

ANRIN

LEADING WATER



Technical data sheet

Heavy duty channels
SF-200

Technical data sheet

ANRIN DRAIN heavy duty channels SF-200

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	26.4 cm
Height	13.0 - 29.0 cm
Edge type	GJS cast edge rail
Nominal width	200 mm
Load class	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	polyester resin-based with mineral aggregates, additives
Compressive strength	$\geq 90 \text{ N/mm}^2$
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 (Dauerbelastung)
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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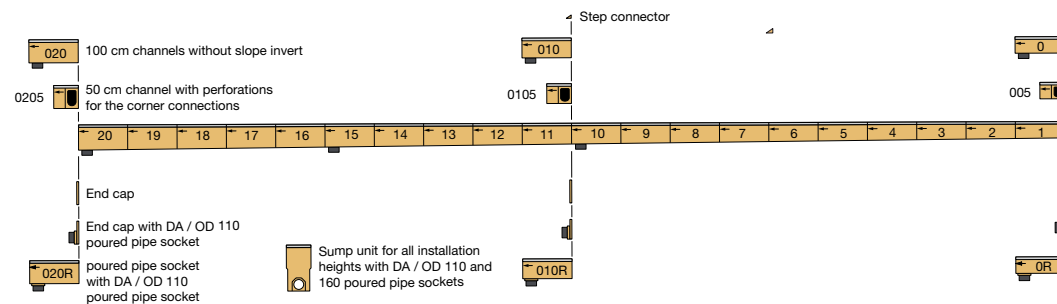
ANRIN DRAIN heavy duty channels

Slope types

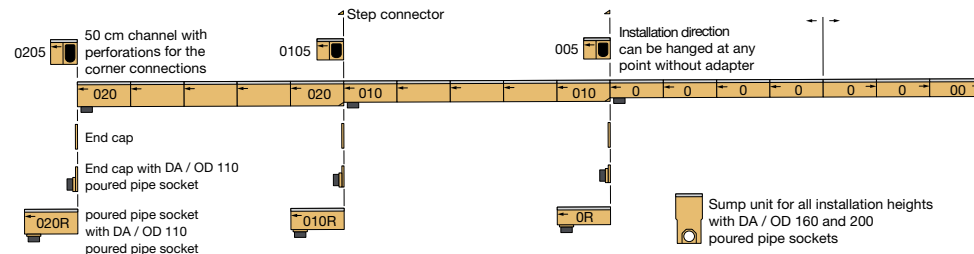
Area drainage with channel runs is normally made according to 3 different principles. The slope of water surface is achieved by the natural fall of the land. The water flows downwards with the gradient of the water level. A stepped invert is realised by an artificial gradient which is formed by the installation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

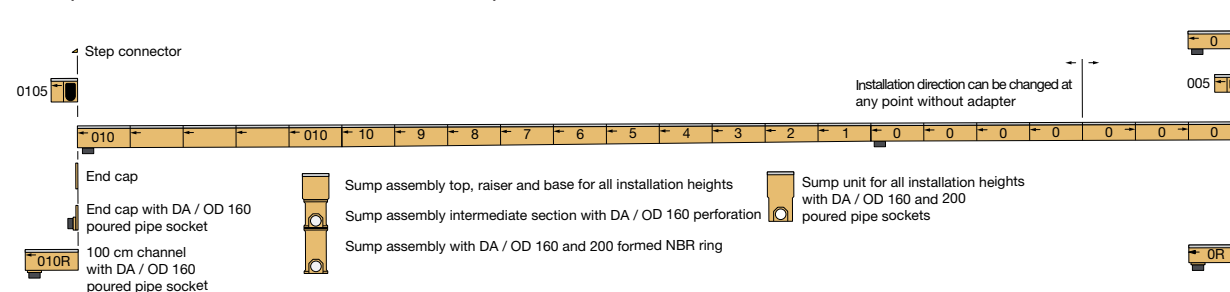
Example - Slope invert SF-100 and SF-150



