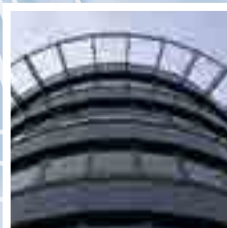
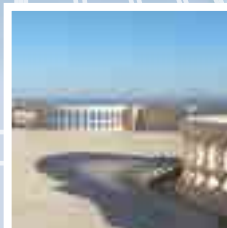


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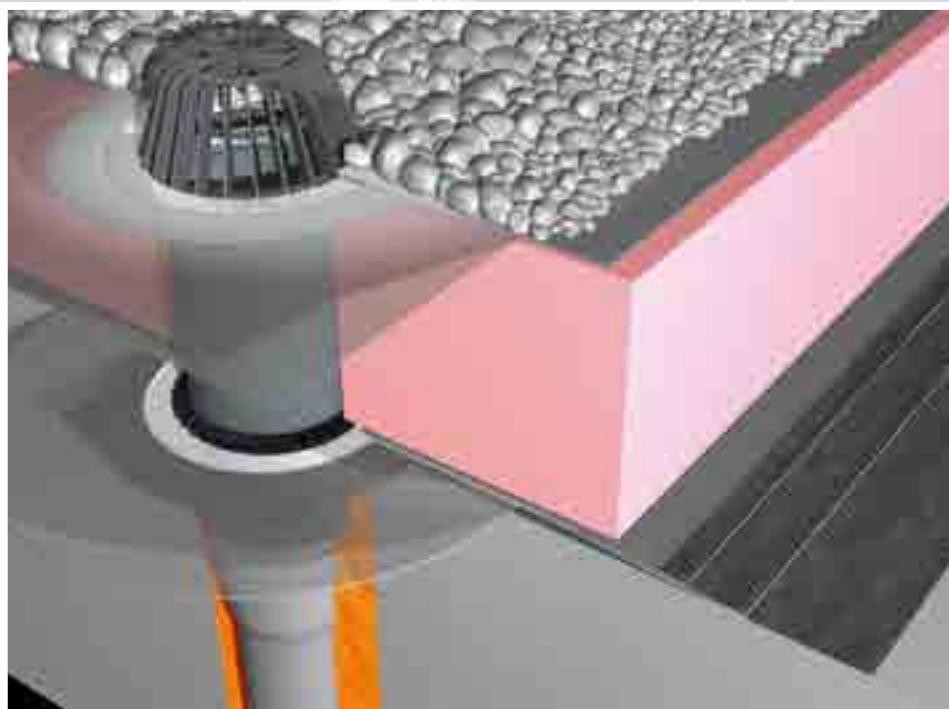
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HL® Drains

Roof



HL® Roof drains

Basic information about design and installation

For conventional roof drainage systems HL provides solutions for nearly every kind of roof construction. The challenge for the designer and the installer is very detailed. Different constructions, layer compositions and roof functions ask for varied drain combinations. Before designing please notice following topics:

▲ **Calculation of the quantity of roof drains**
 First the quantity of rainwater has to be calculated. Acc. EN12056 this is minimum 300l / (s x ha), which means one incident of intense rain, happening one time within 5 years for the time of 5 minutes. If this data is higher at the location of construction, this higher rain yield factor has to be taken into consideration for the calculation (please ask your local meteorological station).

Example: Roof surface = 1500m², rain yield factor = 300l / (s x ha), coefficient 1
 Rain water quantity, which has to be drained off = $(300 \times 1 \times 1500) / 10.000 = 45 \text{ l/s}$.
 Basically every low point of the roof should be provided with a single drain.
 Anyway, the number of drains and the drain capacities has to be at least the calculated rain yield factor.

Example: Rain yield factor = 45 l/s,
 drain capacity of the roof drain = 5 l/s
 Quantity of roof drains = $45/5 = 9$ roof drains

▲ **Emergency overflows**
 To protect from damages, please check acc. DIN 1986-100 (or local standard), if emergency overflows are requested.
 Acc. DIN 1986-100 it has to be checked at all roof constructions, if emergency overflows are necessary, considering the expected incidents of rain at the construction site, the

construction itself, the hydro-insulation, the statics of the roof and the special character of the drainage system. Two possibilities:
 Installation of a second drainage system or draining off by a gap in the attic. The quantity of rain water, drained off by emergency overflows, results from the difference between the century and the standard rain yield factor. (The term „century rain yield factor“ means a heavy rain incident, which may occur one time in 100 years for the time of 5 minutes).

Example:
 Century rain yield factor = 600 l / (s x ha),
 standard rain yield factor = 300 l / (s x ha)
 Rain water quantity for emergency overflows = $600 - 300 = 300 \text{ l / (s x ha)}$.

▲ **Waterproofing**
 Empirically roof openings most often are responsible for damages by water. That means, you have to pay most attention all-ready during the period of designing, to have a 100% waterproof connection between the sheeting and the gully. HL provides solutions for all established waterproof sheetings. We recommend to use gullies, which are prefabricated with flanges made off the same material, as the sheeting.

▲ **Drainage layers**
 Depending on the roof design, there might be more than one layer, which has to be drained off. Please take care, that each layer, where water may occur, is drained off (e.g. by a gravel guard).

▲ **Heating**
 To avoid the freezing of the gully during the winter time, we recommend generally the installation of a roof drain with integrated heating. From our experience, these drains are installed, when they are connected to only storm water sewers. A heated gully is absolutely necessary, when it is at a position, where snow water may occur during day, whilst at night it might be blocked by ice.

▲ **Condensed water**
 Roof drains should have an integrated thermo-insulation, to avoid, that condensed water arises (e.g. all HL roof drains have a double wall drain body, which functions as thermo-insulation).

Relevant standards/directives

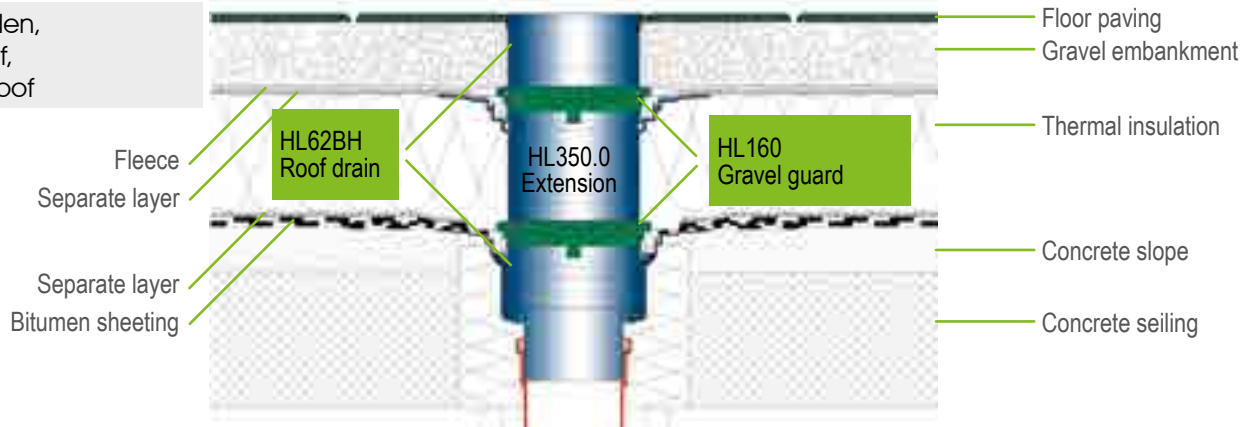
ÖNorm B2501	Drainage of buildings
DIN 1986-100	Drainage systems for buildings and estates
EN 1253	Drains for buildings
ÖNorm B2209	Waterproofing works
ÖNorm B2220	Roof waterproofings with bitumen and plastic sheetings
ÖNorm B7209	Waterproofings for buildings
ÖNorm B7220	Roofs with waterproofings

Selection of the convenient drain

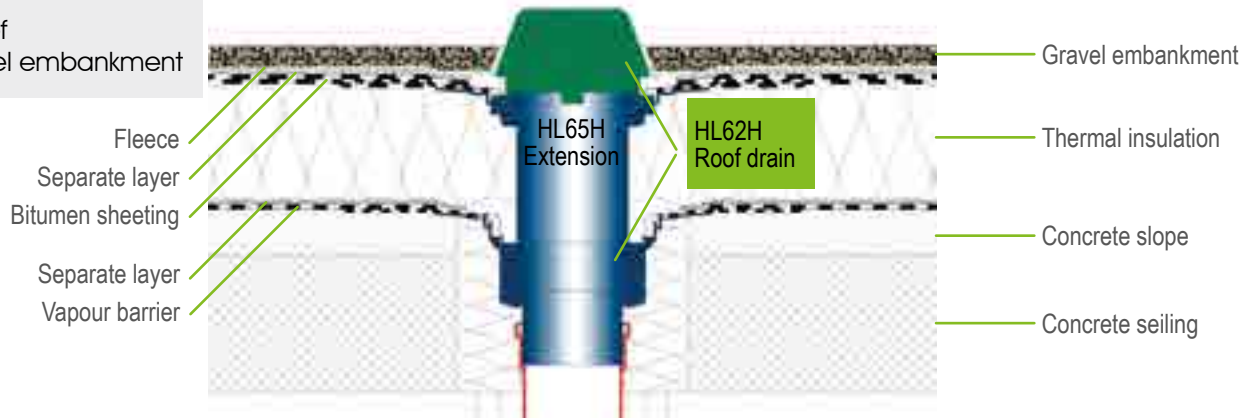
Selective criteria	Requirements	Product
Drainage surface	When you calculate the quantity of occurring rain water acc. ÖNORM B2501 and DIN 1986-100, you have to use at least the standard rain yield factor of 300 l / (s x ha). Quantity of rain water = 0,03l/s x drainage surface Quantity of gullies = $\frac{\text{Absolute quantity of rain water}}{\text{Capacity of the gully}}$	For the exact definition of the right drain and the quantity of gullies, please mind the capacity of the particular article.
Waterproofing	For the right choice of the convenient drain, please find out, which waterproof sheeting material is used on the roof. Please prefer drains with prefabricated PVC- or bitumen flanges, when the roof is sheeted with PVC or bitumen. For all other sheetings you may use drains with a clamping ring. Bitumen sheeting, liquid bitumen compounds PVC-sheeting FPO-sheeting Polymere sheeting	Roof drain vertical HL62H Roof drain horizontal HL64H Roof drain vertical HL62P Roof drain horizontal HL64P Roof drain vertical HL62F Roof drain horizontal HL64F Roof drain vertical HL62 Roof drain horizontal HL64
Roof construction	To find out, what is the best composition of the drain, like extension (with or without flange), gravel guard (e.g. for inverted roofs) or heating, a detailed plan of the different layers is necessary. Extension with flange for e.g. warm roofs Gravel guard for e.g. inverted roofs Extension with flange Extension	HL65(H)(P)(F)(PE) HL160 HL350.0 HL350
Heating	All types of roof drains, signed with the appendix „1“ are equipped with an integrated, self-adjusting 230 V heating (10 - 30 Watt). We recommend gullies with heating especially, when the drainage system is connected to the rainwater drain.	„1“
Siphon trap	All types of drains are without siphon trap. If the drainage system is connected to the sewer, it is possible, to install a central, vertical flap valve for down pipes below the roof as a stench trap.	HL603

