

Roof drainage → Gravity rainwater drainage

Cast iron flat roof drains

Cast iron (EN-GJL-200)

Consists of an iron-carbon alloy in which the carbon is bonded in the metallic base in an lamellar fashion. This so-called graphite grid gives cast iron excellent resistance to corrosion and is thus perfect for use in waste water engineering.

Stainless steel flat roof drains

Stainless steel (material grade 304)

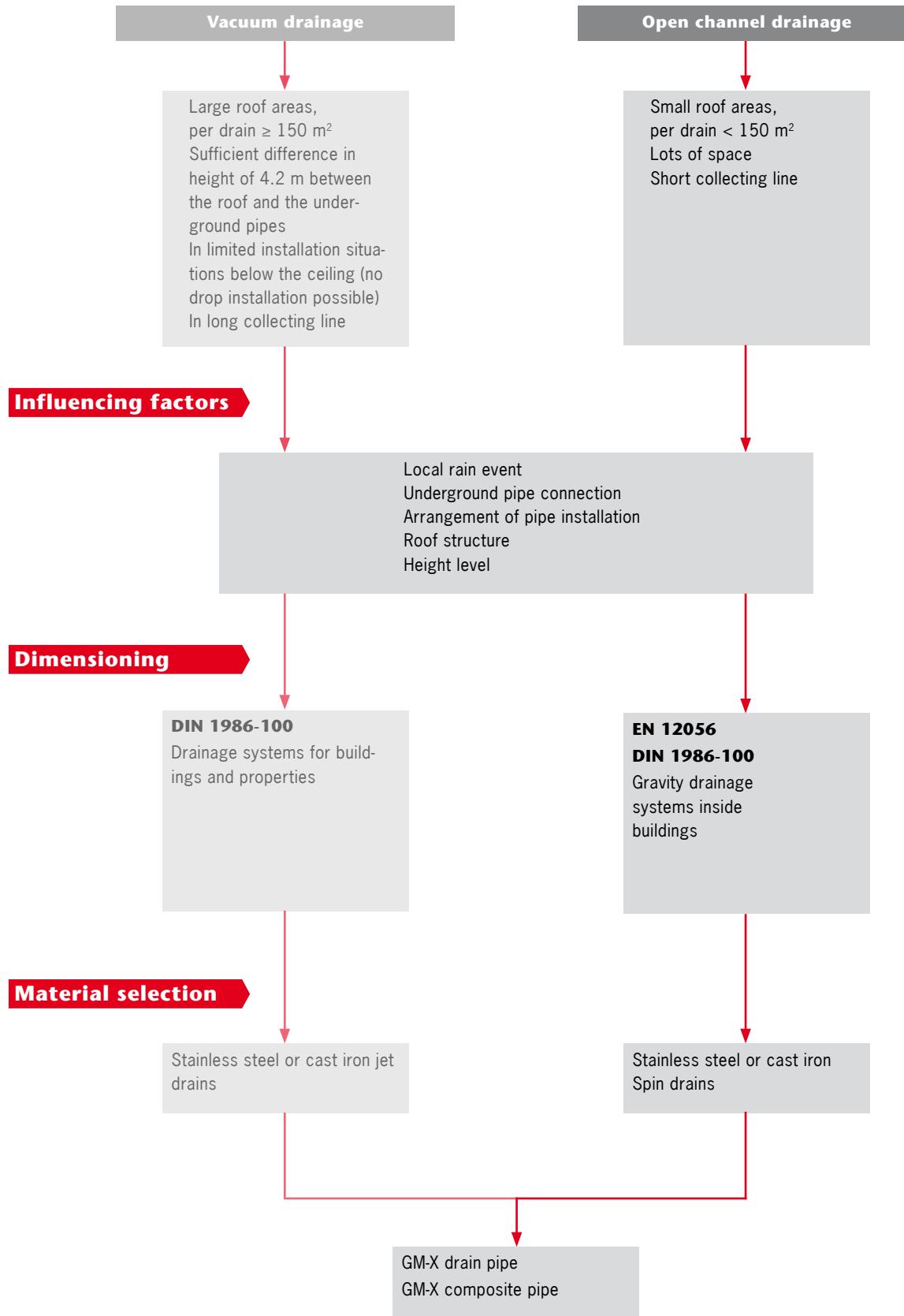
refers to especially highly-pure alloyed or non-alloyed steels. Suitable for a range of uses, steel is resistant to water, steam and humidity. Typical areas of use include roof drainage for large factory buildings.

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Decision Diagram Open channel drainage

Basic requirements



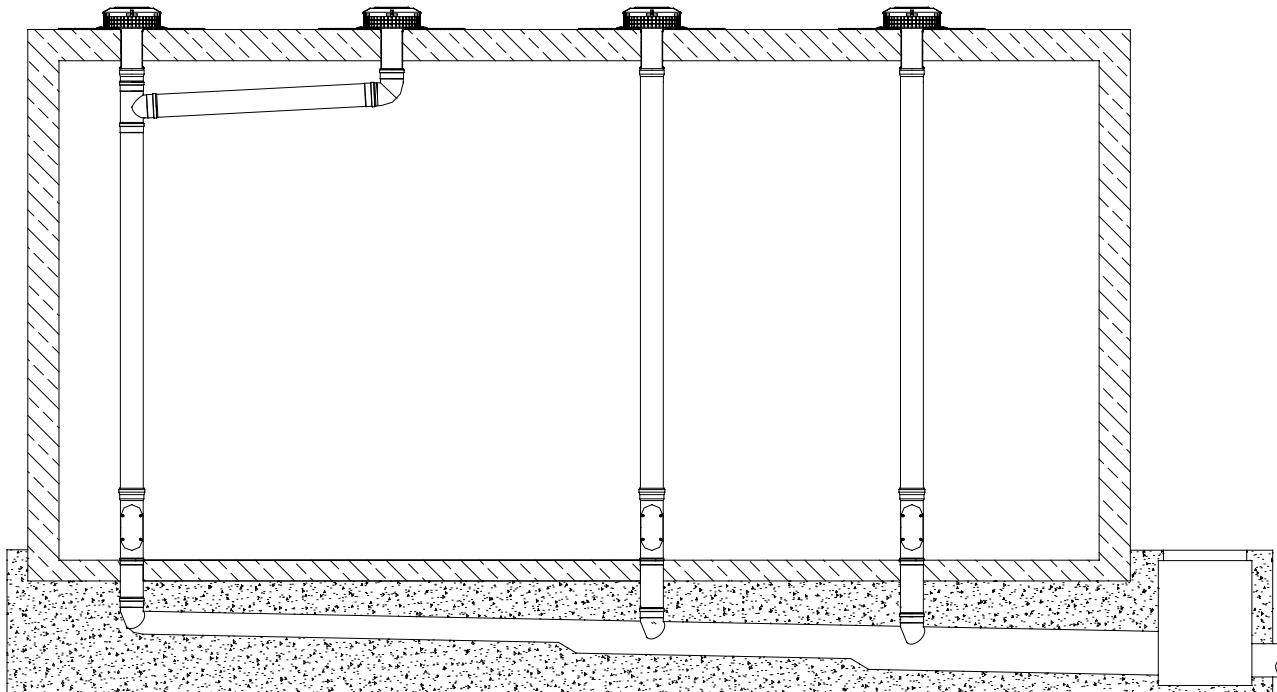
Basics

In the open channel drainage according to EN 12056-3 (installed inside of buildings), the filling degree (h/d) may equal max. 0.7, since sufficient ventilation of the pipes is only guaranteed up to this value and therefore a safe drainage of the rain water. Each roof surface can be drained in the open channel drainage system, however, certain items have to be considered in planning. The installation of the

pipes in the drop is important here, which assumes a certain space requirement. The rain water is simply drained based on the gravity principle via the flat roof drains and the following pipe in the open channel drainage. A large number of roof drains and underground pipe connections are required for the drainage according to this system. The line diameters must be calculated similar to the valid standards. The re-

quired number of flat roof drains and their nominal width depends on the calculation of the rain water drainage (Q_r) in l/s. The following information is required:

Type of connected area
(Ψ or C)
Precipitation area to be connected in m² (A)
Rain yield in l / [s x ha]



Planning information

The roof cover is the ultimate limit of a building. Due to the high demands on these ceilings by rainfall, fluctuating climatic conditions and varied traffic loads, the seal in the roof structure receives special importance regarding its physical construction.

ACO has developed flat roof drains for the functional drainage of rainwater and the secure connection of the seal. The most recent edition of EN 12056-3, in conjunction with DIN 1986-100 must be observed when planning.

Roof drains are installed to drain rain water that accumulates on roof areas, multi-storey car parks and terrace areas. They absorb rain water and drain it over interior pipes.

Drains without odour seals with compression-sealing flanges are used in these areas. The roof drains must be arranged so that the rain water is drained quickly. ACO provides a modular system for this, consisting of drains of the nominal widths DN 70/80, DN 100, DN 125 and DN 150, in 1 or 2-part versions well as in stainless steel and cast iron. In addition, accessories are offered for the

most diverse flat roof and parking deck structures.

The increase in damages, especially on flat roofs of light construction, due to heavy rainfalls occurring more frequently, makes the engineering design and calculation of the emergency drainage on flat roofs a must.

According to DIN 1986-100, the emergency drain may not be connected to the drainage system, but must be drained by a free outlet to property areas that can be flooded without causing damage.

Roof structures

Solid construction

This type of roof construction, for example, of prestressed concrete or ferroconcrete are generally suitable for rain water storage or retention. The resulting loads must be calculated in dimensioning the structure by the structural engineers. Relevant information about the desired water over-fill must be provided to the planner in time.

Lightweight construction

Flat roofs of this construction are generally unsuitable for rainwater storage or retention. They are mainly used in commercial buildings, for example, as a trapezoidal sheet metal structures provided on light frames. The additional rain water load at an increased accumulation would create a burden that would even surpass snow loads.

Roof construction

The top floor ceiling is generally the best part of the roof structure in flat roofs in multi-story buildings. Usually these are solid ferroconcrete sheets, fitted sheet metal or reinforced concrete structures. Flat roofs are roofs that generally only have a low pitch.

Flat roofs are designed as warm roof (non-ventilated roof), as cold roof (ventilated roof) or also as an inverted roof with external insulation. Roofs without insulation, such as parking decks and terraces, and other roof areas above unheated spaces are a special form.

The waterproof roof seal of the flat roof takes over the protection from penetrating water. Typical materials for sealing flat roofs are bitumen - welding beads (now generally polymer modified) and plastic roof sheeting.

Roof structure with a sealing membrane

ACO flat roof/terrace drains have a moulded compression-sealing flange. The drain body/lower section is built into the flat roof or terrace roof.



