

FASERFIX® SUPER KS FASERFIX® SUPER

THE COMPLETE DRAINAGE SYSTEM - EXTREMELY ROBUST.
FOR EXPOSURE TO HEAVY GOODS VEHICLES IN PUBLIC AREAS AND INDUSTRY.



AT A GLANCE

- ✓ Highest bending tensile strength
- ✓ Patented SIDE-LOCK boltless locking system
- ✓ Available with built-in fall
- ✓ With safety joint for easy sealing



FASERFIX® SUPER KS

FASERFIX® SUPER

THE COMPLETE DRAINAGE SYSTEM - EXTREMELY ROBUST.
FOR EXPOSURE TO HEAVY ROAD TRAFFIC IN PUBLIC AREAS AND INDUSTRY.

REQUIREMENT

Surface water in all kinds of areas must be allowed to drain away quickly and reliably. This requires drainage channels that will permanently withstand the loads applied from the expected traffic conditions. In particular this applies to zones exposed to heavy traffic in public and industrial areas. In addition to their technical function, drainage channels are expected to contribute visually to the attractiveness of surfaces with their form, colour and the material of the gratings. Some special applications also call for flexible channel systems - the products must be capable of being adapted to all drainage tasks.



SOLUTION

FASERFIX SUPER channels offer solutions for any type of application in heavy duty traffic areas. They are manufactured from fibre-reinforced concrete which, compared to normal concrete, has greater strength and reduced thickness of the side walls. In addition, they feature a higher bending tensile strength. No supporting backing of the channel body is required during installation. There are no restricting cross ridges in the base of the channel. The top edges and bearing surfaces for the gratings consist of corrosion-proof angle housings in galvanised steel or stainless steel which are firmly tied to the channel body through ties that reach down to the base of the channel. FASERFIX SUPER are resistant to frost and salt. The lower parts of the channels feature safety joints that can be sealed during installation against liquids, using elastic injection sealers such as the MASTERFLEX 700 FR gun grade polysulphide sealing compound. The channels can be supplied with or without in-built fall. Finally, numerous gratings for different load classes are available in the materials ductile iron, galvanised steel or stainless steel. With the SIDE-LOCK boltless locking system the gratings are safely fixed to the channels. The classification and testing meets the requirements of DIN EN 1433. Upon request we are happy to supply copies of the test certificates issued by the official material testing station at the University of Karlsruhe. FASERFIX SUPER channels are CE-marked.

APPLICATION AREAS

Traffic areas for industry and commerce, trade, trade fairs/exhibitions, railway stations, airports, ports, container handling stations, sewage works, power stations,

building yards, barracks, roads/motorways, petrol stations and service areas, parking lots, traffic-calmed zones, play streets, urban squares etc.



Potsdam, Germany



Airport Brussels, Belgium



Petrol stations all over the world



Main station Berlin, Germany

FASERFIX® SUPER KS FASERFIX® SUPER

TAILOR-MADE SOLUTIONS.

EXAMPLES OF TAILOR-MADE SOLUTIONS FOR INDIVIDUAL CUSTOMER REQUIREMENTS.

In each project the conditions to be handled by a drainage system are different. Therefore systems have to be flexible enough to allow standard products from serial production to be complemented by special items. To achieve that, HAURATON will study the individual requirements of each project and work together with the architects at an early stage. The company has a specialised team dealing exclusively with non-standard solutions - from the outline design stage right through to timely delivery and support during installation. In this way a suitable solution will be found for all applications. HAURATON channels are very flexible and can be adapted individually. Some special formats include cutting to required length, mitred cuts, holes and openings or incorporating connection pipes.

WÖRTH, DaimlerChrysler

On a site of about 550,000 square metres very close to the factory in Wörth, DaimlerChrysler is in the process of constructing the so-called EVZ - a development and test centre with test runs for putting heavy goods vehicles (HGV) through their paces. There are various stretches of track, one of them an automated bad surface track (ASW), on which prototypes and serial models are put through tough long-distance tests, with some of the vehicles being controlled via remote control.

For building projects of such dimensions the FASERFIX SUPER drainage system is the ideal solution. Standard production parts are complemented with customised channels that have been designed at the factory and are easy to install by the contractors following the installation instructions that are also supplied. Numerous mitred cuts, non-standard lengths and connection holes make up the complex drainage network that follows the routing of the test tracks.

Design of the ASW: Tilke - Engineers and Architects, Aachen/Olpe

Contractor: ASW Consortium, including the companies Strabag, Züblin, Grötz and Reif



The scheme comprises the following HAURATON channels:
2.500 m FASERFIX SUPER KS 100
850 m FASERFIX SUPER 150
200 m FASERFIX TRAFFIC SUPERBLOC 200

MANNHEIM, SHUNTING YARD

For safety reasons, overhead power lines at railway stations have to be earthed. For the shunting yard at Mannheim, HAURATON has developed a system together with Deutsche Bahn which combines drainage channels with an earth conductor. The solution provides one earthing cube per linear metre of channel which has been incorporated into the channel body underneath the angle housing. These are connected to earthing cables of 1 cm thickness. The function of the SIDE-LOCK boltless locking system remains fully intact.



WAGHÄUSEL, SITEC

The Sitec company is part of the glass industry. Its products are manufactured on highly technical machines and in extreme temperatures. A channel system has been developed for the company's factory floors that combines the routing of service pipes for the machines with a reliable drainage system. At the outline design stage, the project team at HAURATON developed a complex system comprising FASERFIX SUPER channels of different nominal widths. The factory produced numerous adapters between different nominal widths as well as T-pieces and crossovers that fitted exactly and were quick to install.



FASERFIX® SUPER KS FASERFIX® SUPER

TAILOR-MADE SOLUTIONS.

EXAMPLES OF TAILOR-MADE SOLUTIONS FOR INDIVIDUAL CUSTOMER REQUIREMENTS.

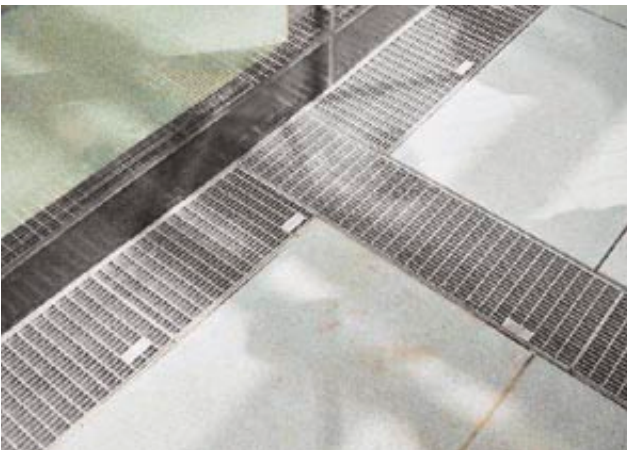
"BISCHOFSCHEIM, AM WINGERTSPFAD": EMBANKMENT CHANNEL WITH CLOSING GRATING

At the new construction site "Am Wingertspfad" in Bischofsheim open FASERFIX SUPER channels were used in different nominal widths to drain the precipitation water to the central percolation area. The whole drainage network consists of FASERFIX SUPER channels in different nominal widths and types. At the end of the drainage lines the water emerges into the open through a channel that has been truncated to suit the existing slope of the embankment as specified by the customer. An exit grating was fitted to safeguard the system.



"DRESDEN, WIENER PLATZ"

The "Wiener Platz" is the central traffic hub in Dresden. The different transport modes, such as railway, cars and buses, tramway, bicycles and wheelchairs are interlinked on different levels. For a visually appealing streetscape design of surfaces and façades, the FASERFIX SUPER channels and FASERFIX POINT yard gullies were fitted with custom-fabricated stainless steel gratings. A special request from the client and architects was the narrow mesh size of the gratings that provides better safety for pedestrians, cyclists and wheelchair users and prevents the ingress of coarser dirt items into the drainage system. The effect adds to the harmonious overall design that does justice to the outstanding architecture.



FASERFIX® SUPER KS

THE COMPLETE DRAINAGE SYSTEM - EXTREMELY ROBUST.
FOR EXPOSURE TO HEAVY ROAD TRAFFIC IN PUBLIC AREAS AND INDUSTRY.

HIGH-STRENGTH SIDEWALLS OWING TO FIBRE-REINFORCED CONCRETE

The standard DIN EN 1433 stipulates sufficient sidewall strength for transport and installation, i.e. without the bracing effect from the gratings that are installed subsequently. The U shape of our drainage channels has passed the test of time over many years. FASERFIX SUPER channels are manufactured from fibre-reinforced concrete. The sidewalls are uniformly slender and very robust - even for short non-standard lengths. FASERFIX SUPER KS and FASERFIX SUPER channels can be installed without the gratings being fitted.

