

# Concrete channels for professionals.

Versatile application - technically perfected - for highest requirements.



BGU-Z Universal channels SV  
BGZ-S Heavy-duty channels SV

## Concrete channels - product range



**Graspointner**  
Entwässerungssysteme



## Your strong partner - Europe-wide presence.

Our local presence in 25 European countries in various climatic zones strengthens our ability to detect important trends and requirements and include them in the continuous development of our products and services.

The in-depth expertise gained from this network enables us to provide specific advice and support:

- with a view for future-oriented needs, also with customer-specific projects
- with highly reliable product quality and innovative developments
- plus local presence

Backed by decades of market experience throughout Europe, BG-Graspointner is a strong partner.



### BG-production facilities:

AT SK RO RU

### BG-sales organizations:

CZ HR HU PL



Sales & marketing headquarters in Austria

25 local sale cooperations throughout Europe

### BG-sales partners:

BE BG BA CH DE  
FR GR IT LU MK  
ME NL NO PT RS  
SI SE

## ▾ Your benefits with BG-Graspointner.

### Innovation

To ensure optimum planning and implementation, BG-Graspointner's drainage solutions are improved continuously in accordance with the latest standards. This is demonstrated by the impressive performance of our newly developed FILCOTEN® material.

### Know-how and high-tech

During the planning stage of your construction projects, our experienced engineers are ready to answer all of your relevant questions. More than 35 years of experience with continuously increasing requirements are the guarantee for optimum know-how.

### Safety

All our activities are centered around the needs of our customers: Our partners can rely on top product quality, reliability, excellent service and integrity.

### Sustainability

for the benefit of the environment and future generations. BG-Graspointner produces drainage solutions with an exceptionally high service life - using one of the hardest materials available: Concrete.

**BG-Graspointner** - Your competent partner for all drainage solutions.





BGU-Z Universal channels



BGZ-S Heavy-duty channels

## Concrete channels with different edges.

Pages 4 to 17:

**BGU-Z Universal channels SV**  
**BGF-Z Shallow channels SV**

- channel with cast iron, galvanized-steel edge in L- or h-shape
- wall thickness 30 mm
- with nominal widths of 100, 150, 200 and 300 mm
- steel gratings and ductile iron gratings with SV-system or bolted
- up to load class E 600 kN



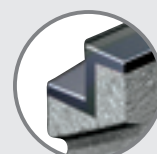
### Ideal for installation in:

Production & commercial facilities, car dealers, service stations, pedestrian zones, parks, sports grounds, public squares, house & garage drives, terraces and similar surfaces.

Pages 18 to 27:

**BGZ-S Heavy-duty channels SV**

- channel with cast iron edge in Z-shape
- wall thickness 47 or 60 mm (depending on nominal width)
- with nominal widths of 100, 150, 200, 300, 400 and 500 mm
- steel gratings and ductile iron gratings with SV-system or bolted
- up to load class F 900 kN



### Ideal for installation in:

Storage yards, workshops, parking lots, service stations, motorways & highways (only parallel to roadway) and similar surfaces.



## Universal application:

### BGU-Z Universal channel with SV-system

#### Application areas.

Our concrete channels are particularly suitable for installation in commercial premises such as production & trade facilities, warehouses, car dealers, service stations, in public areas, e.g. pedestrian zones, parks, sports grounds, city squares, as well as cycle paths and pavements.

In the private sector, they are used for house & garage drives, terraces and similar surfaces. Load class up to E 600 kN.

#### Features & benefits.

- 2 different edge versions
- numerous grate options - loads up to class E
- fast and easy fixing of the gratings with bolts or SV-system
- Bolting material can be replaced at any time
- convenient sealing because of preformed safety joint
- high draining capacity - available up to nominal width 300



#### ▣ Nominal widths: 100, 150, 200, 300 - cast iron, galvanized-steel edge

The BGU-Z channel system is available in different versions. At the top of our product range is the proven channel with cast iron edge (L-shape) and SV-system. We also offer drainage channels with a galvanized-steel edge in h-shape.



cast iron edge



galvanized steel edge

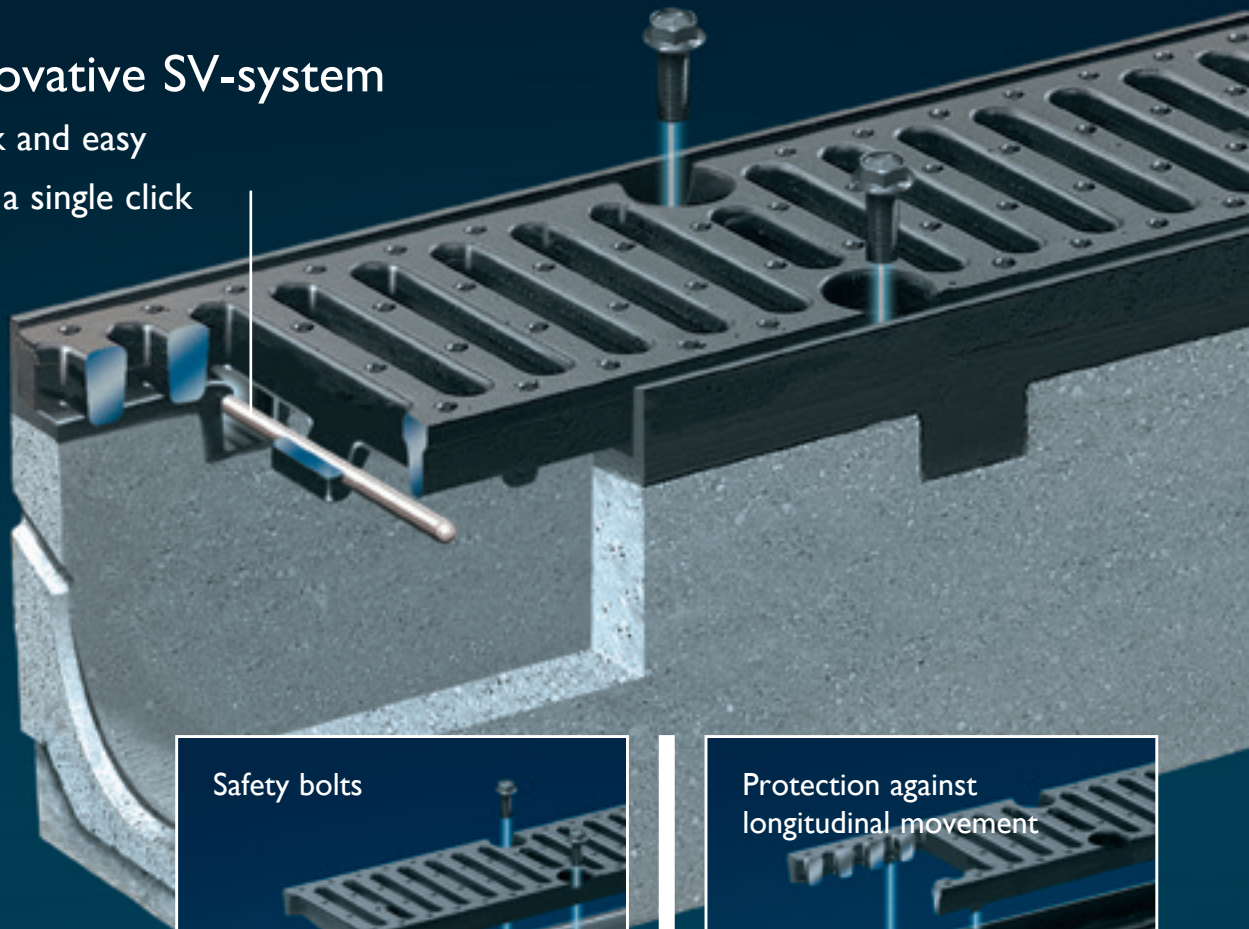




# Installation has never been so easy!

## Innovative SV-system

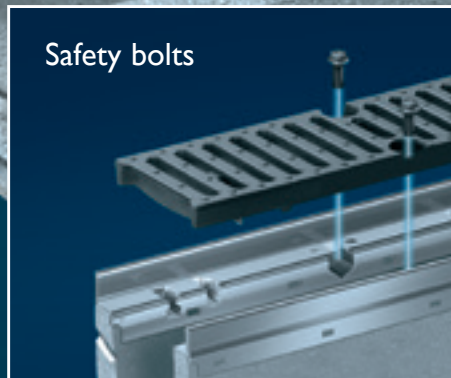
quick and easy  
with a single click



Product range:



Safety bolts



Protection against longitudinal movement



### Easy and efficient installation

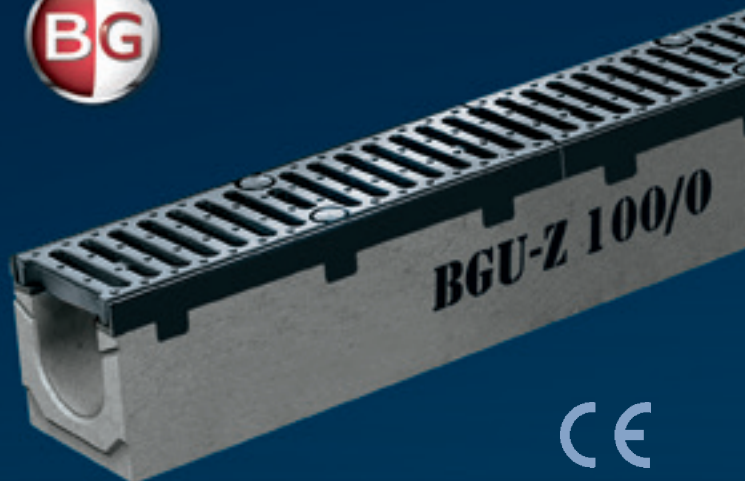
Installation has never been so easy. Grating and channel of the BGU-Z system is fixed by means of an innovative SV-system. The grate is fixed with a single click. A firm tug and the grate comes off again. Because of the safety joint at the front end and corresponding sealing compounds, an elastic sealing can be made between the individual channel segments.

### Safety bolts

Additional fixing with bolts is possible, but not necessary in most cases. If extreme loads are to be expected, the steel gratings or cast iron gratings can be additionally secured with the safety bolts. In case of damaging, the bolting-material can be replaced at any time.

### Protection against longitudinal movement

Additional lugs on the bottom side of the grate provide important stabilization between grate and channel. They protect the system against possible longitudinal movement caused by sudden braking or thrust forces.



## BGU-Z Universal channels SV G

with cast iron edge - nominal width 100

High-grade concrete channel with L-shaped cast iron edge and a safety joint on the front end. An innovative SV-system for easy installation and additional lugs/pockets to protect against longitudinal movement of the grates are integrated. If necessary, the mesh gratings or cast iron gratings can be additionally bolted.

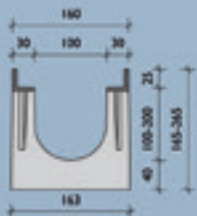
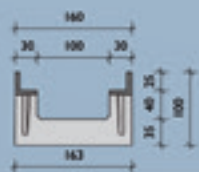
These units are also available as BGF-Z Shallow channels with a construction height of 100 mm.

### Application areas

Ideally suited to pedestrian areas, underground car parks, workshops, railway stations and similar areas.

