

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 ² |
| Bending tensile strength | ≥ 22 N/mm ² |
| Modulus of elasticity | ca. 25 kN/mm ² |
| Density | 2.1 – 2.3 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 |

Technical data sheet

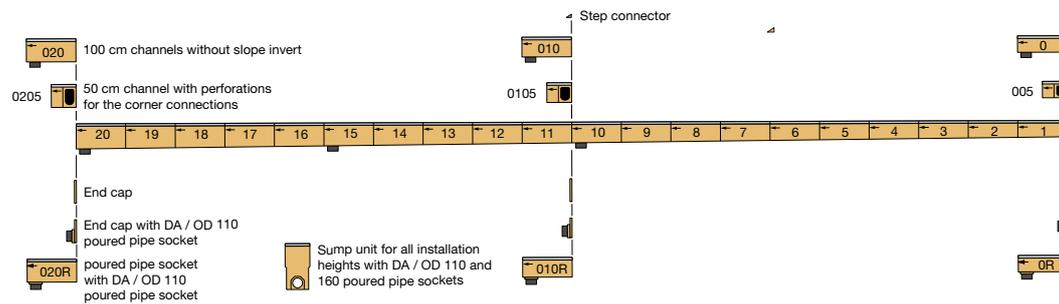
ANRIN DRAIN heavy duty channels

Slope types

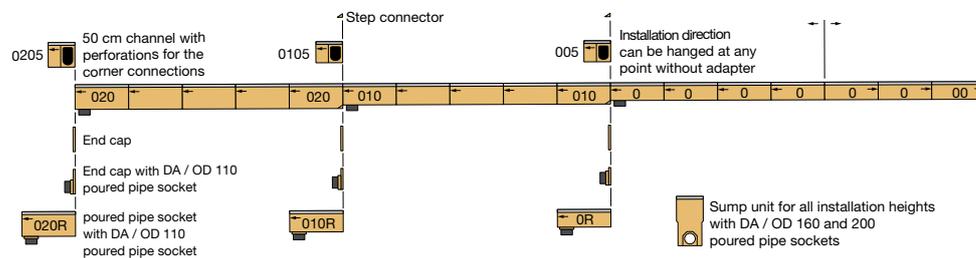
Area drainage with channel runs is normally made according to 3 different principles. The slope of water surface is achieved by the natural fall of the land. The water flows downwards with the gradient of the water level. A stepped invert is realised by an artificial gradient which is formed by the installation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

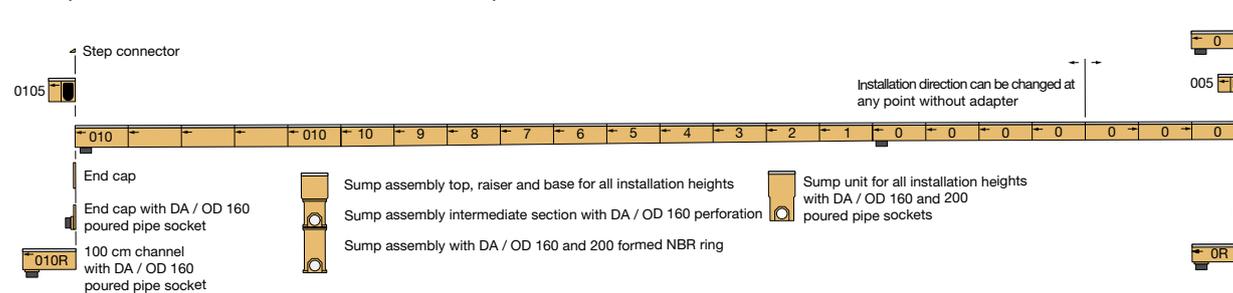
Example - Slope invert SF-100 and SF-150



