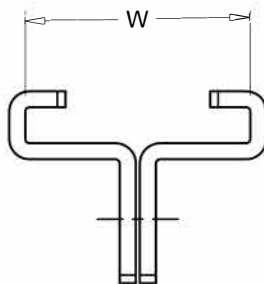
50 x 20 mm  
50 x 25 mm  
50 x 30 mm  
60 x 30 mm

001050020z  
001050025z  
001050030z  
001060030z

**Beam clamp**

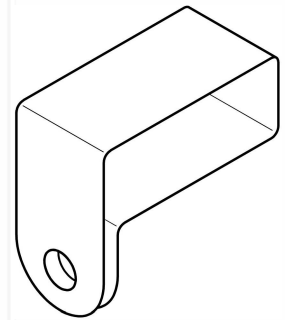
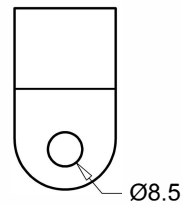
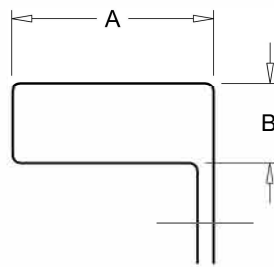
Item Number 605

flat 20x5 pre-galvanized material  
holes for M8



**Truss-clip excentric model**

Item Number 403

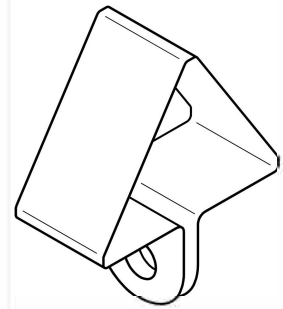
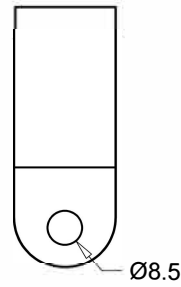
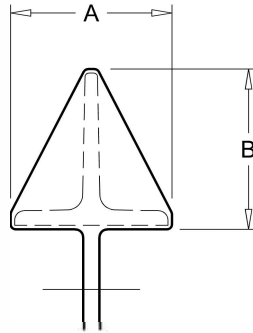
pre-galvanized material  
material flat 25x1,25 mm  
holes for M8**Truss size A x B****Article number**

20 x 50 mm	403020050
20 x 60 mm	403020060
25 x 25 mm	403025025
25 x 50 mm	403025050
30 x 30 mm	403030030
30 x 60 mm	403030060
35 x 35 mm	403035035
40 x 20 mm	403040020
40 x 40 mm	403040040
40 x 60 mm	403040060
50 x 20 mm	403050020
50 x 25 mm	403050025
50 x 30 mm	403050030
50 x 35 mm	403050035
50 x 40 mm	403050040
50 x 50 mm	403050050
55 x 25 mm	403055025
60 x 20 mm	403060020
60 x 25 mm	403060025
60 x 30 mm	403060030
60 x 40 mm	403060040
60 x 60 mm	403060060
60 x 120 mm	403060120
70 x 25 mm	403070025
70 x 30 mm	403070030
70 x 40 mm	403070040
70 x 70 mm	403070070
80 x 40 mm	403080040
80 x 50 mm	403080050
80 x 100 mm	403080100
100 x 50 mm	403100050
120 x 60 mm	403120060

**Truss-clip special for T-profile, base down**

Item Number 005

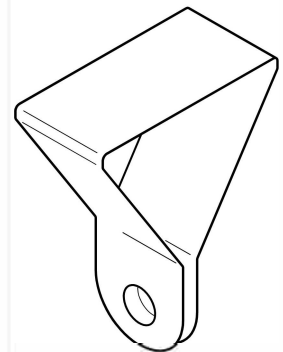
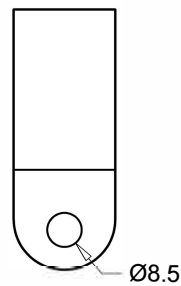
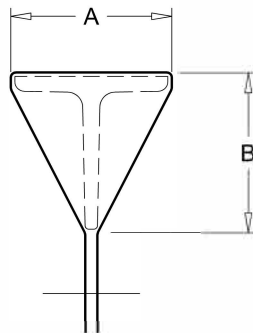
pre-galvanized material  
material flat 25x1,25 mm  
holes for M8



**Truss-clip special for T-profile, base above**

Item Number 006

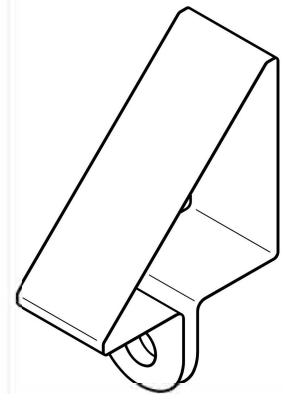
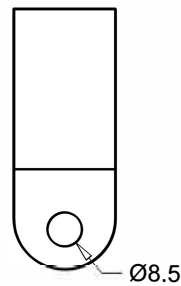
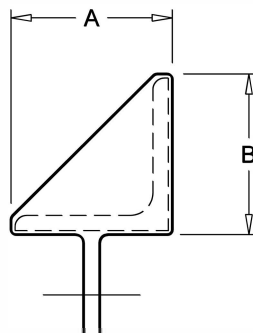
pre-galvanized material  
material flat 25x1,25 mm  
holes for M8



**Truss-clip special for T-profile**

Item Number 007

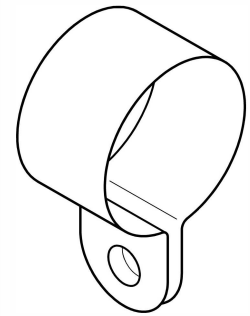
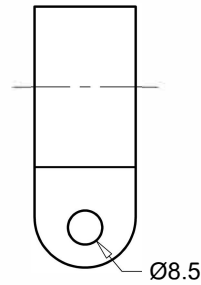
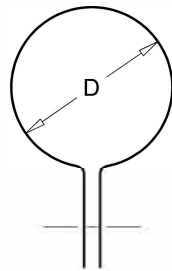
pre-galvanized material  
material flat 25x1,25 mm  
holes for M8



**Tube-clip centric model**

Item Number 008

pre-galvanized material  
flat 25x1,25 mm



**Tube size D**

- 22 mm (1/2")
- 27 mm (3/4")
- 28 mm
- 30 mm
- 32 mm
- 33 mm (1")
- 42 mm (5/4")
- 45 mm
- 48 mm (1 1/2")
- 51 mm
- 57 mm
- 60 mm(2")
- 63 mm
- 76 mm

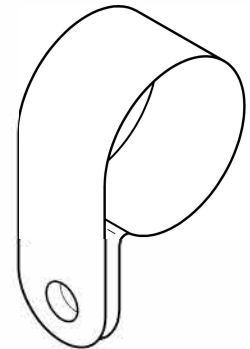
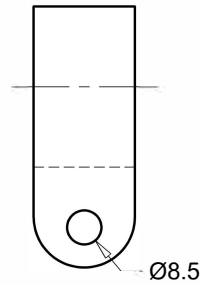
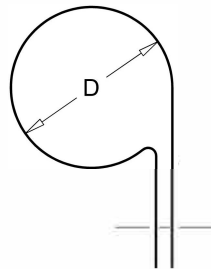
**Article number**

- 008022
- 008027
- 008028
- 008030
- 008032
- 008033
- 008042
- 008045
- 008048
- 008051
- 008057
- 008060
- 008063
- 008076

**Tube-clip excentric model**

Item Number 009

pre-galvanized material  
flat 25x1,25 mm



**Tube size D**

- 22 mm
- 27 mm
- 28 mm
- 33 mm
- 45 mm
- 51 mm
- 63 mm

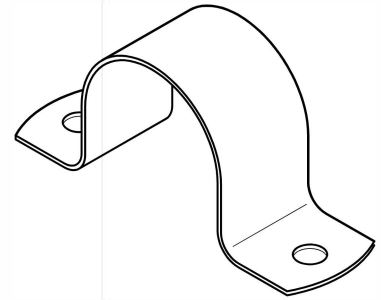
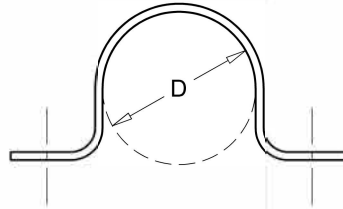
**Article number**

- 009022
- 009027
- 009028
- 009033
- 009045
- 009051
- 009063

**Sadle**

**Item Number** 012

hotdip galvanized  
flat 25x2 mm



**Tube size A**

**Article number**

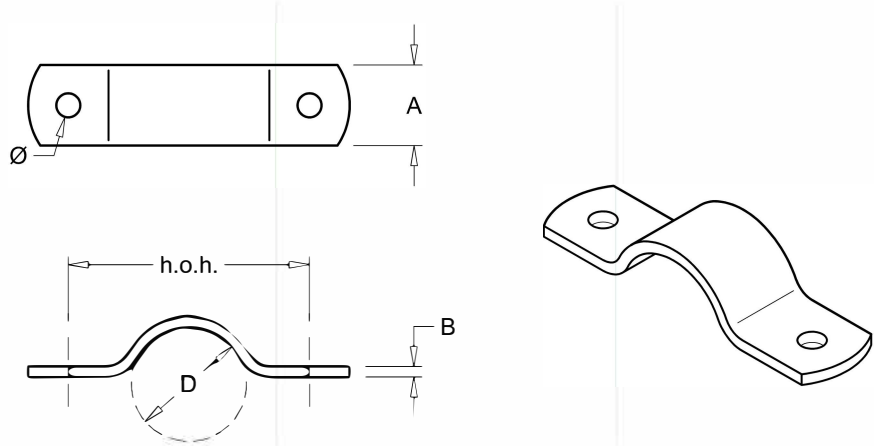
- 27 mm
- 28 mm
- 32 mm
- 33 mm
- 38 mm
- 42 mm
- 45 mm
- 51 mm
- 63 mm

- 012V027
- 012V028
- 012V032
- 012V033
- 012V038
- 012V042
- 012V045
- 012V051
- 012V063

**Hood strap half model**

Item Number 013v

hotdip galvanized



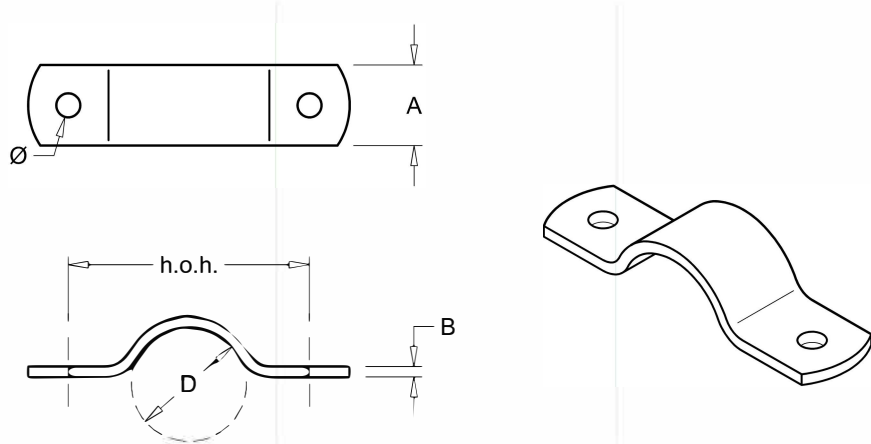
Tube size D	Hole for bolt	Material	Article number
21,3 mm (1/2")	M6	20 x 4 mm verzinkt	013V022A
26,9 mm (3/4")	M6	20 x 4 mm verzinkt	013V027A
32 mm	M6	20 x 4 mm verzinkt	013V032A
33,7 mm (1")	M6	20 x 4 mm verzinkt	013V033A
38 mm	M8	30 x 4 mm verzinkt	013V038A
42,4 mm (5/4")	M8	30 x 4 mm verzinkt	013V042B
45 mm	M8	30 x 4 mm verzinkt	013V045B
48,3 mm (1 1/2")	M8	30 x 4 mm verzinkt	013V048B
51 mm	M8	30 x 4 mm verzinkt	013V051B
51 mm	M8	40 x 5 mm verzinkt	013V051C
57 mm	M8	40 x 5 mm verzinkt	013V057C
60,3 mm (2")	M8	40 x 5 mm verzinkt	013V060C
63 mm	M8	40 x 5 mm verzinkt	013V063C
76,1 mm (2 1/2")	M8	40 x 5 mm verzinkt	013V076C
88,9 mm (3")	M10	40 x 8 mm verzinkt	013V089D
108 mm	M10	40 x 8 mm verzinkt	013V108D
114,3 mm (4")	M10	40 x 8 mm verzinkt	013V114D
133 mm	M12	40 x 8 mm verzinkt	013V133D
139,7 mm (5")	M12	40 x 8 mm verzinkt	013V140D
168 mm (6")	M12	40 x 10 mm verzinkt	013V168E
219,1 mm (8")	M12	40 x 12 mm verzinkt	013V219F



## Hood strap half model

Item Number 013z

black model



## Tube size D

21,3 mm (1/2")  
 26,9 mm (3/4")  
 32 mm  
 33,7 mm (1")  
 42,4 mm (5/4")  
 45 mm  
 48,3 mm (1 1/2")  
 51 mm  
 51 mm  
 57 mm  
 60,3 mm (2")  
 63 mm  
 76,1 mm (2 1/2")  
 88,9 mm (3")  
 108 mm  
 114,3 mm (4")  
 133 mm  
 139,7 mm (5")  
 159 mm  
 168 mm (6")  
 219,1 mm (8")

## Hole for bolt

M6  
 M6  
 M6  
 M6  
 M8  
 M8  
 M8  
 M8  
 M8  
 M8  
 M8  
 M8  
 M8  
 M8  
 M8  
 M8  
 M8  
 M8  
 M10  
 M10  
 M10  
 M10  
 M12  
 M12  
 M12  
 M12  
 M12  
 M12

## Material

20 x 4 mm zwart  
 20 x 4 mm zwart  
 20 x 4 mm zwart  
 20 x 4 mm zwart  
 30 x 4 mm zwart  
 30 x 4 mm zwart  
 30 x 4 mm zwart  
 30 x 4 mm zwart  
 40 x 5 mm zwart  
 40 x 5 mm zwart  
 40 x 5 mm zwart  
 40 x 5 mm zwart  
 40 x 5 mm zwart  
 40 x 5 mm zwart  
 40 x 5 mm zwart  
 40 x 8 mm zwart  
 40 x 8 mm zwart  
 40 x 8 mm zwart  
 40 x 8 mm zwart  
 40 x 8 mm zwart  
 40 x 8 mm zwart  
 40 x 8 mm zwart  
 50 x 10 mm zwart  
 40 x 10 mm zwart  
 40 x 12 mm zwart

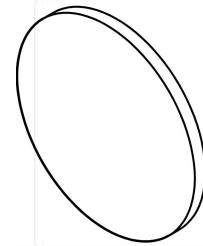
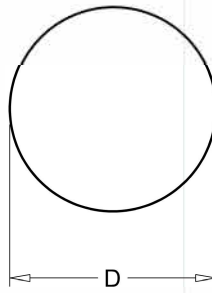
## Article number

013Z022A  
 013Z027A  
 013Z032A  
 013Z033A  
 013Z042B  
 013Z045B  
 013Z048B  
 013Z051B  
 013Z051C  
 013Z057C  
 013Z060C  
 013Z063C  
 013Z076C  
 013Z089D  
 013Z108D  
 013Z114D  
 013Z133D  
 013Z140D  
 013Z159E  
 013Z168E  
 013Z219F

**Endplate**

**Item Number 014**

not galvanized version  
circa 3 mm thick



**Diameter of plate D**

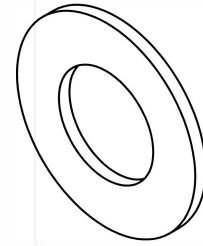
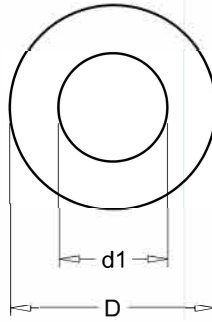
**Article number**

22 mm	014022
27 mm	014027
33 mm	014033
38 mm	014038
45 mm	014045
48 mm	014048
51 mm	014051
55 mm	014055
57 mm	014057
60 mm	014060
63 mm	014063
70 mm	014070
76 mm	014076
89 mm	014089
95 mm	014095
102 mm	014102
108 mm	014108
114 mm	014114
133 mm	014133
140 mm	014140
159 mm	014159
168 mm	014168
193 mm	014193
219 mm	014219

**Endplate with centric hole**

Item Number 015

not galvanized version  
circa 3 mm thick



**Outside diameter D1**

- 45 mm
- 45 mm
- 45 mm
- 51 mm
- 51 mm
- 51 mm

**Hole diameter D2**

- 22 mm
- 27 mm
- 33 mm
- 22 mm
- 27 mm
- 33 mm

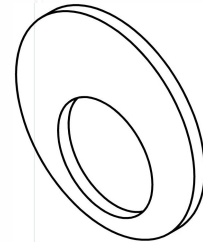
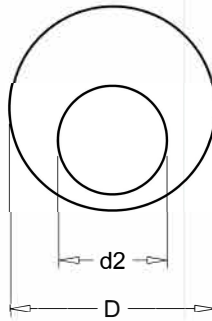
**Article number**

- 015C045022
- 015C045027
- 015C045033
- 015C051022
- 015C051027
- 015C051033

**Endplate with excentric hole**

Item Number 016b

not galvanized version  
circa 3 mm thick



**Outside diameter D**

- 45 mm
- 45 mm
- 45 mm
- 51 mm
- 51 mm
- 51 mm

**Hole diameter ø d1**

- 22 mm
- 27 mm
- 33 mm
- 22 mm
- 27 mm
- 33 mm

**Article number**

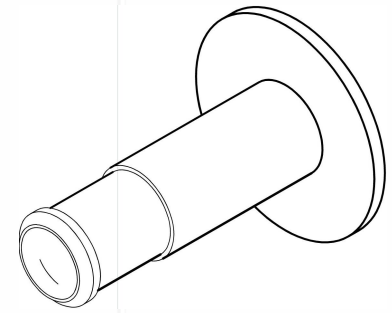
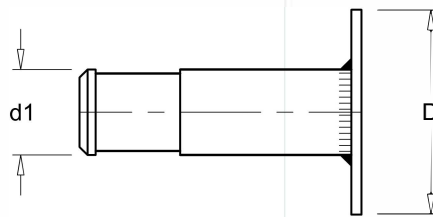
- 016E045022
- 016E045027
- 016E045033
- 016E051022
- 016E051027
- 016E051033

Sizes listed are standard.  
Other sizes also possible.

**Endplate with tulle**

Item Number 016a

not galvanized version



**Outside diameter D**

- 45 mm
- 45 mm
- 45 mm
- 51 mm
- 51 mm
- 51 mm

**Tulle**

- 22 mm
- 27 mm
- 33 mm
- 22 mm
- 27 mm
- 33 mm

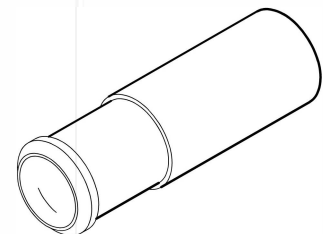
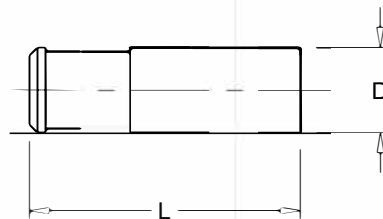
**Article number**

- 016045022
- 016045027
- 016045033
- 016051022
- 016051027
- 016051033

**Hose tulle**

Item Number 855

not galvanized version



**D**

- 3/8" (17,2 mm)
- 3/8" (17,2 mm)
- 1/2" (21,3 mm)
- 1/2" (21,3 mm)
- 3/4" (26,9 mm)
- 3/4" (26,9 mm)
- 1" (33,7 mm)
- 1" (33,7 mm)

**L**

- 50 mm
- 75 mm
- 50 mm
- 75 mm
- 50 mm
- 75 mm
- 50 mm
- 75 mm

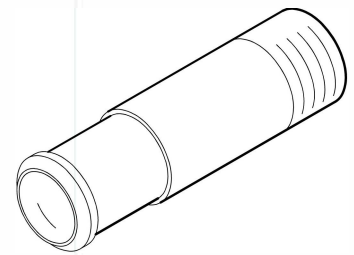
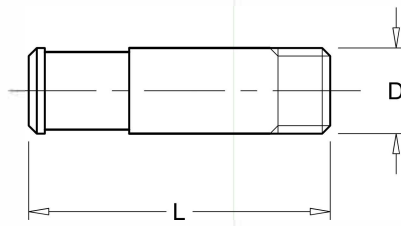
**Article number**

- 8551750
- 8551775
- 8552250
- 8552275
- 8552750
- 8552775
- 8553450
- 8553475

**Threaded hose tulle**

Item Number 856

not galvanized version



**Length**

3/8" (17,2 mm)  
 1/2" (21,3 mm)  
 3/4" (26,9 mm)  
 1" (33,7 mm)

**Outside diameter**

75 mm  
 75 mm  
 75 mm  
 75 mm

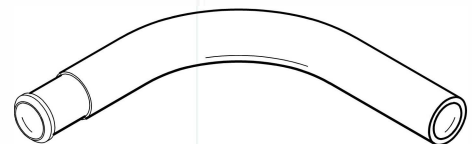
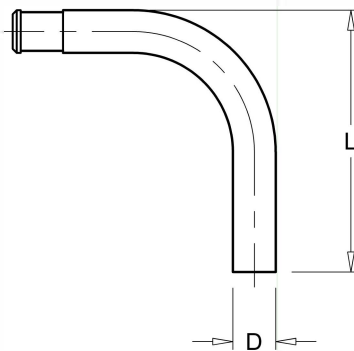
**Article number**

85617  
 85622  
 85627  
 85633

**Hose tulle bended**

Item Number 857

not galvanized version



**Length**

1/2" (21,3 mm)  
 3/4" (26,9 mm)  
 1" (33,7 mm)

**Outside diameter**

125 mm  
 125 mm  
 125 mm

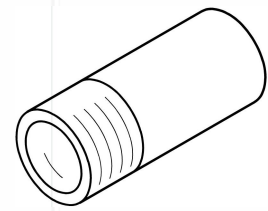
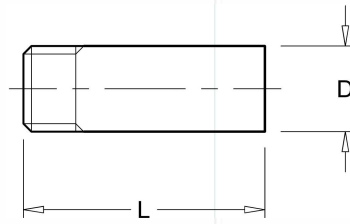
**Article number**

85722  
 85727  
 85733

**Pipe nipple**

Item Number 858

not galvanized version

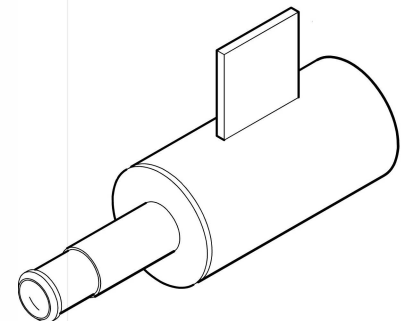
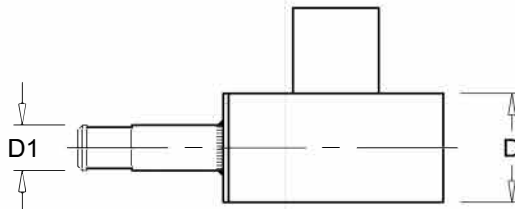


L	Outside diameter D	Article number
1/2" (21,3 mm)	75 mm	85822
3/4" (26,9 mm)	75 mm	85827
1" (33,7 mm)	75 mm	85833
1" (33,7 mm)	50 mm	85833K

**Compound product**

Item Number 908

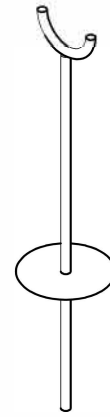
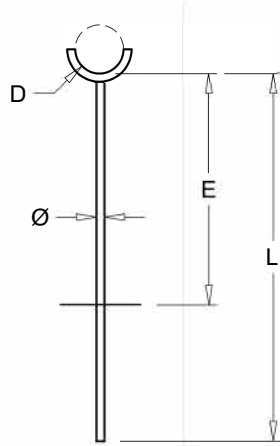
not galvanized version



**Rose-pin welded model**

Item Number 126

hotdip galvanized  $\varnothing$  10 mm  
length 500 mm  
for tube D = 51 mm  
flan  $\varnothing$  100 mm



**Length**

500 mm

**Material**

$\varnothing$  10 mm

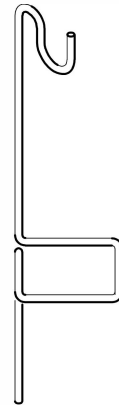
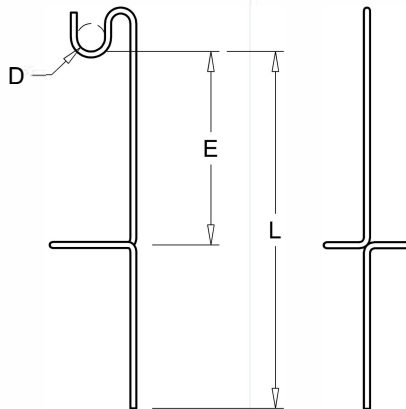
**Article number**

