

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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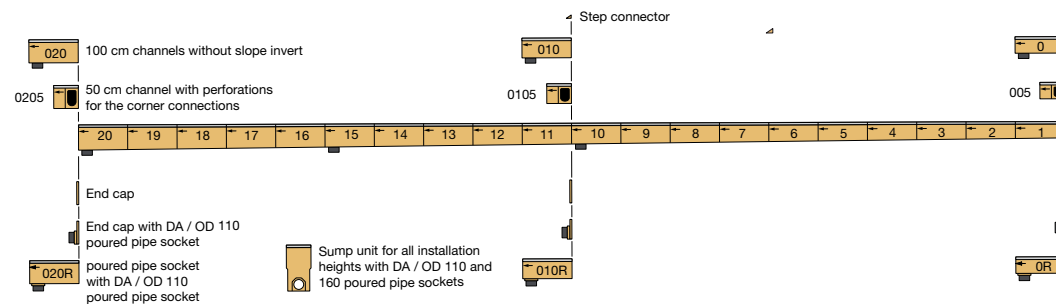
ANRIN DRAIN heavy duty channels

Slope types

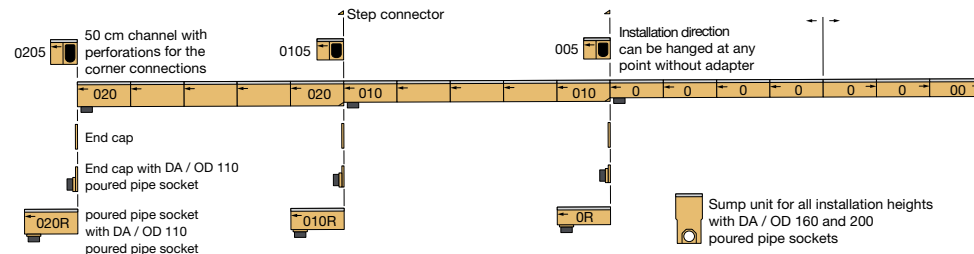
Area drainage with channel runs is normally made according to 3 different principles. The slope of water surface is achieved by the natural fall of the land. The water flows downwards with the gradient of the water level. A stepped invert is realised by an artificial gradient which is formed by the installation 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.

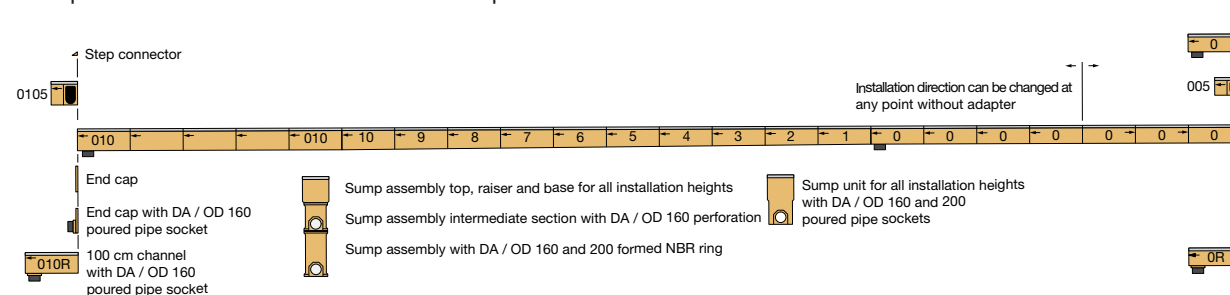
Example - Slope invert SF-100 and SF-150



Example - Stepped invert SF-100 and SF-150



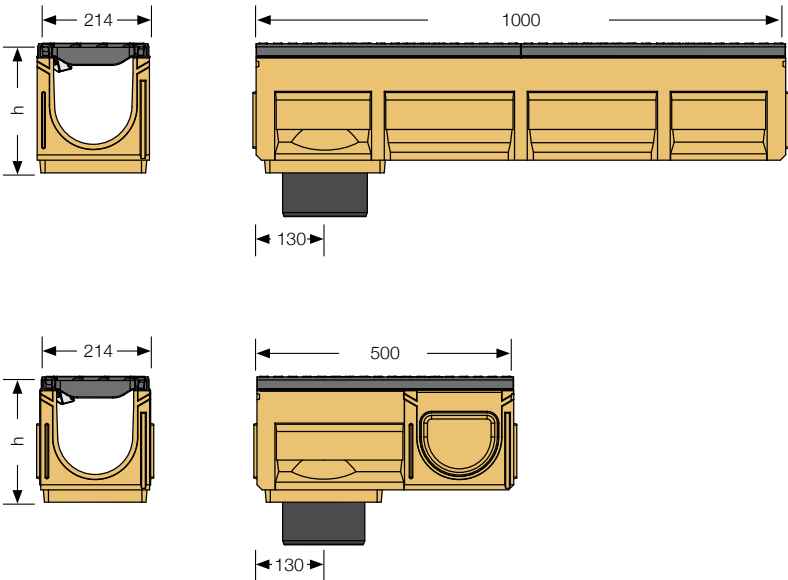
Example - Constant invert combined with slop invert SF-200