Example - Stepped invert SF-100 and SF-150



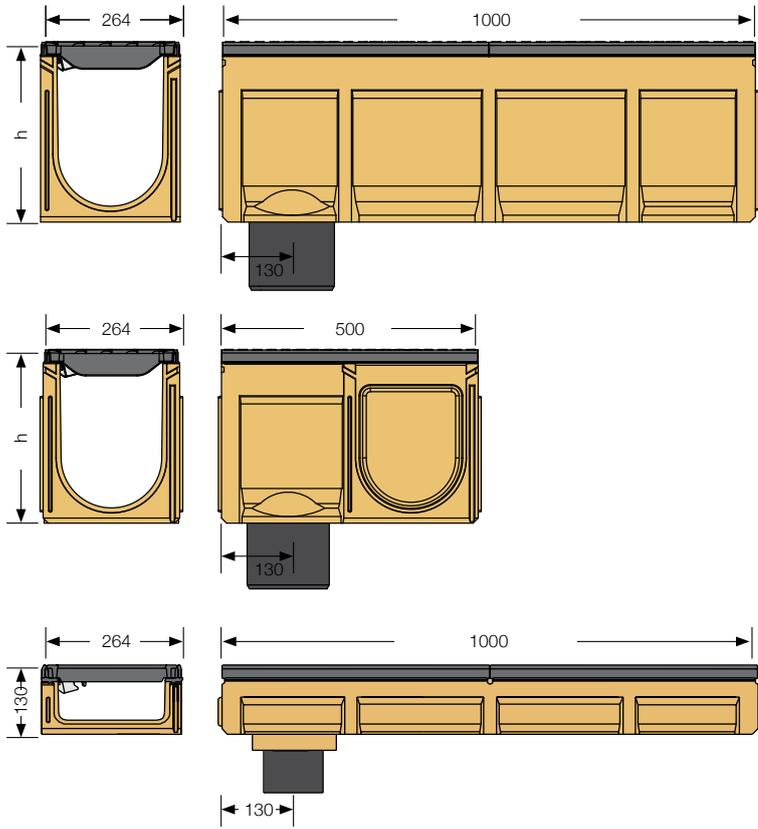
Example - Constant invert combined with slop invert SF-200



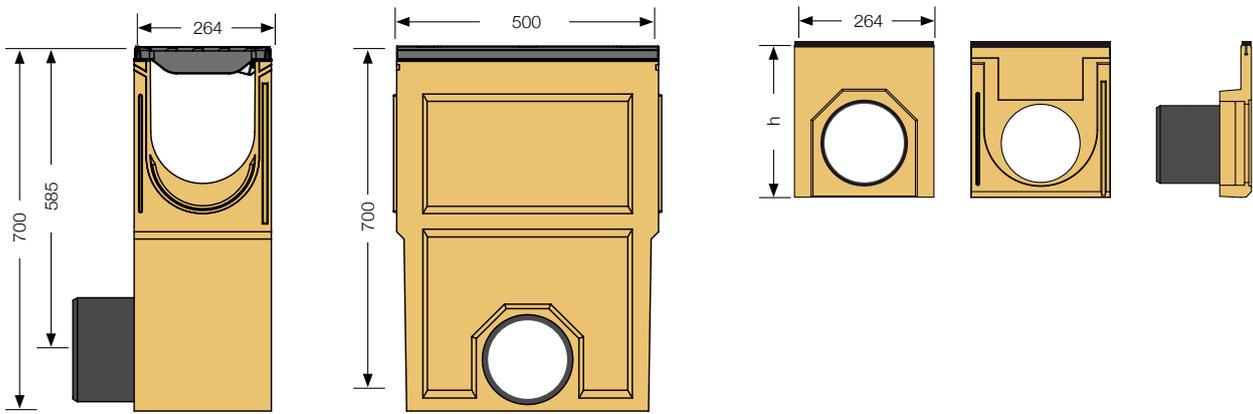
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Channel dimensions



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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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

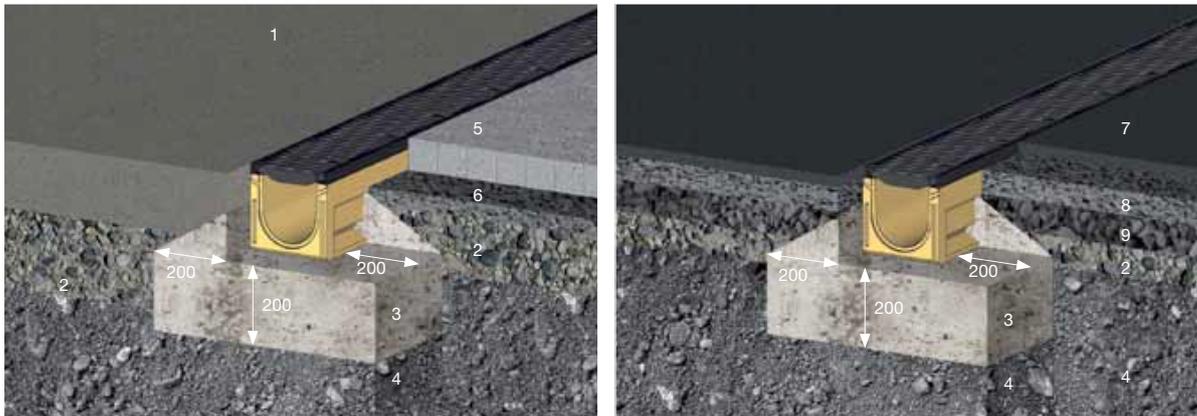
With ANRIN drainage systems, accumulating rainwater should be drained safely and quickly. Moreover, the structural elements have the task of accommodating dynamic loads arising from traffic-related demands and dispersing them to the area of the foundation.

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” |



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