



lindab | we simplify construction



# Lindab Vihmaveesüsteem

Lindab Rainline™

Tehniline info



# Dimensioneerimine

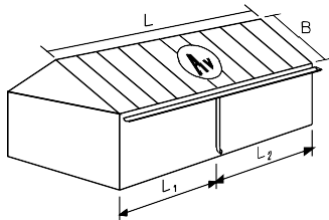
## Vihmaveesüsteem

Dimensioneerimist saab teha vastavalt Rootsi standardile SS või Advice and instructions for the code of practice, "Hus AMA, RA 08 Hus".

Dimensioneerimine vastavalt SS -le annab väiksemad dimensioonid kui RA 08 Hus. Seda seetõttu et RA 08 Hus

võtab arvesse et rennidesse võib tekkida muda lehtedest, lahtist materjali katusekattelt jne. SS kompenseerib seda määrates väikseimaks kaldeks isepuhastuse jaoks 5-7 mm/m, sõltuvalt renni suurusest.

Allpool on toodud diagrammid ja tabelid mis põhinevad SS ja Hus AMA dimensioneerimise juhistele.



$A_v$  = katuse pindala  
 $L_1$  ja  $L_2$  = vahemaa hoone nurgast

### Näide

Katuse pikkus  $L = 20$  m,  $B = 9$  m  $\rightarrow A_v = 180$  m<sup>2</sup> Toru asub 11.6 m kaugusel ühest otsast

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

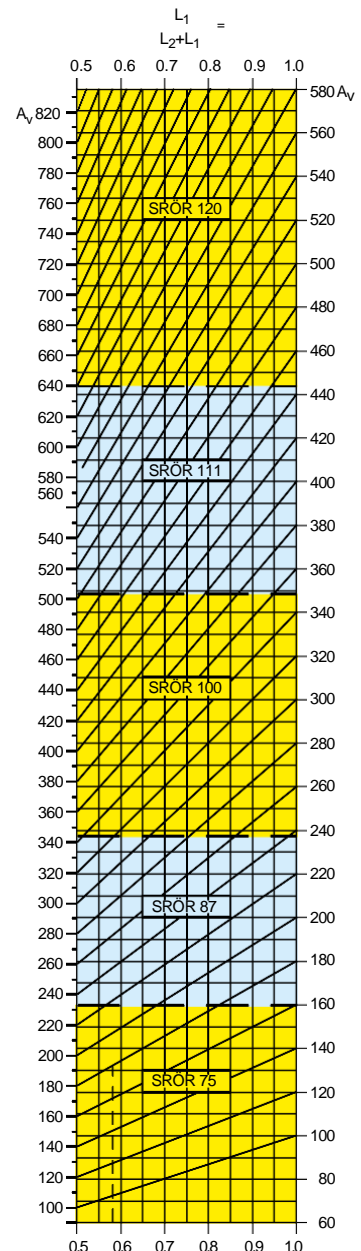
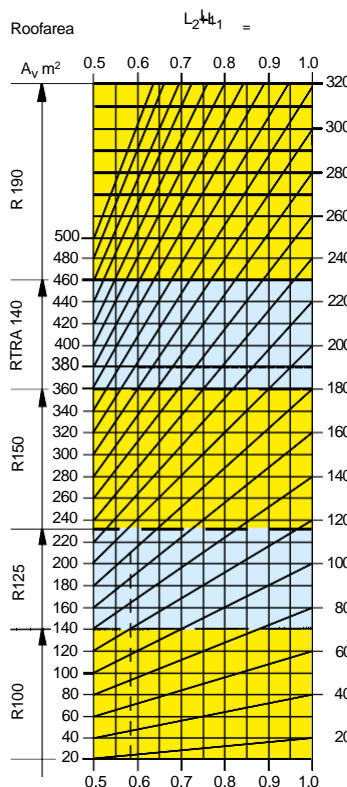
### Tulemus

Võid kasutada renni läbimõõduga R125 või suurem.

Toru teiselt diagrammil peaks siis olema SRÖR75.

## Dimensioneerimine vastavalt SS-le

SS diagrammid sisaldavad erinevate vihmateguuste kõveraid. See põhineb eeldusel et alla 10 000 m<sup>2</sup> pindaladel saab kogu riigi kohta määrata tõenäoliseks sademete intensiivsuseks 0.013 l / (sm<sup>2</sup>), millel meie diagramm põhineb. SS eeldab et renn on paigaldatud väikseima langusega 2.5 mm/m. Kuna SS ei hõlma kogu meie tootevalikut, on SS-i kõverad ekstrapoleeritud. Tuleb märkida et SS-i dimensioneerimisjuhised võivad anda rennide ja vihmaveetorude vahel seose, mis ei vasta renni allaviikude tootestandarditele. Selle põhjuseks on traditsioonilised ja välja nõuded vihmaveerennide ja -torude suuruse sobitamiseks.



# Tehnilised faktid

## Rainline\*

### Värvikaart

Number	Nimetus	Lähim NCS	Lähim RAL
001	Antiikvalge	S 1002-G50Y	9002
015	Must	S 9000-N	9011
015	Must-matt	S 9000-N	9011
035	Grafiithall	S 7502-B	7016
035M	Grafiithall-matt	S 7502-B	7016
044	Antratsiitmetallik	-	9007
045	Höbemetallik	-	9006
087	Tumehall	S 7005-B20G	7043
387	Kohvipruun	S 8502-Y	8019
434	Pruun	S 7010-Y70R	8017
434M	Pruun-matt	S 7010-Y70R	8017
742	Kivipunane	S 4040-Y80R	8004
758	Tumepunane	S 5040-Y80R	3009



*Raske valida?* Lindab Rainline RAL annab sulle võimaluse valida oma uus vihmaveesüsteem 160 erineva RAL värvitooni hulgast. Rohkema info saamiseks pöördu Lindab'i esinduse poole.