BGF-Z Shallow channel SV G  
without slope

BGU-Z Universal channel SV G  
with or without slope



all dimensions in mm

System	BGU-Z SV G
Total length	1000 mm
Overall width	163 mm
Nominal width	100 mm
Slope 0,5 %	channel no. 1 - 20
Total height	165 - 265 mm
Weight w/o grating	37 - 52 kg

### Channels with cast iron edge.

Item no.	Channel type NW 100	Slope/ outlet	Total height	Item no.	Channel type NW 100	Slope/ outlet	Total height	Item no.	Channel type NW 100	Slope/ outlet	Total height
12500	100/H=100	0 %	100 mm	14514	100/5	0,5 %	190 mm	14525	100/16	0,5 %	245 mm
12501	101/H=100	0 % / DN100	100 mm	14515	100/6	0,5 %	195 mm	14526	100/17	0,5 %	250 mm
14500	100/0	0 %	165 mm	14516	100/7	0,5 %	200 mm	14527	100/18	0,5 %	255 mm
14501	100/5-0	0 %	190 mm	14517	100/8	0,5 %	205 mm	14528	100/19	0,5 %	260 mm
14502	100/10-0	0 %	215 mm	14518	100/9	0,5 %	210 mm	14529	100/20	0,5 %	265 mm
14503	100/15-0	0 %	240 mm	14519	100/10	0,5 %	215 mm	14505	101/0	0 % / DN100	165 mm
14504	100/20-0	0 %	265 mm	14520	100/11	0,5 %	220 mm	14506	101/5-0	0 % / DN100	190 mm
14510	100/1	0,5 %	170 mm	14521	100/12	0,5 %	225 mm	14507	101/10-0	0 % / DN100	215 mm
14511	100/2	0,5 %	175 mm	14522	100/13	0,5 %	230 mm	14508	101/15-0	0 % / DN100	240 mm
14512	100/3	0,5 %	180 mm	14523	100/14	0,5 %	235 mm	14509	101/20-0	0 % / DN100	265 mm
14513	100/4	0,5 %	185 mm	14524	100/15	0,5 %	240 mm				

The drainage channel line with slope can be extended by using of channels without slope before or after the relevant slope channels.

### Gratings for all edge versions BGU-Z SV 100.

Item no.	Gratings	Material	Dimensions in mm	Loading class EN1433	Slot/mesh- width in mm	Weight/ unit	SV-system/ bolting	Inlet-section
22156	Mesh grating	Galvanized steel	1000/147/25	B 125 kN	MW 30/10	3,9 kg	SV + bolttable	1170 cm <sup>2</sup> /m
22157		Galvanized steel	500/147/25	B 125 kN	MW 30/10	2,0 kg	SV + bolttable	1170 cm <sup>2</sup> /m
22152		Galvanized steel	1000/147/25	C 250 kN	MW 30/10	4,1 kg	SV + bolttable	1170 cm <sup>2</sup> /m
22153		Galvanized steel	500/147/25	C 250 kN	MW 30/10	2,2 kg	SV + bolttable	1170 cm <sup>2</sup> /m
23250	Mesh grating	Galvanized steel	1000/147/25	D 400 kN	MW 30/10	6,4 kg	SV + bolttable	1190 cm <sup>2</sup> /m
23251		Galvanized steel	500/147/25	D 400 kN	MW 30/10	3,3 kg	SV + bolttable	1190 cm <sup>2</sup> /m
22352		Stainless steel V2A	1000/147/25	C 250 kN	MW 30/10	5,2 kg	SV + bolttable	1170 cm <sup>2</sup> /m
22353		Stainless steel V2A	500/147/25	C 250 kN	MW 30/10	2,6 kg	SV + bolttable	1170 cm <sup>2</sup> /m
22358	Perforated grating	Stainless steel V2A	1000/147/25	C 250 kN	ø 8 mm	4,7 kg	SV	235 cm <sup>2</sup> /m
22359		Stainless steel V2A	500/147/25	C 250 kN	ø 8 mm	2,5 kg	SV	235 cm <sup>2</sup> /m
22050	Ductile iron grating	Ductile iron	500/147/25	C 250 kN	SW 16/120	3,9 kg	SV + bolttable	585 cm <sup>2</sup> /m
22054		Ductile iron	500/147/25	C 250 kN	SW 6/120	4,7 kg	SV + bolttable	220 cm <sup>2</sup> /m
23102	Ductile iron mesh grating	Ductile iron	500/147/25	D 400 kN	SW 18/120	4,0 kg	SV + bolttable	585 cm <sup>2</sup> /m
22754		Ductile iron	500/147/25	E 600 kN	MW 24/24	4,7 kg	SV	725 cm <sup>2</sup> /m
22755		Ductile iron	500/147/25	E 600 kN	MW 24/24	4,7 kg	bolttable	725 cm <sup>2</sup> /m
22756	Ductile iron bar grating	Ductile iron	500/147/25	E 600 kN	MW 27/13	4,3 kg	SV	520 cm <sup>2</sup> /m
22757		Ductile iron	500/147/25	E 600 kN	MW 27/13	4,3 kg	bolttable	520 cm <sup>2</sup> /m

# BGU-Z Universal channels SV V

with galvanized-steel edge - nominal width 100

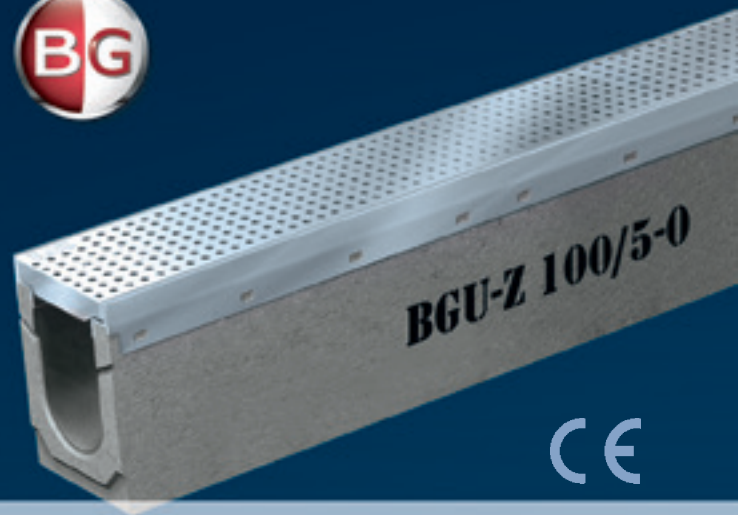
High-grade concrete channel with h-shaped edge made of galvanized-steel and a safety joint on the front end. An innovative SV-system for easy installation and additional lugs/pockets to protect against longitudinal movement of the grates are integrated. If necessary, the mesh gratings or cast iron gratings can be additionally bolted.

These units are also available as BGF-Z Shallow channels with a construction height of 80 or 100 mm.

## Application areas

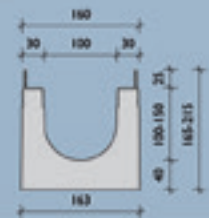
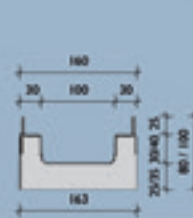
Ideally suited to house driveways, sports grounds, hotel facilities, car dealers, shopping centres, parks and similar areas.

System	BGU-Z SV V
Total length	1000 mm
Overall width	163 mm
Nominal width	100 mm
Slope 0,5 %	channel no. 1 - 10
Total height	165 - 215 mm
Weight w/o grating	36 - 43 kg



BGF-Z Shallow channel SV V  
without slope

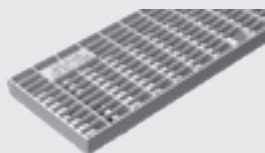
BGU-Z Universal channel SV V  
with or without slope



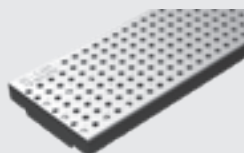
all dimensions in mm

## Channels with galvanized steel edge.

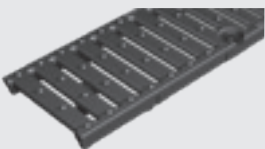
Item no.	Channel type NW 100	Slope/ outlet	Total height	Item no.	Channel type NW 100	Slope/ outlet	Total height	Item no.	Channel type NW 100	Slope/ outlet	Total height
12570	100/H=80	0 %	80 mm	14576	100/1	0,5 %	170 mm	14583	100/8	0,5 %	205 mm
12571	101/H=80	0 % / DN100	80 mm	14577	100/2	0,5 %	175 mm	14584	100/9	0,5 %	210 mm
12572	100/H=100	0 %	100 mm	14578	100/3	0,5 %	180 mm	14585	100/10	0,5 %	215 mm
12573	101/H=100	0 % / DN100	100 mm	14579	100/4	0,5 %	185 mm	14573	101/0	0 % / DN100	165 mm
14570	100/0	0 %	165 mm	14580	100/5	0,5 %	190 mm	14574	101/5-0	0 % / DN100	190 mm
14571	100/5-0	0 %	190 mm	14581	100/6	0,5 %	195 mm	14575	101/10-0	0 % / DN100	215 mm
14572	100/10-0	0 %	215 mm	14582	100/7	0,5 %	200 mm				



Mesh grating MW 30/10,  
Cl. B, C or D, galvanized steel,  
Cl. C, stainless-steel



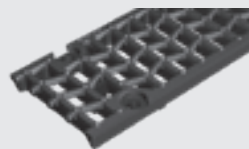
Perforated grating Ø 8 mm,  
Cl. C, stainless steel



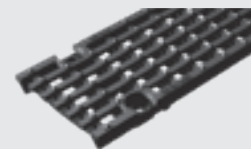
Ductile iron grating SW 6/120,  
Cl. C, narrow slot width



Ductile iron grating SW 16/120,  
Cl. C or Cl. D



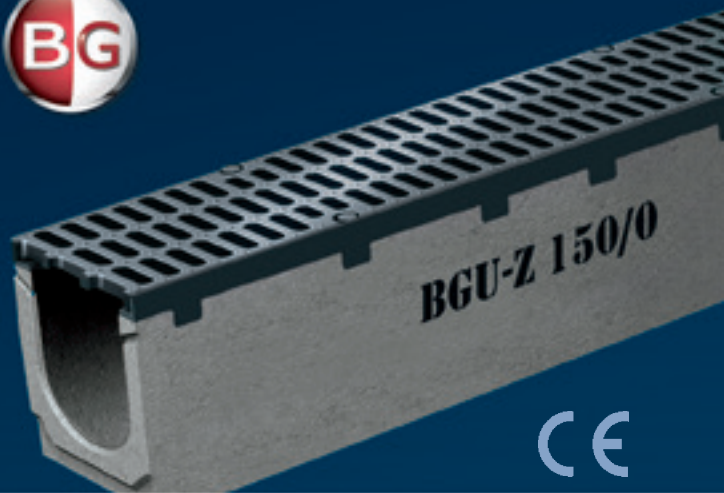
Ductile iron mesh grating  
MW 24/24, Cl. E



Ductile iron bar grating  
MW 27/13, Cl. E

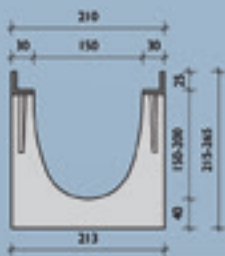
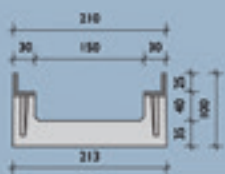
Caution: impact-, braking- and torsional-forces must be considered separately. Heed installation instructions. Subject to technical modifications.





