



# Lindab **Roof Drainage System**

Lindab Rainline <sup>TM</sup>

Technical Information

# Dimensioning

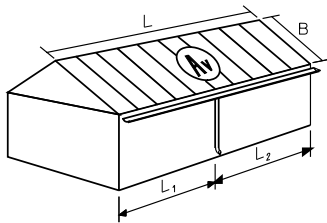
## Roof drainage

Dimensioning can be done according to Swedish Standard SS or the Advice and instructions for the code of practice, "Hus AMA, RA 08 Hus".

Dimensioning to SS gives smaller dimensions than if RA 08 Hus is used. This

is because RA 08 Hus has given some consideration to the tendency of gutters to fill up with sludge from leaves and loose material on roof cladding etc. SS compensates this by specifying a smallest fall for self-clearance of 5-7 mm/m, depend-

ing on dimensions. Diagrams and tables based on the dimensioning instructions in SS and Hus AMA are included below.



$A_v$  = True roof area

$L_1$  and  $L_2$  = Distance from building corner

### Example

Roof area  $L = 20$  m,  $B = 9$  m  $\rightarrow A_v = 180$  m<sup>2</sup>

A down pipe located 11.6 m from one end

$$\rightarrow \frac{L_1}{L_1 + L_2} = \frac{11.6}{20} = 0.58$$

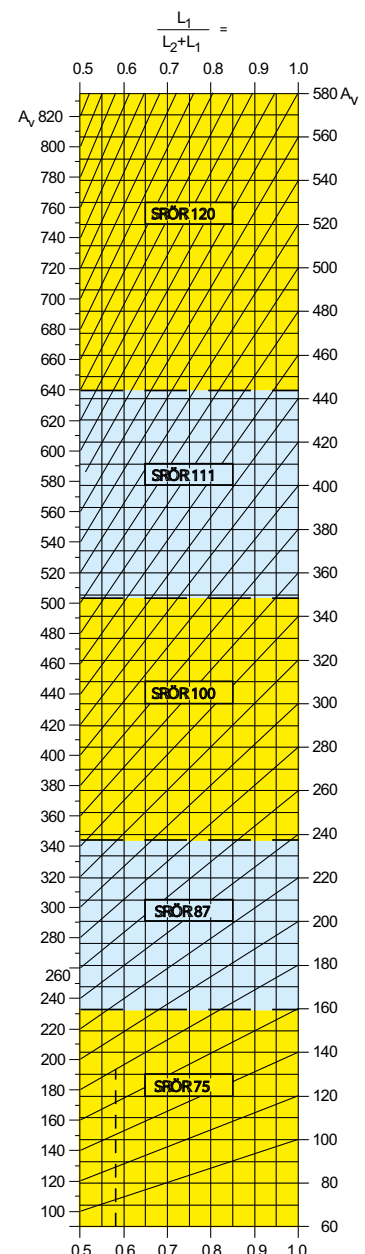
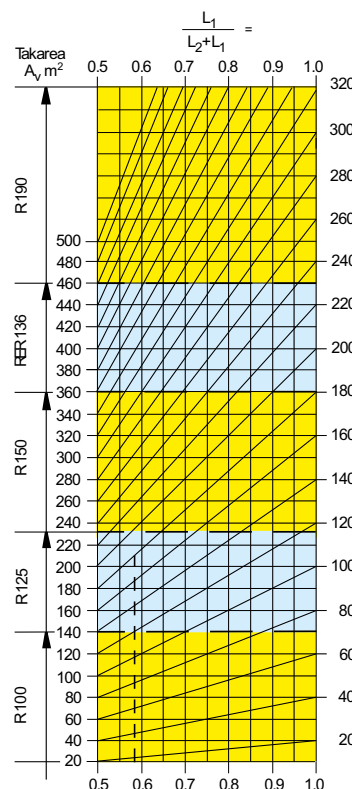
### Result

You can choose a half round gutter of R125 or larger.

The down pipe from the second diagram should then be SRÖR75.

## Dimensioning to SS

SS diagrams contain curves for various rain intensities. It approves the assumption that the probable rain intensity can be specified as 0.013 l/(sm<sup>2</sup>) on areas less than 10,000 m<sup>2</sup> for the whole country, which is what our diagram is based on. SS assumes that the gutter is laid with a smallest fall of 2.5 mm/m. Since SS does not cover our entire product range, the curves in SS have been extrapolated. It should be noted that the dimensioning instructions in SS can give a relationship between gutters and down pipes which does not correspond with the product standard for nozzles. This is because of traditional and appearance demands for size matching between gutters and down pipes.



