

# Effectively innovative.

Althon slot channels - the solid drainage system!



**Althon slot channels**



**Graspointner**  
Drainage systems

## Althon slot channels — high resilience — high performance!

The Althon slot channel is a highly stable finished part made of reinforced concrete.

### **i** Benefits & advantages.

- Various channel profiles for any usage area
- Channels with or without 0.5 % internal slope
- Element lengths 4000 mm - special lengths on request
- Resilient up to class D 400 kN, E 600 kN or F 900 kN
- Expansion joint possible directly on the channel
- Drainage channels with or without border
- Manufacturer with decades of experience
- Produced and certified as per EN 1433



### Althon slot channels - 3 different slot designs available

interrupted slot  
for even more stability



continuous slot for  
improved drainage performance



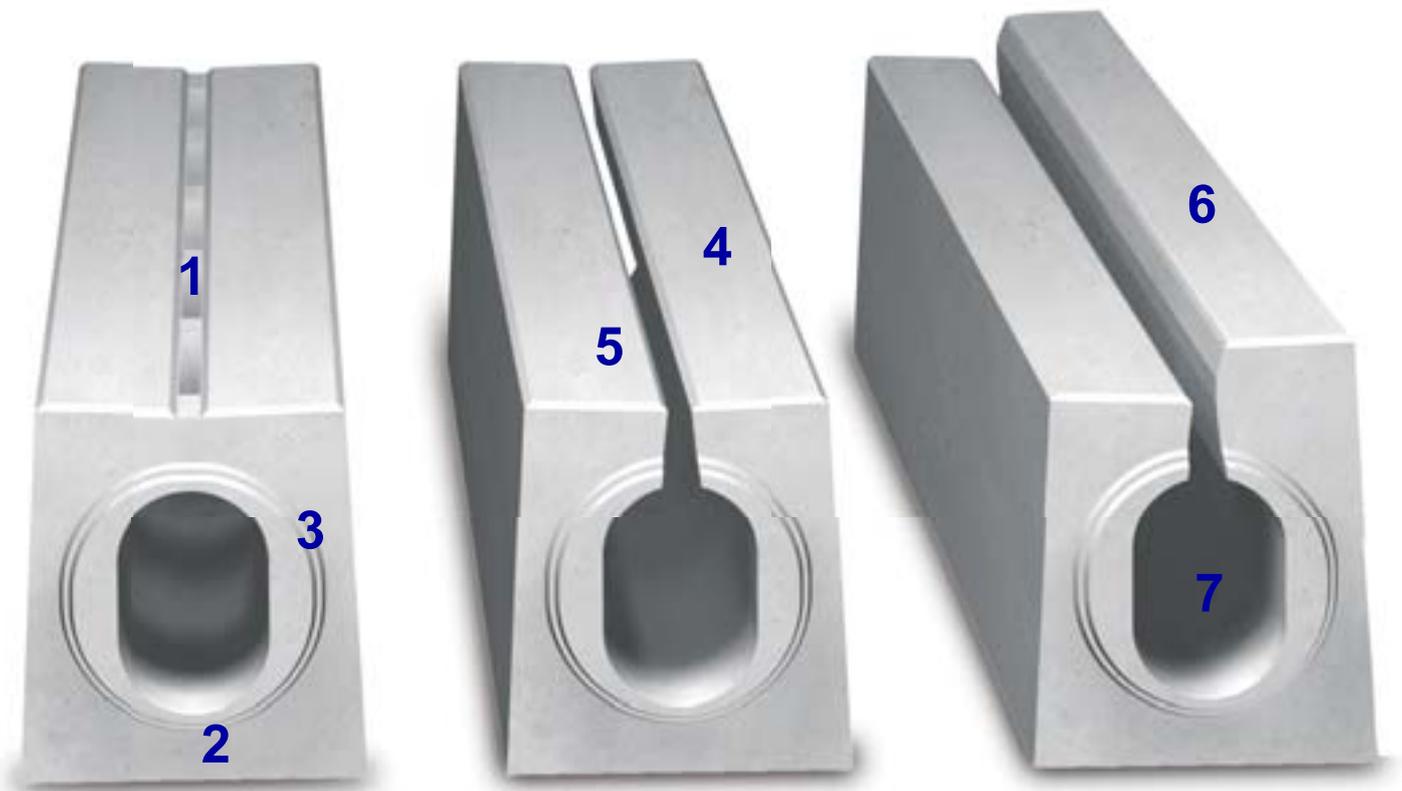
continuous slot  
covered with border



On surfaces on which bikes are used, slot channels with a slot width equal to 30 mm may only be installed so, that the longitudinal axis of the slot lies at right angles, or a maximum of +/- 45°, to the direction of travel.

## Althon slot channels - concrete channels with lots to offer!

- 1 Unique slot geometry - appropriate for all uses - interrupted slot reinforced with stabiliser bars
- 2 Tongue and groove system for each channel element
- 3 Supplied gaskets have to be installed on site and ensure a tight connection in the channel joint
- 4 Highly resilient due to the high concrete strength ( $\geq C40/50$ ) and the steel reinforcement
- 5 Channels with or without surface slope available. Optimum water absorption thanks to 3 % slope to the slot
- 6 Channels with a border can be used for drainage along pavements, in tunnels and when there are rising edges
- 7 Channels can be supplied with or without inner slope. On surfaces without sufficient gradient, reinforced concrete slot channels can be supplied with a pre-installed inner slope of 0.5 %



### Areas of use.

Slot channels are an important part of traffic engineering. They can be used for efficient surface drainage of main traffic routes in road building, logistic centres, container terminals, industrial/port facilities and aviation areas. They are used very successfully on motorways in the hard shoulder or central reservation area, and are particularly used for tunnel drainage.



## Althon slot channel - profile T-1

The „smallest“ in the range.

Quick and effective drainage is guaranteed due to the special shape of the inner profile. The profile T-1 slot channel is mainly used in areas where a low installation height is required. This channel type can also be installed in public traffic areas, e.g. with pedestrian zones where bikes are used, without restriction.