Example - Stepped invert SF-100 and SF-150

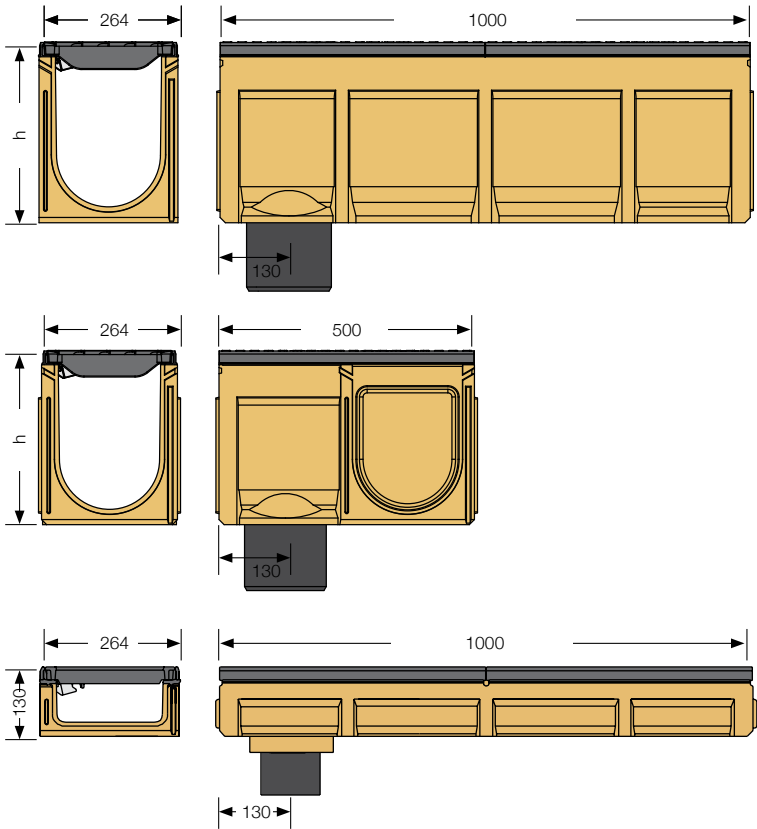


Example - Constant invert combined with slop invert SF-200

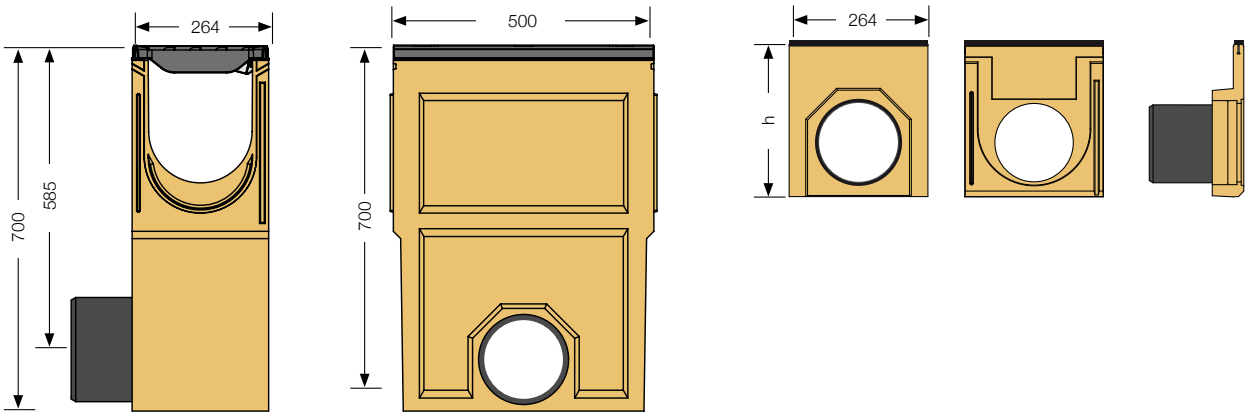


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Channel dimensions



Accessories dimensions



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ANRIN DRAIN heavy duty channels SF-200

Channel types - heavy duty channels SF-200
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
03220001	4026857022176	SF-200 Channel No.	0*	0	100	26.4	29.0	48.2
03220011	4026857022183	SF-200 Channel No.	0R***	0	100	26.4	29.0	48.2
03220051	4026857022190	SF-200 Channel No.	005*/**	0	50	26.4	29.0	25.6
03221011	4026857022206	SF-200 Channel No.	1*	0.5	100	26.4	29.5	48.2
03221021	4026857022213	SF-200 Channel No.	2*	0.5	100	26.4	30.0	48.8
03221031	4026857022220	SF-200 Channel No.	3*	0.5	100	26.4	30.5	49.4
03221041	4026857022237	SF-200 Channel No.	4*	0.5	100	26.4	31.0	50.0
03221051	4026857022244	SF-200 Channel No.	5*	0.5	100	26.4	31.5	50.6
03221061	4026857022251	SF-200 Channel No.	6*	0.5	100	26.4	32.0	51.2
03221071	4026857022268	SF-200 Channel No.	7*	0.5	100	26.4	32.5	51.8
03221081	4026857022275	SF-200 Channel No.	8*	0.5	100	26.4	33.0	52.4
03221091	4026857022282	SF-200 Channel No.	9*	0.5	100	26.4	33.5	53.0
03221101	4026857022299	SF-200 Channel No.	10*	0.5	100	26.4	34.0	53.6
03223001	4026857022305	SF-200 Channel No.	010*	0	100	26.4	34.0	54.0
03223011	4026857022312	SF-200 Channel No.	010R***	0	100	26.4	34.0	54.0
03223051	4026857022329	SF-200 Channel No.	0105*/**	0	50	26.4	34.0	29.6
03225001	4026857022336	SF-200 Channel No.	200-P****	0	100	26.4	13.0	30.4
03225011	4026857022343	SF-200 Channel No.	200-PR*****	0	100	26.4	13.0	30.4