Kõik Lindabi pinnakattega vihmaveesüsteemi tooted on kaetud tsingikihiga 275 g/m<sup>2</sup>.

### Alumiinium

Number	Nimetus	Lähim NCS	Lähim RAL
001	Antiikvalge	S 1002-G50Y	9002
015	Must	S 9000-N	9011
035	Grafiithall	S 7502-B	7016
045	Höbe-matt	-	9006

### Muu materjal

ALUZ	Alumiinium-tsink	-	-
ZM	Tsink-magneesium	-	-
CU	Vask	-	-

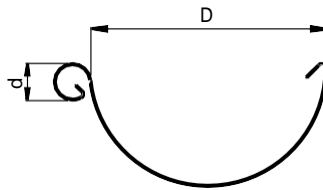
\* Kõik värvitoonid ei ole saadaval kõikides suurustes ja kombinatsioonides.

# Tehnilised faktid

## Rennidetailid

### R renn

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



\* Läbilõike pindala

\*\* Vett kandev ala (6 mm madalam esiserv, 190 rennil 11 mm)

### RSK renniühendus

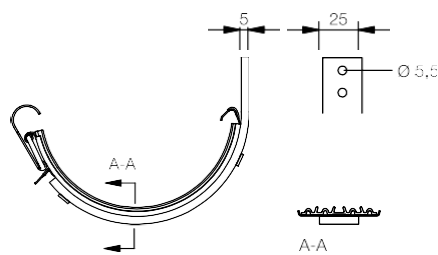
Dim
100
125
150



### RSKR renniühendus

Dim
125
150

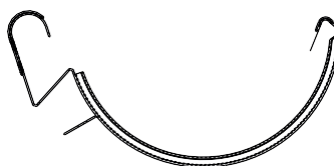
To SS-EN 1462 Class A-H



### ARSK renniühendus alumiinium

Dim
125
150

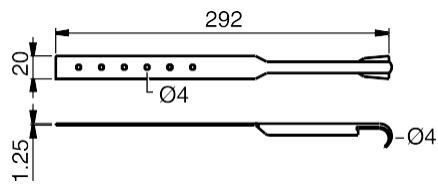
To SS-EN 1462 Class A-H



# Tehnilised faktid

## Rennidetailid

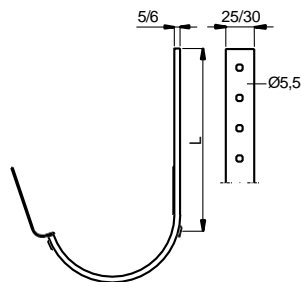
### STAG renni lisatugi



### K33/K24/K18/K07 kandur

Dim	L mm			
	K33	K24	K18	K07
100			180	70
125			180	70
150			180	70
190	334	244		74

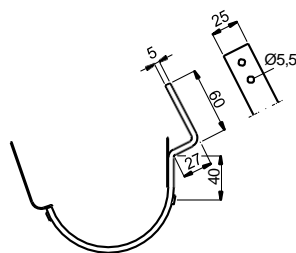
To SS-EN 1462 Class A-H



### K11 kandur 27° kaldega katusele

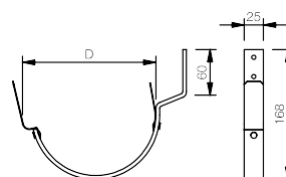
Dim
100
125
150

To SS-EN 1462 Class A-H



### K11P 150 kandur sandwich paneelile

Dim
150



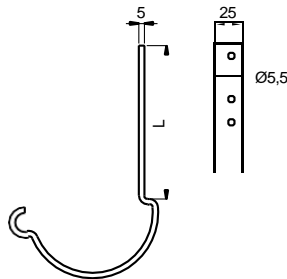
# Tehnilised faktid

## Rennidetailid

### KFL35/KFL/KFM kandur

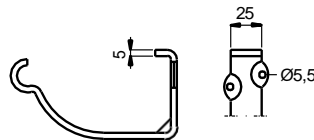
Dim	L mm		
	KFL35	KFL	KFM
100		196	
125	336	196	146
150	336	196	146

To SS-EN 1462 Class A-H



### KFK kandur

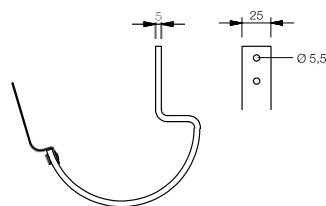
Dim
100
125
150
190



### KRD kandur

Dim
125

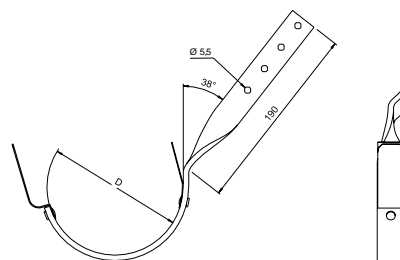
To SS-EN 1462 Class A-H



### KRT kandur

Dim
125
150

To SS-EN 1462 Class A-H



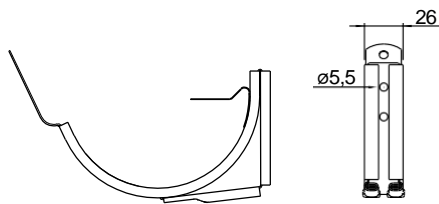
# Tehnilised faktid

## Rennidetailid

### SKK reguleeritav rennikandur

Dim	_____
100	_____
125	_____
150	_____

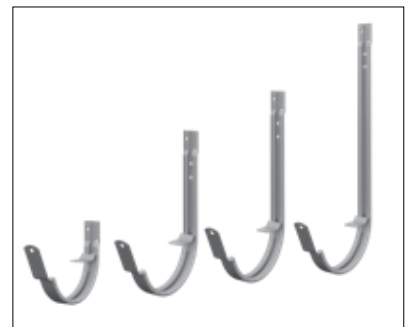
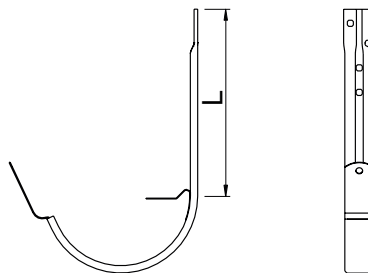
To SS-EN 1462 Class A-H