BGF-Z Shallow channel SV G  
without slope

BGU-Z Universal channel SV G  
with or without slope



all dimensions in mm

## BGU-Z Universal channels SV G

with cast iron edge - nominal width 150

High-grade concrete channel with L-shaped cast iron edge and a safety joint on the front end. An innovative SV-system for easy installation and additional lugs/pockets to protect against longitudinal movement of the grates are integrated. If necessary, the mesh gratings or cast iron gratings can be additionally bolted.

These units are also available as BGF-Z shallow channels with a construction height of 100 mm.

### Application areas

Ideally suited to pedestrian areas, underground car parks, workshops, railway stations and similar areas.

System	BGU-Z SV G
Total length	1000 mm
Overall width	213 mm
Nominal width	150 mm
Slope 0,5 %	channel no. I - 10
Total height	215 - 265 mm
Weight w/o grating	55 - 62 kg

### Channels with cast iron edge.

Item no.	Channel type NW 150	Slope/ outlet	Total height	Item no.	Channel type NW 150	Slope/ outlet	Total height	Item no.	Channel type NW 150	Slope/ outlet	Total height
I2600	150/H=100	0 %	100 mm	I4608	150/2	0,5 %	225 mm	I4614	150/8	0,5 %	255 mm
I2601	151/H=100	0 % / DN150	100 mm	I4609	150/3	0,5 %	230 mm	I4615	150/9	0,5 %	260 mm
I4601	150/0	0 %	215 mm	I4610	150/4	0,5 %	235 mm	I4616	150/10	0,5 %	265 mm
I4602	150/5-0	0 %	240 mm	I4611	150/5	0,5 %	240 mm	I4604	151/0	0 % / DN150	215 mm
I4603	150/10-0	0 %	265 mm	I4612	150/6	0,5 %	245 mm	I4605	151/5-0	0 % / DN150	240 mm
I4607	150/1	0,5 %	220 mm	I4613	150/7	0,5 %	250 mm	I4606	151/10-0	0 % / DN150	265 mm

The drainage channel line with slope can be extended by using of channels without slope before or after the relevant slope channels.

### Gratings for all edge versions BGU-Z SV 150.

Item no.	Gratings	Material	Dimensions in mm	Loading class EN1433	Slot/mesh- width in mm	Weight/ unit	SV-system/ bolting	Inlet-section
22166	Mesh grating	Galvanized steel	1000/197/25	B 125 kN	MW 30/10	5,9 kg	SV + bolttable	1580 cm <sup>2</sup> /m
22167		Galvanized steel	500/197/25	B 125 kN	MW 30/10	3,1 kg	SV + bolttable	1580 cm <sup>2</sup> /m
22162		Galvanized steel	1000/197/25	C 250 kN	MW 30/10	7,9 kg	SV + bolttable	1460 cm <sup>2</sup> /m
22163		Galvanized steel	500/197/25	C 250 kN	MW 30/10	4,0 kg	SV + bolttable	1460 cm <sup>2</sup> /m
23260		Galvanized steel	1000/197/25	D 400 kN	MW 30/10	10,2 kg	SV + bolttable	1530 cm <sup>2</sup> /m
23261		Galvanized steel	500/197/25	D 400 kN	MW 30/10	5,3 kg	SV + bolttable	1530 cm <sup>2</sup> /m
22362	Mesh grating	Stainless steel V2A	1000/197/25	C 250 kN	MW 30/10	8,0 kg	SV + bolttable	1460 cm <sup>2</sup> /m
22363		Stainless steel V2A	500/197/25	C 250 kN	MW 30/10	4,2 kg	SV + bolttable	1460 cm <sup>2</sup> /m
22060	Ductile iron grating	Ductile iron	500/197/25	C 250 kN	SW 12/50	7,2 kg	SV + bolttable	670 cm <sup>2</sup> /m
22067		Ductile iron	500/197/25	C 250 kN	SW 18/170	5,5 kg	SV + bolttable	840 cm <sup>2</sup> /m
22066		Ductile iron	500/197/25	D 400 kN	SW 18/170	6,0 kg	SV + bolttable	840 cm <sup>2</sup> /m
22764	Ductile iron bar grating	Ductile iron	500/197/25	E 600 kN	MW 27/13	7,3 kg	SV	720 cm <sup>2</sup> /m
22765		Ductile iron	500/197/25	E 600 kN	MW 27/13	7,3 kg	bolttable	720 cm <sup>2</sup> /m



# BGU-Z Universal channels SV V

with galvanized-steel edge - nominal width 150

High-grade concrete channel with h-shaped edge made of galvanized-steel and a safety joint on the front end. An innovative SV-system for easy installation and additional lugs/pockets to protect against longitudinal movement of the grates are integrated. If necessary, the mesh gratings or cast iron gratings can be additionally bolted.

These units are also available as BGF-Z Shallow channels with a construction height of 100 mm.

## Application areas

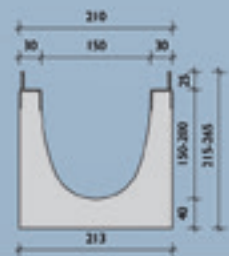
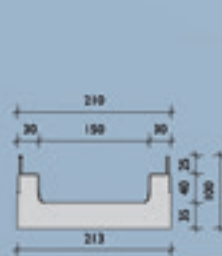
Ideally suited to house driveways, sports grounds, hotel facilities, car dealers, shopping centres, parks and similar areas.

System	BGU-Z SV V
Total length	1000 mm
Overall width	213 mm
Nominal width	150 mm
Slope 0,5 %	channel no. 1 - 10
Total height	215 - 265 mm
Weight w/o grating	54 - 61 kg



BGF-Z Shallow channel SV V  
without slope

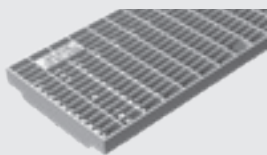
BGU-Z Universal channel SV V  
with or without slope



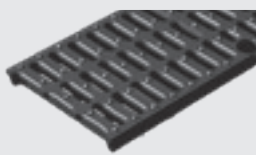
all dimensions in mm

## Channels with galvanized steel edge.

Item no.	Channel type NW 150	Slope/ outlet	Total height	Item no.	Channel type NW 150	Slope/ outlet	Total height	Item no.	Channel type NW 150	Slope/ outlet	Total height
I2670	150/H=100	0 %	100 mm	I4677	150/2	0,5 %	225 mm	I4683	150/8	0,5 %	255 mm
I2671	151/H=100	0 % / DN150	100 mm	I4678	150/3	0,5 %	230 mm	I4684	150/9	0,5 %	260 mm
I4670	150/0	0 %	215 mm	I4679	150/4	0,5 %	235 mm	I4685	150/10	0,5 %	265 mm
I4671	150/5-0	0 %	240 mm	I4680	150/5	0,5 %	240 mm	I4673	151/0	0 % / DN150	215 mm
I4672	150/10-0	0 %	265 mm	I4681	150/6	0,5 %	245 mm	I4674	151/5-0	0 % / DN150	240 mm
I4676	150/1	0,5 %	220 mm	I4682	150/7	0,5 %	250 mm	I4675	151/10-0	0 % / DN150	265 mm



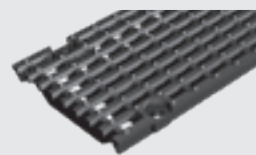
Mesh grating MW 30/10, Cl. B, C or D, galv. / Cl. C stainless-steel



Ductile iron grating SW 12/50, Cl. C, narrow slot width



Ductile iron grating SW 18/170, Cl. C or Cl. D



Ductile iron bar grating MW 27/13, Cl. E

Caution: impact-, braking- and torsional-forces must be considered separately. Heed installation instructions. Subject to technical modifications.



## BGU-Z Universal channels SV G

with cast iron edge - nominal width 200

High-grade concrete channel with L-shaped cast iron edge and a safety joint on the front end. An innovative SV-system for easy installation and additional lugs/pockets to protect against longitudinal movement of the grates are integrated. If necessary, the mesh gratings or cast iron gratings can be additionally bolted.

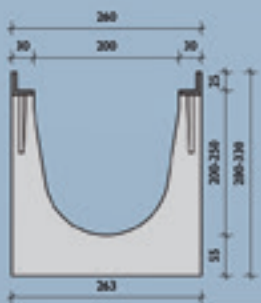
These units are also available as BGF-Z Shallow channels with a construction height of 100 mm.

### Application areas

Ideally suited to pedestrian areas, underground car parks, workshops, railway stations and similar areas.

BGF-Z Shallow channel SV G  
without slope

BGU-Z Universal channel SV G  
with or without slope



all dimensions in mm

System	BGU-Z SV G
Total length	1000 mm
Overall width	263 mm
Nominal width	200 mm
Slope 0,5 %	channel no. 1 - 10
Total height	280 - 330 mm
Weight w/o grating	84 - 92 kg

### Channels with cast iron edge.

Item no.	Channel type NW 200	Slope/ outlet	Total height	Item no.	Channel type NW 200	Slope/ outlet	Total height	Item no.	Channel type NW 200	Slope/ outlet	Total height
12700	200/H=100	0 %	100 mm	14707	200/2	0,5 %	290 mm	14713	200/8	0,5 %	320 mm
12701	201/H=100	0 % / DN200	100 mm	14708	200/3	0,5 %	295 mm	14714	200/9	0,5 %	325 mm
14700	200/0	0 %	280 mm	14709	200/4	0,5 %	300 mm	14715	200/10	0,5 %	330 mm
14701	200/5-0	0 %	305 mm	14710	200/5	0,5 %	305 mm	14703	201/0	0 % / DN200	280 mm
14702	200/10-0	0 %	330 mm	14711	200/6	0,5 %	310 mm	14704	201/5-0	0 % / DN200	305 mm
14706	200/1	0,5 %	285 mm	14712	200/7	0,5 %	315 mm	14705	201/10-0	0 % / DN200	330 mm

The drainage channel line with slope can be extended by using of channels without slope before or after the relevant slope channels.

### Gratings for all edge versions BGU-Z SV 200.

Item no.	Gratings	Material	Dimensions in mm	Loading class EN1433	Slot/mesh- width in mm	Weight/ unit	SV-system/ bolting	Inlet-section
22174	Mesh grating	Galvanized steel	1000/247/25	C 250 kN	MW 30/10	10,1 kg	SV + bolttable	1850 cm <sup>2</sup> /m
22175		Galvanized steel	500/247/25	C 250 kN	MW 30/10	5,1 kg	SV + bolttable	1850 cm <sup>2</sup> /m
23270		Galvanized steel	1000/247/25	D 400 kN	MW 30/10	16,0 kg	SV + bolttable	1940 cm <sup>2</sup> /m
23271		Galvanized steel	500/247/25	D 400 kN	MW 30/10	8,2 kg	SV + bolttable	1940 cm <sup>2</sup> /m
22372	Mesh grating	Stainless steel V2A	1000/247/25	C 250 kN	MW 30/10	10,0 kg	SV + bolttable	1850 cm <sup>2</sup> /m
22373		Stainless steel V2A	500/247/25	C 250 kN	MW 30/10	5,1 kg	SV + bolttable	1850 cm <sup>2</sup> /m
22079	Ductile iron grating	Ductile iron	500/247/25	D 400 kN	SW 18/220	8,2 kg	SV + bolttable	1075 cm <sup>2</sup> /m
22774	Ductile iron bar grating	Ductile iron	500/247/25	E 600 kN	MW 27/13	9,1 kg	SV	960 cm <sup>2</sup> /m
22775		Ductile iron	500/247/25	E 600 kN	MW 27/13	9,1 kg	bolttable	960 cm <sup>2</sup> /m

# BGU-Z Universal channels SV V

with galvanized-steel edge - nominal width 200

High-grade concrete channel with h-shaped edge made of galvanized-steel and a safety joint on the front end. An innovative SV-system for easy installation and additional lugs/pockets to protect against longitudinal movement of the grates are integrated. If necessary, the mesh gratings or cast iron gratings can be additionally bolted.

