

DATA SHEET	SYSTEM OF DRAIN CHANNELS TYPE SE-OK	SE.OK
Polymerconcrete	SE20.OK	

„SYSTEMY I TECHNOLOGIE SP. Z O. O.”

DATA SHEET

SYSTEM OF DRAN CHANNEL TYPE SE.OK

Techn. Dept.
2018-08-06

DATA SHEET	SYSTEM OF DRAIN CHANNELS TYPE SE-OK	SE.OK
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11.SYTEC drain sump of polymerconcrete, with galvanized basket and iron grating COC: 13

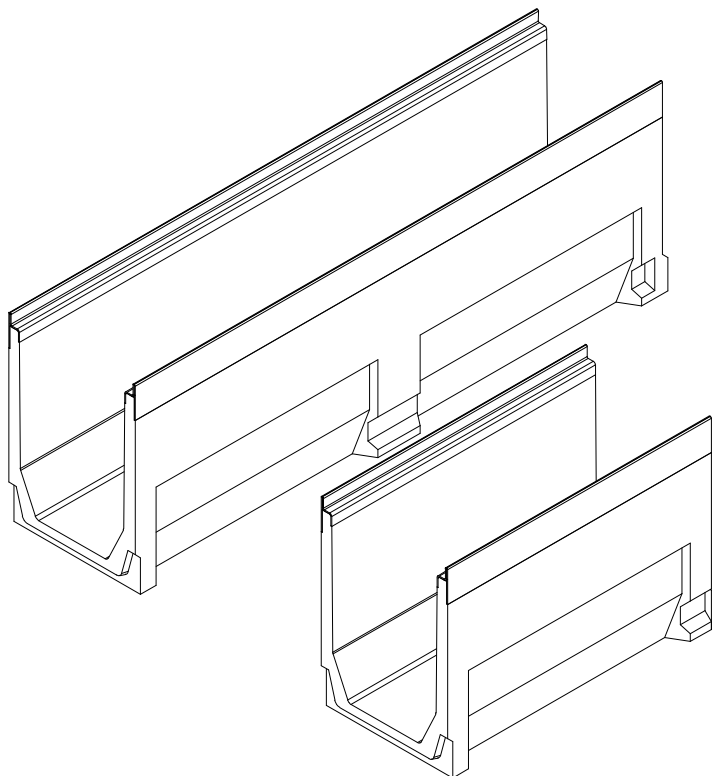
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2. Name of product

DRAIN CHANNEL WITH PROTECTIVE EDGES, TYPE SE.OK, SE20.OK.05.XX.



3. Classification of product:

23.61.12.1

4. Related documents:

Harmonized norm PN-EN 1433:2005/A1:2007 „Channels for draining the areas for pedestrian and vehicular traffic. Classification, structural requirements, testing, marking and compatibility assessment”.

5. Purpose of product:

5.1 Basic information:

Collect and drain the rain water from roads and yards to the drainage well and sewer system or storm water system or directly to the receiver tank located behind the drainage well.

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SYTEC

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5.2 Scope of application:

System type „M” – 1st to 5th group of the application areas of load A15-E600 in accordance with the norm PN-EN 1433, among others : industrial areas of large traffic and high load and the like.

5.3 Special application area:

Collection and drainage of rainwater from communication routes for pedestrian and bicycle traffic, green areas, e.g. parks, squares, home areas, home garages, curbside areas, roadsides not loaded with traffic, car parks or coves for passenger cars, roadway, roadsides and parking lots for all types of road vehicles, areas subject to heavy loads caused by vehicular traffic, e.g. ports and docks.

6. Description of product:

6.1 Basic parameters:

- ✓ Structure: Drain channel consists of a channel body and iron grating COC.
- ✓ Material: Channel body is made of polymer concrete with steel protective edges which enable locking of gratings with locking bars or with iron edges which enable universal locking of gratings (locking bar, catch-lock or double : locking bar/catch lock).
- ✓ Channels with steel or iron protective edges are available in load class A15 – E600.
- ✓ Dimensions: Channels type SE.OK are with slope of nominal (internal) width of 20cm. Slope in the bottom is 0,5%.
- ✓ Channel sequence with 0,5% slope is 20,0m long. Sloped channels of nominal (internal) width of 20cm is designated with index SE20.OK.05.xx, the letters “xx” means a successive channel in the sequence.
- ✓ Channel can be 0,5m long.
- ✓ Per request there is possibility to make angle connection between channels.
- ✓ There is possibility to manufacture channels without slope in order to extend the channel sequence.
- ✓ Channels are adapted to have an opening in the bottom for fixing an outlet pipe.