FASERFIX SUPER KS and FASERFIX SUPER channels meet the requirements of DIN EN 1433 and are suitable for the following load categories:



**CATEGORY A 15,
LOAD CLASS 15 KN**



**CATEGORY B 125,
LOAD CLASS 125 KN**



**CATEGORY C 250,
LOAD CLASS 250 KN**



**CATEGORY D 400,
LOAD CLASS 400 KN**



**CATEGORY E 600,
LOAD CLASS 600 KN**



**CATEGORY F 900,
LOAD CLASS 900 KN**

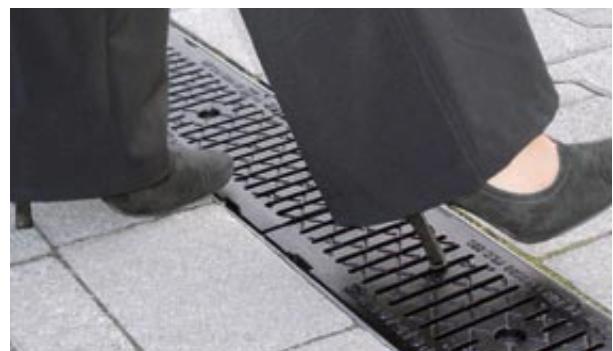
4

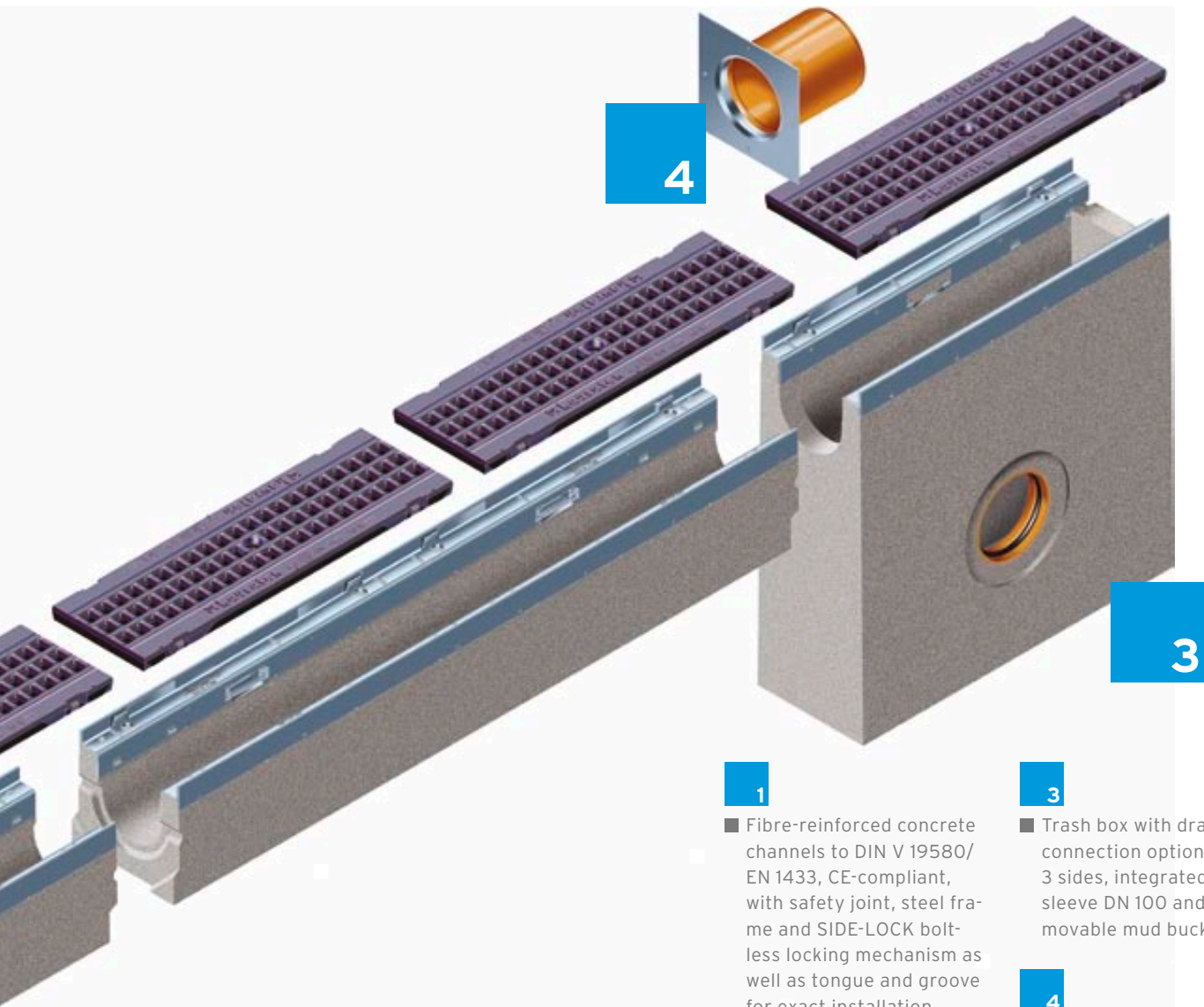
2

1

SAFETY IN PEDESTRIAN ZONES

FASERFIX SUPER channels with their great choice of gratings are also used in pedestrian zones, on market squares and other public areas. To provide greater safety for pedestrians, the gratings with narrow slot sizes were developed.





- 1** Fibre-reinforced concrete channels to DIN V 19580/EN 1433, CE-compliant, with safety joint, steel frame and SIDE-LOCK boltless locking mechanism as well as tongue and groove for exact installation
- 2** Numerous grating options, e.g. GUGI-Ductile iron mesh gratings
- 3** Trash box with drainage connection options on 3 sides, integrated KG sleeve DN 100 and removable mud bucket
- 4** End caps with and without outlets

GRATING OPTIONS FASERFIX®SUPER KS CHANNELS AND FASERFIX®SUPER CHANNELS

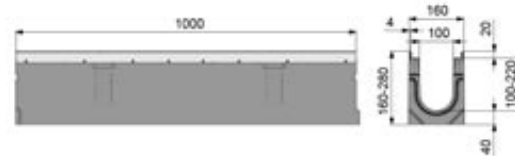
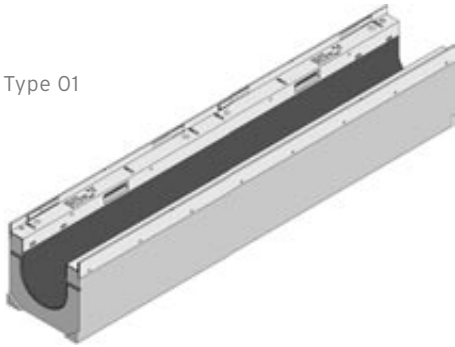
Load categories	GUGI-Ductile iron mesh grating*		Ductile iron grating*		Mesh grating*		Slotted grating*		Perforated grating*		Closed covers*		Longitudinal grating*	
	SUPER KS	SUPER	SUPER KS	SUPER	SUPER KS	SUPER	SUPER KS	SUPER	SUPER KS	SUPER	SUPER KS	SUPER	SUPER KS	SUPER
A 15							100							100
B 125					100									
C 250			100, 150, 200	300	100, 150, 200	300	100		100		100			
D 400			100, 150, 200	300, 400										
E 600	100, 150, 200	150, 200, 300, 400	100, 150	150, 200, 500	100, 150, 200						100	300, 400		
F 900	100		100, 150	150, 200, 300, 400										

* sizes are nominal widths

FASERFIX® SUPER KS 100

FASERFIX® SUPER KS 100 - Channel lower parts

Type 01

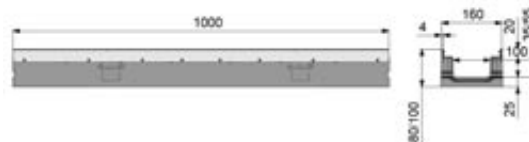


	Length mm	Width mm	Height mm	Drainage cross- sect. cm ²	Weight kg	Article No. galva- nised angle housing	Article No. stainless steel angle housing
Type 01	1000	160	160	89	35,0	8000	8200
Type 01L with hole*	1000	160	160		34,0	8045	-
Type 05	1000	160	184		37,0	8041	-
Type 010	1000	160	214	143	43,0	8042	8242
Type 010L with hole*	1000	160	214		41,5	8046	-
Type 015	1000	160	244	173	45,0	8043	8243
Type 020	1000	160	274	203	49,0	8044	8244
Type 0105	500	160	160	89	16,5	8049	8249
Type 01005	500	160	214		21,5	8050	-

*Distance from middle of the hole (DN100) to the end of the channel: 100 mm.
The quality of the stainless steel material is according CNS 1.4301.

FASERFIX® SUPER KS 100 - Channel lower parts flat

Type 80F

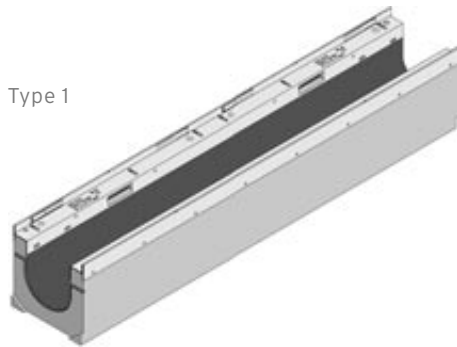


	Length mm	Width mm	Height mm	Drainage cross- sect. cm ²	Weight kg	Article No. galva- nised angle housing	Article No. stainless steel angle housing
Type 80F	1000	160	80	34	17,5	1106	1706
Type 100F	1000	160	100	54	20,0	1108	1708

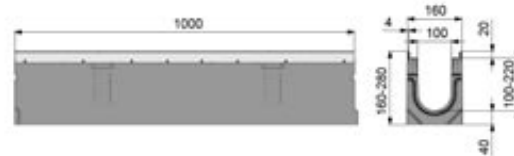
The quality of the stainless steel material is according CNS 1.4301.