Roof structure with two sealing membranes

If a second sealing level is required, a cast iron drain body can be expanded with an additional upper part, which has a moulded compression-sealing flange. The top section is cut to length according to the insulation thickness and inserted in the drain body and sealed with a sealing ring against backflow water.



The drain is supplemented by a lower part for stainless steel, which is pressed into the vapour barrier. The top sealing membrane must be pressed into the drain.

ACO also provides specifically matched accessories for the various roof types, such as non-ventilated roof, inverted roof, multi-storey car park, plates in gravel bed, stilted panels, green roof and gravel covered roof.

Drain types

Two drain types are used for the safe drainage of rain water and the safe connection of the sealing membranes:

Flat roof, terrace, parking deck drains
1-piece with a compression-sealing flange

Flat roof, terrace, parking deck drains
2-piece with a compression-sealing flange each

The 1-piece drains are used for roofs without insulation and inverted roofs. The 2-part drains are used on non-ventilated roofs. The compression-sealing flange of the drain body/lower part is used for including the vapour barrier. The sealing membrane is securely connected to the compression-sealing flange of the upper flange section.

EN 12056-3 and the current DIN 1986-100 must be observed when planning flat roof drains.

The drains of the Spin series and parking deck drains are used for open channel drainage. The connecting lines must be designed according to DIN 1986-100.

Selection criteria for roof drains

Roof drains channel the rain water from roof surfaces into the drainage lines harmless to humans and harmless to buildings. They should be provided wherever rain water can accumulate on the roof and must be safely drained. They must be installed where demanded by DIN 1986-100.

Rain water volume → Nominal width

The drainage value of the roof drains is in direct conjunction with the nominal width of the roof drain. Depending on the accumulating rain water volume, the nominal width DN 70/80, DN 100, DN 125 or DN 150 must be selected and the number of roof drains must be defined.

Pipe distortion → Socket inclination

The connecting line is distorted in or under the ceiling depending on the structural conditions. Accordingly, a roof drain with a socket inclination of 1.5° or 90° is selected.

Traffic load → classification

The traffic areas are classified according to EN 1253. In accordance, there are load classifications H 1,5, K 3, L 15 and M 125. Depending on the traffic area, the correspondingly classified drain/grating must be selected.

Fire behaviour

Cast iron and stainless steel roof drains correspond with building material class A1 according to EN 4102. These drainage systems do not burn. These are ideal conditions for preventive structural fire protection.





Roof drainage → **Gravity rainwater drainage** → **Cast iron**

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Flat roof drains Spin	Drain body DN 70	Flat roof drains Components Top sections Accessories
	Drain body DN 100 – DN 150	Flat roof drains Components Top sections Accessories
Additional components	Greenery roof and multi-storey car park gulley grating	Additional components Accessories
Multi-storey car park drainage	Drains and channels	Multi-storey car park floor drain Multi-storey car park drainage channels

Open channel drainage basics

Cast iron material

Grey cast iron (EN-GJL-200) is an excellent construction material with a good basic performance and many uses. Cast iron according EN 1561 designates a ferrous alloy with a high content of carbon, silicon and other components, such as manganese, chrome or nickel. Cast iron offers a high degree of safety in

relation to fire protection for roof drainage at a melting point of about 1,100° C. Roof drains Spin are made of cast iron, material EN-GJL-200. Based on the layered deposit of carbon in the metal base, cast iron receives an excellent corrosion resistance. This so-called graphite grating

makes it possible to waive any surface coating for corrosion protection.

Single part drain body with compression-sealing flange

A compression-sealing flange consists of

A non-rotatable flange

Flange which is solidly connected to the drain body.

A rotatable flange

Flange with which the seal is pressed against the non-rotatable flange to create a tight connection.



Two-part drain body with compression-sealing flange

Installation in insulated roofs

Drain body

Compression-sealing flange to connect with the vapour barrier.

Top section

with compression-sealing flange to connect with the sealing membrane above the insulation.

Sealing ring standard, prevents the penetration of waste water backflow from the downpipe into the insulation and also the water drainage of the sealing membrane into the drain body.



Insulating body and insulating ring DN 70 – DN 150

Moulded parts of vapour diffusion-tight foam glass (FOAM GLASS) for the heat insulation of the drain body, i.e. the upper part.

The condensation development in the drain area is thereby prevented.

The moulded parts can be used as lost shuttering when concreting the roof ceiling .

The insulating bodies and ring rings are of non-combustible foam glass, building material class A1, according to DIN 4102.

Foam glass corresponds with building materialsclass A1, according to EN 13501-1.



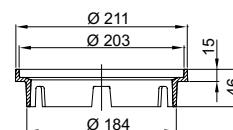
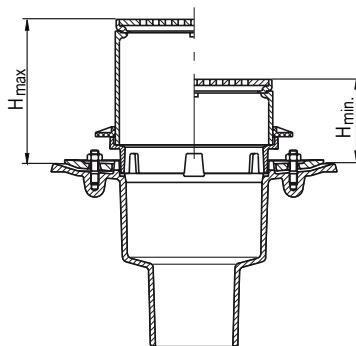
Transition ring

The transition ring 7000.31.00 is required when top sections from the ACO Wal>Selecta Series DN 100 (page 263) are combined with a flat roof drains DN 100 - DN 150.

Application scope

Terraces with stilted plates

Terraces with plates in the gravel bed



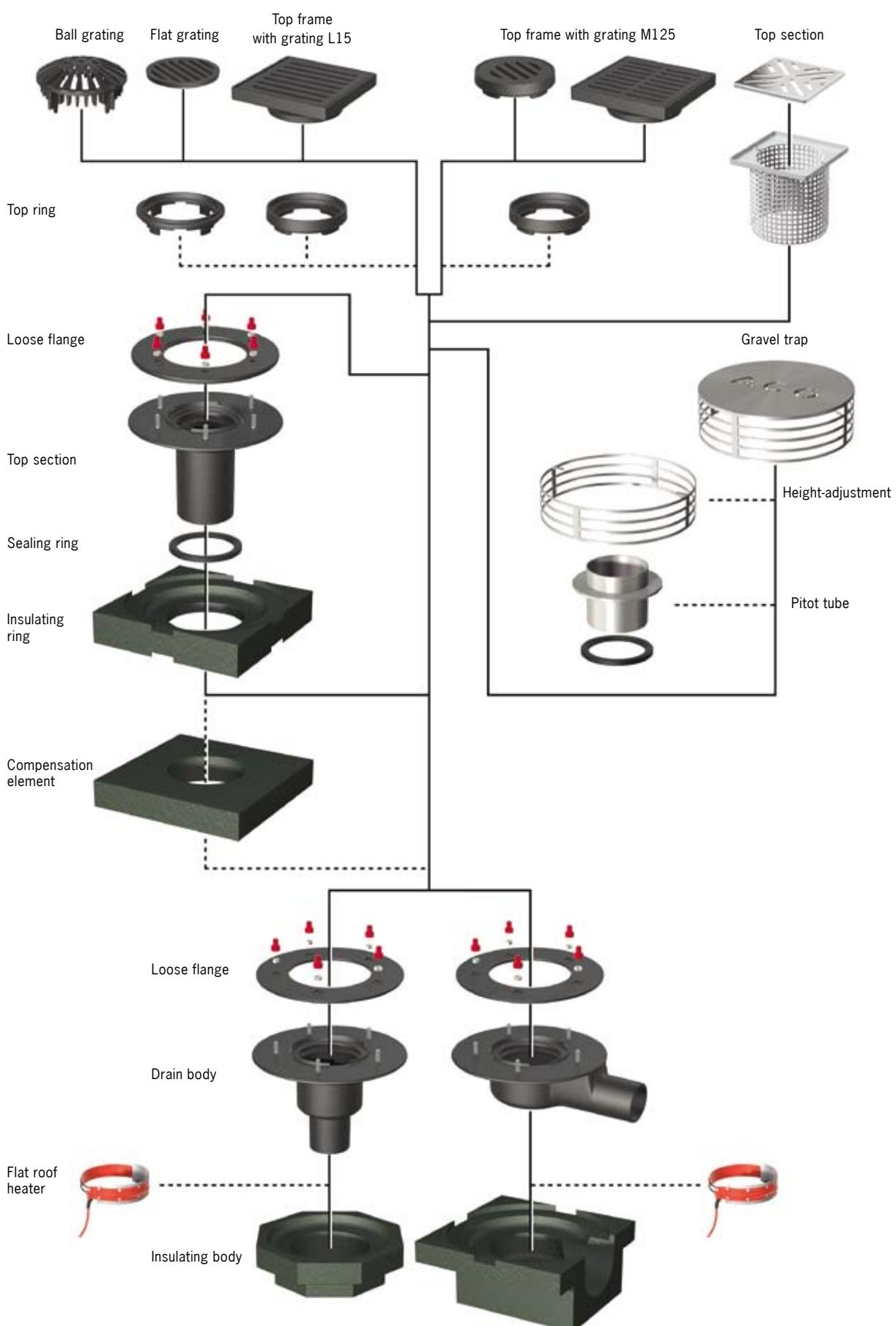
Flat roof heater

ACO optionally offers a heater for roof drains to prevent freezing of the drain. This not only increases the functional reliability of the drainage system even at subzero temperatures, but is also recommended by DIN 1986-100.

