

ANRIN

LEADING WATER



Technical data sheet

Heavy duty channels
SF-100

Technical data sheet

ANRIN DRAIN heavy duty channels SF-100

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	16.4 cm
Height	10.0 - 26.5 cm
Gewicht	19,0 - 42,0 kg
Edge type	GJS cast edge rail
Nominal width	100 mm
Load class	F 900 (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 (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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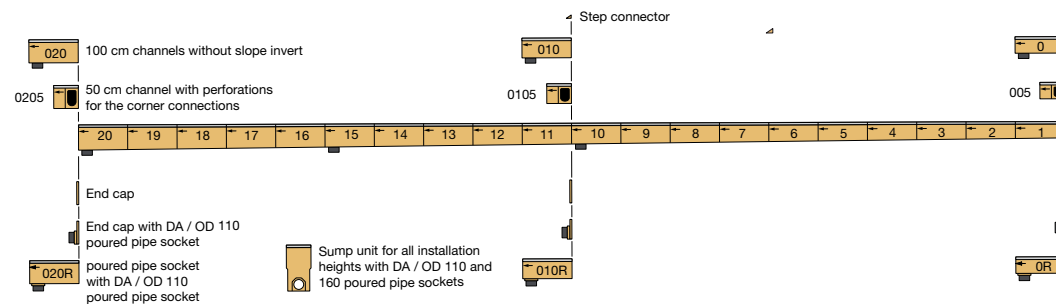
ANRIN DRAIN heavy duty channels

Slope types

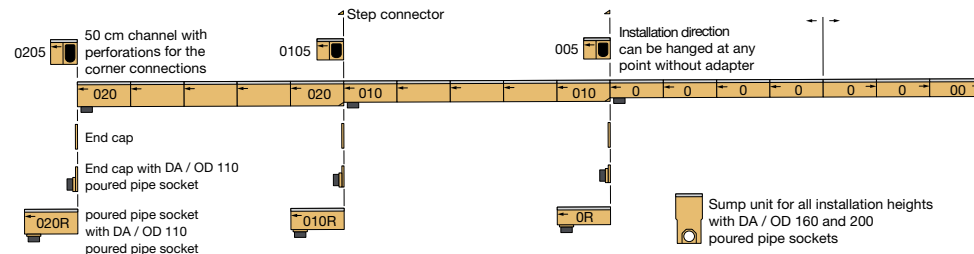
Area drainage with channel runs is normally made according to 3 different principles. The slope of water surface is achieved by the natural fall of the land. The water flows downwards with the gradient of the water level. A stepped invert is realised by an artificial gradient which is formed by the installation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

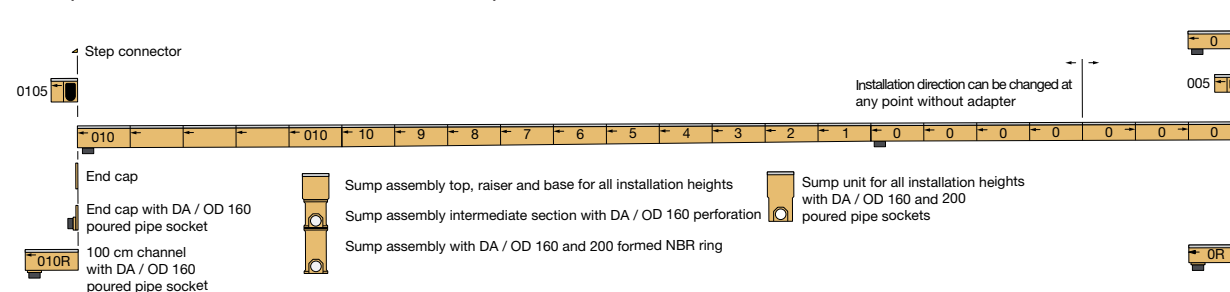
Example - Slope invert SF-100 and SF-150