HL® Roof drains – Sectional drawings

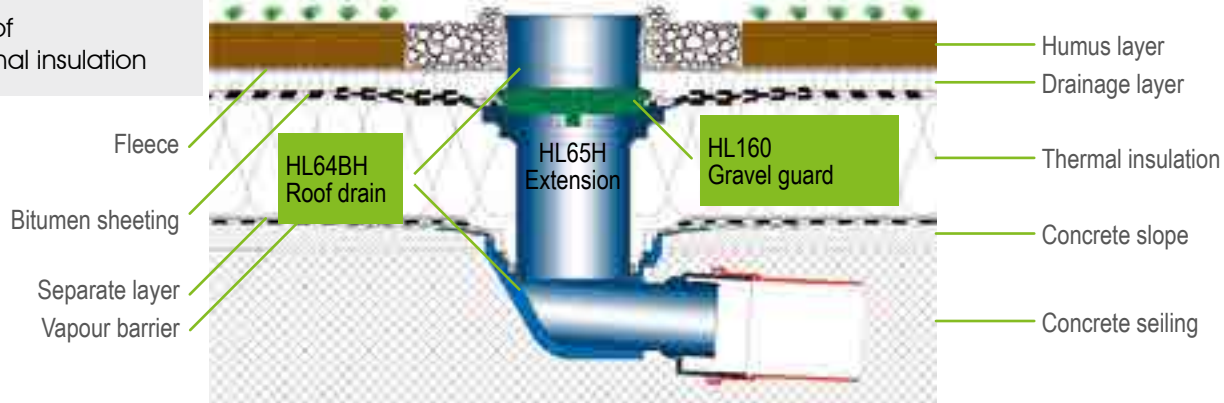
Roof garden,
Warm roof,
Inverted roof



Warm roof
with gravel embankment



Green roof
with thermal insulation



Trapezoidal roof
with thermal insulation
Gravel embankment



More examples please find at
<http://hl.blucina.net>

HL® Roof drains – Installation

Thermal insulated inverted roof with gravel embankment



1. Produce tap hole with Ø 255 mm, insert drain HL62H



2. Apply prime coat on the raw ceiling



3. Weld the first bitumen layer on the raw ceiling, then weld the bitumen flange of the drain on the bitumen layer



4. Connect second bitumen layer with the bitumen flange of the drain



5. Professional integration of the gully in a 2-layer bitumen sheeting



6. Remove lid cover, apply the fleece, insert gravel guard HL160



7. Put the extension HL350.0 on the gravel guard HL160



8. Set the thermal insulation plates, adjust the height of the extension by cutting



9. Insert the transparent plastic ring in the groove of the flange



10. Clamp the fleece on the flange with the stainless steel ring



11. Insert leaf catcher, dispense the gravel with minimum grain size 16/32 around the leaf catcher



12. Fill gravel in

HL® Roof drains – Products – Overview

Drains



Product	HL62	HL62H	HL62P	HL62F	HL64	HL64H	HL64P
Description	Standard roof drain vertical with clamp ring	Roof drain vertical with bitumen membrane	Roof drain vertical with PVC-flange	Roof drain vertical with PP-flange	Standard roof drain horizontal with clamp ring	Roof drain horizontal with bitumen membrane	Roof drain horizontal with PVC-flange
Function	To clamp polymere sheetings	Especially for connection to bitumen sheetings	Especially for connection to PVC-sheetings	Especially for connection to FPO-sheetings based on PP	For clamping of polymere sheetings	Especially for connection to bitumen sheetings	Especially for connection to PVC-sheetings

All drains of series HL62 and HL64 are also available with an assembly kit for terraces.
 All drains of series HL62 and HL64 are also available with integrated heating.
 For more information see product data.

Drains

More spare parts for HL80.3 and HL80.3H find in chapter „balcony - terraces“.



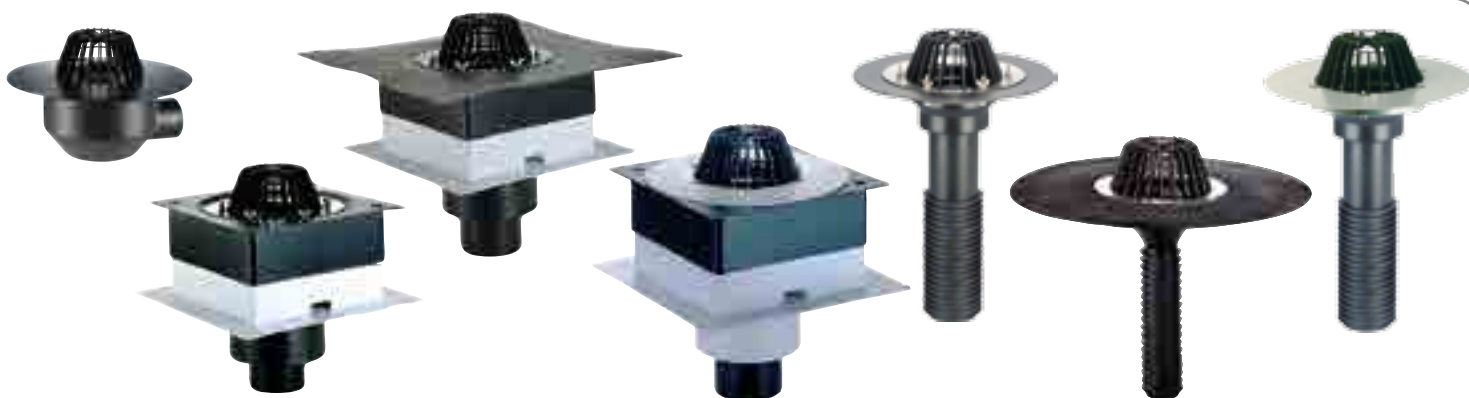
Product	HL80.3	HL80.3H
Description	Flat roof drain	Flat roof drain with bitumen flange
Function	For roof areas up to 33 m² and rain yield factor of 300 l / (s x ha)	For roof areas up to 33 m² and rain yield factor of 300 l / (s x ha) especially for connection to bitumen sheetings

Extensions



Product	HL65	HL65H	HL65P	HL65F(HL65PE)	HL350	HL350.0
Description	Standard extension	Extension with bitumen flange	Extension with PVC-flange	The extension with PP or PE flange	Extension	Extension with insulation set
Function	For clamping of polymere sheetings, e.g. warm roofs	Especially for connection to bitumen sheetings, e.g. warm roofs	Especially for connection to PVC sheetings, e.g. warm roofs	Especially for connection to FPO based on PP or PE	To extend the leaf catcher or the grating of the walkable model	To extend the leaf catcher or the grating of the walkable model with additional clamp ring

HL® Roof drains – Products – Overview



HL64F	HL63	HL63H	HL63P	HL69	HL69H	HL69P
Roof drain horizontal with PP-flange	Roof drain „Drainbox“ vertical with clamp ring	Roof drain „Drainbox“ vertical with bitumen membrane	Roof drain „Drainbox“ vertical with PVC-flange	Flat-roof renovation drain vertical with clamp ring	Flat-roof renovation drain vertical with bitumen membrane	Flat-roof renovation drain vertical with PVC-flange
Especially for connection to FPO sheetings based on PP	For clamping of polymere sheetings and for the installation in thermal insulations from 100 - 160 mm	Especially for connection to bitumen sheetings, and for the installation in thermal insulations from 100 - 160 mm	Especially for connection to PVC sheetings, and for the installation in thermal insulations from 100 - 160 mm	For clamping of polymere sheetings and for the renovation of the drainage system. Easily to be plugged into the body of the old drain	Especially for connection to bitumen sheetings and for the renovation of the drainage system. Easily to be plugged into the body of the old drain	Especially for connection to PVC sheetings and for the renovation of the drainage system. Easily to be plugged into the body of the old drain

Sealing kits

Product data please see
Chapter
Sealing kits-Extensions



Product	HL84.H	HL84.CU	HL84.E
Description	Sealing kit with bitumen membrane	Sealing kit with copper plate	Sealing kit with galvanized steel plate
Function	For clamping to a standard roof drain or a standard extension. „Problem solver“	Fits to a standard roof drain or to a standard extension - for roofs with copper sheetings	Fits to a standard roof drain or to a standard extension - for roofs with steel sheetings

Accessories



Product	HL160	HL161	HL66.9	HL175	HL603
Description	Gravel guard for inverted roofs	Drainage element	Walkable extension	Stainless steel leaf catcher	Flap valve for downpipes DN110 or DN160
Function	For the drainage of rainwater on the hydro-insulation layer, e.g. inverted roof construction	For drainage of condensation water on the vapour barrier, e.g. with aered flat roofs.	To convert roof drains with leaf catcher to a walkable type	Fits for all roof drains and extensions with clamp ring	Prevents from sewer stench

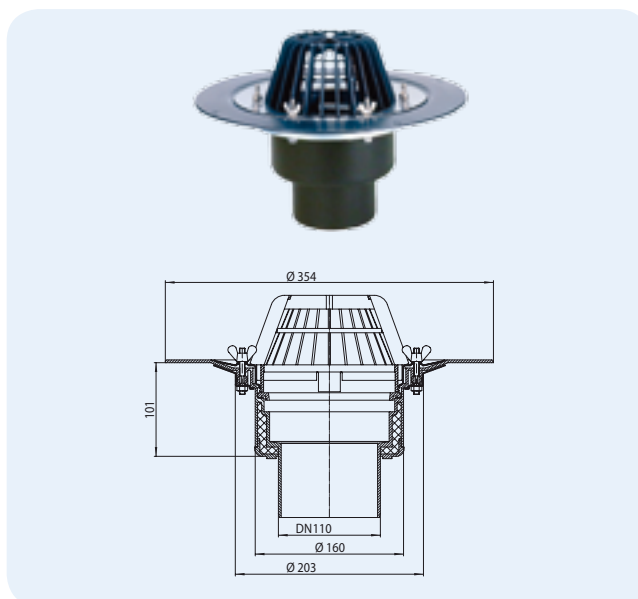
HL® Roof drains – Products – Data

HL62 Roof drain with thermal insulation

HL62.1 Roof drain like HL62, but electrically heated

Data

Capacity	HL62/7, HL62.1/7: 9,90 l/s HL62/1, HL62.1/1: 10,70 l/s HL62/2, HL62.1/2: 14,00 l/s HL62/5, HL62.1/5: 14,10 l/s
Material	PP, drain body thermal insulated
Connection dimension	HL62/7, HL62.1/7: DN75 HL62/1, HL62.1/1: DN110 HL62/2, HL62.1/2: DN125 HL62/5, HL62.1/5: DN160
Outlet	vertical
Sealing flange	PP with stainless steel clamp ring
Inlet	Leaf catcher Ø 170 mm
Standard	DIN 19599, EN 1253
Recommended for	Polymere sheetings
Additional information	Notch dimension: 255 x 380 mm Tap hole dimension: Ø 255 mm