126100500

**Rose-pin in one piece**

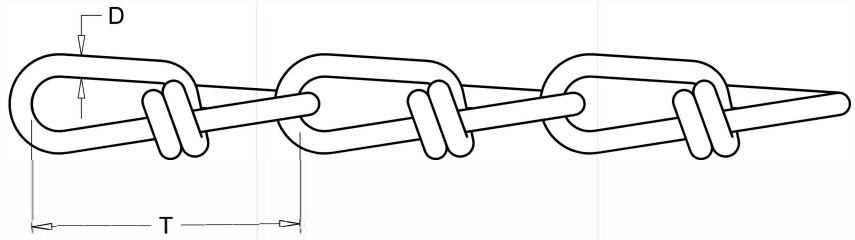
Item Number 127

pre-galvanized material  
total length 500 mm

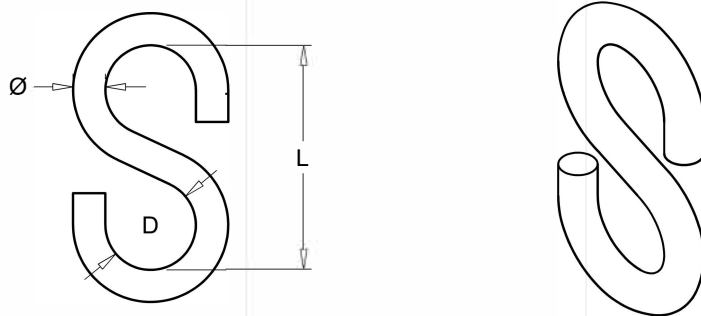


**Victorchain**

Item Number 545

galvanized  
bundles of 30 metre**T**28 mm  
35 mm  
44 mm  
55 mm**D**2 mm  
2,5 mm  
3,4 mm  
4,6 mm**Chain no.**22  
27  
35  
50**Article number**54522  
54527  
54535  
54550**S-hook**

Item Number 043

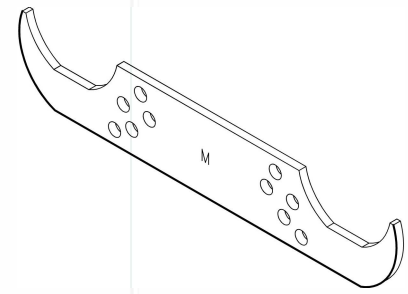
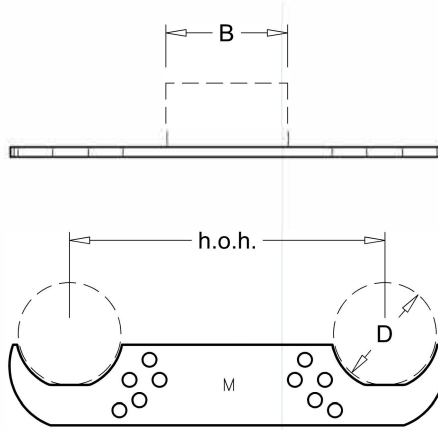
electrolytic galvanized  
packed per 100 pieces**D**7 mm  
11 mm  
14 mm  
16 mm  
16 mm  
18 mm**L**19 mm  
27 mm  
35 mm  
43 mm  
52 mm  
59 mm**Hook no. (=d)**nr. 30 (=ø 3 mm)  
nr. 40 (=ø 4 mm)  
nr. 50 (=ø 5 mm)  
nr. 60 (=ø 6 mm)  
nr. 70 (=ø 7 mm)  
nr. 80 (=ø 8 mm)**Article number**04330  
04340  
04350  
04360  
04370  
04380



**Boathook universal  
Cowhornhook**

Item Number 076

hotdip galvanized  
flat 40x4 mm



**For post size**

- 40 t/m 80 mm
- 40 t/m 80 mm
- 60 t/m 100 mm
- 60 t/m 100 mm
- 90 t/m 130 mm
- 90 t/m 130 mm

**Centre to centre H.O.H. di**

- 137 mm
- 148 mm
- 157 mm
- 168 mm
- 187 mm
- 198 mm

**For tube D**

- 51 mm
- 63 mm
- 51 mm
- 63 mm
- 51 mm
- 63 mm

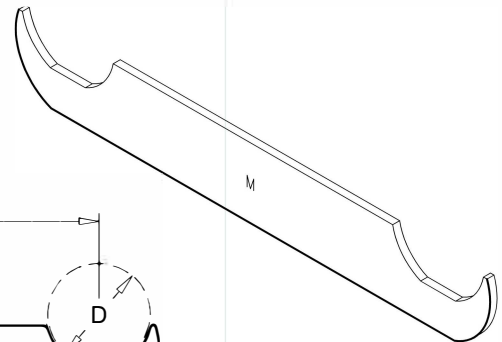
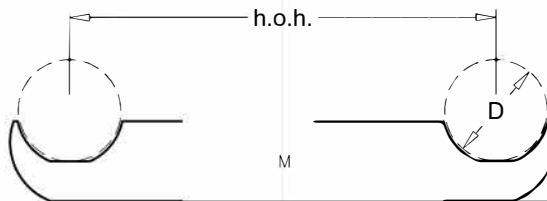
**Article number**

- 076040080
- 076040080S
- 076060100
- 076060100S
- 076090130
- 076090130S

**Boathook welded model**

Item Number 076L

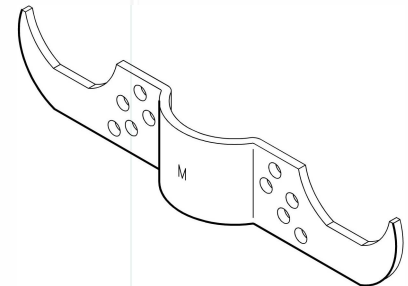
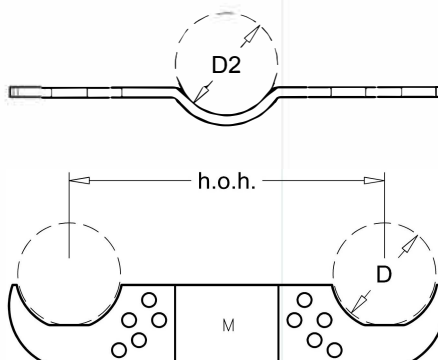
black material 40x4



**Suspension bracket  
type 1**

Item Number 077

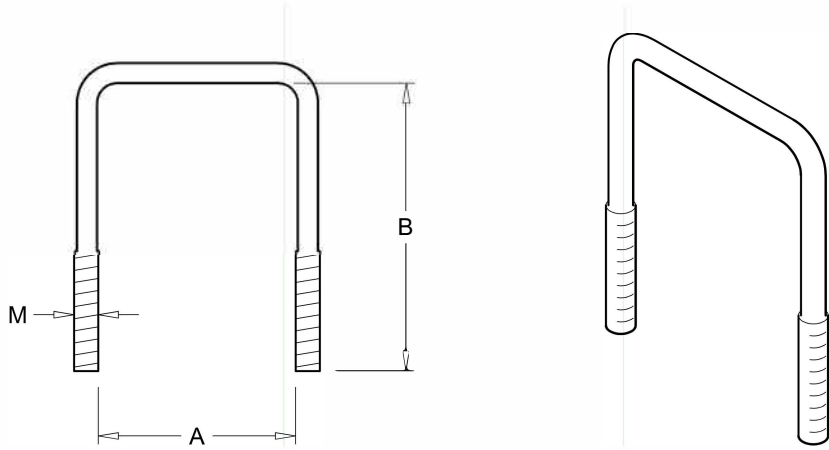
made for pipe 51



**U-bolt**

Item Number 035

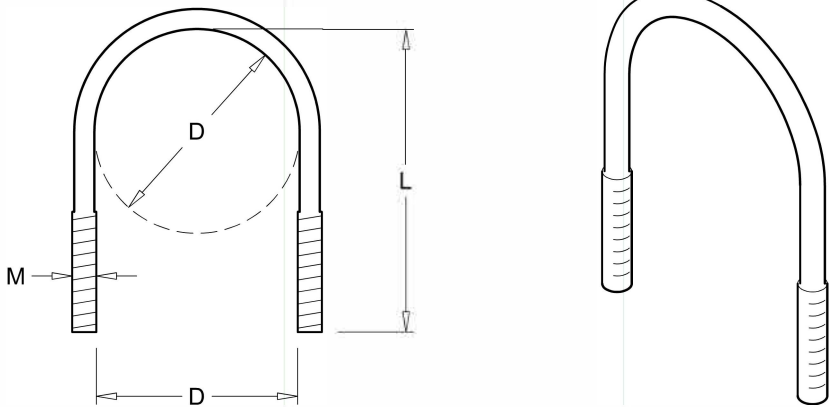
M6, M8, M10 or M12  
electrolytic galvanized



**U-bolt special model for round tube**

Item Number 036

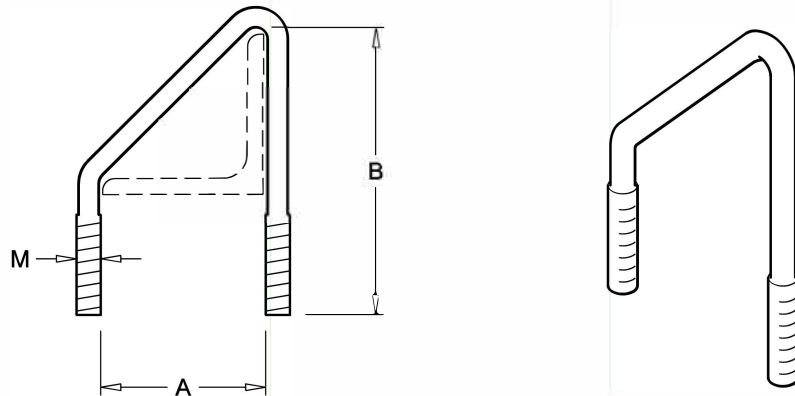
M6, M8 or M10  
electrolytic galvanized



**U-bolt special model for L-profile**

Item Number 037

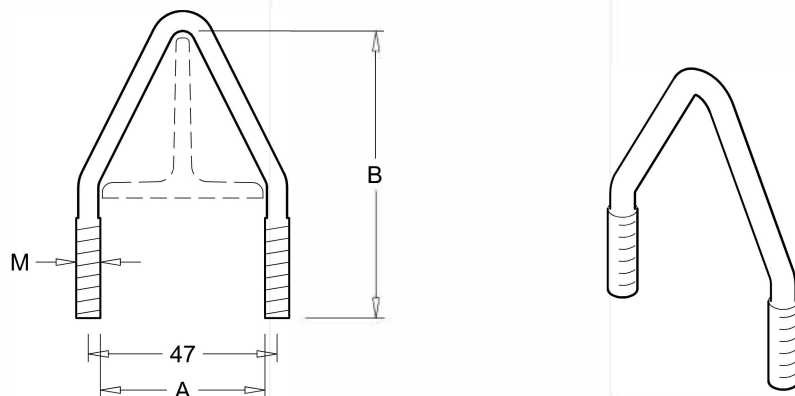
M6, M8 or M10  
electrolytic galvanized



**U-bolt special model for T-profile**

Item Number 038

electrolytic galvanized

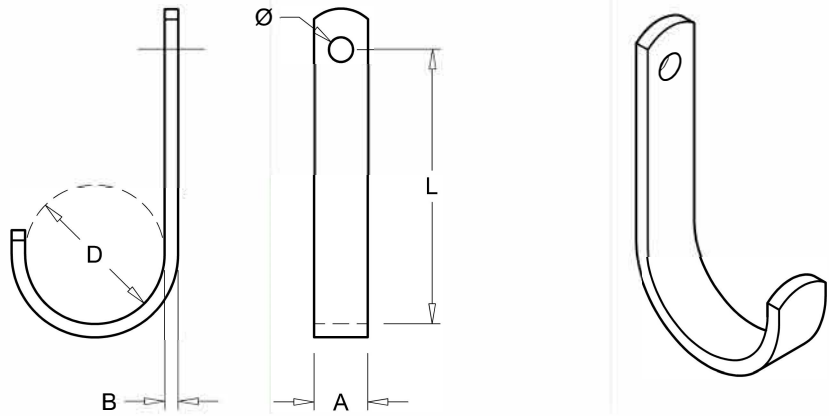


Sizes listed are standard.  
Other sizes also possible.

**J-hook**

Item Number 003

pre-galvanized material



**Material A x B**

- 20 x 5 mm
- 20 x 5 mm
- 20 x 5 mm
- 25 x 5 mm
- 25 x 5 mm
- 25 x 5 mm

**D**

- 51 mm
- 63 mm
- 76 mm
- 95 mm
- 108 mm
- 114 mm

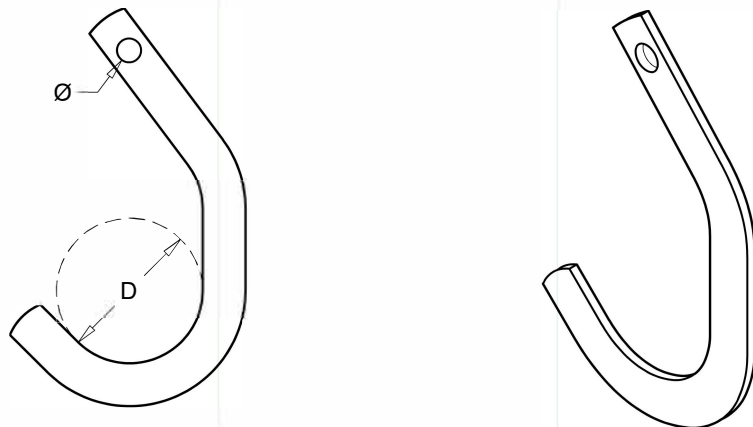
**Article number**

- 003051
- 003063
- 003076
- 003095
- 003108
- 003114

**C-hook**

Item Number 028

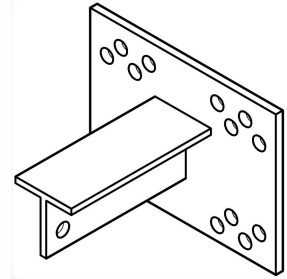
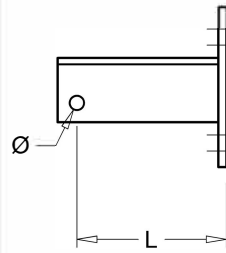
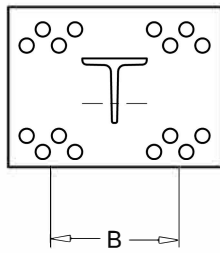
hotdip galvanized material flat 16x3 mm for pipe ø 51 mm



**T-console universal**

**Item Number** 069

hotdip galvanized  
holes for M8  
T40x40x4 mm



**For post**

- 40-100 mm
- 60-120 mm
- 40-100 mm
- 40-120 mm

**L**

- 100 mm
- 100 mm
- 200 mm
- 200 mm

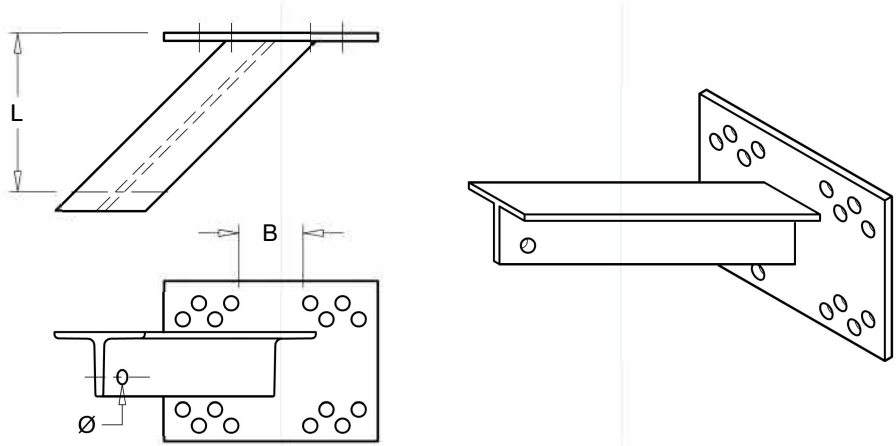
**Article number**

- 069K040100
- 069K060120
- 069L040100
- 069L040120

**T-console universal left angled**

Item Number 071L

hotdip galvanized  
for post 40 up to and including  
120 mm



**L**

100 mm  
200 mm

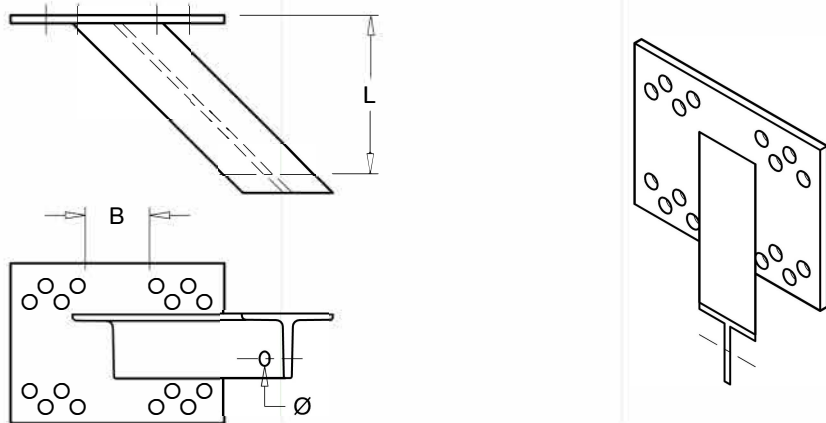
**Article number**

071L040120  
071L040120L

**T-console universal right angled**

Item Number 071R

hotdip galvanized  
for post 40 up to and including  
120 mm



**L**

100 mm  
200 mm

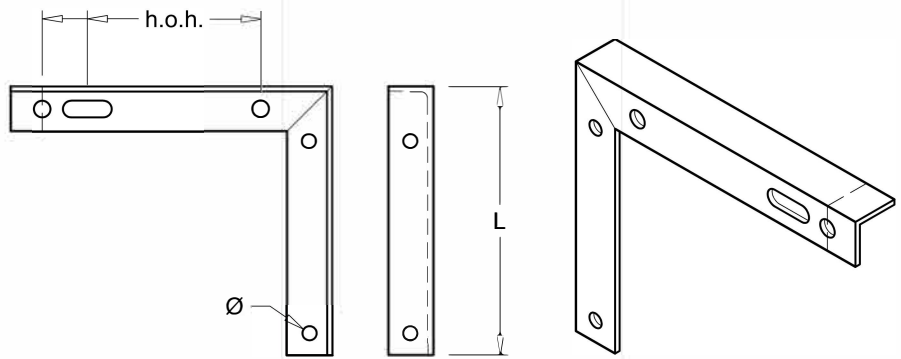
**Article number**

071R040120  
071R040120L

**Post-console**

Item Number 072

hotdip galvanized  
L-profile 35x35x4 mm



**A**

135 mm  
170 mm

**L**

210 mm  
210 mm

**Type**

114 mm / 133 mm  
159 mm

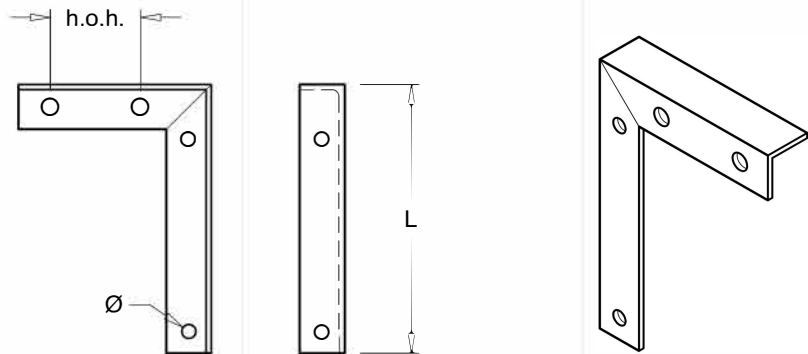
**Article number**

072114133  
072159

**Post-console short**

Item Number 072k

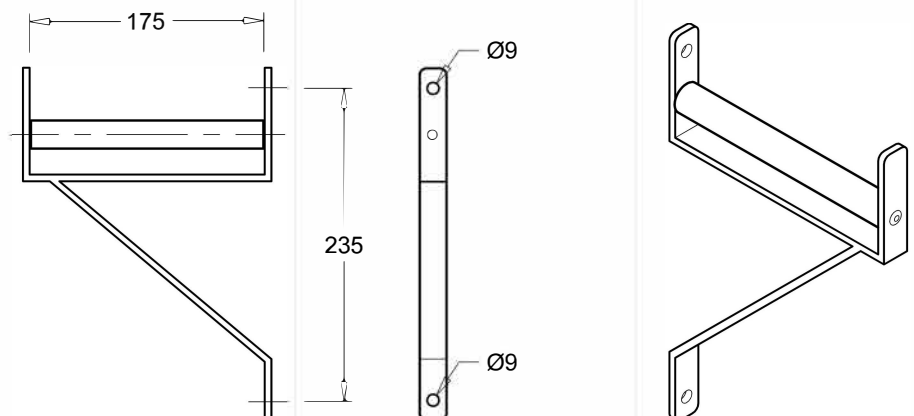
hotdip galvanized  
L-profile 35x35x4 mm



**Rolling-console**

Item Number 050

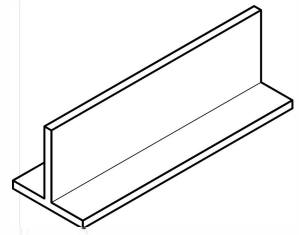
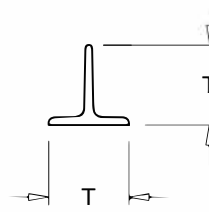
hotdip galvanized  
for pipe 114 / 133 mm  
flat 20x5 mm



**T-profile**

**Item Number 068**

hotdip galvanized  
length L = 300 mm



**L**

300 mm  
300 mm

**T**

40 x 40 x 5 mm  
50 x 50 x 5 mm

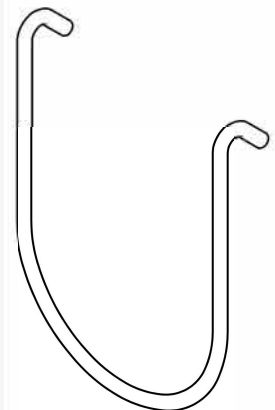
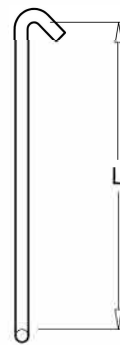
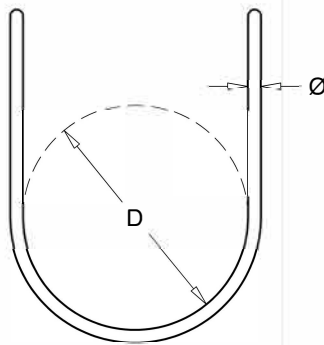
**Article number**

068  
068T50

**Gutter swing**

**Item Number 243**

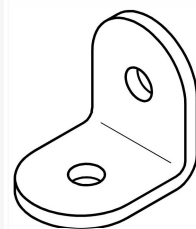
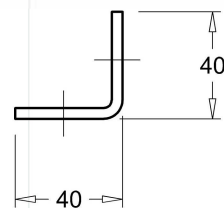
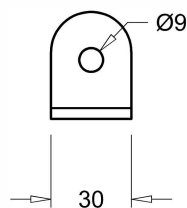
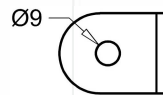
pre-galvanized material, hotdip galvanized



**Gutter hook**

**Item Number 046**

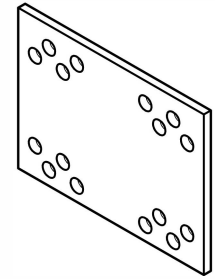
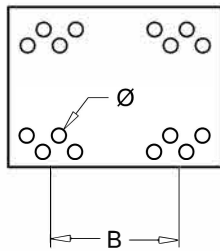
flat 30x4 mm  
pressed  
hotdip galvanized



**Back plate universal**

Item Number 018

holes for M8  
for post 40 till 100 mm and 40 till 120 mm



**For post**

40-100 mm  
60-120 mm

**Galvanized**

018040100  
018060120

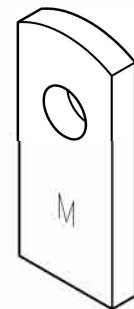
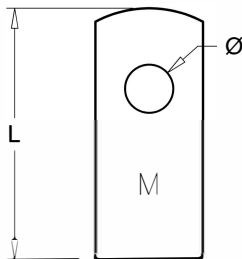
**Black**

018040100Z  
018060120Z

**Welding lug standard model**

Item Number 019

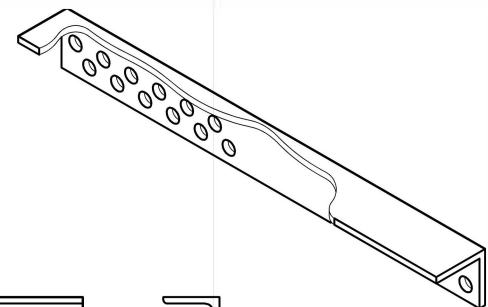
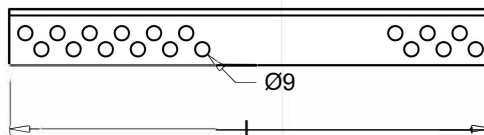
flat 20x5 mm  
black  
hole for M8  
length L = 47 mm



**L-profile universal**

Item Number 073

L-profile 35x35x4 mm  
hotdip galvanized

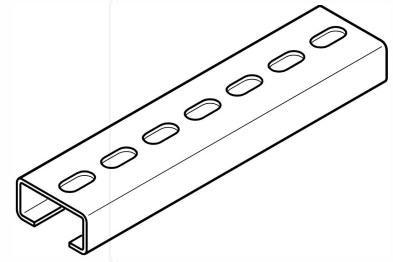
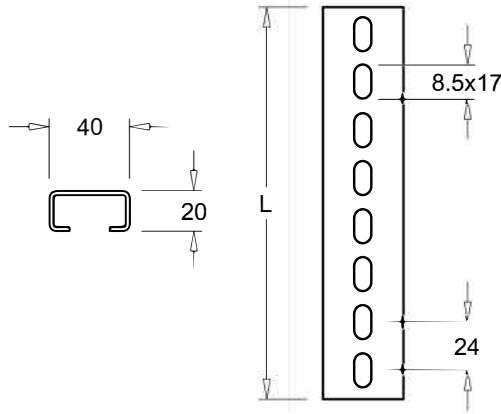