### Benefits & advantages.

- Element length 4 m - without internal slope
- Inner diameter: 18 x 13 cm
- with interrupted slot - slot width 18 mm
- Drainage cross section: 187 cm<sup>2</sup>
- 3 % surface slope to the slot
- resilient up to class D 400 kN
- Complete accessories: sump unit, cleaning element, front- and end caps

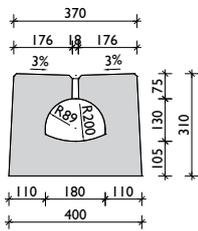


profile T-1

> Althon slot channel, profile T-1, DN 18x13  
interrupted slot, inner diameter 18 x 13 cm, without slope, class D 400 kN

item no.	Althon slot channel - profile T-1 - class D 400 kN	length	width	height	weight
50091000	Althon slot channel, profile T-1, type T18/13, without slope	4000	370/400	310	995 kg
50091020	Cleaning element (tongue-groove) incl. ductile iron cover	1000	370/400	310	232 kg
50091060	Cleaning element (tongue-tongue) incl. ductile iron cover	1000	370/400	310	240 kg
50091021	Sump unit (tongue-groove) with outlet incl. ductile iron cover	1000	370/400	310	233 kg
50091061	Sump unit (groove-groove) with outlet incl. ductile iron cover	1000	370/400	310	225 kg
50000010	Shaft bottom for sump unit with outlet DN 150 incl. Forsheda sealing	550	550	300	70 kg
50091022	Fire protection element (tongue-groove)	1000	370/410	600	511 kg
50091062	Front cap (tongue)	120	370/400	310	39 kg
50091063	End cap (groove)	120	370/400	310	27 kg
50000020	Lifting grab for profile T-1, consisting of 2 items				2,5 kg

*Adjusting piece on request*





## Althon slot channel - profiles I-1, I-3 and I-5

The „most versatile“ in the range.

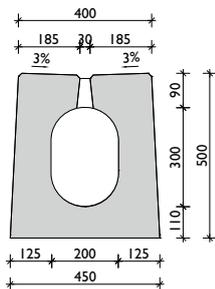
These slot channels are available in the most wide-ranging designs, and therefore are the most frequently used. Available with or without inner slope, with continuous, interrupted or covered slot, with or without border, and in the most wide-ranging diameters. These channel profiles are mainly used in motorway construction (hard shoulder/central reservation and tunnels), container terminals, industrial and port facilities and aviation areas.

### Benefits & advantages.

- Element length 4 m - with or without 0.5% internal slope
- Inner diameter: 20 x 30 cm (on request: 30/30 - 28/28 - 26/26 - 24/24 - 22/22 - 20/20)
- can be supplied with interrupted, continuous or covered slot - slot width 30 mm
- Drainage cross section: 514 cm<sup>2</sup>
- 3 % surface slope to the slot
- with border H = 12 cm in the range
- resilient up to class D 400 kN, E 600 kN or F 900 kN — (channels with border only class D)
- Complete accessories: sump unit, cleaning element, fire protection element, exchange element, front- and end caps



profile I-1



## > Althon slot channel, profile I-1, DN 20x30 interrupted slot, inner diameter 20 x 30 cm, with or without slope - class E 600 kN

item no.	Althon slot channel - profile I-1 - class E 600 kN	length	width	height	weight
50011000	Althon slot channel, profile I-1, type T30/30, without slope	4000	400/450	500	1.510 kg
50011001	Althon slot channel, profile I-1, type G28/30, with 0,5 % slope	4000	400/450	500	1.529 kg
50011002	Althon slot channel, profile I-1, type G26/28, with 0,5 % slope	4000	400/450	500	1.568 kg
50011003	Althon slot channel, profile I-1, type G24/26, with 0,5 % slope	4000	400/450	500	1.606 kg
50011004	Althon slot channel, profile I-1, type G22/24, with 0,5 % slope	4000	400/450	500	1.644 kg
50011005	Althon slot channel, profile I-1, type G20/22, with 0,5 % slope	4000	400/450	500	1.683 kg
50011010	Althon slot channel, profile I-1, type T28/28, without slope	4000	400/450	500	1.548 kg
50011011	Althon slot channel, profile I-1, type T26/26, without slope	4000	400/450	500	1.587 kg
50011012	Althon slot channel, profile I-1, type T24/24, without slope	4000	400/450	500	1.625 kg
50011013	Althon slot channel, profile I-1, type T22/22, without slope	4000	400/450	500	1.664 kg
50011014	Althon slot channel, profile I-1, type T20/20, without slope	4000	400/450	500	1.702 kg
item no.	Accessories	length	width	height	weight
50011020	Cleaning element (tongue-groove), type T30/30 incl. plastic cover	1000	400/450	500	394 kg
50011080	Cleaning element (tongue-groove), type T30/30 incl. ductile iron cover	1000	400/450	500	436 kg
50011060	Cleaning element (tongue-tongue), type T20/20 incl. plastic cover	1000	400/450	500	442 kg
50011082	Cleaning element (tongue-tongue), type T20/20 incl. ductile iron cover	1000	400/450	500	484 kg
50011021	Sump unit (tongue-groove), type T30/30 with outlet incl. plastic cover	1000	400/450	500	347 kg
50011081	Sump unit (tongue-groove), type T30/30 with outlet, ductile iron cover	1000	400/450	500	389 kg
50011061	Sump unit (groove-groove), type T30/30 with outlet incl. plastic cover	1000	400/450	500	338 kg
50011083	Sump unit (groove-groove), type T30/30 with outlet, ductile iron cover	1000	400/450	500	380 kg
50000011	Shaft bottom for sump unit with outlet DN 200 incl. Forsheda sealing	550	550	300	70 kg
50011022	Fire protection element (tongue-groove)	2000	400/500	950	1.540 kg
50011071	Exchange element, 5-parts, different lengths possible	2100-4000	400/450	500	1.510 kg
50011062	Front cap (tongue)	120	400/450	500	76 kg
50011063	End cap (groove)	120	400/450	500	51 kg
50000021	Lifting grab for profile I-1, consisting of 2 items				4 kg

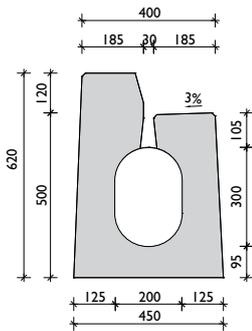
## > Althon slot channel, profile I-1, DN 20x30 interrupted slot, inner diameter 20 x 30 cm, with or without slope - class F 900 kN