Including	HL62.1: heated type with self-adjusting heat source for the connection to a 230 V power grid (10 - 30 Watt) Lid cover, 6 pcs. HL062N.4E hex nut alternative to wing nuts
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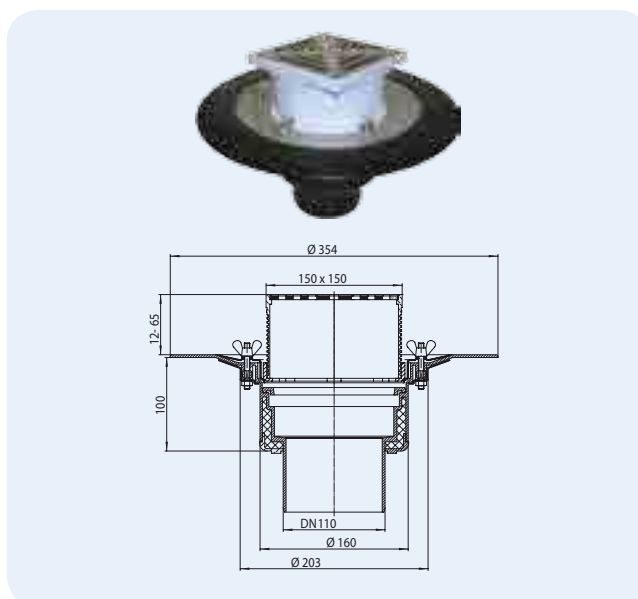
HL-No.	Dimension	Weight	EAN	Piece/package	Type
62/7	DN75	1507 g	+830626	1	Standard
62.1/7	DN75	1647 g	+832620	1	with heating
62/1	DN110	1486 g	+800629	1	Standard
62.1/1	DN110	1626 g	+802623	1	with heating
62/2	DN125	1481 g	+810628	1	Standard
62.1/2	DN125	1621 g	+812622	1	with heating
62/5	DN160	1515 g	+820627	1	Standard
62.1/5	DN160	1655 g	+822621	1	with heating

HL62B Roof drain, walkable

HL62.1B Roof drain like HL62B, but with electrical heating

Data

Capacity	6,00 l/s
Material	PP, drain body thermal insulated
Connection dimension	HL62B/7, HL62.1B/7: DN75 HL62B/1, HL62.1B/1: DN110 HL62B/2, HL62.1B/2: DN125 HL62B/5, HL62.1B/5: DN160
Outlet	vertical
Extension	PP, 150 x 150 mm, adjustable in length
Sealing flange	PP with stainless steel clamp ring
Inlet	Stainless steel grate, 137 x 137 mm
Standard	DIN 19599, EN 1253
Load classification	K3, max. 300 kg
Recommended for	Polymere sheetings, walkable flat roofs
Additional information	Notch dimension: 255 x 380 mm Tap hole dimension: Ø 255 mm

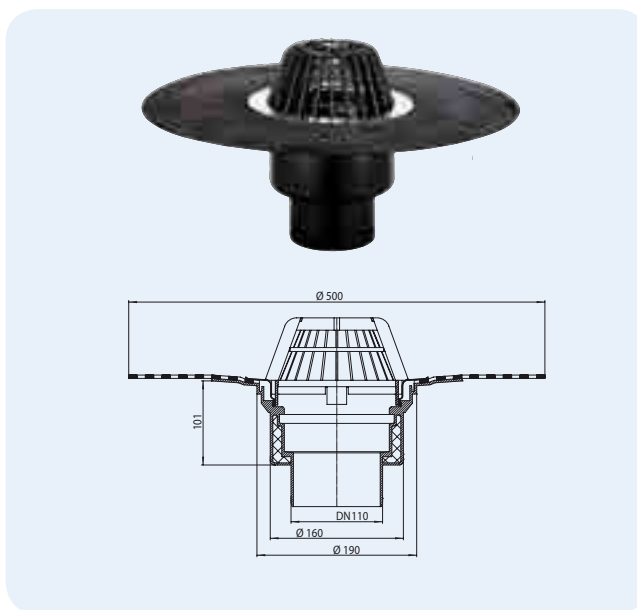


Including	HL62.1B: heated type with self-adjusting heat source for the connection to a 230 V power grid (10 - 30 Watt) Lid cover, 6 pcs. HL062N.4E hex nut alternative to wing nuts
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HL-No.	Dimension	Weight	EAN	Piece/package	Type
62B/7	DN75	1803 g	+836253	1	Standard
62.1B/7	DN75	1943 g	+832514	1	with heating
62B/1	DN110	1782 g	+806256	1	Standard
62.1B/1	DN110	1922 g	+802517	1	with heating
62B/2	DN125	1777 g	+816255	1	Standard
62.1B/2	DN125	1917 g	+812516	1	with heating
62B/5	DN160	1811 g	+826254	1	Standard
62.1B/5	DN160	1951 g	+822522	1	with heating

HL62H Roof drain with bitumen membrane**HL62.1H** Roof drain like HL62H, but with electrical heating**Data**

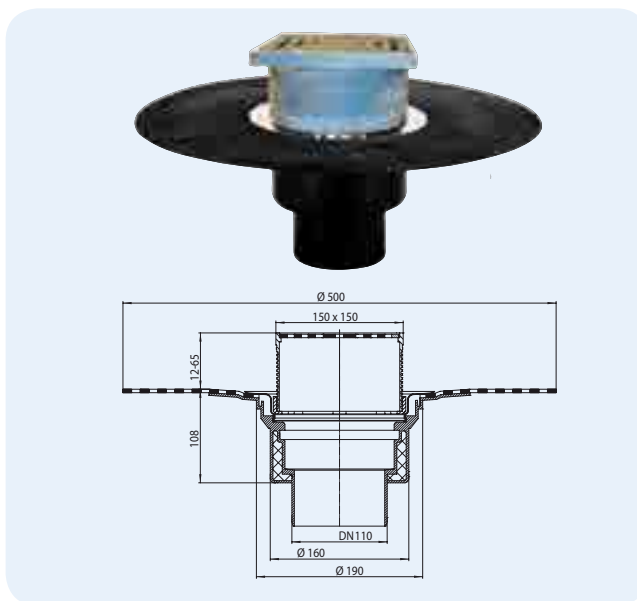
Capacity	HL62H/7, HL62.1H/7: 9,90 l/s HL62H/1, HL62.1H/1: 10,70 l/s HL62H/2, HL62.1H/2: 14,00 l/s HL62H/5, HL62.1H/5: 14,10 l/s
Material	PP, drain body thermal insulated
Connection dimension	HL62H/7, HL62.1H/7: DN75 HL62H/1, HL62.1H/1: DN110 HL62H/2, HL62.1H/2: DN125 HL62H/5, HL62.1H/5: DN160
Outlet	vertical
Sealing flange	PP, stainless steel, prefabricated welded bitumen membrane
Inlet	Leaf catcher Ø 170 mm
Standard	DIN 19599, EN 1253
Recommended for	Bitumen sheetings
Additional information	Notch dimension: 255 x 380 mm Tap hole dimension: Ø 255 mm



HL-No.	Dimension	Weight	EAN	Piece/package	Type
62H/7	DN75	1853 g	+831623	1	Standard
62.1H/7	DN75	1993 g	+806225	1	with heating
62H/1	DN110	1832 g	+801626	1	Standard
62.1H/1	DN110	1972 g	+816217	1	with heating
62H/2	DN125	1827 g	+811625	1	Standard
62.1H/2	DN125	1967 g	+826216	1	with heating
62H/5	DN160	1861 g	+821624	1	Standard
62.1H/5	DN160	2001 g	+836215	1	with heating

HL62BH Roof drain walkable, with bitumen membrane**HL62.1BH** Roof drain like HL62BH, but electrically heated**Data**

Capacity	6,00 l/s
Material	PP, drain body thermal insulated
Connection dimension	HL62BH/7, HL62.1BH/7: DN75 HL62BH/1, HL62.1BH/1: DN110 HL62BH/2, HL62.1BH/2: DN125 HL62BH/5, HL62.1BH/5: DN160
Outlet	vertical
Extension	PP, 150 x 150 mm, adjustable in length
Sealing flange	PP, stainless steel, prefabricated welded bitumen membrane
Inlet	Stainless steel grate, 137 x 137 mm
Standard	DIN 19599, EN 1253
Load classification	K3, max. 300 kg
Recommended for	Bitumen sheetings; walkable flat roofs
Additional information	Notch dimension: 255 x 380 mm Tap hole dimension: Ø 255 mm



HL-No.	Dimension	Weight	EAN	Piece/package	Type
62BH/7	DN75	2104 g	+846221	1	Standard
62.1BH/7	DN75	2244 g	+802128	1	with heating
62BH/1	DN110	2083 g	+816224	1	Standard
62.1BH/1	DN110	2223 g	+812127	1	with heating
62BH/2	DN125	2078 g	+826223	1	Standard
62.1BH/2	DN125	2218 g	+822126	1	with heating
62BH/5	DN160	2112 g	+836222	1	Standard
62.1BH/5	DN160	2252 g	+832125	1	with heating

Including Lid cover

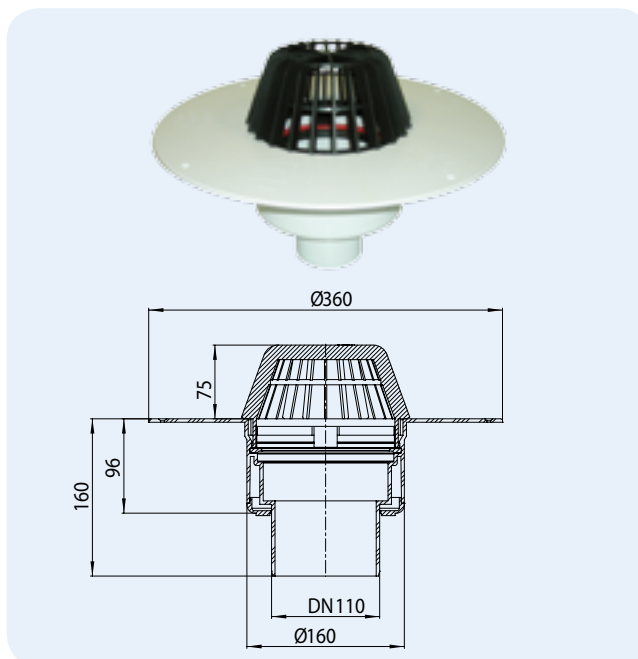
HL62P Roof drain with PVC-flange

HL62.1P Roof drain like HL62P, but electrically heated

Data

Capacity	HL62P/7, HL62.1P/7: 7,40 l/s HL62P/1, HL62.1P/1: 7,85 l/s HL62P/2, HL62.1P/2: 10,75 l/s HL62P/5, HL62.1P/5: 11,10 l/s
Material	PP, PVC, drain body thermal insulated
Connection dimension	HL62P/7, HL62.1P/7: DN75 HL62P/1, HL62.1P/1: DN110 HL62P/2, HL62.1P/2: DN125 HL62P/5, HL62.1P/5: DN160
Outlet	vertical
Sealing flange	PVC , weldable with hot air
Inlet	Leaf catcher Ø 170 mm
Standard	DIN 19599, EN 1253
Recommended for	PVC-sheetings
Additional information	Notch dimension: 255 x 380 mm Tap hole dimension: Ø 255 mm