FASERFIX®SUPER KS 100

FASERFIX®SUPER KS 100 - Channel lower parts built-in fall 0,6 %



Type 1



	Length mm	Width mm	Height mm	Drainage cross- sect. cm ²	Weight kg	Article No. galva- nised angle housing	Article No. stainless steel angle housing
Type 1	1000	160	160 - 166	89	35,0	8001	8201
Type 2	1000	160	166 - 172	95	36,5	8002	8202
Type 3	1000	160	172 - 178	101	37,5	8003	8203
Type 4	1000	160	178 - 184	107	38,0	8004	8204
Type 5	1000	160	184 - 190	113	38,5	8005	8205
Type 6	1000	160	190 - 196	119	39,0	8006	8206
Type 7	1000	160	196 - 202	125	40,0	8007	8207
Type 8	1000	160	202 - 208	131	40,5	8008	8208
Type 9	1000	160	208 - 214	137	41,5	8009	8209
Type 10	1000	160	214 - 220	143	42,5	8010	8210
Type 11	1000	160	220 - 226	149	43,0	8011	8211
Type 12	1000	160	226 - 232	155	43,5	8012	8212
Type 13	1000	160	232 - 238	161	44,0	8013	8213
Type 14	1000	160	238 - 244	167	44,5	8014	8214
Type 15	1000	160	244 - 250	173	45,5	8015	8215
Type 16	1000	160	250 - 256	179	46,5	8016	8216
Type 17	1000	160	256 - 262	185	47,0	8017	8217
Type 18	1000	160	262 - 268	191	47,5	8018	8218
Type 19	1000	160	268 - 274	197	48,0	8019	8219
Type 20	1000	160	274 - 280	203	48,0	8020	8220

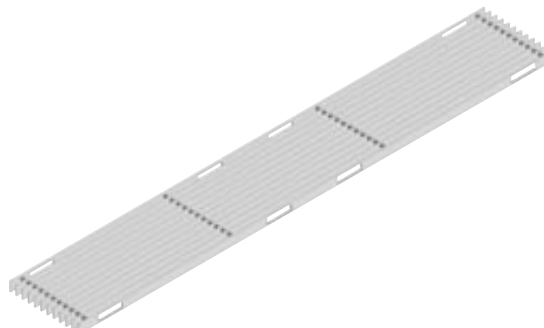
The quality of the stainless steel material is according CNS 1.4301.

FASERFIX® SUPER KS 100

FASERFIX® SUPER KS 100 - Gratings, class A 15



Slotted grating SW 80/10,
galvanised



Longitudinal slot grating, slot
distance 10 mm, stainless steel

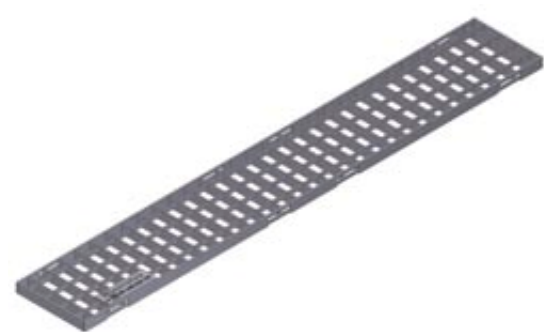
	Length mm	Width mm	Height mm	Intake cross- sect. cm ² /m	Weight kg	Article No.
Slotted grating SW 80/10, galvanised	1000	149	20	278	2,7	8161
Slotted grating SW 80/10, galvanised	500	149	20	278	1,4	8162
Slotted grating SW 80/10, stainless steel	1000	149	20	278	2,7	8163
Slotted grating SW 80/10, stainless steel	500	149	20	278	1,4	8164
Longitudinal slot grating, slot distance 10 mm, stainless steel	1000	149	20	727	5,8	8590
Longitudinal slot grating, slot distance 10 mm, stainless steel	500	149	20	727	2,9	8591
Traverse bar grating, stainless steel	1000	149	20	902	7,5	8594
Traverse bar grating, stainless steel	500	149	20	902	3,8	8595

The quality of the stainless steel material is according CNS 1.4301.

FASERFIX® SUPER KS 100 - Gratings, class B 125



Mesh grating MW 30/10,
galvanised



Mesh grating MW 30/30,
galvanised

	Length mm	Width mm	Height mm	Intake cross- sect. cm ² /m	Weight kg	Article No.
Mesh grating MW 30/10, galvanised	1000	149	20	716	3,9	8151
Mesh grating MW 30/10, galvanised	500	149	20	716	2,0	8152
Mesh grating MW 30/30, galvanised	1000	149	20	878	3,2	8077
Mesh grating MW 30/30, galvanised	500	149	20	869	1,6	8078

The quality of the stainless steel material is according CNS 1.4301.

FASERFIX® SUPER KS 100

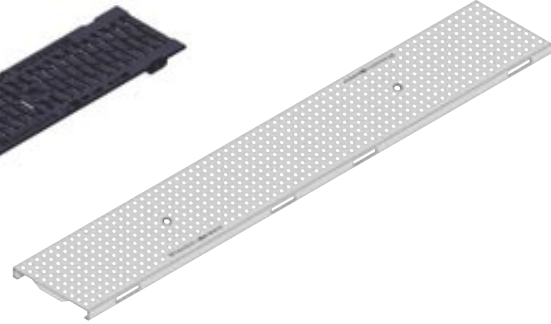
FASERFIX® SUPER KS 100 - Gratings, class C 250



Ductile iron grating, SW 100/14, black



Ductile iron grating, heel safe



Perforated grating Ø 6, galvanised



Reinforced slotted grating SW 80/10, galvanised

	Length mm	Width mm	Height mm	Intake cross- sect. cm ² /m	Weight kg	Article No.
Ductile iron grating, SW 100/14, black	500	149	20	454	3,4	8064
Ductile iron grating, heel safe	500	149	20	280	3,4	8068
Mesh grating MW 30/10, galvanised	1000	149	20	716	5,4	8154
Mesh grating MW 30/10, galvanised	500	149	20	716	2,7	8155
Mesh grating 30/10 stainless steel	1000	149	20	776	5,2	8577
Mesh grating, stainless steel	500	149	20	766	2,6	8578
Mesh grating MW 30/30, galvanised	1000	149	20	828	4,9	8073
Mesh grating MW 30/30, galvanised	500	149	20	819	2,5	8074
Reinforced slotted grating SW 80/10, galvanised	1000	149	20	281	5,4	8167
Reinforced slotted grating SW 80/10, galvanised	500	149	20	281	2,7	8168
Reinforced slotted grating SW 80/10, stainless steel	1000	149	20	281	5,0	8169
Reinforced slotted grating SW 80/10, stainless steel	500	149	20	281	2,5	8170
Perforated grating Ø 6, galvanised	1000	149	20	99	5,4	8171
Perforated grating Ø 6, galvanised	500	149	20	99	2,7	8172
Perforated grating Ø 6, stainless steel	1000	149	20	99	6,8	8177
Perforated grating Ø 6, stainless steel	500	149	20	99	3,4	8178
Solid cover, galvanised	1000	149	20	0	5,5	8191
Solid cover, galvanised	500	149	20	0	2,8	8192

The quality of the stainless steel material is according CNS 1.4301.

FASERFIX® SUPER KS 100

FASERFIX® SUPER KS 100 - Gratings, class D 400*



Ductile iron grating,
SW 100/14, black

	Length mm	Width mm	Height mm	Intake cross- sect. cm ² /m	Weight kg	Article No.
Ductile iron grating, SW 100/14, black	500	149	20	454	3,6	8063

* Not for use across the carriageway of highways or motorways in moving traffic.

FASERFIX® SUPER KS 100 - Gratings, class E 600



GUGI-Ductile iron mesh
grating MW 20/30, black



Ductile iron grating
SW 100/14, black



Ductile iron grating,
heel safe

	Length mm	Width mm	Height mm	Intake cross- sect. cm ² /m	Weight kg	Article No.
GUGI-Ductile iron mesh grating MW 20/30, black	500	149	20	426	4,0	8079
GUGI-Ductile iron mesh grating MW 20/30, galvanized	500	149	20	426	4,2	8080
Ductile iron grating SW 100/14, black	500	149	20	454	4,0	8062
Ductile iron grating, heel safe	500	149	20	280	4,1	8066
Mesh grating MW 11/30, galvanised	1000	149	20	695	7,0	8071
Mesh grating MW 11/30, galvanised	500	149	20	695	4,0	8072
Mesh grating MW 11/30, stainless steel	1000	149	20	695	7,0	8571
Mesh grating MW 11/30, stainless steel	500	149	20	695	4,0	8572
Ductile iron grating closed, black	500	149	20	0	4,6	8262
Ductile iron grating closed, galvanised	500	149	20	0	4,8	8264

The quality of the stainless steel material is according CNS 1.4301.