item no.	Althon slot channel - profile I-1 - class F 900 kN	length	width	height	weight
50011100	Althon slot channel, profile I-1, type T30/30, without slope	4000	400/450	500	1.510 kg
50011101	Althon slot channel, profile I-1, type G28/30, with 0,5 % slope	4000	400/450	500	1.529 kg
50011102	Althon slot channel, profile I-1, type G26/28, with 0,5 % slope	4000	400/450	500	1.568 kg
50011103	Althon slot channel, profile I-1, type G24/26, with 0,5 % slope	4000	400/450	500	1.606 kg
50011104	Althon slot channel, profile I-1, type G22/24, with 0,5 % slope	4000	400/450	500	1.644 kg
50011105	Althon slot channel, profile I-1, type G20/22, with 0,5 % slope	4000	400/450	500	1.683 kg
50011110	Althon slot channel, profile I-1, type T28/28, without slope	4000	400/450	500	1.548 kg
50011111	Althon slot channel, profile I-1, type T26/26, without slope	4000	400/450	500	1.587 kg
50011112	Althon slot channel, profile I-1, type T24/24, without slope	4000	400/450	500	1.625 kg
50011113	Althon slot channel, profile I-1, type T22/22, without slope	4000	400/450	500	1.664 kg
50011114	Althon slot channel, profile I-1, type T20/20, without slope	4000	400/450	500	1.702 kg
item no.	Accessories	length	width	height	weight
50011120	Cleaning element (tongue-groove), type T30/30 incl. ductile iron cover	1000	400/450	500	394 kg
50011160	Cleaning element (tongue-tongue), type T20/20 incl. ductile iron cover	1000	400/450	500	442 kg
50011121	Sump unit (tongue-groove), type T30/30 with outlet, ductile iron cover	1000	400/450	500	347 kg
50011161	Sump unit (groove-groove), type T30/30 with outlet, ductile iron cover	1000	400/450	500	338 kg
50000011	Shaft bottom for sump unit with outlet DN 200 incl. Forsheda sealing	550	550	300	70 kg
50011171	Exchange element, 5-parts, different lengths possible	2100-4000	400/450	500	1.510 kg
50011162	Front cap (tongue)	120	400/450	500	76 kg
50011163	End cap (groove)	120	400/450	500	51 kg
50000021	Lifting grab for profile I-1, consisting of 2 items				4 kg

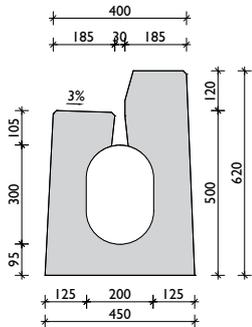
Adjusting piece and curved elements on request



profile I-3  
border left



profile I-3  
border right



## > Althon slot channel, profile I-3, DN 20x30

continuous slot, border 12 cm left, DN 20 x 30 cm, with or without slope, class D 400 kN

item no.	Althon slot channel - profile I-3 - border 12 cm left	length	width	height	weight
50013040	Althon slot channel, profile I-3, type T30/30, without slope	4000	400/450	500/620	1.704 kg
50013041	Althon slot channel, profile I-3, type G28/30, with 0,5 % slope	4000	400/450	500/620	1.723 kg
50013042	Althon slot channel, profile I-3, type G26/28, with 0,5 % slope	4000	400/450	500/620	1.757 kg
50013043	Althon slot channel, profile I-3, type G24/26, with 0,5 % slope	4000	400/450	500/620	1.792 kg
50013044	Althon slot channel, profile I-3, type G22/24, with 0,5 % slope	4000	400/450	500/620	1.826 kg
50013045	Althon slot channel, profile I-3, type G20/22, with 0,5 % slope	4000	400/450	500/620	1.860 kg
50013050	Althon slot channel, profile I-3, type T28/28, without slope	4000	400/450	500/620	1.741 kg
50013051	Althon slot channel, profile I-3, type T26/26, without slope	4000	400/450	500/620	1.774 kg
50013052	Althon slot channel, profile I-3, type T24/24, without slope	4000	400/450	500/620	1.809 kg
50013053	Althon slot channel, profile I-3, type T22/22, without slope	4000	400/450	500/620	1.843 kg
50013054	Althon slot channel, profile I-3, type T20/20, without slope	4000	400/450	500/620	1.877 kg
item no.	Accessories	length	width	height	weight
50013060	Cleaning element (tongue-groove), type T30/30 incl. ductile iron cover	1000	400/450	500/620	462 kg
50013062	Cleaning element (tongue-groove), type T30/30 incl. plastic cover	1000	400/450	500/620	420 kg
50013027	Cleaning element (tongue-tongue), type T20/20 incl. ductile iron cover	1000	400/450	500/620	468 kg
50013029	Cleaning element (tongue-tongue), type T20/20 incl. plastic cover	1000	400/450	500/620	468 kg
50013063	Sump unit (tongue-groove), type T30/30 with outlet, ductile iron cover	1000	400/450	500/620	415 kg
50013065	Sump unit (tongue-groove), type T30/30 with outlet incl. plastic cover	1000	400/450	500/620	373 kg
50013030	Sump unit (groove-groove), type T30/30 with outlet, ductile iron cover	1000	400/450	500/620	364 kg
50013032	Sump unit (groove-groove), type T30/30 with outlet incl. plastic cover	1000	400/450	500/620	364 kg
50000011	Shaft bottom for sump unit with outlet DN 200 incl. Forsheda sealing	550	550	300	70 kg
50013066	Fire protection element (tongue-groove)	2000	400/500	1.070	1.739 kg
50013074	Front cap (tongue)	120	400/450	620	76 kg
50013075	End cap (groove)	120	400/450	620	51 kg
50000022	Lifting grab for profile I-3, consisting of 2 items				4,4 kg

## > Althon slot channel, profile I-3, DN 20x30

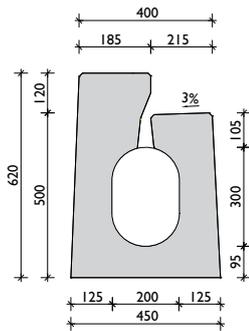
continuous slot, border 12 cm right, DN 20 x 30 cm, with or without slope, class D 400 kN

item no.	Althon slot channel - profile I-3 - border 12 cm right	length	width	height	weight
50013000	Althon slot channel, profile I-3, type T30/30, without slope	4000	400/450	500/620	1.704 kg
50013001	Althon slot channel, profile I-3, type G28/30, with 0,5 % slope	4000	400/450	500/620	1.723 kg
50013002	Althon slot channel, profile I-3, type G26/28, with 0,5 % slope	4000	400/450	500/620	1.757 kg
50013003	Althon slot channel, profile I-3, type G24/26, with 0,5 % slope	4000	400/450	500/620	1.792 kg
50013004	Althon slot channel, profile I-3, type G22/24, with 0,5 % slope	4000	400/450	500/620	1.826 kg
50013005	Althon slot channel, profile I-3, type G20/22, with 0,5 % slope	4000	400/450	500/620	1.860 kg
50013010	Althon slot channel, profile I-3, type T28/28, without slope	4000	400/450	500/620	1.741 kg
50013011	Althon slot channel, profile I-3, type T26/26, without slope	4000	400/450	500/620	1.774 kg
50013012	Althon slot channel, profile I-3, type T24/24, without slope	4000	400/450	500/620	1.809 kg
50013013	Althon slot channel, profile I-3, type T22/22, without slope	4000	400/450	500/620	1.843 kg
50013014	Althon slot channel, profile I-3, type T20/20, without slope	4000	400/450	500/620	1.877 kg
item no.	Accessories	length	width	height	weight
50013020	Cleaning element (tongue-groove), type T30/30 incl. ductile iron cover	1000	400/450	500/620	462 kg
50013022	Cleaning element (tongue-groove), type T30/30 incl. plastic cover	1000	400/450	500/620	420 kg
50013027	Cleaning element (tongue-tongue), type T20/20 incl. ductile iron cover	1000	400/450	500/620	468 kg
50013029	Cleaning element (tongue-tongue), type T20/20 incl. plastic cover	1000	400/450	500/620	468 kg
50013023	Sump unit (tongue-groove), type T30/30 with outlet, ductile iron cover	1000	400/450	500/620	415 kg
50013025	Sump unit (tongue-groove), type T30/30 with outlet incl. plastic cover	1000	400/450	500/620	373 kg
50013030	Sump unit (groove-groove), type T30/30 with outlet, ductile iron cover	1000	400/450	500/620	364 kg
50013032	Sump unit (groove-groove), type T30/30 with outlet incl. plastic cover	1000	400/450	500/620	364 kg
50000011	Shaft bottom for sump unit with outlet DN 200 incl. Forsheda sealing	550	550	300	70 kg
50013026	Fire protection element (tongue-groove)	2000	400/500	1.070	1.739 kg
50013034	Front cap (tongue)	120	400/450	620	76 kg
50013035	End cap (groove)	120	400/450	620	51 kg
50000022	Lifting grab for profile I-3, consisting of 2 items				4,4 kg

