

ANRIN

LEADING WATER



Technical data sheet

Heavy duty channels
SF-150

Technical data sheet

ANRIN DRAIN heavy duty channels SF-150

Channel drainage for the load classes D 400 to F 900

According to DIN 19580 / EN 1433 "Drainage channels for vehicular and pedestrian areas", these surfaces are assigned to specific load classes depending on the use. Accordingly, the respective suitable ANRIN heavy duty system can be selected with the appropriate cover grating.

Product specifications

Product specifications	
Material	Resin concrete
Length	50 cm and 100 cm
Width	21.4 cm
Height	22.0 - 32.0 cm
Edge type	17,0 - 40,8 kg
Kantenausbildung	GJS cast edge rail
Nominal width	150 mm
Load class	D400* / E600* and F900* (no cross-road drainage of busy roads)
Slope type	Slope invert 0.5 %, Stepped invert, Constant invert
Joint type	UNILINK®-joint
Fastening	RapidLock fastening

Material properties

Channel / component body	
Polymer concrete	auf Polyesterharzbasis mit mineralischen Zuschlägen, Additiven
Polymer concrete	$\geq 90 \text{ N/mm}^2$
Bending tensile strength	$\geq 22 \text{ N/mm}^2$
Modulus of elasticity	ca. 25 kN/mm^2
Density	$2.1 - 2.3 \text{ g/dm}^3$
Heat resistance	100° C (permanent loading)
Frost resistance	- 50° C
Water penetration depth	0 mm
Water absorption	0,05 %
Edge protection	
Edge protection	Cast iron GJS
Channel cover	
Channel cover	Cast iron GJS

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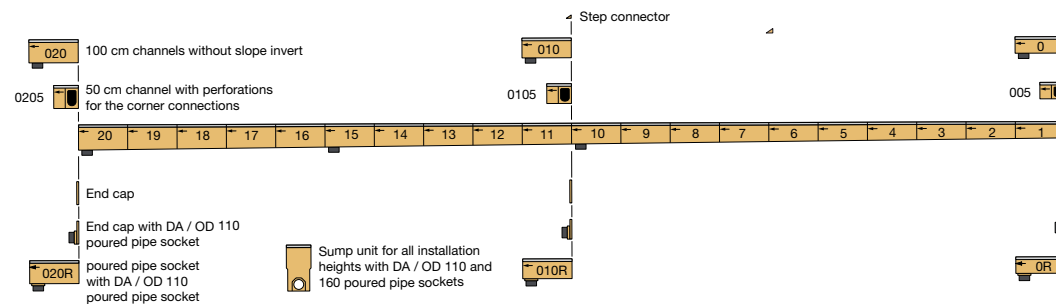
ANRIN DRAIN heavy duty channels

Slope types

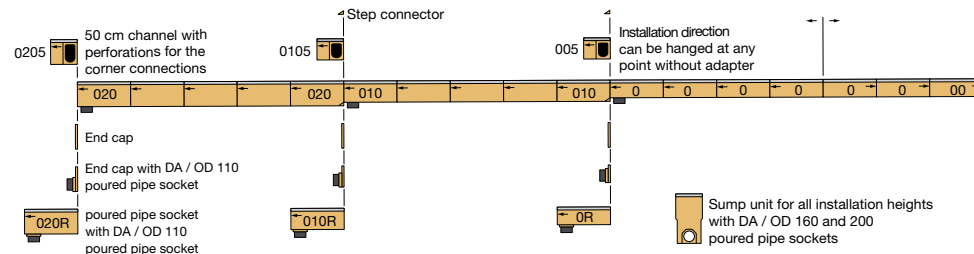
Area drainage with channel runs is normally made according to 3 different principles. The slope of water surface is achieved by the natural fall of the land. The water flows downwards with the gradient of the water level. A stepped invert is realised by an artificial gradient which is formed by the installation of stepped-height channels and connectors. The high flow rate with self-cleaning effect can be achieved with channels in natural slope.

All slope types can be combined according to hydraulic requirements and topographical conditions.