Example - Stepped invert SF-100 and SF-150

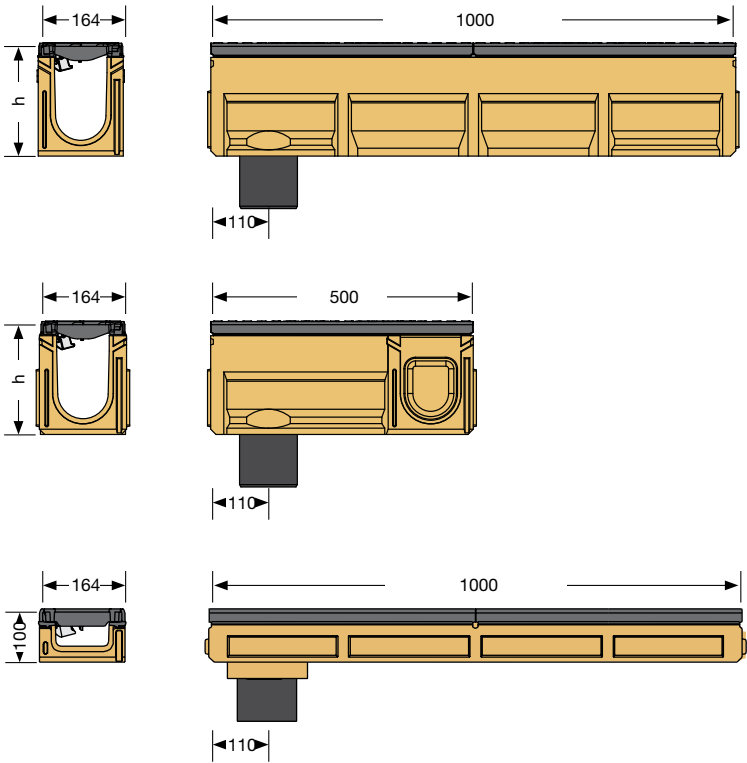


Example - Constant invert combined with slop invert SF-200

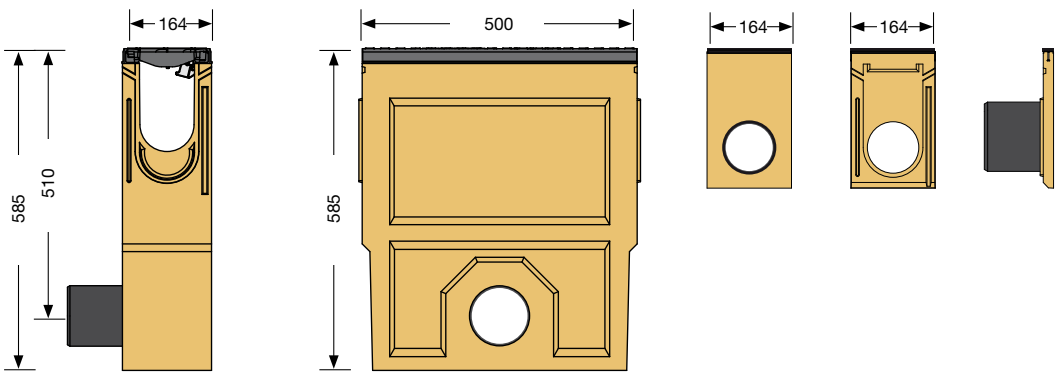


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Channel dimensions



Accessories dimensions



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ANRIN DRAIN heavy duty channels SF-100

Channel types - heavy duty channels SF-100
with UNILINK-joint system and RapidLock fastening,
channels with black cataphoretic dip coated steel edge rail,
incl. cast iron slotted grating cl. F900¹

Artikel Nr.	EAN	Beschreibung		Gefälle %	Länge cm	Breite cm	Höhe cm	Gewicht kg
03201000	4026857012030	SF-100 Channel No.	0*	0	100	16.4	16.5	36.0
03201010	4026857012757	SF-100 Channel No.	0R***	0	100	16.4	16.5	36.0
03201050	4026857012047	SF-100 Channel No.	005**/*	0	50	16.4	16.5	19.0
03200010	4026857012054	SF-100 Channel No.	1	0.5	100	16.4	17.0	36.0
03200020	4026857012061	SF-100 Channel No.	2	0.5	100	16.4	17.5	36.4
03200030	4026857012078	SF-100 Channel No.	3	0.5	100	16.4	18.0	36.6
03200040	4026857012085	SF-100 Channel No.	4	0.5	100	16.4	18.5	36.8
03200050	4026857012092	SF-100 Channel No.	5*	0.5	100	16.4	19.0	37.0
03200060	4026857012108	SF-100 Channel No.	6	0.5	100	16.4	19.5	37.3
03200070	4026857012115	SF-100 Channel No.	7	0.5	100	16.4	20.0	37.5
03200080	4026857012122	SF-100 Channel No.	8	0.5	100	16.4	20.5	38.0
03200090	4026857012139	SF-100 Channel No.	9	0.5	100	16.4	21.0	38.3
03200100	4026857012160	SF-100 Channel No.	10*	0.5	100	16.4	21.5	38.5
03202000	4026857012146	SF-100 Channel No.	010*	0	100	16.4	21.5	38.5
03202010	4026857012764	SF-100 Channel No.	010R***	0	100	16.4	21.5	38.5
03202050	4026857012153	SF-100 Channel No.	0105**/*	0	50	16.4	21,5	21.0
03200110	4026857013280	SF-100 Channel No.	11	0.5	100	16.4	22.0	39.0
03200120	4026857012177	SF-100 Channel No.	12	0.5	100	16.4	22.5	39.3
03200130	4026857012184	SF-100 Channel No.	13	0.5	100	16.4	23.0	39.8
03200140	4026857012191	SF-100 Channel No.	14	0.5	100	16.4	23.5	40.5
03200150	4026857012207	SF-100 Channel No.	15*	0.5	100	16.4	24.0	41.0
03200160	4026857012214	SF-100 Channel No.	16	0.5	100	16.4	24.5	41.4
03200170	4026857012221	SF-100 Channel No.	17	0.5	100	16.4	25.0	41.6
03200180	4026857012238	SF-100 Channel No.	18	0.5	100	16.4	25.5	41.7
03200190	4026857012245	SF-100 Channel No.	19	0.5	100	16.4	26.0	41.9
03200200	4026857012252	SF-100 Channel No.	20*	0.5	100	16.4	26.5	42.0
03203000	4026857012269	SF-100 Channel No.	020*	0	100	16.4	26.5	42.0
03203010	4026857012771	SF-100 Channel No.	020R***	0	100	16.4	26.5	42.0
03203050	4026857012283	SF-100 Channel No.	0205**/*	0	50	16.4	26.5	23.0
03204000	4026857012276	SF-100 Channel No.	100-P*	0	100	16.4	10.0	32.0
03204010	4026857013273	SF-100 Channel No.	100-PR***	0	100	16.4	10.0	32.0