Table as below includes possible size of outlet pipe

Item	Type of channel	Size of outlet
1	SE20.OK	DN110 or DN160

- ✓ Revision and cleaning: on the total length of system and through drain sump
- ✓ Max load class: E600
- ✓ Installation of elements: have to consider min. slope of 0,2%. Recommended slope is min. 0,5%.
- ✓ Roughness factor of polymerconcrete: $n=0,011$
- ✓ Overhaul, maintenance: not required

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- ✓ Method of installation: in accordance with the guidelines of producer
Type M – elements requiring a concrete apron
- ✓ Cleaning frequency of system: every 6 month or in accordance with a schedule of user
- ✓ Corrosion of polymerconcrete elements: noncorrosive, not contain reinforced steel
- ✓ Corrosion of steel: galvanized steel
- ✓ Corrosion of iron elements: superficial, passivation of iron, not require painting
- ✓ Ageing proces: natural

6.2 Hydraulic capacity:

Type of channel	Load class	Cross section area [mm ²]	Wetted perimeter [mm]	Hydraulic capacity for slope in channel bottom 0,0% by longitudinal slope of 0,2% [l/s]	Hydraulic capacity for slope in channel bottom 0,5% by longitudinal slope of 0,0% [l/s]
SE20.OK.05.01	C250	35342,79	526,26	18,7	29,6
SE20.OK.05.01	D400	34151,86	514,26	17,9	28,4
SE20.OK.05.01	E600	32768,22	500,26	17,0	27,0
SE20.OK.05.05	C250	39309,46	566,26	21,3	33,6
SE20.OK.05.05	D400	38118,73	554,27	20,5	32,4
SE20.OK.05.05	E600	36730,33	540,26	19,6	31,0
SE20.OK.05.10	C250	44211,97	616,26	24,4	38,7
SE20.OK.05.10	D400	43081,24	604,26	23,7	37,5
SE20.OK.05.10	E600	41692,84	590,26	22,8	36,1
SE20.OK.05.15	C250	49245,43	666,26	27,8	43,9
SE20.OK.05.15	D400	48054,70	654,26	27,0	42,7
SE20.OK.05.15	E600	46666,30	640,26	26,1	41,2
SE20.OK.05.20	C250	54229,80	716,26	31,1	49,2
SE20.OK.05.20	D400	53039,14	704,26	30,3	47,9
SE20.OK.05.20	E600	51650,74	690,26	29,4	46,5

7. Installation principles:

7.1 Description:

- ✓ Drain channels type SE.OK are equipped with fasteners (concave or crowned) which prevent the horizontal movements of channels.
- ✓ During installation, the channels should have spacers to prevent squeezing and damaging the walls of the channel.
- ✓ Iron gratings COC should be inserted into locks which prevent movement and should be secured with locking bar or catch-lock or double locking (locking bar + catch-lock)). It is possible to use anti-theft bolts.
- ✓ **IMPORTANT** : Channels type SE.OK are channel type „M” – in accordance with the norm PN-EN1433 therefore require an additional support in form of a concrete casing. Installation of channels should be carried out in accordance with the INSTALLATION GUIDELINES FOR DRAIN CHANNELS TYPE SE.OK.