Adjusting piece on request



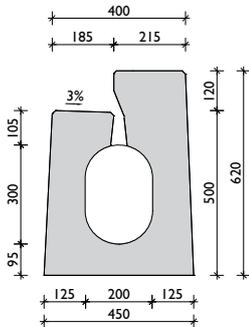
profile I-5  
border left



## > Althon slot channel, profile I-5, DN 20x30 covered/continuous slot, border 12 cm left, DN 20 x 30 cm, with or without slope, class D 400 kN

item no.	Althon slot channel - profile I-5 - border 12 cm left	length	width	height	weight
50015040	Althon slot channel, profile I-5, type T30/30, without slope	4000	400/450	500/620	1.741 kg
50015041	Althon slot channel, profile I-5, type G28/30, with 0,5 % slope	4000	400/450	500/620	1.758 kg
50015042	Althon slot channel, profile I-5, type G26/28, with 0,5 % slope	4000	400/450	500/620	1.792 kg
50015043	Althon slot channel, profile I-5, type G24/26, with 0,5 % slope	4000	400/450	500/620	1.827 kg
50015044	Althon slot channel, profile I-5, type G22/24, with 0,5 % slope	4000	400/450	500/620	1.861 kg
50015045	Althon slot channel, profile I-5, type G20/22, with 0,5 % slope	4000	400/450	500/620	1.895 kg
50015050	Althon slot channel, profile I-5, type T28/28, without slope	4000	400/450	500/620	1.775 kg
50015051	Althon slot channel, profile I-5, type T26/26, without slope	4000	400/450	500/620	1.809 kg
50015052	Althon slot channel, profile I-5, type T24/24, without slope	4000	400/450	500/620	1.844 kg
50015053	Althon slot channel, profile I-5, type T22/22, without slope	4000	400/450	500/620	1.878 kg
50015054	Althon slot channel, profile I-5, type T20/20, without slope	4000	400/450	500/620	1.912 kg
item no.	Accessories	length	width	height	weight
50015060	Cleaning element (tongue-groove), type T30/30 incl. ductile iron cover	1000	400/450	500/620	467 kg
50015062	Cleaning element (tongue-groove), type T30/30 incl. plastic cover	1000	400/450	500/620	425 kg
50015027	Cleaning element (tongue-tongue), type T20/20 incl. ductile iron cover	1000	400/450	500/620	473 kg
50015029	Cleaning element (tongue-tongue), type T20/20 incl. plastic cover	1000	400/450	500/620	473 kg
50015063	Sump unit (tongue-groove), type T30/30 with outlet, ductile iron cover	1000	400/450	500/620	420 kg
50015065	Sump unit (tongue-groove), type T30/30 with outlet incl. plastic cover	1000	400/450	500/620	378 kg
50015030	Sump unit (groove-groove), type T30/30 with outlet, ductile iron cover	1000	400/450	500/620	369 kg
50015032	Sump unit (groove-groove), type T30/30 with outlet incl. plastic cover	1000	400/450	500/620	369 kg
50000011	Shaft bottom for sump unit with outlet DN 200 incl. Forsheda sealing	550	550	300	70 kg
50015074	Front cap (tongue)	120	400/450	620	76 kg
50015075	End cap (groove)	120	400/450	620	51 kg
50000022	Lifting grab for profile I-5, consisting of 2 items				4,4 kg

profile I-5  
border right



## > Althon slot channel, profile I-5, DN 20x30 covered/continuous slot, border 12 cm right, DN 20 x 30 cm, with or without slope, class D 400 kN

item no.	Althon slot channel - profile I-5 - border 12 cm right	length	width	height	weight
50015000	Althon slot channel, profile I-5, type T30/30, without slope	4000	400/450	500/620	1.741 kg
50015001	Althon slot channel, profile I-5, type G28/30, with 0,5 % slope	4000	400/450	500/620	1.758 kg
50015002	Althon slot channel, profile I-5, type G26/28, with 0,5 % slope	4000	400/450	500/620	1.792 kg
50015003	Althon slot channel, profile I-5, type G24/26, with 0,5 % slope	4000	400/450	500/620	1.827 kg
50015004	Althon slot channel, profile I-5, type G22/24, with 0,5 % slope	4000	400/450	500/620	1.861 kg
50015005	Althon slot channel, profile I-5, type G20/22, with 0,5 % slope	4000	400/450	500/620	1.895 kg
50015010	Althon slot channel, profile I-5, type T28/28, without slope	4000	400/450	500/620	1.775 kg
50015011	Althon slot channel, profile I-5, type T26/26, without slope	4000	400/450	500/620	1.809 kg
50015012	Althon slot channel, profile I-5, type T24/24, without slope	4000	400/450	500/620	1.844 kg
50015013	Althon slot channel, profile I-5, type T22/22, without slope	4000	400/450	500/620	1.878 kg
50015014	Althon slot channel, profile I-5, type T20/20, without slope	4000	400/450	500/620	1.912 kg
item no.	Accessories	length	width	height	weight
50015020	Cleaning element (tongue-groove), type T30/30 incl. ductile iron cover	1000	400/450	500/620	467 kg
50015022	Cleaning element (tongue-groove), type T30/30 incl. plastic cover	1000	400/450	500/620	425 kg
50015027	Cleaning element (tongue-tongue), type T20/20 incl. ductile iron cover	1000	400/450	500/620	515 kg
50015029	Cleaning element (tongue-tongue), type T20/20 incl. plastic cover	1000	400/450	500/620	473 kg
50015023	Sump unit (tongue-groove), type T30/30 with outlet, ductile iron cover	1000	400/450	500/620	420 kg
50015025	Sump unit (tongue-groove), type T30/30 with outlet incl. plastic cover	1000	400/450	500/620	378 kg
50015030	Sump unit (groove-groove), type T30/30 with outlet, ductile iron cover	1000	400/450	500/620	411 kg
50015032	Sump unit (groove-groove), type T30/30 with outlet incl. plastic cover	1000	400/450	500/620	369 kg
50000011	Shaft bottom for sump unit with outlet DN 200 incl. Forsheda sealing	550	550	300	70 kg
50015034	Front cap (tongue)	120	400/450	620	76 kg
50015035	End cap (groove)	120	400/450	620	51 kg
50000022	Lifting grab for profile I-5, consisting of 2 items				4,4 kg

[Adjusting piece on request](#)



## Althon slot channels - profiles II-1 and III-1

The „most powerful“ in the range.