	HL62.1P: heated type with self-adjusting heat source for the connection to a 230 V power grid (10 - 30 Watt)
Including	Lid cover



HL062.1E



HL170



HL-No.	Dimension	Weight	EAN	Piece/package	Type
62P/7	DN75	1307 g	+022144	1	Standard
62.1P/7	DN75	1447 g	+022205	1	with heating
62P/1	DN110	1286 g	+022090	1	Standard
62.1P/1	DN110	1426 g	+021925	1	with heating
62P/2	DN125	1281 g	+022113	1	Standard
62.1P/2	DN125	1421 g	+022168	1	with heating
62P/5	DN160	1315 g	+022120	1	Standard
62.1P/5	DN160	1544 g	+022182	1	with heating

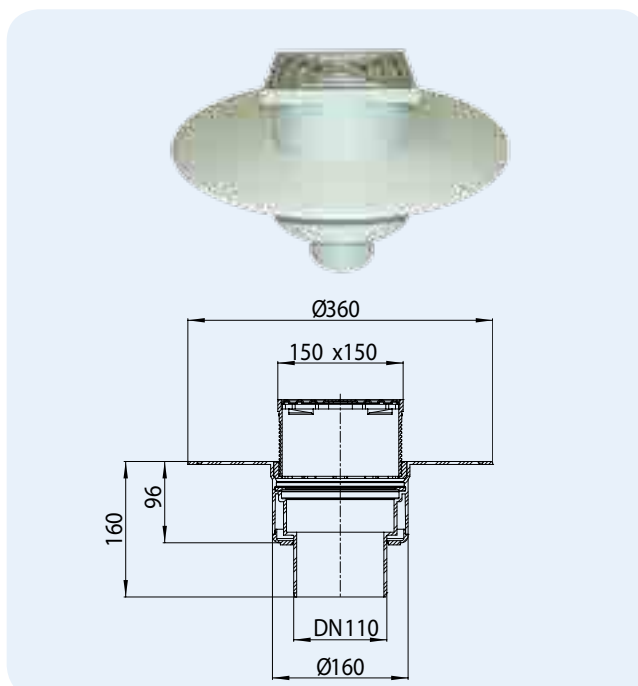
HL62BP Roof drain with PVC-flange, walkable

HL62.1BP Roof drain like HL62BP, but electrically heated

Data

Capacity	6,00 l/s
Material	PP, PVC, drain body thermal insulated
Connection dimension	HL62BP/7, HL62.1BP/7: DN75 HL62BP/1, HL62.1BP/1: DN110 HL62BP/2, HL62.1BP/2: DN125 HL62BP/5, HL62.1BP/5: DN160
Outlet	vertical
Extension	PP, 150 x 150 mm, adjustable in length
Sealing flange	PVC , weldable with hot air
Inlet	Stainless steel grate, 137 x 137 mm
Standard	DIN 19599, EN 1253
Load classification	K3, max. 300 kg
Recommended for	PVC-sheetings, walkable flat roofs
Additional information	Notch dimension: 255 x 380 mm Tap hole dimension: Ø 255 mm

	HL62.1BP: heated type with self-adjusting heat source for the connection to a 230 V power grid (10 - 30 Watt)
Including	Lid cover



HL66.9



HL0317.1E



HL062B.2E



HL062B.3E



HL170



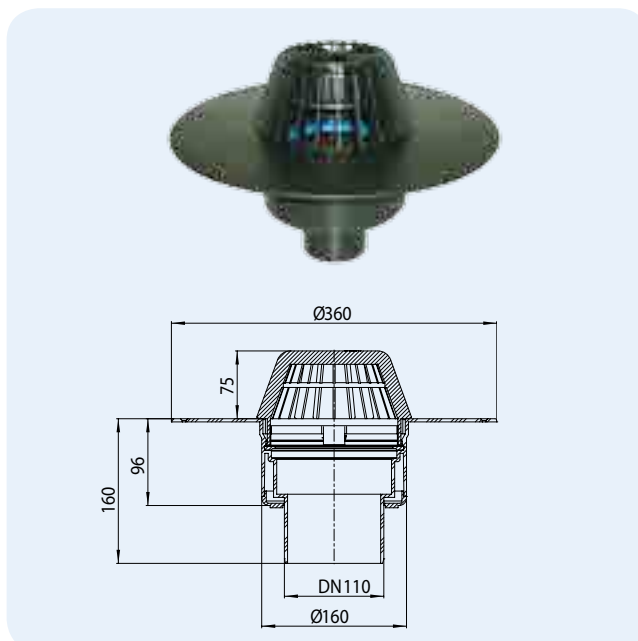
HL-No.	Dimension	Weight	EAN	Piece/package	Type
62BP/7	DN75	1603 g	+022311	1	Standard
62.1BP/7	DN75	1743 g	+022397	1	with heating
62BP/1	DN110	1582 g	+022250	1	Standard
62.1BP/1	DN110	1722 g	+022335	1	with heating
62BP/2	DN125	1577 g	+022274	1	Standard
62.1BP/2	DN125	1717 g	+022359	1	with heating
62BP/5	DN160	1611 g	+022298	1	Standard
62.1BP/5	DN160	1751 g	+022373	1	with heating

HL62F Roof drain with PP-flange**HL62.1F** Roof drain like HL62F, but electrically heated**Data**

Capacity	HL62F/7, HL62.1F/7: 7,40 l/s HL62F/1, HL62.1F/1: 7,85 l/s HL62F/2, HL62.1F/2: 10,75 l/s
Material	PP, drain body thermal insulated
Connection dimension	HL62F/7, HL62.1F/7: DN75 HL62F/1, HL62.1F/1: DN110 HL62F/2, HL62.1F/2: DN125
Outlet	vertical
Sealing flange	PP, weldable with hot air
Inlet	Leaf catcher Ø 170 mm
Standard	DIN 19599, EN 1253
Recommended for	FPO-sheetings, based on PP
Additional information	Notch dimension: 255 x 380 mm Tap hole dimension: Ø 255 mm

HL62.1F: heated type with self-adjusting heat source for the connection to a 230 V power grid (10 - 30 Watt)

Including Lid cover



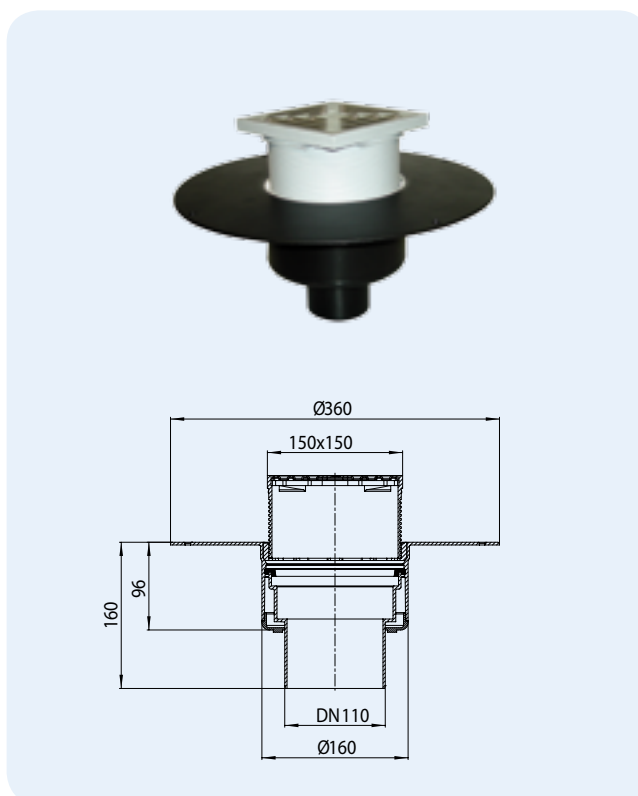
HL-No.	Dimension	Weight	EAN	Piece/package	Type
62F/7	DN75	1307 g	+031740	1	Standard
62.1F/7	DN75	1447 g	+031825	1	with heating
62F/1	DN110	1286 g	+031726	1	Standard
62.1F/1	DN110	1426 g	+031788	1	with heating
62F/2	DN125	1281 g	+031764	1	Standard
62.1F/2	DN125	1421 g	+031801	1	with heating

**HL62BF** Roof drain with PP-flange, walkable**HL62.1BF** Roof drain like HL62BF, but electrically heated**Data**

Capacity	6,00 l/s
Material	PP
Connection dimension	HL62BF/7, HL62.1BF/7: DN75 HL62BF/1, HL62.1BF/1: DN110 HL62BF/2, HL62.1BF/2: DN125
Outlet	vertical
Extension	PP, 150 x 150 mm, adjustable in length
Sealing flange	PP, weldable with hot air
Inlet	Stainless steel grate, 137 x 137 mm
Standard	DIN 19599, EN 1253
Load classification	K3, max. 300 kg
Recommended for	FPO-sheetings, based on PP, walkable flat roofs
Additional information	Notch dimension: 255 x 380 mm Tap hole dimension: Ø 255 mm

HL62.1BF: heated type with self-adjusting heat source for the connection to a 230 V power grid (10 - 30 Watt)

Including Lid cover



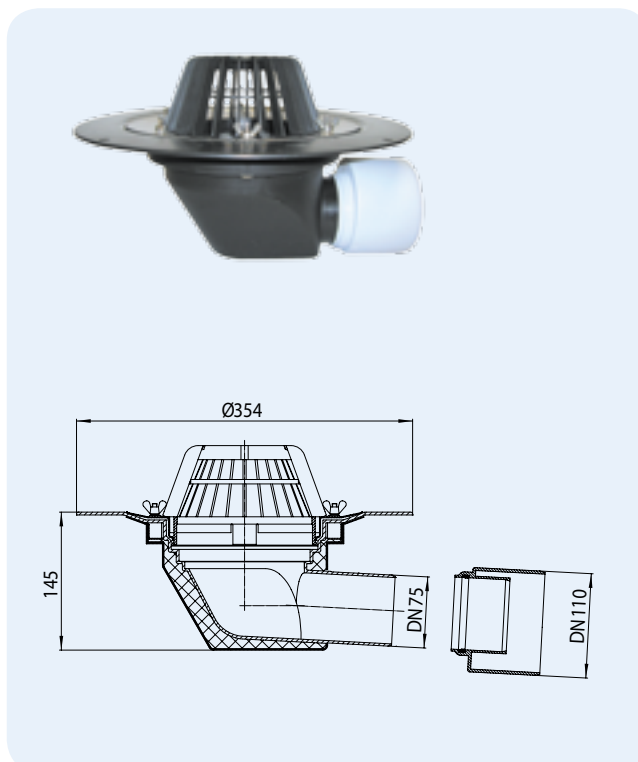
HL-No.	Dimension	Weight	EAN	Piece/package	Type
62BF/7	DN75	1603 g	+031344	1	Standard
62.1BF/7	DN75	1743 g	+031849	1	with heating
62BF/1	DN110	1582 g	+031351	1	Standard
62.1BF/1	DN110	1722 g	+031863	1	with heating
62BF/2	DN125	1577 g	+031368	1	Standard
62.1BF/2	DN125	1717 g	+031887	1	with heating



