

InStreamer inlet nozzle

GB Operator's Manual
Original manual



Table of Contents

1	General information	3
1.1	Warranty notice.....	3
1.2	General information	3
1.3	Proper use	3
2	Safety instructions	4
2.1	Safety instructions for the operator	4
3	Description of the device / general technical data	4
3.1	General description.....	4
3.2	Technical data	4
3.3	Dimensions	5
3.4	Characteristics	6
4	InStreamer water outflow system	6
4.1	Pressure loss diagram	6
5	InStreamer inlet nozzle	7
5.1	Modules	7
5.2	Installation procedure for tiled concrete pool	8
5.3	Installation procedure for concrete pool with brush-applied sealant.....	12
6	The centring tool	17
6.1	Work steps.....	17

1 General information

1.1 Warranty notice



The entire system or parts of it are not suitable for use in other systems. The function of the entire system in combination with other systems or components can not be guaranteed. Accordingly we explicitly instruct you only to use such parts or the entire system for their intended purpose. Failure to comply with the information provided in this operator's manual voids all claims under warranty.

1.2 General information

All parts in contact with media are designed for water quality according to DIN 19643. The inlet nozzle represents the state of the art. It has been manufactured with the greatest care and is subject to continuous quality control.

This Operator's Manual contains important information to ensure that the inlet nozzle is operated safely, properly and economically. Your strict observance is necessary to prevent dangers and ensure a long service life for the inlet nozzle system.

This operator's manual does not take into consideration local requirements. The operator is responsible for ensuring these requirements are met, including personnel retained to assemble the system.

1.3 Proper use.

The inlet nozzle must not be operated beyond the values specified in the technical data. If you have any questions, please contact your Customer Service representative or the manufacturer.

The area coverage of the nozzle complies with the requirements of DIN19643:
Not suitable for salt electrolysis systems.



Important!

For a vertical pool flow, the number and distribution must be selected so that an inflow device is available for around 8 m² of the pool ground-plan area, i.e. a circular area with a diameter of 3.2 m or a square with a side length of 2.8 m. For a ribbon-shaped inflow, an area of up to 1.6 m is covered on each side. For pools or parts of a pool with a water depth < 1.35 m, an inflow opening must be available for 6 m².

Source: DIN19643-1

2 Safety Instructions

Please read the Operating Manual carefully before installing the inlet nozzle and placing it in operation. Make certain you have understood everything.

2.1 Safety instructions for the operator

1. Repairs of any nature must only be made by qualified professionals. The pool must be emptied if necessary to make repairs.
2. The operator must ensure that
 - the operator's manual is always available for operating personnel,
 - the instructions in the operator's manual are observed.
3. All parts that come in contact with medium are resistant up to an absolute salt content of 5% (40,000 mg/l NaCl). All metal parts are designed in bronze (GCCuSn12). If higher concentrations of salt are present, please contact the manufacturer.