FASERFIX®SUPER KS 100

FASERFIX®SUPER KS 100 - Gratings, class F 900



GUGI-Ductile iron mesh grating, black

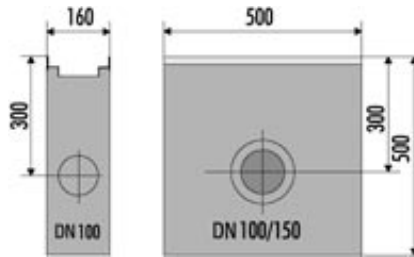
	Length mm	Width mm	Height mm	Intake cross- sect. cm ² /m	Weight kg	Article No.
GUGI-Ductile iron mesh grating, black	500	149	20	426	4,8	8060
Ductile iron grating SW 100/14, black	500	149	20	454	4,5	8061

FASERFIX® SUPER KS 100

FASERFIX® SUPER KS 100 - Accessories



Trash box with galvanised bucket



UPVC-outlet DN 100



Foul air trap DN 100, outside

	Length mm	Width mm	Height mm	Weight kg	Article No. galvanised angle housing	Article No. stainless steel angle housing
Trash box with galvanised bucket	500	160	500	50,0	8053	-
Trash box with UPVC-bucket	500	160	500	49,0	8052	8252
Foul air trap DN 100, outside	-	-	-	0,4	961	-
UPVC-outlet DN 100	-	-	-	0,2	903	-

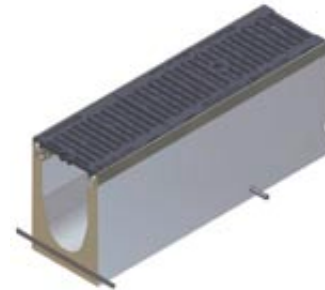
FASERFIX® SUPER KS 100



Sealing material Masterflex 700 FR Gun Grade, cartridge 450 ml**



End cap closed, Type 01



Fixing-system EP, empty conduit in the channel bottom, (2 pieces per running metre)

	Length mm	Width mm	Height mm	Weight kg	Article No. galvanised angle housing	Article No. stainless steel angle housing
End cap closed, Type 01	-	160	160	0,4	8081	8181
End cap closed, Type 010	-	160	214	0,5	8082	8182
End cap closed, Type 020	-	160	274	0,7	8083	8183
End cap closed, Type 80F	-	160	80	0,2	1181	1681
End cap closed, Type 100F	-	160	100	0,3	1183	1683
End cap with horizontal UPVC-outlet DN 100, Type 010	-	160	214	0,6	8087	8186
End cap with horizontal UPVC-outlet DN 100, Type 020	-	160	274	0,8	8089	8187
Cutting to length of NW 100	-	-	-	-	990	-
Mitre cuts for NW 100 (two cuts per connection)	-	-	-	-	995	-
Drilling of connecting holes DN 70	-	-	-	-	971	-
Drilling of connecting holes DN 100	-	-	-	-	972	-
Inserting of PVC union connectors DN 70*	-	-	-	-	981	-
Inserting of PVC union connectors DN 100 *	-	-	-	-	982	-
Sealing material Masterflex 700 FR Gun Grade, cartridge 450 ml**	-	-	-	1,0	19000	-
Primer Masterflex 700 A SP, capacity 1000 ml	-	-	-	1,0	20000	-
Primer Masterflex 700 FE (steel), capacity 1000 ml	-	-	-	1,1	19950	-
Toolkit for sealing material Masterflex 700 FR Gun Grade	-	-	-	3,1	10025	-
Fixing-system EP, empty conduit in the channel bottom, (2 pieces per running metre)	-	-	-	-	703	-
Steelbars for fixing system (2 pieces per running metre)	-	-	-	-	704	-

* We can additionally insert SML- or PE-HD outlets on appointment

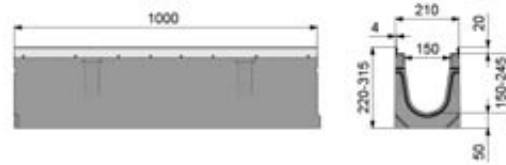
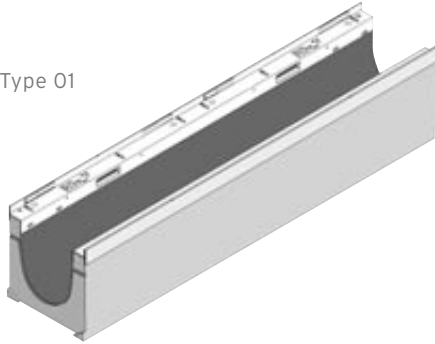
** Consumption for channely type 020: approx. 65 ml per joint.

The quality of the stainless steel material is according CNS 1.4301.

FASERFIX® SUPER KS 150

FASERFIX® SUPER KS 150 - Channel lower parts

Type 01

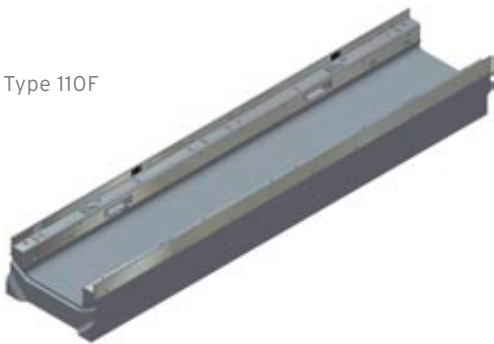


	Length mm	Width mm	Height mm	Drainage cross- sect. cm ²	Weight kg	Article No. galva- nised angle housing	Article No. stainless steel angle housing
Type 01	1000	210	220	185	55,0	11000	11500
Type 010	1000	210	265	245	63,5	11042	11542
Type 020	1000	210	315	312	72,0	11044	11544
Type 0105	500	210	220	185	30,0	11049	11549

The quality of the stainless steel material is according CNS 1.4301.

FASERFIX® SUPER KS 150 - Channel lower parts flat

Type 110F

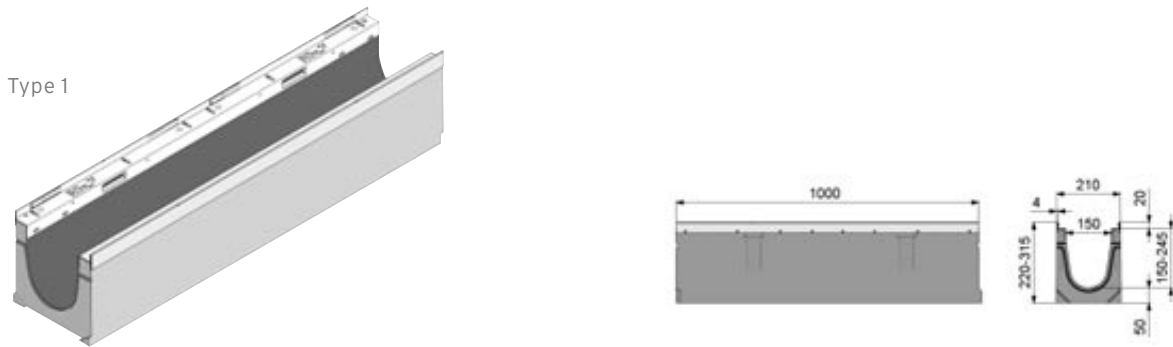


	Length mm	Width mm	Height mm	Drainage cross- sect. cm ²	Weight kg	Article No. galva- nised angle housing	Article No. stainless steel angle housing
Type 110F	1000	210	110	74	29,0	2121	2521
Type 150F	1000	210	150	134	35,0	2122	2522
Type 200F	1000	210	200	208	42,5	2123	2523

The quality of the stainless steel material is according CNS 1.4301.

FASERFIX®SUPER KS 150

FASERFIX®SUPER KS 150 - Channel lower parts built-in fall 0,5 %



	Length mm	Width mm	Height mm	Drainage cross- sect. cm ²	Weight kg	Article No. galva- nised angle housing	Article No. stainless steel angle housing
Type 1	1000	210	220 - 225	186	56,1	11001	11501
Type 2	1000	210	225 - 230	196	56,8	11002	11502
Type 3	1000	210	230 - 235	203	57,7	11003	11503
Type 4	1000	210	235 - 240	211	58,5	11004	11504
Type 5	1000	210	240 - 245	218	59,3	11005	11505
Type 6	1000	210	245 - 250	226	60,2	11006	11506
Type 7	1000	210	250 - 255	233	61,0	11007	11507
Type 8	1000	210	255 - 260	241	61,8	11008	11508
Type 9	1000	210	260 - 265	248	62,7	11009	11509
Type 10	1000	210	265 - 270	254	63,5	11010	11510

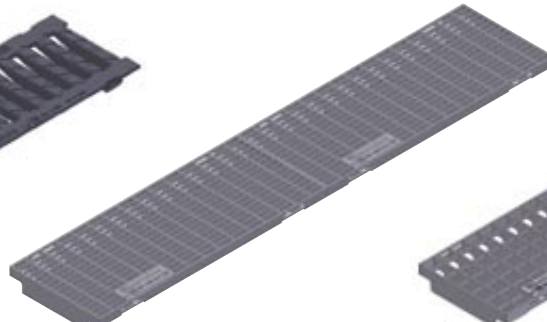
The quality of the stainless steel material is according CNS 1.4301.