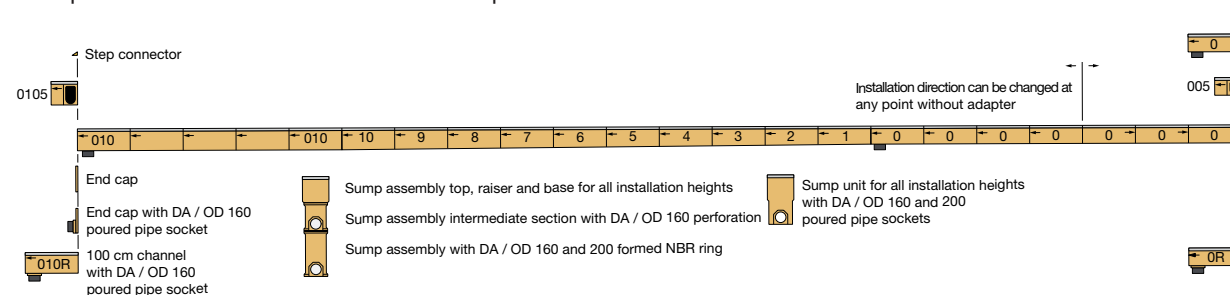
Example - Slope invert SF-100 and SF-150



Example - Stepped invert SF-100 and SF-150



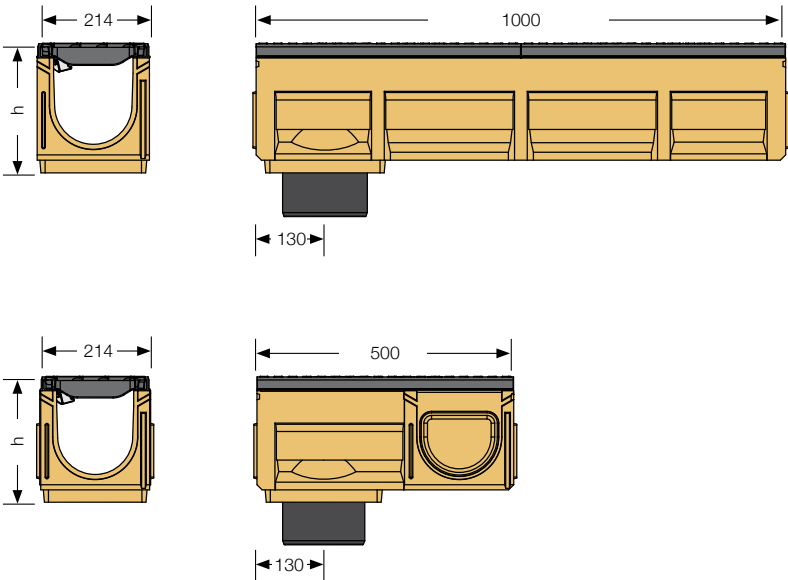
Example - Constant invert combined with slop invert SF-200



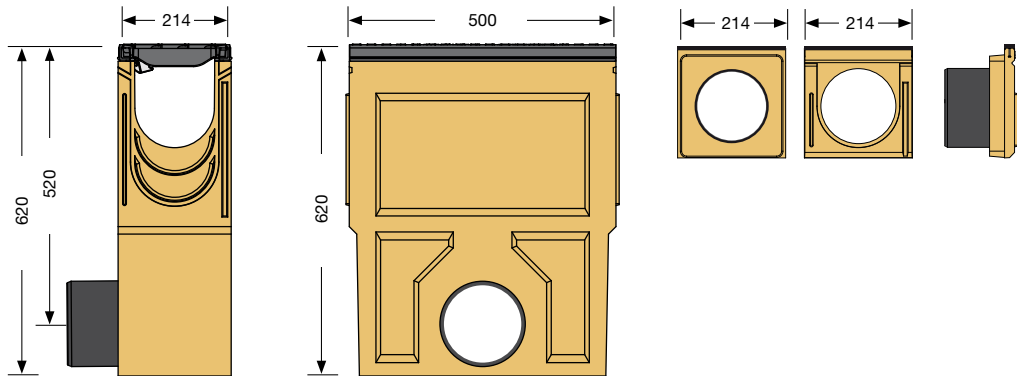
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ANRIN DRAIN heavy duty channels SF-150