### SKK05/SKK16/SKK21/SKK30

Dim	L mm			
	SKK05	SKK16	SKK21	SKK30
100	70	160	210	300
125	70	160	210	300
150	70	160	210	300

To SS-EN 1462 Class A-H

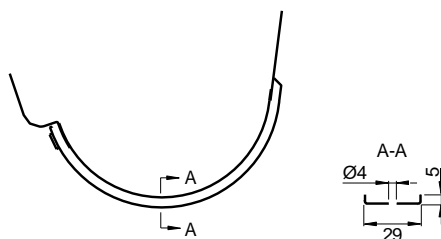


### KBO kanduripainutaja



### TB kanduri kate

Dim	_____
100	_____
125	_____
150	_____

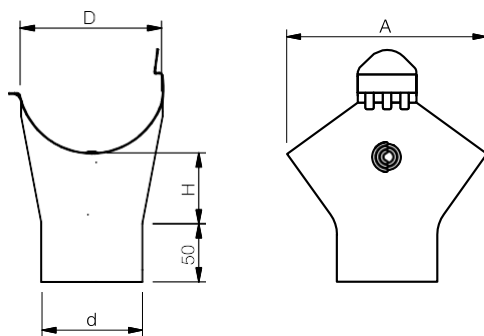


# Tehnilised faktid

## Rennidetailid

### OMV renni allaviik

Dim D/d	A mm	H 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



Kõik renni allaviigud vasest (CU) tarnitakse kui OK.