These units are also available as BGF-Z Shallow channels with a construction height of 100 mm.

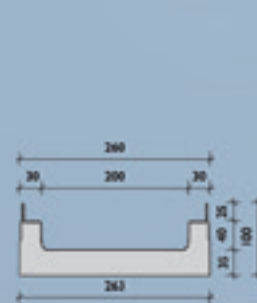
## Application areas

Ideally suited to house driveways, sports grounds, hotel facilities, car dealers, shopping centres, parks and similar areas.

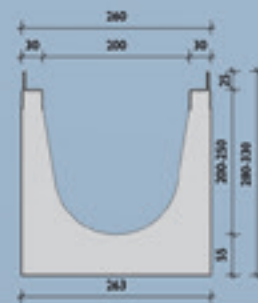
System	BGU-Z SV V
Total length	1000 mm
Overall width	263 mm
Nominal width	200 mm
Slope 0,5 %	channel no. 1 - 10
Total height	280 - 330 mm
Weight w/o grating	83 - 91 kg



BGF-Z Shallow channel SV V  
without slope



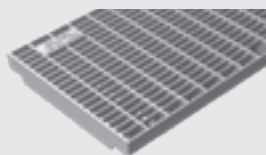
BGU-Z Universal channel SV V  
with or without slope



all dimensions in mm

## Channels with galvanized steel edge.

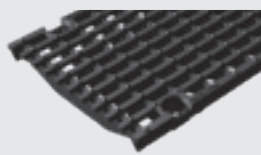
Item no.	Channel type NW 200	Slope/ outlet	Total height	Item no.	Channel type NW 200	Slope/ outlet	Total height	Item no.	Channel type NW 200	Slope/ outlet	Total height
12770	200/H=100	0 %	100 mm	14777	200/2	0,5 %	290 mm	14783	200/8	0,5 %	320 mm
12771	201/H=100	0 % / DN200	100 mm	14778	200/3	0,5 %	295 mm	14784	200/9	0,5 %	325 mm
14770	200/0	0 %	280 mm	14779	200/4	0,5 %	300 mm	14785	200/10	0,5 %	330 mm
14771	200/5-0	0 %	305 mm	14780	200/5	0,5 %	305 mm	14773	201/0	0 % / DN200	280 mm
14772	200/10-0	0 %	330 mm	14781	200/6	0,5 %	310 mm	14774	201/5-0	0 % / DN200	305 mm
14776	200/1	0,5 %	285 mm	14782	200/7	0,5 %	315 mm	14775	201/10-0	0 % / DN200	330 mm



Mesh grating MW 30/10,  
Cl. C or D, galv. /  
Cl. C stainless-steel



Ductile iron grating  
SW 18/220, Cl. D



Ductile iron bar grating  
MW 27/13, Cl. E

Caution: impact-, braking- and torsional-forces must be considered separately. Heed installation instructions. Subject to technical modifications.





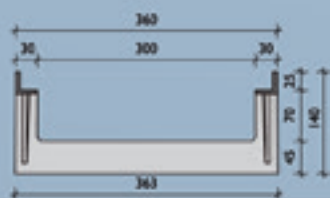
## BGU-Z Universal channels SV G

with cast iron edge - nominal width 300

High-grade concrete channel with L-shaped cast iron edge and a safety joint on the front end. An innovative SV-system for easy installation and additional lugs/pockets to protect against longitudinal movement of the grates are integrated. If necessary, the mesh gratings or cast iron gratings can be additionally bolted.

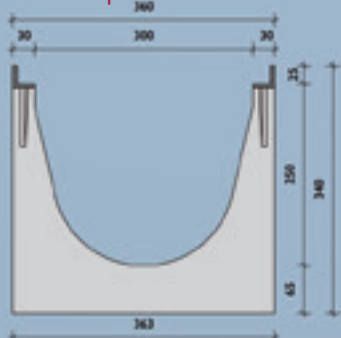
These units are also available as BGF-Z Shallow channels with a construction height of 140 mm.

BGF-Z Shallow channel SV G  
without slope



all dimensions in mm

BGU-Z Universal channel SV G  
without slope



### Application areas

Ideally suited to pedestrian areas, underground car parks, workshops, railway stations and similar areas.

System	BGU-Z SV G
Total length	1000 mm
Overall width	363 mm
Nominal width	300 mm
Slope 0,5 %	none
Total height	340 mm
Weight w/o grating	123 kg

### Channels with cast iron edge.

Item no.	Channel type NW 300	Slope/ outlet	Total height	Item no.	Channel type NW 300	Slope/ outlet	Total height
12800	300/H=140	0 %	140 mm	14800	300/0	0 %	340 mm
12801	301/H=140	0 % / DN200	140 mm	14803	301/0	0 % / DN200	340 mm

### Gratings for all edge versions BGU-Z SV 300.

Item no.	Gratings	Material	Dimensions in mm	Loading class EN1433	Slot/mesh- width in mm	Weight/ unit	SV-system/ bolting	Inlet-section
22182	Mesh grating	Galvanized steel	1000/347/25	C 250 kN	MW 30/30	23,3 kg	SV + boltable	2565 cm <sup>2</sup> /m
22183		Galvanized steel	500/347/25	C 250 kN	MW 30/30	11,7 kg	SV + boltable	2565 cm <sup>2</sup> /m
22382	Mesh grating	Stainless steel V2A	1000/347/25	C 250 kN	MW 30/10	24,1 kg	SV + boltable	1990 cm <sup>2</sup> /m
22383		Stainless steel V2A	500/347/25	C 250 kN	MW 30/10	12,1 kg	SV + boltable	1990 cm <sup>2</sup> /m
23180	Ductile iron grating	Ductile iron	500/347/25	D 400 kN	SW 18/150	15,2 kg	SV + boltable	1440 cm <sup>2</sup> /m
22784	Ductile iron bar grating	Ductile iron	500/347/25	E 600 kN	MW 25/14	15,5 kg	SV	1350 cm <sup>2</sup> /m
22785		Ductile iron	500/347/25	E 600 kN	MW 25/14	15,5 kg	boltable	1350 cm <sup>2</sup> /m

# BGU-Z Universal channels SV V

with galvanized-steel edge - nominal width 300

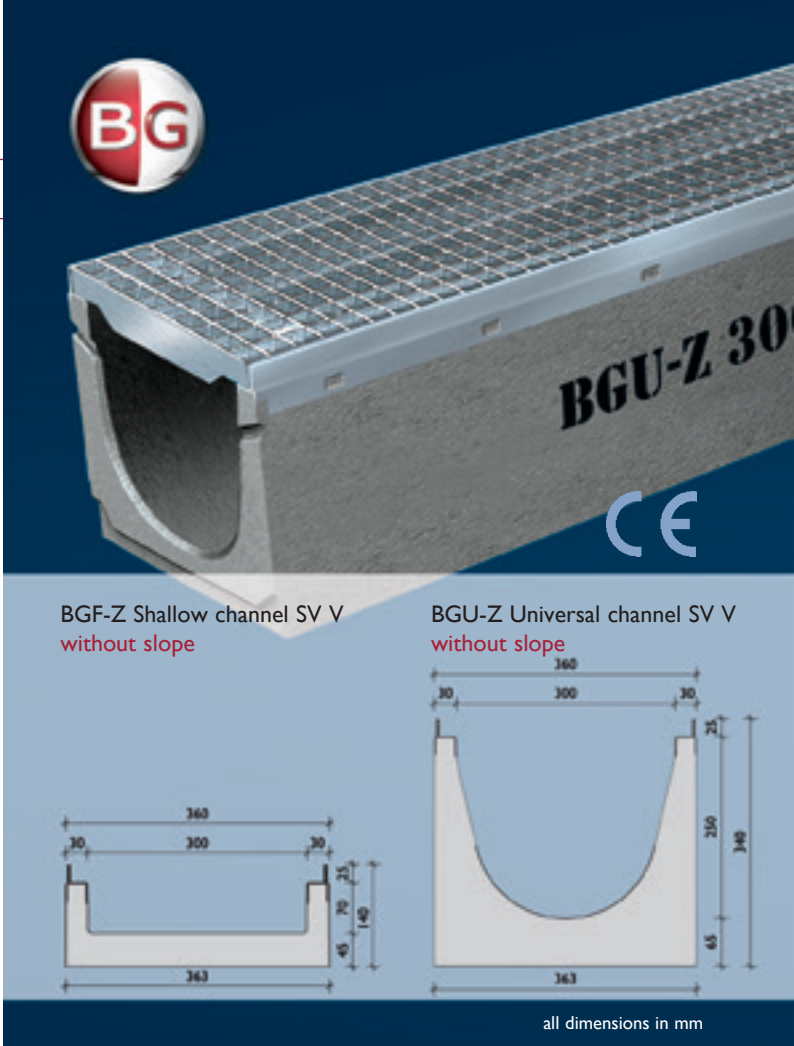
High-grade concrete channel with h-shaped edge made of galvanized-steel and a safety joint on the front end. An innovative SV-system for easy installation and additional lugs/pockets to protect against longitudinal movement of the grates are integrated. If necessary, the mesh gratings or cast iron gratings can be additionally bolted.

These units are also available as BGF-Z Shallow channels with a construction height of 140 mm.

## Application areas

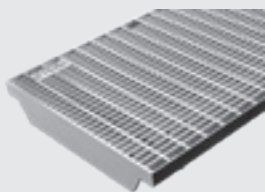
Ideally suited to house driveways, sports grounds, hotel facilities, car dealers, shopping centres, parks and similar areas.

System	BGU-Z SV V
Total length	1000 mm
Overall width	363 mm
Nominal width	300 mm
Slope 0,5 %	none
Total height	340 mm
Weight w/o grating	122 kg

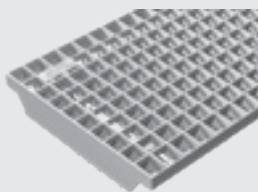


## Channels with galvanized steel edge.

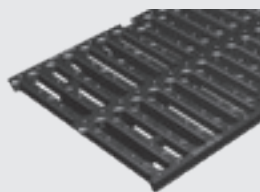
Item no.	Channel type NW 300	Slope/ outlet	Total height	Item no.	Channel type NW 300	Slope/ outlet	Total height
I2870	300/H=140	0 %	140 mm	I4870	300/0	0 %	340 mm
I2871	301/H=140	0 % / DN200	140 mm	I4873	301/0	0 % / DN200	340 mm



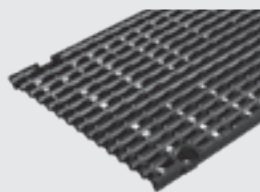
Mesh grating MW 30/10,  
Cl. C, stainless steel



Mesh grating MW 30/30,  
Cl. C, galvanized steel



Ductile iron grating  
SW 18/150, Cl. D



Ductile iron bar grating  
MW 25/14, Cl. E

Caution: impact-, braking- and torsional-forces must be considered separately. Heed installation instructions. Subject to technical modifications.



The following installation guidelines and examples are intended for standard applications. Loading class and the installation site according to EN 1433 must be adapted to local conditions by the planner. Consider the common known technical rules and guidelines which are accepted among experts.