FASERFIX® SUPER KS 150

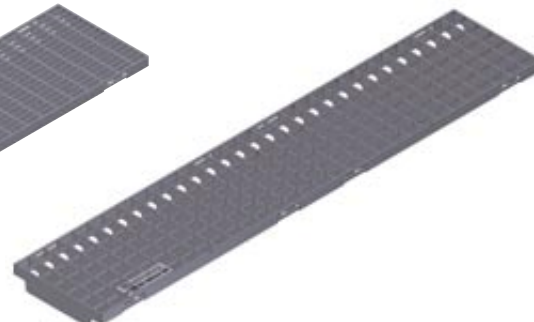
FASERFIX® SUPER KS 150 - Gratings, class C 250



Ductile iron grating
SW 132/20, black



Mesh grating MW 30/10,
galvanised



Mesh grating MW 30/30,
galvanised

	Length mm	Width mm	Height mm	Intake cross- sect. cm ² /m	Weight kg	Article No.
Ductile iron grating SW 132/20, black	500	199	20	631	5,3	11064
Mesh grating MW 30/10, galvanised	1000	199	20	1105	7,7	11075
Mesh grating MW 30/10, galvanised	500	199	20	1105	4,1	11076
Mesh grating MW 30/10, stainless steel	1000	199	20	1105	8,0	11575
Mesh grating MW 30/10, stainless steel	500	199	20	1105	4,0	11576
Mesh grating MW 30/30, galvanised	1000	199	20	1240	6,8	11073
Mesh grating MW 30/30, galvanised	500	199	20	1240	3,4	11074
Mesh grating MW 30/30, stainless steel	1000	199	20	1240	7,0	11573
Mesh grating MW 30/30, stainless steel	500	199	20	1240	3,5	11574

The quality of the stainless steel material is according CNS 1.4301.

FASERFIX® SUPER KS 150 - Gratings, class D 400*



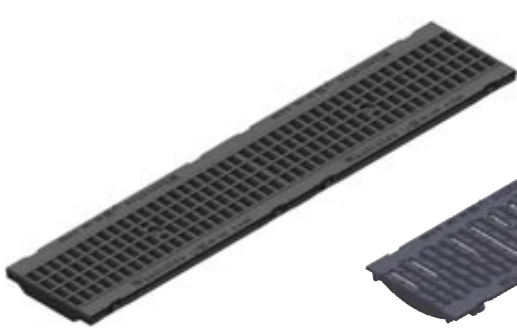
GUGI-Ductile iron mesh
grating, black

	Length mm	Width mm	Height mm	Intake cross- sect. cm ² /m	Weight kg	Article No.
GUGI-Ductile iron mesh grating, black	500	199	20	716	5,5	11067
Ductile iron grating SW 132/20, black	500	199	20	629	5,3	11063

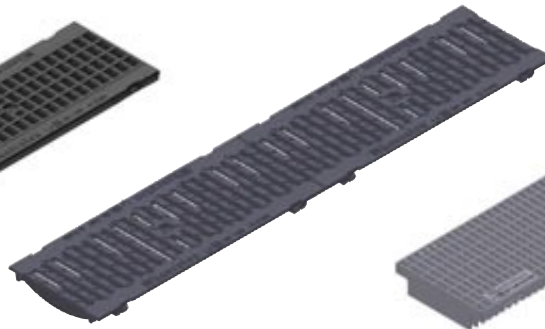
* Not for use across the carriageway of highways or motorways in moving traffic.

FASERFIX®SUPER KS 150

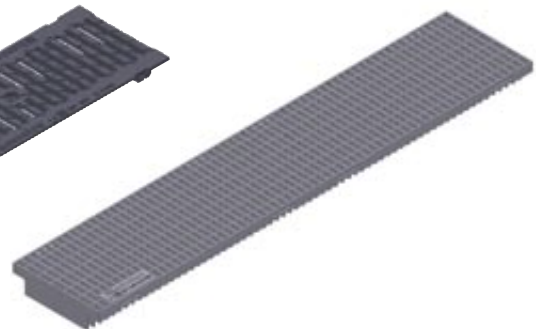
FASERFIX®SUPER KS 150 - Gratings, class E 600



GUGI-Ductile iron mesh grating MW 20/30, black



Ductile iron grating SW 132/9, black



Mesh grating MW 11/30, galvanised

	Length mm	Width mm	Height mm	Intake cross- sect. cm ² /m	Weight kg	Article No.
GUGI-Ductile iron mesh grating MW 20/30, black	500	199	20	716	7,7	11068
Ductile iron grating, closed, black	500	199	20	0	7,0	11362
Ductile iron grating SW 132/9, black	500	199	20	557	6,8	11066
Mesh grating MW 11/30, galvanised	1000	199	20	981	20,2	11071
Mesh grating MW 11/30, galvanised	500	199	20	981	10,1	11072
Mesh grating MW 11/30, stainless steel	1000	199	20	981	21,0	11571
Mesh grating MW 11/30, stainless steel	500	199	20	981	11,0	11572

The quality of the stainless steel material is according CNS 1.4301.

FASERFIX®SUPER KS 150 - Gratings, class F 900



Ductile iron grating SW 132/20, black

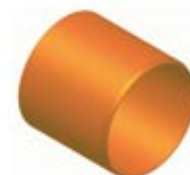
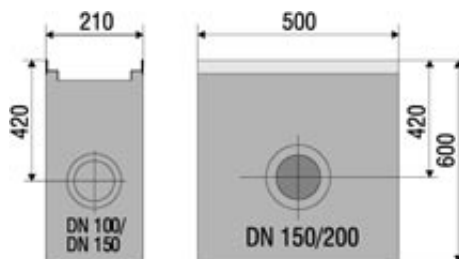
	Length mm	width mm	Height mm	Intake cross-sect. cm ² /m	Weight KG	Article No.
Ductile iron grating SW 132/20, black	500	199	20	626	7,2	11061

FASERFIX® SUPER KS 150

FASERFIX® SUPER KS 150 - Accessories



Trash box with galvanised bucket



PVC - connection DN 150



Foul air trap DN 150

	Length mm	Width mm	Height mm	Weight kg	Article No. galvanised angle housing	Article No. stainless steel angle housing
Trash box with galvanised bucket	500	210	600	67,5	11052	11552
Foul air trap DN 150	-	-	-	2,0	960	-
PVC - connection DN 150	-	-	-	0,5	906	-

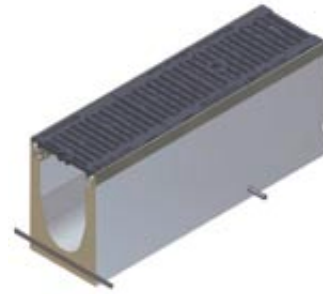
FASERFIX® SUPER KS 150



Sealing material Masterflex 700 FR Gun Grade, cartridge 450 ml**



End cap closed, type 01



Fixing-system EP, empty conduit in the channel bottom, (2 pieces per running metre)

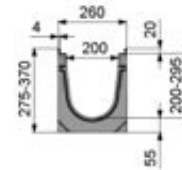
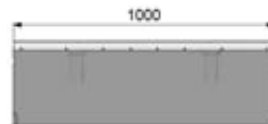
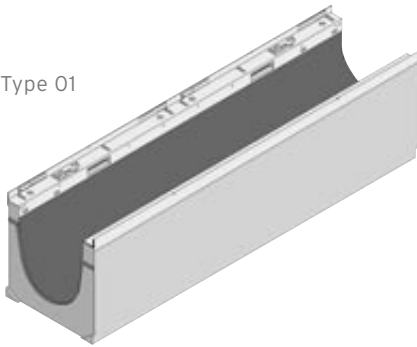
	Length mm	Width mm	Height mm	Weight kg	Article No. galvanised angle housing	Article No. stainless steel angle housing
End cap closed, type 01	-	210	220	0,9	11081	11581
End cap closed, type 010	-	210	265	0,9	11082	11582
End cap closed, type 020	-	210	315	1,3	11083	11583
End cap closed, type 110F	-	210	110	0,4	2181	2681
End cap closed, type 150F	-	210	150	0,6	2182	2682
End cap closed, type 200F	-	210	200	0,8	2183	2683
End cap with horizontal UPVC - outlet DN 150, type 010	-	210	265	1,1	11087	-
End cap with horizontal UPVC - outlet DN 150, type 020	-	210	315	1,3	11088	-
End cap with horizontal UPVC - outlet DN 150, type 010	-	210	265	1,1	11587	-
End cap with horizontal UPVC - outlet DN 150, type 020	-	210	315	1,3	11588	-
Cutting to length of NW 150	-	-	-	-	991	-
Mitre cuts of NW 150 (two cuts per connection)	-	-	-	-	996	-
Drilling of connecting holes DN 150	-	-	-	-	973	-
Inserting of PVC union connectors DN 150*	-	-	-	-	983	-
Sealing material Masterflex 700 FR Gun Grade, cartridge 450 ml**	-	-	-	1,0	19000	-
Primer Masterflex 700 A SP, capacity 1000 ml	-	-	-	1,0	20000	-
Primer Masterflex 700 FE (steel), capacity 1000 ml	-	-	-	1,1	19950	-
Toolkit for sealing material Masterflex 700 FR Gun Grade	-	-	-	3,1	10025	-
Fixing-system EP, empty conduit in the channel bottom, (2 pieces per running metre)	-	-	-	-	703	-
Steelbars for fixing system (2 pieces per running metre)	-	-	-	-	704	-

* We can additionally insert SML- or PE-HD outlets on appointment
 ** Consumption for channely type 020: approx. 94 ml per joint.
 The quality of the stainless steel material is according CNS 1.4301.