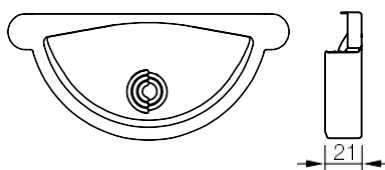
### OK renni allaviik

Dim D/d	A mm	H mm
150/75	194	55
190/100	180	62
190/120	206	62



### RG renniots

Dim
100
125
150



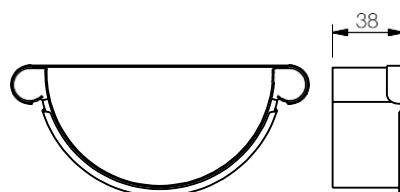


# Tehnilised faktid

## Rennidetailid

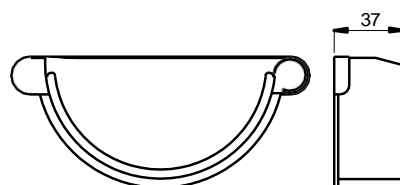
### RGU renniots

Dim
100
125
150



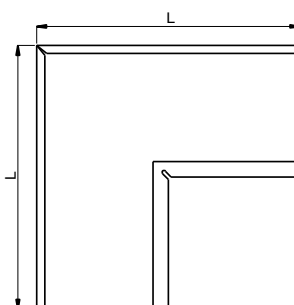
### RGV/RGH renniots

Dim
190



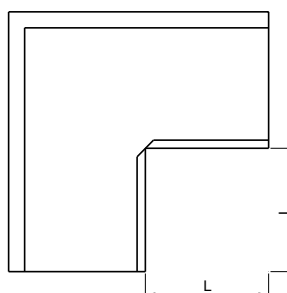
### RVI renni sisenuk

Dim	L mm
100	400
125	300
150	300
190	500



### RVY renni välisnurk

Dim	L mm
100	295
125	160
150	130
190	285



# Tehnilised faktid

## Rennidetailid

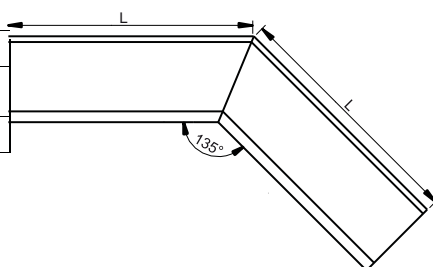
### RV1135 renni sisenurk 135°

Dim L mm

100 300

125 300

150 300



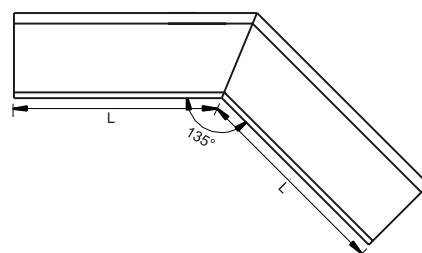
### RVY135 renni välisnurk 135°

Dim L mm

100 250

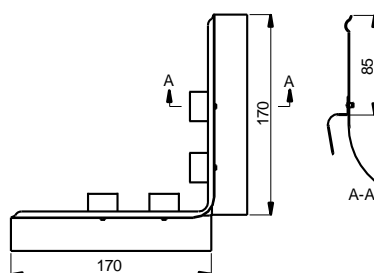
125 240

150 230



### ÖSK ülevoolutõke

Kõikidele suurustele

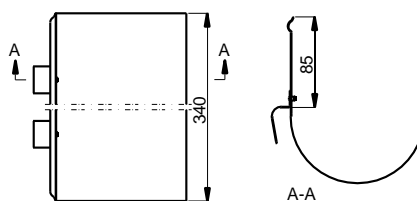


### ÖSKR ülevoolutõke sirge

Dim

125

150



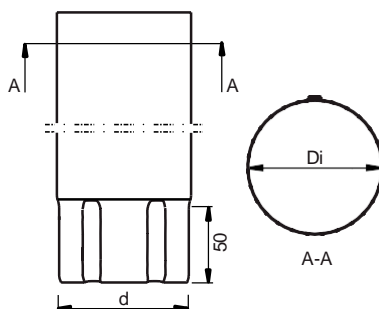
# Tehnilised faktid

## Torudetailid

### SRÖR toru

Dim	Pind-ala mm <sup>2</sup>
75	4400
87	5900
100	7800
111	9700
120	11300

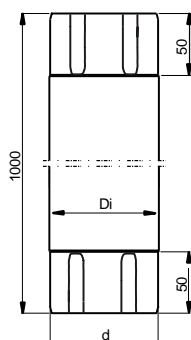
To SS-EN 612 Class A-X



### MST vahetoru

Dim
75
87
100
111
120

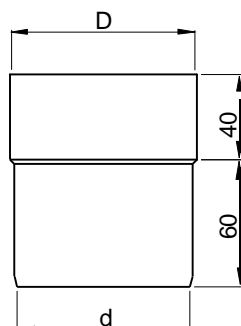
Lõigata sobivateks pikkusteks



### SRORM ühendusmuhv torule

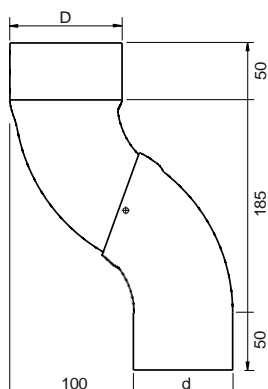
Dim
75
87
100

SRORM sobib nii toru sisse kui peale