## Installation guidelines and examples:

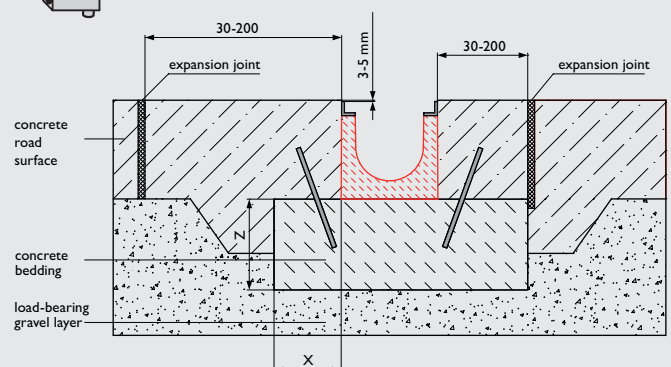
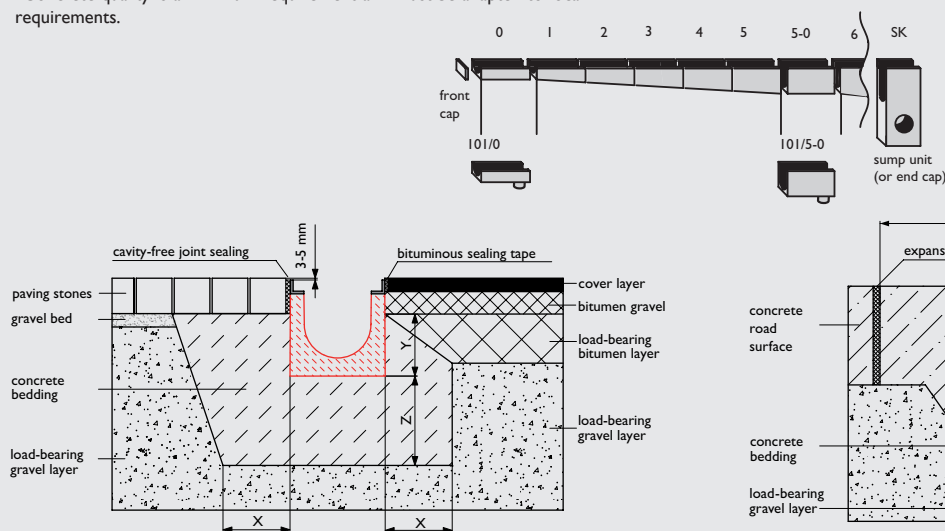
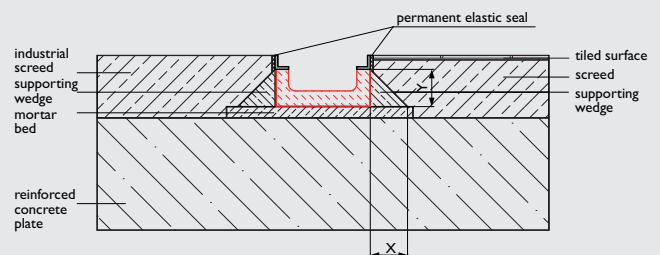
Installation guidelines BGU-Z Universal channels SV and  
BGF-Z Shallow channels SV:

1. BG concrete channels are bedded in concrete in accordance with Austrian Standard Ö-Norm B4710-I or in drainage concrete acc. to RVS 08.18.01. Mind the slope of the channel while excavating (only with BGU-Z). Depending on the static requirements, a lateral supporting wedge or a concrete casing might be necessary, even with reinforcement - for details, see table and sectional drawings. BG channels should generally be bedded with proper tools (e.g. BG lifting grab).
2. Take note of the different heights of channels with slopes (only with BGU-Z) and start bedding the drainage line from the discharge end. The direction of flow is marked with an arrow on each channel.
3. The rebated joints between the channel segments can be sealed with a suitable sealing compound - for description of material and quantity determination - see BG sealing system.
4. Before starting work on the adjoining surfaces, mount the grate and secure with bolts if necessary, or make sure that the channel walls cannot be pressed together. When compacting the superstructure and the covering layer (asphalt, paving stones, concrete, etc.), make sure that the channels are not damaged.

5. If horizontal forces are expected (e.g. with concrete surfaces, installation on slopes, etc.), a suitably dimensioned expansion joint must be provided at a distance of 30...200 cm from the channel. Expansion joints transverse to the drainage line that must be provided in the adjoining concrete surfaces, have to pass through a rebated joint of the channel line.
6. When installed in areas with frequent traffic, and depending on application area, traversing speed, and frequency, we recommend securing the grates with bolts (up to 8 bolts possible per channel). If securing bolts are used, it must be ensured that they provide a durable and tight connection.
7. All adjoining covering layers should be permanently 3...5 mm higher than the top of the channel in order to prevent mechanical damage (e.g. snow shovelling), and to ensure good water run-off.
8. In areas subjected to increased chemical attack (e.g. de-icing media, acids, lyes, etc.), we recommend using drainage channels with stainless steel side edges and grates.
9. These installation guidelines apply analogously to silt buckets (only with BGU-Z).

Load Class	A 15 kN	B 125 kN	C 250 kN	D 400 kN	E 600 kN
Concrete quality - base according to Ö-Norm B 4710-I *	C16/20	C20/25	C20/25	C25/30	C25/30
X	≥ 8 cm	≥ 10 cm	≥ 15 cm	≥ 15 cm	≥ 15 cm
Y	min. channel height -8 cm		min. channel height -5 cm		
Z	≥ 8 cm	≥ 10 cm	≥ 15 cm	≥ 20 cm	≥ 20 cm
Splice bar	unnecessary				Ø = 8 mm all 20 cm

\*Concrete quality is a minimum requirement and must be adapted to local requirements.





## Accessory BGU-Z / BGF-Z

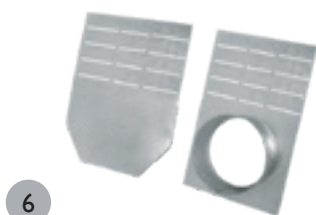
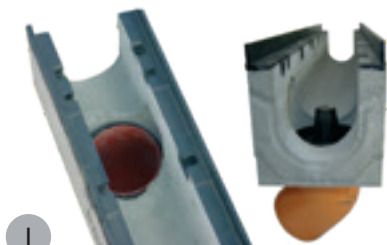
- 1 Channels with outlet **for BGU-Z, BGF-Z**  
DN same as nominal width - maximum of DN 200

### Location of outlet:

BGU-Z: Channel end to center of outlet = 250 mm

BGF-Z: Channel end to center of outlet = 175 mm

- 2 Drain trap for bottom outlet **for BGU-Z, BGF-Z**  
can be used for channels with outlet DN 100
- 3 Sump unit **for BGU-Z**  
with cast iron or galvanized-steel edge  
(L= 500 mm) - for all nominal widths
- 4 Drain trap made of PVC-sewer pipes **for BGU-Z**  
use for sump units with pipe connection DN 150/200
- 5 Silt bucket **for BGU-Z**  
suitable for sump unit - galvanized steel or plastic -  
serves as a dust trap
- 6 Front-/end cap or end cap with outlet **for BGU-Z**  
galvanized- or stainless steel - for all nominal widths
- 7 Front-/end cap **for BGF-Z**  
galvanized- or stainless steel - for all nominal widths
- 8 Sealing system **for BGU-Z, BGF-Z**  
to seal the rebated joints
- 9 Bolting material M10 **for BGU-Z, BGF-Z**  
for all mesh gratings or ductile iron gratings







## References.

BGF-Z Shallow channels SV



## References.

BGF-Z Shallow channels SV





## References.

BGU-Z Universal channels SV



## References.

BGU-Z Universal channels SV

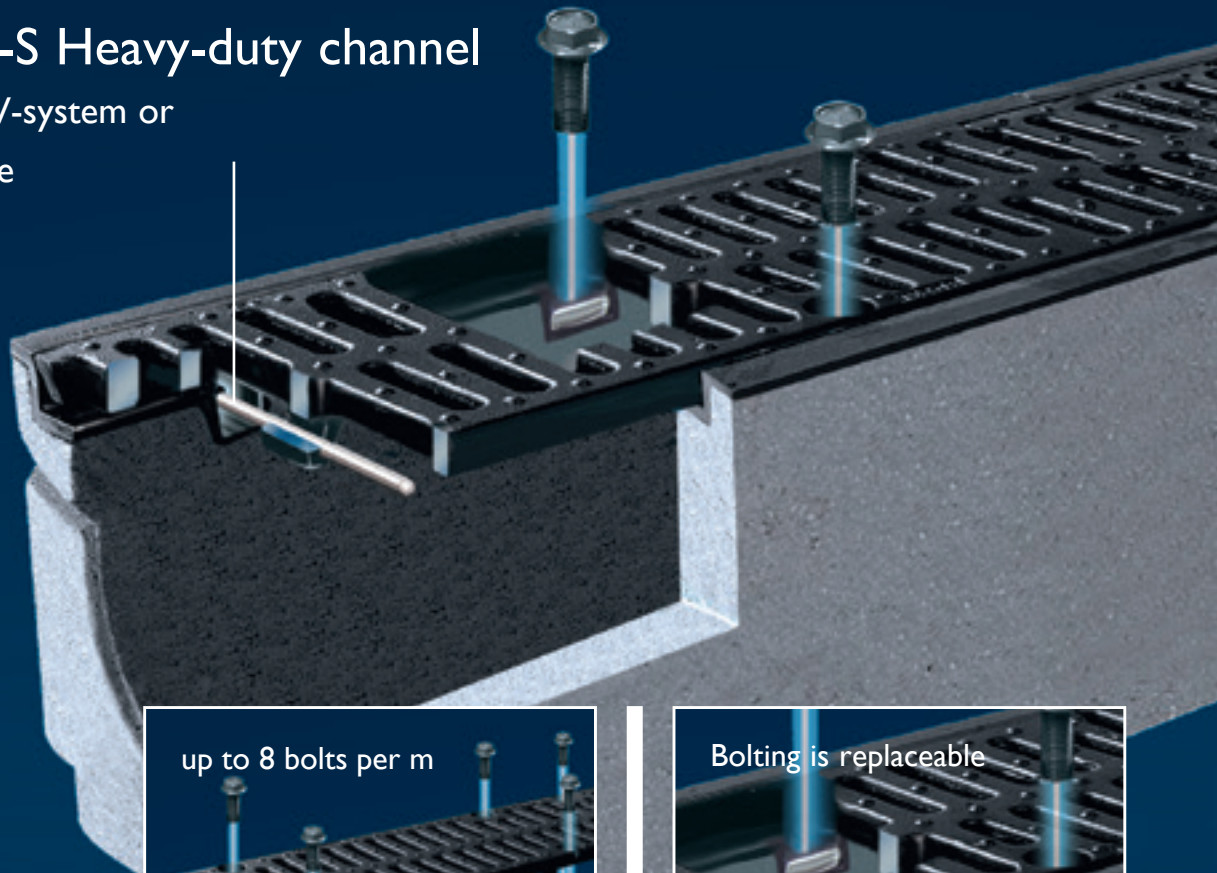




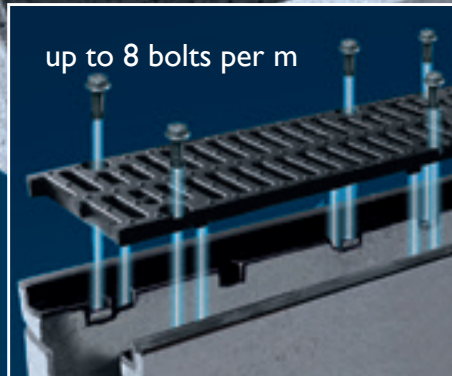


For highest requirements!