# Technical Facts

## Rainline

### Colour chart

| Number | Name                | Nearest NCS | Nearest RAL |
|--------|---------------------|-------------|-------------|
| 001    | Antique white       | S 1002-G50Y | 9002        |
| 015    | Black               | S 9000-N    | 9011        |
| 035    | Graphite grey       | S 7502-B    | 7016        |
| 044    | Anthracite metallic | -           | 9007        |
| 044M   | Anthracite Matt     | S 6000-N    | 7037        |
| 045    | Silver metallic     | -           | 9006        |
| 087    | Dark grey           | S 7005-B20G | 7011        |
| 387    | Coffee brown        | S 8502-Y    | 8019        |
| 434    | Brown               | S 8005-Y80R | 8017        |
| 742    | Tile red            | S 4040-Y80R | 8004        |
| 758    | Dark red            | S 5040-Y80R | 3009        |
| 778    | Copper metallic     | -           | 8001        |

### Other material

|    |                |   |   |
|----|----------------|---|---|
| ZM | Zinc-magnesium | - | - |
| CU | Copper         | - | - |

# Technical Facts

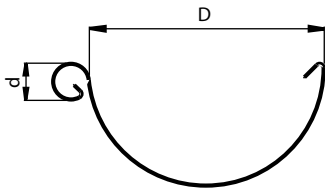
## Gutter with accessories

### R Gutter

| Dim | D<br>mm | d<br>mm | Area*<br>mm <sup>2</sup> | Area**<br>mm <sup>2</sup> |
|-----|---------|---------|--------------------------|---------------------------|
| 100 | 107     | 17      | 4500                     | 4100                      |
| 125 | 123     | 17      | 5900                     | 5500                      |
| 150 | 155     | 17      | 9400                     | 8900                      |
| 190 | 192     | 22      | 17300                    | 16200                     |

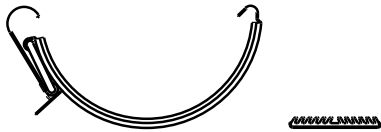
\* Sectional area

\*\* Water carrying area (6 mm lower front edge,190 gutter 11 mm)



### RSK Gutter joint

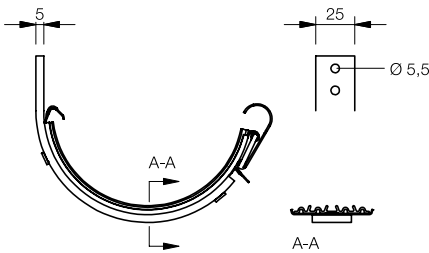
| Dim |
|-----|
| 100 |
| 125 |
| 150 |



### RSKR Bracket

| Dim |
|-----|
| 125 |
| 150 |

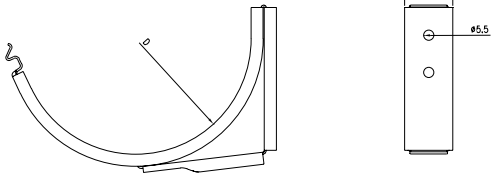
To SS-EN 1462 Class A-H



### KLK Adjustable bracket

| Dim |
|-----|
| 100 |
| 125 |
| 150 |

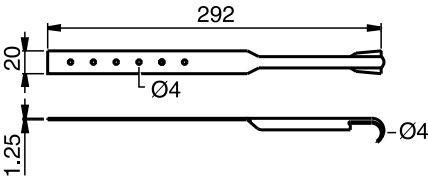
To SS-EN 1462 Class A-H



# Technical Facts

## Gutter with accessories

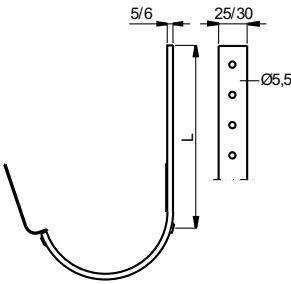
### STAG Stay strap



### K33/K24/K21/K16/K07 Bracket

| Dim | L mm |     |     |     |     |
|-----|------|-----|-----|-----|-----|
|     | K33  | K24 | K21 | K16 | K07 |
| 100 |      |     |     | 160 | 70  |
| 125 |      |     | 210 | 160 | 70  |
| 150 |      |     | 210 | 160 | 70  |
| 190 | 334  | 244 |     |     | 74  |

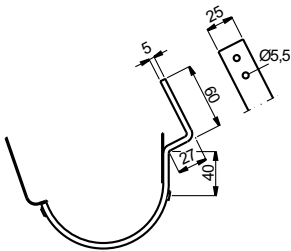
To SS-EN 1462 Class A-H



### K11 Bracket for 27° roof pitch

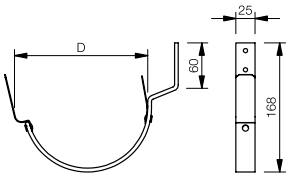
| Dim |  |
|-----|--|
| 100 |  |
| 125 |  |
| 150 |  |

To SS-EN 1462 Class A-H



### K11P 150 Bracket for Sandwich panels

| Dim |  |
|-----|--|
| 150 |  |



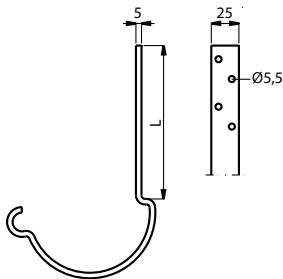
# Technical Facts

## Gutter with accessories

### KFL35/KFL/KFM Bracket

| Dim | L mm  |     |     |
|-----|-------|-----|-----|
|     | KFL35 | KFL | KFM |
| 100 |       | 196 |     |
| 125 | 336   | 196 | 146 |
| 150 | 336   | 196 | 146 |