### SOKN soklipölv

Dim
75
87
100

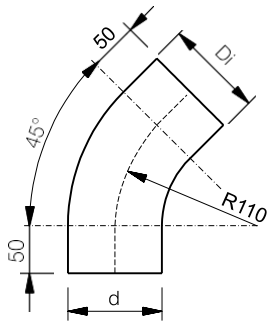


# Tehnilised faktid

## Torudetailid

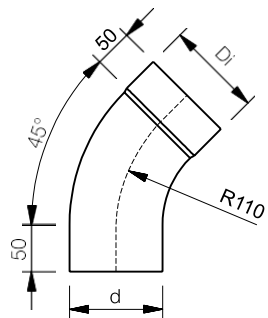
### BK45 põlv 45°

Dim
Di/d
75
87
100



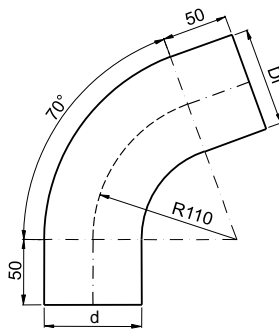
### BM45 põlv 45°

Dim
Di/d
75
87
100



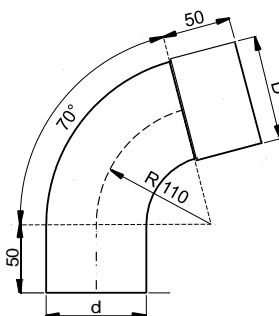
### BK70 põlv 70°

Dim
Di/d
75
87
100
111
120



### BM70 põlv 70°

Dim
D/d
111
120



# Tehnilised faktid

## Torudetailid

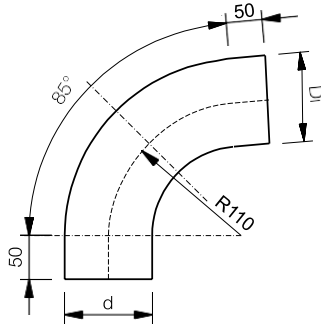
### BK85 põlv 85°

Dim  
Di/d

75

87

100



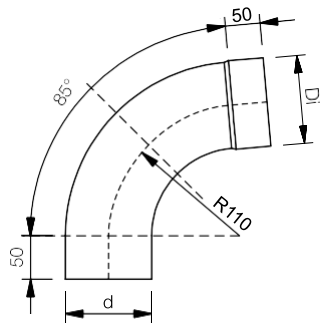
### BM85 põlv 85°

Dim  
Di/d

75

87

100



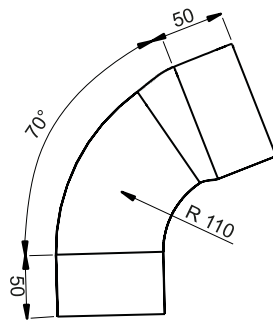
### BKM70 põlv, koonuses 70°

Dim  
Di/d

75

87

100



### BK põlv, terav 70°

Dim  
D/d

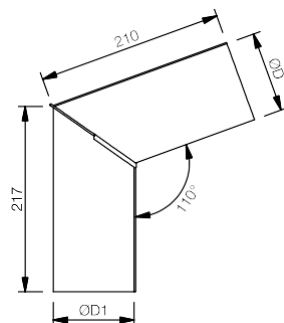
75

87

100

111

120



# Tehnilised faktid

## Torudetailid

### SSVU torukinniti

Dim  
D

75

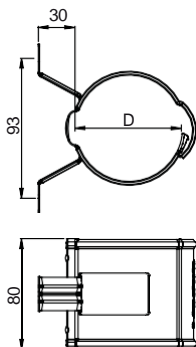
87

100

111

120

Alumiinium-tsink ja vask (CU) on kiilkinnitiga



### SVHA torukinniti

Dim  
D

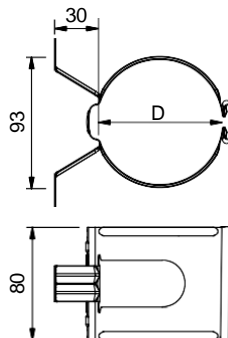
75

87

100

111

120



### SV torukinniti tüübliga

Dim  
D

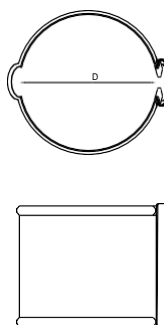
75

87

100

111

120



### SST tüübel

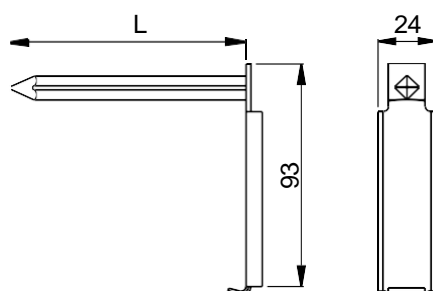
L  
mm

125

175

250

300



# Tehnilised faktid

## Torudetailid

### SSC kruvikomplekt

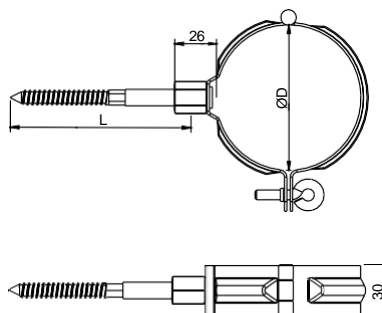
Kaugus seinast (mm)	Tüübel	Kruvi	Distsantspuksid*
25	1	1	1
55	1	1	2
85	1	1	3
115	1	1	4

