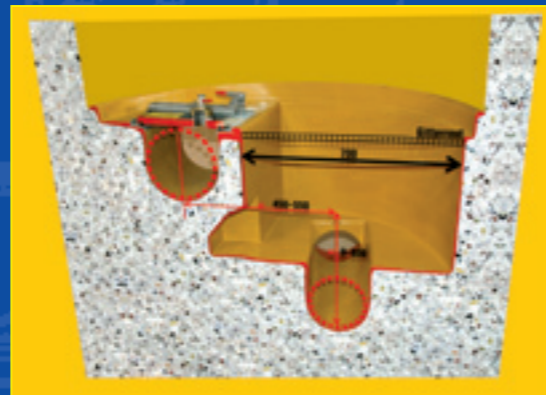
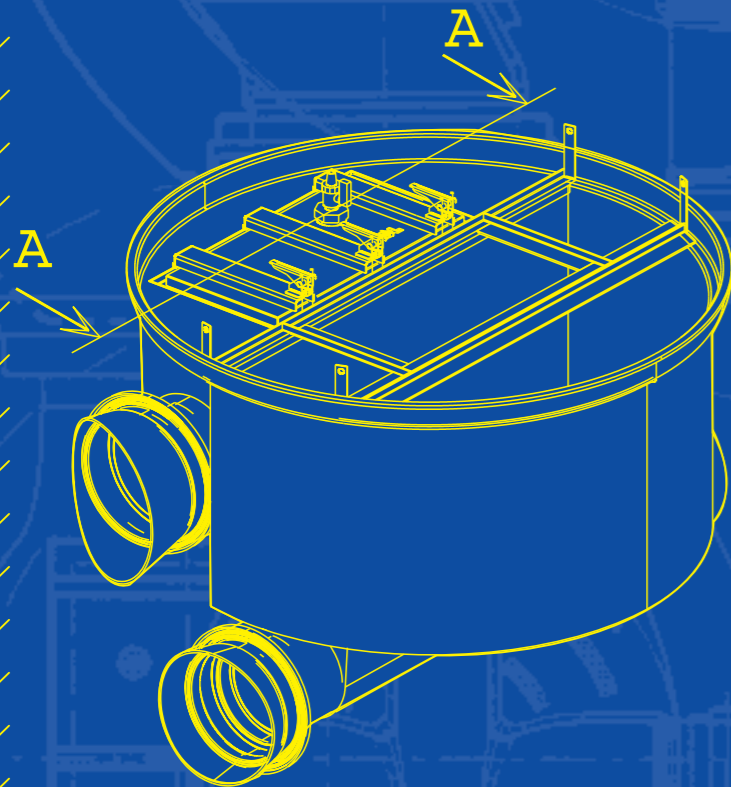


INFRASCHACHT®



General Approval
Z-42.1-355
German Institute for building technique Berlin

For the INFRASCHACHT® and the MULTRO® manhole rings there are different lid constructions available. These are systematically equipped with gas pressure valves and have quick fastening panels which give an easy access for cleaning and inspection work. In order to assure sanitation of the closed RW (Rain Water) channel, we recommend the installation of the newly developed angle fastener: as well as having a top cover it also has a removable front lid. If necessary, the lid can be loosened and thus give access for the introduction of sanitation packages. Depending on the length of the maintenance, it is recommended to install sanitation angle fasteners on every second manhole or on changes of direction in the main channel of more than 15°.

Standard cover with stainless steel frame



Angle fastener

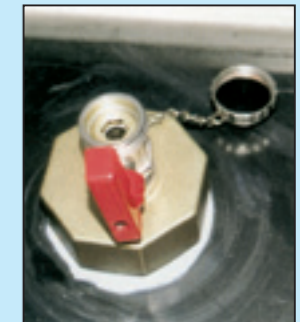


Straight version



Angle fastening:
Regular maintenance can be done without problems through the upper opening.
The front lid is only removed for sanitation work and makes the introduction of large sanitation packages possible.

General Approval
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Before opening the screw of the pressure valve check for high pressure



Version for angle channels



Stand 03/2006

The standard INFRASCHACHT® built with standard base liners DN 1000 and angle shaped RW channel for widening the access (1000 mm).

Building up with manhole rings DN 1200 possible with transition slab (working space between RW channel crown min 500 mm)

INFRASCHACHT® as specials allow to save costs during the construction works, with reduced manhole diameters.

It is recommended to give the appropriated working instructions to the maintenance staff.

According to the technical building approval n° Z 42.1-355, the sewage water area with reduced entry measurements has to be covered with steel grating.

When exceeding the maximum water bed dimensions in height (b2) as indicated in the spreadsheet, the MULTRO® manhole ring should be used.

PREDL® - INFRASCHACHT DN 1500 – Standard version								
Ø RW	Ø SW	a ₁ *	a ₂ *	b ₁ *	b ₂ *	h ₅ min*	h ₁₀ min*	s ₁ min*
250	max. 250	1000	500	550	0 - 850	730	250	150
300	max. 300	1000	500	550		730	250	150
400	max. 300	1000	500	550		730	250	150
500	max. 300	1000	500	650		930	250	150
600	max. 300	1000	500	650		930	250	150
Angle in the main channel			RW: max. 50°			SW: max. 50°		
Angle in inlet branch			RW : 45 – 90° (inlet above SW channel max 45°)			SW: 45 - 90°		
Dimension of optional ductwork for cables		max. DN 200						

*Ask the concerned manufacturer for his tolerance dimensions

PREDL® - INFRASCHACHT DN 1500 – Standard version								
Ø RW	Ø SW	a ₁ *	a ₂ *	b ₁ *	b ₂ *	h ₅ min*	h ₁₀ min*	s ₁ min*
500*	max. 300	700	800	450 - 650	0 - 850	780	250	150
600	max. 300	700	800			880	250	150
Angle in the main channel			RW: max. 50°			SW: max. 50°		
Angle in inlet branch			RW: 45 - 90°			SW: 45 - 90°		
Dimension of optional ductwork for cables		max. DN 200						