HL64 Roof drain with thermal insulation**HL64.1** Roof drain like HL64, but electrically heated**Data**

Capacity	DN75: 10,00 l/s, DN110: 6,00 l/s
Material	PP, drain body thermal insulated
Connection dimension	DN75/110
Outlet	horizontal
Sealing flange	PP with stainless steel clamp ring
Inlet	Leaf catcher Ø 170 mm
Standard	DIN 19599, EN 1253
Recommended for	Polymere sheetings
Additional information	Notch dimension: 260 x 380 mm

Including
 HL64.1: heated type with self-adjusting heat source for the connection to a 230 V power grid (10 - 30 Watt)
 Lid cover, 6 pcs. HL062N.4E
 hex nut alternative to wing nuts

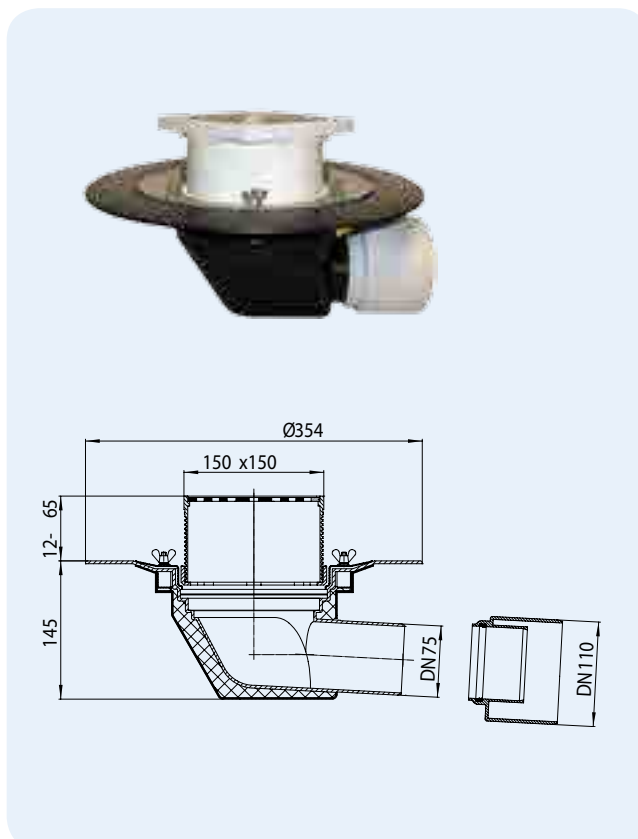


HL-No.	Dimension	Weight	EAN	Piece/package	Type
64	DN75/110	1639 g	+800643	1	Standard
64.1	DN75/110	1781 g	+806416	1	with heating

HL64B Roof drain walkable**HL64.1B** Roof drain like HL64B, but electrically heated**Data**

Capacity	3,70 l/s
Material	PP, drain body thermal insulated
Connection dimension	DN75/110
Outlet	horizontal
Extension	PP, 150 x 150 mm, adjustable in length
Sealing flange	PP with stainless steel clamp ring
Inlet	Stainless steel grate, 137 x 137 mm
Standard	DIN 19599, EN 1253
Load classification	K3, max. 300 kg
Recommended for	Polymere sheetings, walkable flat roofs
Additional information	Notch dimension: 260 x 380 mm

Including
 HL64.1B: heated type with self-adjusting heat source for the connection to a 230 V power grid (10 - 30 Watt)
 Lid cover, 6 pcs. HL062N.4E
 hex nut alternative to wing nuts

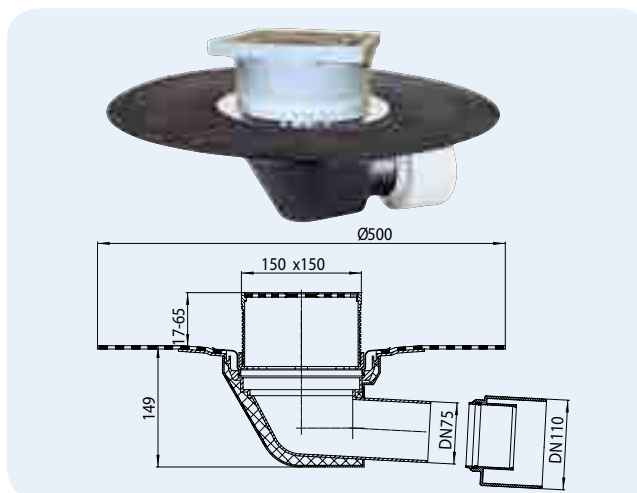


HL-No.	Dimension	Weight	EAN	Piece/package	Type
64B	DN75/110	1900 g	+806423	1	Standard
64.1B	DN75/110	2042 g	+814121	1	with heating

HL64BH Roof drain walkable, with bitumen membrane
HL64.1BH Roof drain like HL64BH, but electrically heated

Data

Capacity	3,70 l/s
Material	PP, drain body thermal insulated
Connection dimens.	DN75/110
Outlet	horizontal
Extension	PP, 150 x 150 mm, adjustable in length
Sealing flange	PP, Stainless steel, prefabricated welded bitumen membrane
Inlet	Stainless steel grate, 137 x 137 mm
Standard	DIN 19599, EN 1253
Load classification	K3, max. 300 kg
Recommended for	Bitumen sheetings; walkable flat roofs
Additional information	Notch dimension: 260 x 380 mm HL64.1BH: heated type with self-adjusting heat source for the connection to a 230 V power grid (10 - 30 Watt)
Including	Lid cover



HL-No.	Dimension	Weight	EAN	Piece/package	Type
64BH	DN75/110	2293 g	+816422	1	Standard
64.1BH	DN75/110	2435 g	+864126	1	with heating

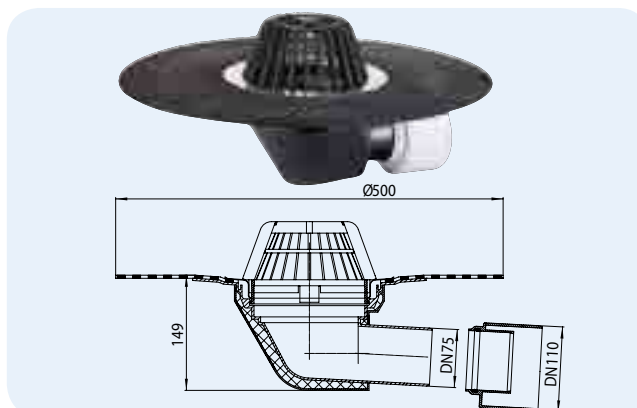
HL66.9



HL64H Roof drain with bitumen membrane
HL64.1H Roof drain like HL64H, but electrically heated

Data

Capacity	DN75: 10,00 l/s, DN110: 6,00 l/s
Material	PP, drain body thermal insulated
Connection dimens.	DN75/110
Outlet	horizontal
Sealing flange	PP, Stainless steel, prefabricated welded bitumen membrane
Inlet	Leaf catcher Ø 170 mm
Standard	DIN 19599, EN 1253
Recommended for	Bitumen sheetings
Additional information	Notch dimension: 260 x 380 mm HL64.1H: heated type with self-adjusting heat source for the connection to a 230 V power grid (10 - 30 Watt)
Including	Lid cover



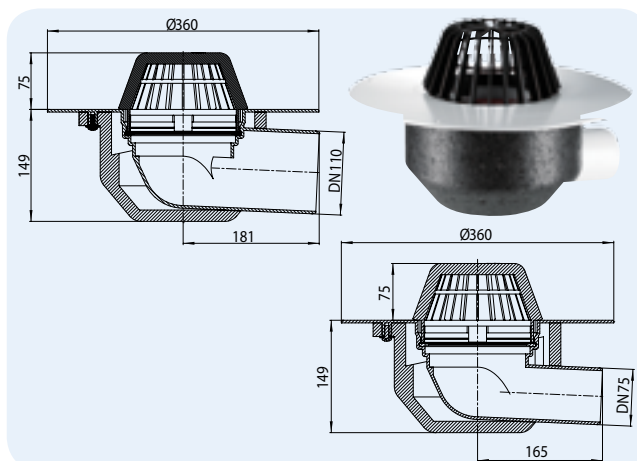
HL-No.	Dimension	Weight	EAN	Piece/package	Type
64H	DN75/110	1953 g	+801640	1	Standard
64.1H	DN75/110	2095 g	+816415	1	with heating



HL64P Roof drain with PVC-flange
HL64.1P Roof drain like HL64P, but electrically heated

Data

Capacity	HL64P/7, HL64.1P/7: 6,90 l/s HL64P/1, HL64.1P/1: 7,80 l/s
Material	PP, PVC, drain body thermal insulated
Connection dimension	HL64P/7, HL64.1P/7: DN75 HL64P/1, HL64.1P/1: DN110
Outlet	horizontal
Sealing flange	PVC , weldable with hot air
Inlet	Leaf catcher Ø 170 mm
Standard	DIN 19599, EN 1253
Recommended for	PVC-sheetings
Additional information	Notch dimension: 260 x 380 mm HL64.1P: heated type with self-adjusting heat source for the connection to a 230 V power grid (10 - 30 Watt)
Including	Lid cover



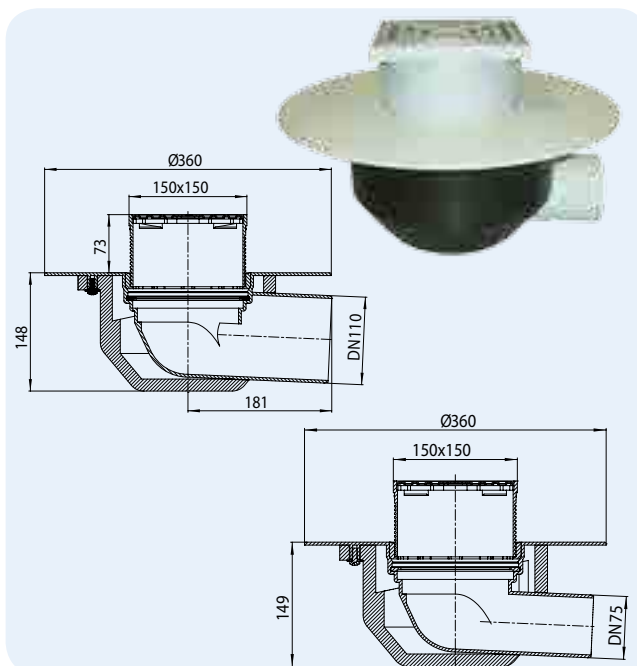
HL-No.	Dimension	Weight	EAN	Piece/package	Type
64P/7	DN75	1739 g	+031405	1	Standard
64.1P/7	DN75	1881 g	+031443	1	with heating
64P/1	DN110	1739 g	+031429	1	Standard
64.1P/1	DN110	1881 g	+031467	1	with heating