\*Distsantspuksid on valmistatud helehallist HD polüetüleenist



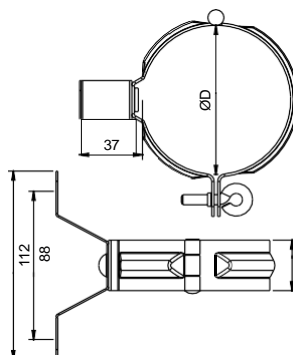
### SHFS torukinniti kruviga

Dim D	L mm	
75	100	140
87	100	140
100	100	140



### SHFB torukinniti jalgadega

Dim D
75
87
100

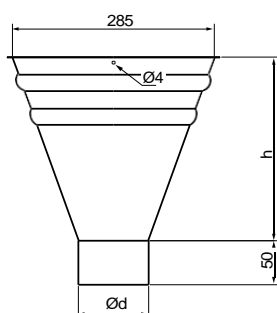


# Tehnilised faktid

## Torudetailid

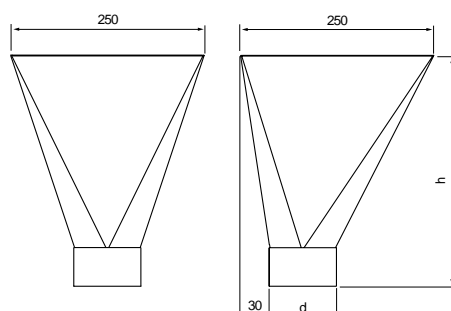
### VATK lehter

Dim	h
87	270
100	253
111	239
120	227



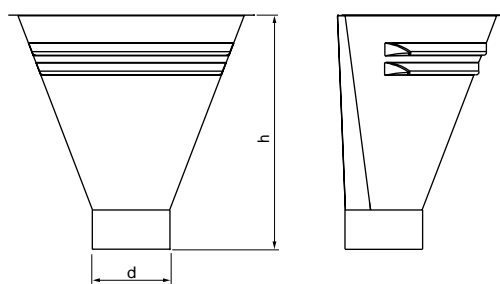
### VATKL kandiline lehter

Dim	h
75	305
87	230
100	200

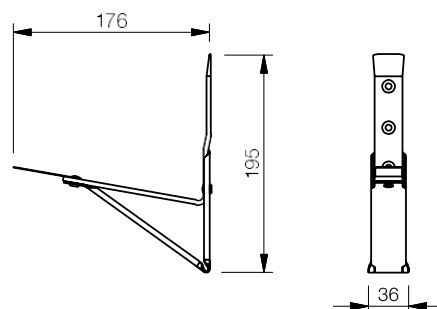


### VATKS poolümar lehter

Dim	h
87	270
100	253



### FRK katusepealse renni kandur



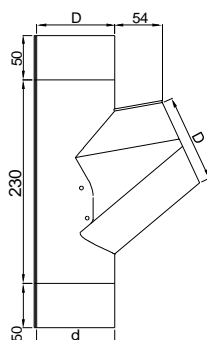


# Tehnilised faktid

## Torudetailid

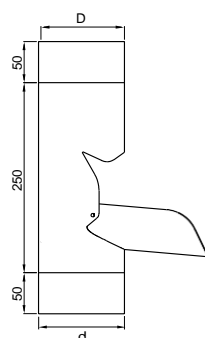
### GRÖR reguleeritav torukolmik

Dim	
75	
87	
100	
111	
120	



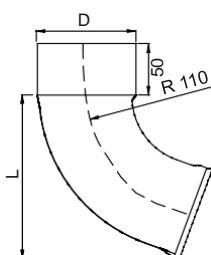
### FUTK vihmavee koguja

Dim	
75	
87	
100	



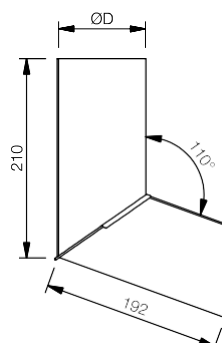
### UTK süüti

Dim	L mm
75	151
87	157
100	113
111	169
120	173



### UTKS süüti, terav

Dim	
75	
87	
100	
111	
120	



# Tehnilised faktid

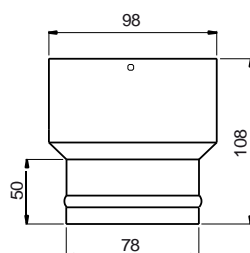
## Torudetailid

### SLAS

Vooliku ühendus 80 mm voolikule

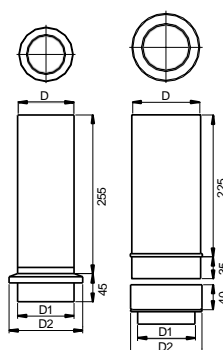
Dim

87



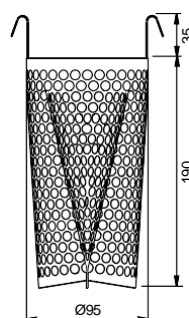
### BUTK Drenaazi ühendustoru

Dim	D1 mm	D2 mm
75	81	115
87	93	115
100	93	115
111	93	119
120	93	125



### DVSIL lehesõel

Roostevabast terasest



### PRT liugtoru

Dim

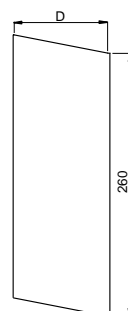
75

87

100

111

PRT sobitub renni peale

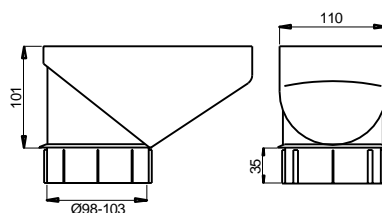


# Tehnilised faktid

## Torudetailid

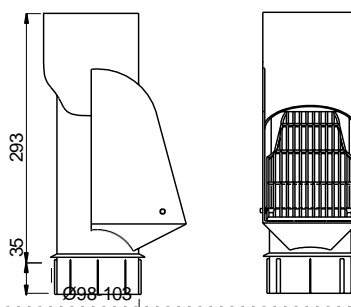
### RT lehesõel (HD polüetüleen)

HD polüetüleenist lehesõel torule. Alumine osa sobib standardsete maapealsete-/ühendustorudega.



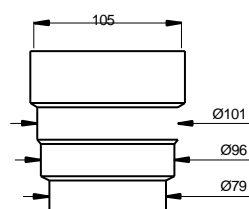
### SLS isepuhastuv lehesõel

HD polüetüleenist isepuhastuv lehesõel torule. Alumine osa sobib standardsete maapealsete torudega.

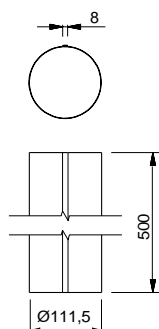


### MRT Drenaažiühendus

Ühendus HD polüetüleenist filtritele. Mittestandardsete maapealsete torudega ühendamiseks.



### IMR Drenaažitoru kate



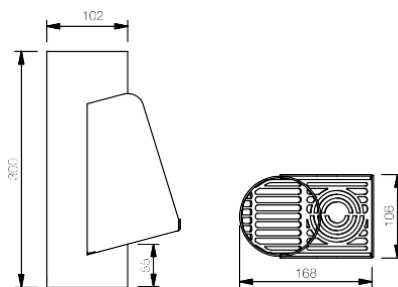
# Tehnilised faktid

## Tugevdatud toru detailid

### VANSLS 300

300 mm tugevdatud isepuhastav lehesõel

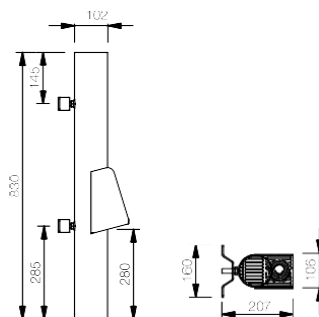
	Teras	Rooste- vaba
Väline dim. (Ø mm)	101.6	101.6
Paksus	2.0	1.5
Kaal (kg)	2.1	1.8



### VANSLS 850

830 mm tugevdatud toru koos lehesõelaga sokliga majadele

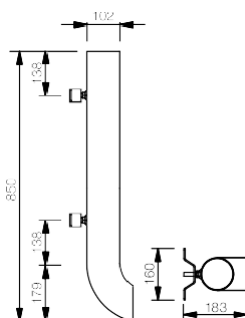
	Teras	Rooste- vaba
Väline dim. (Ø mm)	101.6	101.6
Paksus	2.0	1.5
Kaal (kg)	5.3	4.1



### VANUTK 850

850 mm tugevdatud toru sülitiga

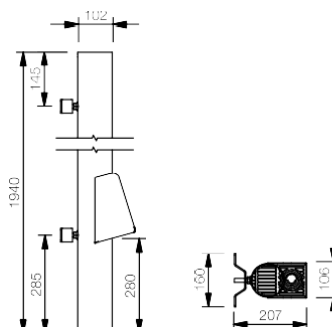
	Teras	Rooste- vaba
Väline dim. (Ø mm)	101.6	101.6
Paksus	2.0	1.5
Kaal (kg)	5.3	4.0



### VANSLS 2000

2m tugevdatud toru isepuhastuva lehesõelaga toru allosas

	Teras	Rooste- vaba
Väline dim. (Ø mm)	101.6	101.6
Paksus	2.0	1.5
Kaal (kg)	10.9	8.5