FASERFIX® SUPER KS 200

FASERFIX® SUPER KS 200 - Channel lower parts

Type 01

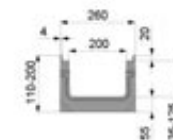


	Length mm	Width mm	Height mm	Drainage cross- sect. cm ²	Weight kg	Article No. galva- nised angle housing	Article No. stainless steel angle housing
Type 01	1000	260	275	319	80,0	12000	12500
Type 010	1000	260	320	409	85,0	12042	12542
Type 020	1000	260	370	509	93,0	12044	12544
Type 0105	500	260	275	319	40,5	12049	12549

The quality of the stainless steel material is according CNS 1.4301.

FASERFIX® SUPER KS 200 - Channel lower parts flat

Type 120 F

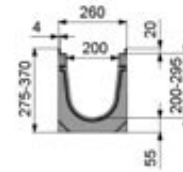
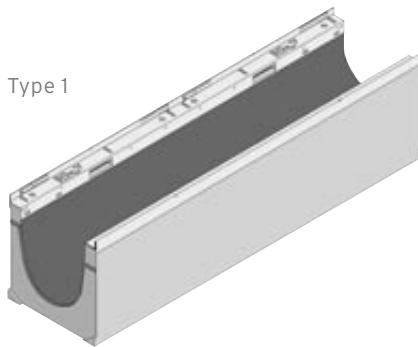


	Length mm	Width mm	Height mm	Drainage cross- sect. cm ²	Weight kg	Article No. galva- nised angle housing	Article No. stainless steel angle housing
Type 120 F	1000	260	110	89	54,0	3121	3521
Type 150 F	1000	260	150	148	60,0	3122	3522
Type 200 F	1000	260	200	246	67,5	3123	3523

The quality of the stainless steel material is according CNS 1.4301.

FASERFIX®SUPER KS 200

FASERFIX®SUPER KS 200 - Channel lower parts built-in fall 05 %

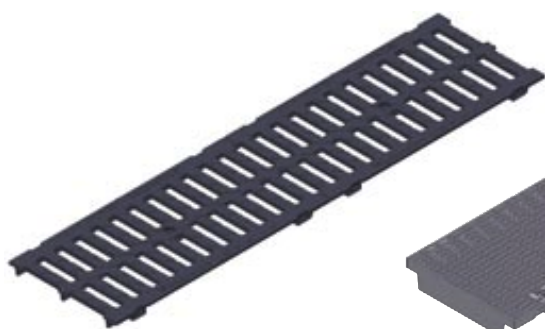


	Length mm	Width mm	Height mm	Drainage cross- sect. cm ²	Weight kg	Article No. galva- nised angle housing	Article No. stainless steel angle housing
Type 1	1000	260	275 - 280	324	79,0	12001	12501
Type 2	1000	260	280 - 285	334	80,6	12002	12502
Type 3	1000	260	285 - 290	344	81,4	12003	12503
Type 4	1000	260	290 - 295	354	82,2	12004	12504
Type 5	1000	260	295 - 300	364	83,0	12005	12505
Type 6	1000	260	300 - 305	374	83,8	12006	12506
Type 7	1000	260	305 - 310	384	84,6	12007	12507
Type 8	1000	260	310 - 315	394	85,4	12008	12508
Type 9	1000	260	315 - 320	404	86,2	12009	12509
Type 10	1000	260	320 - 325	414	87,0	12010	12510

The quality of the stainless steel material is according CNS 1.4301.

FASERFIX® SUPER KS 200

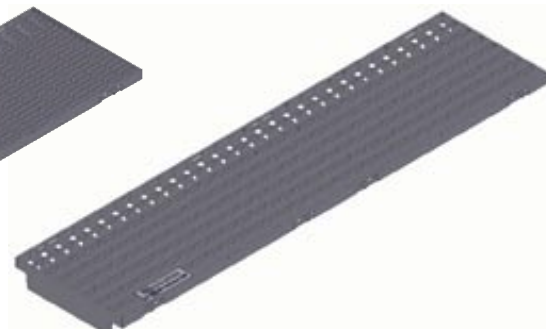
FASERFIX® SUPER KS 200 - Gratings, class C 250



Ductile iron grating
SW 2x85/20, black



Mesh grating MW 30/10,
galvanised



Mesh grating MW 30/30,
galvanised

	Length mm	Width mm	Height mm	Intake cross- sect. cm ² /m	Weight kg	Article No.
Ductile iron grating SW 2x85/20, black	500	249	20	823	5,8	12064
Mesh grating MW 30/10, galvanised	1000	249	20	1500	11,0	12075
Mesh grating MW 30/10, galvanised	500	249	20	1500	5,8	12076
Mesh grating MW 30/10, stainless steel	1000	249	20	1500	11,0	12575
Mesh grating MW 30/10, stainless steel	500	249	20	1500	5,8	12576
Mesh grating MW 30/30, galvanised	1000	249	20	1681	9,8	12073
Mesh grating MW 30/30, galvanised	500	249	20	1681	5,0	12074
Mesh grating MW 30/30, stainless steel	1000	249	20	1681	9,8	12573
Mesh grating MW 30/30, stainless steel	500	249	20	1681	5,0	12574

The quality of the stainless steel material is according CNS 1.4301.

FASERFIX® SUPER KS 200 - Gratings, class D 400*



Ductile iron grating
SW 2x85/20, black

	Length mm	Width mm	Height mm	Intake cross- sect. cm ² /m	Weight kg	Article No.
Ductile iron grating SW 2x85/20, black	500	249	20	823	6,8	12063

* Not for use across the carriageway of highways or motorways in moving traffic.

FASERFIX®SUPER KS 200

FASERFIX®SUPER KS 200 - Gratings, class E 600



Mesh grating MW 11/30, galvanised



GUGI-Ductile mesh grating MW 20/30, black

	Length mm	Width mm	Height mm	Intake cross-sect. cm ² /m	Weight kg	Article No.
GUGI-Ductile mesh grating MW 20/30, black	500	249	20	886	9,6	12068
Ductile iron grating, closed, black	500	249	20	0	8,6	12362
Mesh grating MW 11/30, galvanised	1000	249	20	1309	29,7	12071
Mesh grating MW 11/30, galvanised	500	249	20	1309	14,9	12072
Mesh grating MW 11/30, stainless steel	1000	249	20	1309	29,7	12571
Mesh grating MW 11/30, stainless steel	500	249	20	1309	14,9	12572

The quality of the stainless steel material is according CNS 1.4301.

FASERFIX®SUPER KS 200 - Gratings, class F 900



Ductile iron grating SW 2x85/20, black

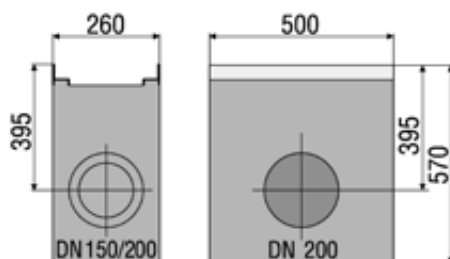
	Length mm	Width mm	Height mm	Intake cross-sect. cm ² /m	Weight kg	Article No.
Ductile iron grating SW 2x85/20, black	500	249	20	826	9,2	12061

FASERFIX® SUPER KS 200

FASERFIX® SUPER KS 200 - Accessories



Trash box with galvanised bucket



Foul air trap DN 150

	Length mm	Width mm	Height mm	Weight kg	Article No. galvanised angle housing	Article No. stainless steel angle housing
Trash box with galvanised bucket	500	260	570	75,5	12052	12525
Trash box with galvanised bucket	500	260	570	75,5	12552	-
Foul air trap DN 150	-	-	-	2,0	960	-
PVC-Connection DN 200	-	-	-	0,8	907	-

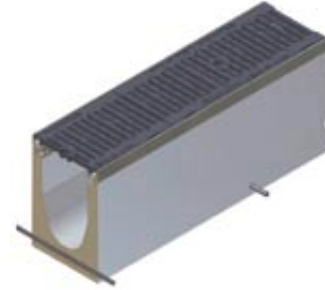
FASERFIX® SUPER KS 200



Sealing material Masterflex 700 FR Gun Grade, cartridge 450 ml**



End cap closed, Type 01



Fixing-system EP, empty conduit in the channel bottom, (2 pieces per running metre)

	Length mm	Width mm	Height mm	Weight kg	Article No. galvanised angle housing	Article No. stainless steel angle housing
End cap closed, Type 01	-	260	275	0,9	12081	12581
End cap closed, Type 010	-	260	320	0,9	12082	12582
End cap closed, Type 020	-	260	370	1,3	12083	12583
End cap, closed, Type 120 F	-	260	110	0,5	3181	3681
End cap, closed, Type 150 F	-	260	150	0,6	3182	3682
End cap, closed, Type 200 F	-	260	200	0,8	3183	3683
End cap with horizontal UPVC-outlet, DN 150, galvanised, Type 010	-	260	320	1,5	12087	12587
End cap with horizontal UPVC-outlet, DN 150, galvanised, Type 020	-	260	370	1,8	12088	12588
Cutting to length of NW 200	-	-	-	-	992	-
Mitre cuts of NW 200 (two cuts per connection)	-	-	-	-	997	-
Drilling of connecting holes DN 200	-	-	-	-	974	-
Inserting of PVC union connectors DN 200*	-	-	-	-	984	-
Sealing material Masterflex 700 FR Gun Grade, cartridge 450 ml**	-	-	-	1,0	19000	-
Primer Masterflex 700 A SP, capacity 1000 ml	-	-	-	1,0	20000	-
Primer Masterflex 700 FE (steel), capacity 1000 ml	-	-	-	1,1	19950	-
Toolkit for sealing material Masterflex 700 FR Gun Grade	-	-	-	3,1	10025	-
Fixing-system EP, empty conduit in the channel bottom, (2 pieces per running metre)	-	-	-	-	703	-
Steelbars for fixing system (2 pieces per running metre)	-	-	-	-	704	-

* We can additionally insert SML- or PE-HD outlets on appointment

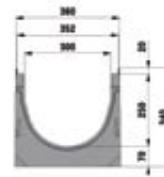
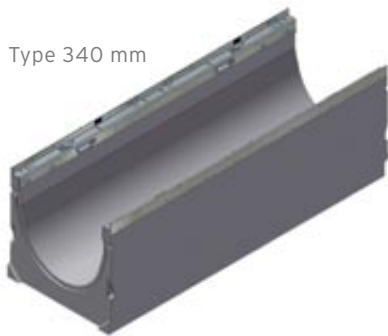
** Consumption for channely type 020: approx. 105 ml per joint.