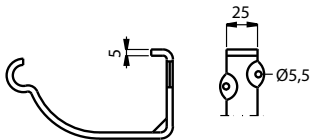
To SS-EN 1462 Class A-H



### KFK Fascia Bracket

| Dim |
|-----|
| 100 |
| 125 |
| 150 |

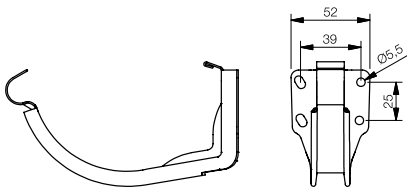
To SS-EN 1462 Class A-H



### KPK Thin Gauge Bracket

| Dim |
|-----|
| 125 |
| 150 |

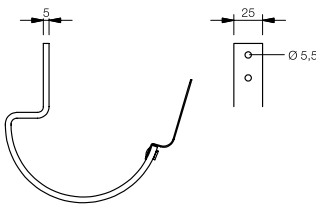
To SS-EN 1462 Class A-H



### KRD Bracket

| Dim |
|-----|
| 125 |

To SS-EN 1462 Class A-H



# Technical Facts

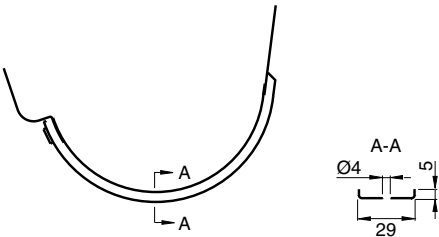
## Gutter with accessories

### KBO Bracket bender



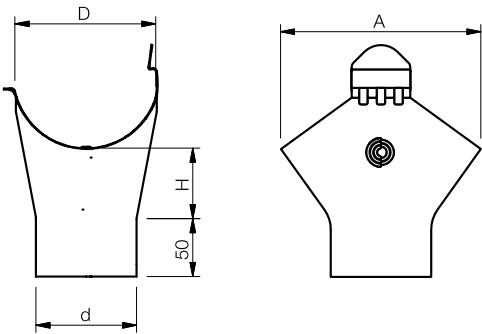
### TB Cover brace

| Dim |
|-----|
| 100 |
| 125 |
| 150 |



### OMV Gutter outlet

| Dim<br>D/d | A<br>mm | H<br>mm |
|------------|---------|---------|
| 100/75     | 156     | 56      |
| 100/87     | 156     | 48      |
| 125/75     | 174     | 67      |
| 125/87     | 174     | 59      |
| 125/100    | 174     | 50      |
| 150/87     | 212     | 82      |
| 150/100    | 212     | 73      |
| 150/111    | 212     | 66      |
| 150/120    | 212     | 60      |
| 190/100    | 180     | 62      |
| 190/120    | 206     | 62      |

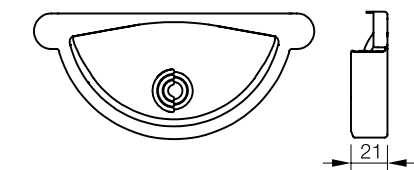


# Technical Facts

## Gutter with accessories

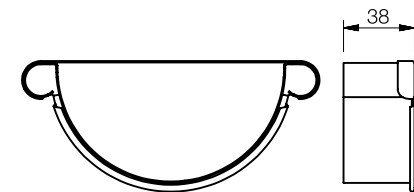
### RG Stop end

| Dim |
|-----|
| 100 |
| 125 |
| 150 |



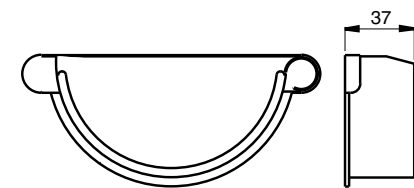
### RGU Stop end

| Dim |
|-----|
| 100 |
| 125 |
| 150 |



### RGV/RGH Stop end

| Dim          |
|--------------|
| 100 outgoing |
| 125 outgoing |
| 150 outgoing |
| 190          |



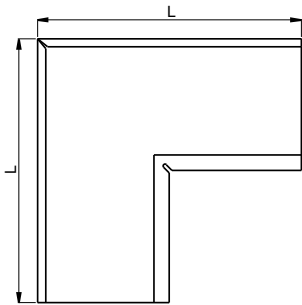


# Technical Facts

## Gutter with accessories

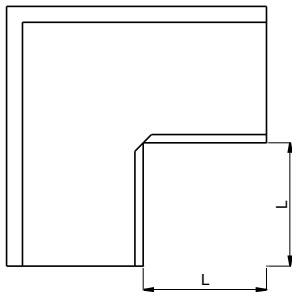
### RVI Gutter angle, inner

| Dim | L mm |
|-----|------|
| 100 | 400  |
| 125 | 300  |
| 150 | 300  |
| 190 | 500  |



