



# 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 dusty 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	≥ 90 N/mm <sup>2</sup>
Bending tensile strength	$\geq$ 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 (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

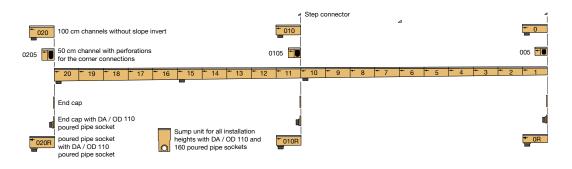
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#### Slope types

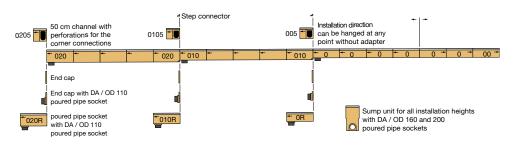
Area drainage with channel runs is normally made according to 3 different principles. The slope of water surface is achieved by the natural fall of the land. The water flows downwards with the gradient of the water level. A stepped invert is realised by an artificial gradient which is formed by the installation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

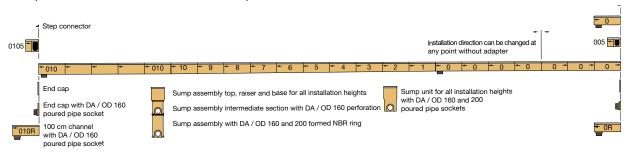
#### Example - Slope invert SF-100 and SF-150



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



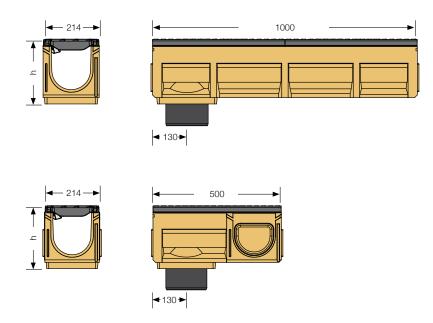
#### Example - Constant invert combined with slop invert SF-200



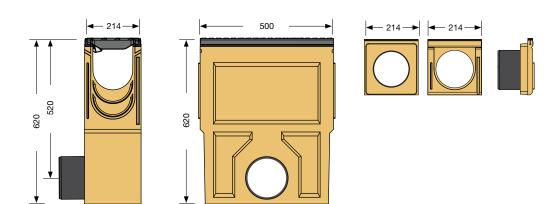
## Technical data sheet

ANRIN DRAIN heavy duty channels SF-150

## Channel dimensions



## Accessories dimensions



## 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

## 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. D400<sup>1</sup> and E600<sup>1</sup> with RapidLock fastening

Article no.	EAN	Designation	Length cm	Width cm	Inlet Ø cm²/m	Weight kg
03214500	4026857022152	Slotted cast iron with OvalGrip Design, Cast iron GJS	50	19.3	615	7.9

## Cover gratings cl. F900<sup>1</sup> with RapidLock fastening

Article no.	EAN	Designation	Length cm	Width cm	Inlet Ø cm²/m	Weight kg
03214520	4026857022169	Slotted cast iron with OvalGrip Design, Cast iron GJS	50	19.3	615	8.9

<sup>1</sup> Exception: Cross-road drainage of busy roads

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### Example installations

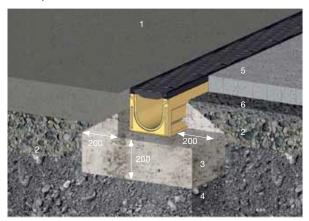
With ANRIN drainage systems, accumulating rainwater should be drained safely and quickly. Moreover, the structural elements have the task of accommodating dynamic loads arising from traffic-related demands and dispersing them to the area of the foundation.

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 re-created n 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
- 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 info@anrin.com