

# 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	≥ 90 N/mm <sup>2</sup>
Bending tensile strength	≥ 22 N/mm <sup>2</sup>
Modulus of elasticity	ca. 25 kN/mm <sup>2</sup>
Density	2.1 – 2.3 g/dm <sup>3</sup>
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

# Technical data sheet

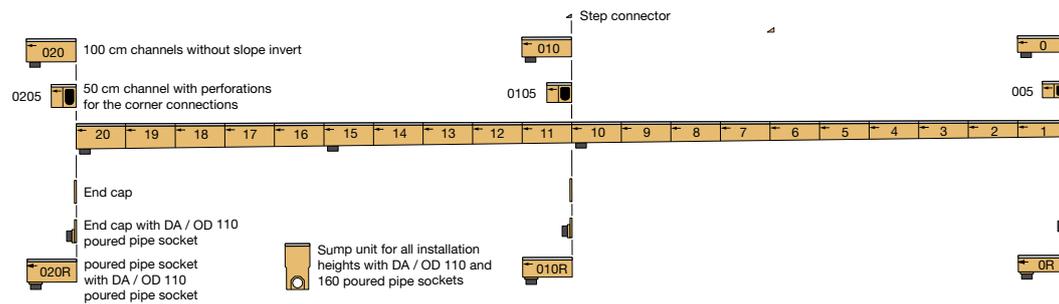
## ANRIN DRAIN heavy duty channels

### Slope types

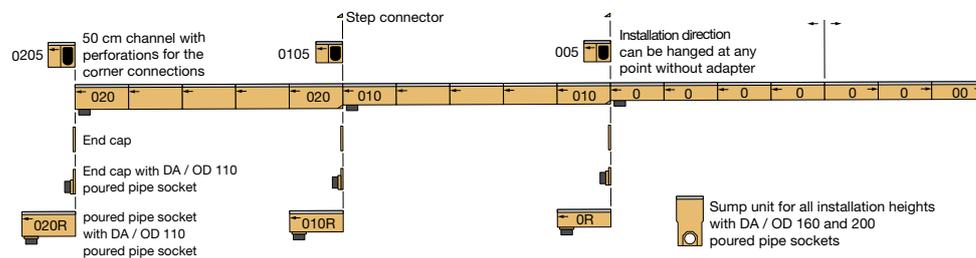
Area drainage with channel runs is normally made according to 3 different principles. The slope of water surface is achieved by the natural fall of the land. The water flows downwards with the gradient of the water level. A stepped invert is realised by an artificial gradient which is formed by the installation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

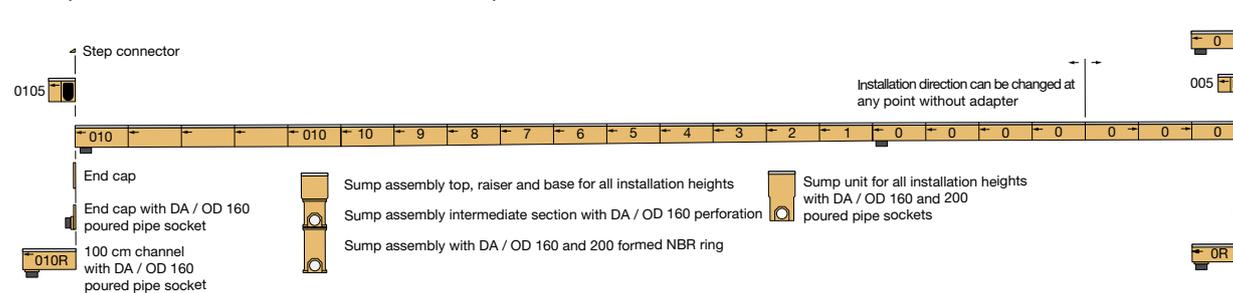
### Example - Slope invert SF-100 and SF-150