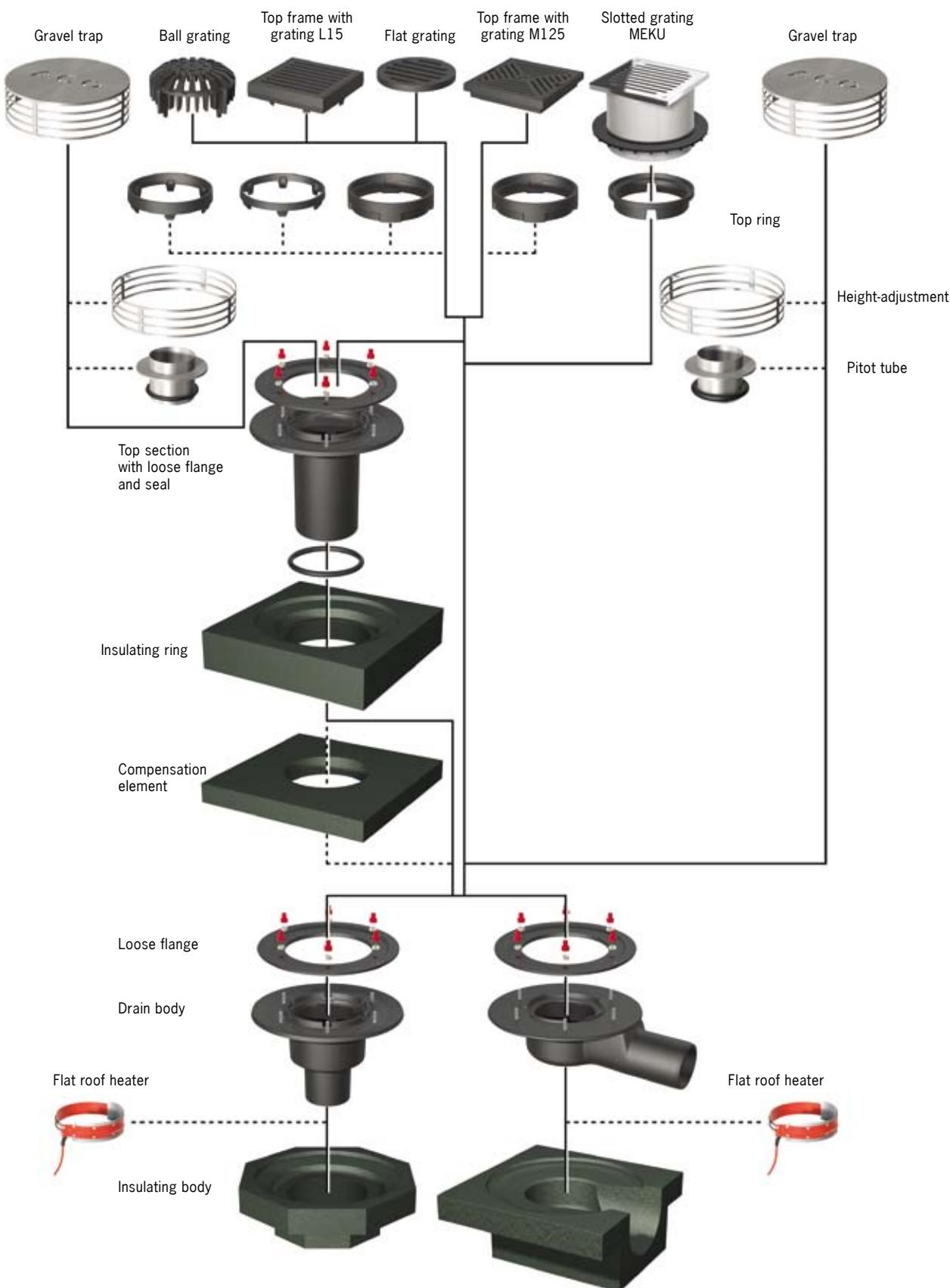
A flat roof heater is recommended espe-

cially in houses in an extreme location, when connected to separate sewage system, for buildings that are not heated at times during the winter months, drains that are located in shady areas, etc. The requirements of the VDE and the local EVU regulations must be observed.

In order to prevent unnecessary energy consumption, it is advisable to regulate the heated roof drains via an additional thermostat.

Cast iron open channel drainage DN 70


Cast iron open channel drainage DN 100 – DN 150



Drain values of cast iron flat roof drains Spin

The runoff values of the flat roof drains depend on the nominal width of the drain body, the grates used, the socket inclina-

tion and / or whether a top section with a compression-sealing flange is placed on

the drain body. The correct sizing of the pipe to be used must be observed.

DN 70

			Ball grating	Flat grating	Top section	Cast iron top section
Nominal width	Socket inclination	Model	Article No. 7000.09.00	Article No. 7000.19.00	Article No. 5141.81.00 5141.87.00 5141.89.00	Article No. 5141.83.00
DN 70	1,5°	1-part	6.0 l/s	5.4 l/s	5.2 l/s	4.8 l/s
DN 70	1,5°	2-part	5.5 l/s	4.4 l/s	4.2 l/s	3.8 l/s
DN 70	90°	1-part	7.0 l/s	6.7 l/s	6.2 l/s	5.8 l/s
DN 70	90°	2-part	6.5 l/s	5.7 l/s	5.2 l/s	4.8 l/s

DN 100

			Ball grating	Flat grating	Top frame with grating	Top frame with grating	Top frame with grating
Nominal width	Socket inclination	Model	Article No. 7000.10.00	Article No. 7000.20.00	Article No. 7000.40.00	Article No. 7000.28.00	Article No. 7000.41.00 7000.42.00
DN 100	1,5°	1-part	9.0 l/s	8.4 l/s	10.7 l/s	7.6 l/s	12.1 l/s
DN 100	1,5°	2-part	9.0 l/s	8.4 l/s	10.7 l/s	7.6 l/s	12.1 l/s
DN 100	90°	1-part	8.0 l/s	6.2 l/s	10.7 l/s	7.6 l/s	15.2 l/s
DN 100	90°	2-part	8.0 l/s	6.2 l/s	10.7 l/s	7.6 l/s	15.2 l/s

DN 125

			Ball grating	Flat grating	Top frame with grating	Top frame with grating	Top frame with grating
Nominal width	Socket inclination	Model	Article No. 7000.10.00	Article No. 7000.20.00	Article No. 7000.40.00	Article No. 7000.28.00	Article No. 7000.41.00 7000.42.00
DN 125	1,5°	1-part	12.0 l/s	10.2 l/s	12.6 l/s	7.6 l/s	16.4 l/s
DN 125	1,5°	2-part	12.0 l/s	10.2 l/s	12.6 l/s	7.6 l/s	16.4 l/s
DN 125	90°	1-part	12.0 l/s	10.2 l/s	12.6 l/s	7.6 l/s	16.4 l/s
DN 125	90°	2-part	12.0 l/s	10.0 l/s	12.6 l/s	7.6 l/s	16.4 l/s

DN 150

			Ball grating	Flat grating	Top frame with grating	Top frame with grating	Top frame with grating
Nominal width	Socket inclination	Version	Article No. 7000.10.00	Article No. 7000.20.00	Article No. 7000.40.00	Article No. 7000.28.00	Article No. 7000.41.00 7000.42.00
DN 150	1,5°	1-part	14.5 l/s	12.6 l/s	15.0 l/s	7.6 l/s	21.2 l/s
DN 150	1,5°	2-part	14.5 l/s	12.6 l/s	15.0 l/s	7.6 l/s	21.2 l/s
DN 150	90°	1-part	13.5 l/s	11.0 l/s	15.0 l/s	7.6 l/s	18.5 l/s
DN 150	90°	2-part	13.5 l/s	11.0 l/s	15.0 l/s	7.6 l/s	18.5 l/s

DN 100, with fire protection insert

			Ball grating	Flat grating	Top frame with grating	Top frame with grating	Top frame with grating
Nominal width	Socket inclination	Version	Article No. 7000.10.00	Article No. 7000.20.00	Article No. 7000.40.00	Article No. 7000.28.00	Article No. 7000.41.00 7000.42.00
DN 100	90°	1-part	6.5 l/s	6.0 l/s	7.5 l/s	4.5 l/s	10.5 l/s
DN 100	90°	2-part	6.5 l/s	6.0 l/s	7.5 l/s	4.5 l/s	10.5 l/s

Basics multi-storey car park drainage

The outdoor exposed and interior weather protected parking decks are distinguished in the parking deck drainage. Moisture or water accumulation can be expected in both cases. Significant rainfall can be expected in the exterior parking decks, while the internal areas are exposed to dripping water and snow accumulation on cars during winter. The parking deck drains and connecting

lines must therefore be designed according to EN 12056-3.

According to the state building codes and garage regulations, the protection against the transmission of fire and smoke is required in the area of the parking decks under certain conditions.

The ACO parking deck drains with fire protection can be fitted or retrofitted with a fire protection insert, the requirements

of AbZ. 19.17-1887 must be observed here.

ACO Haustechnik fire protection therefore also offer drains without odour seals.



Cast iron drainage channels

Drainage channels perform the function of absorbing accumulating waste water from adjacent traffic areas and drain it safely and harmless to humans and structures.

The channels of ACO Haustechnik consist of a cast-iron channel body and a slotted cast iron grate as a top.

The waste water is drained in the channel via a channel body with a vertical drain socket that matches the SML pipe DN 100 according to DIN 19522.



Flat roof drains Spin – gravity rainwater drainage

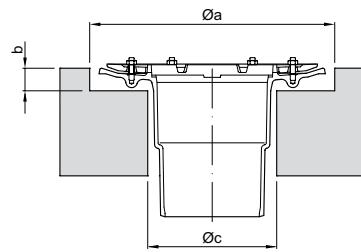
Product information

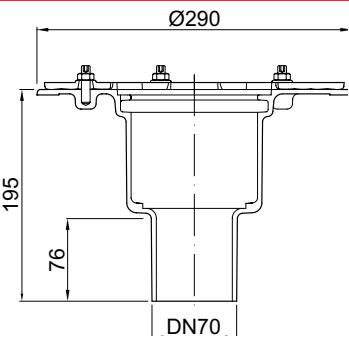
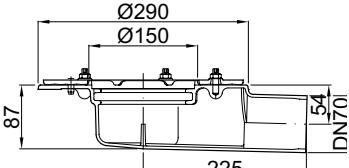
Drain body DN 70	With compression-sealing flange
Certified in accordance with EN 1255	With seepage openings
Coated cast iron	
Building material class A1	

Ordering information

Kernbohrungsmaße

Selection assistant	Nominal size	Øa [mm]	Øc [mm]	b [mm]	Article No.
For drain body without isolating body					
	DN 70	300	150	30	5169.20.00
For drain body with isolating body					
	DN 70	315	220	45	5169.20.00

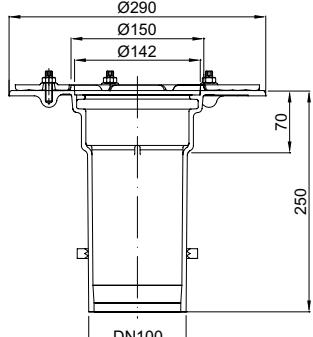


	Nominal width	Max. outflow value [l/s]	Recess [mm]	Weight [kg]	Article No.
Socket inclination: 90°					
	DN 70	7,0	230 x 320	7,4	5169.20.00
Socket inclination: 1,5°					
	DN 70	6,0	230 x 530	7,7	5169.40.00

Components

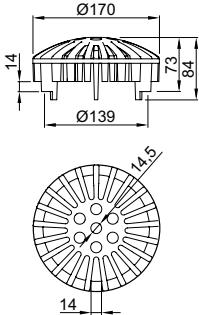
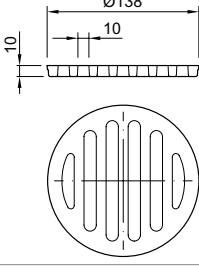
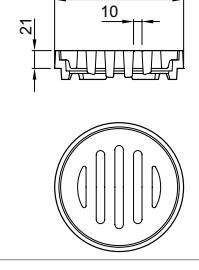
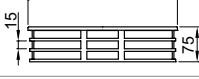
Drain bodies upper part DN 70