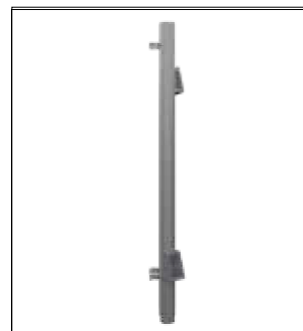
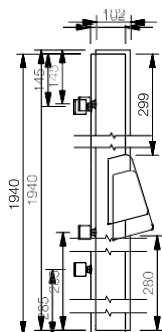
# Tehnilised faktid

## Tugevdatud toru detailid

### VANSLST 2000

2m tugevdatud toru isepuhastuva lehesõelaga toru ülemises osas. Ideaalne kasutamiseks lasteaedades ja koolides.

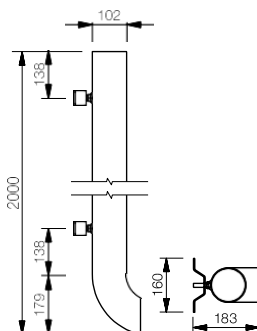
	Teras	Rooste- vaba
Väline dim. (Ø mm)	101.6	101.6
Paksus	2.0	1.5
Kaal (kg)	10.9	8.5



### VANUTK 2000

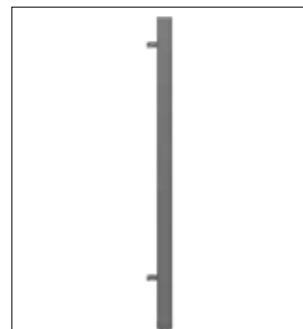
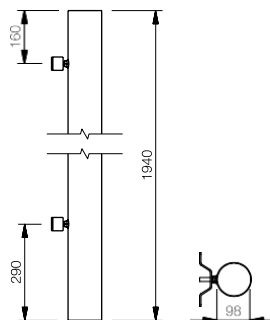
2m tugevdatud toru sülitiga

	Teras	Rooste- vaba
Väline dim. (Ø mm)	101.6	101.6
Paksus	2.0	1.5
Kaal (kg)	11.8	8.0



### VANSTD 2000

	Teras	Rooste- vaba
Väline dim. (Ø mm)	101.6	101.6
Paksus	2.0	1.5
Kaal (kg)	10.5	8.2



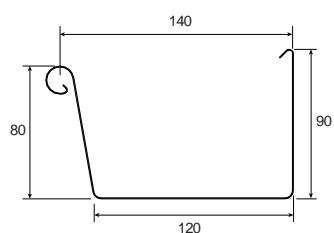
# Tehnilised faktid

## Kandilise renni detailid

### RTRA renn

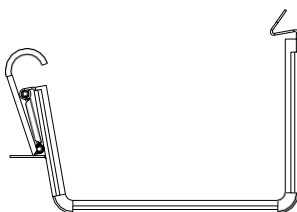
Dim	Pindala* mm <sup>2</sup>
140	10 000

\* Vett kandev ala.



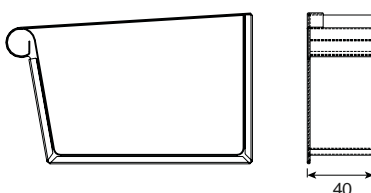
### RTSK renniühendus

Dim
140



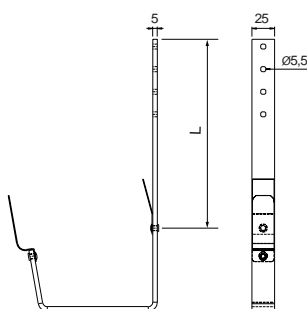
### RTGV/RTGH renniots

Dim
140



### RTK07/RTK21 kandur

Dim	L mm	
	RTK07	RTK21
140	70	210



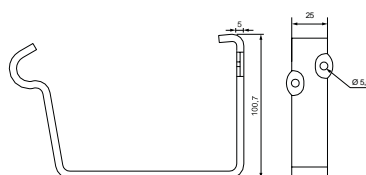
# Tehnilised faktid

## Kandilise renni detailid

### RTKFK kandur

Dim

140



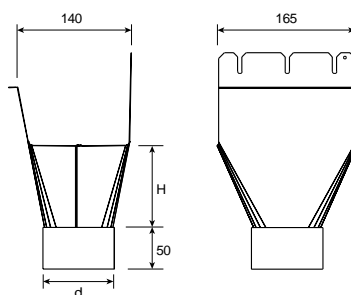
### RTOK allaviik

Dim	H
D/d	mm

140/87	95
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140/100	85
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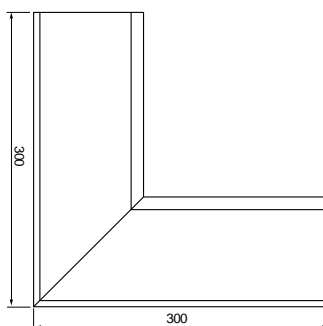
140/111	75
---------	----