Channel dimensions



Accessories dimensions



Technical data sheet

ANRIN DRAIN heavy duty channels SF-150

Channel types - heavy duty channels SF-150
with UNILINK-joint system and RapidLock fastening
channels with black cataphoretic dip coated steel edge rail,
incl. ductile-iron slotted grating cl. F900

Article no.	EAN	Designation		Slope %	Length cm	Width cm	Height cm	Weight kg
03211000	4026857013334	SF-150 Channel No.	0*	0	100	21.4	22.0	30.0
03211010	4026857012375	SF-150 Channel No.	0R***	0	100	21.4	22.0	30.0
03211050	4026857012382	SF-150 Channel No.	005*/**	0	50	21.4	22.0	17.0
03210010	4026857017790	SF-150 Channel No.	1*	0.5	100	21.4	22.5	33.4
03210020	4026857017806	SF-150 Channel No.	2*	0.5	100	21.4	23.0	33.8
03210030	4026857017813	SF-150 Channel No.	3*	0.5	100	21.4	23.5	34.2
03210040	4026857017820	SF-150 Channel No.	4*	0.5	100	21.4	24.0	34.6
03210050	4026857017837	SF-150 Channel No.	5*	0.5	100	21.4	24.5	35.0
03210060	4026857017844	SF-150 Channel No.	6*	0.5	100	21.4	25.0	35.4
03210070	4026857017844	SF-150 Channel No.	7*	0.5	100	21.4	25.5	35.8
03210080	4026857017868	SF-150 Channel No.	8*	0.5	100	21.4	26.0	36.2
03210090	4026857017875	SF-150 Channel No.	9*	0.5	100	21.4	26.5	36.6
03210100	4026857017882	SF-150 Channel No.	10*	0.5	100	21.4	27.0	37.0
03212000	4026857012399	SF-150 Channel No.	010*	0	100	21.4	27.0	37.0
03212010	4026857012405	SF-150 Channel No.	010R***	0	100	21.4	27.0	37.0
03212050	4026857012849	SF-150 Channel No.	0105*/**	0	50	21.4	27.0	18.8
03213000	4026857012429	SF-150 Channel No.	020*	0	100	21.4	32.0	40.7
03213010	4026857013235	SF-150 Channel No.	020R***	0	100	21.4	32.0	40.7
03213050	4026857012436	SF-150 Channel No.	0205*/**	0	50	21.4	32.0	20.4

* Channel with mouldings for vertical outlet DA/OD 160

** Channel with sidewise perforations for the connection of t-junctions, elbow joints and cross-over joints

*** Channel with vertical pipe socket DA/OD 160

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ANRIN DRAIN heavy duty channels SF-150

Accessories - heavy duty channels SF-150
with UNILINK-joint system and RapidLock fastening channels
with black cataphoretic dip coated steel edge rail,
incl. ductile-iron slotted grating cl. F900

Article no.	EAN	Designation		Length cm	Width cm	Height cm	Weight kg
03216000	4026857012443	SF-150 Sump unit with mud bucket		50	21.4	62.0	55.1
03216121	4028657022462	SF-150 Sump assembly top with mud bucket		54	36.0	43.0	49.0
03206810	4026857012450	Pipe socket DA/OD 160					0.6
03217010	4026857029441	SF-/KE-150 Closed end cap for No.	0 - 0205				2.5
03218110	4026857029465	SF-/KE-150 End cap with pipe socket DA/OD 160 for No.	0				2.8
03218210	4026857029472	SF-/KE-150 End cap with pipe socket DA/OD 160 for No.	010				3.4
03218310	4026857029489	SF-/KE-150 End cap with pipe socket DA/OD 160 for No.	020				3.6
03217050	4026857018742	SF-/KE-150 Closed end cap for No.	0				
03217400	4026857019633	SF-/KE-150 Closed end cap for No.	150P				
03217500	4026857012504	SF-/KE-150 Step connector for compensating level differences					0.7