HL64BP Roof drain with PVC-flange, walkable
HL64.1BP Roof drain like HL64BP, but electrically heated

Data

Capacity	3,70 l/s
Material	PP, PVC, drain body thermal insulated
Connection dimension	HL64BP/7, HL64.1BP/7: DN75 HL64BP/1, HL64.1BP/1: DN110
Outlet	horizontal
Extension	PP, 150 x 150 mm, adjustable in length
Sealing flange	PVC , weldable with hot air
Inlet	Stainless steel grate, 137 x 137 mm
Standard	DIN 19599, EN 1253
Load classification	K3, max. 300 kg
Recommended for	PVC-sheetings, walkable flat roofs
Additional information	Notch dimension: 260 x 380 mm HL64.1BP: heated type with self-adjusting heat source for the connection to a 230 V power grid (10 - 30 Watt)
Including	Lid cover



HL-No.	Dimension	Weight	EAN	Piece/package	Type
64BP/7	DN75	2000 g	+031481	1	Standard
64.1BP/7	DN75	2142 g	+031566	1	with heating
64BP/1	DN110	2000 g	+031504	1	Standard
64.1BP/1	DN110	2142 g	+031542	1	with heating

HL66.9



HL0317.1E



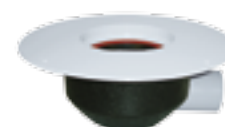
HL062B.2E



HL062B.3E



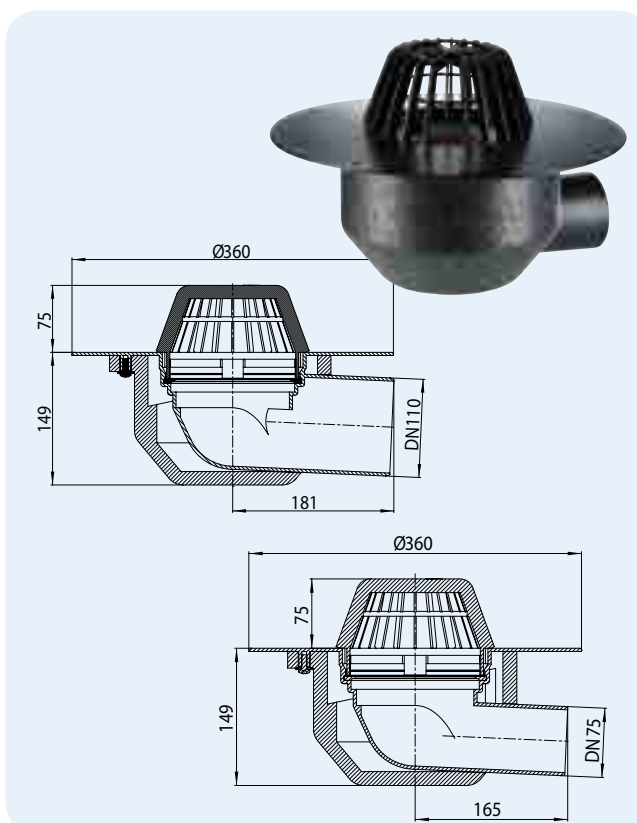
HL170



HL64F Roof drain with PP-flange
HL64.1F Roof drain like HL64F, but electrically heated

Data

Capacity	HL64F/7, HL64.1F/7: 6,90 l/s HL64F/1, HL64.1F/1: 7,80 l/s
Material	PP, drain body thermal insulated
Connection dimension	HL64F/7, HL64.1F/7: DN75 HL64F/1, HL64.1F/1: DN110
Outlet	horizontal
Sealing flange	PP, weldable with hot air
Inlet	Leaf catcher Ø 170 mm
Standard	DIN 19599, EN 1253
Recommended for	FPO-sheetings, based on PP
Additional information	Notch dimension: 260 x 380 mm HL64.1F: heated type with self-adjusting heat source for the connection to a 230 V power grid (10 - 30 Watt)
Including	Lid cover



HL-No.	Dimension	Weight	EAN	Piece/package	Type
64F7	DN75	1739 g	+031689	1	Standard
64.1F/7	DN75	1881 g	+031665	1	with heating
64F/1	DN110	1739 g	+031702	1	Standard
64.1F/1	DN110	1881 g	+031641	1	with heating



HL0317.1E

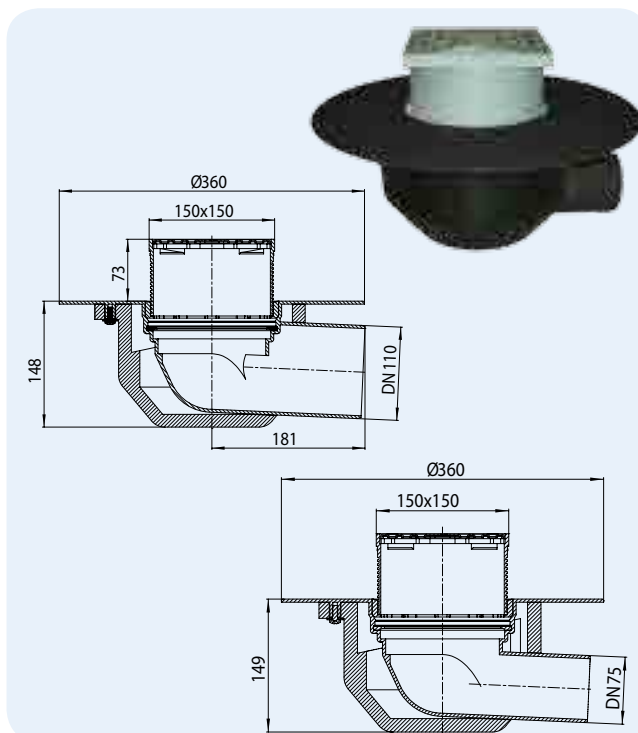


HL170



HL64BF Roof drain with PP-flange, walkable**HL64.1BF** Roof drain like HL64BF, but electrically heated**Data**

Capacity	3,70 l/s
Material	PP, drain body thermal insulated
Connection dimension	HL64BF/7, HL64.1BF/7: DN75 HL64BF/1, HL64.1BF/1: DN110
Outlet	horizontal
Extension	PP, 150 x 150 mm, adjustable in length
Sealing flange	PP, weldable with hot air
Inlet	Stainless steel grate, 137 x 137 mm
Standard	DIN 19599, EN 1253
Load classification	K3, max. 300 kg
Recommended for	FPO-sheatings, based on PP, walkable flat roofs
Additional information	Notch dimension: 260 x 380 mm HL64.1BF: heated type with self-adjusting heat source for the connection to a 230 V power grid (10 - 30 Watt)
Including	Lid cover

**HL66.9**

HL0317.1E



HL062B.2E



HL062B.3E



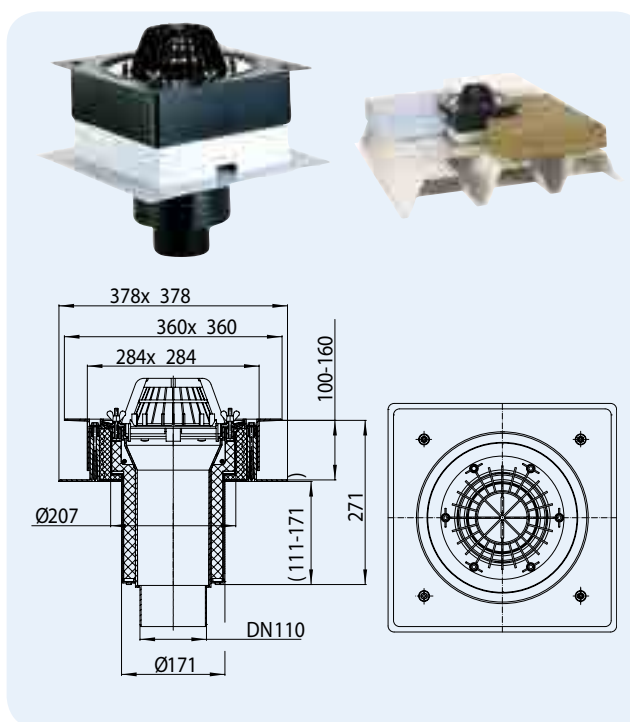
HL170



HL-No.	Dimension	Weight	EAN	Piece/package	Type
64BF/7	DN75	2000 g	+031603	1	Standard
64.1BF/7	DN75	2142 g	+031566	1	with heating
64BF/1	DN110	2000 g	+031627	1	Standard
64.1BF/1	DN110	2142 g	+031580	1	with heating

HL63 Roof drain „Drainbox“, with thermal insulation**HL63.1** Roof drain like HL63, but electrically heated**Data**

Capacity	HL63/7, HL63.1/7: 8,60 l/s HL63/1, HL63.1/1: 8,70 l/s HL63/2, HL63.1/2: 12,20 l/s
Material	PP, Drain body with thermal insulation and adjustable in height
Connection dimension	HL63/7, HL63.1/7: DN75 HL63/1, HL63.1/1: DN110 HL63/2, HL63.1/2: DN125
Outlet	vertical
Sealing flange	PP with stainless steel clamp ring
Inlet	Leaf catcher Ø 170 mm
Standard	DIN 19599, EN 1253
Recommended for	Polymere sheetings; for the installation in thermal insulation plates from 100 – 360 mm
Additional information	Notch dimension: 255 x 400 mm Tap hole dimension: Ø 255 mm HL63.1: heated type with self-adjusting heat source for the connection to a 230 V power grid (10 - 30 Watt)
Including	Lid cover, 6 pcs. HL062N.4E hex nut alternative to wing nuts