### RTVI renni sisnurk

Dim

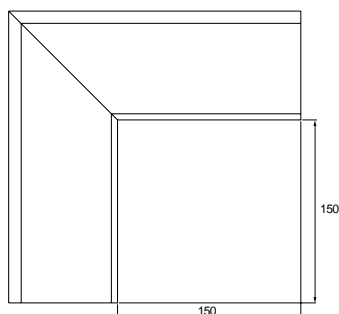
140



### RTVY renni välisnurk

Dim

140



# Tehnilised faktid

## Poolümara renni detailid

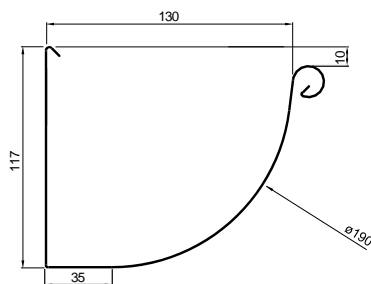
### KVRA poolümar renn

Dim pindala\* pindala\*\*  
mm<sup>2</sup> mm<sup>2</sup>

130 13 269 11 969

\* Lõikepind

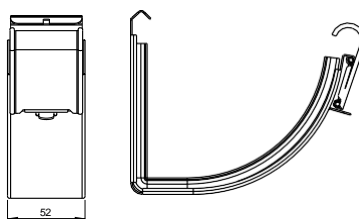
\*\* Vett kandev ala (10 mm madalam esiserv)



### KVSK renniühendus

Dim

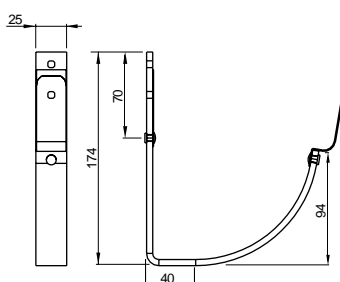
130



### KVK07 lühike kandur

Dim

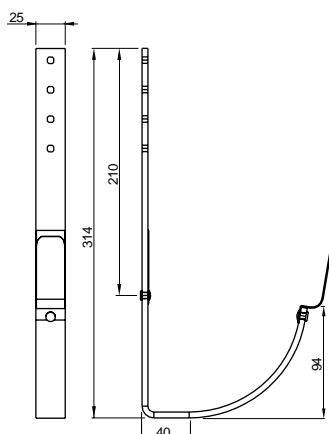
130



### KVK21 pikk kandur

Dim

130





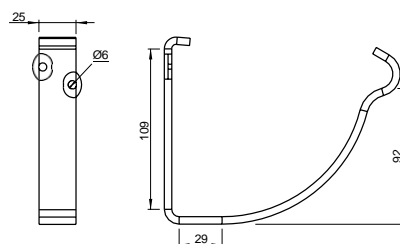
# Tehnilised faktid

## Poolümara renni detailid

### KVFK lühike kandur

Dim

130



### KVTP allaviik

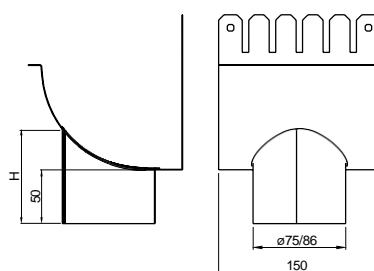
Dim

D/d

H  
mm

130/87 88

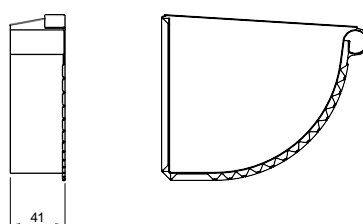
130/75 75



### KVGV/KVGH renniots

Dim

130



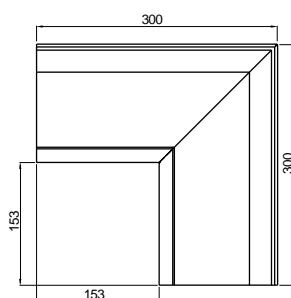
# Tehnilised faktid

## Poolümara renni detailid

### KVVI renni sisnurk

Dim

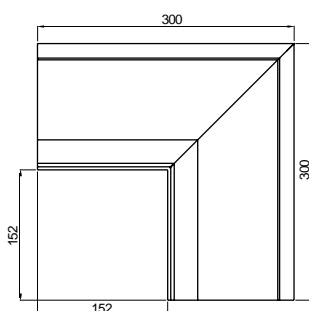
130



### KVYV renni välisnurk

Dim

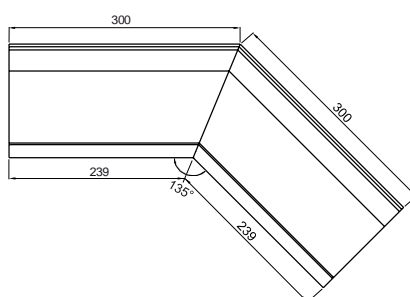
130



### KVVI renni sisnurk 135°

Dim

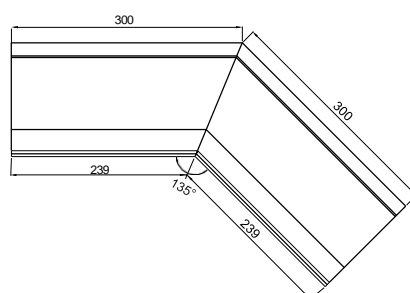
130



### KVYV renni välisnurk 135°

Dim

130



# Tehnilised faktid

## Muud tooted

### STIFT parandusvärv

Parandusvärv pintsliga väikeste kriimustuste parandamiseks või lõikeservade katmiseks.





Enamik meist veedab suurema osa ajast siseruumides. Sisekliima on ülioluline selle jaoks kuidas me ennast tunneme, kui produktiivsed oleme ja kas me püsime terved.

Seetõttu oleme Lindabis seadnud oma kõige olulisemaks eesmärgiks panustada inimeste elu parandavasse sisekliimasse. Selleks arendame energiatõhusaid ventilatsioonilahendusi ja vastupidavaid ehitustooteid. Samuti on meie eesmärk aidata kaasa meie planeedi paremale kliimale, töötades viisil mis on jätkusuutlik nii inimeste kui ka keskkonna jaoks.

[Lindab | For a better climate](#)