3 Description of the device / general technical data

3.1 General description

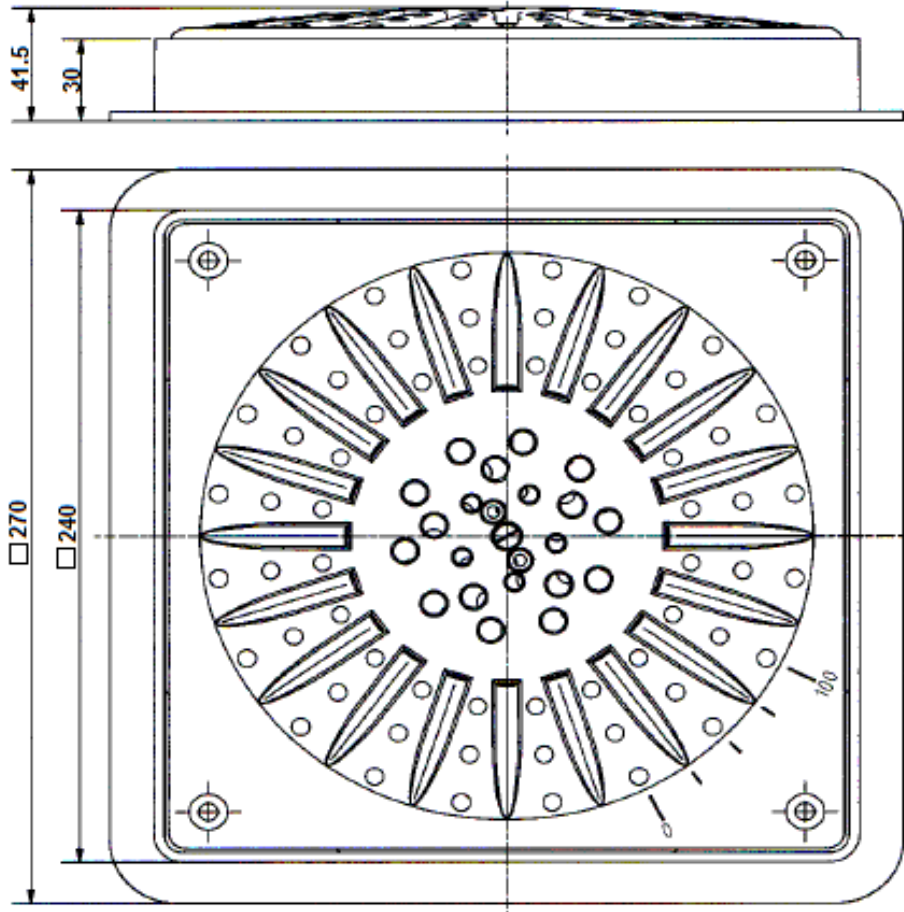
- The inlet nozzle can be individually set within a volume flow range of 4 – 18 m³/h thanks to its unique design. The pressure loss is 50-820 mbar depending on the selected throughput.
- The system is suitable for installation in concrete tiled pools. Installation does not require subsequent drilling of the frame. The nozzle was adapted to the tile grid dimension 240 x 240mm (e.g. Agrob Bruchtal) so that no additional cutting work is required on the tiles.
- Welding the pipe openings at the adjustment plate brings about a frictional connection. Optimum cleaning effect of the pool due to a 0° outflow.
- The base plate is installed on the clean water piping by gluing the assembly takes place (base plate and clean water piping).

3.2 Technical data

- Maximum volume flow: 4 - 18 m³/h
- Setting: 0 - 100 % infinitely variable
- Material (frame/upper section/rotary insert): ABS
- Material (screws): A4
- Material (sleeves + set collar): GBZ 12
- Material (base plate): PVC
- Colour (other RAL colours possible): White
- Application limit: 5% salt
- Resistance: max. 40,000 mg/l NaCl

3.3 Dimensions

- Housing dimension (L x W x H): 240 x 240 x 41.5 mm
- Frame dimension (L x W x H): 270 x 270 x 41.5 mm
- Suitable for tile pattern 240 x 240 mm (e.g. Agrob Buchtal)