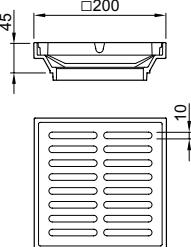
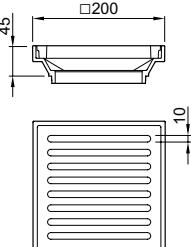
Ordering information

Designation	compatible with	Description	Article No.
 Upper part	Flat roof drains Jet <input type="checkbox"/> DN 50 Flat roof drains Spin <input type="checkbox"/> DN 70	Coated cast iron With compression-sealing flange in accordance with EN 1253 Non-flammable in accordance with building materials class A1 With seepage openings and lip-seal Height-adjustability: 62 – 200 mm Weight: 8.0 kg	7047.10.25

Top sections and gratings

Ordering information

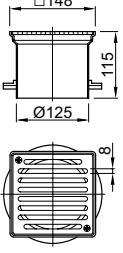
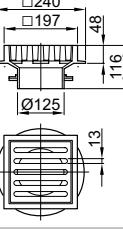
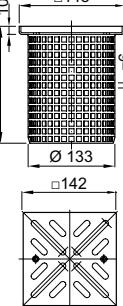
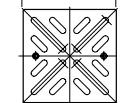
Designation	compatible with	Description	Article No.
 Ball grating	Flat roof drains Spin <input type="checkbox"/> DN 70	Coated cast iron Diameter: 170 mm Load class: H 1.5 Weight: 1.2 kg	7000.09.00
 Flat grating	Flat roof drains Spin <input type="checkbox"/> DN 70	Coated cast iron Diameter: 138 mm Load class: L 15 Weight: 0.7 kg	7000.19.00
 Top frame with frame	Flat roof drains Spin <input type="checkbox"/> DN 70	Coated cast iron Frame <input type="checkbox"/> Diameter: 152 mm Grating <input type="checkbox"/> Load class: M 125 Weight: 2.3 kg	7000.08.00
 Shingle filter	Flat roof drains Jet <input type="checkbox"/> DN 50 Flat roof drains Spin <input type="checkbox"/> DN 70	Stainless steel With 2 mounting screws Weight: 1.2 kg	7000.02.00

	Designation	compatible with	Description	Article No.
	Top frame with grating	Cast iron Jet flat roof drains DN 50	Cast iron Load class: M 125 Weight: 5.0 kg	7000.44.00
	Top frame with grating	Cast iron Jet flat roof drains DN 50	Cast iron Load class: L 15 Weight: 4.0 kg	7000.43.00

Top sections

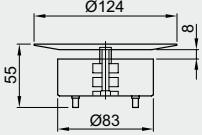
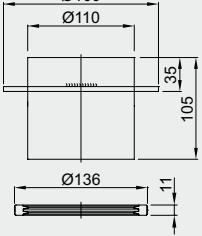
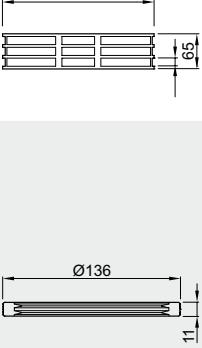
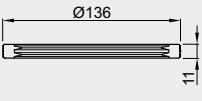
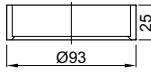
Top sections standard

Ordering information

	Design	Frame [mm]	Grating [mm]	Height adjustability [mm]	Description	Weight [kg]	Article No.
Standard configuration							
 	Stainless steel Retaining ring	Stainless steel 148 x 148	Slotted grating Stainless steel 140 x 140 K 3	45 – 115	Screwed	1,9	5141.89.00
	Screwed Anti-slipage: Class C	1,9	5141.89.11				
	Cast iron with coating Retaining ring	Cast iron 197 x 197	Slotted grating Cast iron 170 x 170 M 125	90 – 115	Loosely inserted	11,5	5141.83.00
 	Stainless steel	Stainless steel 148 x 148	Slotted grating Stainless steel 142 x 142 K 3		Loosely inserted With filtration holes	1,1	0154.55.78

Accessories

	Designation	compatible with	Description	Article No.
	Insulating body	Cast iron flat roof drains Spin <input type="checkbox"/> Socket inclination: 90° <input type="checkbox"/> DN 70 Cast iron flat roof drains Jet <input type="checkbox"/> Socket inclination: 90° <input type="checkbox"/> DN 50	Foam glass Weight: 0.75 kg	7040.22.00
	Insulating body	Flat roof drains <input type="checkbox"/> Socket inclination: 1.5° <input type="checkbox"/> DN 70	Foam glass Weight: 0.73 kg	7040.34.00
	Insulating ring	Flat roof drain upper part Spin <input type="checkbox"/> DN 70 Flat roof drain upper part Jet <input type="checkbox"/> DN 50	Foam glass Weight: 0.7 kg	7040.12.00
	Compensation element	Flat roof drain upper part Spin <input type="checkbox"/> DN 70 Flat roof drain upper part Jet <input type="checkbox"/> DN 50	Foam glass Weight: 0.7 kg	7040.02.00
	Top ring	Gratings <input type="checkbox"/> 7000.09.00 <input type="checkbox"/> 7000.19.00	Cast iron Load class L 15 Weight: 0.7 kg	7000.06.00
	Top ring	Top frame with grating <input type="checkbox"/> 7000.08.00 <input type="checkbox"/> 7000.44.00 <input type="checkbox"/> 7000.43.00	Cast iron Load class: M 125 Weight: 0.8 kg	7000.05.00
	Top frame	Floor drains DN 100 <input type="checkbox"/> 5194.10.00 <input type="checkbox"/> 5194.20.00 <input type="checkbox"/> 5194.30.00 Gratings <input type="checkbox"/> 5095.00.20 <input type="checkbox"/> 5095.01.20 <input type="checkbox"/> 5084.85.20 Top sections <input type="checkbox"/> 5141.83.00 <input type="checkbox"/> 5084.82.00 <input type="checkbox"/> 5084.84.00 <input type="checkbox"/> 5084.85.00 Drain body DN 100 with flange sealing	Cast iron Frame dimensions: 197 x 197 mm For incremental adjustment by 46 mm Weight: 3.6 kg	Coated 5095.80.00

Designation	compatible with	Description	Article No.
	Bucket Top sections <input type="checkbox"/> 5141.71.00 <input type="checkbox"/> 5141.81.00 <input type="checkbox"/> 5141.86.00 <input type="checkbox"/> 5141.87.00 <input type="checkbox"/> 5141.89.00 <input type="checkbox"/> 5141.91.00 <input type="checkbox"/> 5141.92.00 <input type="checkbox"/> 5141.97.00 Flat roof drains Spin <input type="checkbox"/> DN 70 Greenery roof and multi-storey car park tops	Stainless steel, material grade 304 Minimum ceiling structure via drain adhering flange 50 mm Weight: 0.2 kg	7000.03.00
Flat roof heating	All flat roof drains are made of cast iron <input type="checkbox"/> DN 50 – DN 150	Mains supply: 220 – 240 V AC Nominal performance: 25 W Protection rating: I Protection type: IP X7 Connection conduit: <input type="checkbox"/> SIHF 3 x 1 mm ² <input type="checkbox"/> Length: 1.5 m Certified in accordance with DIN VDE 0700, parts 1 and 223 Weight: 0.5 kg	7000.85.00
	Damming ring Flat roof drains Spin <input type="checkbox"/> DN 70 <input type="checkbox"/> 1/2 piece	As emergency overflow <input type="checkbox"/> Height = 35 mm Stainless steel, material grade 304 With sealing ring Weight: 1 kg	7033.10.50
	height adjustment Shingle filter <input type="checkbox"/> 7000.12.00 <input type="checkbox"/> 7000.02.00	Stainless steel With 2 mounting screws Height: 65 mm Can only be used in connection with a shingle filter Weight: 0.5 kg	7000.11.00
	Lip seal ring Flat roof drains Jet <input type="checkbox"/> DN 50 Upper part for flat roof drains Spin <input type="checkbox"/> DN 70 1-/2 piece flat roof/terrace drains Spin DN 70 for customer-side provision of a ventilation pipe <input type="checkbox"/> Cast iron SML pipe DN 100 for grey water downpipe over roofs, length according to DIN 12056 and DIN 1986-100	Diameter: 136 mm	7047.00.26
	Hose piece DN 70/ DN 80 Drain body Wal>Selecta <input type="checkbox"/> DN 70 Flat roof drains Spin <input type="checkbox"/> DN 70	For connection of drain bodies DN 70 to SML pipe DN 80	5170.70.80

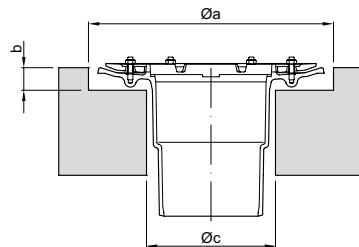
Flat roof drains Spin – gravity rainwater drainage
Product information

Drain body DN 100 – DN 150
 Certified in accordance with EN 1253
 Coated cast iron
 Building material class A1

With compression-sealing flange
 With seepage openings

Ordering information
Core hole dimension

Selection assistant	Nominal size	Øa [mm]	Øc [mm]	b [mm]	Article No.
For drain body without isolating body					
	DN 100	380	200	35	7034.10.10
	DN 125	380	200	35	7035.10.10
	DN 150	380	200	35	7036.10.10
For drain body with isolating body					
	DN 100	430	270	65	7034.10.10
	DN 125	430	270	65	7035.10.10
	DN 150	430	270	65	7036.10.10



	Nominal width	Max. outflow value [l/s]	Recess [mm]	Weight [kg]	Article No.
Socket inclination: 90°					
	DN 100	15,2	290 x 410	13,1	7034.10.10
	DN 125	16,4	290 x 410	13,6	7035.10.10
	DN 150	18,5	290 x 410	14,4	7036.10.10

	Nominal width	Max. outflow value [l/s]	Recess [mm]	Weight [kg]	Article No.
Socket inclination: 1,5°					
	DN 100	12,1	290 x 670	15,2	7054.11.10
	DN 125	16,4	290 x 700	15,7	7055.11.10
	DN 150	21,2	290 x 750	18,0	7056.11.10

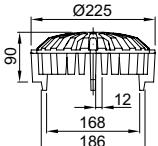
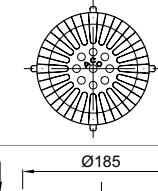
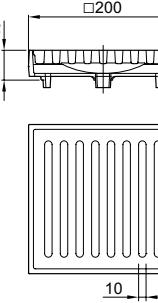
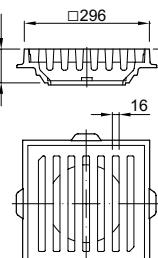
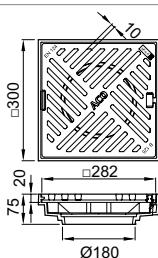
Components