The quality of the stainless steel material is according CNS 1.4301.

FASERFIX® SUPER KS 300

FASERFIX® SUPER KS 300 - Channel lower parts

Type 340 mm



	Length mm	Width mm	Height mm	Drainage cross- sect. cm ²	Weight kg	Article No.
Type 340 mm	1000	360	340	634	117,0	14040

FASERFIX® SUPER KS 300 - Gratings, class E 600

GUGI-Ductile iron mesh
grating, black



	Length mm	Width mm	Height mm	Intake cross- sect. cm ² /m	Weight kg	Article No.
GUGI-Ductile iron mesh grating, black	500	349	20	1196	18,6	14068

FASERFIX®SUPER KS 300

FASERFIX®SUPER KS 300 - Accessories

End cap closed,
type 340



	Length mm	Width mm	Height mm	Weight kg	Article No.
End cap closed, type 340	-	-	-	2,3	14085
Cutting to length of NW 300	-	-	-	-	993
Mitre cuts of NW 300 (two cuts per connection)	-	-	-	-	998
Inserting of PVC union connectors DN 200*	-	-	-	-	984
Sealing material Masterflex 700 FR Gun Grade, cartridge 450 ml**	-	-	-	1,0	19000
Primer Masterflex 700 A SP, capacity 1000 ml	-	-	-	1,0	20000
Primer Masterflex 700 FE (steel), capacity 1000 ml	-	-	-	1,1	19950
Toolkit for sealing material Masterflex 700 FR Gun Grade	-	-	-	3,1	10025
Fixing-system EP, empty conduit in the channel bottom, (2 pieces per running metre)	-	-	-	-	703
Steelbars for fixing system (2 pieces per running metre)	-	-	-	-	704

FASERFIX® SUPER KS FASERFIX® SUPER

THE COMPLETE DRAINAGE SYSTEM - EXTREMELY ROBUST.
FOR EXPOSURE TO HEAVY GOODS VEHICLES IN PUBLIC AREAS AND INDUSTRY.



AT A GLANCE

- ✓ Highest bending tensile strength
- ✓ Patented SIDE-LOCK boltless locking system
- ✓ Available with built-in fall
- ✓ With safety joint for easy sealing



FASERFIX® SUPER KS

FASERFIX® SUPER

THE COMPLETE DRAINAGE SYSTEM - EXTREMELY ROBUST.
FOR EXPOSURE TO HEAVY ROAD TRAFFIC IN PUBLIC AREAS AND INDUSTRY.

REQUIREMENT

Surface water in all kinds of areas must be allowed to drain away quickly and reliably. This requires drainage channels that will permanently withstand the loads applied from the expected traffic conditions. In particular this applies to zones exposed to heavy traffic in public and industrial areas. In addition to their technical function, drainage channels are expected to contribute visually to the attractiveness of surfaces with their form, colour and the material of the gratings. Some special applications also call for flexible channel systems - the products must be capable of being adapted to all drainage tasks.



SOLUTION

FASERFIX SUPER channels offer solutions for any type of application in heavy duty traffic areas. They are manufactured from fibre-reinforced concrete which, compared to normal concrete, has greater strength and reduced thickness of the side walls. In addition, they feature a higher bending tensile strength. No supporting backing of the channel body is required during installation. There are no restricting cross ridges in the base of the channel. The top edges and bearing surfaces for the gratings consist of corrosion-proof angle housings in galvanised steel or stainless steel which are firmly tied to the channel body through ties that reach down to the base of the channel. FASERFIX SUPER are resistant to frost and salt. The lower parts of the channels feature safety joints that can be sealed during installation against liquids, using elastic injection sealers such as the MASTERFLEX 700 FR gun grade polysulphide sealing compound. The channels can be supplied with or without in-built fall. Finally, numerous gratings for different load classes are available in the materials ductile iron, galvanised steel or stainless steel. With the SIDE-LOCK boltless locking system the gratings are safely fixed to the channels. The classification and testing meets the requirements of DIN EN 1433. Upon request we are happy to supply copies of the test certificates issued by the official material testing station at the University of Karlsruhe. FASERFIX SUPER channels are CE-marked.

APPLICATION AREAS

Traffic areas for industry and commerce, trade, trade fairs/exhibitions, railway stations, airports, ports, container handling stations, sewage works, power stations,

building yards, barracks, roads/motorways, petrol stations and service areas, parking lots, traffic-calmed zones, play streets, urban squares etc.



Potsdam, Germany



Airport Brussels, Belgium



Petrol stations all over the world



Main station Berlin, Germany

FASERFIX® SUPER KS FASERFIX® SUPER

TAILOR-MADE SOLUTIONS.

EXAMPLES OF TAILOR-MADE SOLUTIONS FOR INDIVIDUAL CUSTOMER REQUIREMENTS.

In each project the conditions to be handled by a drainage system are different. Therefore systems have to be flexible enough to allow standard products from serial production to be complemented by special items. To achieve that, HAURATON will study the individual requirements of each project and work together with the architects at an early stage. The company has a specialised team dealing exclusively with non-standard solutions - from the outline design stage right through to timely delivery and support during installation. In this way a suitable solution will be found for all applications. HAURATON channels are very flexible and can be adapted individually. Some special formats include cutting to required length, mitred cuts, holes and openings or incorporating connection pipes.

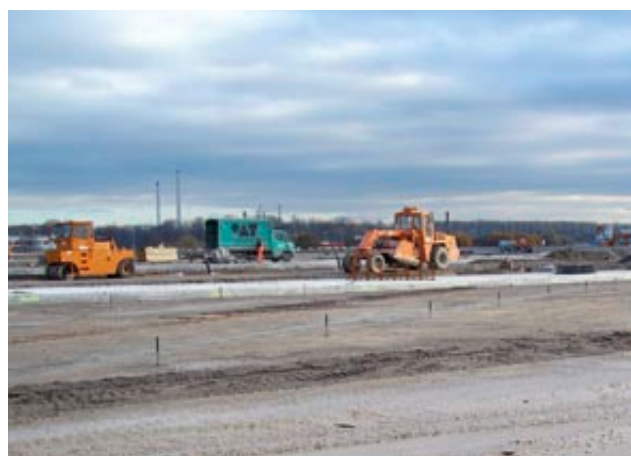
WÖRTH, DaimlerChrysler

On a site of about 550,000 square metres very close to the factory in Wörth, DaimlerChrysler is in the process of constructing the so-called EVZ - a development and test centre with test runs for putting heavy goods vehicles (HGV) through their paces. There are various stretches of track, one of them an automated bad surface track (ASW), on which prototypes and serial models are put through tough long-distance tests, with some of the vehicles being controlled via remote control.

For building projects of such dimensions the FASERFIX SUPER drainage system is the ideal solution. Standard production parts are complemented with customised channels that have been designed at the factory and are easy to install by the contractors following the installation instructions that are also supplied. Numerous mitred cuts, non-standard lengths and connection holes make up the complex drainage network that follows the routing of the test tracks.

Design of the ASW: Tilke - Engineers and Architects, Aachen/Olpe

Contractor: ASW Consortium, including the companies Strabag, Züblin, Grötz and Reif



The scheme comprises the following HAURATON channels:
2.500 m FASERFIX SUPER KS 100
850 m FASERFIX SUPER 150
200 m FASERFIX TRAFFIC SUPERBLOC 200

MANNHEIM, SHUNTING YARD

For safety reasons, overhead power lines at railway stations have to be earthed. For the shunting yard at Mannheim, HAURATON has developed a system together with Deutsche Bahn which combines drainage channels with an earth conductor. The solution provides one earthing cube per linear metre of channel which has been incorporated into the channel body underneath the angle housing. These are connected to earthing cables of 1 cm thickness. The function of the SIDE-LOCK boltless locking system remains fully intact.



WAGHÄUSEL, SITEC

The Sitec company is part of the glass industry. Its products are manufactured on highly technical machines and in extreme temperatures. A channel system has been developed for the company's factory floors that combines the routing of service pipes for the machines with a reliable drainage system. At the outline design stage, the project team at HAURATON developed a complex system comprising FASERFIX SUPER channels of different nominal widths. The factory produced numerous adapters between different nominal widths as well as T-pieces and crossovers that fitted exactly and were quick to install.