**Axe support universal C 40x20**

Item Number 205

pre-galvanized  
materialsawing possible in any  
length from universal perforated  
C-profile



**L**

- 500 mm
- 600 mm
- 500 mm
- 7500 mm

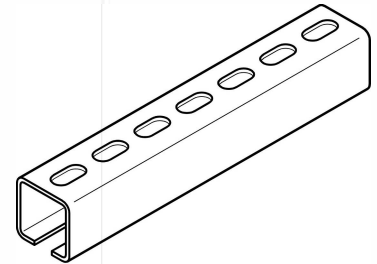
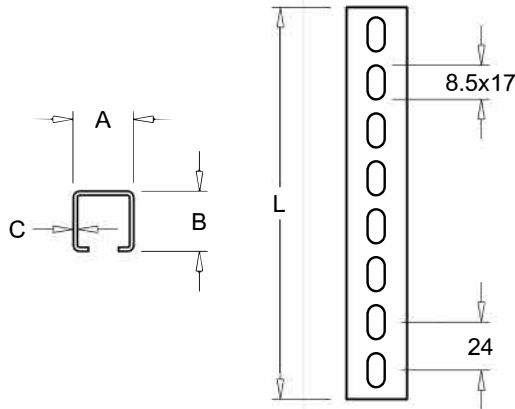
**Article number**

- 205500
- 205600
- 205700
- 2057500

**C-profile universal fitting**

Item Number 033

pre-galvanized  
slot holes 17x8,5 mm



**Length**

- 6000 mm
- 6000 mm
- 6000 mm

**A x B x C**

- 30 x 30 x 2 mm
- 35 x 35 x 2 mm
- 40 x 40 x 2 mm

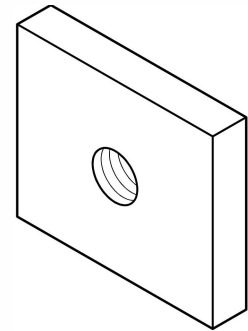
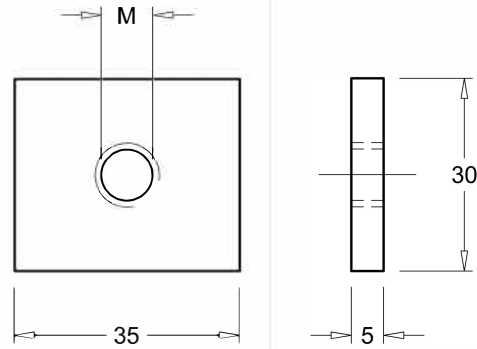
**Article number**

- 033C3030
- 033C3535
- 033C4040

**Nut rectangular model**

Item Number 200

electrolytic galvanized  
M6 or M8 version  
material 30x5 mm



**Material**

30x35x5 mm  
30x35x5 mm

**Nut**

M6  
M8

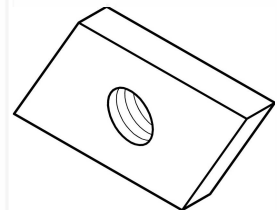
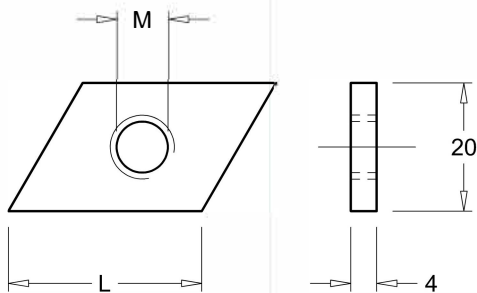
**Article number**

2006  
2008

**Nut special model**

Item Number 203

electrolytic galvanized  
M6 or M8 version  
material 20x4 mm



**Nut**

M6  
M8  
M8

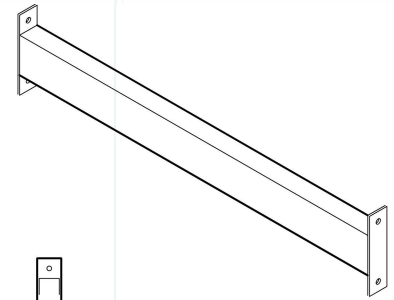
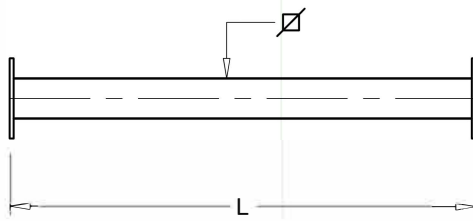
**Article number**

2036  
2038  
2038L

**Beams for heating pipes**

Item Number 574

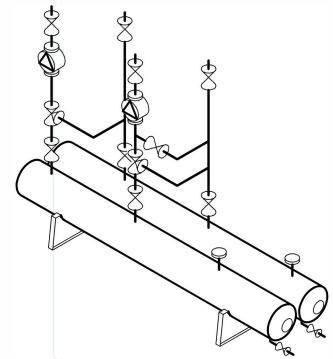
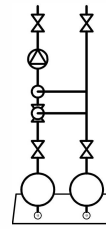
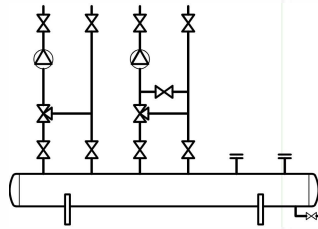
hotdip galvanized  
custom made



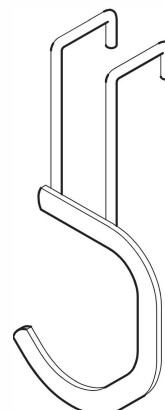
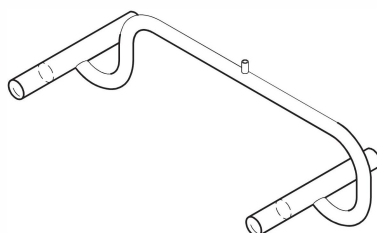
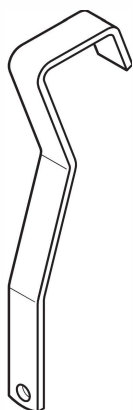
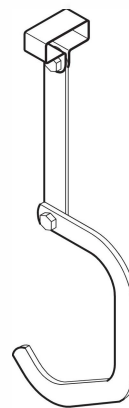
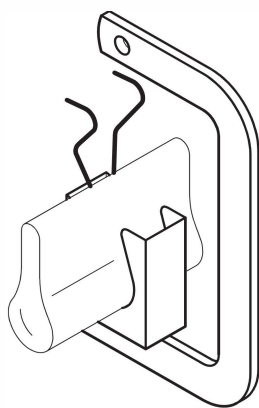
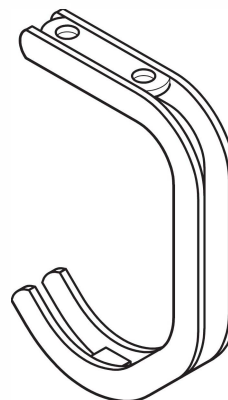
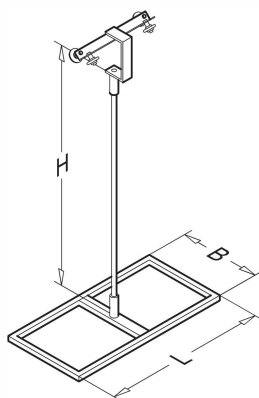
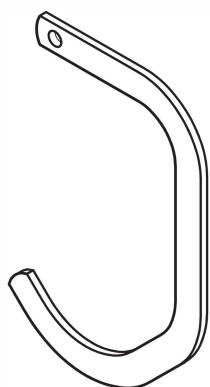
**Manifold**

Item Number 600

1 x red painted  
custom made



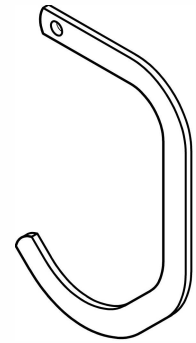
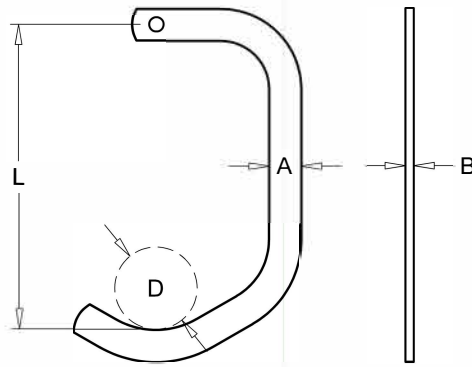
# Monorail products



**Monorailhook**

**Item Number 052**

hotdip galvanized  
hole for M8  
for pipe 51 mm



**L**

- 145 mm
- 165 mm
- 200 mm
- 220 mm

**20 x 5 mm (A x B)**

- 052A145
- 052A165
- 052A200
- 052A220

**25 x 5 mm (A x B)**

- 052B145
- 052B165
- 052B200
- 052B220

**30 x 5 mm (A x B)**

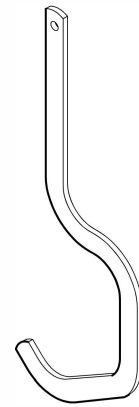
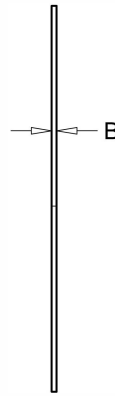
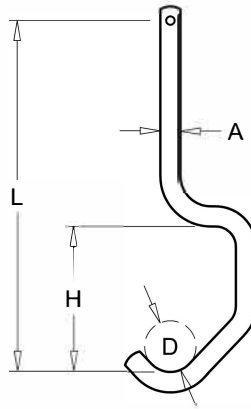
- 052D145
- 052D165
- 052D200
- 052D220

Sizes listed are standard.  
Other sizes also possible.

**Monorailhaak vishaak model**

Artikelnummer 053

voorverzinkt materiaal  
tbv pijp D=ø51 mm



**L**

- 1000
- 300
- 350
- 400
- 450
- 500
- 550
- 600
- 650
- 700
- 750
- 800

**20 x 5 mm (A x B)**

- 053A1000S
- 053A300S
- 053A350S
- 053A400S
- 053A450S
- 053A500S
- 053A550S
- 053A600S
- 053A650S
- 053A700S
- 053A750S
- 053A800S

**25 x 5 mm (A x B)**

- 053B1000S
- 053B300S
- 053B350S
- 053B400S
- 053B450S
- 053B500S
- 053B550S
- 053B600S
- 053B650S
- 053BD700S
- 053BD750S
- 053BD800S

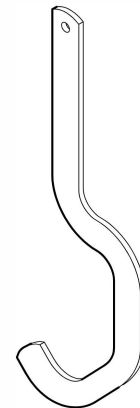
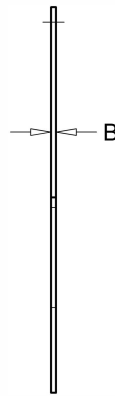
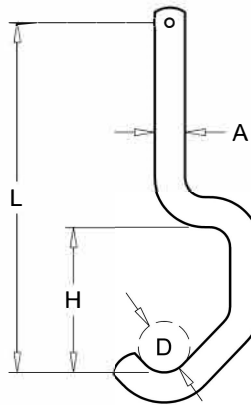
**25 x6 mm (A x B)**

- 053C1000S
- 053C300S
- 053C350S
- 053C400S
- 053C450S
- 053C500S
- 053C550S
- 053C600S
- 053C650S
- 053C700S
- 053C750S
- 053C800S

**Monorailhaak vishaak model**

Artikelnummer 053z

voorverzinkt materiaal  
tbv pijp D=ø51 mm



**L**

- 1000
- 300
- 350
- 400
- 450
- 500
- 550
- 600
- 650
- 700
- 750
- 800

**30 x 6 mm (A x B)**

- 053D1000S
- 053D300S
- 053D350S
- 053D400S
- 053D450S
- 053D500S
- 053D550S
- 053D600S
- 053D650S
- 053D700S
- 053D750S
- 053D800S

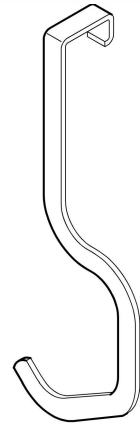
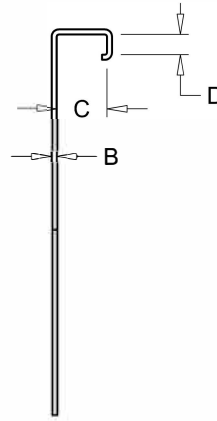
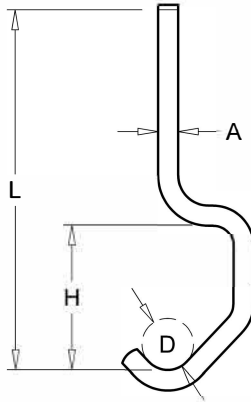
**30 x 5 mm (A x B)**

- 053E1000S
- 053E300S
- 053E350S
- 053E400S
- 053E450S
- 053E500S
- 053E550S
- 053E600S
- 053E650S
- 053E700S
- 053E750S
- 053E800S

**Monorailhook with bended truss-hook pipe**

Item Number 056

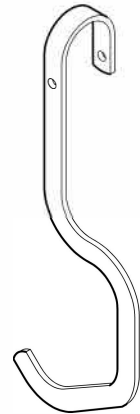
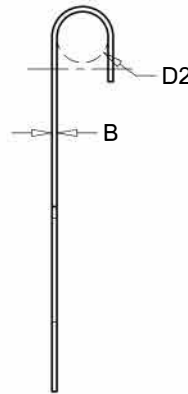
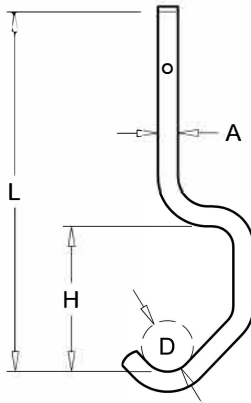
pre-galvanized material for pipe 51 inside dimension 155 mm only usable for inequilateral trusses



**Monorailhook with bended truss-hook round**

Item Number 056r

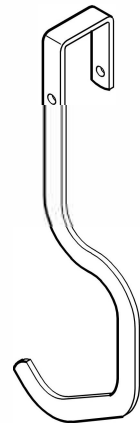
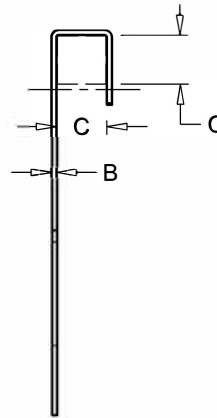
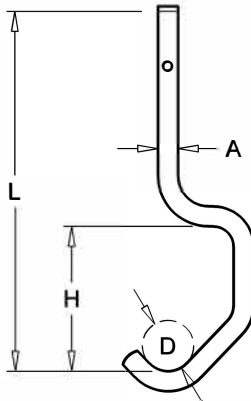
pre-galvanized material for round trusses



**Monorailhook with bended truss-hook square**

Item Number 056s

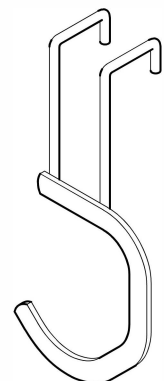
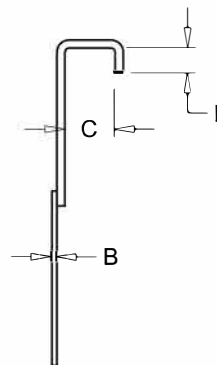
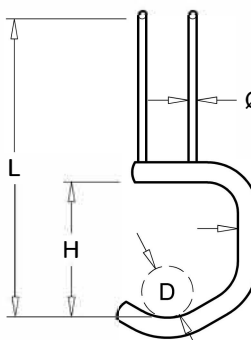
pre-galvanized material for square trusses only usable for inequilateral trusses



**Monorailhook welded type**

Item Number 054

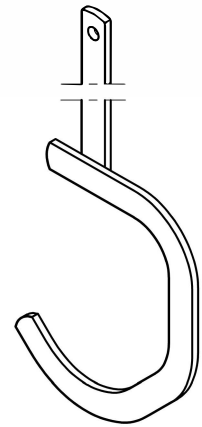
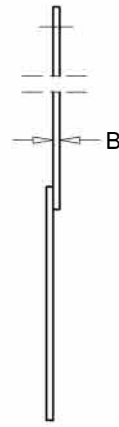
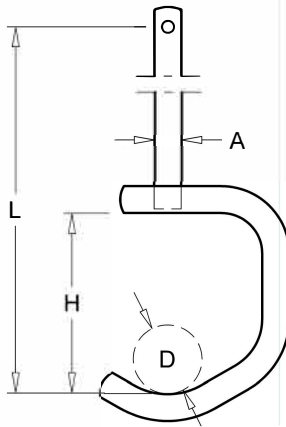
hotdip galvanized material mono 20x5 mm material claws  $\varnothing$  8 mm



**Monorailhook with welded strap**

Item Number 055

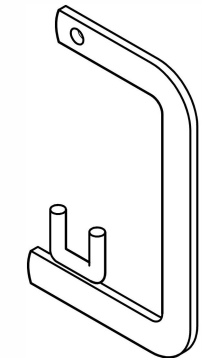
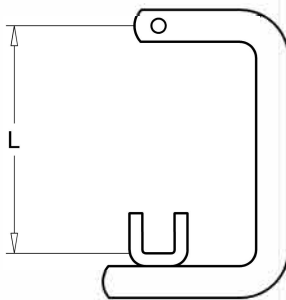
material of the mono is the same as material of the strap



**Monorailhook special model for duorail**

Item Number 119

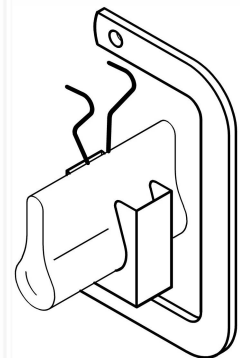
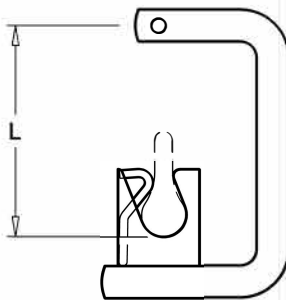
welded hotdip galvanized material 20x5 mm and ø 8 mm



**Monorailhook special model for drop-tube 1**

Item Number 120

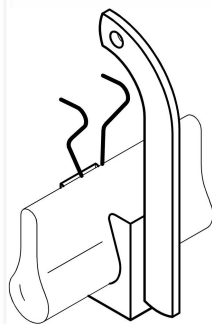
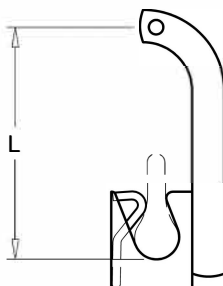
welded hotdip galvanized material flat 20x5 mm tube 50x25 mm



**Monorailhook special model for drop tube 2**

Item Number 140

welded hotdip galvanized material 20x5 mm tube 50x25 mm

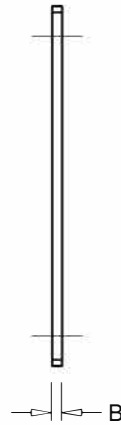
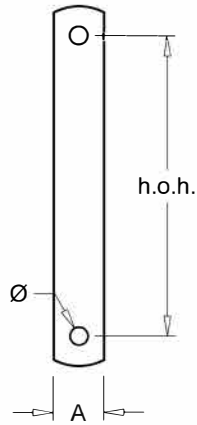




**Suspension strap**

Item Number 125

pre-galvanized material  
material flat 25x3, 20x5 or 25x5  
mm  
holes for M8



**Length (H.O.H.)**

- 50 mm
- 100 mm
- 150 mm
- 200 mm
- 250 mm
- 300 mm
- 350 mm
- 400 mm
- 450 mm
- 500 mm
- 550 mm
- 600 mm
- 650 mm
- 700 mm
- 750 mm
- 800 mm
- 850 mm
- 900 mm
- 950 mm

**25 x 3 mm**

- 125B050
- 125B100
- 125B150
- 125B200
- 125B250
- 125B300
- 125B350
- 125B400
- 125B450
- 125B500
- 125B550
- 125B600
- 125B650
- 125B700
- 125B750
- 125B800
- 125B850
- 125B900
- 125B950

**20 x 5 mm**

- 125C050
- 125C100
- 125C150
- 125C200
- 125C250
- 125C300
- 125C350
- 125C400
- 125C450
- 125C500
- 125C550
- 125C600
- 125C650
- 125C700
- 125C750
- 125C800
- 125C850
- 125C900
- 125C950

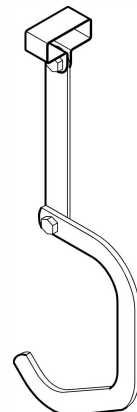
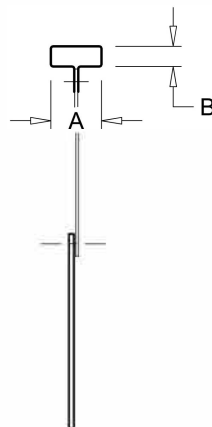
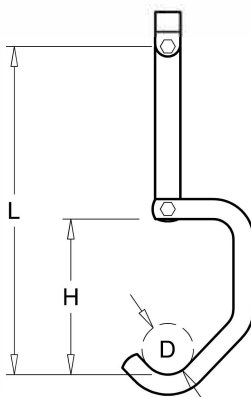
**25 x 5 mm**

- 125D050
- 125D100
- 125D150
- 125D200
- 125D250
- 125D300
- 125D350
- 125D400
- 125D450
- 125D500
- 125D550
- 125D600
- 125D650
- 125D700
- 125D750
- 125D800
- 125D850
- 125D900
- 125D950

**Monorailhook compound**

Item Number 173

monorailhook + truss-clip +  
suspension strap  
deliverable with or without bolts  
and nuts

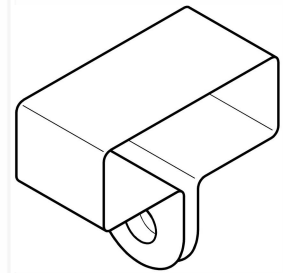
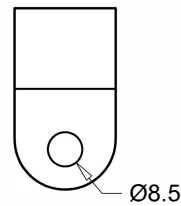
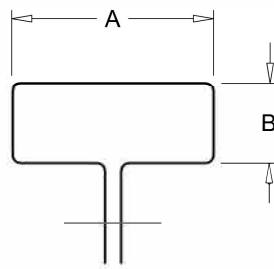


Sizes listed are standard.  
Other sizes also possible.

## Truss-clip centric model

Item Number 001

pre-galvanized material  
material fl at 25x1,25 mm  
holes for M8



## Truss size A x B

## Article number

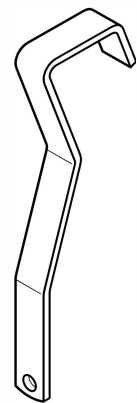
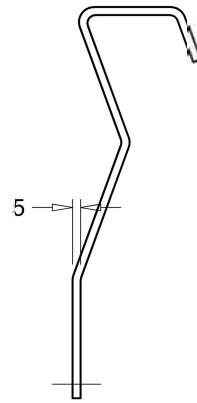
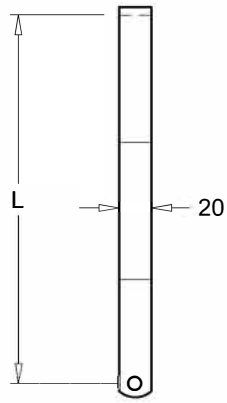
20 x 20 mm	001020020
20 x 40 mm	001020040
20 x 50 mm	001020050
20 x 60 mm	001020060
25 x 25 mm	001025025
25 x 50 mm	001025050
30 x 30 mm	001030030
30 x 50 mm	001030050
30 x 60 mm	001030060
35 x 35 mm	001035035
40 x 20 mm	001040020
40 x 30 mm	001040030
40 x 40 mm	001040040
40 x 50 mm	001040050
40 x 60 mm	001040060
40 x 70 mm	001040070
40 x 80 mm	001040080
45 x 45 mm	001045045
50 x 20 mm	001050020
50 x 25 mm	001050025
50 x 30 mm	001050030
50 x 35 mm	001050035
50 x 40 mm	001050040
50 x 50 mm	001050050
50 x 80 mm	001050080
50 x 100 mm	001050100
55 x 25 mm	001055025
60 x 20 mm	001060020
60 x 25 mm	001060025
60 x 30 mm	001060030
60 x 40 mm	001060040
60 x 60 mm	001060060
60 x 120 mm	001060120
70 x 25 mm	001070025
70 x 30 mm	001070030
70 x 40 mm	001070040
70 x 50 mm	001070050
80 x 40 mm	001080040
80 x 50 mm	001080050
100 x 40 mm	001100040
100 x 50 mm	001100050
100 x 60 mm	001100060

Sizes listed are standard.  
Other sizes also possible.