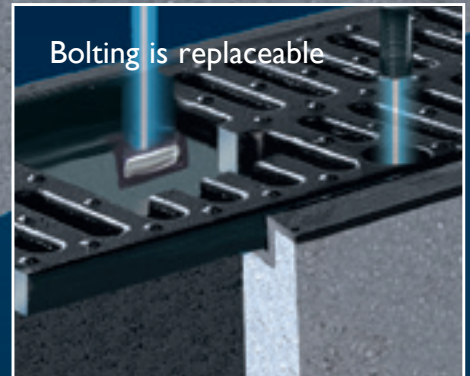
## BGZ-S Heavy-duty channel with SV-system or boltable



up to 8 bolts per m



Bolting is replaceable



Product range:



### ▣ Nominal widths: 100, 150, 200, 300, 400, 500 - with SV-system or bolted

Special feature of the BGZ-S Heavy-duty channels are the Z-shaped cast iron edges. This makes the channel specially stable at the grate bearing and edge-top.

Load class up to F 900 kN.

### SV-system

In areas with low traffic frequency, the BGZ-S Heavy-duty channel can also be fitted with the innovative SV-system. The grate is fixed with a single click, additional fixing is possible with replaceable boltings.

### Bolting

When installed in areas with heavy traffic, and depending on application area, traversing speed and frequency, we recommend securing the grates with bolts (up to 8 fixing bolts possible per meter). The bolting-material can be replaced at any time.

### Application areas

The concrete channels are suitable for use in storage yards, parking lots, freight yards, service stations, loading bays, etc. Similarly, they are recommended for heavily frequented motorways & highways - but only parallel to the roadway. Also in all areas where impact-, braking- and torsional-forces are expected.

# BGZ-S Heavy-duty channels SV G

with cast iron edge - nominal width 100

Massive, high-grade concrete channel with Z-shaped cast iron edge, a safety joint on the front end and an innovative SV-system. This product is suitable for all areas with high traffic frequency and heavy loads because of the multipoint bolting for the mesh gratings or cast iron gratings.

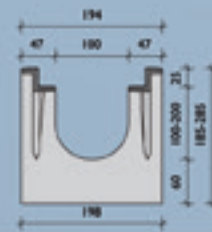
## Application areas

Storage-/parking area, freight yards, loading bays, service stations, motorways & highways, railway stations, etc.

System	BGZ-S SV G
Total length	1000 mm
Overall width	198 mm
Nominal width	100 mm
Slope 0,5 %	channel no. 1 - 20
Total height	185 - 285 mm
Weight w/o grating	63 - 83 kg



BGZ-S Heavy-duty channel SV G  
with or without slope



all dimensions in mm

## Channels with cast iron edge.

Item no.	Channel type NW 100	Slope/ outlet	Total height	Item no.	Channel type NW 100	Slope/ outlet	Total height
16500	100/0	0 %	185 mm	16520	100/11	0,5 %	240 mm
16501	100/5-0	0 %	210 mm	16521	100/12	0,5 %	245 mm
16502	100/10-0	0 %	235 mm	16522	100/13	0,5 %	250 mm
16503	100/15-0	0 %	260 mm	16523	100/14	0,5 %	255 mm
16504	100/20-0	0 %	285 mm	16524	100/15	0,5 %	260 mm
16510	100/1	0,5 %	190 mm	16525	100/16	0,5 %	265 mm
16511	100/2	0,5 %	195 mm	16526	100/17	0,5 %	270 mm
16512	100/3	0,5 %	200 mm	16527	100/18	0,5 %	275 mm
16513	100/4	0,5 %	205 mm	16528	100/19	0,5 %	280 mm
16514	100/5	0,5 %	210 mm	16529	100/20	0,5 %	285 mm
16515	100/6	0,5 %	215 mm	16505	101/0	0 % / DN100	185 mm
16516	100/7	0,5 %	220 mm	16506	101/5-0	0 % / DN100	210 mm
16517	100/8	0,5 %	225 mm	16507	101/10-0	0 % / DN100	235 mm
16518	100/9	0,5 %	230 mm	16508	101/15-0	0 % / DN100	260 mm
16519	100/10	0,5 %	235 mm	16509	101/20-0	0 % / DN100	285 mm

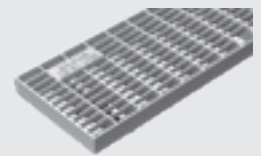
The drainage channel line with slope can be extended by using of channels without slope before or after the relevant slope channels.

## Gratings BGZ-S SV 100.

Item no.	Gratings with SV-System	Material	Dimensions in mm	Loading class EN1433	Slot/mesh- width in mm	Weight/ unit	Inlet-section
23250	Mesh grating	Galvanized steel	1000/147/25	D 400 kN	MW 30/10	6,4 kg	1190 cm <sup>2</sup> /m
23251		Galvanized steel	500/147/25	D 400 kN	MW 30/10	3,3 kg	1190 cm <sup>2</sup> /m
23102	Ductile iron grating	Ductile iron	500/147/25	D 400 kN	SW 18/120	4,0 kg	585 cm <sup>2</sup> /m
22754	Ductile iron mesh grating	Ductile iron	500/147/25	E 600 kN	MW 24/24	4,7 kg	725 cm <sup>2</sup> /m
22756	Ductile iron bar grating	Ductile iron	500/147/25	E 600 kN	MW 27/13	4,3 kg	520 cm <sup>2</sup> /m

Item no.	Gratings bolttable	Material	Dimensions in mm	Loading class EN1433	Slot/mesh- width in mm	Weight/ unit	Inlet-section
22755	Ductile iron mesh grating	Ductile iron	500/147/25	E 600 kN	MW 24/24	4,7 kg	725 cm <sup>2</sup> /m
22757	Ductile iron bar grating	Ductile iron	500/147/25	E 600 kN	MW 27/13	4,3 kg	520 cm <sup>2</sup> /m
22053	Ductile iron grating	Ductile iron	500/147/25	F 900 kN	SW 16/120	5,4 kg	517 cm <sup>2</sup> /m
22059		Ductile iron	500/147/25	F 900 kN	closed	7,7 kg	0 cm <sup>2</sup> /m

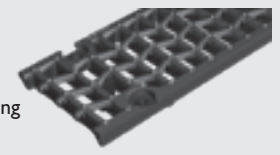
Mesh grating MW 30/10,  
Cl. D, galvanized steel



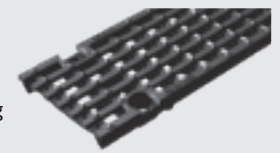
Ductile iron grating  
SW 18/120, Cl. D



Ductile iron mesh grating  
MW 24/24, Cl. E



Ductile iron bar grating  
MW 27/13, Cl. E



Ductile iron grating  
SW 16/120, Cl. F



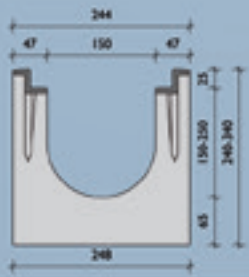
Ductile iron cover,  
Cl. F



Caution: impact-, braking- and torsional-forces must be considered separately. Heed installation instructions. Subject to technical modifications.



BGZ-S Heavy-duty channel SV G  
with or without slope



all dimensions in mm

## BGZ-S Heavy-duty channels SV G

with cast iron edge - nominal width 150

Massive, high-grade concrete channel with Z-shaped cast iron edge, a safety joint on the front end and an innovative SV-system. This product is suitable for all areas with high traffic frequency and heavy loads because of the multipoint bolting for the mesh gratings or cast iron gratings.

### Application areas

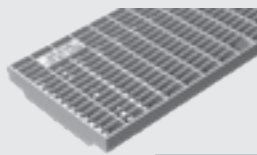
Storage-/parking area, freight yards, loading bays, service stations, motorways & highways, railway stations, etc.

#### System

#### BGZ-S SV G

Total length	1000 mm
Overall width	248 mm
Nominal width	150 mm
Slope 0,5 %	channel no. 1 - 20
Total height	240 - 340 mm
Weight w/o grating	86 - 105 kg

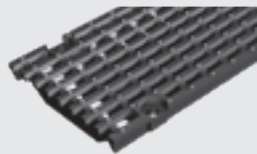
### Channels with cast iron edge.



Mesh grating MW 30/10,  
Cl. D, galvanized steel



Ductile iron grating  
SW 18/170, Cl. D



Ductile iron bar grating  
MW 27/13, Cl. E



Ductile iron grating  
SW 15/75, Cl. F

Item no.	Channel type NW 150	Slope/ outlet	Total height	Item no.	Channel type NW 150	Slope/ outlet	Total height
I6600	150/0	0 %	240 mm	I6620	150/11	0,5 %	295 mm
I6601	150/5-0	0 %	265 mm	I6621	150/12	0,5 %	300 mm
I6602	150/10-0	0 %	290 mm	I6622	150/13	0,5 %	305 mm
I6603	150/15-0	0 %	315 mm	I6623	150/14	0,5 %	310 mm
I6604	150/20-0	0 %	340 mm	I6624	150/15	0,5 %	315 mm
I6610	150/1	0,5 %	245 mm	I6625	150/16	0,5 %	320 mm
I6611	150/2	0,5 %	250 mm	I6626	150/17	0,5 %	325 mm
I6612	150/3	0,5 %	255 mm	I6627	150/18	0,5 %	330 mm
I6613	150/4	0,5 %	260 mm	I6628	150/19	0,5 %	335 mm
I6614	150/5	0,5 %	265 mm	I6629	150/20	0,5 %	340 mm
I6615	150/6	0,5 %	270 mm	I6605	151/0	0 % / DN150	240 mm
I6616	150/7	0,5 %	275 mm	I6606	151/5-0	0 % / DN150	265 mm
I6617	150/8	0,5 %	280 mm	I6607	151/10-0	0 % / DN150	290 mm
I6618	150/9	0,5 %	285 mm	I6608	151/15-0	0 % / DN150	315 mm
I6619	150/10	0,5 %	290 mm	I6609	151/20-0	0 % / DN150	340 mm

The drainage channel line with slope can be extended by using of channels without slope before or after the relevant slope channels.

### Gratings BGZ-S SV 150.

Item no.	Gratings with SV-System	Material	Dimensions in mm	Loading class EN1433	Slot/mesh- width in mm	Weight/ unit	Inlet-section
23260	Mesh grating	Galvanized steel	1000/197/25	D 400 kN	MW 30/10	10,2 kg	1530 cm <sup>2</sup> /m
23261		Galvanized steel	500/197/25	D 400 kN	MW 30/10	5,3 kg	1530 cm <sup>2</sup> /m
22066	Ductile iron grating	Ductile iron	500/197/25	D 400 kN	SW 18/170	6,0 kg	840 cm <sup>2</sup> /m
22764	Ductile iron bar grating	Ductile iron	500/197/25	E 600 kN	MW 27/13	7,3 kg	720 cm <sup>2</sup> /m

Item no.	Gratings bolttable	Material	Dimensions in mm	Loading class EN1433	Slot/mesh- width in mm	Weight/ unit	Inlet-section
22765	Ductile iron bar grating	Ductile iron	500/197/25	E 600 kN	MW 27/13	7,3 kg	720 cm <sup>2</sup> /m
22063	Ductile iron grating	Ductile iron	500/197/25	F 900 kN	SW 15/75	11,4 kg	704 cm <sup>2</sup> /m

Caution: impact-, braking- and torsional-forces must be considered separately. Heed installation instructions. Subject to technical modifications.