### Example - Stepped invert SF-100 and SF-150



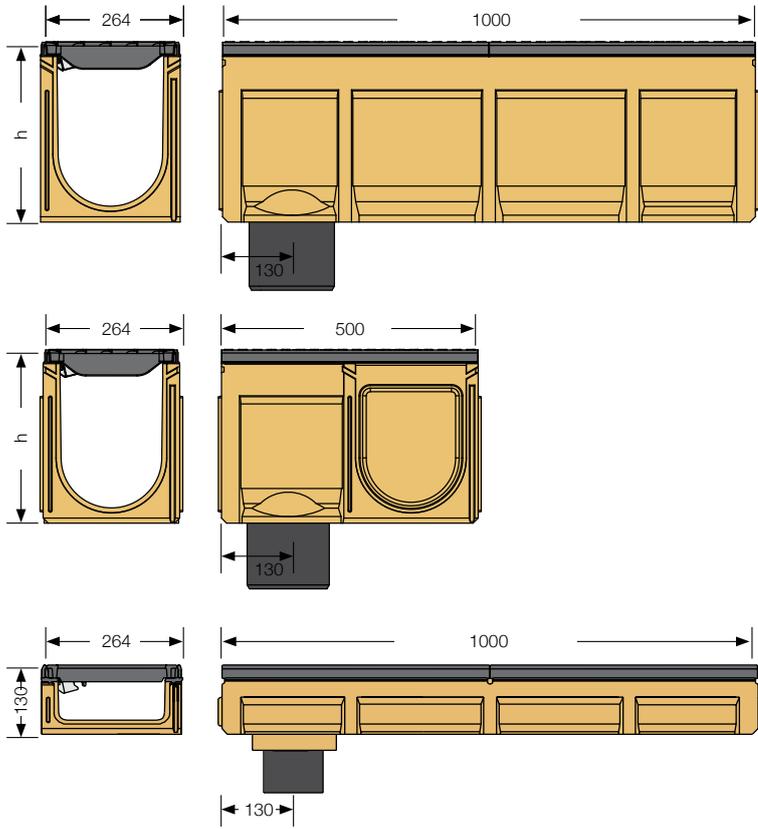
### Example - Constant invert combined with slop invert SF-200