**PD-clip**

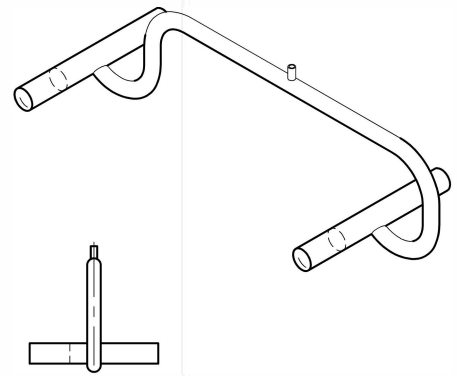
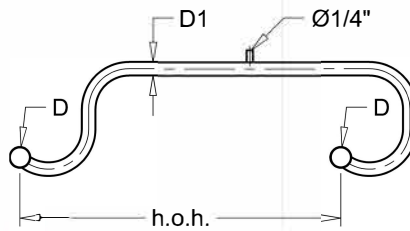
**Item Number 029**

length L = 190 mm  
flat 20x5 mm  
also possible to bend directly to  
monorailhook



**Head piece monorail  
special model for  
spraying robot**

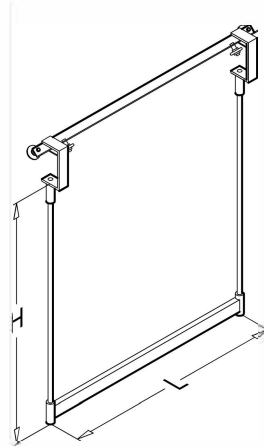
**Item Number 572**



**Monorail cart**

**Item Number 852**

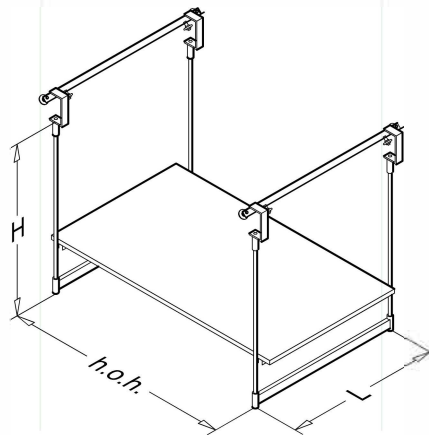
material aluminium  
 for pipe 51 mm  
 adjustable in height  
 with synthetic supported wheels  
 inside width 1000 mm



**Monorail tray**

**Item Number 853**

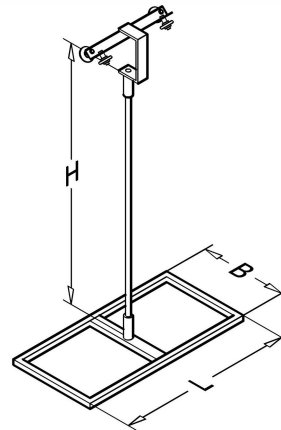
material aluminium  
 for pipe 51 mm  
 adjustable in height  
 with synthetic supported wheels



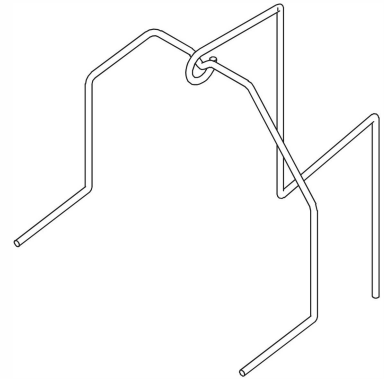
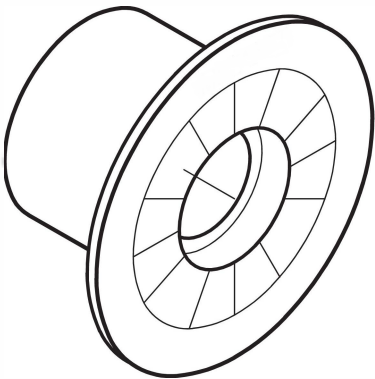
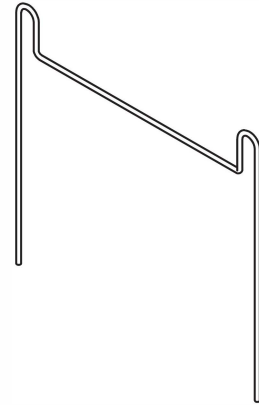
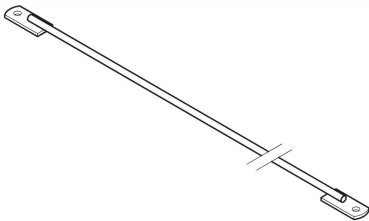
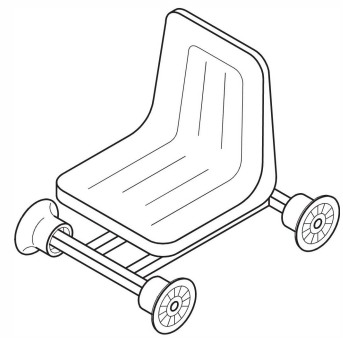
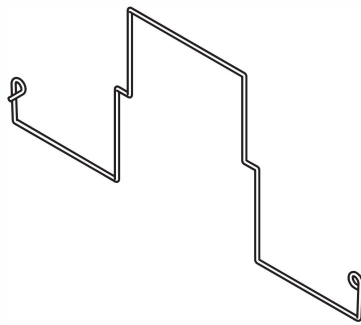
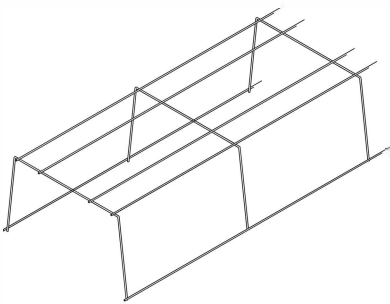
**Monorail cart**

**Item Number 854**

material aluminium  
 for pipe 51 mm  
 adjustable in height  
 with synthetic wheels with  
 bearings



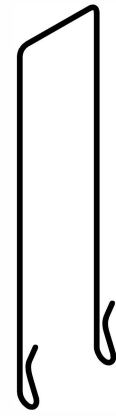
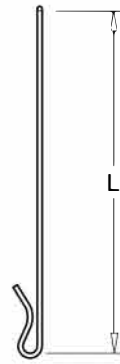
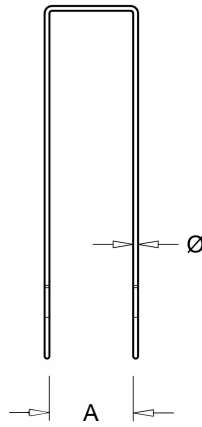
# Cultivation on technical products



**Cropwire-hook double model**

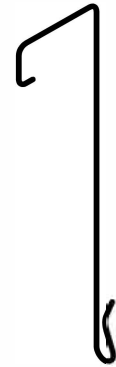
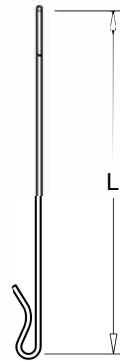
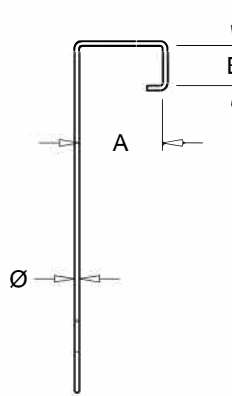
Item Number 780

material  $\varnothing$  3,4 galvanized (=wire no. 10) or  $\varnothing$  4 galvanized (=wire no. ??)

**Cropwire-hook single model**

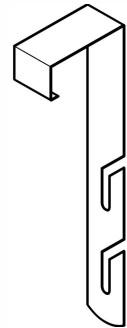
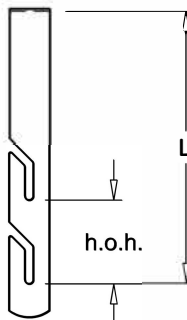
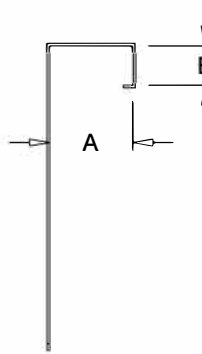
Item Number 781

material  $\varnothing$  5 mm galvanized

**Cropwire-hook single-sided model**

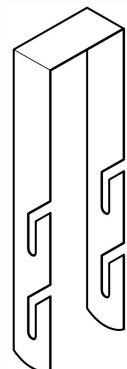
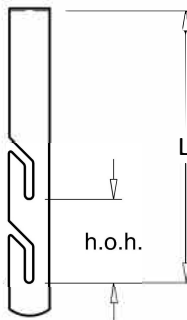
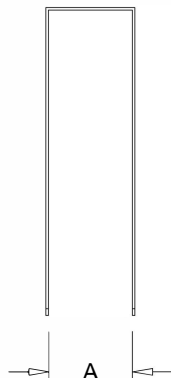
Item Number 131

pre-galvanized material  
material 25x1,5 mm  
to hang over the truss  
length and number of slots to give  
by you

**Cropwire-hook double-sided model**

Item Number 130

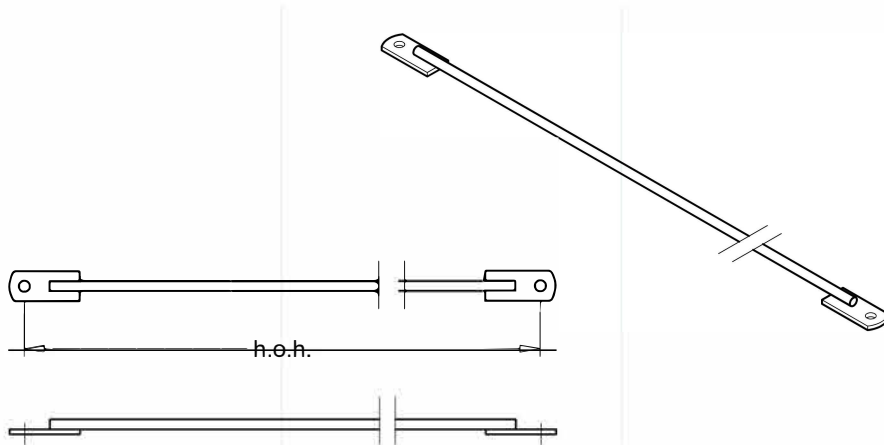
pre-galvanized material  
material 25x1,5 mm  
to hang over the truss  
length and number of slots to be  
given by you



**Wire arc, welded model**

Item Number 121

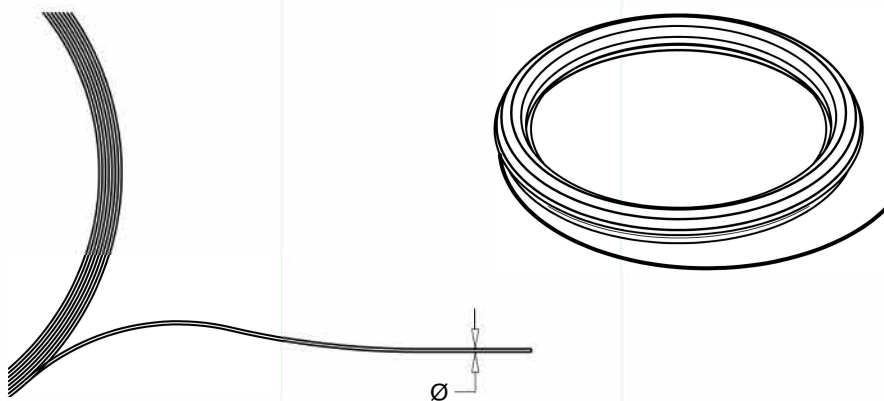
welded hotdip galvanized



**Crop wire**

Item Number 887

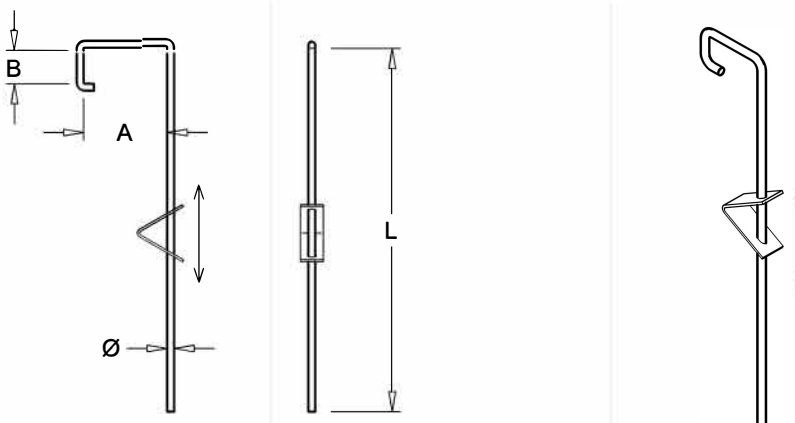
pre-galvanized material



**Adjustable clip**

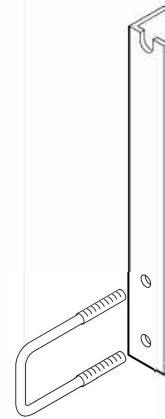
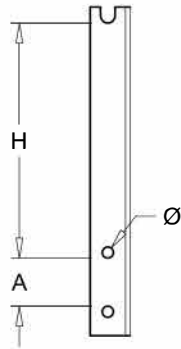
Item Number 550

Ø 6 mm pre-galvanized stainless steel clip

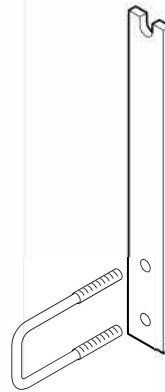
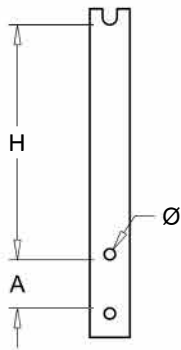


**Wire-lifter L-profile****Item Number 158**

electrolytic galvanized  
holes for M6  
in every desired height  
?-profile 25x25x3 mm

**Wire-lifter strap model****Item Number 159**

pre-galvanized flat  
holes for M6  
in every desired height

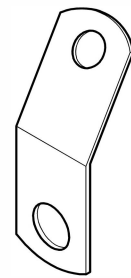
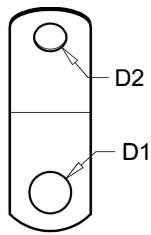




**Set plate model pressed**

Item Number 123

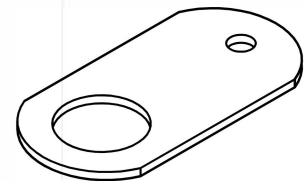
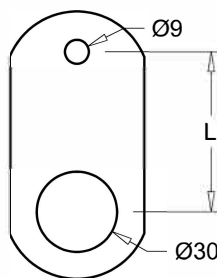
pre-galvanized material



**Head rack bottom support punched mode**

Item Number 540P

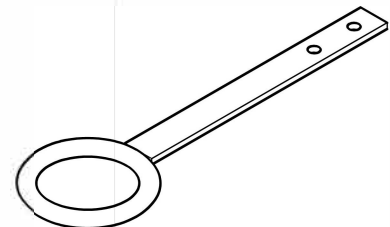
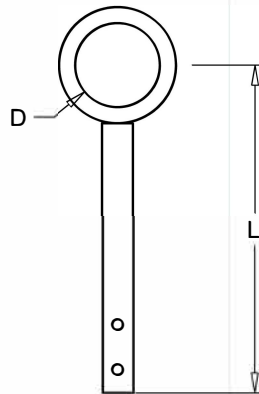
pre-galvanized material



**Head rack bottom support welded model**

Item Number 540

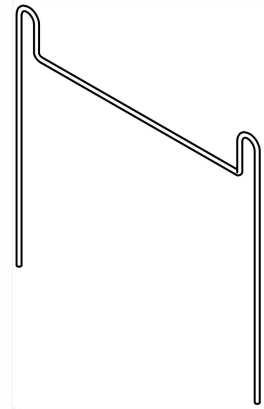
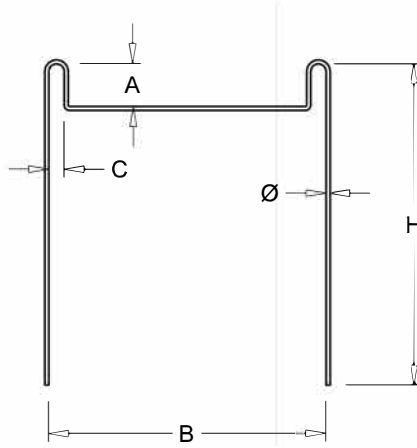
hotdip galvanized



**Stem support**

Item Number 155

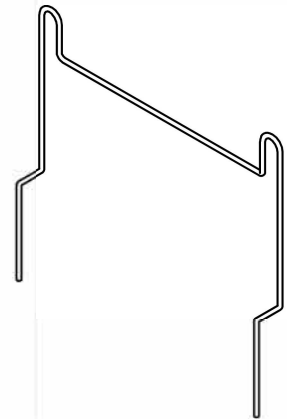
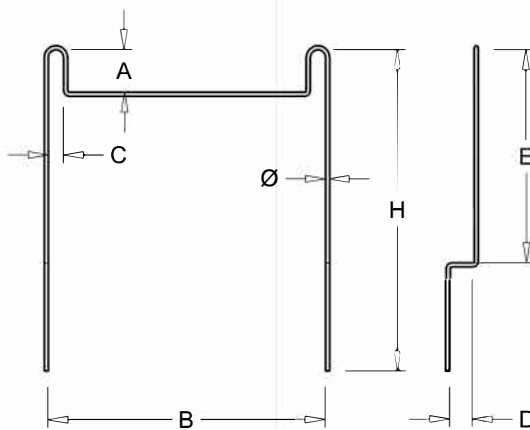
pre-galvanized material  
material  $\varnothing$  5,  $\varnothing$  5,5 or  $\varnothing$  6 mm



**Stem support extra pressed model B**

Item Number 155b

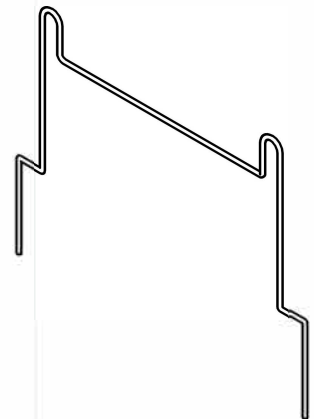
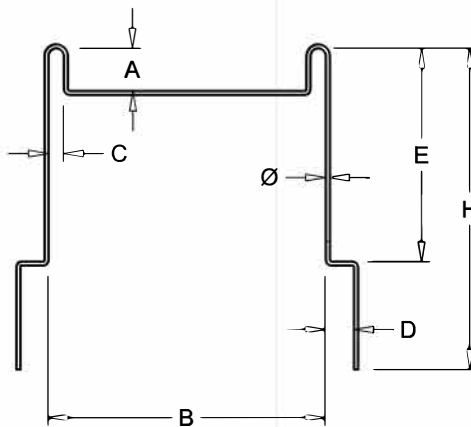
material  $\varnothing$  5,  $\varnothing$  5,5 or  $\varnothing$  6 mm  
pre-galvanized



**Stem support extra pressed model C**

Item Number 155c

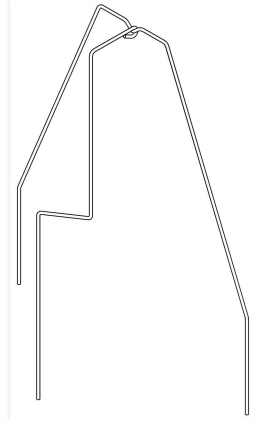
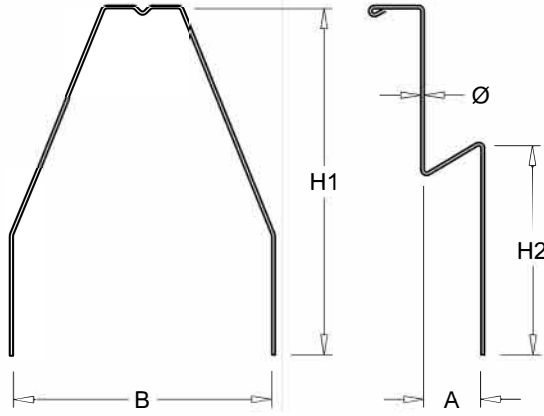
material  $\varnothing$  5,  $\varnothing$  5,5 or  $\varnothing$  6 mm  
pre-galvanized



**Stem support**

Item Number 155a

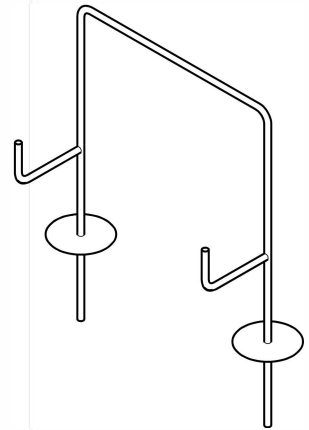
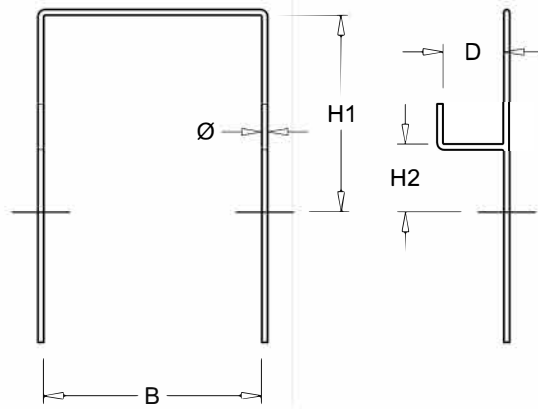
pre-galvanized material



**Head stem support heavy model**

Item Number 154

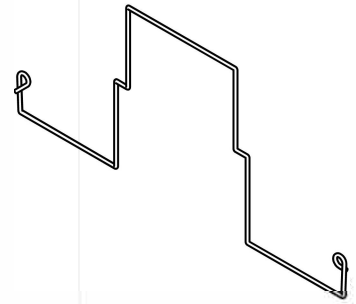
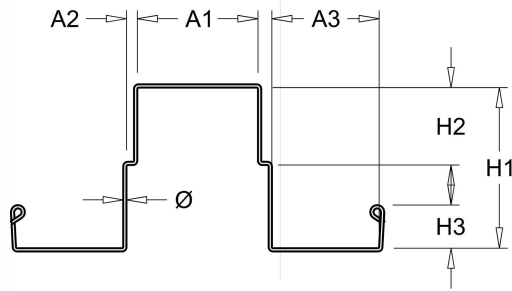
pre-galvanized material  $\varnothing$  10 mm



**Stem support  
for gutter**

Item Number 998a

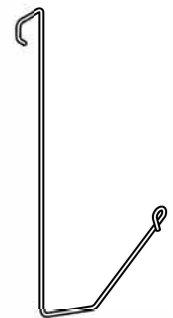
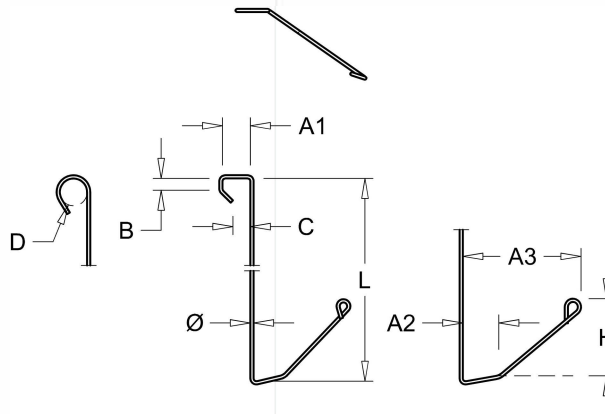
pre-galvanized material mounted  
on gutter



**Stem support  
for gutter**

Item Number 998b

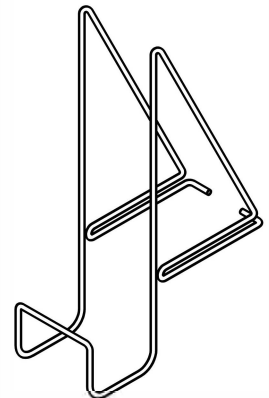
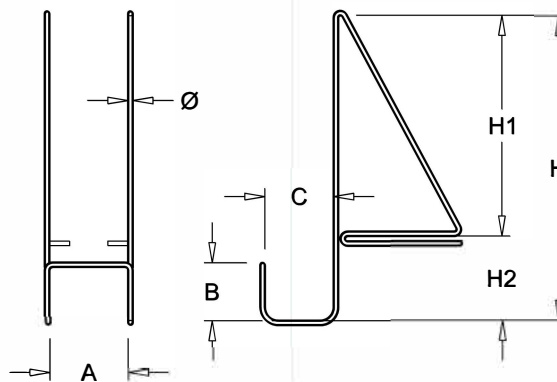
pre-galvanized material  
mounted on growtube



**Head Stem support  
for gutter**

Item Number 998c

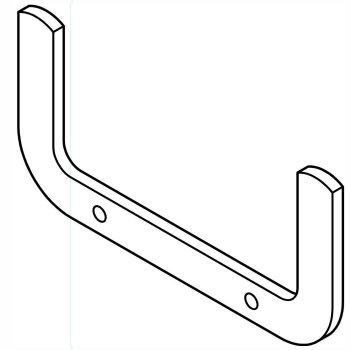
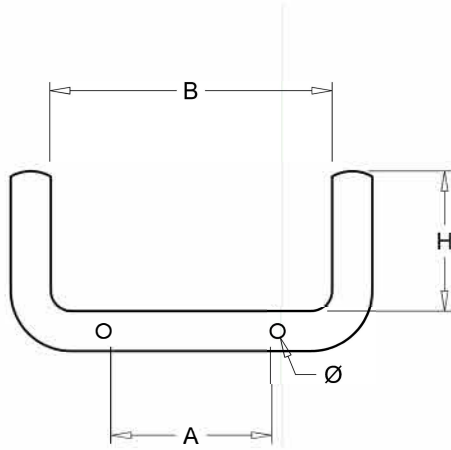
pre-galvanized material



**Drip tube clip**

**Item Number 368**

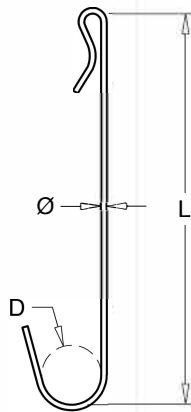
material 20x5  
pre-galvanized  
inclusive U-bolt M6



**Rainwater pipe hook**

**Item Number 157**

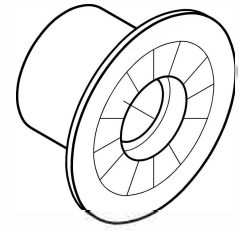
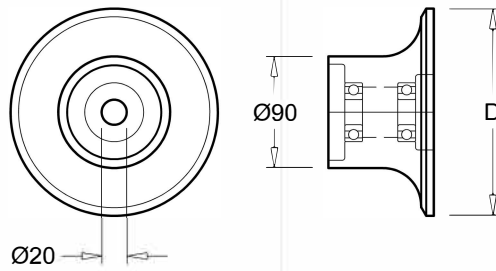
pre-galvanized material  
material wire no. 10



### Universal synthetic tube rail wheel

Item Number 849

flange diameter  $\varnothing$  166,  $\varnothing$  177,  $\varnothing$  190 or  $\varnothing$  210 mm  
 outside diameter  $\varnothing$  90 mm  
 produced with ball-bearings



#### Tread Diameter

90 mm  
 90 mm  
 90 mm  
 90 mm

#### Flange diameter

166 mm  
 177 mm  
 190 mm  
 210 mm

#### Article number

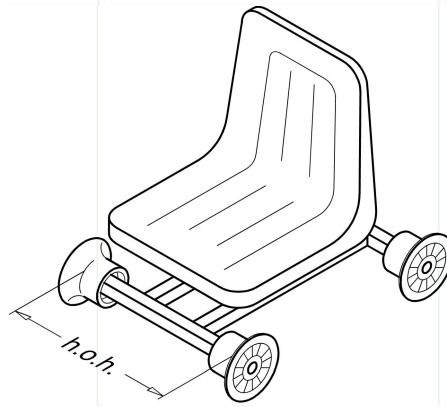
84901  
 84902  
 84903  
 84904

Sizes listed are standard.  
 Other sizes also possible.