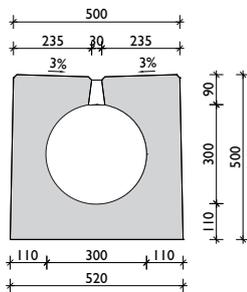
Slot channels with profile II-1 or III-1 have a large drainage cross section and are used in areas with high hydraulic requirements. They ensure controlled surface drainage and are successfully used, mainly in aviation areas, container terminals and industrial or port facilities.

### Benefits & advantages.

- Element length 4 m - without internal slope
- Inner diameter: 30 x 30 or 30 x 40 cm
- with interrupted slot - slot width 30 mm
- Drainage cross section: 706 cm<sup>2</sup> for 30x30 or 1.006 cm<sup>2</sup> for 30x40
- 3 % surface slope to the slot
- resilient up to class D 400 kN or F 900 kN
- Complete accessories: sump unit, cleaning element, front- and end caps



profile II-1



## > Althon slot channel, profile II-1, DN 30x30 interrupted slot, inner diameter 30 x 30 cm, without slope - class D 400 or F 900 kN

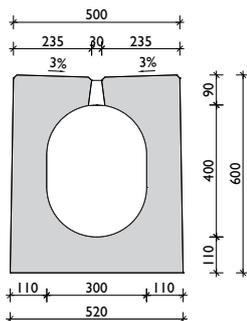
item no.	Althon slot channel - profile II-1 - class D 400 kN	length	width	height	weight
50021000	Althon slot channel, profile II-1, type T30/30, without	4000	500/520	500	1.700 kg
item no.	Accessories	length	width	height	weight
50021020	Cleaning element (tongue-groove) incl. plastic cover	1000	500/520	500	377 kg
50021080	Cleaning element (tongue-groove) incl. ductile iron cover	1000	500/520	500	419 kg
50021060	Cleaning element (tongue-tongue) incl. plastic cover	1000	500/520	500	387 kg
50021082	Cleaning element (tongue-tongue) incl. ductile iron cover	1000	500/520	500	429 kg
50021021	Sump unit (tongue-groove) with outlet incl. plastic cover	1000	500/520	500	347 kg
50021081	Sump unit (tongue-groove) with outlet incl. ductile iron cover	1000	500/520	500	389 kg
50021061	Sump unit (groove-groove) with outlet incl. plastic cover	1000	500/520	500	337 kg
50021083	Sump unit (groove-groove) with outlet incl. ductile iron cover	1000	500/520	500	379 kg
50000011	Shaft bottom for sump unit with outlet DN 200 incl. Forsheda sealing	550	550	300	70 kg
50021062	Front cap (tongue)	120	500/520	500	84 kg
50021063	End cap (groove)	120	500/520	500	57 kg
50000021	Lifting grab for profile II-1, consisting of 2 items				4 kg

item no.	Althon slot channel - profile II-1 - class F 900 kN	length	width	height	weight
50021100	Althon slot channel, profile II-1, type T30/30, without	4000	500/520	500	1.700 kg
item no.	Accessories	length	width	height	weight
50021180	Cleaning element (tongue-groove) incl. ductile iron cover	1000	500/520	500	419 kg
50021182	Cleaning element (tongue-tongue) incl. ductile iron cover	1000	500/520	500	429 kg
50021181	Sump unit (tongue-groove) with outlet incl. ductile iron cover	1000	500/520	500	389 kg
50021183	Sump unit (groove-groove) with outlet incl. ductile iron cover	1000	500/520	500	379 kg
50000011	Shaft bottom for sump unit with outlet DN 200 incl. Forsheda sealing	550	550	300	70 kg
50021162	Front cap (tongue)	120	500/520	500	84 kg
50021163	End cap (groove)	120	500/520	500	57 kg
50000021	Lifting grab for profile II-1, consisting of 2 items				4 kg

[Adjusting piece on request](#)



profile III-1



## > Althon slot channel, profile III-1, DN 30x40 interrupted slot, inner diameter 30 x 40 cm, without slope - class D 400 or F 900 kN

item no.	Althon slot channel - profile III-1 - class D 400 kN	length	width	height	weight
50031000	Althon slot channel, profile III-1, type T30/30, without	4000	500/520	600	1.897 kg
item no.	Accessories	length	width	height	weight
50031020	Cleaning element (tongue-groove) incl. plastic cover	1000	500/520	600	426 kg
50031080	Cleaning element (tongue-groove) incl. ductile iron cover	1000	500/520	600	468 kg
50031060	Cleaning element (tongue-tongue) incl. plastic cover	1000	500/520	600	437 kg
50031082	Cleaning element (tongue-tongue) incl. ductile iron cover	1000	500/520	600	479 kg
50031021	Sump unit (tongue-groove) with outlet incl. plastic cover	1000	500/520	600	396 kg
50031081	Sump unit (tongue-groove) with outlet incl. ductile iron cover	1000	500/520	600	438 kg
50031061	Sump unit (groove-groove) with outlet incl. plastic cover	1000	500/520	600	385 kg
50031083	Sump unit (groove-groove) with outlet incl. ductile iron cover	1000	500/520	600	427 kg
50000011	Shaft bottom for sump unit with outlet DN 200 incl. Forsheda sealing	550	550	300	70 kg
50031062	Front cap (tongue)	120	500/520	600	102 kg
50023063	End cap (groove)	120	500/520	600	67 kg
50000021	Lifting grab for profile III-1, consisting of 2 items				4 kg

item no.	Althon slot channel - profile III-1 - class F 900 kN	length	width	height	weight
50031100	Althon slot channel, profile III-1, type T30/30, without	4000	500/520	600	1.897 kg
item no.	Accessories	length	width	height	weight
50031180	Cleaning element (tongue-groove) incl. ductile iron cover	1000	500/520	600	468 kg
50031182	Cleaning element (tongue-tongue) incl. ductile iron cover	1000	500/520	600	479 kg
50031181	Sump unit (tongue-groove) with outlet incl. ductile iron cover	1000	500/520	600	438 kg
50031183	Sump unit (groove-groove) with outlet incl. ductile iron cover	1000	500/520	600	427 kg
50000011	Shaft bottom for sump unit with outlet DN 200 incl. Forsheda sealing	550	550	300	70 kg
50031162	Front cap (tongue)	120	500/520	600	102 kg
50031163	End cap (groove)	120	500/520	600	67 kg
50000021	Lifting grab for profile III-1, consisting of 2 items				4 kg

[Adjusting piece on request](#)

# Installation guidelines for correct installation.

## General installation guidelines:

The following installation guidelines and installation examples are intended for standard applications. The load class and the installation location must be adapted to the local conditions by the planners. The generally recognised technical rules and regulations must be observed.