Sump unit SF-150



with mud bucket, with DA/OD 160
poured pipe socket and perforations
DA/OD 200

End cap



End cap with pipe socket



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Example installations

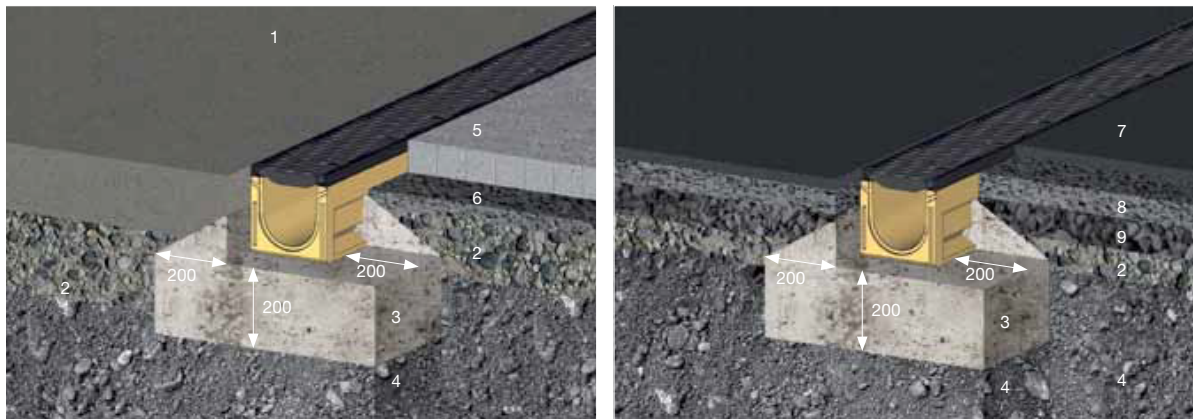
With ANRIN drainage systems, accumulating rainwater should be drained safely and quickly. Moreover, the structural elements have the task of accommodating dynamic loads arising from traffic-related demands and dispersing them to the area of the foundation.

The following installation guidelines are schematic representations. These are provided as examples and are non-binding. The information provided here is based on our long-term experience in excavation and road construction as well as the state-of-the-art technology.

Despite this, designers and planners are always obligated to check the products and the installation instructions for their appropriateness. The example details are simplified recommendations for execution. Constructions are to be re-created on a project-specific basis. Special local conditions must be reviewed by the planner and the appropriate installation types must be taken into account. The example details are simplified recommendations for execution. Constructions are to be re-created on a project-specific basis.

Important: Insert gratings for the installation.

Example installations SF-150



Road concrete and / or concrete sheets or paving bed Cast asphalt

- | | |
|--------------------------------------------------------|------------------------------------------|
| 1 In-situ road concrete | 6 Paving bed |
| 2 Base course with hydraulic binder | 7 Wearing course |
| 3 Concrete cladding of the channel body | 8 Bonding course |
| 4 Gravel base (frost-protection layer) | 9 Bitumen base course |
| 5 Prefabricated concrete sheets and / or stone systems | All length specifications in millimetres |

The current guidelines and regulations of the state-of-the-art technology must be observed for the installation. For example, these are:

- | | |
|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DIN EN 1433 | "Drainage channels for vehicular and pedestrian areas" |
| DIN 19580 | "Drainage channels for vehicular and pedestrian areas" |
| RStO | "Guidelines for the standardisation of the superstructure of vehicular areas" |
| DIN EN 206-1 | "Concrete. Specification, performance, production and conformity", to be observed, in particular: ZTV concrete StB 07 for the construction of base courses with hydraulic binders and concrete road wearing courses. |
| (VOB) Teil C | DIN 18318 "Construction work on roadways" |
| DIN EN 1045-2 | "Concrete, reinforced and prestressed concrete structures. Part 2: Concrete – Specification, properties, production and conformity; application rules for DIN EN 206-1" |



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