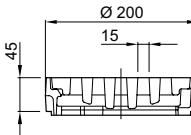
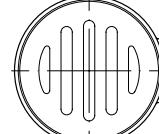
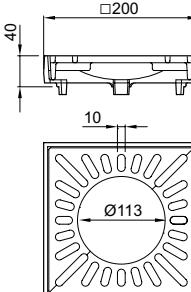
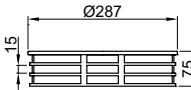
Drain bodies upper part DN 100 – DN 150

Ordering information

	Designation	compatible with	Description	Article No.
	Upper part	Flat roof drains Spin □ DN 100 – DN 150 Flat roof drains Jet □ DN 80	Coated cast iron With compression-sealing flange in accordance with EN 1253 Non-flammable in accordance with building materials class A1 With sealing ring With seepage openings Height-adjustability: 50 – 200 mm Weight: 12.6 kg	7044.10.25

Top sections and gratings**Ordering information**

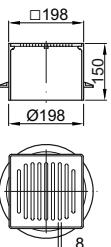
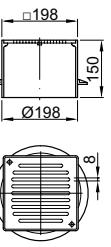
	Designation	compatible with	Description	Article No.
	Ball grating	Flat roof drains Spin □ DN 100 – DN 150	Coated cast iron Load class: H 1.5 Diameter: 225 mm Weight: 2.8 kg	7000.10.00
	Flat grating	Flat roof drains Spin □ DN 100 – DN 150	Coated cast iron Load class: L 15 Diameter: 185 mm Weight: 1.7 kg	7000.20.00
	Top frame with grating	Flat roof drains Spin □ DN 100 – DN 150	Coated cast iron Frame □ Frame dimensions: 200 x 200 mm Grating □ Grating dimensions: 187 x 187 mm □ Load class: L 15 Weight: 3.9 kg	7000.40.00
	Top frame with grating	Flat roof drains Spin □ DN 100 – DN 150 Flat roof drains Jet □ DN 80	Not screwed in place	7000.41.00
			Screwed in place	7000.42.00
	Top frame with grating	Flat roof drains Jet □ DN 80 Flat roof drains Spin □ DN 100 – DN 150	Coated cast iron Frame □ Frame dimensions: 300 x 300 mm Grating □ Grating dimensions: 282 x 282 mm □ Load class: M 125 □ Not screwed in place	7000.46.00

Designation	compatible with	Description	Article No.
 	Top frame with grating Flat roof drains Spin □ DN 100 – DN 150	Coated cast iron Frame □ Frame dimensions (diameter) 200 mm Grating □ Grating dimensions (diameter) 185 mm □ Load class: M 125 Weight: 5.1 kg	7000.28.00
	Top frame with grating Flat roof drains Spin □ DN 100 – DN 150	Coated cast iron Frame □ Frame dimensions: 200 x 200 mm Grating □ Grating dimensions: 186 x 186 mm □ Load class: L 15 Weight: 2.6 kg	7000.39.00
	Shingle filter Flat roof drains Jet □ DN 80 Flat roof drains Spin □ DN 100 – DN 150	Stainless steel With 2 mounting screws Load class: H 1.5 Weight: 1.2 kg	7000.12.00

Top sections

Top sections standard

Ordering information

Design	Frame [mm]	Grating [mm]	Height ad- justability [mm]	Description	Weight [kg]	Article No.	
Standard configuration							
	Plastic Retaining ring	Plastic 198 x 198	Slotted grating Stainless steel 188 x 188 K 3	45 – 150	Loosely inserted	1,5	5084.87.00
					Loosely inserted Anti-slippage: Class C	1,5	5084.87.11
	Plastic Retaining ring	Plastic 198 x 198	Slotted grating Stainless steel 188 x 188 K 3	45 – 150	Screwed	4,5	5084.71.00
					Screwed Anti-slippage: Class C	4,5	5084.71.11

Remark: In combination with isolating body and/or isolating ring the top frames Article No. 7000.28.00 have to be placed on a load distribution plate.

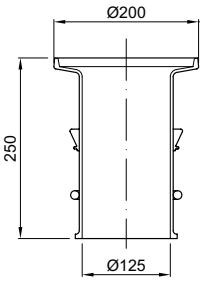
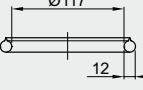
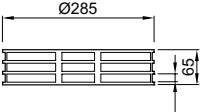
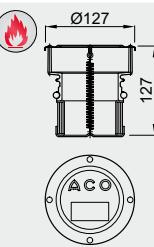
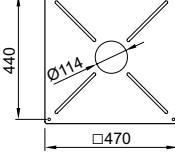
Height-adjustability: Dimensions are valid in combination with Article No. 7000.31.00 (refer to page 263).

	Design	Frame [mm]	Grating [mm]	Height ad- justability [mm]	Description	Weight [kg]	Article No.
	MEKU Retaining ring	Stainless steel 196 x 196	Slotted grating Stainless steel 188 x 188 K 3	50 – 155	Screwed	2,3	5084.81.00
					Screwed Anti- slippage: Class C	2,3	5084.81.11
	Stainless steel Retaining ring	Stainless steel 196 x 196	Slotted grating Stainless steel 188 x 188 K 3	45 – 160	Screwed	4,5	5084.89.00
					Screwed Anti- slippage: Class C	4,5	5084.89.11

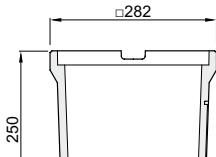
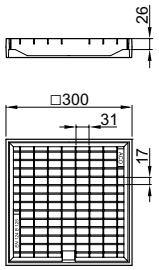
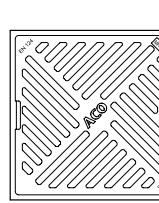
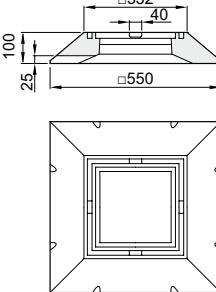
Accessories

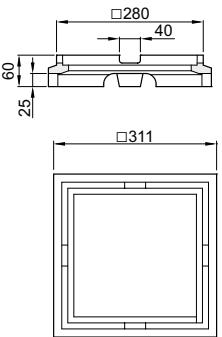
	Designation	compatible with	Description	Article No.
	Insulating body	Flat roof drains Spin <input type="checkbox"/> Socket inclination: 90° <input type="checkbox"/> DN 100 – DN 150 Flat roof drains Jet <input type="checkbox"/> Socket inclination 90° <input type="checkbox"/> DN 80	Foam glass Weight: 1.3 kg	7040.21.00
	Insulating body	Flat roof drains <input type="checkbox"/> Socket inclination: 1.5°	Foam glass Weight: 2.1 kg	DN 100 Height: 170 mm 7040.31.00 DN 125 Height: 215 mm 7040.32.00 DN 150 Height: 240 mm 7040.33.00
	Insulating ring	Flat roof drain upper part	Foam glass Weight: 1.9 kg	7040.11.00
	Compensation element	Flat roof drain upper part	Foam glass Weight: 0.8 kg	7040.01.00

	Designation	compatible with	Description	Article No.
	Top ring	Gratings, load class: H 1.5 and L 15	Cast iron Height: 25 mm Weight: 0.7 kg Height: 35 mm Weight: 1.4 kg	7000.25.00 7000.35.00
	Top ring	Top frame with grating, load class: L 15 and M 125 Gratings, load class: H 1.5 and L 15	Cast iron Weight: 2.0 kg	7000.45.00
	Bucket	Flat roof drains Spin <input type="checkbox"/> DN 100 – DN 150 <input type="checkbox"/> For structures up to 180 mm when using polymer concrete top sections Top section <input type="checkbox"/> 5084.97.00	Stainless steel, material grade 304 Minimum ceiling structure via drain adhering flange: 60 mm Weight: 0.6 kg	7000.13.00
	Transfer ring	Top sections <input type="checkbox"/> 5084.87.00/11 <input type="checkbox"/> 5084.71.00/11 <input type="checkbox"/> 5084.81.00/11 <input type="checkbox"/> 5084.89.00/11	Cast iron Load class <input type="checkbox"/> H 1.5 <input type="checkbox"/> L 15 Height adjustability: 24 mm Weight: 1.1 kg	7000.31.00
	Bucket	Top sections <input type="checkbox"/> 5084.80.00 <input type="checkbox"/> 5084.81.00 <input type="checkbox"/> 5084.83.00 <input type="checkbox"/> 5084.87.00 <input type="checkbox"/> 5084.89.00 <input type="checkbox"/> 9405.89.00 <input type="checkbox"/> 5084.91.00	Stainless steel, material grade 304 Slot width: 0.8 mm Minimum ceiling structure via drain adhering flange: 50 mm Weight: 0.6 kg	5086.10.19
	Seal and clamp ring	Flat roof drains Spin <input type="checkbox"/> DN 100/DN 125 <input type="checkbox"/> Socket inclination: 90°	Customer-side provision of ventilation pipe <input type="checkbox"/> Cast iron SML pipe DN 125 <input type="checkbox"/> For grey water downpipes over roof <input type="checkbox"/> Length in accordance with EN 12056 and DIN 1986-100 Weight: 0.7 kg	7000.63.00 7000.64.00
	Pilot tube for emergency overflow	Flat roof drain Spin <input type="checkbox"/> DN 100	With sealing ring Accumulation height: 35 mm Weight: 2 kg	7034.10.50 7044.10.50
	Pilot tube for emergency overflow	Flat roof drains Spin <input type="checkbox"/> DN 125	With sealing Accumulation height: 45 mm Weight: 2.2 kg	7035.10.50 7045.10.50

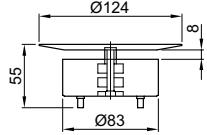
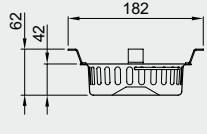
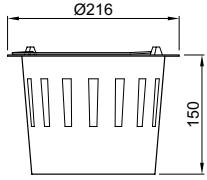
Designation	compatible with	Description	Article No.
	Stand pipe Flat roof drains □ DN 100 – DN 150 □ 2 piece	For water retention on flat roofs Height-adjustability: 20 – 150 mm Weight: 4.0 kg	7049.70.00
	Sealing ring Flat roof drains Spin □ DN 100 – DN 150 Flat roof drains Jet □ DN 80	Diameter: 117 mm Thickness: 2 mm For 2 piece design upper parts	7044.00.26
	height adjustment Shingle filter □ 7000.12.00 □ 7000.02.00	Stainless steel With 2 mounting screws Height: 65 mm Can only be used in connection with a shingle filter Weight: 0.5 kg	7000.11.00
	Fire protection insert Flat roof drains Spin □ DN 100 □ Socket inclination: 90° Multi-storey car park drains □ 300 x 300 mm □ Socket inclination: 90°	Certified fire protection in accordance with AbZ: Z-19.17-1888 Attention: Flow rate is reduced via use - see page: 251 Weight: 0.3 kg	7034.20.15
	Heat shield Flat roof drains Spin □ DN 100	With drive-in plug 8 x 16	7034.20.17
Flat roof heating	All flat roof drains are made of cast iron □ DN 50 – DN 150	Mains supply: 220 – 240 V AC Nominal performance: 25 W Protection rating: I Protection type: IP X7 Connection conduit: □ SIHF 3 x 1 mm ² □ Length: 1.5 m Certified in accordance with DIN VDE 0700, parts 1 and 223 Weight: 0.5 kg	7000.85.00
Insulating body	Flat roof drains Spin □ DN 100 – DN 150	Foam glass Weight: 0.5 kg	7040.23.00