**Four-wheeled seat**

**Item Number 851**

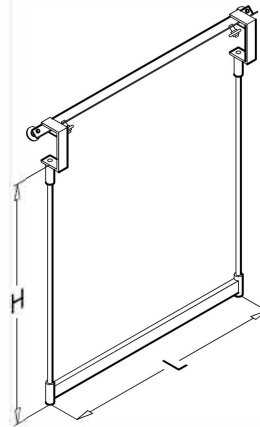
galvanized steel frame  
synthetic tube rail wheels  
to produce with steel seat or  
luxury seat both adjustable in  
height



**Monorail cart**

**Item Number 852**

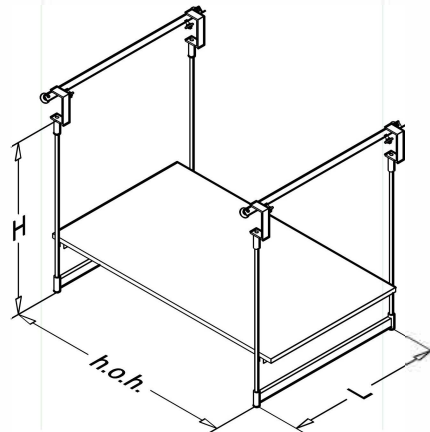
material aluminium  
for pipe 51 mm  
adjustable in height  
with synthetic supported wheels  
inside width 1000 mm



**Monorail tray**

**Item Number 853**

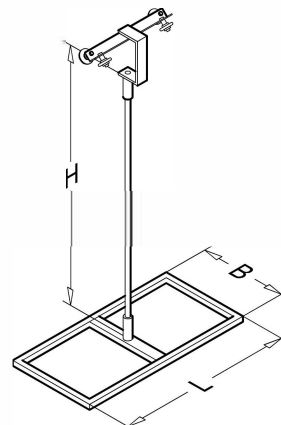
material aluminium  
for pipe 51 mm  
adjustable in height  
with synthetic supported wheels



**Monorail cart**

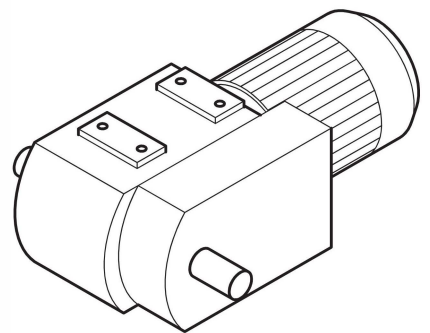
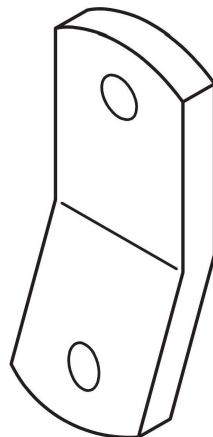
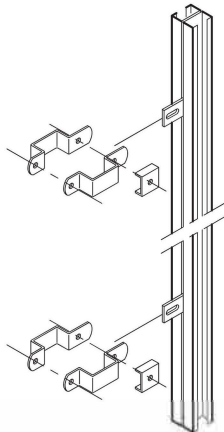
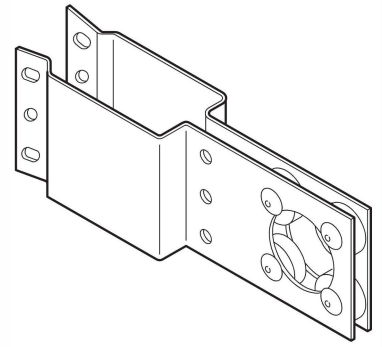
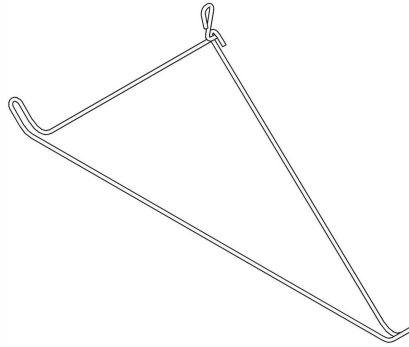
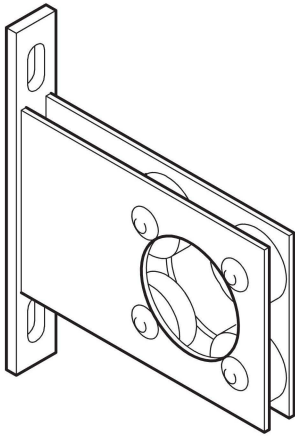
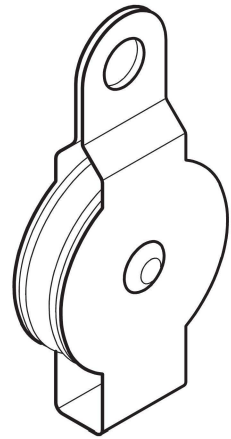
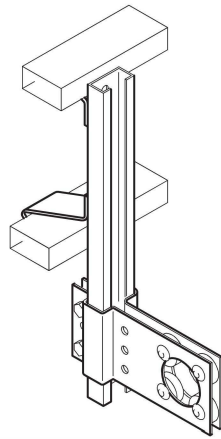
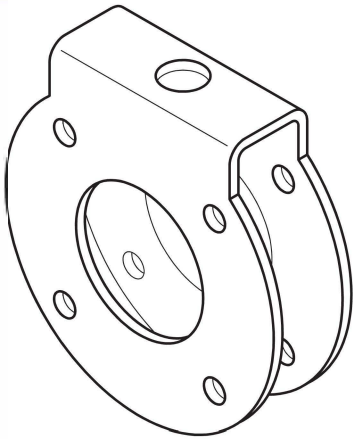
**Item Number 854**

material aluminium  
for pipe 51 mm  
adjustable in height  
with synthetic wheels with  
bearings



Sizes listed are standard.  
Other sizes also possible.

# Hoisting heating

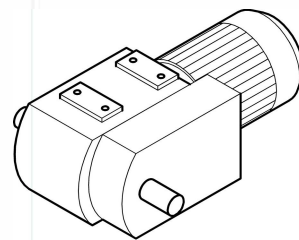
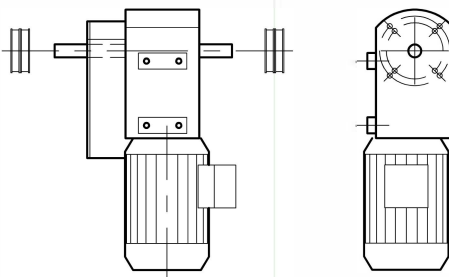




### Lifting motor reductor

Item Number 704

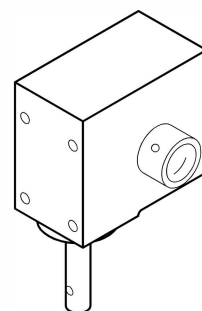
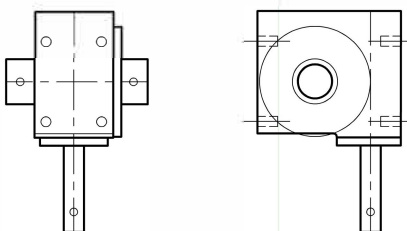
product "Huima"  
inclusive joints  
inclusive aut. end turn off.  
various dimensions



### Gear box

Item Number 705

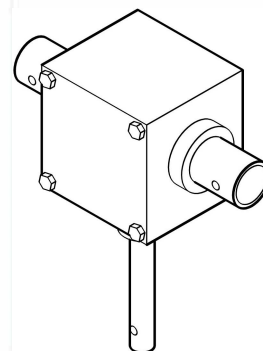
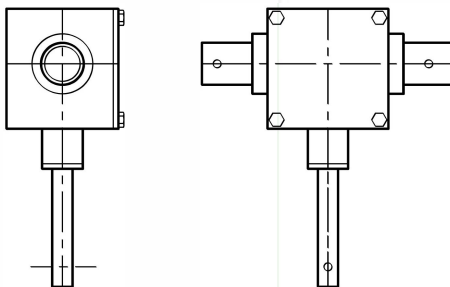
product "Huima"  
inclusive joints  
various dimensions



### Gear box square model

Item Number 911

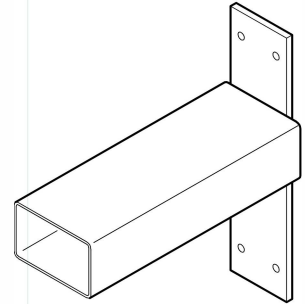
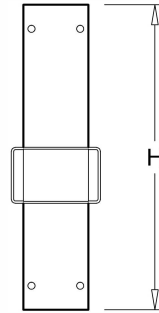
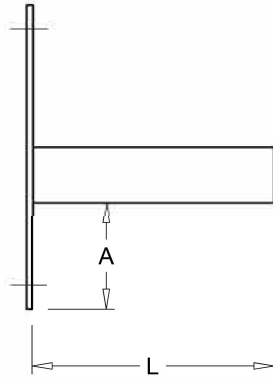
product "Huima"



**Motor reductor support  
axis parallel trellis**

Item Number 903

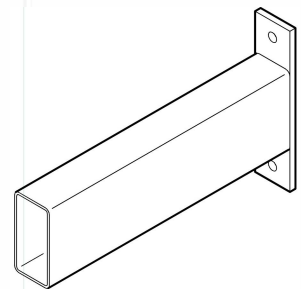
hotdip galvanized  
inclusive bolts and nuts



**Motor reductor support  
axis parallel gutter**

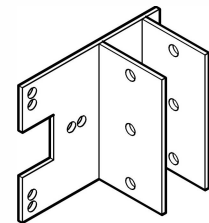
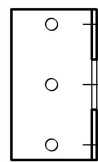
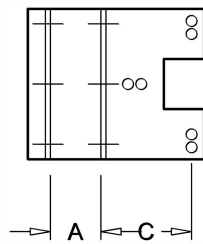
Item Number 904

hotdip galvanized  
inclusive bolts and nuts



**Motor reductor support  
Ridder 50 / 63 axis  
parallel on trellis**

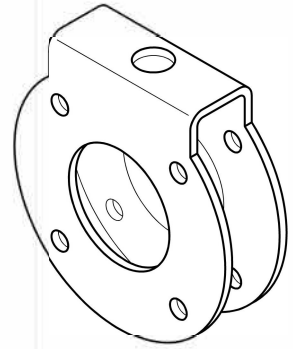
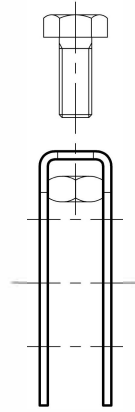
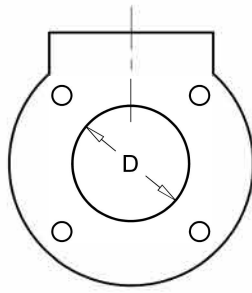
Item Number 213



**Cable-clamb ring stamped model**

**Item Number 542**

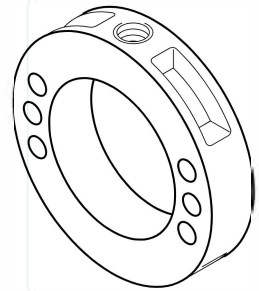
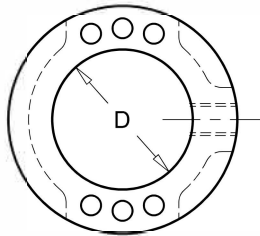
inclusive u-bolt  
pre-galvanized material  
for axis D = 1" or 5/4"



**Cable-clamb ring moulded model**

**Item Number 212**

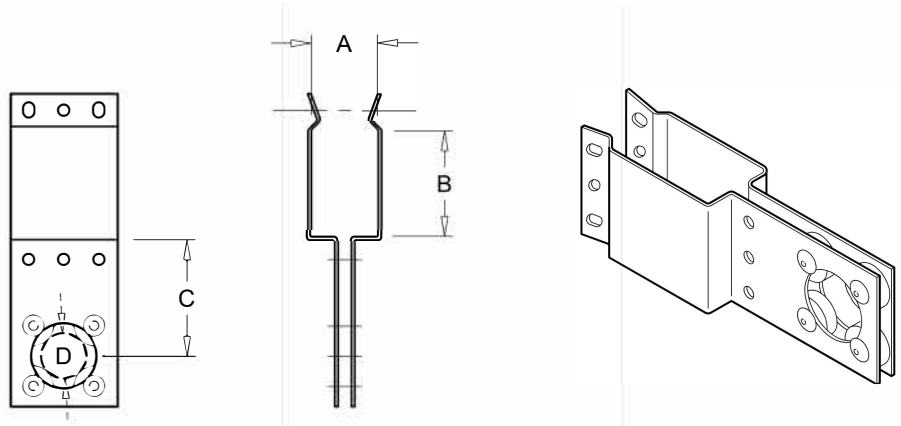
inclusive adjusting hex bolt  
electrolytic galvanized  
for axis 1"



**Clamp bearing plate  
axis parallel on gutter  
brass rolls**

Item Number 218

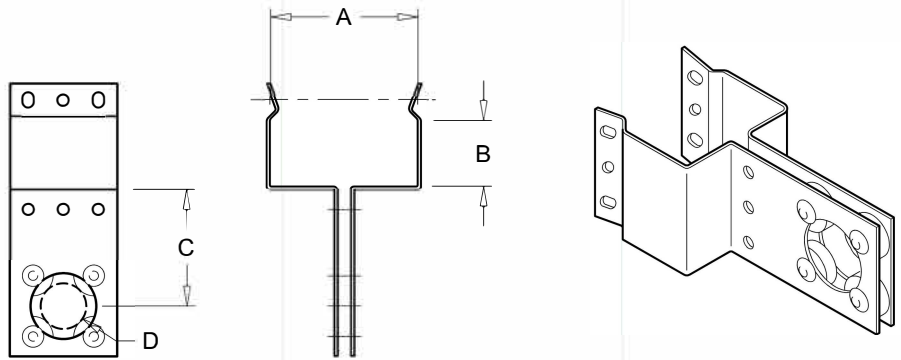
pre-galvanized material  
for axis 1" or 5/4"  
brass rolls or steel ball-bearings



**Clamp bearing plate  
axis parallel on trellis  
brass rolls**

Item Number 216

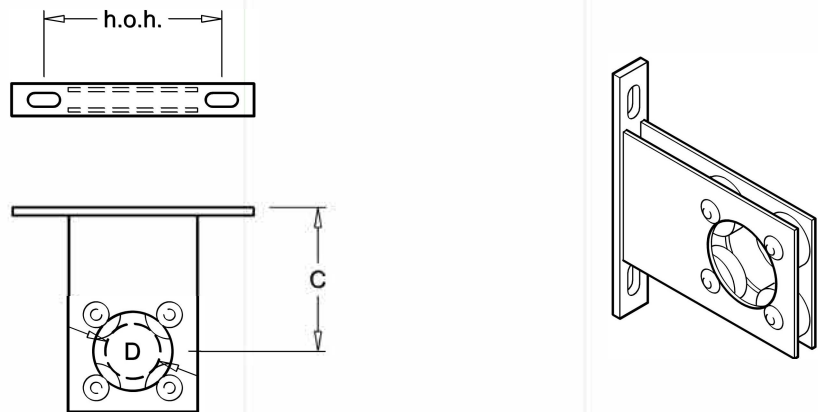
pre-galvanized material  
for axis 1" or 5/4"  
brass rolls or steel ball-bearings



**Screw bearing plate**

Item Number 217

welded hotdip galvanized  
for axis 1" or 5/4"  
C = 90 mm



**Slide bearing plate**

Item Number 165

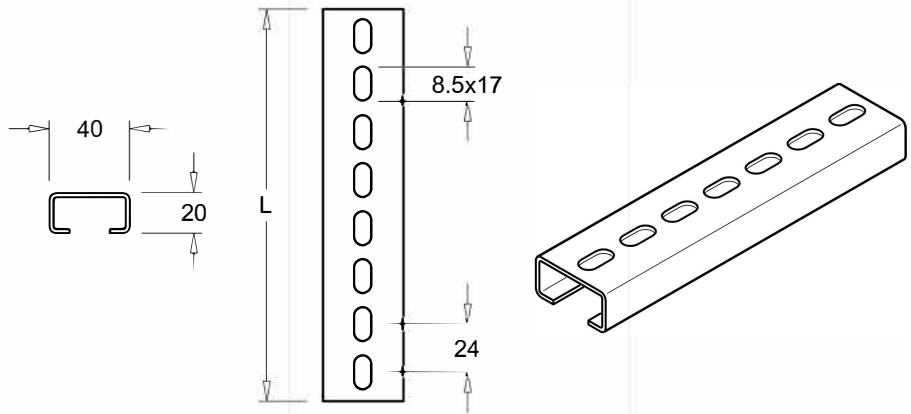
for axis 1" brass slide bearing  
brass -glijlager-



**Axe support universal C  
40x20**

Item Number 205

pre-galvanized  
materialsawing possible in any  
length from universal perforated  
C-profile



**L**

- 500 mm
- 500 mm
- 600 mm
- 7500 mm

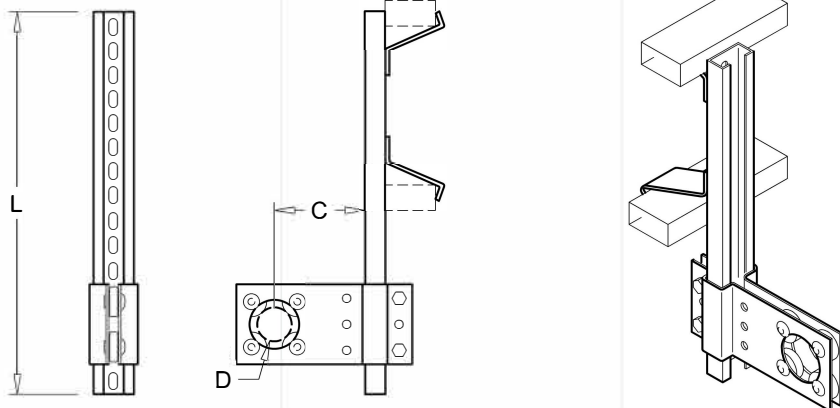
**Article number**

- 205700
- 205500
- 205600
- 2057500

**Axe support complete  
with bearing-plate**

Item Number 147

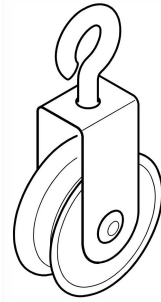
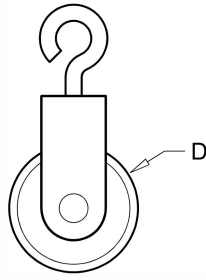
for axe 1" or 5/4"  
pre-galvanized material  
complete with bolts, nuts, clamps  
and contra plates  
variable length



**Pulley steel V-model**

Item Number 864

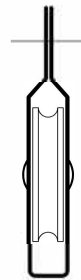
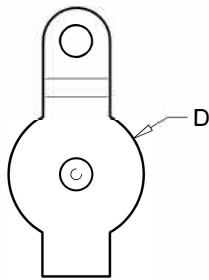
diameter wheel  $D = \varnothing 50$  mm  
 polyamide wheel  
 material hook  $\varnothing 5$  mm



**Pulley 2" 1 x fixed eye**

Item Number 709

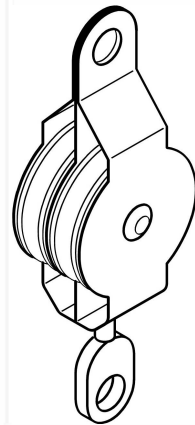
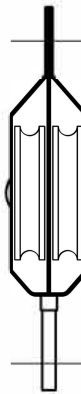
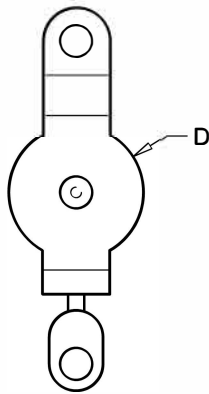
diameter wheel  $\varnothing 50$  mm  
 single polyamide or brass wheel



**Double pulley 2"**

Item Number 709d

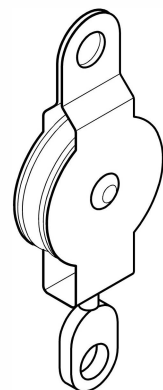
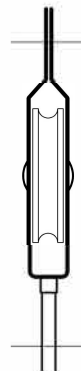
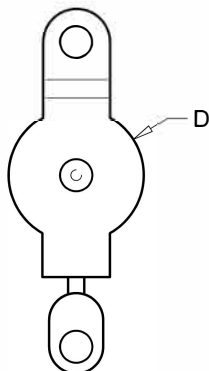
diameter wheel  $\varnothing 50$  mm  
 double polyamide or brass wheel



**Pulley 2" 1 x fixed eye + revolving eye**

Item Number 709oog

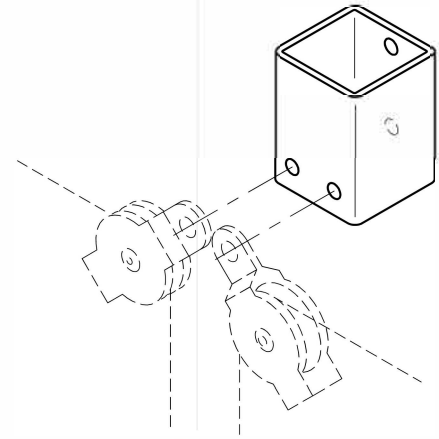
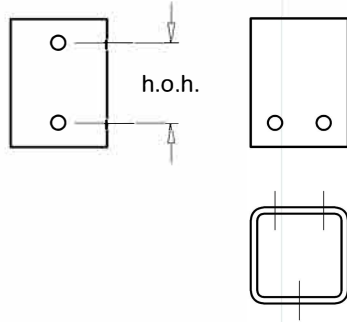
diameter wheel  $\varnothing 50$  mm  
 single polyamide or brass wheel



**Double pulley-clamp suspension drill model**

Item Number 880

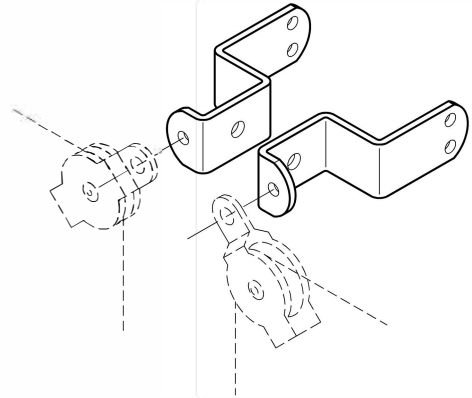
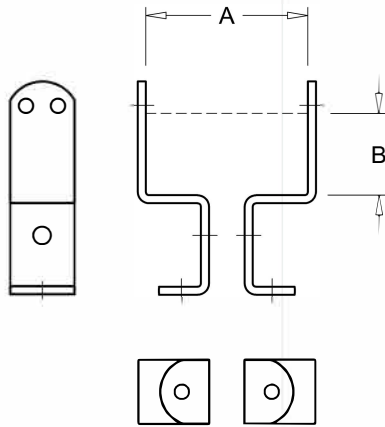
tube 60x60  
for 2 pulley's  
inclusive matching bolts and nuts