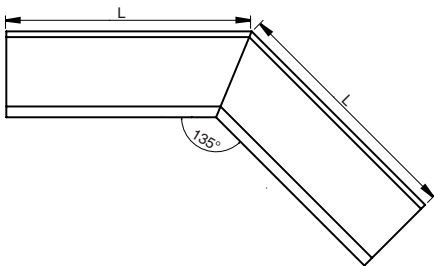
### RVY Gutter angle, outer

| Dim | L mm |
|-----|------|
| 100 | 295  |
| 125 | 160  |
| 150 | 130  |
| 190 | 285  |



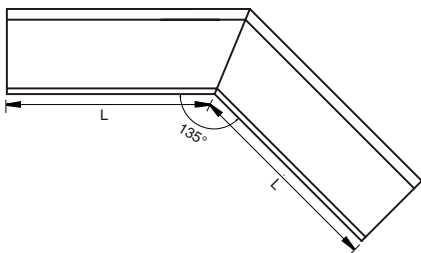
### RVI135 Gutter angle 135°, inner

| Dim | L mm |
|-----|------|
| 100 | 300  |
| 125 | 300  |
| 150 | 300  |



### RVY135 Gutter angle 135°, outer

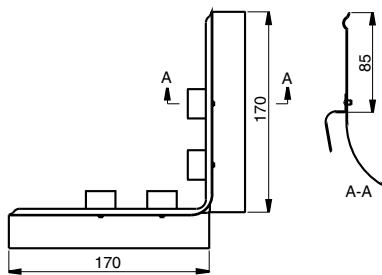
| Dim | L mm |
|-----|------|
| 100 | 250  |
| 125 | 240  |
| 150 | 230  |



# Technical Facts

## Gutter with accessories

### ÖSK Overflow protection

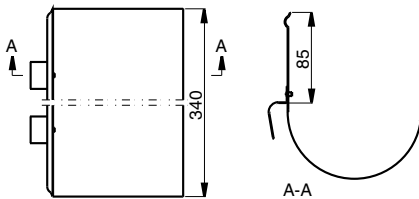


### ÖSKR Overflow protection, straight

Dim

125

150



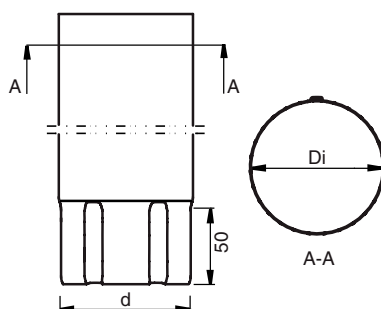
# Technical Facts

## Downpipe with accessories

### SRÖR Down pipe

| Dim  | Area            |
|------|-----------------|
| Di/d | mm <sup>2</sup> |
| 75   | 4400            |
| 87   | 5900            |
| 100  | 7800            |
| 111  | 9700            |
| 120  | 11300           |

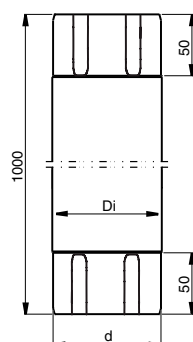
To SS-EN 612 Class A-X



### MST Intermediate pipe

| Dim |
|-----|
| 75  |
| 87  |
| 100 |
| 111 |
| 120 |

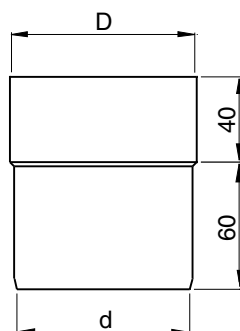
Cuts into suitable pieces



### SRORM Pipe connector

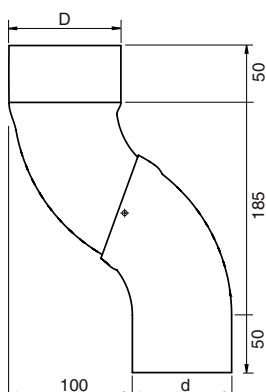
| Dim |
|-----|
| D/d |
| 75  |
| 87  |
| 100 |

SRORM fits both inside and outside the downpipe.