Additional components**Ordering information**

	Designation	compatible with	Description	Weight [kg]	Article No.
	Intermediate element	Flat roof drains Spin □ DN 70 – DN 150 □ Socket inclination: 1.5°/90°	Polymer concrete Height: 60 mm	5,0	7000.52.00
	Intermediate element	Flat roof drains Spin □ DN 70 – DN 150 □ Socket inclination: 1.5°/90°	Polymer concrete Connection possibility for lateral inlet DN 100 Height: 250 mm	9,1	7000.54.00
	Frame with grating	Flat roof drains Spin □ DN 70 – DN 150 □ Socket inclination: 1.5°/90°	Coated cast iron Load class: L 15/M 125 Length x width 300 x 300 mm Grating □ Galvanized steel □ Mesh width 31 x 17 mm □ Latch without screws		7000.50.00
	Frame with grating	Flat roof drains Spin □ DN 70 – DN 150 □ Socket inclination: 1.5°/90°	Coated cast iron Load class: L 15/M 125 Length x width 300 x 300 mm	9,1	7000.51.00
	Joining frame	Flat roof drains Spin □ DN 70 – DN 150 □ Socket inclination: 1.5°/90°	Polymer concrete Load class: M 125 With seepage openings Height: 100 mm	26,0	7000.56.00

	Designation	compatible with	Description	Weight [kg]	Article No.
	Joining frame	Flat roof drains Spin □ DN 70 – DN 150 □ Socket inclination: 1.5°/90°	Polymer concrete Load class: L 15 With seepage openings Height: 60 mm	3,2	7000.55.00

Accessories

	Designation	compatible with	Description	Article No.
	Bucket	Top sections □ 5141.71.00 □ 5141.81.00 □ 5141.86.00 □ 5141.87.00 □ 5141.89.00 □ 5141.91.00 □ 5141.92.00 □ 5141.97.00 Flat roof drains Spin □ DN 70 Greeneryroofandmulti-storeycarparkgulleygrating	Stainless steel, material grade 304 Minimum ceiling structure via drain adhering flange 50 mm Weight: 0.2 kg	7000.03.00
	Bucket	Flat roof drains Spin □ DN 100 – DN 150 □ For structures up to 180 mm when using polymer concrete top sections Top section □ 5084.97.00	Stainless steel, material grade 304 Minimum ceiling structure via drain adhering flange: 60 mm Weight: 0.6 kg	7000.13.00
	Bucket	Flat roof drains Spin □ DN 70 – DN 150 □ Structures larger than 180 mm when using polymer concrete top sections	Polypropylene Height: 150 mm For structures larger than: 180 mm Weight: 0.2 kg	7000.53.00

Multistorey car park floor drain

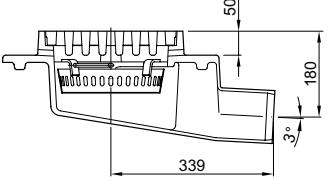
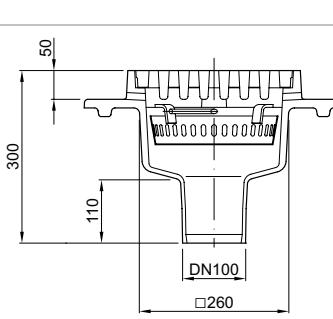
Product information

Drains DN 100
Coated cast iron
Certified in accordance with EN 1253
Load class: B 125/M 125

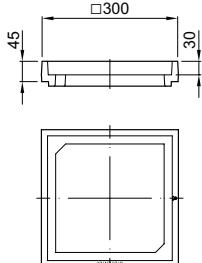
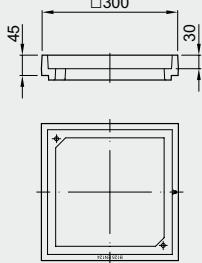
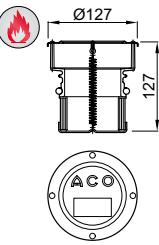


Ordering information

	Socket incli- nation	Gland	Description	Recess [mm]	Weight [kg]	Article No.
	1,5°	Without	Bucket: Galvanized steel	350 x 700	40	5935.50.00
		With	Bucket: Galvanized steel	350 x 700	40	5935.59.00
	90°	Without	Bucket: Galvanized steel	350 x 350	35	5935.00.00
		With	Bucket: Galvanized steel	350 x 350	35	5935.09.00

Socket incli- nation	Gland	Description	Recess [mm]	Weight [kg]	Article No.
	Without	With seepage openings Bucket: Galvanized steel	300 x 750	52	5935.60.00
		With seepage openings Bucket: Galvanized steel	300 x 750	52	5935.69.00
	Without	With seepage openings Bucket: Galvanized steel	300 x 450	47	5935.10.00
		With seepage openings Bucket: Galvanized steel	300 x 450	47	5935.19.00

Accessories

Designation	compatible with	Description	Article No.
	Top frame Multi-storey car park floor drains 300 x 300 mm	Coated cast iron Height: 45 mm For incremental adjustment by 30 mm Weight: 7.9 kg	5935.20.10
	Top frame Multi-storey car park floor drains 300 x 300 mm	Coated cast iron With 2 bore holes For a screwed grating Height: 45 mm For incremental adjustment Weight: 7.9 kg	5935.29.10
	Fire protection insert Flat roof drains Spin □ DN 100 □ Socket inclination: 90° Multi-storey car park drains □ 300 x 300 mm □ Socket inclination: 90°	Certified fire protection in accordance with AbZ: Z-19.17-1888 Attention: Flow rate is reduced via use - see page: 251 Weight: 0.3 kg	7034.20.15

Multi-storey car park drainage channels Aquapass**Product information**

Cast iron
Without intrinsic gradient
In accordance with EN 124/DIN 1229

Load class: B 125/C 250
In accordance with EN 1253
 Load class: M 125

Ordering information

	Designation	Description	Weight [kg]	Article No.
	Channel	With inserted elongated slot grating Screwed in place Inlet section: 340 cm ² /m	13	5801.60.00
	Channel with moulded outlet socket	With inserted elongated slot grating Screwed in place Inlet section: 340 cm ² /m	13,2	5801.62.00

Accessories

	Designation	compatible with	Description	Article No.
	Cast iron elongated slot grating	Cast iron multi-storey car park drainage channel Aquapass	Length: 500 mm Load class: B 125/C 250 Slot width: 10 mm Weight: 13.2 kg	5801.60.20
	Beginning and end bulkhead	Cast iron multi-storey car park drainage channel Aquapass	Cast iron Weight: 1.2 kg	5801.00.80
	Cover plate complete	Cast iron multi-storey car park drainage channel Aquapass	For covering the annulus between the drain body and channel socket	5801.00.90





Roof drainage → **Gravity rainwater drainage** → **Stainless steel**

		Page
Basics		274
Drain values		277
Flat roof drains Spin	Drain bodies DN 70 – DN 125	Flat roof drains
		Components
		Accessories
Parapet wall roof drains Spin	Drain bodies DN 70 – DN 100	Parapet wall roof drains
		Accessories

Basics

Stainless steel

The area of non-corrosive steels is described as stainless steel. However, this generic term does not provide any conclusion of the quality of the steel grade used. In waste water technology, material grade 304 with 18% chromium (Cr) and 10% nickel (Ni) has prevailed. An austenitic, acid-resistant stainless steel suitable for high temperatures has excellent hydraulic characteristics due to its smooth surface.

The flat roof drains of ACO Haustechnik are mass-produced from material grade 304. This material is resistant against water and humidity. However, the material is not suitable for all media, despite its high-quality properties.

In the event of an accumulation of aggressive waste water or waste water contaminated with chloride ions - this occurs, for

example, in areas in which are located directly by the ocean - the suitability of the material used must be checked in any case.

Single part drain body with compression-sealing flange

A compression-sealing flange consists of:

A non-rotatable flange

Flange which is solidly connected to the drain body.

A rotatable flange

Flange with which the seal is pressed against the non-rotatable flange to create a tight connection.



2-part drain body with compression-sealing flange

Installation in insulated roofs:

Lower section

with compression-sealing flange to connect with the vapour barrier.

Drain body

with compression-sealing flange to connect with the sealing membrane above the insulation.

Sealing element

standard, prevents the waste water backflow from the downpipe from penetrating the insulation.



Installation instructions

Recesses in concrete ceilings

The recesses must be designed so that concrete can also be filled below the flange (i.e. by inclining a side of the recess).

Concreting in the roof drains

The roof drains must be stabilized prior to concreting so that the position cannot be shifted when sealing the concrete.

Sealing the roof drains

Providing the roof drains with compression-sealing flanges makes it possible to include sealing membranes and foils of various qualities in thicknesses up to

10 mm in the drain bodies. Depending on the quality of the sealing membrane, the flange seals of EPDM/PVC soft or of another quality must also be inserted under the sealing membrane.

Adjustment to the roof structure

Insulation layers of a thickness of 25 - 200 mm can be bridged with the stacking element of 2-part roof drains. For thicker layers of insulation, an additional fitted pipe, identical to the nominal width of the inlet body into DN 70, DN 100 or DN 125 in an appropriate length must be used.