The authoritative regulations are:

[EN1433 - Drainage channels for vehicular and pedestrian areas](#)

EN 1433 includes an exception for the slot widths of slot channels which are installed in areas where the use of bikes is not permitted. On surfaces on which bikes are used, slot channels with a slot width equal to 30 mm may only be installed so that the longitudinal axis of the slot lies at right angles, or a maximum of +/- 45°, to the direction of travel.

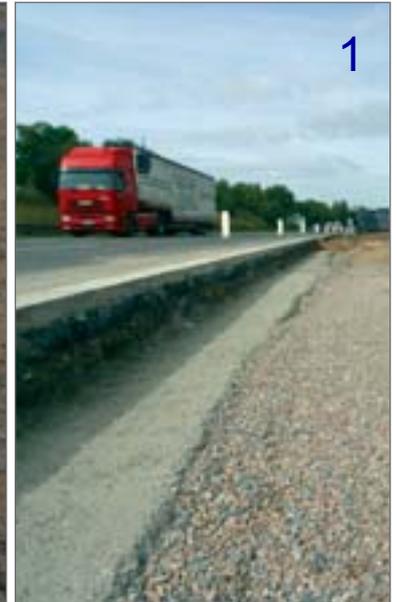
## Foundation:

I

The movement of the Althon slot channels is carried out as follows depending on the condition of the foundation and the load class:

**Cl. D 400 kN, type I - no load-bearing foundation required.** The laying is carried out on a mechanically compressed base layer (=frost protection layer) and a blinding/levelling layer made of concrete.

**Cl. F 900 kN, type M - structurally calculated reinforced concrete foundation required according to project engineer's specifications.** When laying on the reinforced concrete foundation, the connection between channel and foundation must be produced using a suitable volume-stable sealing or grouting mortar, at least 2 cm thick, with quality at least C 25/30. When using a grouting mortar, the slot channel must be positioned and aligned on appropriate spacers. When backfilling the channel, it must be ensured that there is even insertion and continuous support of the channel (avoid backfilling from one side).



## Installation guidelines for correct installation.

### Lifting tool:

**2**

Reinforced concrete slot channels must be unloaded and moved using suitable lifting tools which allow for even and precise lifting and lowering (e.g. truck-mounted crane, appropriate digger). The components must be suspended centrally.

**3**

First the lower part of the lifting tool is lowered into the slot channel and turned 90° to ensure that it is protected against rotation in the slot. Then the lifting device of the crane or digger can be hooked onto the lifting tool and the channel can be moved easily and safely.



### Butt joints and sealing:

**4**

Ensure that the first channel in the line is precisely positioned. During laying, the surfaces must be precisely aligned.

**5**

Before bringing the elements together, the socket must be cleaned and the gasket applied to the point. The supplied lubricant is applied evenly to the gasket and to the sealing surface of the socket.



**6**

The slot channel hanging on the lifting tool must then be brought to the channel that has already be laid, until the gasket is evenly covered and the parts can be securely pushed together. The width of the butt joint must be permanently set at min. 5 mm to max. 15 mm. For uniform joints, we recommend, the use of wooden slats with a thickness of around 10 mm for example.



## Installation guidelines for correct installation.

### Covering surfaces and expansion joints:

7

Implementation of the road surface covering (asphalt, concrete, etc.) must be carried out according to the planned specifications. When connecting concrete surfaces, sufficiently large dilation joints (expansion joints) must be produced along the channel so that no temperature-related expansion forces affect the sides of the channel.

Throughout the entire height of the channel, a continuous, suitable polystyrene plate or a bituminous softboard plate must be installed along the longitudinal joint between the channel and concrete cover. These plates must be able to absorb the expansion forces of the concrete cover and may not transfer/dissipate the horizontal forces of the concrete cover onto the channel.

#### IMPORTANT!

Anyone implementing this must ensure that there is no rigid connection between the adjacent road surface covering (foundation, base layer, cover) and the channel.

8

All adjacent covers must permanently run at least at the same level as the channel surface in order to avoid mechanical damage (e.g. snow clearing) and in order to ensure proper water drainage.

9

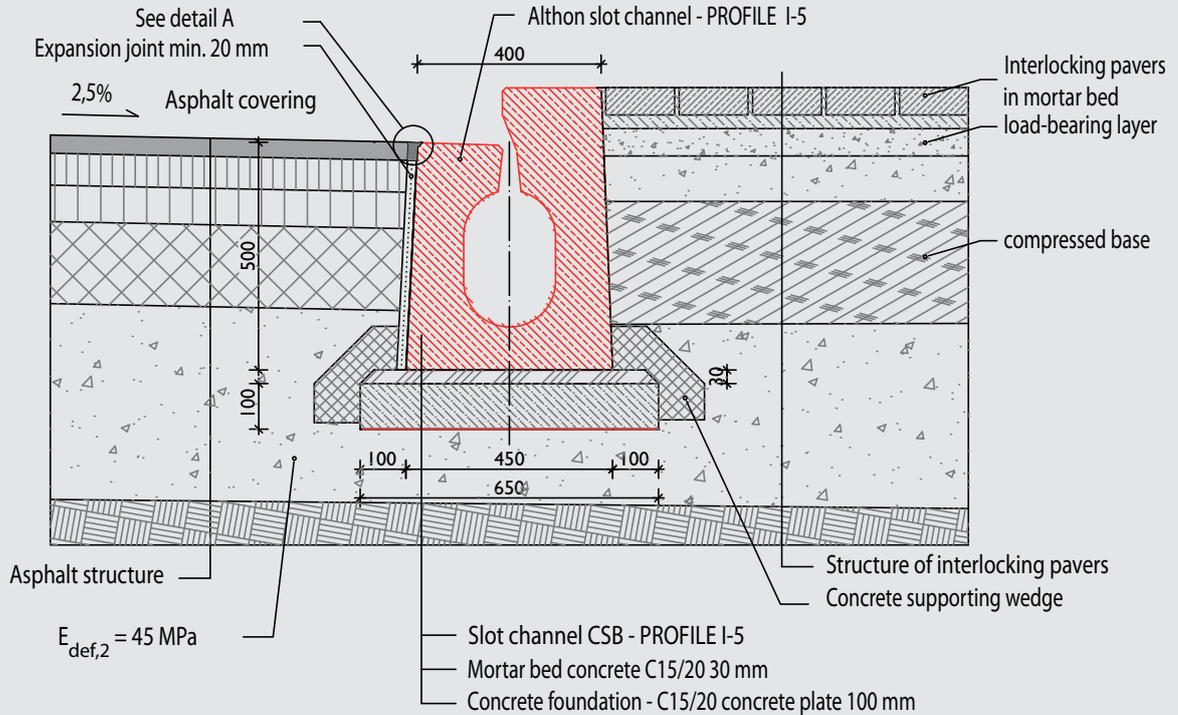
Following completion of the adjacent surfaces, the longitudinal and transverse joints of the channels must be filled with a non-shrink sealant. It must be ensured that the transverse joints between the individual channel units are permanently formed so that minor, temperature-related longitudinal movements of the slot channels can be absorbed. In order to avoid spalling, the slot channels must not be driven on during the construction phase. When working with machines and vehicles, ensure that the channels are not damaged.