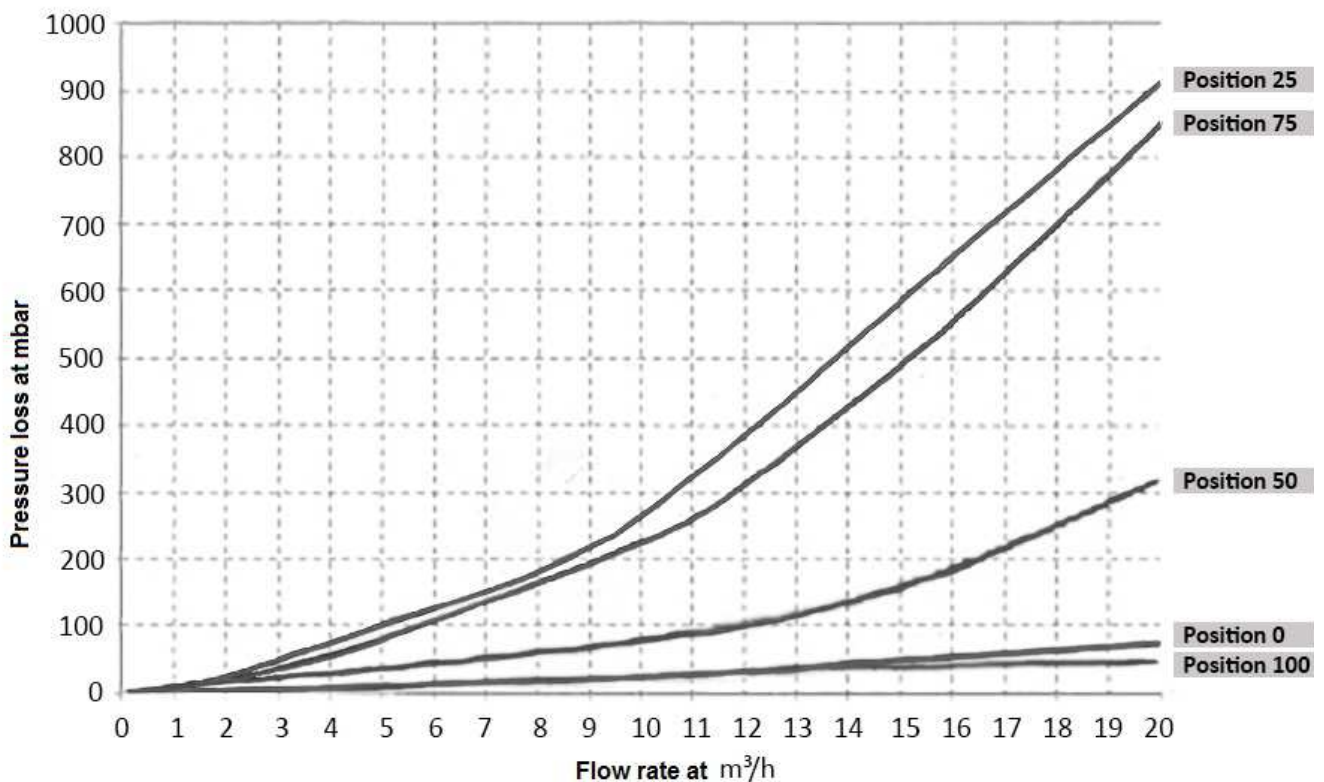


3.4 Characteristics

Selected Setting	Inflow openings		free inflow cross-section mm ²	Pressure loss at 15 m ³ /h mbar
	at side in %	at top in %		
0	100	40	1264	50
25	0	60	100	580
50	100	0	761	160
75	0	15	249	490
100	100	100	1634	40