**Double pulley-clamp suspension clamp model**

Item Number 880g

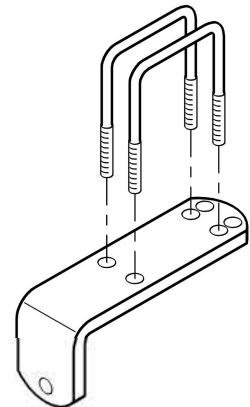
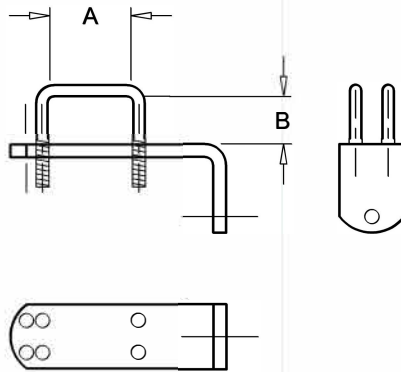
pre-galvanized material



**Suspension pulley set strap with U-bolt**

Item Number 521

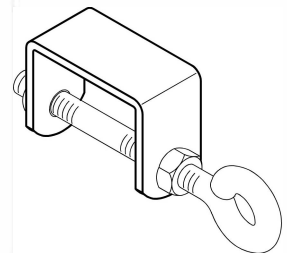
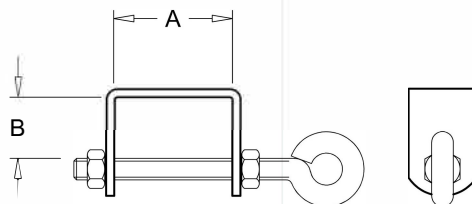
pre-galvanized  
flat 20x5 mm  
inclusive U-bolt M6



**Suspension pulley U-model**

Item Number 859

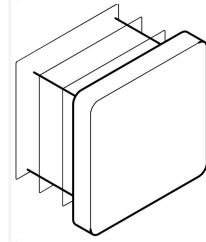
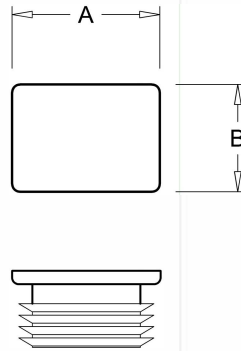
pre-galvanized material



**Tube inserts**

**Item Number 711**

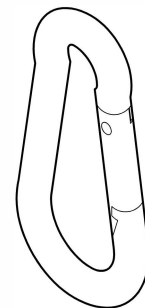
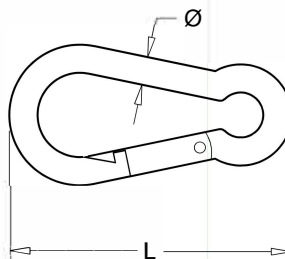
square model  
black synthetic material



**Carabine hook**

**Item Number 714**

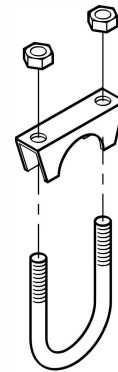
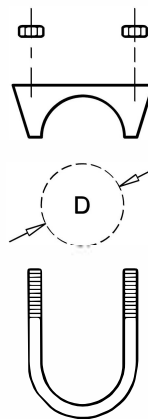
galvanized version



**Exhaust clamp**

**Item Number 730**

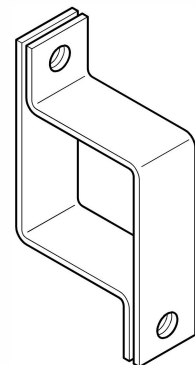
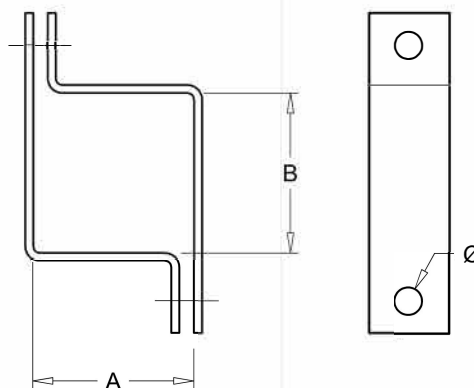
for various tube dimensions



**Truss-clip scale model**

**Item Number 210**

pre-galvanized flat 25x2 mm  
special for horizontal force

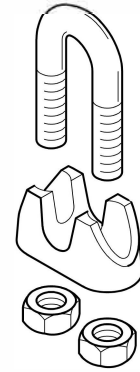
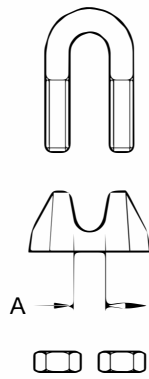




**Cable clamps**

**Item Number 710k**

galvanized for steelcable  $\varnothing$  2 or  $\varnothing$  3



**Cable clamb**

- 10 mm (3/8")
- 13 mm
- 3 mm (1/8")
- 5 mm (3/16")
- 6 mm
- 8 mm (5/16")

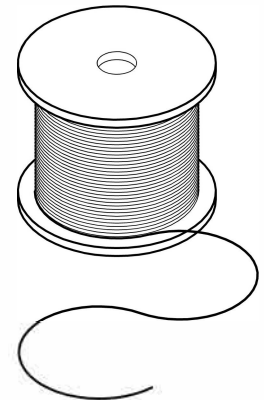
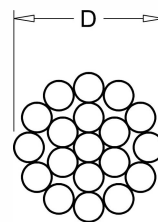
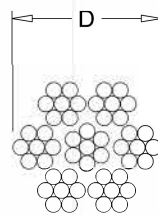
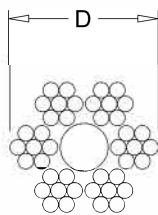
**Article number**

- 710K10
- 710K13
- 710K3
- 710K5
- 710K6
- 710K8

**Cable**

**Item Number 710s**

galvanized version  
rolls of 500 or 1000 meters  
construction 7x7 or 6x7+1



**Steel cable  $\varnothing$**

- 2 mm
- 2 mm
- 3 mm
- 3 mm
- 4 mm
- 5 mm

**Construction**

- 6 x 7 + 1
- 7 x 7
- 6 x 7 + 1
- 1 x 19
- 6 x 7 + 1
- 6 x 7 + 1

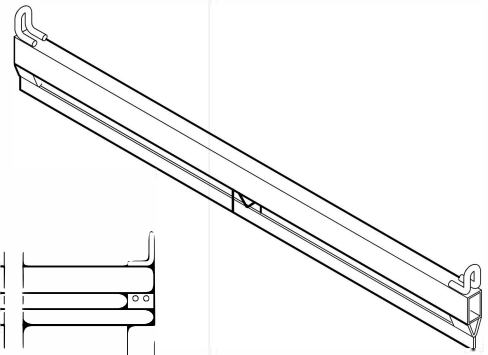
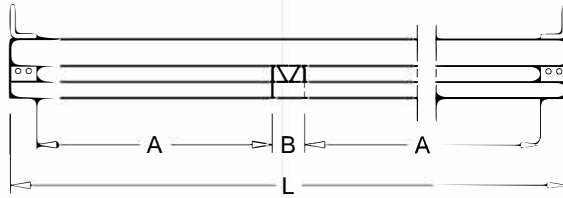
**Article number**

- 710S2
- 710S2-7X7
- 710S3
- 710S3-19
- 710S4
- 710S5

**Hoisting-layers**

Item Number 230

welded hotdip galvanized  
tube with brace/support

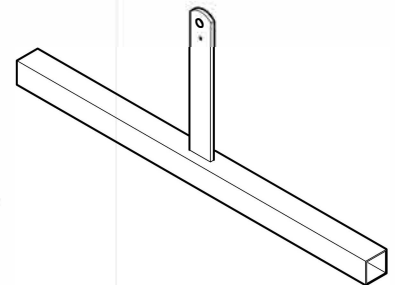
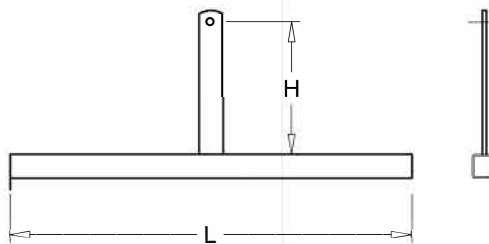


Various models available for 2, 3, 4 of 5 beds.  
Also available for hoisting the layers behind the support.  
Measurements at your request..

**Hoisting brackets  
welded model**

Item Number 519

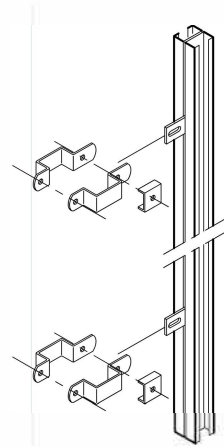
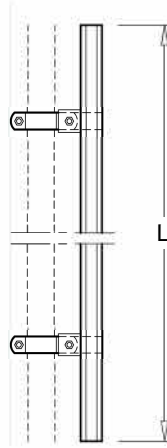
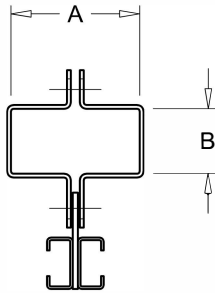
welded hotdip galvanized  
for various sizes



**Guide-system C-profile double model**

Item Number 251

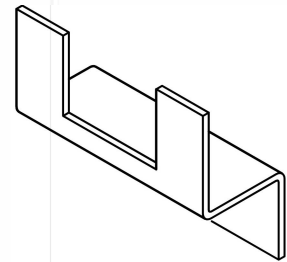
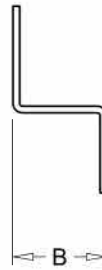
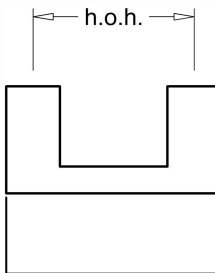
C-profile 40x20x10  
pre-galvanized model  
inclusive associated fixing clips



**Guide-bracket set double model for pile**

Item Number 239

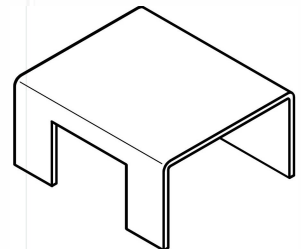
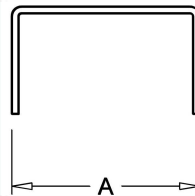
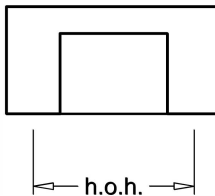
hotdip galvanized  
centre to centre H.O.H. 60 mm  
for 2 x pipe 3/4"  
complete with U-bolt, contra plate  
and nuts



**Guide-bracket set double model for pile**

Item Number 240

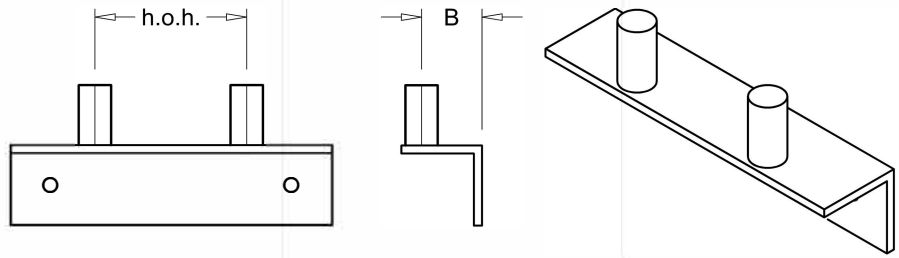
hotdip galvanized  
centre to centre H.O.H. 60 mm  
for 2 x pipe 3/4"  
complete with u-bolt, contra plate  
and nuts



**Guide-bracket welded double model for pile**

Item Number 233

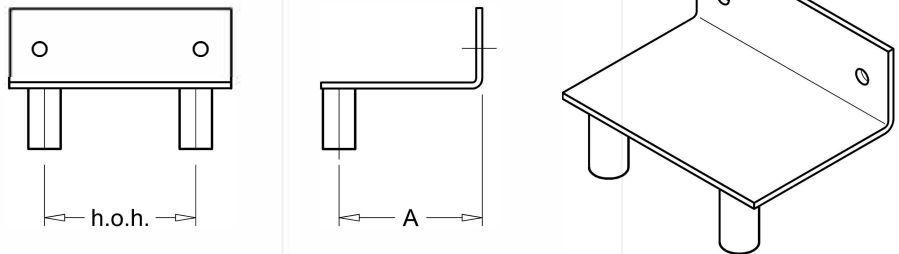
welded hotdip galvanized  
centre to centre H.O.H. 75 mm  
for 2 x pipe 3/4"



**Guide-bracket welded double model for pile**

Item Number 235

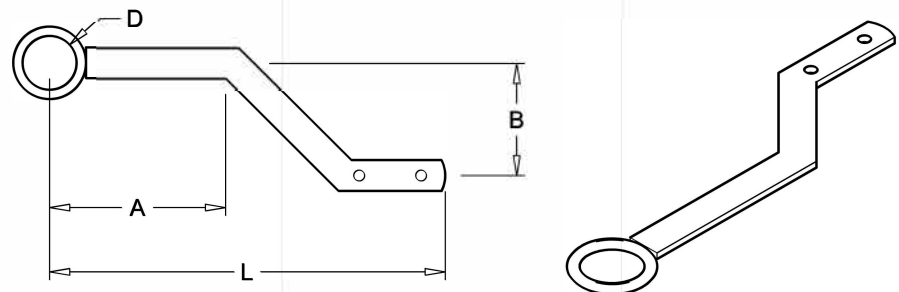
welded hotdip galvanized  
centre to centre H.O.H. 75 mm  
for 2 x pipe 3/4"



**Guide-bracket set model**

Item Number 232

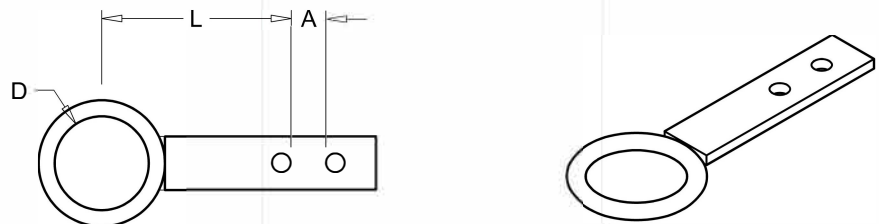
welded hotdip galvanized  
flat 20x5 mm  
ring ø 6 mm  
for pipe 3/4"



**Guide-clamb straight model**

Item Number 209

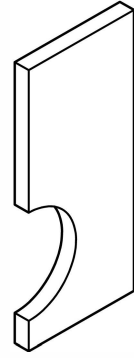
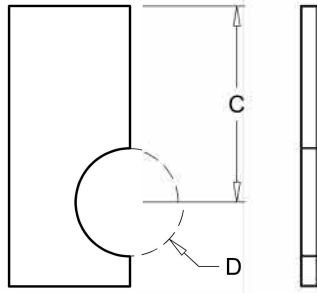
welded hotdip galvanized  
flat 20x5 mm  
ring ø 6 mm  
for pipe D = 3/4"



**Nettension plate 3/4" pipe**

Item Number 242

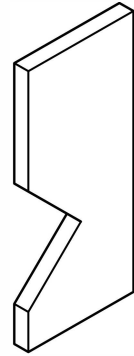
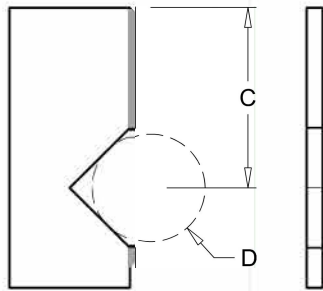
flat 30x4 mm  
black



**Nettension plate universal**

Item Number 241

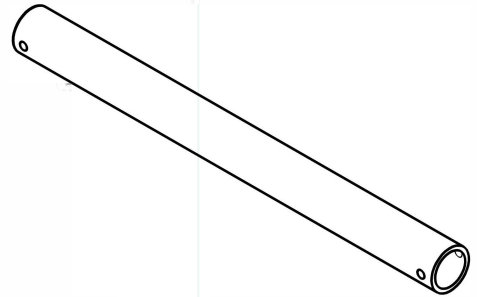
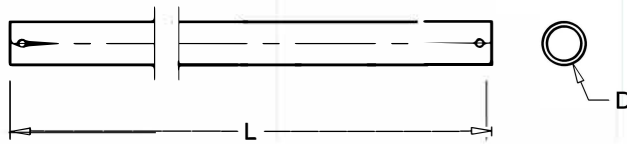
flat 30x4 mm  
black  
for pipe 3/4" or pipe 1"



**Nettension tube**

Item Number 241b

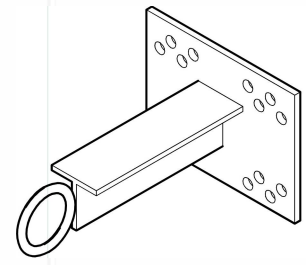
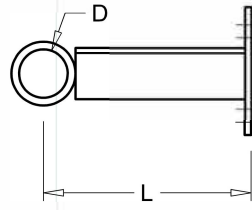
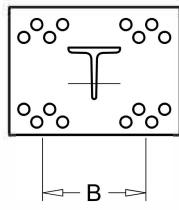
galvanized  
pipe 3/4" or pipe 1"



**End post support with welded ring**

Item Number 149

T40x40x4 mm  
ring for pipe D = 1" of 51  
for post 40 up to 120 mm  
length 500 mm



**With ring D**

33 mm (1")  
51 mm

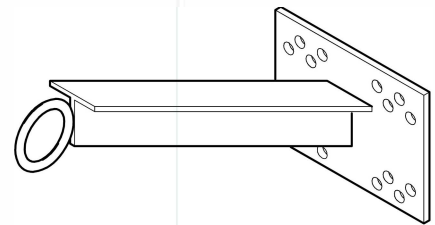
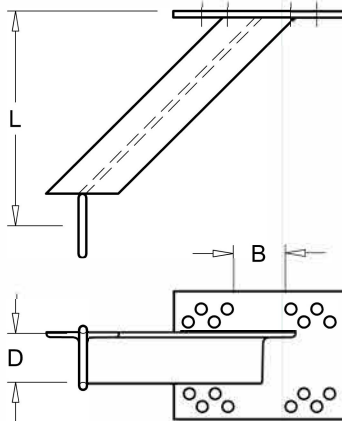
**Article number**

149033  
149051

**End post support with welded ring angled left**

Item Number 149L

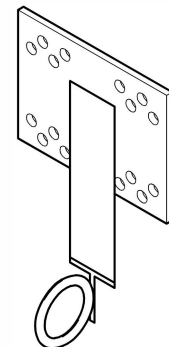
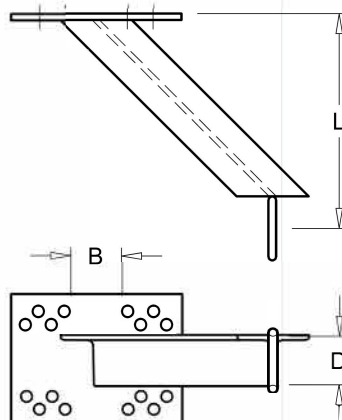
T40x40x4 mm  
for ring 1"  
for post 40 up to 120 mm  
length 500 mm



**End post support with welded ring angled right**

Item Number 149R

T40x40x4 mm  
for ring 1"  
for post 40 up to 120 mm  
length 500 mm

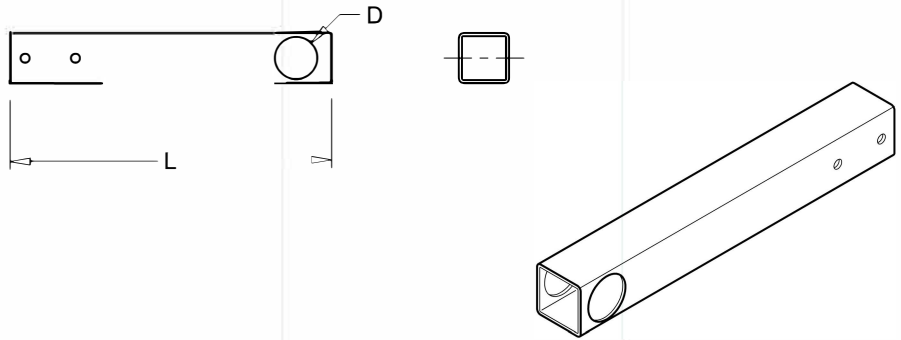


Sizes listed are standard.  
Other sizes also possible.

**End post support tube with hole**

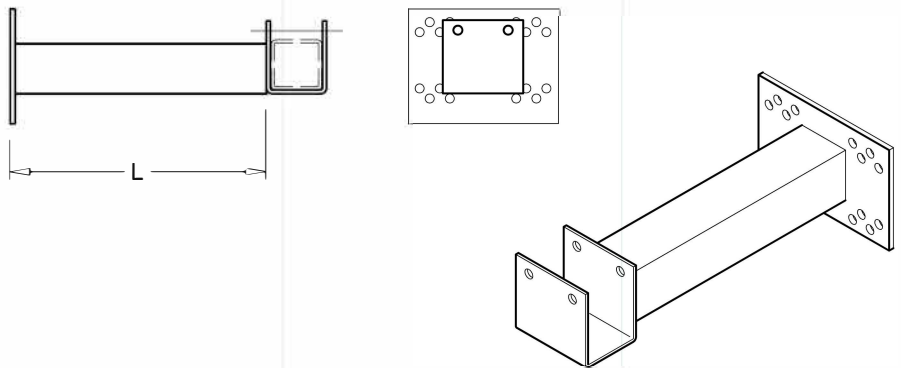
Item Number 225a

hotdip galvanized  
tube dimension 50x50 mm



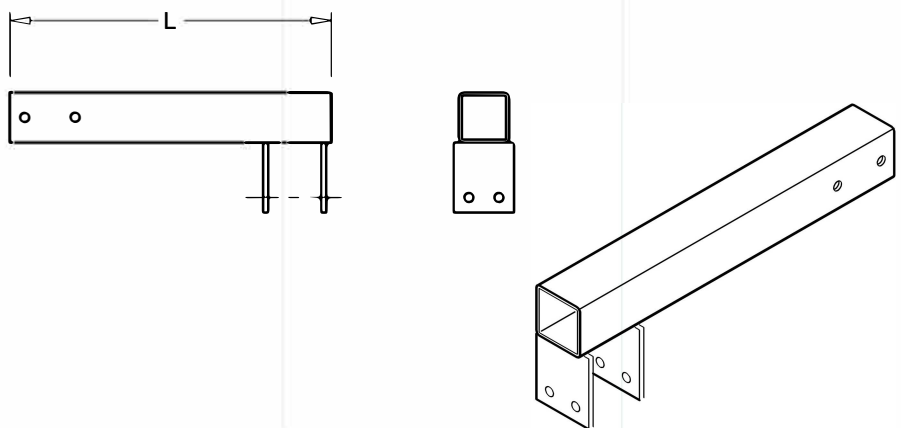
**End post support for tube**

Item Number 225b



**End post support for pulleys**

Item Number 225c



**Tentclip model 2**

**Item Number 117**

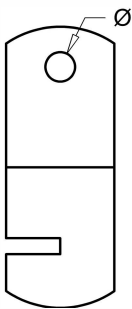
galvanized  
flat 20x5 mm  
for steel cable up to  $\varnothing$  3 mm



**Tentclip model 3**

**Item Number 118**

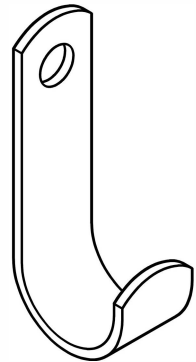
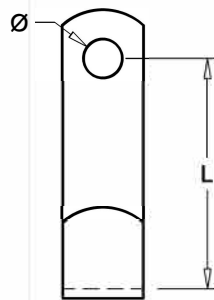
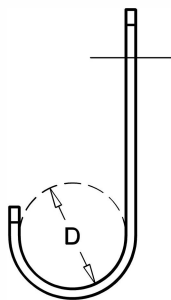
galvanized  
flat 20x5 mm  
for steel cable up to  $\varnothing$  3 mm



**J-Hook with big hole**

**Item Number 513**

pre-galvanized material  
deliverable for various pipe sizes  
for Victorchain no. 22

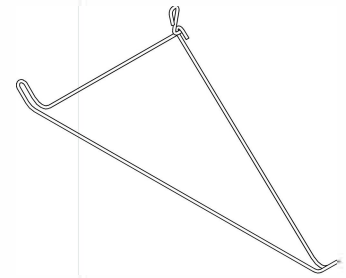
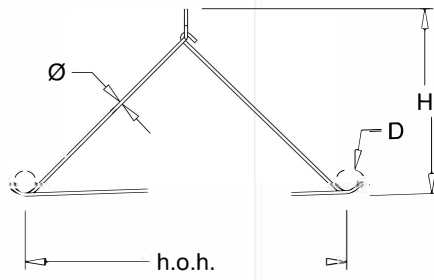




**A-hook bended model**

Item Number 102

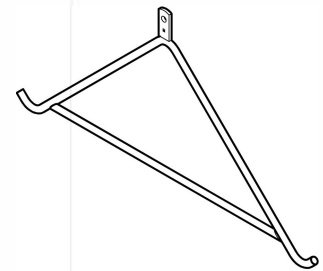
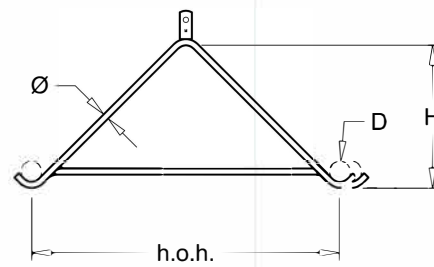
bended  
pre-galvanized material