### SOKN One piece bend

| Dim |
|-----|
| D/d |
| 75  |
| 87  |
| 100 |

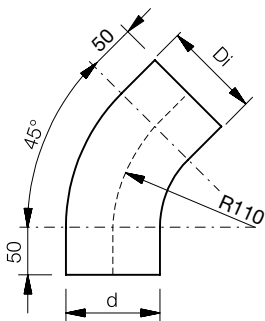


# Technical Facts

## Downpipe with accessories

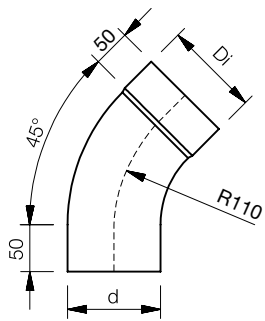
### BK45 Bends 45°

| Dim  |
|------|
| Di/d |
| 75   |
| 87   |
| 100  |
| 111  |
| 120  |



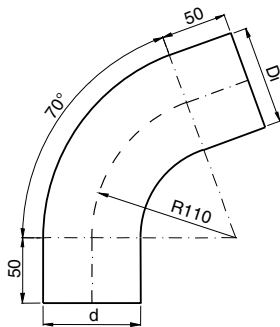
### BM45 Bends 45°

| Dim |
|-----|
| D/d |
| 75  |
| 87  |
| 100 |
| 111 |
| 120 |



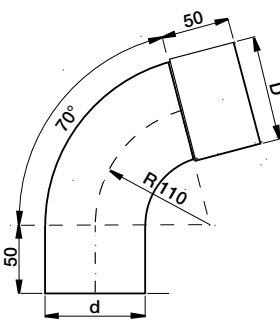
### BK70 Bends 70°

| Dim  |
|------|
| Di/d |
| 75   |
| 87   |
| 100  |
| 111  |
| 120  |



### BM70 Bends 70°

| Dim |
|-----|
| D/d |
| 75  |
| 87  |
| 100 |
| 111 |
| 120 |

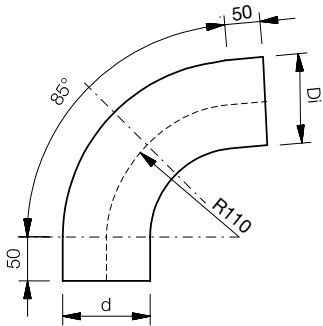


# Technical Facts

## Downpipe with accessories

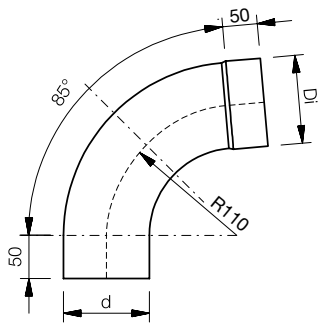
### BK85 Bends 85°

| Dim  |
|------|
| Di/d |
| 75   |
| 87   |
| 100  |
| 111  |
| 120  |



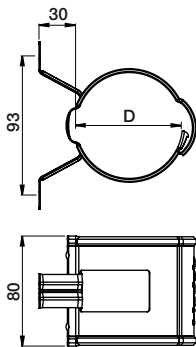
### BM85 Bends 85°

| Dim |
|-----|
| D/d |
| 75  |
| 87  |
| 100 |
| 111 |
| 120 |



### SSVU Pipe holder

| Dim |
|-----|
| D   |
| 75  |
| 87  |
| 100 |
| 111 |
| 120 |

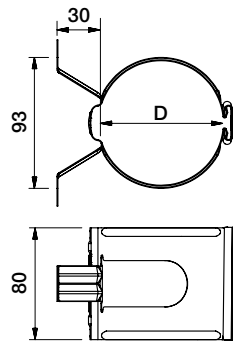


With wedge locking in aluminium-zinc design.



### SVHA Pipe holder

| Dim |
|-----|
| D   |
| 75  |
| 87  |
| 100 |
| 111 |
| 120 |

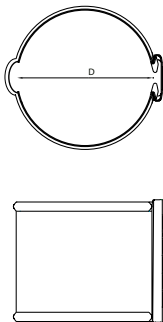


# Technical Facts

## Downpipe with accessories

### SV Pipe holder with spike

| Dim<br>D |
|----------|
| 75       |
| 87       |
| 100      |
| 111      |
| 120      |



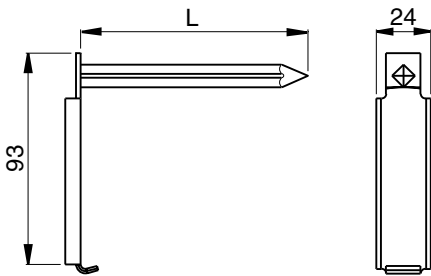
### SSC Screw kit

| Distance<br>from wall (mm) | Plug | Holder | Distances |
|----------------------------|------|--------|-----------|
| 25                         | 1    | 1      | –         |
| 55                         | 1    | 1      | 1         |
| 85                         | 1    | 1      | 2         |
| 115                        | 1    | 1      | 3         |



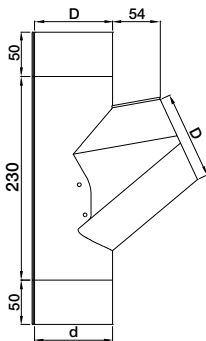
### SST Spike

| L<br>mm |
|---------|
| 125     |
| 175     |
| 250     |
| 300     |



### GRÖR Adjustable branch

| Dim |
|-----|
| 75  |
| 87  |
| 100 |
| 111 |
| 120 |

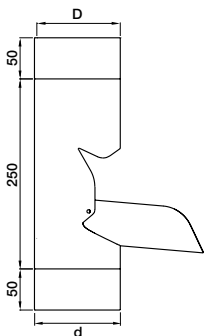


# Technical Facts

## Downpipe with accessories

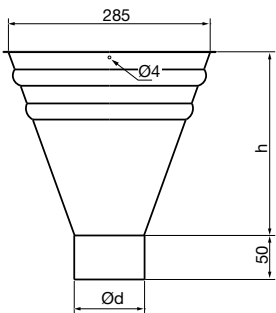
### FUTK Adjustable shoe

| Dim |  |
|-----|--|
| 75  |  |
| 87  |  |
| 100 |  |



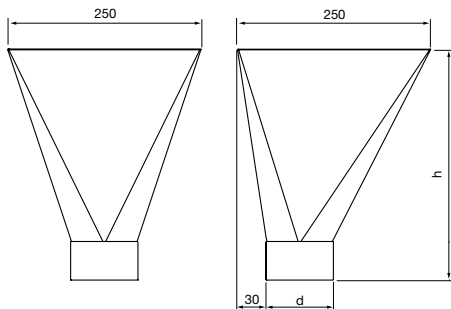
### VATK Hopper

| Dim | h   |
|-----|-----|
| 87  | 270 |
| 100 | 253 |
| 111 | 239 |
| 120 | 227 |