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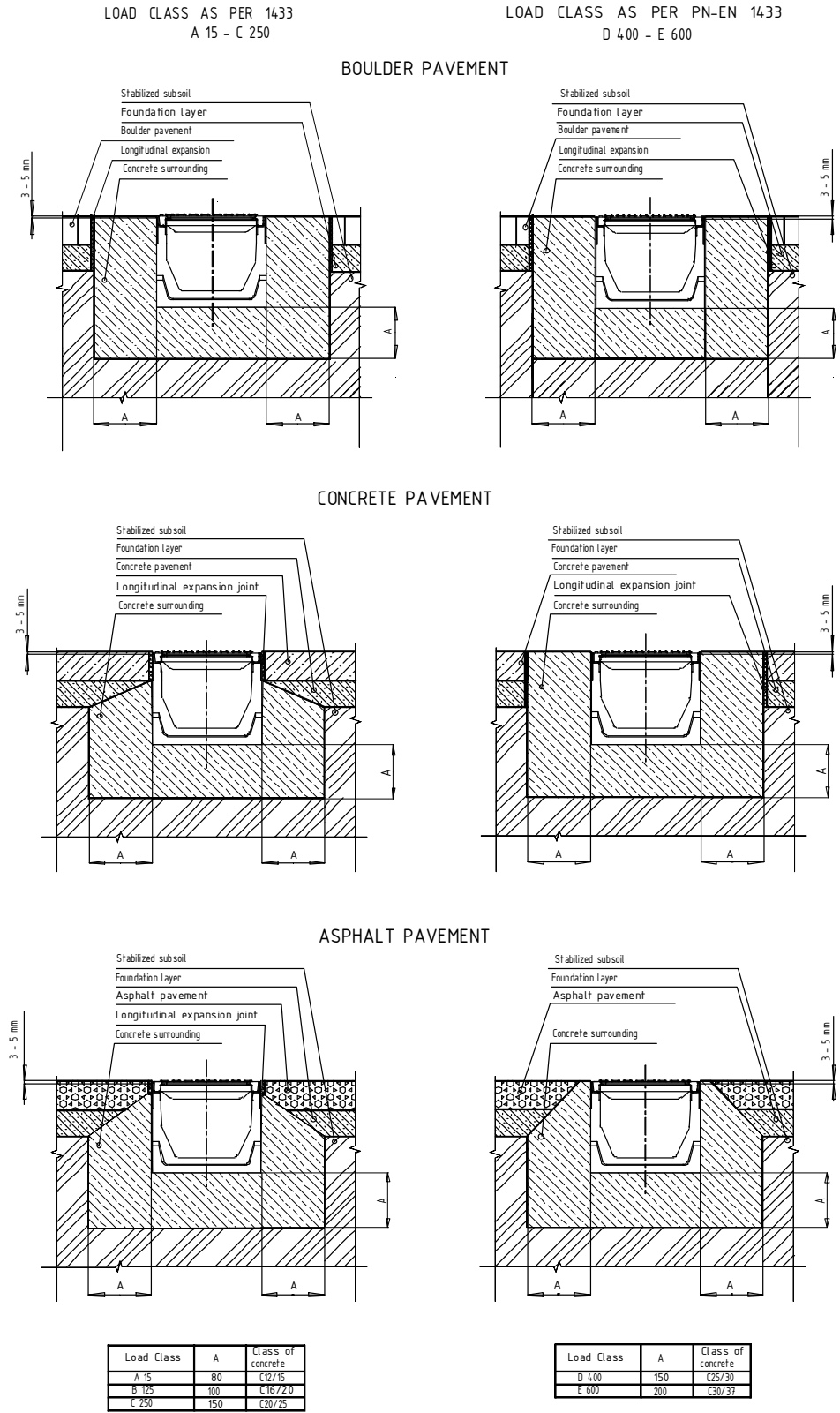
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7.2 Example of installation for channels type SE.OK depending on load class and kind of surface.