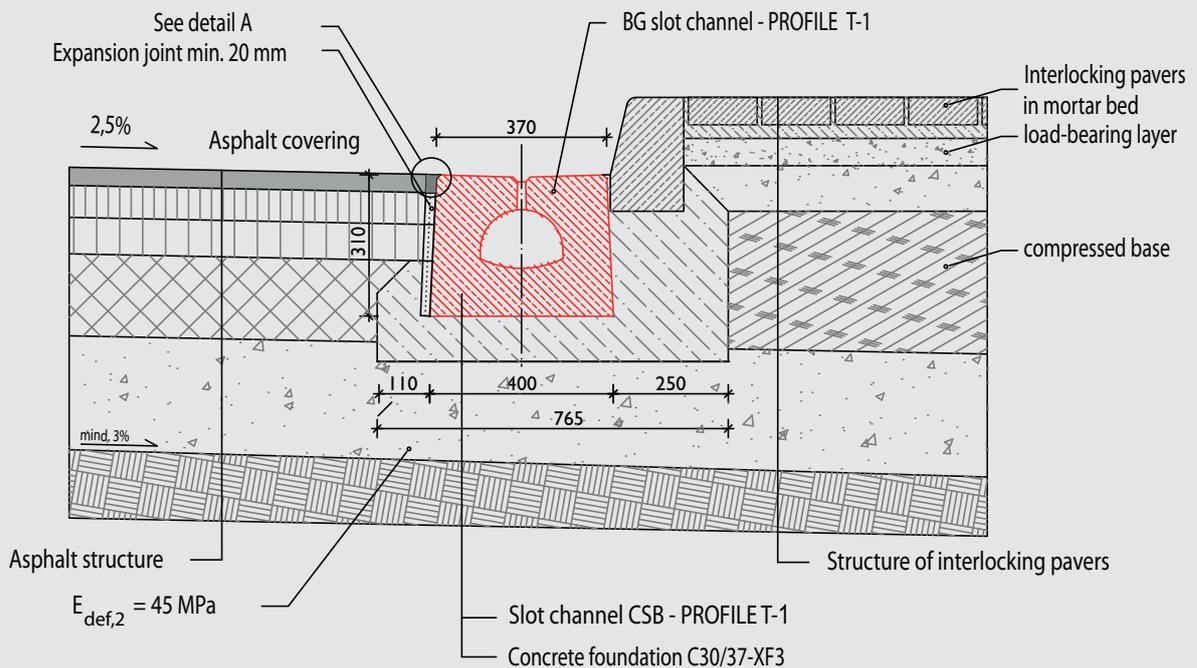


# Installation guidelines for correct installation.

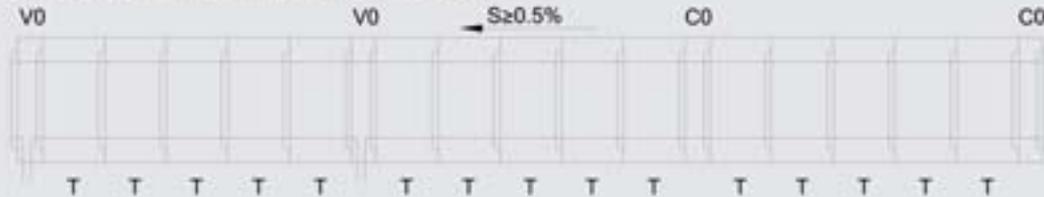
## Channel profile I-5 with border:



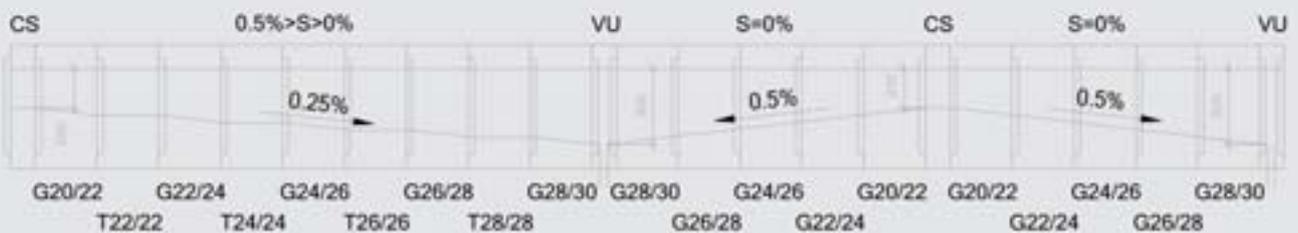
## Channel profile T-1 laid in a border:



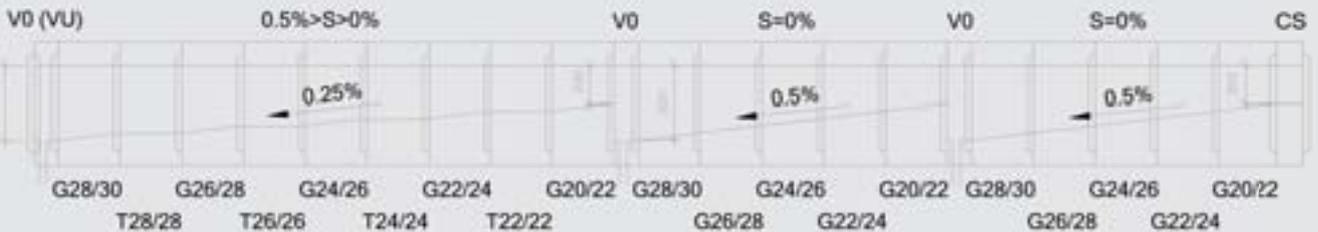
combination of slot-channels without internal-slope I-1-T:



combination of slot-channels with internal slope I-1-G: (slot-channels with bottom-outlet in roof-shaped sole)



combination of slot-channels with internal slope I-1-G: (slot-channels with bottom-outlet in pip-shaped sole)