Protective cover during construction period

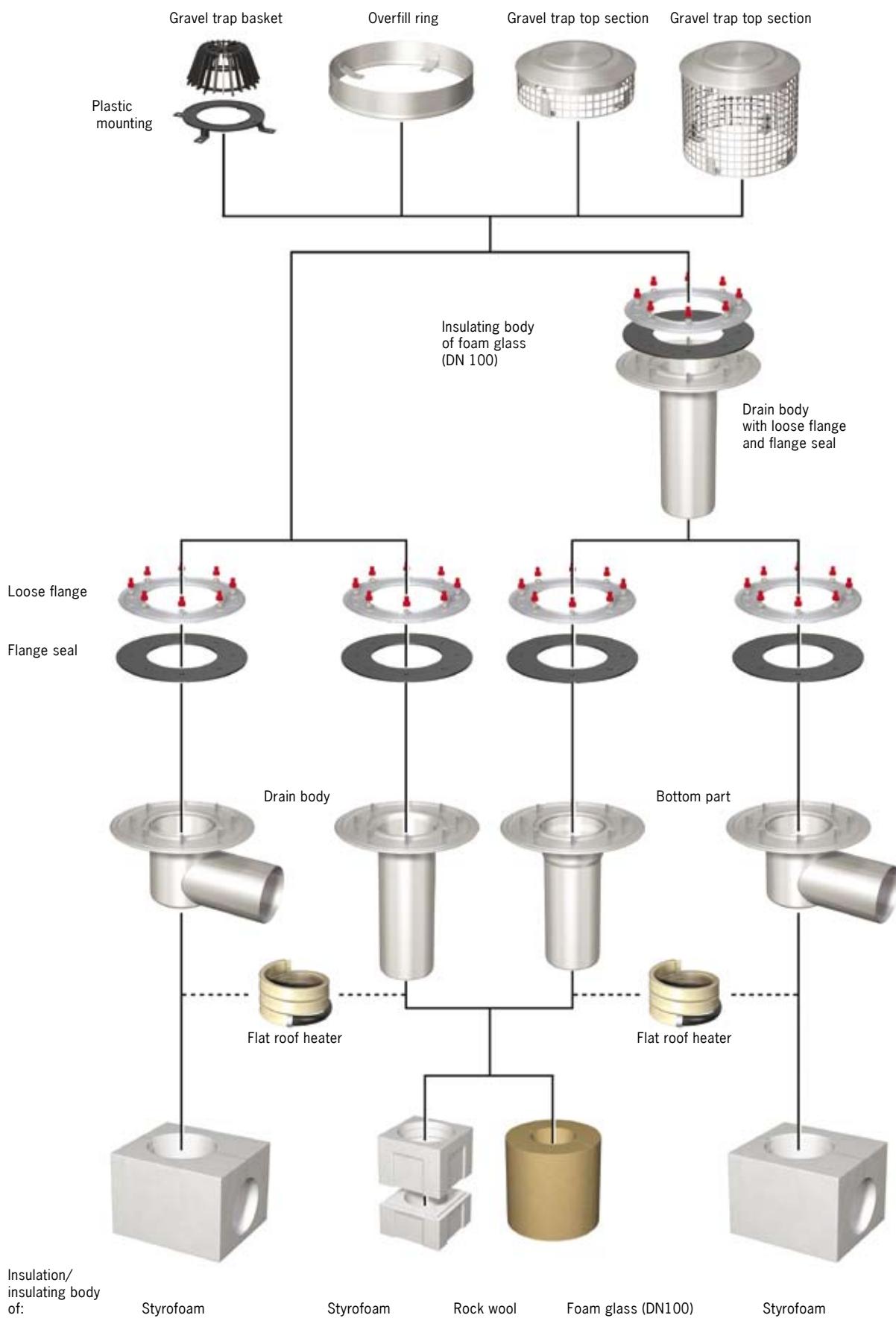
In order to keep the drain bodies free of pollution during the construction phase, they must be provided with a protective cover during the construction period (socket cap). The protective covers during the construction period must be removed prior to assembling the stacking elements or gravel trap baskets.

Flat roof heater

ACO offers a heater for flat roof drains as an option, so that the drain will not freeze. This not only increases the functional reliability of the drainage system even at subfreezing temperatures, but is also recommended by DIN 1986-100. A flat roof heater is recommended especially

in buildings at an extreme location, when connected to a separate sewage system, in buildings that are occasionally not heated during the winter months, drains that are located in shady areas, etc.. The regulations according to VDE and the local EVU regulations must be observed.

In order to prevent an unnecessary energy consumption, it is recommended to control the heated flat roof drains with an additional thermostat.

Stainless steel open channel drainage construction


Drain values of stainless steel flat roof drains Spin

The runoff values of the flat roof drains depend on the nominal width of the drain body, the grates used, the socket inclina-

tion and / or whether a top section with a compression-sealing flange is placed on

the drain body. The correct sizing of the pipe to be used must be observed.

DN 70

Nominal width	Socket inclination	Version	Plastic gravel trap	Stainless steel gravel trap
			Article No. 0174.46.66	Article No. 0174.46.59 0174.46.62
DN 70	1,5°	1-part	2.6 l/s	2.7 l/s
DN 70	1,5°	2-part	2.8 l/s	3.0 l/s
DN 70	90°	1-part	2.5 l/s	2.6 l/s
DN 70	90°	2-part	2.7 l/s	2.8 l/s

DN 100

Nominal width	Socket inclination	Version	Plastic gravel trap	Stainless steel gravel trap
			Article No. 0174.46.66	Article No. 0174.46.59 0174.46.62
DN 100	1,5°	1-part	5.0 l/s	5.9 l/s
DN 100	1,5°	2-part	4.7 l/s	5.3 l/s
DN 100	90°	1-part	4.7 l/s	5.6 l/s
DN 100	90°	2-part	5.1 l/s	5.7 l/s

DN 125

Nominal width	Socket inclination	Version	Plastic gravel trap	Stainless steel gravel trap
			Article No. 0174.46.66	Article No. 0174.46.59 0174.46.62
DN 125	1,5°	1-part	8.3 l/s	9.9 l/s
DN 125	1,5°	2-part	8.7 l/s	8.9 l/s
DN 125	90°	1-part	8.5 l/s	8.4 l/s
DN 125	90°	2-part	8.5 l/s	8.4 l/s

DN 100, with fire protection insert

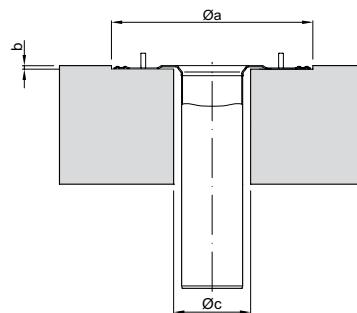
Nominal width	Socket inclination	Version	Plastic gravel trap	Stainless steel gravel trap
			Article No. 0174.46.66	Article No. 0174.46.59 0174.46.62
DN 100	90°	1-part	5.0 l/s	5.0 l/s
DN 100	90°	2-part	5.0 l/s	5.0 l/s

Flat roof drains Spin – gravity rainwater drainage
Product information

Drain body DN 70 – DN 125
 Stainless steel, material grade 304
 Non-insulated
 With compression-sealing flange in
 accordance with EN 1253

Ordering information
Core hole dimension

	Nominal size	Øa [mm]	Øc [mm]	b [mm]	Article No.
For drain body without isolating body					
	DN 70	340	90	10	0174.47.30
	DN 100	340	130	10	0174.47.31
	DN 125	340	160	10	0174.47.32
For drain body with isolating body					
	DN 70	340	290	10	0174.47.30
	DN 100	340	290	10	0174.47.31
	DN 125	340	290	10	0174.47.32



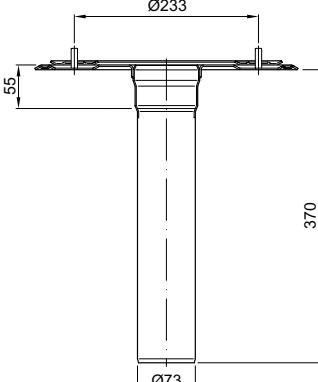
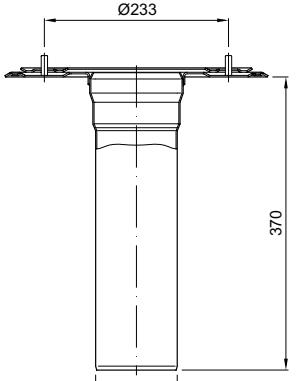
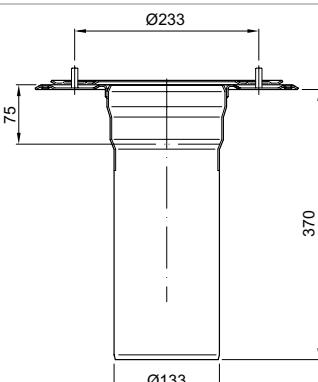
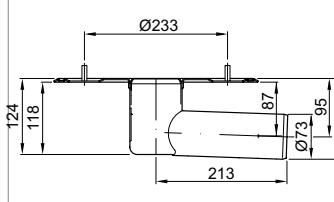
	Nominal width	Socket inclina-tion	Max. out-flow value [l/s]	Recess [mm]	Weight [kg]	Article No.
	DN 70	90°	2,8	230 x 360	2,3	0174.47.30

	Nominal width	Socket inclina-tion	Max. out-flow value [l/s]	Recess [mm]	Weight [kg]	Article No.
	DN 100	90°	5,7	230 x 360	2,8	0174.47.31
	DN 125	90°	8,5	230 x 360	3,8	0174.47.32
	DN 70	1,5°	3,0	220 x 360	2,3	0174.48.03
	DN 100	1,5°	5,9	260 x 400	2,8	0174.48.04
	DN 125	1,5°	8,9	260 x 400	3,8	0174.48.11

Components

Lower part for DN 70 – DN 125

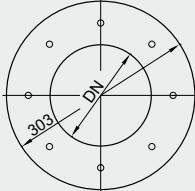
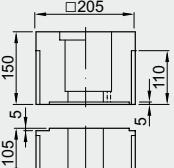
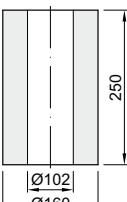
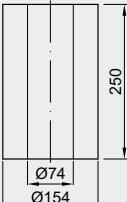
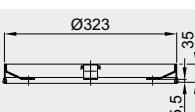
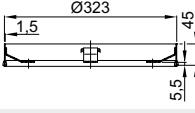
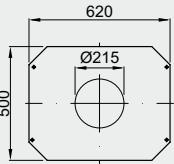
Ordering information

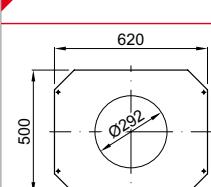
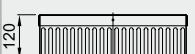
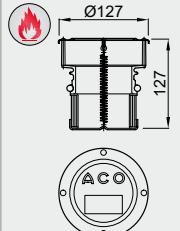
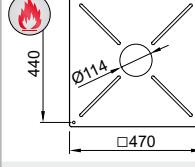
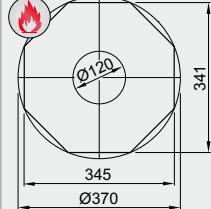
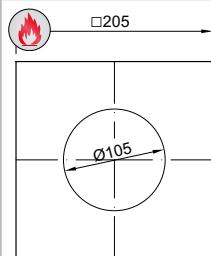
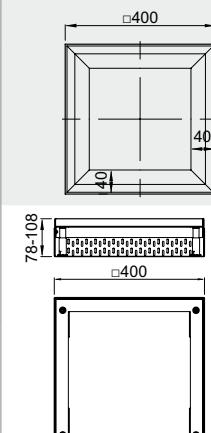
	Designation	compatible with	Description	Weight [kg]	Article No.
	Lower part	Stainless steel flat roof drains Spin □ DN 70	Stainless steel, material grade 304 Socket inclination: 90° With compression-sealing flange in accordance with EN 1253	2,3	0174.47.15
	Lower part	Stainless steel flat roof drains Jet/Spin □ DN 100	Stainless steel, material grade 304 Socket inclination: 90° With compression-sealing flange in accordance with EN 1253	2,8	0174.47.16
	Lower part	Stainless steel flat roof drains Spin □ DN 125	Stainless steel, material grade 304 Socket inclination: 90° With compression-sealing flange in accordance with EN 1253	3,8	0174.47.17
	Lower part	Stainless steel flat roof drains Spin □ DN 70	Stainless steel, material grade 304 Socket inclination: 1,5° With compression-sealing flange in accordance with EN 1253	2,3	0174.48.03