HL062.1E



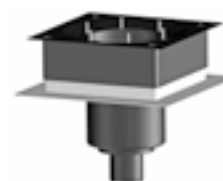
HL170



HL062.4E



HL062.3E



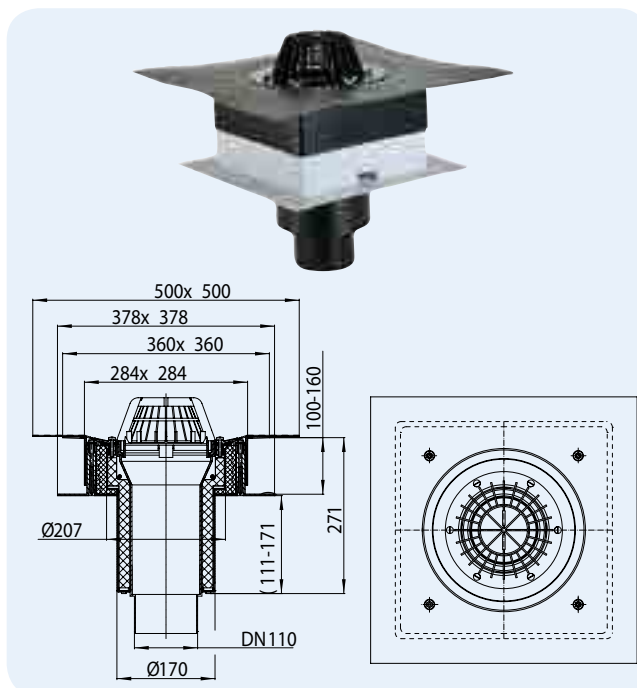
HL-No.	Dimension	Weight	EAN	Piece/package	Type
63/7	DN75	3054 g	+806300	1	Standard
63.1/7	DN75	3173 g	+806317	1	with heating
63/1	DN110	3078 g	+816309	1	Standard
63.1/1	DN110	3197 g	+816316	1	with heating
63/2	DN125	3098 g	+826308	1	Standard
63.1/2	DN125	3217 g	+826315	1	with heating

HL63H Roof drain „Drainbox“ with bitumen membrane**HL63.1H** Roof drain like HL63H, but electrically heated**Data**

Capacity	HL63H/7, HL63.1H/7: 8,60 l/s HL63H/1, HL63.1H/1: 8,70 l/s HL63H/2, HL63.1H/2: 12,20 l/s
Material	PP, Drain body with thermal insulation and adjustable in height
Connection dimension	HL63H/7, HL63.1H/7: DN75 HL63H/1, HL63.1H/1: DN110 HL63H/2, HL63.1H/2: DN125
Outlet	vertical
Sealing flange	PP, Stainless steel, prefabricated welded bitumen membrane
Inlet	Leaf catcher Ø 170 mm
Standard	DIN 19599, EN 1253
Recommended for	Bitumen sheetings; for the installation in thermal insulation plates from 100 – 160 mm
Additional information	Notch dimension: 255 x 400 mm Tap hole dimension: Ø 255 mm

HL63.1H: heated type with self-adjusting heat source for the connection to a 230 V power grid (10 - 30 Watt)

Including Lid cover



HL-No.	Dimension	Weight	EAN	Piece/package	Type
63H/7	DN75	3571 g	+806324	1	Standard
63.1H/7	DN75	3690 g	+806331	1	with heating
63H/1	DN110	3595 g	+816323	1	Standard
63.1H/1	DN110	3714 g	+816330	1	with heating
63H/2	DN125	3615 g	+826322	1	Standard
63.1H/2	DN125	3734 g	+826339	1	with heating



HL062.1E



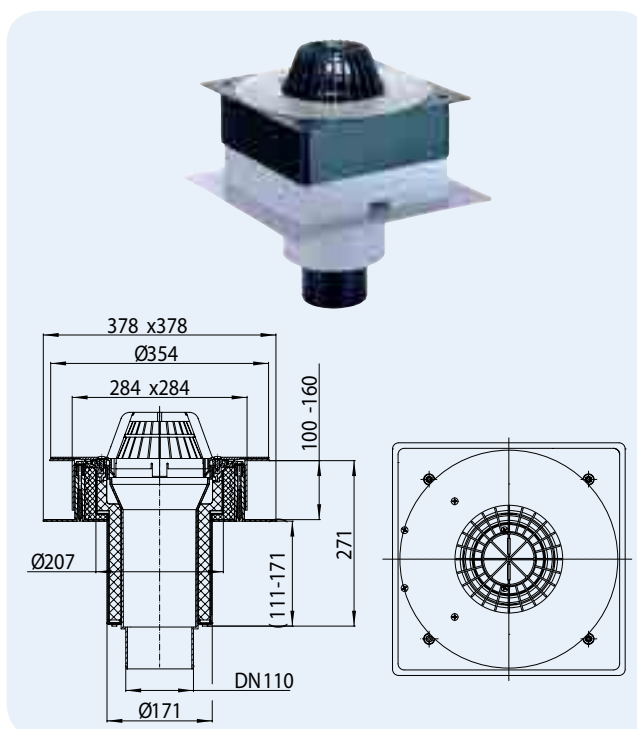
HL170

**HL63P** Roof drain „Drainbox“ with PVC-flange**HL63.1P** Roof drain like HL63P, but electrically heated**Data**

Capacity	HL63P/7, HL63.1P/7: 6,48 l/s HL63P/1, HL63.1P/1: 5,82 l/s HL63P/2, HL63.1P/2: 9,25 l/s
Material	Drain body with thermal insulation and adjustable in height
Connection dimension	HL63P/7, HL63.1P/7: DN75 HL63P/1, HL63.1P/1: DN110 HL63P/2, HL63.1P/2: DN125
Outlet	vertical
Sealing flange	PVC , weldable with hot air
Inlet	Leaf catcher Ø 170 mm
Standard	DIN 19599, EN 1253
Recommended for	PVC-sheetings for the installation in thermal insulation plates from 100 – 160 mm
Additional information	Notch dimension: 255 x 400 mm Tap hole dimension: Ø 255 mm

HL63.1P: heated type with self-adjusting heat source for the connection to a 230 V power grid (10 - 30 Watt)

Including Lid cover



HL-No.	Dimension	Weight	EAN	Piece/package	Type
63P/7	DN75	2779 g	+806348	1	Standard
63.1P/7	DN75	2898 g	+806355	1	with heating
63P/1	DN110	2803 g	+816347	1	Standard
63.1P/1	DN110	2922 g	+816354	1	with heating
63P/2	DN125	2823 g	+826346	1	Standard
63.1P/2	DN125	2942 g	+826353	1	with heating



HL062.1E



HL170

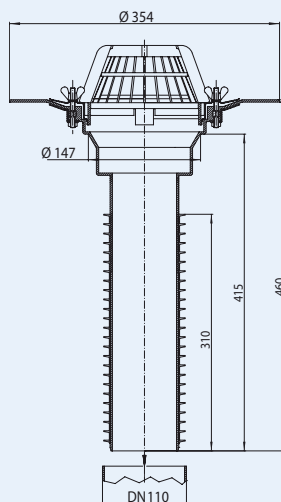


HL69 Roof renovation drain

Data

Capacity	HL69/7: 7,50 l/s HL69/1: 7,80 l/s HL69/2: 11,00 l/s HL69/5: 10,30 l/s
Material	PP
Connection dimension	HL69/7: DN75 HL69/1: DN110 HL69/2: DN125 HL69/5: DN160
Outlet	vertical
Sealing flange	PP with stainless steel clamp ring
Inlet	Leaf catcher Ø 170 mm
Recommended for	Polymere sheetings; for the simple and quick renovation of the old drainage system
Additional information	Easily to be plugged into the body of the old drain with vertical outlet - ready installed. Fits exactly into the old pipes with the prefabricated lip-gaskets.
Including	Lid cover, 6 pcs. HL062N.4E hex nut alternative to wing nuts

Lippendurchmesser von - bis / Diameter		
Dachablauf HL69	Ø min. Lippen	Ø max. Lippen
DN75	64 mm	73,5 mm
DN110	100 mm	108 mm
DN125	105 mm	123 mm
DN160	145 mm	159 mm

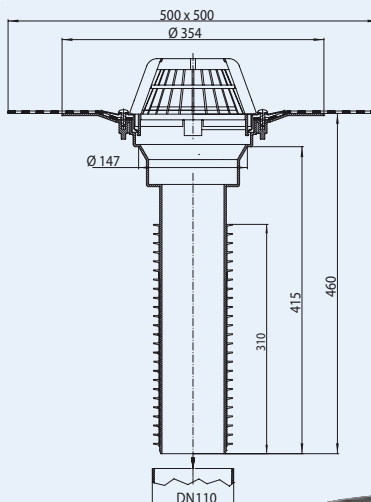


HL-No.	Dimension	Weight	EAN	Piece/package
69/7	for DN75	1523 g	+000580	1
69/1	for DN110	1781 g	+004515	1
69/2	for DN125	1877 g	+004522	1
69/5	for DN160	2265 g	+008261	1

HL69H Roof renovation drain with bitumen membrane

Data

Capacity	HL69H/7: 7,50 l/s HL69H/1: 7,80 l/s HL69H/2: 11,00 l/s HL69H/5: 10,30 l/s
Material	PP
Connection dimension	HL69H/7: DN75 HL69H/1: DN110 HL69H/2: DN125 HL69H/5: DN160
Outlet	vertical
Sealing flange	PP, prefabricated welded bitumen membrane
Inlet	Leaf catcher Ø 170 mm
Recommended for	Bitumen sheetings; for the simple and quick renovation of the old drainage system
Additional information	Easily to be plugged into the body of the old drain with vertical outlet - ready installed. Fits exactly into the old pipes with the prefabricated lip-gaskets.
Including	Lid cover



Lippendurchmesser von - bis / Diameter		
Dachablauf HL69	Ø min. Lippen	Ø max. Lippen
DN75	64 mm	73,5 mm
DN110	100 mm	108 mm
DN125	105 mm	123 mm
DN160	145 mm	159 mm



HL062.1E



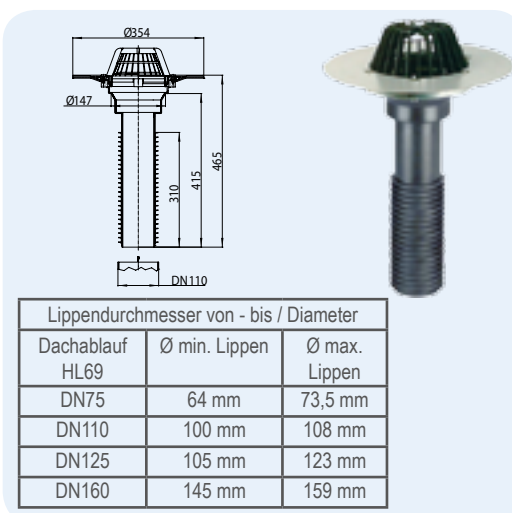
HL170



HL-No.	Dimension	Weight	EAN	Piece/package
69H/7	for DN75	2074 g	+004539	1
69H/1	for DN110	2332 g	+004546	1
69H/2	for DN125	2428 g	+004553	1
69H/5	for DN160	2816 g	+008285	1