- * 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 DA/OD 160 poured pipe socket
- **** Channel with mouldings for vertical outlet DA/OD 110
- ***** Channel with DA/OD 110 poured pipe socket

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ANRIN DRAIN heavy duty channels SF-200

Accessories - heavy duty channels SF-200
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	4028657022448	SF-200 Sump unit with mud bucket		50	26.4	70.0	61.1
03226121	4028657022479	SF-200 Sump assembly top with mud bucket		54	36.0	43.0	49.0
03206810	4026857012450	Pipe socket DA/OD 160					0.6
03206820	4026857012702	Pipe socket DA/OD 200					0.8
03227010	4026857029496	SF-200 Closed end cap for No.	0-010				2.8
03227050	4026857018735	SF-200 Closed end cap for No.	0				
03227410	4026857029502	SF-200 Closed end cap for No.	200P				1.3
03228010	4026857029519	SF-200 End cap with pipe socket DA/OD 160 for No.	0, 005				3.6
03228110	4026857029526	SF-200 End cap with pipe socket DA/OD 160 for No.	10, 010, 0105				3.9
03228510	4026857029533	SF-200 End cap with pipe socket DA/OD 70 for No.	200P				1.3

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		Weight kg
03224500	4026857022350	Slotted cast iron with OvalGrip Design, Cast iron GJS	50	24.3	830	12.2

Cover gratings cl. F900¹ with RapidLock fastening

Article no.	EAN	Designation	Length cm	Width cm	Inlet Ø cm ² /m	Weight kg
03224520	4026857022367	Slotted cast iron with OvalGrip Design, Cast iron GJS	50	24.3	830	13.9

¹ Exception: Cross-road drainage of busy roads

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Example installations

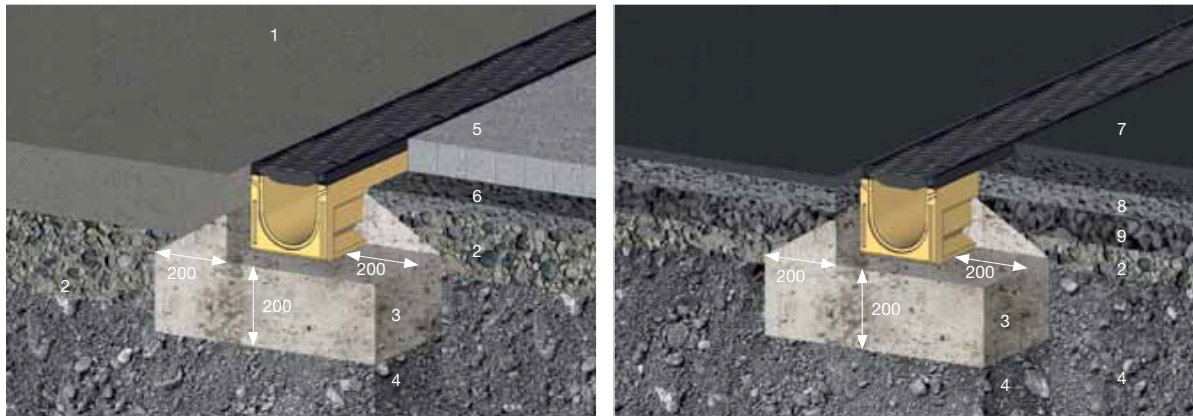
With ANRIN drainage systems, accumulating rainwater should be drained safely and quickly. Moreover, the structural elements have the task of accommodating dynamic loads arising from traffic-related demands and dispersing them to the area of the foundation.

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-200



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" |



ANRIN GmbH
Siemensstr. 1
59609 Anröchte
Germany

+49 (0) 29 47.97 81-0
www.anrin.com
info@anrin.com