	Designation	compatible with	Description	Weight [kg]	Article No.
	Lower part	Stainless steel flat roof drains Spin □ DN 100	Stainless steel, material grade 304 Socket inclination: 1,5° With compression-sealing flange in accordance with EN 1253	2,8	0174.48.04
	Lower part	Stainless steel flat roof drains Spin □ DN 125	Stainless steel, material grade 304 Socket inclination: 1,5° With compression-sealing flange in accordance with EN 1253	3,8	0174.48.11

Accessories

	Designation	compatible with	Description	Article No.
	Slide flange	Stainless steel flat roof drains Jet/Spin series □ DN 70 □ Socket inclination: 90°	Stainless steel, material grade 304 Weight: 2.3 kg	
			For unheated version	0174.46.53
			For heated version	0174.46.54
	Shingle trap top	Stainless steel flat roof drains Spin series □ Socket inclination: 90° Parapet wall roof drains Spin	Stainless steel, material grade 304	
			Height: 75 mm Weight: 1.1 kg	0174.46.63
			Height: 225 mm Weight: 2.1 kg	0174.46.64
	Shingle filter	Stainless steel flat roof drains Spin □ DN 70 – DN 125 Parapet wall roof drains Spin	Plastic Only in combination with mounting 0174.46.67 Weight: 0.3 kg	0174.46.66
	Shingle trap support	Shingle filter □ 0174.46.66	Plastic Weight: 0.2 kg	0174.46.67
	Shingle filter for inverted roof	Stainless steel flat roof drains Jet/Spin series	Stainless steel, material grade 304 Load class: H 1.5 Weight: 0.63 kg	0153.60.01

	Designation	compatible with	Description	Article No.
	Flange seal	Stainless steel flat roof drains Jet/Spin series Parapet wall roof drains Spin	Thickness: 4 mm Weight: 0.3 kg	
			EPDM rubber	0174.42.87
			Soft PVC	0174.42.92
	Flange seal	Stainless steel flat roof drains Jet/Spin series	EPDM rubber For box channels Thickness: 5 mm	0174.42.95
			Styrofoam Height: 250 mm Length x width 205 x 205 mm Weight: 0.2 kg	
			DN 70 vertical DN 100 vertical DN 125 vertical	0174.47.18 0174.47.19 0174.47.20
	Insulation	Stainless steel flat roof drains Jet/Spin series □ Socket inclination: 90°	For inlet/pipe socket Rock wool, building material class A1 Weight: 0.6 kg	
			DN 100 DN 125	0174.47.21 0174.47.22
			For inlet/pipe socket Rockwool, building material class A1 Weight: 0.6 kg	0174.46.57
	Insulation	Stainless steel flat roof drains Jet/Spin series □ Socket inclination: 90° □ DN 70	For inlet/pipe socket Rockwool, building material class A1 Weight: 0.6 kg	
			DN 70	0174.48.06
			DN 100	0174.48.07
	Insulation	Stainless steel flat roof drains Jet/Spin series	Styrofoam Weight: 0.2 kg	
			DN 125	0174.48.08
			Height: 140 Length x width 260 x 190 mm	
	Damming ring for emergency overflow	Stainless steel flat roof drains Spin □ DN 70/DN 100	Height: 170 Length x width 280 x 230 mm	0174.46.76
			Height: 200 Length x width 280 x 230 mm	0174.46.77
	Damming ring for emergency overflow	Stainless steel flat roof drains Spin □ DN 125	Stainless steel, material grade 304 Diameter: 324 mm Height: 35 mm	
			Stainless steel, material grade 304 Diameter: 324 mm Height: 45 mm	0174.46.77
	Support sheet for trapezoidal tin roof	Flat roof drains Jet □ DN 70 □ Socket inclination: 90° Flat roof drains Spin □ DN 70 – DN 125 □ Socket inclination: 90°	Galvanized steel panel Thickness: 1.5 mm Weight: 3.14 kg	0174.46.61

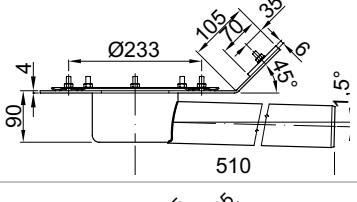
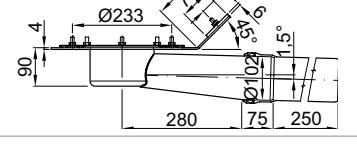
Designation	compatible with	Description	Article No.
	Support sheet for trapezoidal tin roof Stainless steel flat roof drains Spin <input type="checkbox"/> DN 70 – DN 125 Stainless steel flat roof drains Jet <input type="checkbox"/> DN 100	Galvanized steel panel Thickness: 1.5 mm Weight: 3.0 kg	0174.47.26
	Control shaft Stainless steel flat roof drains Jet/Spin series	Stainless steel, material grade 304 Dimensions: 400 x 400 mm Height: 120 mm Load class: K 3 Weight: 5.34 kg	0153.73.05
	Flat roof heating Stainless steel flat roof drains Jet/Spin series		0174.84.32
	Fire protection insert Flat roof drains Spin <input type="checkbox"/> DN 100 <input type="checkbox"/> Socket inclination: 90° Multi-storey car park drains <input type="checkbox"/> 300 x 300 mm <input type="checkbox"/> Socket inclination: 90°	Certified fire protection in accordance with AbZ: Z-19.17-1888 Attention: Flow rate is reduced via use - see page: 251 Weight: 0.3 kg	7034.20.15
	Heat shield Flat roof drains Spin <input type="checkbox"/> DN 100	With drive-in plug 8 x 16	7034.20.17
	Insulating body Stainless steel flat roof drains Spin <input type="checkbox"/> DN 70/DN 100 <input type="checkbox"/> Socket inclination: 90°	Foam glass Height: 100 mm	0174.77.96
	Insulating sheath Stainless steel flat roof drains Jet/Spin series <input type="checkbox"/> DN 100 <input type="checkbox"/> Socket inclination: 90°	Foam glass Height: 150 mm As length adjustment	0174.77.94
	Gully grating Profiline Stainless steel flat roof drains Jet/Spin series Profiline	Installation height: 50 mm Dimensions: 400 x 400 mm Galvanized steel Stainless steel, material grade 304	38150 38156
	Gully grating Profiline Stainless steel flat drains Jet/ Spin series Profiline	Height-adjustability: 78 – 108 mm Dimensions: 400 x 400 mm Galvanized steel Stainless steel, material grade 304	38801 38803

Parapet wall roof drains Spin – gravity rainwater and emergency drainage
Product information

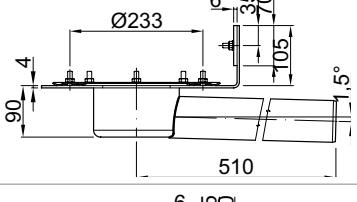
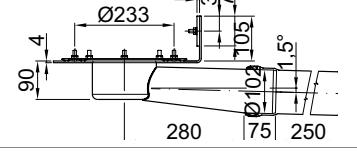
Parapet wall drains DN 70 – DN 100
 Stainless steel, material grade 304
 1 piece

Non-insulated
 With compression-sealing flange in
 accordance with EN 1253

45° wall flange for bitumen sealing membrane
Ordering information

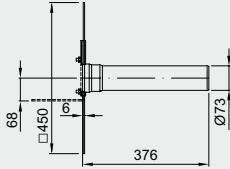
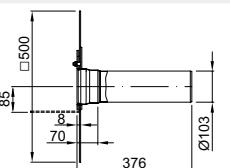
	Nominal width	Socket inclina- nation	Flow rate		Weight [kg]	Article No.
			in accord- dance with DIN [l/s]	with 75 mm accumula- tion [l/s]		
	DN 70	1,5°	5,7	16,9	7,6	0174.78.22
	DN 100	1,5°	6,0	22,0	8,0	0174.78.24

90° wall flange for sealing with plastic membrane
Ordering information

	Nominal width	Socket inclina- nation	Flow rate		Weight [kg]	Article No.
			in accord- dance with DIN [l/s]	with 75 mm accumula- tion [l/s]		
	DN 70	1,5°	5,7	16,9	7,6	0174.78.23
	DN 100	1,5°	6,0	22,0	8,0	0174.78.25

Accessories

	Designation	compatible with	Description	Article No.
	Shingle trap top	Stainless steel flat roof drains Jet/Spin series □ Socket inclination: 90° Parapet wall roof drains Spin	Stainless steel, material grade 304 Height: 75 mm Weight: 1.1 kg	0174.46.63
	Shingle filter	Stainless steel flat roof drains Spin □ DN 70 – DN 125 Parapet wall roof drains Spin	Plastic Only in combination with mounting 0174.46.67 Weight: 0.3 kg	0174.46.66
	Shingle trap support	Shingle filter □ 0174.46.66	Plastic Weight: 0.2 kg	0174.46.67
	Flange seal	Stainless steel flat roof drains Jet/Spin series Parapet wall roof drains Spin	Thickness: 4 mm Weight: 0.3 kg EPDM rubber Soft PVC NBR/SBR	0174.42.87 0174.42.92 0174.42.97
	Damming ring for emergency overflow	Stainless steel flat roof drains Spin □ DN 70/DN 100	Stainless steel, material grade 304 Diameter: 324 mm Height: 35 mm	0174.46.76
	Insulating body	Parapet wall roof drains Spin DN 70	Foam glass Height: 120 mm	0154.02.95
	Insulating body	Parapet wall roof drains Spin DN 100	Foam glass Height: 145 mm	0154.02.94

	Designation	compatible with	Description	Article No.
	Attika bushing	Parapet wall roof drains Spin □ DN 70	Stainless steel, material grade 304 With pinched bitumen connecting collar provided by manufacturer	0174.48.66
	Attika bushing	Parapet wall roof drains Spin □ DN 100	Stainless steel, material grade 304 With pinched bitumen connecting collar provided by manufacturer	0174.48.67