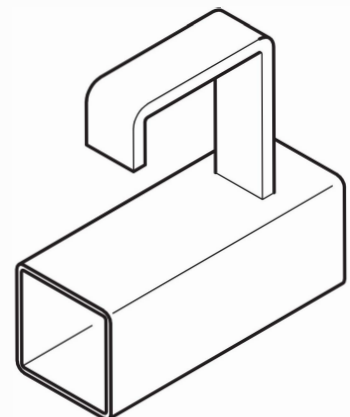
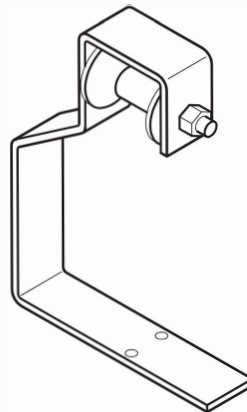
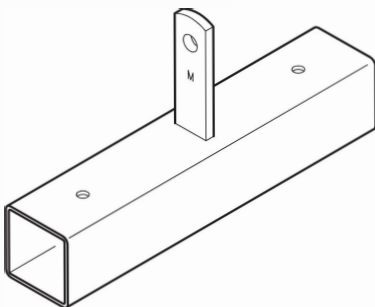
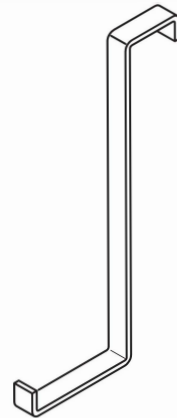
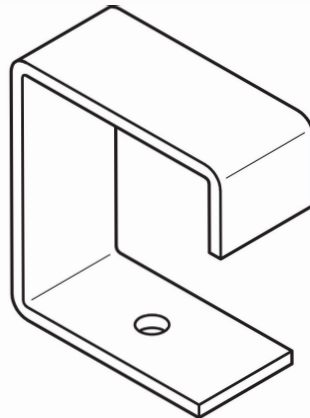
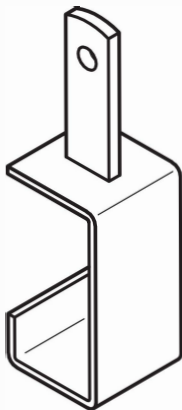
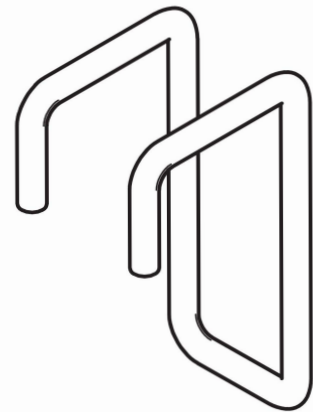
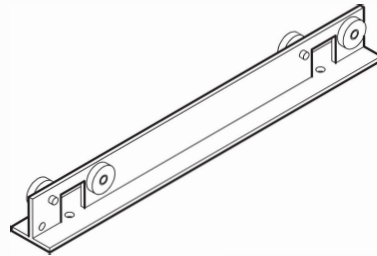
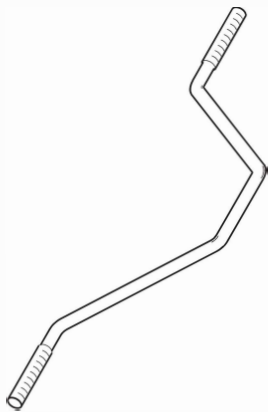
**A-hook welded model**

Item Number 102las

welded hotdip galvanized  
centre to centre H.O.H. 41,5, 60  
or 80 cm  
material  $\varnothing$  6,  $\varnothing$  8 or  $\varnothing$  10 mm  
with lug

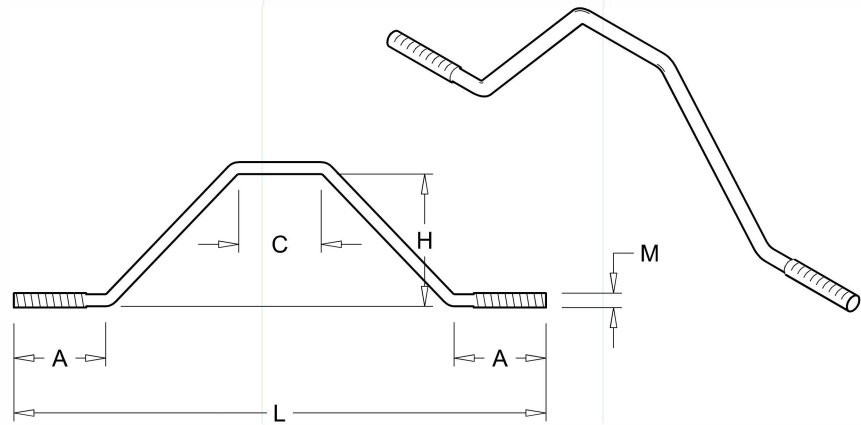


# Electric/Water

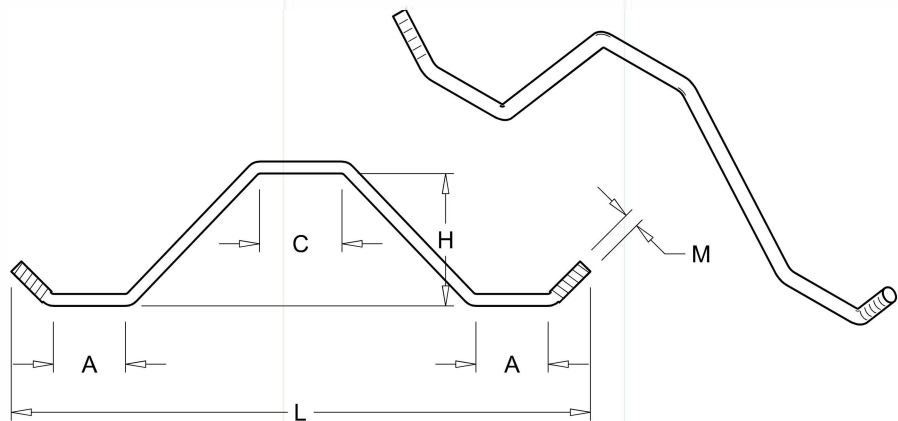


**Armature bracket type 1**

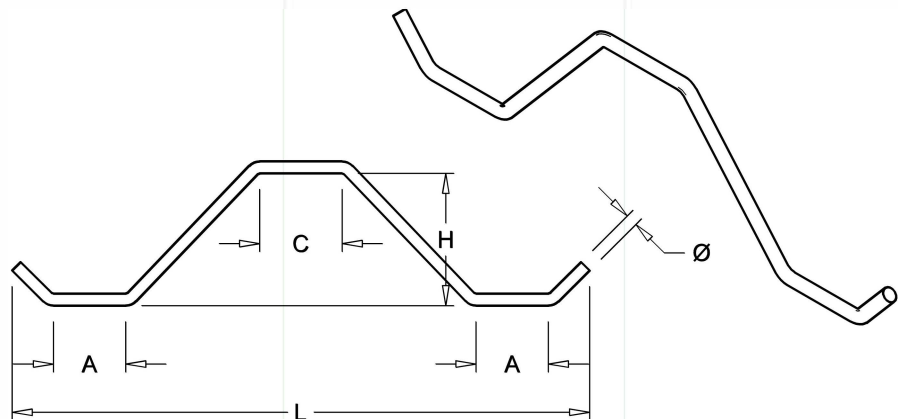
Item Number 078

M6 version  
electrolytic galvanized**Armature bracket type 2**

Item Number 079

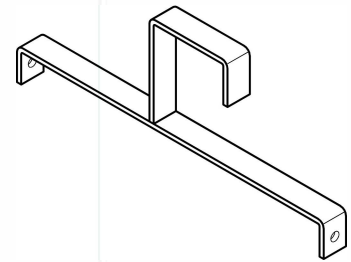
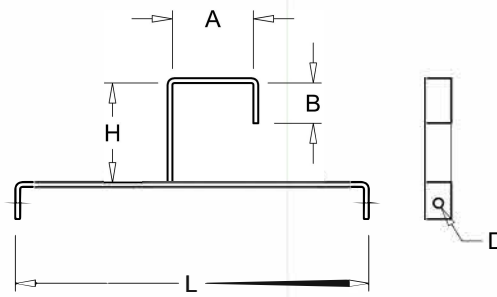
M6 version  
electrolytic galvanized**Armature bracket type 3**

Item Number 080

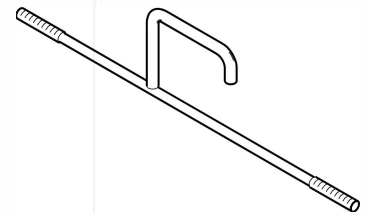
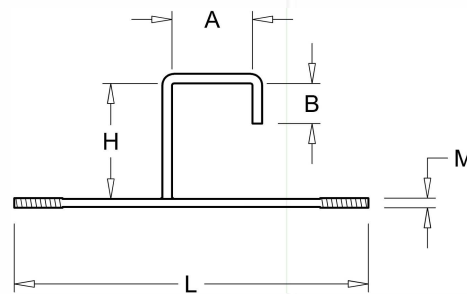
ø 6 version  
pre-galvanized material

**Armature bracket type 4**

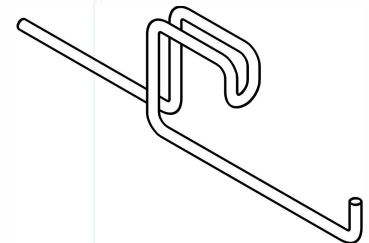
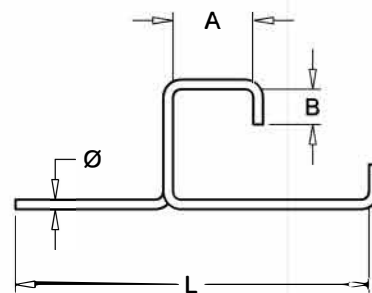
Item Number 081

material 16x3 mm  
electrolytic galvanized**Armature bracket type 5 welded model**

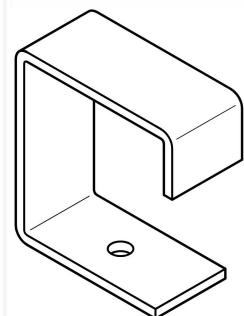
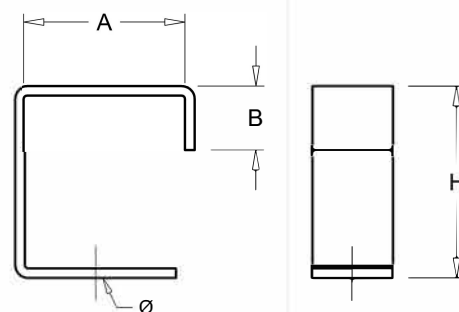
Item Number 082

M8 version  
electrolytic galvanized**Armature bracket type 5 bended model**

Item Number 082a

M8 version  
inclusive starlock**Armature bracket type 6**

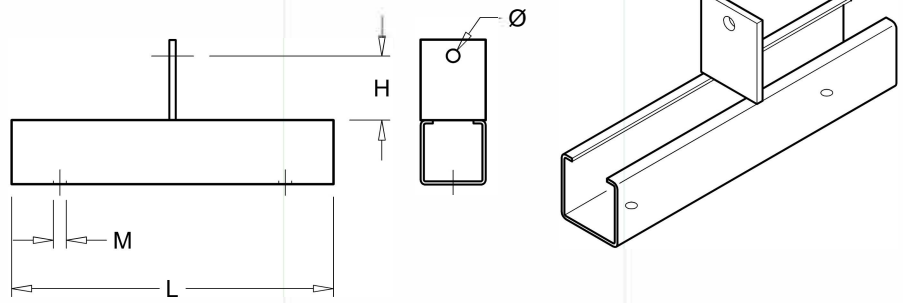
Item Number 083

material flat 25x3 mm  
pre-galvanized version

**Suspension joint type 1**

Item Number 084

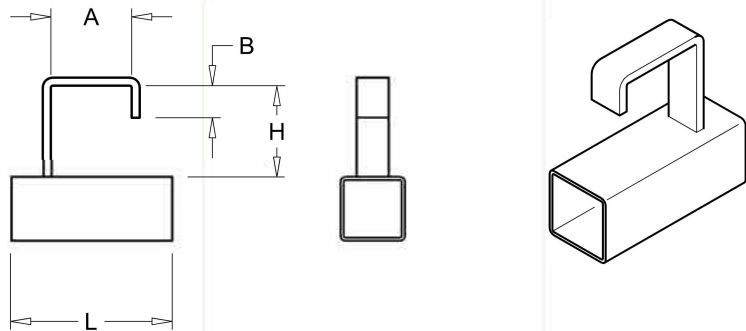
length L = 200 mm  
with or without thread



**Suspension joint type 2**

Item Number 085

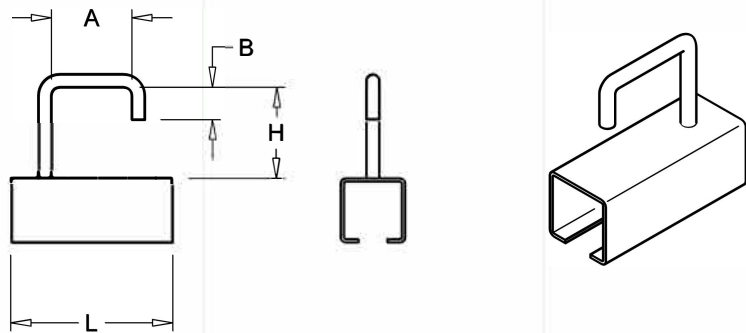
hotdip galvanized  
length L = 200 mm



**Suspension joint type 3**

Item Number 086

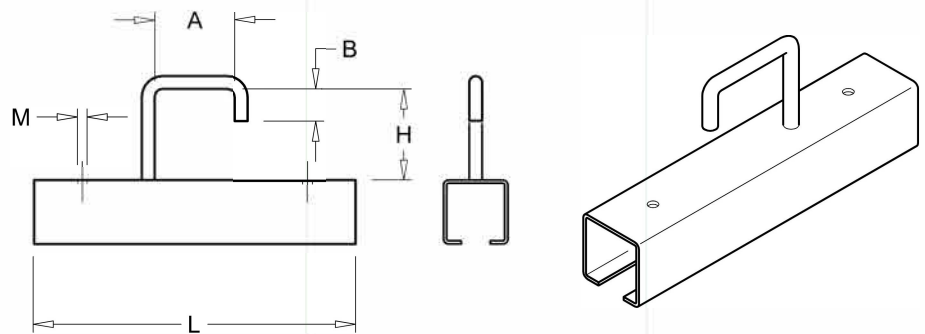
length L = 100 mm  
usable for armature trolley



**Suspension joint type 4**

Item Number 087

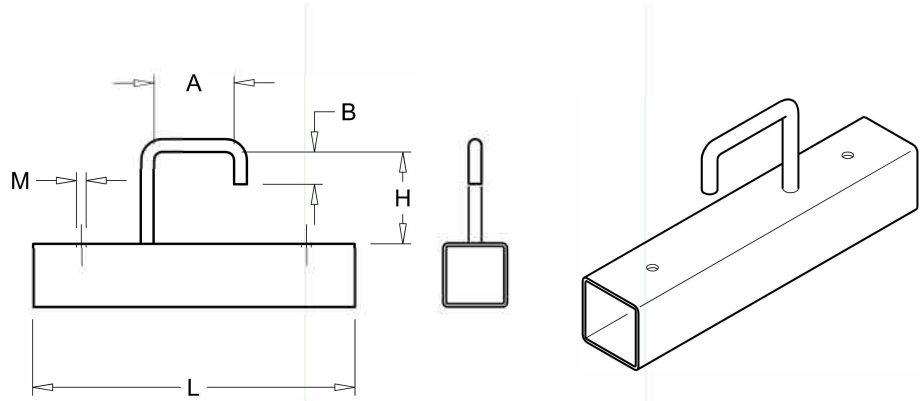
length L = 200 mm  
usable for armature trolley  
with or without thread



**Suspension joint type 5**

Item Number 088

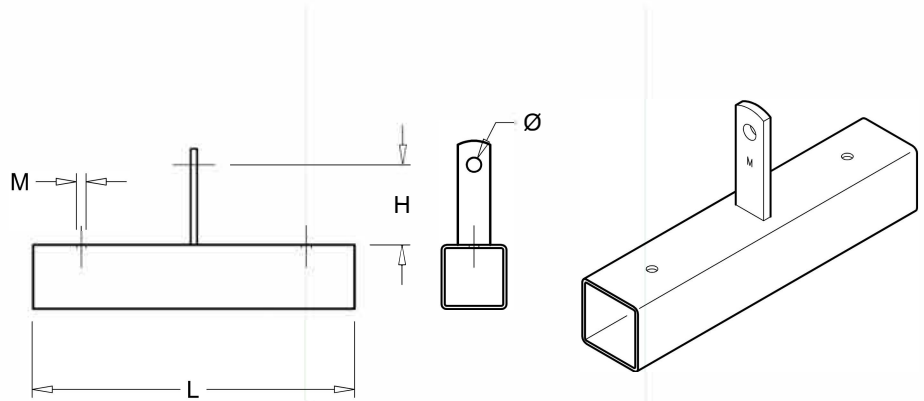
length L = 200 mm  
with or without thread



**Suspension joint type 6**

Item Number 089

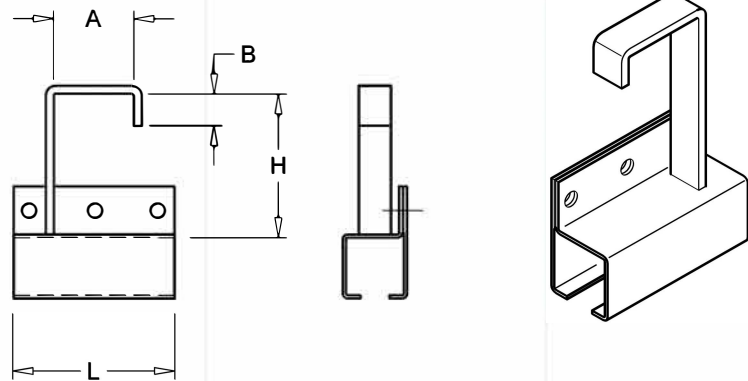
length L = 200 mm  
with or without thread



**Suspension joint type 7**

Item Number 515

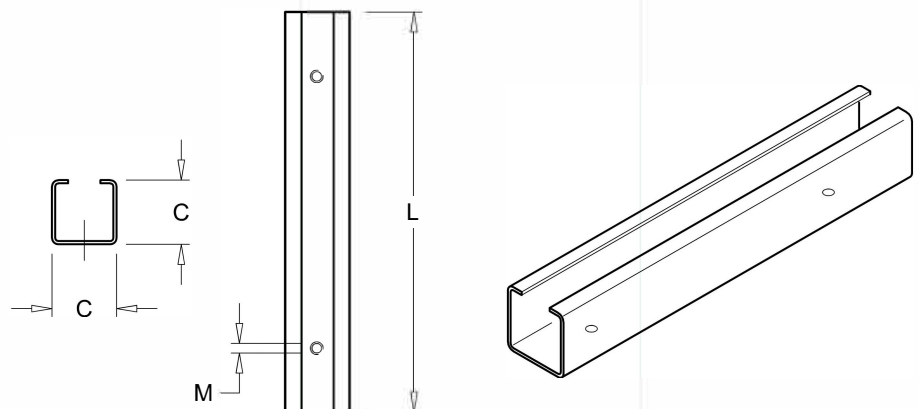
for C40 mm  
hotdip galvanized  
length 100 mm  
exclusive of bolts and nuts



**Joining**

Item Number 202

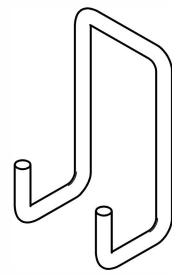
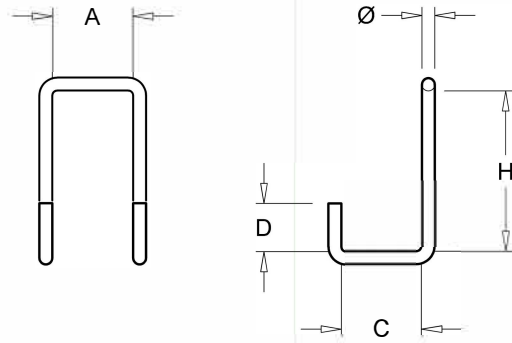
excess C-profile  
length L = 300 mm  
with or without mortiser



**Suspension bracket type 1**

Item Number 090

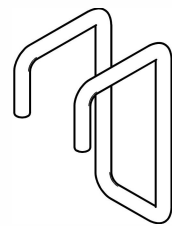
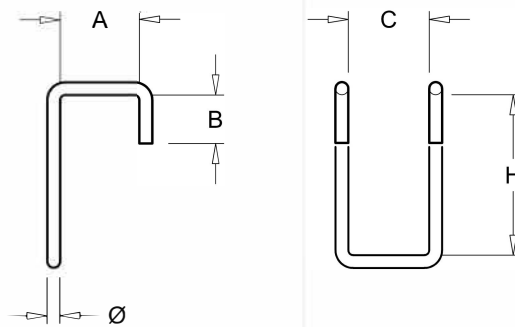
pre-galvanized  
 ø 6 or ø 8 mm



**Suspension bracket type 2**

Item Number 091

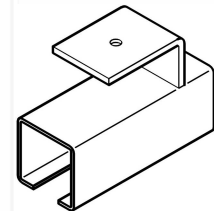
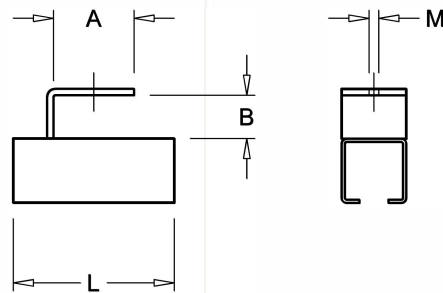
galvanized  
 ø 6 or ø 8 mm  
 custom made



**Suspension bracket type 3**

Item Number 092

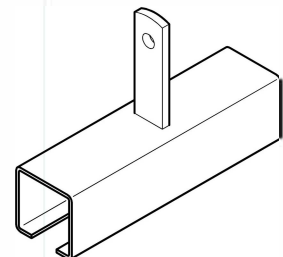
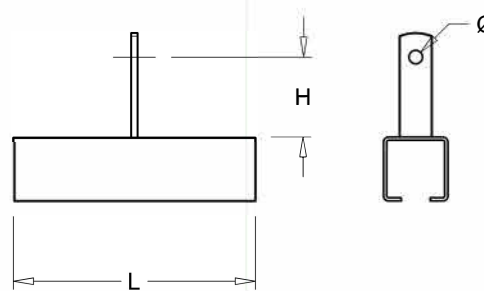
length L = 100 mm  
 usable for armature trolley



**Suspension bracket type 4**

Item Number 093

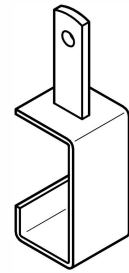
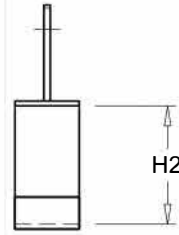
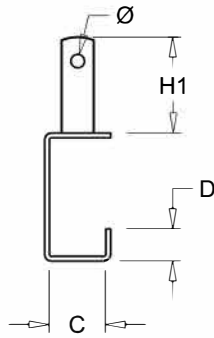
length L = 150 mm  
 usable for armature trolley



**Suspension bracket type 5**

Item Number 094

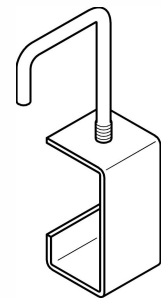
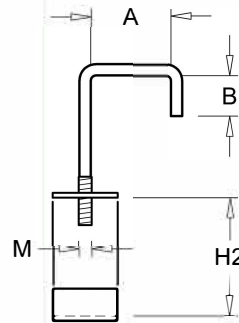
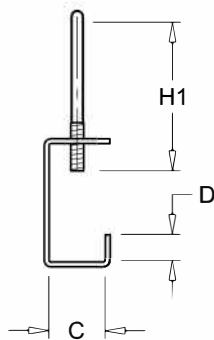
flat 40x3 or 100x3 mm  
height 200 mm



**Suspension bracket type 6**

Item Number 095

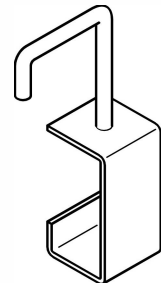
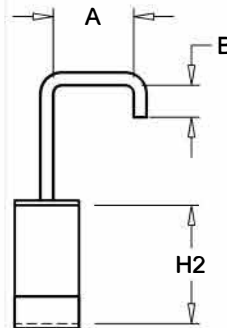
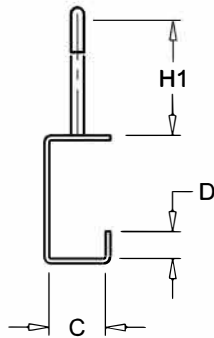
flat 40x3 or 100x3 mm  
total height app. 250 mm



**Suspension bracket type 7**

Item Number 096

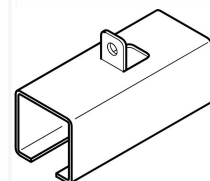
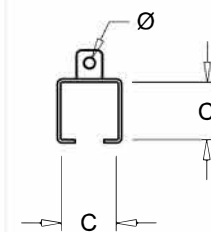
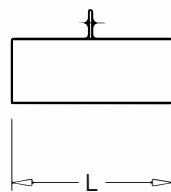
flat 40x3 or 100x3 mm  
total height app. 200 mm



**Suspension bracket type 8**

Item Number 098

for C30 or C35 mm  
pre-galvanized material  
length L = 100 mm  
usable for armature trolley