# BGZ-S Heavy-duty channels SV G

with cast iron edge - nominal width 200

Massive, high-grade concrete channel with Z-shaped cast iron edge, a safety joint on the front end and an innovative SV-system. This product is suitable for all areas with high traffic frequency and heavy loads because of the multipoint bolting for the mesh gratings or cast iron gratings.

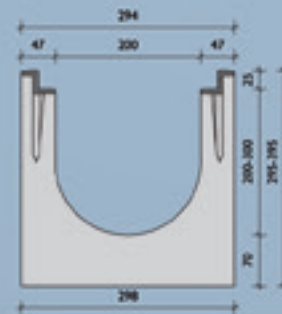
## Application areas

Storage-/parking area, freight yards, loading bays, service stations, motorways & highways, railway stations, etc.

System	BGZ-S SV G
Total length	1000 mm
Overall width	298 mm
Nominal width	200 mm
Slope 0,5 %	channel no. 1 - 20
Total height	295 - 395 mm
Weight w/o grating	114 - 134 kg



BGZ-S Heavy-duty channel SV G  
with or without slope



all dimensions in mm

## Channels with cast iron edge.

Item no.	Channel type NW 200	Slope/ outlet	Total height	Item no.	Channel type NW 200	Slope/ outlet	Total height
16700	200/0	0 %	295 mm	16730	200/11	0,5 %	350 mm
16701	200/5-0	0 %	320 mm	16731	200/12	0,5 %	355 mm
16702	200/10-0	0 %	345 mm	16732	200/13	0,5 %	360 mm
16726	200/15-0	0 %	370 mm	16733	200/14	0,5 %	365 mm
16727	200/20-0	0 %	395 mm	16734	200/15	0,5 %	370 mm
16706	200/1	0,5 %	300 mm	16735	200/16	0,5 %	375 mm
16707	200/2	0,5 %	305 mm	16736	200/17	0,5 %	380 mm
16708	200/3	0,5 %	310 mm	16737	200/18	0,5 %	385 mm
16709	200/4	0,5 %	315 mm	16738	200/19	0,5 %	390 mm
16710	200/5	0,5 %	320 mm	16739	200/20	0,5 %	395 mm
16711	200/6	0,5 %	325 mm	16703	201/0	0 % / DN200	295 mm
16712	200/7	0,5 %	330 mm	16704	201/5-0	0 % / DN200	320 mm
16713	200/8	0,5 %	335 mm	16705	201/10-0	0 % / DN200	345 mm
16714	200/9	0,5 %	340 mm	16728	201/15-0	0 % / DN200	370 mm
16715	200/10	0,5 %	345 mm	16729	201/20-0	0 % / DN200	395 mm

The drainage channel line with slope can be extended by using of channels without slope before or after the relevant slope channels.

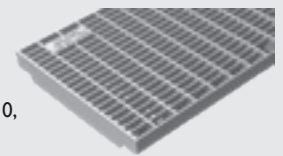
## Gratings BGZ-S SV 200.

Item no.	Gratings with SV-System	Material	Dimensions in mm	Loading class EN1433	Slot/mesh- width in mm	Weight/ unit	Inlet-section
23270	Mesh grating	Galvanized steel	1000/247/25	D 400 kN	MW 30/10	16,0 kg	1940 cm <sup>2</sup> /m
23271		Galvanized steel	500/247/25	D 400 kN	MW 30/10	8,2 kg	1940 cm <sup>2</sup> /m
22079	Ductile iron grating	Ductile iron	500/247/25	D 400 kN	SW 18/220	8,2 kg	1075 cm <sup>2</sup> /m
22774	Ductile iron bar grating	Ductile iron	500/247/25	E 600 kN	MW 27/13	9,1 kg	960 cm <sup>2</sup> /m

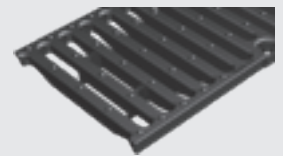
Item no.	Gratings boltable	Material	Dimensions in mm	Loading class EN1433	Slot/mesh- width in mm	Weight/ unit	Inlet-section
22775	Ductile iron bar grating	Ductile iron	500/247/25	E 600 kN	MW 27/13	9,1 kg	960 cm <sup>2</sup> /m
22073	Ductile iron grating	Ductile iron	500/247/25	F 900 kN	SW 16/220	11,1 kg	1045 cm <sup>2</sup> /m
22078		Ductile iron	500/247/25	F 900 kN	closed	16,8 kg	0 cm <sup>2</sup> /m

Caution: impact-, braking- and torsional-forces must be considered separately. Heed installation instructions. Subject to technical modifications.

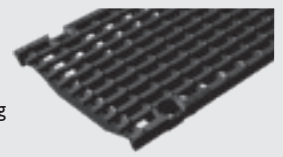
Mesh grating MW 30/10,  
Cl. D, galvanized steel



Ductile iron grating  
SW 18/220, Cl. D



Ductile iron bar grating  
MW 27/13, Cl. E



Ductile iron grating  
SW 16/220, Cl. F

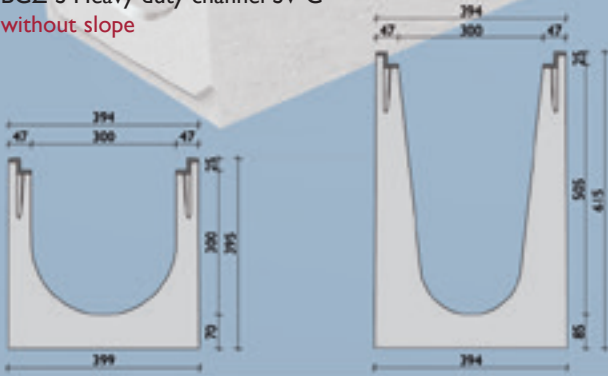


Ductile iron cover,  
Cl. F





BGZ-S Heavy-duty channel SV G  
without slope



all dimensions in mm

## BGZ-S Heavy-duty channels SV G

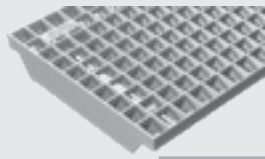
with cast iron edge - nominal width 300

Massive, high-grade concrete channel with Z-shaped cast iron edge, a safety joint on the front end and an innovative SV-system. This product is suitable for all areas with high traffic frequency and heavy loads because of the multipoint bolting for the mesh gratings or cast iron gratings.

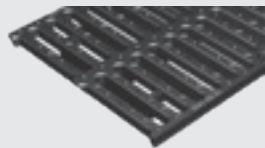
### Application areas

Storage-/parking area, freight yards, loading bays, service stations, motorways & highways, railway stations, etc.

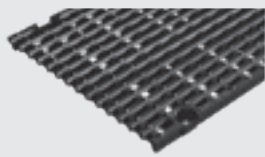
System	BGZ-S SV G	BGZ-S SV G / H=615
Total length	1000 mm	1000 / 2500 mm
Overall width	399 mm	394 mm
Nominal width	300 mm	300 mm
Slope 0,5 %	none	none
Total height	395 mm	615 mm
Weight w/o grating	169 kg	256 / 640 kg



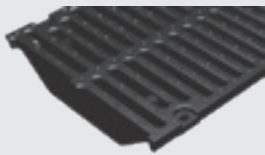
Mesh grating MW 30/30,  
Cl. C, galvanized steel



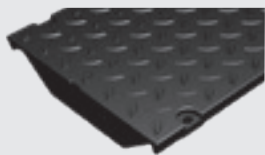
Ductile iron grating  
SW 18/150 Cl. D



Ductile iron bar grating  
MW 25/14, Cl. E



Ductile iron grating  
SW 16/148, Cl. F



Ductile iron cover,  
Cl. F

### Channels with cast iron edge.

Item no.	Channel type NW 300	Total length	Slope/outlet	Total height	Item no.	Channel type NW 300	Total length	Slope/outlet	Total height
16800	300/0	L=1000	0 %	395 mm	16830	300/H=615	L=2500	0 %	615 mm
16801	301/0	L=1000	0 %	395 mm	16831	300/H=615	L=1000	0 %	615 mm
					16832	301/H=615	L=1000	0 % / DN200	615 mm

### Gratings BGZ-S SV 300.

Item no.	Gratings with SV-System	Material	Dimensions in mm	Loading class EN1433	Slot/mesh-width in mm	Weight/unit	Inlet-section
22182	Mesh grating	Galvanized steel	1000/347/25	C 250 kN	MW 30/30	23,3 kg	2565 cm <sup>2</sup> /m
22183		Galvanized steel	500/347/25	C 250 kN	MW 30/30	11,7 kg	2565 cm <sup>2</sup> /m
23180	Ductile iron grating	Ductile iron	500/347/25	D 400 kN	SW 18/150	15,2 kg	1440 cm <sup>2</sup> /m
22784	Ductile iron bar grating	Ductile iron	500/347/25	E 600 kN	MW 25/14	15,7 kg	1350 cm <sup>2</sup> /m

Item no.	Gratings boltable	Material	Dimensions in mm	Loading class EN1433	Slot/mesh-width in mm	Weight/unit	Inlet-section
22785	Ductile iron bar grating	Ductile iron	500/347/25	E 600 kN	MW 25/14	15,7 kg	1350 cm <sup>2</sup> /m
22083	Ductile iron grating	Ductile iron	500/347/25	F 900 kN	SW 16/148	30,9 kg	1400 cm <sup>2</sup> /m
22080		Ductile iron	500/347/25	F 900 kN	closed	35,4 kg	0 cm <sup>2</sup> /m

Caution: impact-, braking- and torsional-forces must be considered separately. Heed installation instructions. Subject to technical modifications.

# BGZ-S Heavy-duty channels G

with cast iron edge - nominal width 400

Massive, high-grade concrete channel with Z-shaped cast iron edge and a safety joint on the front end. This product is suitable for all areas with high traffic frequency and heavy loads because of the multipoint bolting for the mesh gratings or cast iron gratings.

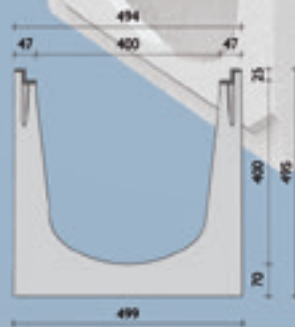
## Application areas

Storage-/parking area, freight yards, loading bays, petrol stations, motorways & highways, railway stations, etc.

System	BGZ-S G
Total length	1000 mm
Overall width	499 mm
Nominal width	400 mm
Slope 0,5 %	none
Total height	495 mm
Weight w/o grating	225 kg



BGZ-S Heavy-duty channel G  
without slope

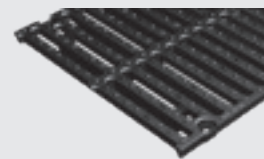


all dimensions in mm

## Channels with cast iron edge.

Item no.	Channel type NW 400	Total length	Slope/ outlet	Total height	Item no.	Channel type NW 400	Total length	Slope/ outlet	Total height
16850	400/0	L=1000	0 %	495 mm	16851	401/0	L=1000	0 % / DN200	495 mm

Ductile iron grating  
SW 18/200, Cl. D

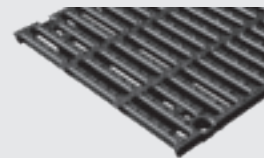


## Gratings BGZ-S 400.

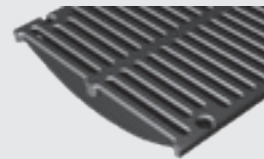
Item no.	Gratings bolttable	Material	Dimensions in mm	Loading class EN1433	Slot/mesh- width in mm	Weight/ unit	Inlet-section
22088	Ductile iron grating	Ductile iron	500/447/25	D 400 kN	SW 18/200	20,5 kg	1780 cm <sup>2</sup> /m
22086		Ductile iron	500/447/25	E 600 kN	SW 15/125	35,5 kg	1780 cm <sup>2</sup> /m
22087		Ductile iron	500/447/25	F 900 kN	SW 15/125	40,6 kg	1780 cm <sup>2</sup> /m

Caution: impact-, braking- and torsional-forces must be considered separately. Heed installation instructions. Subject to technical modifications.