* Channel with mouldings for vertical outlet DA/OD 110

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

*** Channel with vertical pipe socket DA/OD 110

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Accessories - heavy duty channels SF-100
with UNILINK-joint system and RapidLock fastening,
channels with black cataphoretic dip coated steel edge rail,
incl. cast iron slotted grating cl. F900¹

Article no.	EAN	Designation		Length cm	Width cm	Height cm	Weight kg
03206000	4026857012290	SF-100 Sump unit incl. cast iron grating cl. F 900		50	16.4	58.5	42.0
03206121	4028657022486	SF-100 Sump assembly top with mud bucket		54	36.0	43.0	49.0
03206810	4026857012450	Pipe socket DA/OD 160					0.2
03206820	4026857012702	Pipe socket DA/OD 200					0.6
03207010	4026857029380	SF-100 Closed end cap for No.	0-20				2.4
03207510	4026857029397	SF-100 Closed end cap for No.	100P				1.0
03208010	4026857029403	SF-100 End cap with pipe socket DA/OD 110 for No.	0				1.8
03208110	4026857029410	SF-100 End cap with pipe socket DA/OD 110 for No.	010				2.1
03208210	4026857029434	SF-100 End cap with pipe socket DA/OD 110 for No.	020				2.5
03208510	4026857029427	SF-100 End cap with pipe socket DA/OD 70 for No.	100P				0.6
01107500	4026857011415	KE-/SF-100 Step connector for compensating level differences					0.5

Cover grating



Oval Grip slotted
cast iron grating

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Example installations

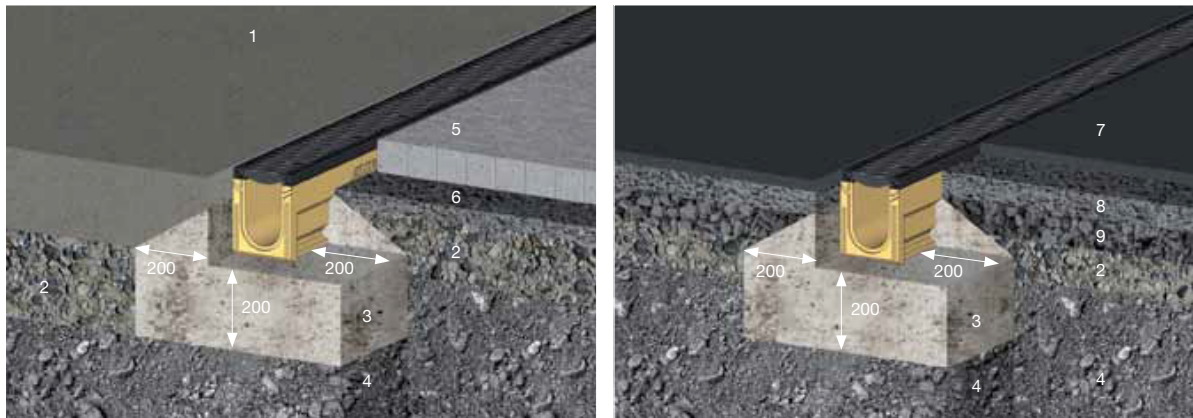
With ANRIN drainage systems, accumulating rainwater should be drained safely and quickly. Moreover, the structural elements have the task of accommodating dynamic loads arising from traffic-related demands and dispersing them to the area of the foundation.

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-100



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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