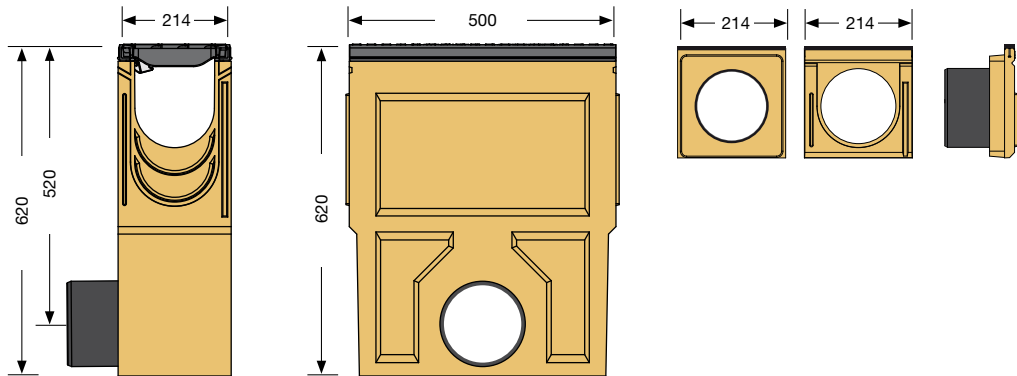
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ANRIN DRAIN heavy duty channels SF-150

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

Article no.	EAN	Designation		Slope %	Length cm	Width cm	Height cm	Weight kg
03211001	4026857021858	SF-150 Channel No.	0*	0	100	21.4	22.0	30.0
03211011	4026857021865	SF-150 Channel No.	0R***	0	100	21.4	22.0	30.0
03211051	4026857021872	SF-150 Channel No.	005*/**	0	50	21.4	22.0	17.0
03210011	4026857021889	SF-150 Channel No.	1*	0.5	100	21.4	22.5	33.4
03210021	4026857021896	SF-150 Channel No.	2*	0.5	100	21.4	23.0	33.8
03210031	4026857021902	SF-150 Channel No.	3*	0.5	100	21.4	23.5	34.2
03210041	4026857021919	SF-150 Channel No.	4*	0.5	100	21.4	24.0	34.6
03210051	4026857021926	SF-150 Channel No.	5*	0.5	100	21.4	24.5	35.0
03210061	4026857021933	SF-150 Channel No.	6*	0.5	100	21.4	25.0	35.4
03210071	4026857021940	SF-150 Channel No.	7*	0.5	100	21.4	25.5	35.8
03210081	4026857021957	SF-150 Channel No.	8*	0.5	100	21.4	26.0	36.2
03210091	4026857021964	SF-150 Channel No.	9*	0.5	100	21.4	26.5	36.6
03210101	4026857021971	SF-150 Channel No.	10*	0.5	100	21.4	27.0	37.0
03212001	4026857021988	SF-150 Channel No.	010*	0	100	21.4	27.0	37.0
03212011	4026857021995	SF-150 Channel No.	010R***	0	100	21.4	27.0	37.0
03212051	4026857022008	SF-150 Channel No.	0105*/**	0	50	21.4	27.0	18.8
03213001	4026857022114	SF-150 Channel No.	020*	0	100	21.4	32.0	40.7
03213011	4026857022121	SF-150 Channel No.	020R***	0	100	21.4	32.0	40.7
03213051	4026857022138	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

Article no.	EAN	Designation		Length cm	Width cm	Height cm	Weight kg
03216001	4026857022145	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

Cover grating



Oval Grip Design

slotted cast iron grating

Cover gratings cl. D400¹ and E600¹ with RapidLock fastening

Article no.	EAN	Designation	Length cm	Width cm	Inlet Ø cm ² /m	Weight kg
03214500	4026857022152	Slotted cast iron with OvalGrip Design, Cast iron GJS	50	19.3	615	7.9

Cover gratings cl. F900¹ with RapidLock fastening

Article no.	EAN	Designation	Length cm	Width cm	Inlet Ø cm ² /m	Weight kg
03214520	4026857022169	Slotted cast iron with OvalGrip Design, Cast iron GJS	50	19.3	615	8.9

¹ Exception: Cross-road drainage of busy roads

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Example installations

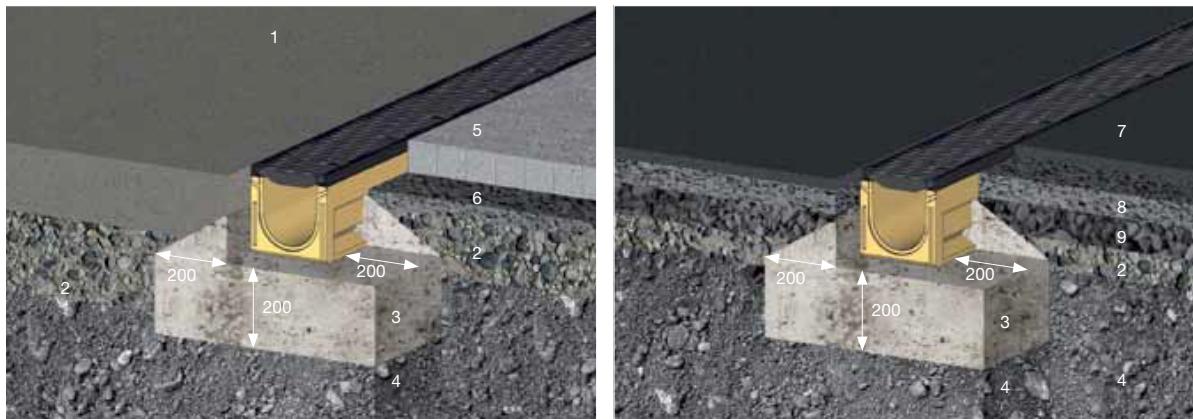
With ANRIN drainage systems, accumulating rainwater should be drained safely and quickly. Moreover, the structural elements have the task of accommodating dynamic loads arising from traffic-related demands and dispersing them to the area of the foundation.

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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