FASERFIX® SUPER KS FASERFIX® SUPER

TAILOR-MADE SOLUTIONS.

EXAMPLES OF TAILOR-MADE SOLUTIONS FOR INDIVIDUAL CUSTOMER REQUIREMENTS.

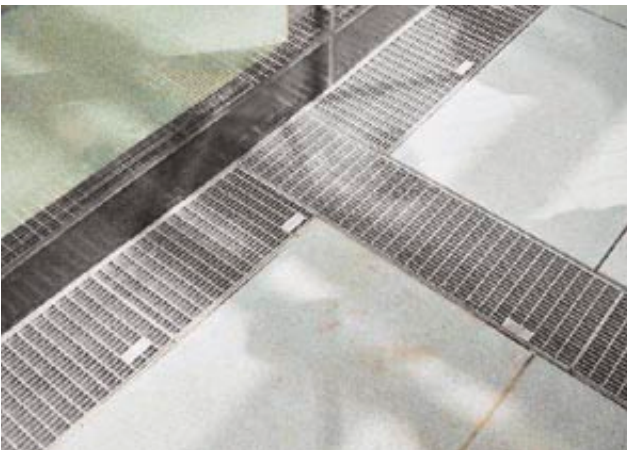
"BISCHOFSCHEIM, AM WINGERTSPFAD": EMBANKMENT CHANNEL WITH CLOSING GRATING

At the new construction site "Am Wingertspfad" in Bischofsheim open FASERFIX SUPER channels were used in different nominal widths to drain the precipitation water to the central percolation area. The whole drainage network consists of FASERFIX SUPER channels in different nominal widths and types. At the end of the drainage lines the water emerges into the open through a channel that has been truncated to suit the existing slope of the embankment as specified by the customer. An exit grating was fitted to safeguard the system.



"DRESDEN, WIENER PLATZ"

The "Wiener Platz" is the central traffic hub in Dresden. The different transport modes, such as railway, cars and buses, tramway, bicycles and wheelchairs are interlinked on different levels. For a visually appealing streetscape design of surfaces and façades, the FASERFIX SUPER channels and FASERFIX POINT yard gullies were fitted with custom-fabricated stainless steel gratings. A special request from the client and architects was the narrow mesh size of the gratings that provides better safety for pedestrians, cyclists and wheelchair users and prevents the ingress of coarser dirt items into the drainage system. The effect adds to the harmonious overall design that does justice to the outstanding architecture.



FASERFIX® SUPER KS

THE COMPLETE DRAINAGE SYSTEM - EXTREMELY ROBUST.
FOR EXPOSURE TO HEAVY ROAD TRAFFIC IN PUBLIC AREAS AND INDUSTRY.

HIGH-STRENGTH SIDEWALLS OWING TO FIBRE-REINFORCED CONCRETE

The standard DIN EN 1433 stipulates sufficient sidewall strength for transport and installation, i.e. without the bracing effect from the gratings that are installed subsequently. The U shape of our drainage channels has passed the test of time over many years. FASERFIX SUPER channels are manufactured from fibre-reinforced concrete. The sidewalls are uniformly slender and very robust - even for short non-standard lengths. FASERFIX SUPER KS and FASERFIX SUPER channels can be installed without the gratings being fitted.

FASERFIX SUPER KS and FASERFIX SUPER channels meet the requirements of DIN EN 1433 and are suitable for the following load categories:



**CATEGORY A 15,
LOAD CLASS 15 KN**



**CATEGORY B 125,
LOAD CLASS 125 KN**



**CATEGORY C 250,
LOAD CLASS 250 KN**



**CATEGORY D 400,
LOAD CLASS 400 KN**



**CATEGORY E 600,
LOAD CLASS 600 KN**



**CATEGORY F 900,
LOAD CLASS 900 KN**

4

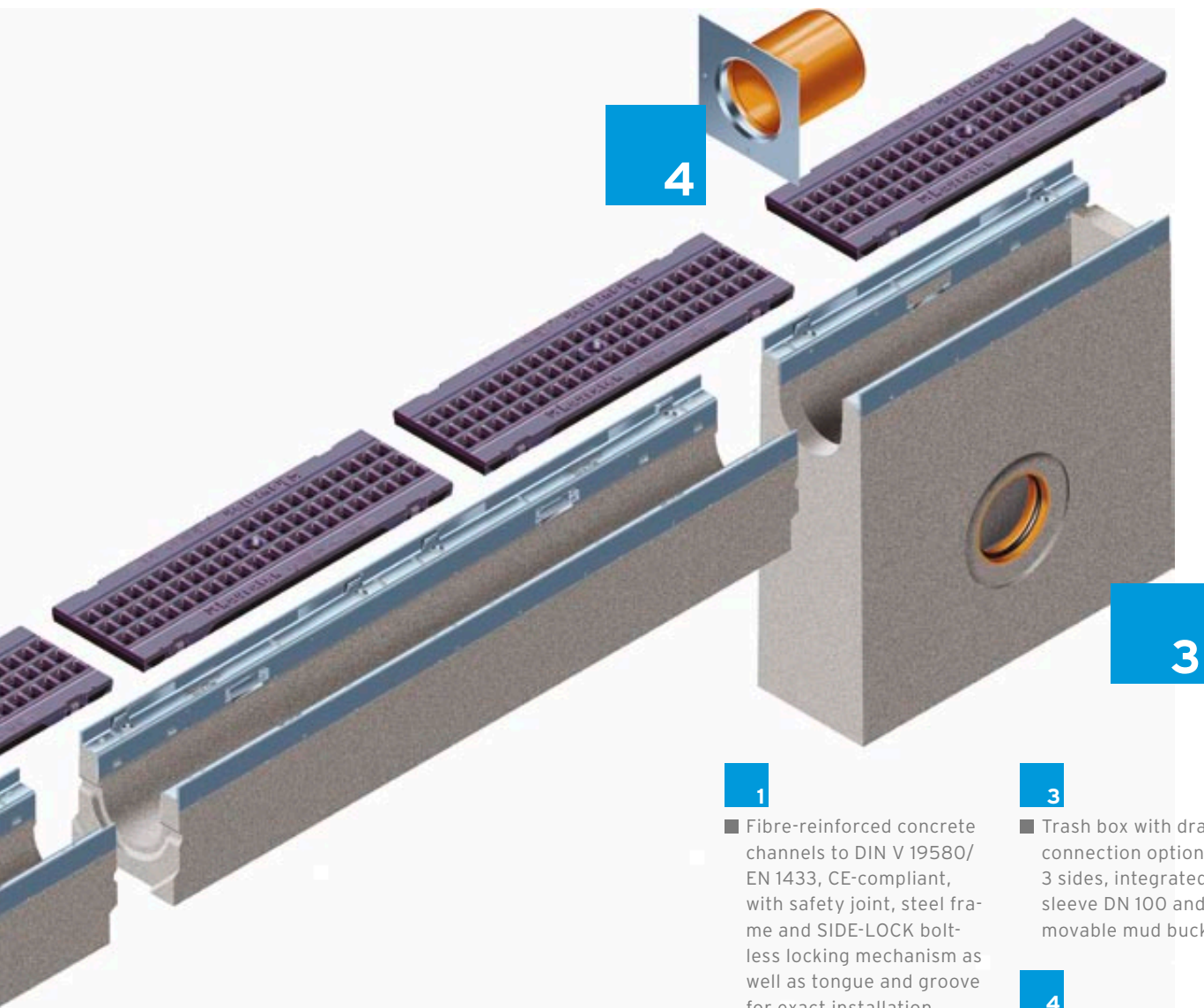
2

1

SAFETY IN PEDESTRIAN ZONES

FASERFIX SUPER channels with their great choice of gratings are also used in pedestrian zones, on market squares and other public areas. To provide greater safety for pedestrians, the gratings with narrow slot sizes were developed.





- 1** Fibre-reinforced concrete channels to DIN V 19580/EN 1433, CE-compliant, with safety joint, steel frame and SIDE-LOCK boltless locking mechanism as well as tongue and groove for exact installation
- 2** Numerous grating options, e.g. GUGI-Ductile iron mesh gratings
- 3** Trash box with drainage connection options on 3 sides, integrated KG sleeve DN 100 and removable mud bucket
- 4** End caps with and without outlets

GRATING OPTIONS

FASERFIX®SUPER KS CHANNELS AND FASERFIX®SUPER CHANNELS

Load categories	GUGI-Ductile iron mesh grating*		Ductile iron grating*		Mesh grating*		Slotted grating*		Perforated grating*		Closed covers*		Longitudinal grating*	
	SUPER KS	SUPER	SUPER KS	SUPER	SUPER KS	SUPER	SUPER KS	SUPER	SUPER KS	SUPER	SUPER KS	SUPER	SUPER KS	SUPER
A 15							100							100
B 125					100									
C 250			100, 150, 200	300	100, 150, 200	300	100		100		100			
D 400			100, 150, 200	300, 400										
E 600	100, 150, 200	150, 200, 300, 400	100, 150	150, 200, 500	100, 150, 200						100	300, 400		
F 900	100		100, 150	150, 200, 300, 400										

* sizes are nominal widths