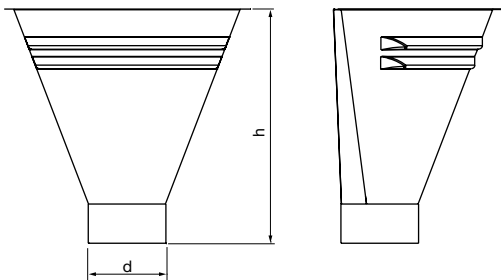
### VATKL Square hopper

| Dim | h   |
|-----|-----|
| 75  | 305 |
| 87  | 230 |
| 100 | 200 |



### VATKS Halfround hopper

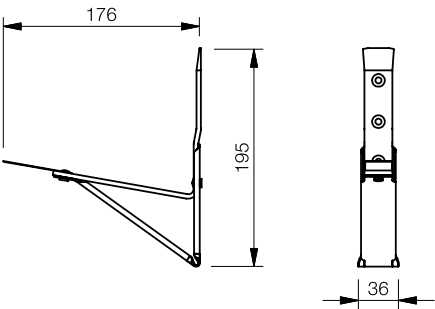
| Dim | h   |
|-----|-----|
| 87  | 270 |
| 100 | 253 |



# Technical Facts

## Downpipe with accessories

### FRK Gutter hook

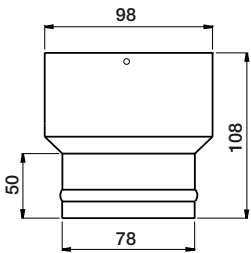


### SLAS

Connector for 80 mm hose.

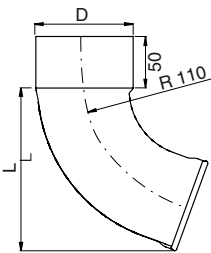
Dim

87



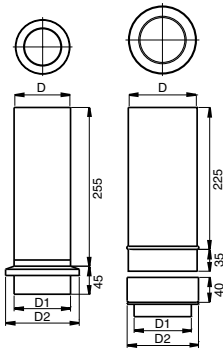
### UTK Shoe

| Dim | L<br>mm |
|-----|---------|
| 75  | 151     |
| 87  | 157     |
| 100 | 113     |
| 111 | 169     |
| 120 | 173     |



### BUTK Drain shoe

| Dim | D1<br>mm | D2<br>mm |
|-----|----------|----------|
| 75  | 81       | 115      |
| 87  | 93       | 115      |
| 100 | 93       | 115      |
| 111 | 93       | 119      |
| 120 | 93       | 125      |



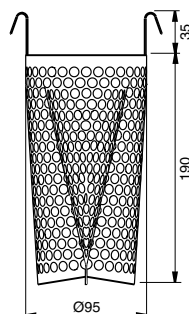


# Technical Facts

## Downpipe with accessories

### DVSIL Leaf filter

Stainless steel.



### PRT Sliding pipe

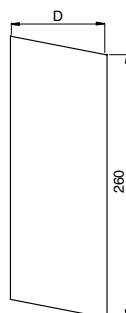
Dim

75

87

100

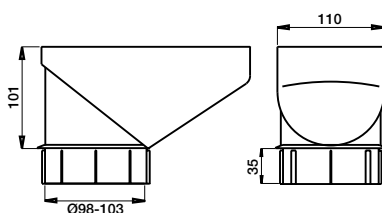
111



The sliding pipe fits outside the down pipe.

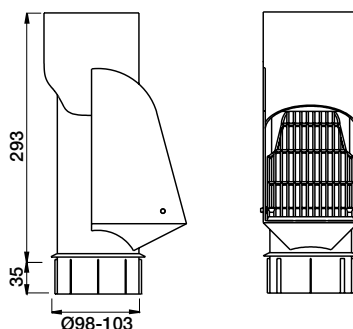
### RT Drain trap (HD polythene)

Leaf filter in HD polythene for down pipes.  
The lower section fits standard ground pipes/junction pipes.



### SLS Self cleaning leaf trap

Self cleaning leaf filter in HD polythene for down pipes. The lower section fits standard ground pipes.

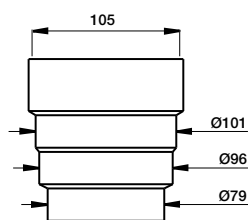


# Technical Facts

## Downpipe with accessories

### MRT Drain connector

Connector for HD polythene filters.  
For connection to ground pipes  
with dimensions other than standard.