Ductile iron grating  
SW 15/125, Cl. E



Ductile iron grating  
SW 15/125, Cl. F







## BGZ-S Heavy-duty channels G / V

with galv. steel or cast iron edge - nominal width 500

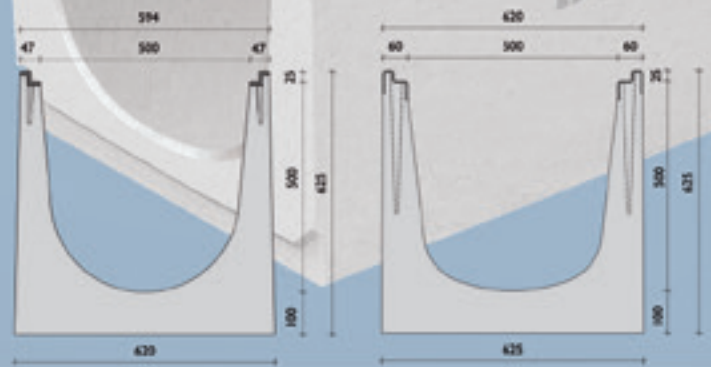
Massive, high-grade concrete channel with Z-shaped cast iron edge or a galvanized steel edge and a safety joint on the front end. This product is suitable for all areas with high traffic frequency and heavy loads because of the multipoint bolting for the mesh gratings or cast iron gratings.

### Application areas

Storage-/parking area, freight yards, loading bays, petrol stations, motorways & highways, railway stations, etc.

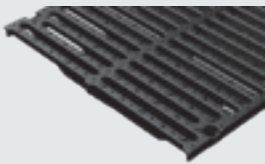
BGZ-S Heavy-duty channel G

BGZ-S Heavy-duty channel V

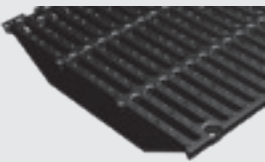


all dimensions in mm

System	BGZ-S G	BGZ-S V
Total length	1000 / 2000 mm	1000 / 2500 mm
Overall width	620 mm	625 mm
Nominal width	500 mm	500 mm
Slope 0,5 %	none	none
Total height	625 mm	625 mm
Weight w/o grating	360 / 720 kg	380 / 950 kg



Ductile iron grating  
SW 15/248, Cl. D



Ductile iron grating  
SW 15/164, Cl. E

#### Bolt sizes:

- for cast iron edge: M10
- for galvanized steel edge: M12

### Channels with cast iron edge. Channels with galv. steel edge.

Item no. cast iron edge	Channel type NW 500	Total length	Slope/ outlet	Total height	Item no. galv. steel edge	Channel type NW 500	Total length	Slope/ outlet	Total height
16900	500/0	L=2000	0 %	625 mm	16950	500/0	L=2500	0 %	625 mm
16901	500/0	L=1000	0 %	625 mm	16951	500/0	L=1000	0 %	625 mm
16902	501/0	L=1000	0 % / DN200	625 mm	16955	501/0	L=2500	0 % / DN200	625 mm
					16956	501/0	L=1000	0 % / DN200	625 mm

### Gratings BGZ-S 500.

Item no.	Gratings boltable	Material	Dimensions in mm	Loading class EN1433	Slot/mesh- width in mm	Weight/ unit	Inlet-section
22094	Ductile iron grating	Ductile iron	500/547/25	D 400 kN	SW 15/248	30,2 kg	2590 cm <sup>2</sup> /m
22091	cast iron edge	Ductile iron	500/547/25	E 600 kN	SW 15/164	31,0 kg	2350 cm <sup>2</sup> /m
22095	Ductile iron grating	Ductile iron	500/547/25	D 400 kN	SW 15/248	30,2 kg	2590 cm <sup>2</sup> /m
22093	galv. steel edge	Ductile iron	500/547/25	E 600 kN	SW 15/164	31,0 kg	2350 cm <sup>2</sup> /m

Caution: impact-, braking- and torsional-forces must be considered separately. Heed installation instructions. Subject to technical modifications.

## References.

BGZ-S Heavy-duty channels SV



## References.

BGZ-S Heavy-duty channels SV







The following installation guidelines and examples are intended for standard applications. Loading class and the installation site according to EN 1433 must be adapted to local conditions by the planner. Consider the common known technical rules and guidelines which are accepted among experts.

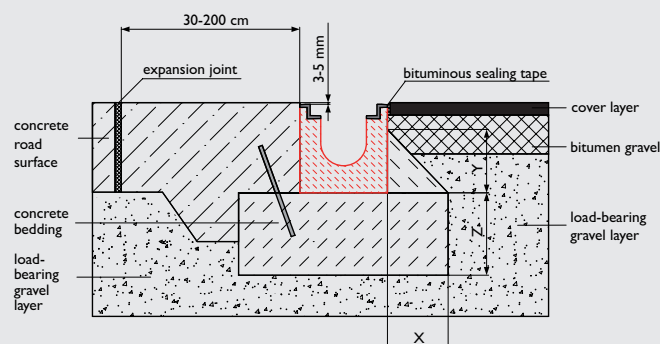
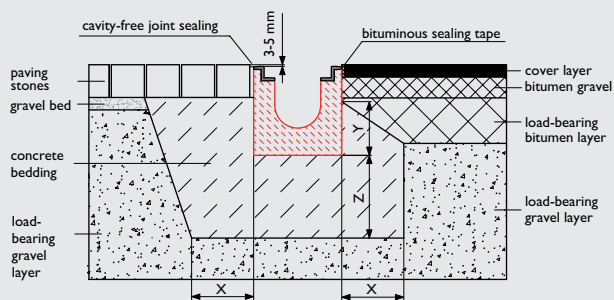
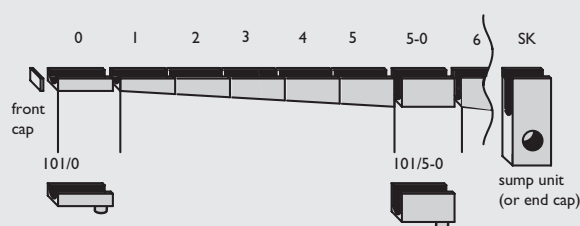
## Installation guidelines and examples:

Installation guidelines BGZ-S Heavy-duty channels:

1. BG concrete channels are bedded in concrete in accordance with Austrian Standard Ö-Norm B4710-I or in drainage concrete acc. to RVS 08.18.01. Mind the slope of the channel while excavating. Depending on the static requirements, a lateral supporting wedge or a concrete casing might be necessary, even with reinforcement - for details, see table and sectional drawings. BG channels should generally be bedded with proper tools (e.g. BG lifting grab).
2. Take note of the different heights of channels with slopes and start bedding the drainage line from the discharge end. The direction of flow is marked with an arrow on each channel.
3. The rebated joints between the channel segments can be sealed with a suitable sealing compound - for description of material and quantity determination - see BG sealing system.
4. Before starting work on the adjoining surfaces, mount the grate and secure with bolts if necessary, or make sure that the channel walls cannot be pressed together. When compacting the superstructure and the covering layer (asphalt, paving stones, concrete, etc.), make sure that the channels are not damaged.
5. If horizontal forces are expected (e.g. with concrete surfaces, installation on slopes, etc.), a suitably dimensioned expansion joint must be provided at a distance of 30...200 cm from the channel. Expansion joints transverse to the drainage line that must be provided in the adjoining concrete surfaces, have to pass through a rebated joint of the channel line.
6. When installed in areas with frequent traffic, and depending on application area, traversing speed, and frequency, we recommend securing the grates with bolts (up to 8 bolts possible). If securing bolts are used, it must be ensured that they provide a durable and tight connection.
7. All adjoining covering layers should be permanently 3...5 mm higher than the top of the channel in order to prevent mechanical damage (e.g. snow shovelling), and to ensure good water run-off.
8. These installation guidelines apply analogously to silt buckets.

Load Class	A 15 kN	B 125 kN	C 250 kN	D 400 kN	E 600 kN	F 900 kN
Concrete quality - base according to Ö-Norm B 4710-I *	C16/20	C20/25	C20/25	C25/30	C25/30	C25/30
X	≥ 8 cm	≥ 10 cm	≥ 15 cm	≥ 15 cm	≥ 15 cm	≥ 20 cm
Y	min. channel height -8 cm		min. channel height -5 cm		channel height	
Z	≥ 8 cm	≥ 10 cm	≥ 15 cm	≥ 20 cm	≥ 20 cm	≥ 25 cm
Splice bar	unnecessary					Ø = 8 mm all 20 cm

\*Concrete quality is a minimum requirement and must be adapted to local requirements.





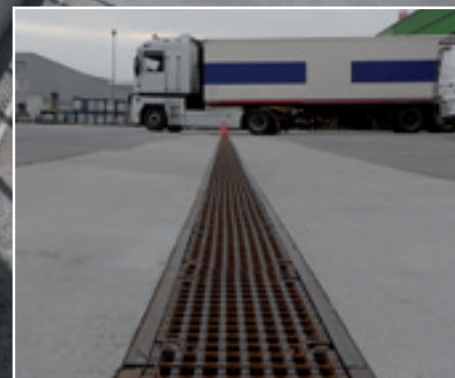
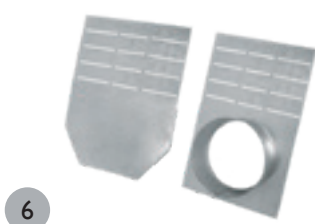
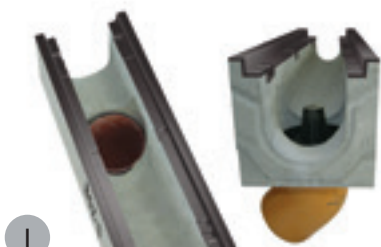
## Accessory BGZ-S

- 1 Channels with outlet  
DN same as nominal width - maximum of DN 200

### Location of outlet:

BGZ-S: Channel end to center of outlet = 250 mm

- 2 Drain trap for bottom outlet -  
can be used for channels with outlet DN 100
- 3 Sump unit with cast iron edge (L= 500 mm) -  
for nominal widths 100 - 400
- 4 Drain trap made of PVC-sewer pipes -  
use for sump units with pipe connection DN 150/200
- 5 Silt bucket - suitable for sump unit -  
galvanized steel or plastic - serves as a dust trap
- 6 Front-/end cap or end cap with outlet -  
galvanized- or stainless steel - for all nominal widths
- 7 Bolting material M10 -  
for all mesh gratings or ductile iron gratings  
at NW 500 with galvanized steel edge: M12
- 8 Sealing system to seal the rebated joints
- 9 Forsheda-sealing - DN 100/150/200  
is installed on-site into the outlet from below



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