HL69P Roof renovation drain with PVC-flange**Data**

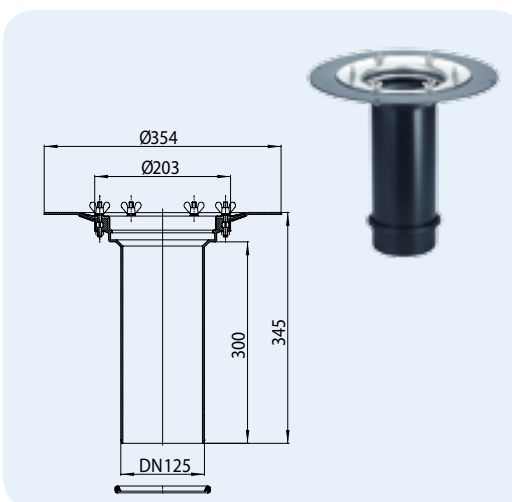
Capacity	HL69P/7: 6,34 l/s HL69P/1: 6,65 l/s HL69P/2: 10,10 l/s HL69P/5: 9,00 l/s
Material	PP, PVC
Connection dimension	HL69P/7: DN75 HL69P/1: DN110 HL69P/2: DN125 HL69P/5: DN160
Outlet	vertical
Sealing flange	PVC , weldable with hot air
Inlet	Leaf catcher Ø 170 mm
Recommended for	PVC-sheetings; for the simple and quick renovation of the old drainage system.
Additional information	Easily to be plugged into the body of the old drain with vertical outlet - ready installed. Fits exactly into the old pipes with the prefabricated lip-gaskets.
Including	Lid cover



HL-No.	Dimension	Weight	EAN	Piece/package
69P/7	for DN75	2103 g	+022663	1
69P/1	for DN110	2461 g	+022601	1
69P/2	for DN125	2557 g	+022625	1
69P/5	for DN160	2845 g	+022649	1

HL65 Extension**Data**

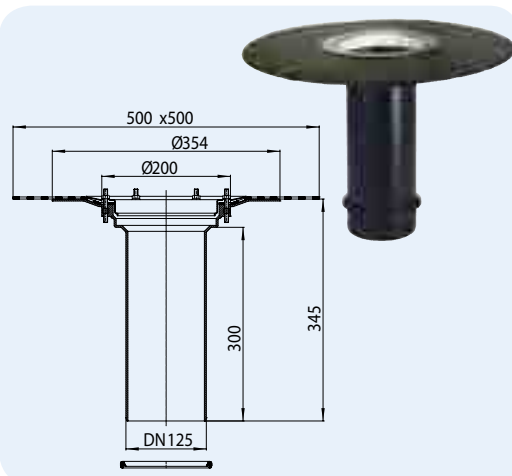
Material	PP
Connection dimension	DN125
Outlet	vertical
Sealing flange	PP with stainless steel clamp ring
Recommended for	Polymere sheetings; fits to HL62(.1)(H), HL64(.1)(H)
Additional information	incl. backflow gasket
Including	6 pcs. HL062N.4E hex nut alternative to wing nuts



HL-No.	Weight	EAN	Piece/package
65	1438 g	+800650	1

HL65H Extension with bitumen membrane**Data**

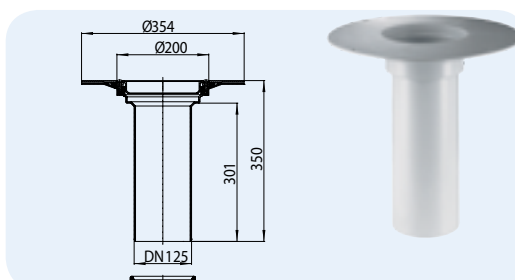
Material	PP
Connection dimension	DN125
Outlet	vertical
Sealing flange	PP, prefabricated welded bitumen membrane
Recommended for	Bitumen sheetings
Additional information	incl. backflow gasket



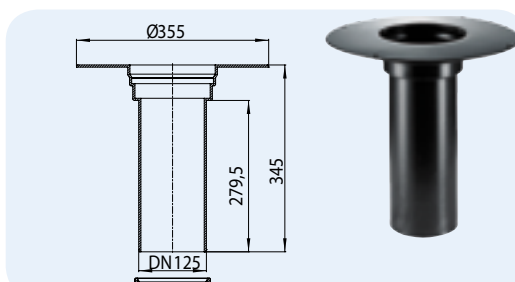
HL-No.	Weight	EAN	Piece/package
65H	2137 g	+801657	1

HL65P Extension with PVC-flange**Data**

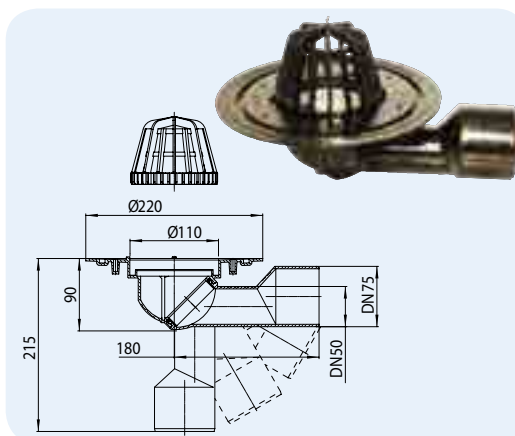
Material	PVC
Connection dimension	DN125
Outlet	vertical
Sealing flange	PVC , weldable with hot air
Recommended for	PVC-sheetings
Additional information	incl. backflow gasket

HL-No.
65PWeight
1338 gEAN
+022588Piece/package
1**HL65F** Extension with PP-flange**HL65PE** Extension with PE-flange**Data**

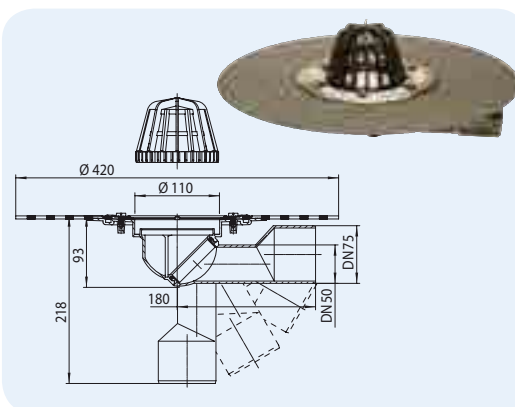
Material	HL65F: PP HL65PE: PE
Connection dimension	DN125
Outlet	vertical
Sealing flange	PP resp. PE, weldable by hot air
Recommended for	HL65F: FPO-sheetings, based on PP HL65PE: FPO-sheetings, based on PE
Additional information	incl. backflow gasket

HL-No.
65F
65PEWeight
1338 g
1600 gEAN
+031900
+017126Piece/package
1
1**HL80.3** Roof drain with continuously variable outlet**Data**

Capacity	1,00 l/s
Material	PP, PE
Connection dimension	DN50/75 crosscutable
Outlet	convertable from horizontal to vertical, Material PE, pluggable and weldable
Inlet	Leaf catcher Ø 110 mm
Standard	DIN 19535, 19560
Recommended for	Roof areas up to 33 m² and rain yield factor of 300 l/ (s x ha)
Additional information	Tap hole dimension Ø 185 mm
Including	Lid cover

HL-No.
80.3Dimension
DN50/75Weight
550 gEAN
+908035Piece/package
1**HL80.3H** Roof drain with continuously variable outlet and bitumen membrane**Data**

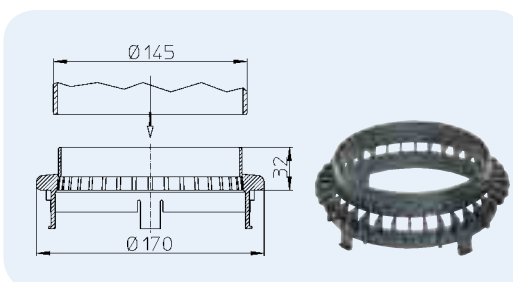
Capacity	1,00 l/s
Material	PP
Connection dims.	DN50/75 adjustable in length
Outlet	convertable from horizontal to vertical, Material PE, pluggable and weldable
Sealing flange	PP, prefabricated welded bitumen membrane
Inlet	Leaf catcher Ø 110 mm
Standard	DIN 19535, 19560
Recommended for	Bitumen sheetings, Roof areas up to 33 m² and rain yield factor of 300 l/ (s x ha)
Additional information	Tap hole dimension Ø 185 mm
Including	Lid cover

HL-No.
80.3HDimension
DN50/75Weight
550 gEAN
+918034Piece/package
1

HL160 Gravel guard for inverted roofs

Data

Material	PP
Additional information	for installation between drain flange and extension, to drain enough water in the second drainage level, e.g. inverted roofs. Fits to drain series HL62, HL63, HL64, HL69 and extension HL350(.0)



HL-No.	Dimension	Weight	EAN	Piece/Package
160	Ø 195 mm	53 g	+001606	1

HL161 Drainage element for series HL65

Data

Material	PP
Additional information	for installation between drain flange and extension HL65-series, to drain water on the second drainage level or on the vapour barrier, e.g. at aered roofs. Fits to drain series HL62, HL63, HL64, HL69 and extension HL65.

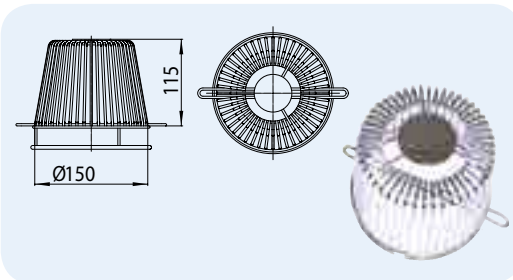


HL-No.	Dimension	Weight	EAN	Piece/Package
161	Ø 195 mm		+034772	1

HL175 Stainless steel leaf catcher

Data

Material	Stainless steel 1.4301
Additional information	Fits to all HL roof drains and extensions

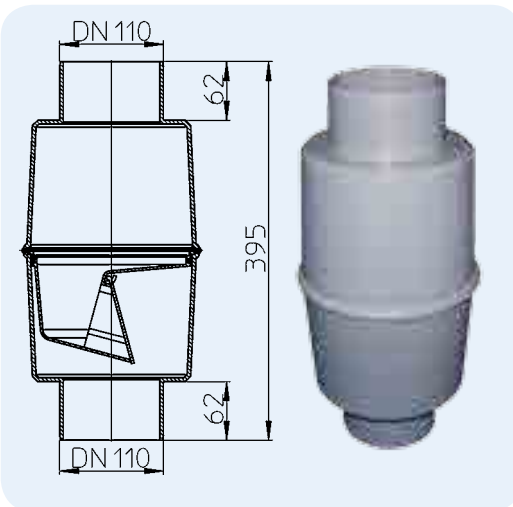


HL-Nr.	Dimension	Weight	EAN	Piece/Package
175	Ø 145 mm	520 g	+018031	1

HL603 Flap seal for external downpipes

Data

Capacity	DN110 and DN160: 6l/s
Material	PP
Connection	HL603/1: DN110 HL603/5: DN160
Outlet	HL603/1: DN110 HL603/5: DN160
Recommended for	Avoids stench, coming up the downpipe, e.g. for roof drains, which are connected to the sewer
Additional information	Only for vertical installation, care for access for cleaning!



HL-Nr.	Dimension	Weight	EAN	Piece/Package
603/1	DN110	940 g	+005956	1
603/5	DN160	940 g	+011933	1