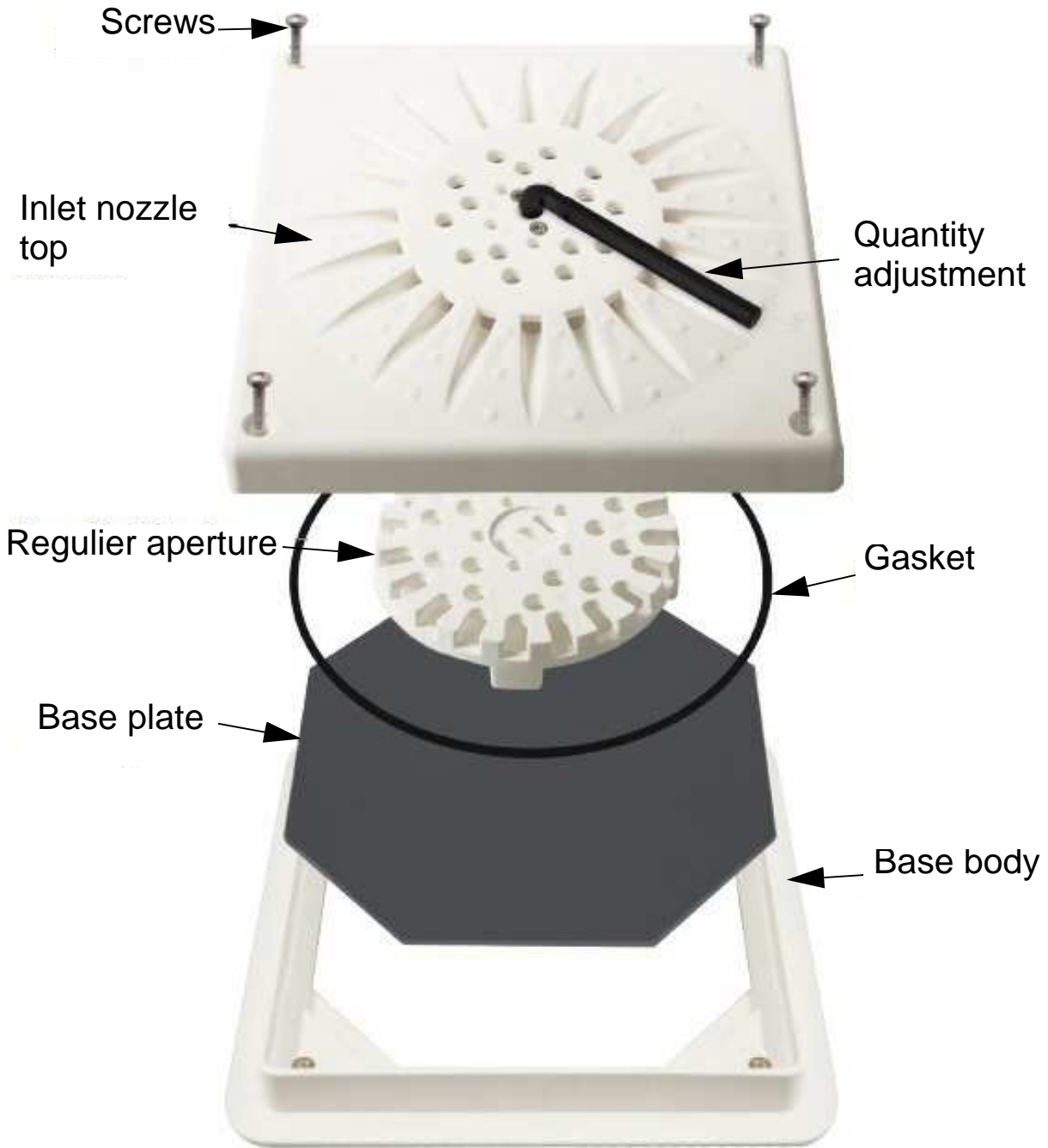
4 InStreamer water outflow system

4.1 Pressure loss diagram



The inlet nozzle meets the requirements of DIN EN 13451-3 during operation below the 4 m/s limit characteristic curve.

5 InStreamer inlet nozzle
5.1 Modules



5.2 Installation process for tiled concrete pool

The installation of the inlet nozzle starts after the clean water piping and subsequent pool floor concreting work and relevant sealing work has been completed. The connecting pipes should protrude approx. 20 cm above the concreted pool floor (fig. 1).

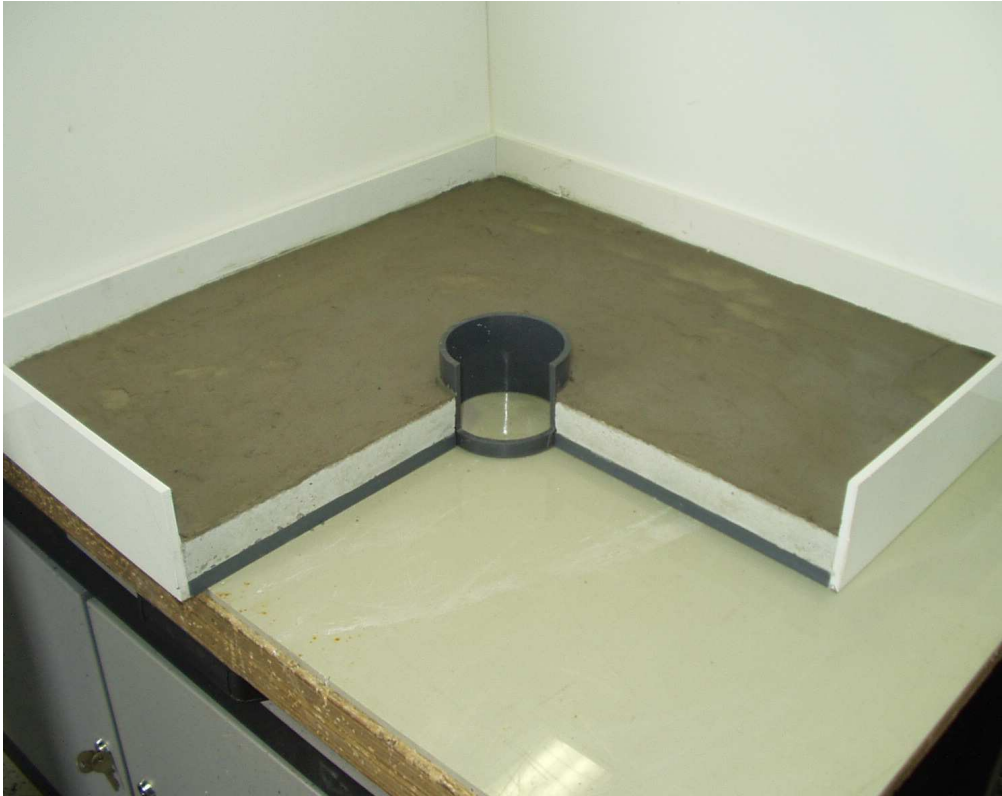


Fig. 1



Important!