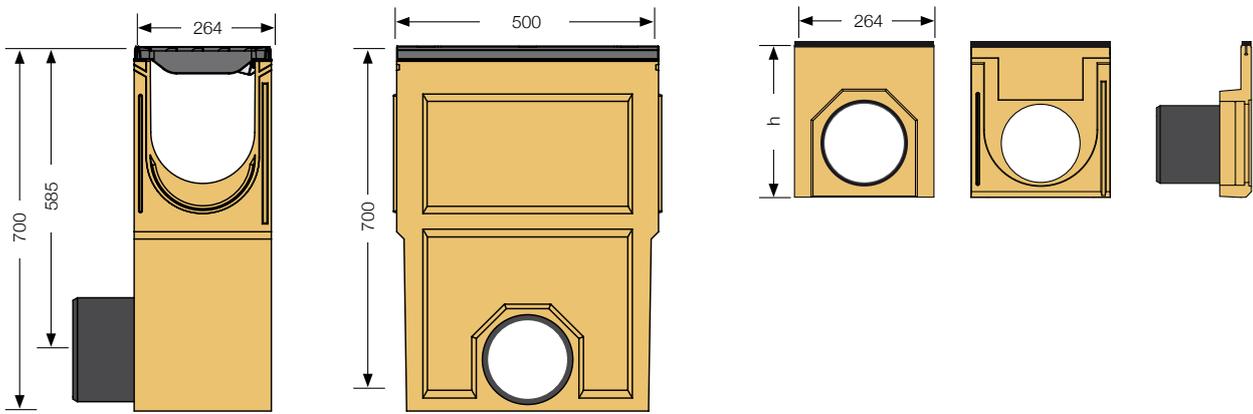
# Technical data sheet

## ANRIN DRAIN heavy duty channels SF-200

### Channel dimensions



### Accessories dimensions



# Technical data sheet

## 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,  
incl. ductile-iron slotted grating cl. F900

Article no.	EAN	Designation		Slope %	Length cm	Width cm	Height cm	Weight kg
03220000	4026857012559	SF-200 Channel No.	0*	0	100	26.4	29.0	48.2
03220010	4026857013259	SF-200 Channel No.	0R***	0	100	26.4	29.0	48.2
03220050	4026857012566	SF-200 Channel No.	005*/**	0	50	26.4	29.0	25.6
03221010	4026857017530	SF-200 Channel No.	1*	0.5	100	26.4	29.5	48.2
03221020	4026857017547	SF-200 Channel No.	2*	0.5	100	26.4	30.0	48.8
03221030	4026857017554	SF-200 Channel No.	3*	0.5	100	26.4	30.5	49.4
03221040	4026857017561	SF-200 Channel No.	4*	0.5	100	26.4	31.0	50.0
03221050	4026857017578	SF-200 Channel No.	5*	0.5	100	26.4	31.5	50.6
03221060	4026857017585	SF-200 Channel No.	6*	0.5	100	26.4	32.0	51.2
03221070	4026857017592	SF-200 Channel No.	7*	0.5	100	26.4	32.5	51.8
03221080	4026857017608	SF-200 Channel No.	8*	0.5	100	26.4	33.0	52.4
03221090	4026857017615	SF-200 Channel No.	9*	0.5	100	26.4	33.5	53.0
03221100	4026857017622	SF-200 Channel No.	10*	0.5	100	26.4	34.0	53.6
03223000	4026857017639	SF-200 Channel No.	010*	0	100	26.4	34.0	54.0
03223010	4026857017769	SF-200 Channel No.	010R***	0	100	26.4	34.0	54.0
03223050	4026857017776	SF-200 Channel No.	0105*/**	0	50	26.4	34.0	29.6
03225000	4026857012573	SF-200 Channel No.	200-P****	0	100	26.4	13.0	30.4
03225010	4026857013006	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

# Technical data sheet

## 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,  
incl. ductile-iron slotted grating cl. F900

Article no.	EAN	Designation		Length cm	Width cm	Height cm	Weight kg
03226000	4026857017783	SF-200 Sump unit with mud bucket		50	26.4	70.0	61.1
03226120	4026857018858	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

### Sump unit SF-200



mit Schmutzfangeimer, mit  
eingegossenem Rohrstopfen DA/OD 160  
mit Vorformung DA/OD 200

### End cap



### End cap with pipe socket



# Technical data sheet

## ANRIN DRAIN heavy duty channels SF-200

### Example installations

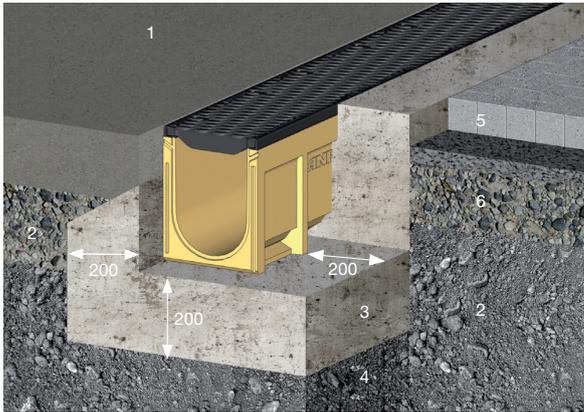
With ANRIN drainage systems, accumulating rainwater should be drained safely and quickly. Moreover, the structural elements have the task of accommodating dynamic loads arising from traffic-related demands and dispersing them to the area of the foundation.

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.

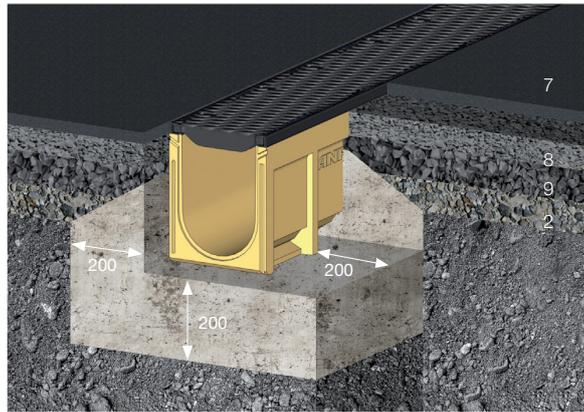
Despite this, designers and planners are always obligated to check the products and the installation instructions for their appropriateness. The example details are simplified recommendations for execution. Constructions are to be re-created on a project-specific basis. Special local conditions must 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
- 2 Base course with hydraulic binder
- 3 Concrete cladding of the channel body
- 4 Gravel base (frost-protection layer)
- 5 Prefabricated concrete sheets and / or stone systems

- 6 Paving bed
  - 7 Wearing course
  - 8 Bonding course
  - 9 Bitumen base course
- 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](http://www.anrin.com)  
[info@anrin.com](mailto:info@anrin.com)