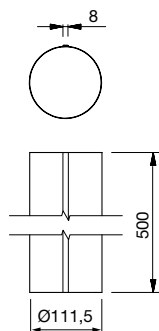
### IMR Lining of the cursor

Dim

75

87

100



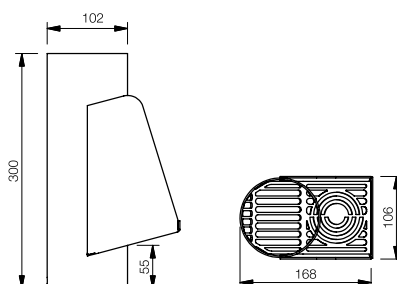
# Technical Facts

## Reinforced downpipe with accessories

### Vandal 300 SLS

300 mm reinforced downpipe with self-cleaning leaf filter.

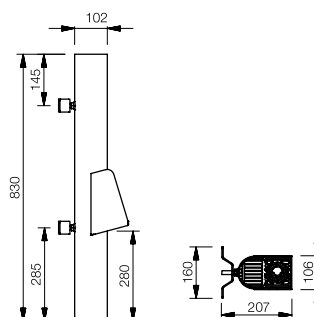
|                   | Steel | Stainless |
|-------------------|-------|-----------|
| Outer dim. (Ø mm) | 101.6 | 101.6     |
| Thickness         | 2.0   | 1.5       |
| Weight (kg)       | 2.1   | 1.8       |



### Vandal 850 SLS

830 mm reinforced downpipe with self-cleaning leaf filter for buildings with plinth.

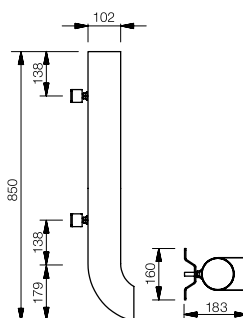
|                   | Steel | Stainless |
|-------------------|-------|-----------|
| Outer dim. (Ø mm) | 101.6 | 101.6     |
| Thickness         | 2.0   | 1.5       |
| Weight (kg)       | 5.3   | 4.1       |



### Vandal 850 UTK

850 mm reinforced downpipe with shoe.

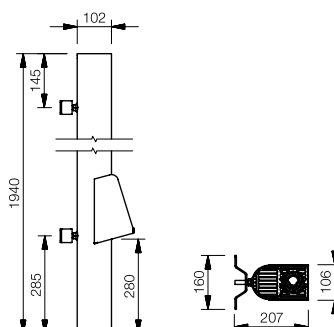
|                   | Steel | Stainless |
|-------------------|-------|-----------|
| Outer dim. (Ø mm) | 101.6 | 101.6     |
| Thickness         | 2.0   | 1.5       |
| Weight (kg)       | 5.3   | 4.0       |



### Vandal 2000 SLS

2 m reinforced downpipe with self-cleaning leaf filter at the bottom.

|                   | Steel | Stainless |
|-------------------|-------|-----------|
| Outer dim. (Ø mm) | 101.6 | 101.6     |
| Thickness         | 2.0   | 1.5       |
| Weight (kg)       | 10.9  | 8.5       |



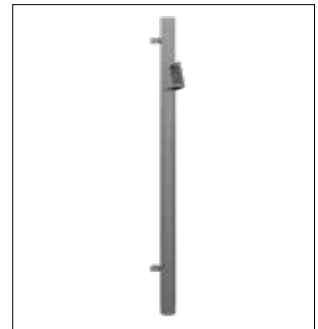
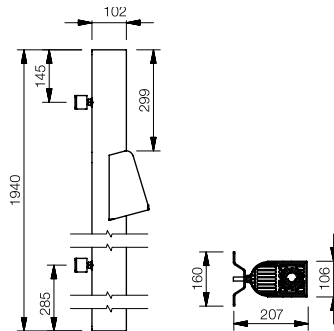
# Technical Facts

## Reinforced downpipe with accessories

### Vandal 2000 SLST

2 m reinforced downpipe with self-cleaning leaf filter on top. Excellent for use in kindergarten and junior school environments.

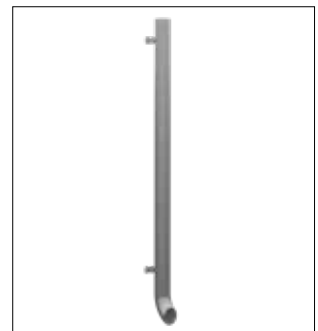
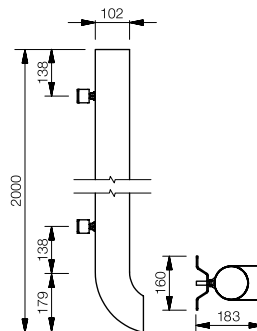
|                   | Steel | Stainless |
|-------------------|-------|-----------|
| Outer dim. (Ø mm) | 101.6 | 101.6     |
| Thickness         | 2.0   | 1.5       |
| Weight (kg)       | 10.9  | 8.5       |