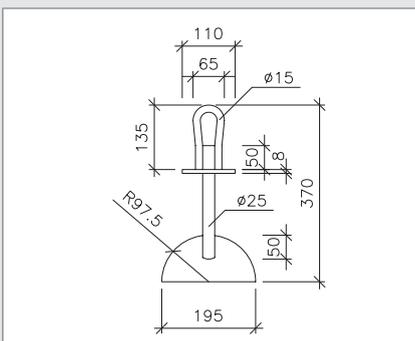
**Designations of sump units and cleaning elements:**

- VO – sump unit „base“ – tongue-groove  
Clear height of the opening at both ends 300 mm
- VO – sump unit „valley/trough“ – groove on both sides  
Clear height of the opening at both ends 300 mm

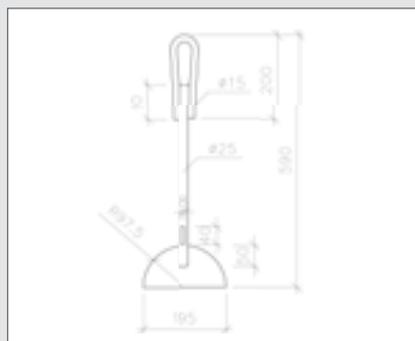
- CO – cleaning element „base“ – tongue-groove  
Clear height of the opening at both ends 300 mm
- CS – cleaning element „high point“ – tongue on both sides  
Clear height of the opening on both sides  $\varnothing$  200 mm
- S – stands for slope

## Lifting tools:

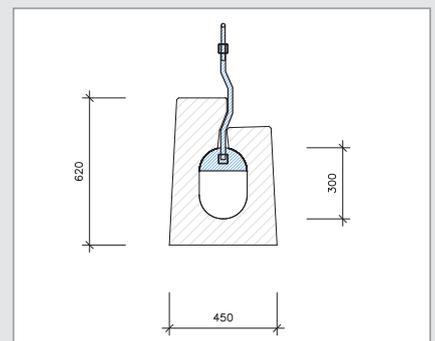
If a lifting tool is leased, then the full purchase price (operation) must be paid at the start. When the lifting tool is returned undamaged, the difference between the purchase price and the agreed leasing fee is credited to the contractual partner. The client must pay for the return transport.



Item no. 50000020 - Lifting tool for profile T-1



Item no. 50000021 - Lifting tool for profile I-1, II-1 and III-1



Item no. 50000022 - Lifting tool for profile I-3 and I-5

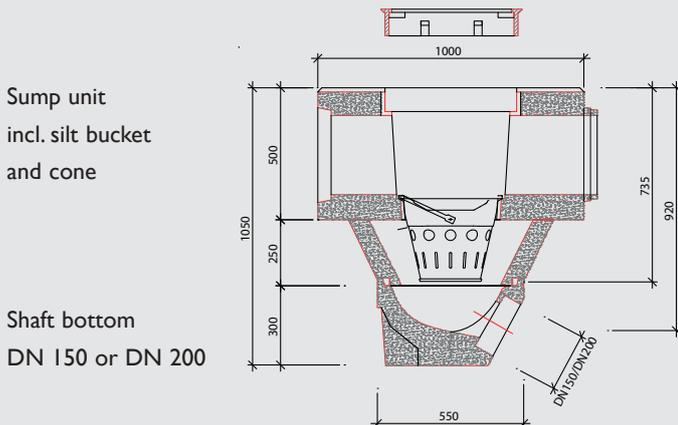
## Accessories.

### Sump unit

The sump unit is produced with an element length of 1000 mm and supplied in 2 parts. Firstly, the lower part must be laid so that it will not twist or tilt, then the upper part can be placed on top of this with pre-formed base drainage. The upper part is available in 2 different designs: depending on the connection options or position in the channel line, with groove-groove or tongue-groove system.

The cast iron cover must be securely screwed into the frame. A plastic cover can also be optionally provided.

Installation detail for the sump unit:



## Accessories.

### Silt bucket (integrated into sump unit):

A galvanised silt bucket is included in the sales set. It is used to trap coarse dirt and can be cleaned at any time.

### Cleaning element

The cleaning element also has an element length of 1000 mm and is provided in 2 different designs: depending on connection options/ position in the channel line, with tongue-groove or tongue-tongue system. The plastic cover is screwed into the cleaning element and can be opened quickly and easily during cleaning work. Cast iron cover on request.

### Front caps / end caps

Front caps (tongue) or end caps (groove) ensure a clean and tight closure of the channel line.



## Special parts.

### Fire protection element

The fire protection element, with an element length of 2000 mm, is used for safe drainage of burning liquids, e.g. in tunnel construction. The installation of a bleed air valve prevents liquid from continuing burning in the channel line. The integrated fire shutter also increases safety.



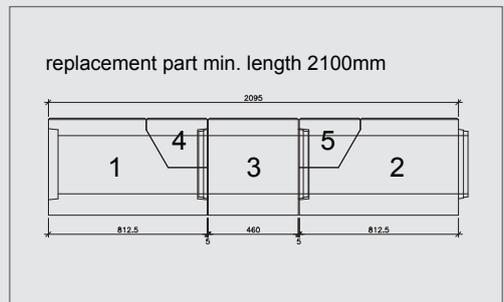
### Curved element

The curved element can be used to lay channel lines in a radius of min. 7° to maximum 45°. This flexibility makes installation much easier.



### Replacement element / adapter

The replacement element set consists of 5 individual parts which allow for easy replacement of damaged elements in the existing channel line. The „replacement part“ (no. 3) can be supplied in a wide range of installation lengths, from a minimum of 2100 mm to a maximum of 4000 mm.



## References.

### Althon slot channels with interrupted, continuous or covered slot

For motorways, tunnels, airport terminals and similar heavily-used surfaces.



## Althon-Graspointner - Drainage systems

**Althon-Graspointner is a full-service provider** with a wide range of products and services for all areas of use. **Steel and concrete channels** from those that can be walked on, to those which heavy loads can drive over. Althon-Graspointner systems are optimally compatible with each other.

Producing varied, innovative channel systems made of high quality

- **CONCRETE:**  
all-round products for any use
- **STEEL:**  
maximum drainage with a small structure
- **FILCOTEN®:**



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