*RW DN 250, 300 and 400 only possible when angle < 50° and inlets from RW lie above SW

*Ask the concerned manufacturer for his tolerance dimensions

PREDL® - INFRASCHACHT DN 1200 – Standard version								
Ø RW	Ø SW	a ₁ *	a ₂ *	b ₁ *	b ₂ *	h ₅ min*	h ₁₀ min*	s ₁ min*
250	max. 250	1000	200	550	0 - 850	730	250	150
300	max. 300	1000	200	550		730	250	150
400	max. 400	1000	200	550		730	250	150
Angle in the main channel			RW: max. 50°			SW: max. 50°		
Angle in inlet branch			RW : 45 – 90° (inlet above SW channel max 45°)			SW: 45 - 90°		
Dimension of optional ductwork for cables		max. DN 200						

*Ask the concerned manufacturer for his tolerance dimensions

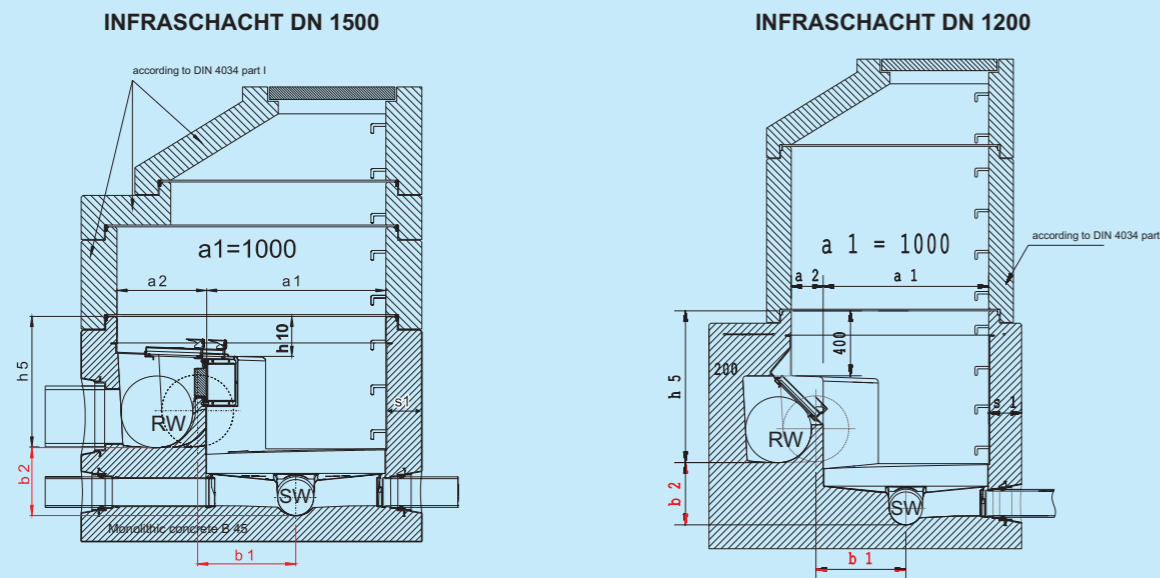
PREDL® - INFRASCHACHT DN 1200 – Standard version									
Ø RW	Ø SW	a ₁ *	a ₂ *	b ₁ *	b ₂ *	1 h ₅ min*	2 h ₅ min*	h ₁₀ min*	s ₁ min*
250	max. 200	700	500	450 - 550	0 - 850	605	530	250	150
300	max. 250	700	500			630	580	250	150
400	max. 300	700	500			680	680	250	150
Angle in the main channel			RW: max. 50°			SW: max. 50°			*Dimensions 2h5 with standard lid
Angle in inlet branch			RW: 45 - 90°			SW: 45 - 90°			*Dimensions 1h5 with angle fastener (possible from 500 mm onward water bed height difference)
Dimension of optional ductwork for cables		max. DN 200							

*Ask the concerned manufacturer for his tolerance dimensions

PREDL® - INFRASCHACHT DN 1000 – Standard version house connected Manhole								
Ø RW	Ø SW	a ₁ *	a ₂ *	b ₁ *	b ₂ *	h ₅ min*	h ₁₀ min*	s ₁ min*
150	150	600	400	400	0 - 650	400	230	150
200	150	600	400	400		450	230	150
Angle in inlet branch			On request					
Dimension of optional ductwork for cables		max. DN 200						

*Ask the concerned manufacturer for his tolerance dimensions

PREDL® - INFRASCHACHT DN 2000 – Standard Version on demand								
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Rainwater access standard lid with stainless steel frame 250x250 mm (DN 1200 and 1500)
Or angle fastener 800 x 350 x 220 mm (only DN 1500)

Suggestion for the amendment of a prescription text: INFRASCHACHT®

*Manhole bottom part for separated channels made out of precast concrete according to EN 1917 / DIN V 4034/ 1 with steps according to DIN 19555. Channel and working area from sewage resistant plastic material (GRP / PP) with a bottom channel for sewage water and a higher positioned closed rainwater channel including a pressure proof cleaning access (standard lid with stainless steel frame 250 x 250 mm)

- Clear manhole diameterm
- b1 dimension – distance between sewage water pipe and rainwater pipe (axis distance).....mm
- b2 water bed distance.....mm
- Sewage water for..... pipe DN.....
- Rainwater withpipe DN.....
- Extra charge for angle fastener (800 x 350 x 220 mm)
- Extra charge for steel grating (PREDL® INFRASCHACHT® system or equivalent)