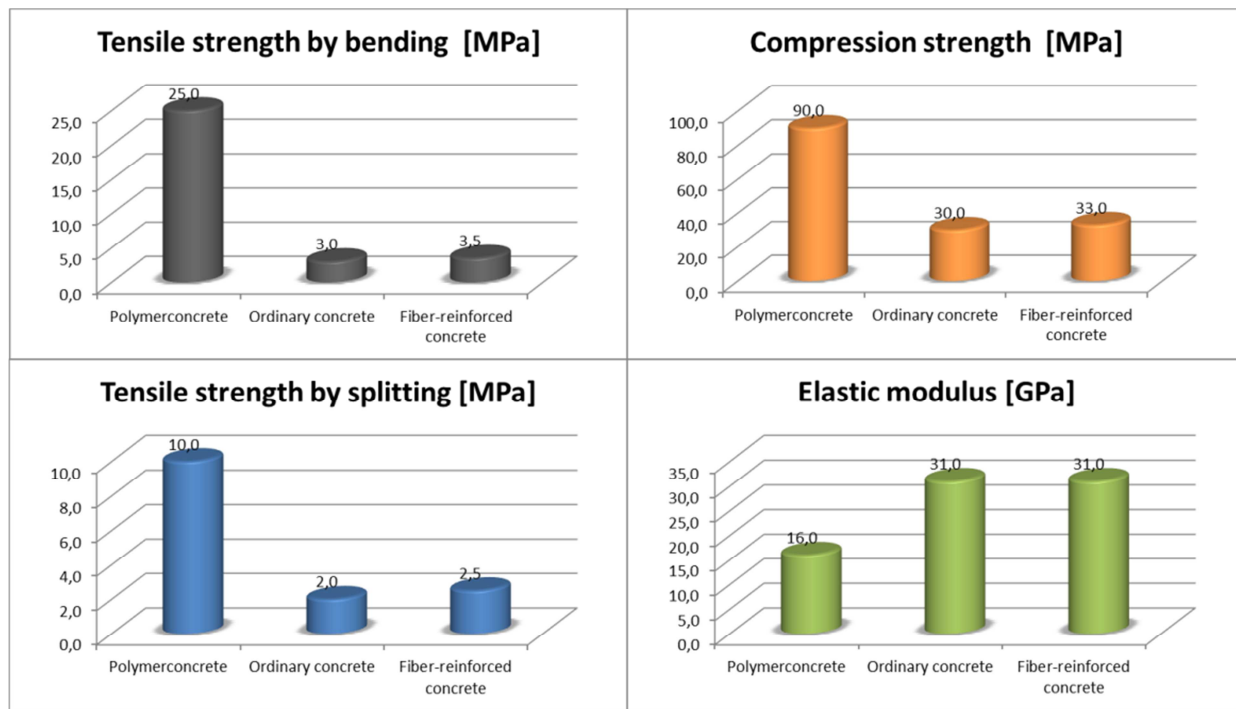
Load Class	A	Class of concrete
A 15	80	C12/15
B 125	100	C16/20
C 250	150	C20/25

Load Class	A	Class of concrete
D 400	150	C25/30
E 600	200	C30/37

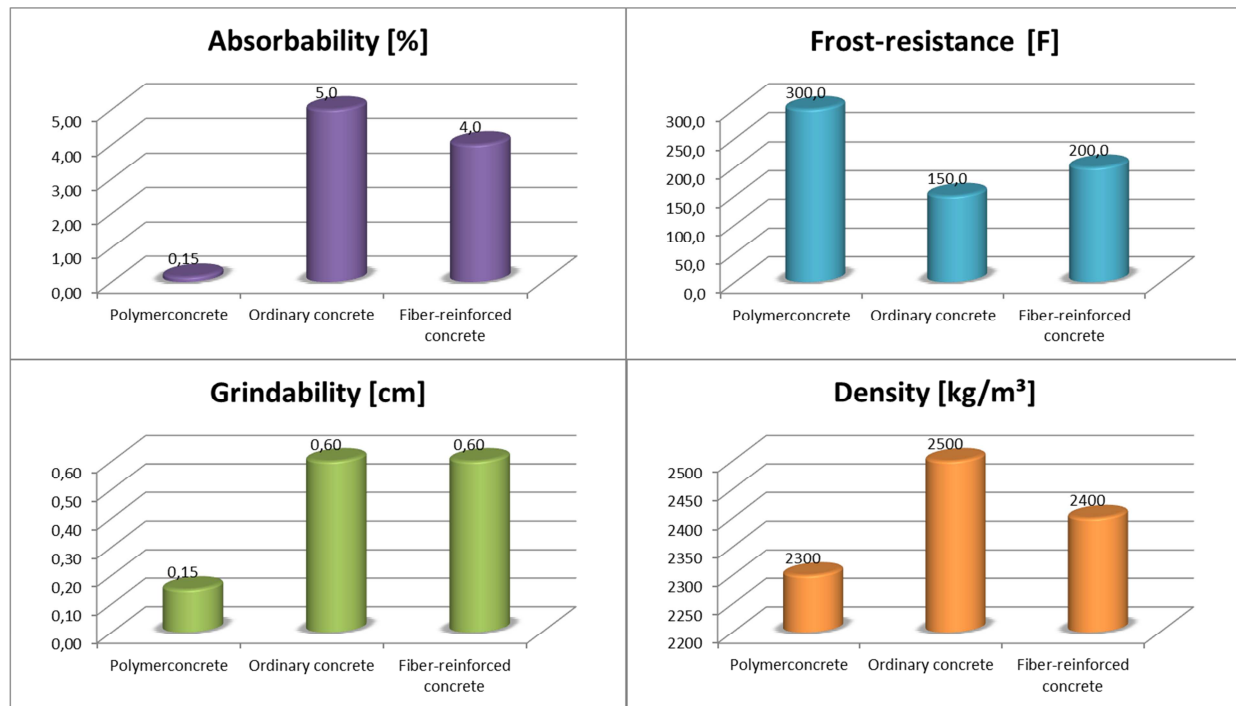
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8. Material