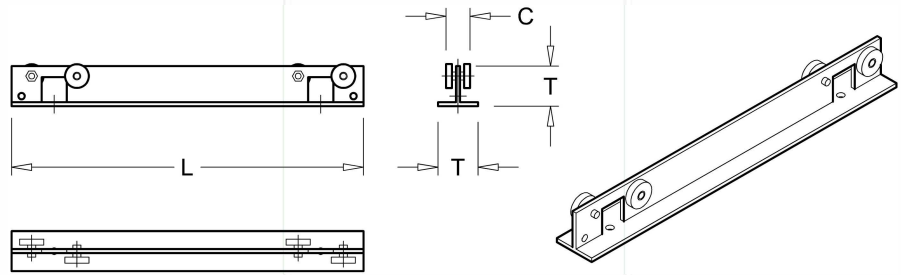




### armature trolley for ass. lamp standard type

Item Number 099

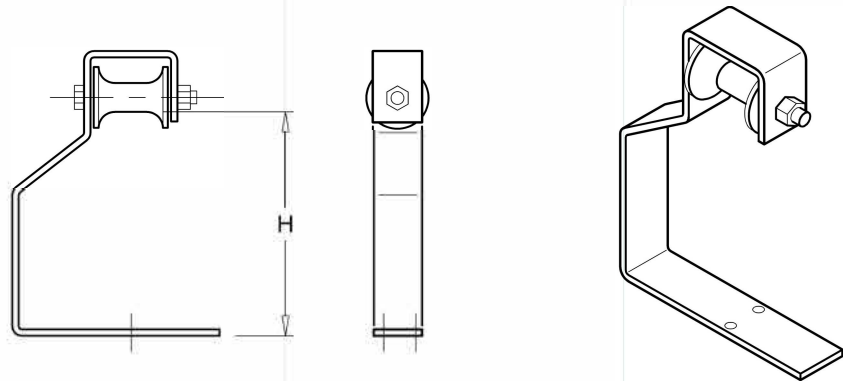
T40 aluminium  
synthetic bearings  
for C30, C35 or C40 mm  
length L = 300 mm  
provided with mounting holes



### armature trolley for pile lamp, for monorail

Item Number 517

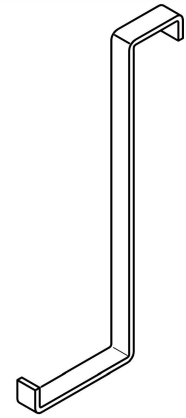
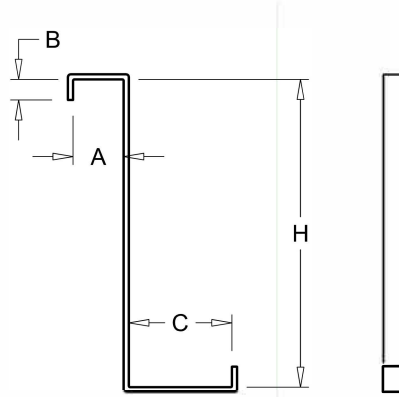
galvanized 30x4 mm  
synthetic diablo wheel



**cable gutter support  
bended truss fitting**

Item Number 144

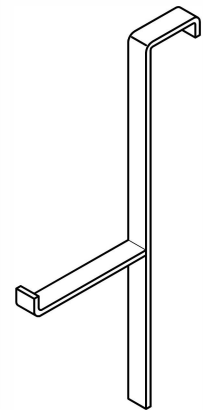
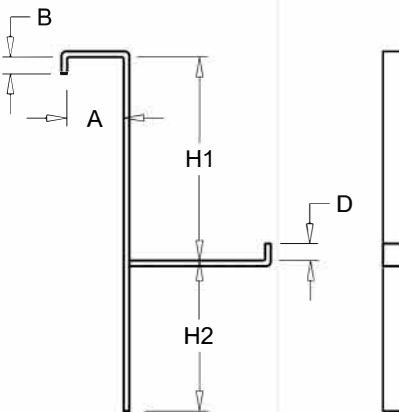
pre-galvanized material



**cable gutter support  
welded truss fitting**

Item Number 150

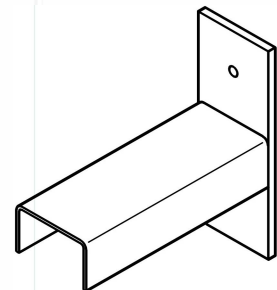
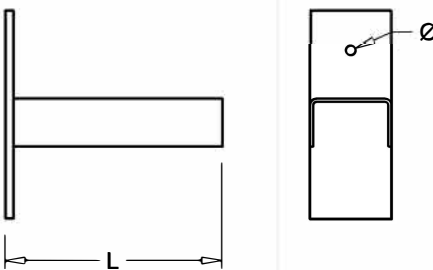
hotdip galvanized



**cable gutter support  
welded post fitting**

Item Number 145

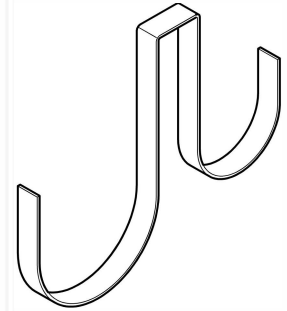
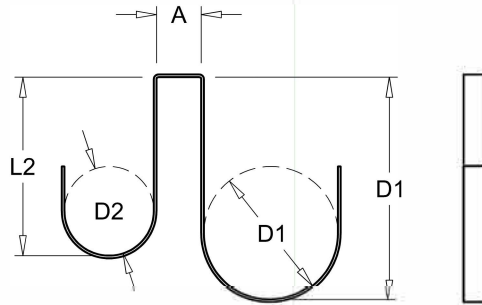
hotdip galvanized



**Rain pipe hook double model**

Item Number 002d

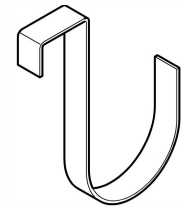
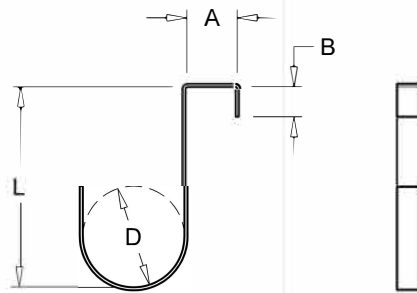
material 25x3  
pre-galvanized



**Rain pipe hook single model**

Item Number 002e

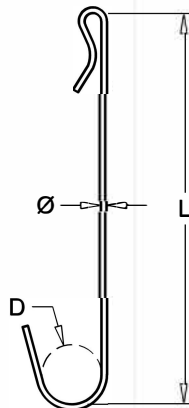
material 25x3  
pre-galvanized



**Rainwater pipe hook**

Item Number 157

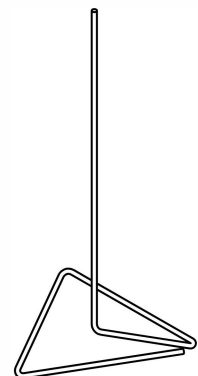
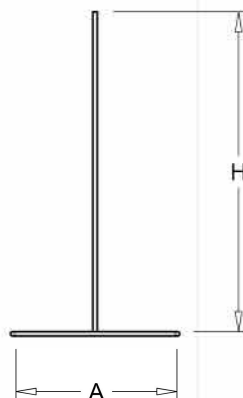
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**Sprayer support**

Item Number 889

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# METAALUNIE CONDITIONS

General delivery and payment conditions of Koninklijke Metaalunie (the Dutch organisation for small and medium-sized enterprises in the metal industry), referred to as 'the METAALUNIE CONDITIONS', formerly referred to as 'the SMECOMA CONDITIONS',

filed with the Court Registry in Rotterdam on 1 January 2008.

Published by Koninklijke Metaalunie, PO Box 2600, 3430 GA Nieuwegein, the Netherlands.

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## Article 1: Applicability

- 1.1. These Terms & Conditions apply to all tenders issued by members of Koninklijke Metaalunie, to all agreements concluded by those members and to all agreements that may result therefrom.
- 1.2. The tendering party/supplier is the Metaalunie member applying these Terms & Conditions, and is referred to as 'the Supplier'. The counterparty is referred to as 'the Client'.
- 1.3. In the event of any conflicts between the substance of the agreement concluded between the Client and the Supplier on the one hand and these Terms & Conditions on the other, the provisions set out in the agreement have precedence.
- 1.4. These Terms & Conditions may only be used by members of Koninklijke Metaalunie.

## Article 2: Tenders

- 2.1. No obligations are attached to any tenders.
- 2.2. If the Client supplies the Supplier with data, drawings etc., the Supplier may rely on their accuracy and shall base the tender on that information.
- 2.3. All prices specified in the tender are based on delivery ex works, in accordance with the Incoterms 2000. Prices are stated exclusive of VAT and packing materials.
- 2.4. If the tender is not accepted, the Supplier is entitled to charge the Client for all costs incurred in order to submit the tender.

## Article 3: Intellectual property rights

- 3.1. Unless agreed otherwise in writing, the Supplier retains the copyrights and all intellectual property rights to all tenders, designs submitted, illustrations, drawings, trial models, programs, etc.
- 3.2. The rights listed in Article 3.1 remain the property of the Supplier, regardless of whether costs have been charged to the Client for their production. The relevant information may not be copied, used or shown to third parties without the Supplier's explicit prior consent. The Client will be liable to pay the Supplier a penalty for each instance of violation of this provision, to the amount of €25,000. This penalty may be demanded in addition to any compensation damages awarded by law.
- 3.3. The Client must return all data provided as meant in Article 3.1 on demand, within the period specified by the Supplier. If this provision is violated, the Client is liable to pay the Supplier a penalty of €1,000 per day. This penalty may be demanded in addition to any compensation damages awarded by law.

## Article 4: Advice, designs and materials

- 4.1. The Client cannot derive any rights from advice or information provided by the Supplier that has no direct bearing on the engagement.
- 4.2. The Client is responsible for all drawings, calculations and designs made by or on behalf of the Client, and for the functional suitability of all materials prescribed by or on behalf of the Client.
- 4.3. The Client indemnifies the Supplier for any claims from third parties arising in connection with the use of the drawings, calculations, designs, materials, samples, models, etc. provided by or on behalf of the Client.
- 4.4. The Client may examine (or arrange for the examination of) the materials that the Supplier intends to use before they are processed, at the Client's own expense. Any damages incurred by the Supplier as a result are for the Client's expense.

## Article 5: Delivery times

- 5.1. The delivery deadline and/or work period stated by the Supplier are estimates.
- 5.2. In determining delivery deadlines and/or work periods, the Supplier assumes that the engagement can be carried out under the circumstances as they are known to the Supplier at that moment.
- 5.3. Delivery deadlines and/or work periods do not commence until the Parties have agreed on all commercial and technical details, all necessary data, final and approved drawings, etc. are in the Supplier's possession, the payment or instalment agreed has been received and the conditions necessary for the performance of the engagement have been met.
- 5.4. a. In the event of circumstances that are different to those known to the Supplier when the delivery deadline and/or work period were determined, the Supplier may extend the delivery deadline and/or work period by the time that is required in order to perform the engagement under those circumstances. If the work cannot be fitted into the Supplier's work schedule, it will be carried out as soon as the Supplier's schedule permits.  
b. In the event of contract extras, the delivery deadline and/or work period will be extended by the time required to supply (or arrange for the supply of) the materials and parts necessary for those contract extras and to carry out the contract extras. If the contract extras cannot be fitted into the Supplier's work schedule, they will be carried out as soon as the Supplier's schedule permits.  
c. In the event that the Supplier's obligations are suspended, the delivery deadline and/or work period will be extended by the duration that the obligations are suspended. If resumption of the work cannot be fitted into the Supplier's work schedule, the work will be carried out as soon as the Supplier's schedule permits.  
d. In the event of weather conditions that prevent work being carried out, the delivery deadline and/or work period will be extended by the resulting delay.
- 5.5. If the delivery deadline and/or work period agreed is exceeded, that circumstance does not in any instance entitle the Client to compensation for damages, unless agreed in writing.

## Article 6: Transfer of risk

- 6.1. Deliveries are made ex works, in accordance with the Incoterms 2000; the risks attached to the object are transferred at the moment that the Supplier makes the object available to the Client.
- 6.2. The provisions of Article 6.1 notwithstanding, the Client and the Supplier may agree that the Supplier will arrange transport. The risks attached to the storage, loading, transport and unloading remain with the Client in such instances. The Client may take out insurance to cover those risks.

- 6.3. In the event that objects are to be exchanged and the Client continues to use the exchangeable object whilst awaiting delivery of the new object, the risks attached to the exchangeable object remain with the Client until the moment that possession of the object has been relinquished to the Supplier.

## Article 7: Price changes

- 7.1. The Supplier may charge any increases in cost-determining factors that arise after the agreement is concluded to the Client if the performance of the agreement has not been completed at the moment of the increase.
- 7.2. The Client is obliged to pay the price increases as meant in Article 7.1 at the same time as the principal sum or the next instalment is paid.
- 7.3. If the Client provides goods and the Supplier is prepared to use those goods, the Supplier may charge up to 20% of the market price of the goods provided.

## Article 8: Impracticability of the engagement

- 8.1. The Supplier is entitled to suspend the fulfilment of any obligations if any circumstances that could not be foreseen when the agreement was concluded and that are beyond the Supplier's influence temporarily prevent the fulfilment of those obligations.
- 8.2. Circumstances that the Supplier could not foresee and that are beyond the Supplier's influence are understood to include (but are not limited to) the circumstance that the Supplier's own suppliers and/or subcontractors fail to meet their obligations, or fail to do so in time, the weather, earthquakes, fire, loss or theft of tools, the destruction of materials to be processed, road blocks, strikes or work stoppages and restrictions on import or trade.
- 8.3. The Supplier is no longer entitled to suspend the fulfilment of any obligations when the temporary impossibility of performance has lasted for more than six months. The agreement may not be dissolved until that term has lapsed, and only in respect of those obligations that have not been fulfilled. In that event, the Parties are not entitled to any compensation for damages incurred as a result of that dissolution.

## Article 9: Scope of the work

- 9.1. The Client is responsible for ensuring that all licences, permits, dispensations and other administrative decisions that are needed to carry out the work are obtained in time.
- 9.2. The price for the work does not include the following:
  - a. the costs of earthwork, pile driving, demolition, foundation work, cementing, carpentry, plastering, painting, wallpapering, repairs or other construction work;
  - b. the costs of connecting gas, water, electricity or other infrastructural facilities;
  - c. the costs of preventing or limiting damages to any objects situated on or near the work site;
  - d. the costs of disposing of materials, building materials or waste products;
  - e. hotel and travelling expenses.

## Article 10: Changes to the work

- 10.1. Any changes to the work will result in contract variations in at least the following instances:
  - a. if the design or the specifications change;
  - b. if the information provided by the Client does not match the actual situation;
  - c. in the event of deviation from estimated quantities by more than 10%.
- 10.2. Contract extras will be charged based on the value of the cost-determining factors as at the moment that the contract extra is performed. Contract deductions will be settled based on the value of the cost-determining factors as at the moment that the agreement was concluded.
- 10.3. If the value of the contract deductions exceeds that of the contract extras, the Supplier is entitled to charge the Client for 10% of the difference upon final settlement. This provision does not apply to any contract deductions based on requests from the Supplier.

## Article 11: Performance of the work

- 11.1. The Client is responsible for ensuring that the Supplier can carry out the activities without interruption and at the times agreed, and that the Supplier has access to the necessary facilities when carrying out the activities, such as:
  - gas, water and electricity;
  - heating;
  - lockable and dry storage space;
  - all facilities required by the laws and regulations governing working conditions.
- 11.2. The Client is liable for all damages, including those resulting from loss, theft, burning or harm, to objects belonging to the Supplier, the Client and/or any third parties, such as tools and materials intended for use in the work that are located on the site where the activities are carried out or at another agreed location.
- 11.3. If the Client fails to fulfil the obligations as set out in Article 11.1 and 11.2, and that failure causes delays in the performance of the activities, the activities will be carried out as soon as the Client has yet fulfils those obligations and when the Supplier's schedule permits. The Client is liable for all damages that the Supplier incurs as a result of the delay.

## Article 12: Completion of the work

- 12.1. The project will be deemed to have been completed when:
  - a. the Client has approved the work;
  - b. the Client has put the work into use. If the Client puts part of the work into use, that part will be deemed to have been completed;
  - c. the Supplier has notified the Client in writing that the work is finished and the Client has not communicated, within 14 days after that notification, whether or not the work has been approved;
  - d. the Client does not approve the work on grounds of minor defects or missing parts that can be repaired or provided within 30 days and that do not prevent the work from being put into use.
- 12.2. If the Client does not approve the work, the grounds on which the approval is withheld must be communicated to the Supplier in writing.
- 12.3. If the Client does not approve the work, the Supplier must be given another opportunity to complete the work. The provisions set out in this Article apply anew.

- 12.4. The Client indemnifies the Supplier against all claims from third parties for damages to parts of the work that have not yet been completed that are caused by use of parts of the work that have already been completed.

## Article 13: Liability

- 13.1. The Supplier is liable for all damages that the Client incurs that stem directly and exclusively from a shortcoming attributable to the Supplier. However, only those damages for which the Supplier is insured, or should within reason have been insured, qualify for compensation.
- 13.2. If, when the agreement is concluded, it is impossible for the Supplier to take out insurance as meant in Article 13.1, or impossible to do so at reasonable conditions, or if it is subsequently impossible to renew the insurance policy at reasonable conditions, the maximum compensation payable for damages is the amount that the Supplier charged for the agreement in question (exclusive of VAT).
- 13.3. The following damages do not qualify for compensation:
  - a. trading losses, including losses caused by delays and loss of profits. The Client should take out insurance to cover such damages, if such is deemed desirable;
  - b. supervision damages, which are understood to include damages caused, during or as a result of the performance of the work, to objects on which work is being carried out to objects situated in the vicinity of the work site. The Client should take out insurance to cover such damages, if such is deemed desirable;
  - c. damages caused by intent or gross negligence on the part of helpers or non-management employees of the Supplier.
- 13.4. The Supplier is not liable for damages to materials provided by or on behalf of the Client that result from improper processing. At the Client's request, the Supplier will repeat the process, using materials provided by the Client, at the Client's expense.
- 13.5. The Client indemnifies the Supplier against all claims from third parties for product liability stemming from defects in products provided by the Client to third parties that consisted of or included products and/or materials provided by the Supplier.

## Article 14: Guarantees

- 14.1. The Supplier guarantees the proper performance of the product or service stipulated for a period of six months after delivery or completion.
- 14.2. If the product or service stipulated consists of contract work, the Supplier guarantees the soundness of the construction delivered and the materials used, if the Supplier was at liberty to choose those materials, for the period specified in Article 14.1.

If the construction delivered and/or the materials used prove to be unsound, the Supplier will make the necessary repairs or replacement. Those parts that are to be repaired at the Supplier's place of business or are to be replaced by the Supplier must be sent to the Supplier carriage paid. Disassembly and assembly of those parts, plus any hotel and travelling expenses, are for the Client's account.

- 14.3. If the product or service stipulated (partly) consists of the processing of materials provided by the Client, the Supplier guarantees proper processing for the period specified in Article 14.1.

If any processing proves to have been performed improperly, the Supplier will do one of the following, at the Supplier's discretion:

- repeat the process, in which case the Client must provide new materials, at the Client's own expense;
  - repair the shortcoming, in which case the Client must return the materials to the Supplier carriage paid;
  - credit the Client for a proportionate part of the invoice.
- 14.4. If the product or service stipulated consists of the delivery of an object, the Supplier guarantees the soundness of the object delivered for the period specified in Article 14.1.

If the delivery proves to have been defective, the object must be returned to the Supplier carriage paid. The Supplier will then elect either:

- to repair the object;
- to replace the object;
- to credit the Client for a proportionate part of the invoice.

- 14.5. If the product or service stipulated (partly) consists of the fitting and/or assembling of a delivered object, the Supplier guarantees the soundness of the fitting and/or assembly for the period specified in Article 14.1.

If the fitting and/or assembly prove to be defective, the Supplier will repair the fault. Any hotel and travelling expenses are for the Client's account.

- 14.6. Factory guarantees apply to those parts for which the Client and the Supplier agree such explicitly and in writing. If the Client has had the opportunity to examine the substance of the factory guarantee, that factory guarantee will replace the guarantees specified in this Article.

- 14.7. In all situations, the Client must allow the Supplier the opportunity to repair any shortcomings and/or repeat the processing.

- 14.8. The Client may only invoke guarantees after all obligations in respect of the Supplier have been fulfilled.

- 14.9. a. No guarantee is given when defects are the result of:
  - normal wear and tear;
  - improper use;
  - lack of proper maintenance;
  - fitting, assembly, alterations or repairs by the Client or by third parties.
- b. No guarantee is given for delivered objects that were not new when they were delivered or for objects whose use the Client prescribed or that were provided by or on behalf of the Client.
- c. No guarantee is given on inspections of and/or repairs to objects belonging to the Client.

## Article 15: Complaints

The Client may not invoke defects in the product or service unless a written complaint has been submitted to the Supplier within fourteen days after the defect was detected or should, within reason, have been detected.

## Article 16: Failure to take delivery

In the event that the Client has not taken delivery of any object after the delivery deadline has passed, those objects will remain available to the Client. Any objects of which the Client has not taken delivery will be stored for the Client's account and risk. The Supplier may at any time invoke the powers granted by Article 6:90 of the Dutch Civil Code.

## Article 17: Payment

- 17.1. Payment must be made at the Supplier's place of business or to an account specified by the Supplier.

- 17.2. Unless agreed otherwise, payment must be made using one of the following methods:
  - a. for counter sales: cash;
  - b. for payment in instalments:
    - 40% of the total price when the engagement is granted;
    - 50% of the total price when the materials have been delivered or, if the engagement does not include delivery of the materials, upon commencement of the activities;
    - 10% of the total price upon completion;
  - c. in all other instances: within thirty days after the date on the invoice.

- 17.3. The payment conditions specified notwithstanding, the Client is obliged, at the Supplier's request, to provide security for payment, to the Client's satisfaction. Failure on the Client's part to provide such security for payment within the period specified will immediately constitute default. In that event, the Supplier is entitled to dissolve the agreement and recover any damages from the Client.

- 17.4. The Client's right to offset any claims on the Supplier is excluded, except in the event of the Supplier's bankruptcy or if judicial debt restructuring is applied in respect of the Supplier.

- 17.5. The full claim for payment is payable on demand in the following instances:
  - a. if any payment deadline has been exceeded;
  - b. if the Client has been declared bankrupt or requests suspension of payments;
  - c. if any of the Client's assets or claims are seized;
  - d. if the Client (if a company) is dissolved or wound up;
  - e. if the Client (if a natural person) makes a request for judicial debt restructuring, is placed under guardianship or dies.

- 17.6. If payment has not been made by the payment deadline specified, the Client is immediately liable to pay the Supplier interest. That interest is payable at a rate of 12% per year, or at the statutory rate if that is higher. For the purposes of calculating the interest, partial months are counted as full months.

- 17.7. If payment has not been made by the payment deadline specified, the Client is immediately liable to pay the Supplier all extrajudicial costs, to a minimum of €75.

The costs are calculated in accordance with the following table:

over the first €3,000	15%
over the excess up to €6,000	10%
over the excess up to €15,000	8%
over the excess from €15,000	5%
over the excess from €60,000	3%

If the actual extrajudicial costs exceed those based on this formula, the Client is liable to pay the actual costs.

- 17.8. If judicial proceedings are decided in the Supplier's favour, all costs incurred by the Supplier in connection with those proceedings are for the Client's account.

## Article 18: Retention of ownership and pledging

- 18.1. After delivery, the Supplier remains the owner of the objects delivered for as long as:
  - a. the Client fails or will fail in the fulfilment of the obligations stemming from this agreement or any similar agreements;
  - b. the Client fails or will fail to pay for any work performed or to be performed under such agreements;
  - c. the Client has not paid any claims arising from non-fulfilment of those agreements, such as compensation for damages, penalties, interest and costs.

- 18.2. As long as any objects are subject to retention of ownership, the Client may not encumber those objects in any way that exceeds the scope of the Client's ordinary activities.

- 18.3. Having invoked retention of ownership, the Supplier may retrieve the objects delivered. The Client must allow the Supplier to enter the place where those objects are located.

- 18.4. If the Supplier cannot invoke retention of ownership because the objects delivered have been subject to confusion, deformation or accession, the Client is obliged to give the newly formed objects in pledge to the Supplier.

## Article 19: Termination

If the Client wishes to dissolve the agreement without the Supplier having failed in the performance thereof and if the Supplier so agrees, the agreement will be terminated by mutual consent. In that event, the Supplier is entitled to reimbursement for all financial losses incurred, such as damages, loss of profits and costs.

## Article 20: Applicable law and competent court

- 20.1. These Terms & Conditions are governed by the laws of the Netherlands.
- 20.2. The Vienna Sales Convention (C.I.S.G.) does not apply to these Terms & Conditions, nor do any other international regulations whose exclusion is permitted.
- 20.3. Only the Dutch civil court within whose jurisdiction the Supplier's place of business is situated is competent to pass judgment on disputes, unless such is at odds with any mandatory rules of law. The Supplier is entitled to deviate from this jurisdiction clause and apply the statutory rules for jurisdiction.
- 20.4. The Parties may agree on another form of dispute settlement, such as arbitration or mediation.

These conditions are a full translation of the Dutch version of the 'METAALUNIEVOORWAARDEN' as deposited with the Registry of the District Court in Rotterdam on 1 January 2008. Explanation and interpretation of the text of these Conditions shall be based on the Dutch text.