### Vandal 2000 UTK

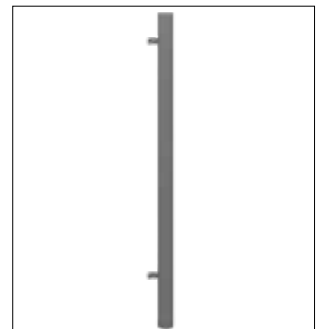
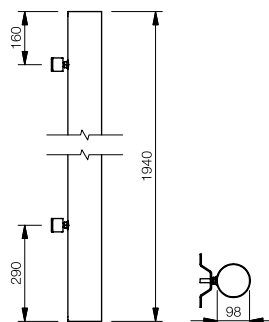
2 m reinforced downpipe with shoe.

|                   | Steel | Stainless |
|-------------------|-------|-----------|
| Outer dim. (Ø mm) | 101.6 | 101.6     |
| Thickness         | 2.0   | 1.5       |
| Weight (kg)       | 11.8  | 8.0       |



### Vandal 2000 STD

|                   | Steel | Stainless |
|-------------------|-------|-----------|
| Outer dim. (Ø mm) | 101.6 | 101.6     |
| Thickness         | 2.0   | 1.5       |
| Weight (kg)       | 10.5  | 8.2       |



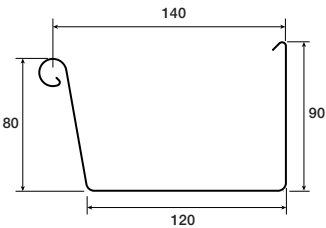
# Technical Facts

## Rectangular gutter with accessories

### RTRA Gutter

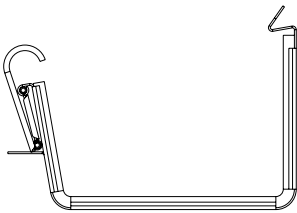
| Dim | Area*<br>mm <sup>2</sup> |
|-----|--------------------------|
| 140 | 10400                    |

\* Water carrying area.



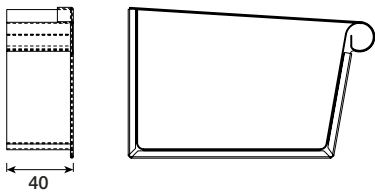
### RTSK Gutter joint

| Dim |
|-----|
| 140 |



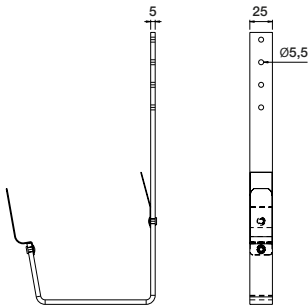
### RTGV/RTGH Stop end

| Dim |
|-----|
| 140 |



### RTK07/RTK21 Bracket

| Dim | L mm  |       |
|-----|-------|-------|
|     | RTK07 | RTK21 |
| 140 | 70    | 210   |

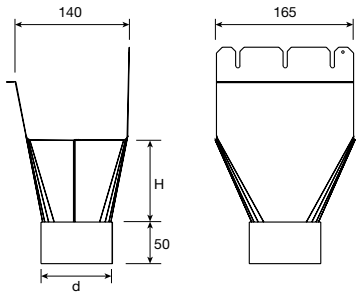


# Technical Facts

## Rectangular gutter with accessories

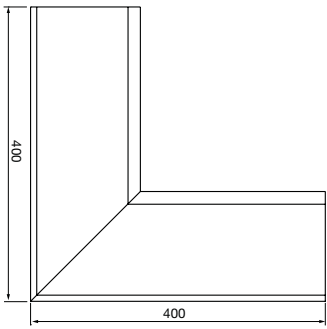
### RTOK Nozzle

| Dim     | H  |
|---------|----|
| D/d     | mm |
| 140/87  | 95 |
| 140/100 | 85 |
| 140/111 | 75 |



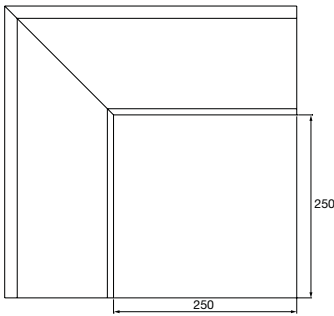
### RTVI Gutter angle, inner

| Dim |
|-----|
| 140 |



### RTVY Gutter angle, outer

| Dim |
|-----|
| 140 |



# Technical Facts

## Accessories

### **STIFT Touch up paint**

Touch up paint to fix the small scratch or to cover up cut ends, with application brush.





## Good Thinking

**At Lindab**, good thinking is a philosophy that guides us in everything we do. We have made it our mission to create a healthy indoor climate – and to simplify the construction of sustainable buildings. We do that by designing innovative products and solutions that are easy to use, as well as offering efficient availability and logistics. We are also working on ways to reduce our impact on our environment and climate. We do that by developing methods to produce our solutions using a minimum of energy and natural resources, and by reducing negative effects on the environment. We use steel in our products. It's one of few materials that can be recycled an infinite number of times without losing any of its properties. That means less carbon emissions in nature and less energy wasted.

**We simplify construction**

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