8.1 Resistance:

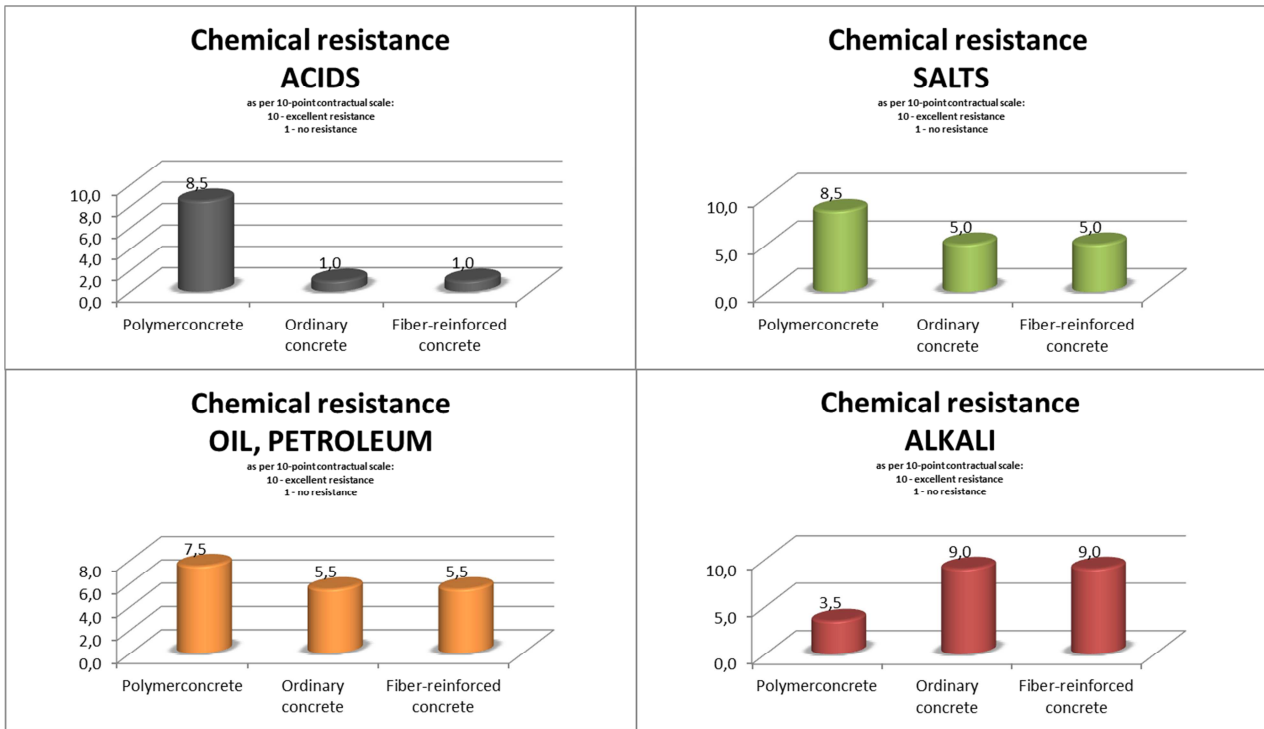


8.2 Durability:



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8.3 Operating resistance:

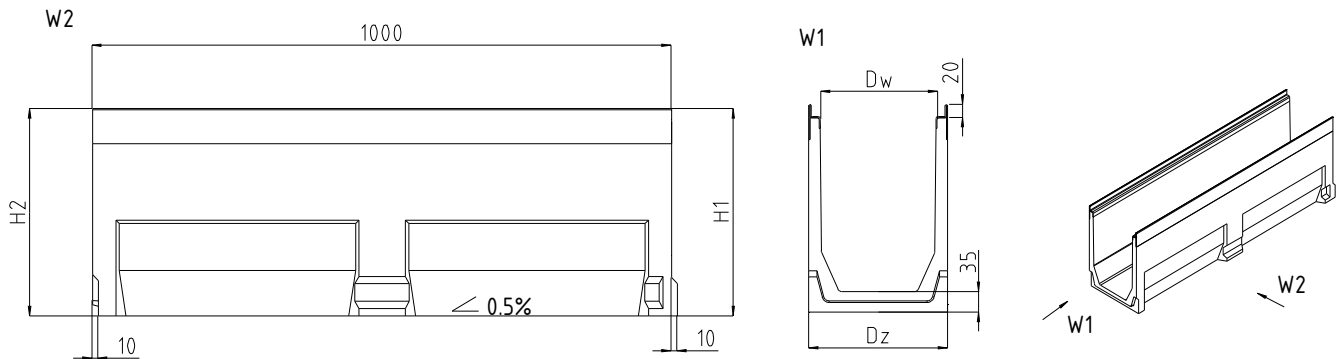


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9. Elements of the system type SE.OK:

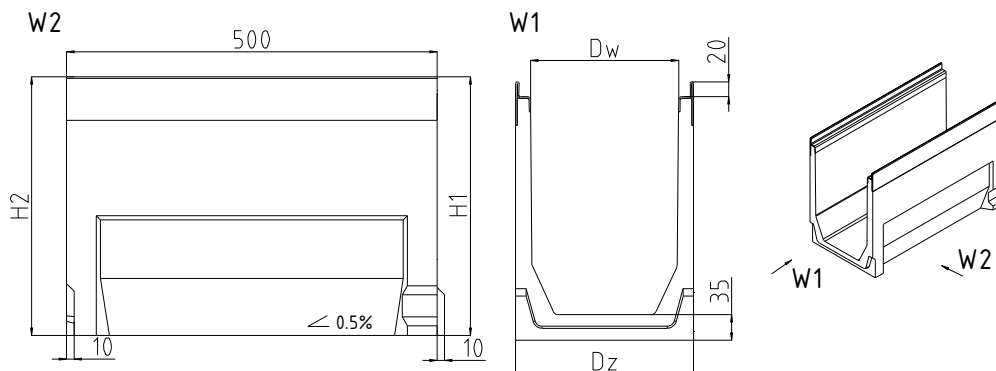
9.1 Channel SE.OK - 1m with steel edge:

a) Slope 0,5%:



9.2 Channel SE.OK - 0,5 m with steel edge:

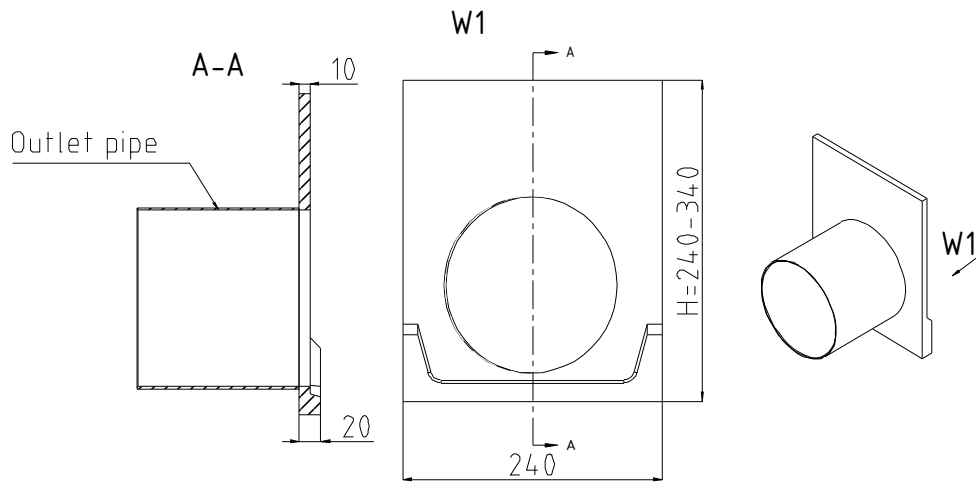
a) slope 0,5%:



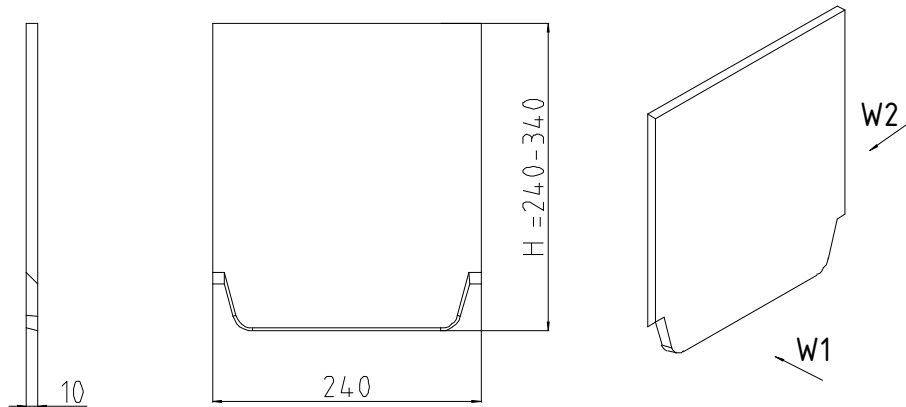
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9.3 End-cap:

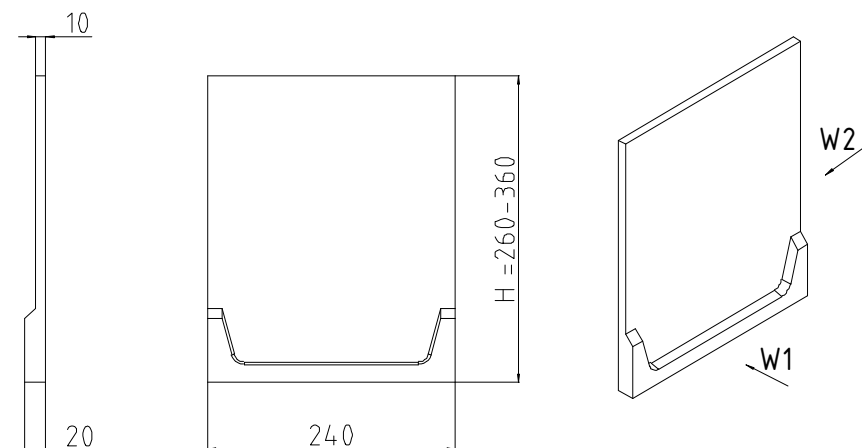
a) Outlet for SE20.OK:



b) Plain sequence-beginning for SE20.OK:



c) Plain sequence-end for SE20.OK:



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10. Parameters of drain channels:

- a) SYTEC channel with protective edges for type SE.OK in load class A15-E600, with 0,5% slope in channel bottom:

INDEX		HEIGHT [MM]				WIDTH [MM]		LENGTH [MM]
Galvanized edge	Iron edge	H1	H2	Hw1	Hw2	Dz	Dw	L
SE20.OK.05.01	SE20.OK.05.01U	255	260	220	225	240	200	1000
SE20.OK.05.02	SE20.OK.05.02U	260	265	225	230	240	200	1000
SE20.OK.05.03	SE20.OK.05.03U	265	270	230	235	240	200	1000
SE20.OK.05.04	SE20.OK.05.04U	270	275	235	240	240	200	1000
SE20.OK.05.05	SE20.OK.05.05U	275	280	240	245	240	200	1000
SE20.OK.05.06	SE20.OK.05.06U	280	285	245	250	240	200	1000
SE20.OK.05.07	SE20.OK.05.07U	285	290	250	255	240	200	1000
SE20.OK.05.08	SE20.OK.05.08U	290	295	255	260	240	200	1000
SE20.OK.05.09	SE20.OK.05.09U	295	300	260	265	240	200	1000
SE20.OK.05.10	SE20.OK.05.10U	300	305	265	270	240	200	1000
SE20.OK.05.11	SE20.OK.05.11U	305	310	270	275	240	200	1000
SE20.OK.05.12	SE20.OK.05.12U	310	315	275	280	240	200	1000
SE20.OK.05.13	SE20.OK.05.13U	315	320	280	285	240	200	1000
SE20.OK.05.14	SE20.OK.05.14U	320	325	285	290	240	200	1000
SE20.OK.05.15	SE20.OK.05.15U	325	330	290	295	240	200	1000
SE20.OK.05.16	SE20.OK.05.16U	330	335	295	300	240	200	1000
SE20.OK.05.17	SE20.OK.05.17U	335	340	300	305	240	200	1000
SE20.OK.05.18	SE20.OK.05.18U	340	345	305	310	240	200	1000
SE20.OK.05.19	SE20.OK.05.19U	345	350	310	315	240	200	1000
SE20.OK.05.20	SE20.OK.05.20U	350	355	315	320	240	200	1000

- b) SYTEC grating COC for channel type SE.OK:

INDEX	MATERIAL OF GRATING	KIND OF GRATING	FASTENING OF GRATING	LOAD CLASS	LENGTH L [mm]	WATER INLET AREA [cm ² /szt]
COC20.02.ZW	Iron	Slotted	Locking-bar	C250	500	537
COC20.02.SW ¹	Iron	Slotted	Catch-lock	C250	500	537
COC20.02.UW ¹	Iron	Slotted	Double (Catch-lock + Locking-bar)	C250	500	537
COC20.03.ZW	Iron	Slotted	Locking-bar	D400	500	537
COC20.03.SW ¹	Iron	Slotted	Catch-lock	D400	500	537
COC20.03.UW ¹	Iron	Slotted	Double (Catch-lock + Locking-bar)	D400	500	537
COC20.04.ZW	Iron	Slotted	Locking-bar	E600	500	534
COC20.04.SW ¹	Iron	Slotted	Catch-lock	E600	500	512
COC20.04.UW ¹	Iron	Slotted	Double (Catch-lock + Locking-bar)	E600	500	534

¹only in channel with iron edge

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11. SYTEC drain sump of polymerconcrete, with galvanized basket and iron grating COC:

INDEX	LOAD CLASS	FASTENING OF GRATING	OUTLET	HEIGHT H _z [mm]	WIDTH D _z [mm]	WIDTH D _w [mm]	LENGTH L [mm]
SE20.OK.SB2.CK*	C250	Locking-bar	Possibility for outlet ϕ 110, ϕ 160 or ϕ 200 and fixing a pipe	780	254	200	500
SE20.OK.SB2.DK*	D400	Locking-bar		780	254	200	500
SE20.OK.SB2.EK*	E600	Locking-bar		780	254	200	500
SE20.OK.SB3.CK*	C250	Locking-bar		1140	254	200	500
SE20.OK.SB3.DK*	D400	Locking-bar		1140	254	200	500
SE20.OK.SB3.EK*	E600	Locking-bar		1140	254	200	500
SE20.OK.SB2.Z.CK	C250	Locking-bar	Possibility for outlet ϕ 110, ϕ 160 or ϕ 200 and fixing a pipe	780	254	200	500
SE20.OK.SB2.S.CK		Catch-lock		780	254	200	500
SE20.OK.SB2.U.CK		Double		780	254	200	500
SE20.OK.SB3.Z.CK		Locking-bar		1140	254	200	500
SE20.OK.SB3.S.CK		Catch-lock		1140	254	200	500
SE20.OK.SB3.U.CK		Double		1140	254	200	500
SE20.OK.SB2.Z.DK	D400	Locking-bar	Possibility for outlet ϕ 110, ϕ 160 or ϕ 200 and fixing a pipe	780	254	200	500
SE20.OK.SB2.S.DK		Catch-lock		780	254	200	500
SE20.OK.SB2.U.DK		Double		780	254	200	500
SE20.OK.SB3.Z.DK		Locking-bar		1140	254	200	500
SE20.OK.SB3.S.DK		Catch-lock		1140	254	200	500
SE20.OK.SB3.U.DK		Double		1140	254	200	500
SE20.OK.SB2.Z.EK	E600	Locking-bar	Possibility for outlet ϕ 110, ϕ 160 or ϕ 200 and fixing a pipe króćca	780	254	200	500
SE20.OK.SB2.S.EK		Catch-lock		780	254	200	500
SE20.OK.SB2.U.EK		Double		780	254	200	500
SE20.OK.SB3.Z.EK		Locking-bar		1140	254	200	500
SE20.OK.SB3.S.EK		Catch-lock		1140	254	200	500
SE20.OK.SB3.U.EK		Double		1140	254	200	500
SE/CE20.SB.P	Intermediate part			360	254	200	500

* only in channel with steel edge

12. Accessories for channels type SE.OK:

a) SYTEC end-caps for channels with slope:

INDEX	TYPE	FOR CHANNELS TYPE	WEIGHT [kg]
SE20.OK.E1	Plain sequence-beginning	SE20.OK.05.01 - SE20.OK.05.20 SE20.OK.05.01U - SE20.OK.05.20U	1,85
SE20.OK.E2	Plain sequence-end	SE20.OK.05.01 - SE20.OK.05.20 SE20.OK.05.01U - SE20.OK.05.20U	2,15
SE20.OK.OUE2	Outlet 160PCV	SE20.OK.05.01 - SE20.OK.05.20 SE20.OK.05.01U - SE20.OK.05.20U	2,03

There is possibility for individual solutions.

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