The pipe protrusion is shortened to the final height in coordination with the tiler.

The tiler now inserts the basic body and, if necessary, fixes it on the subsurface using epoxy resin and fleece (fig. 2). The space between the base plate and the floor is filled using casting compound or epoxy resin so that no microbial contamination can occur under the base plate.

The dimensions for the section of the clean water supply line in the base plate are measured with a special centring tool (see item 4.4. The centring tool).

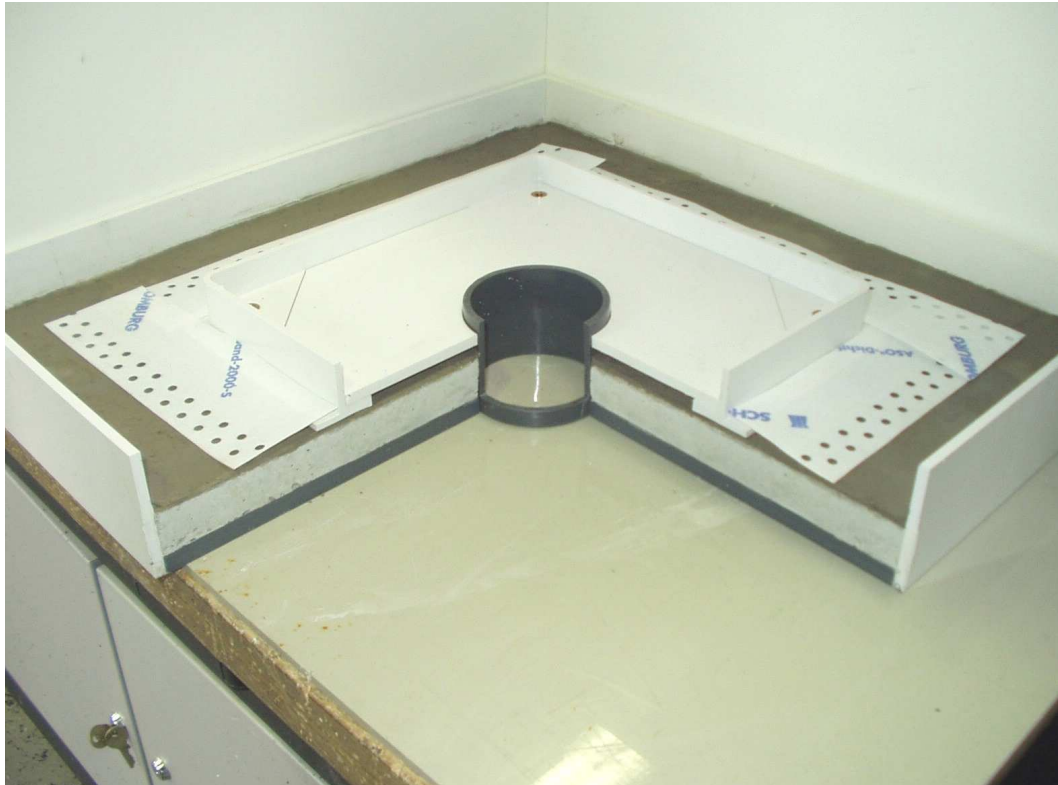


Fig. 2



Important!

The tiler determines the installation height and inserts the base body.



Important!

The base plate must be made of the same material as the clean water supply line.

The connection between the base plate and the clean water supply line have to connect by gluing (observe material type of the base plate and supply line).

The upper section of the inlet nozzle is then installed. This is inserted in the base body and fastened with 4 screws. Adjust the nozzle setting beforehand using the control screen. For this purpose, loosen the centrally located middle screws (fig.3) so that the control screen can be turned accordingly (fig.4). Tighten the screws afterwards

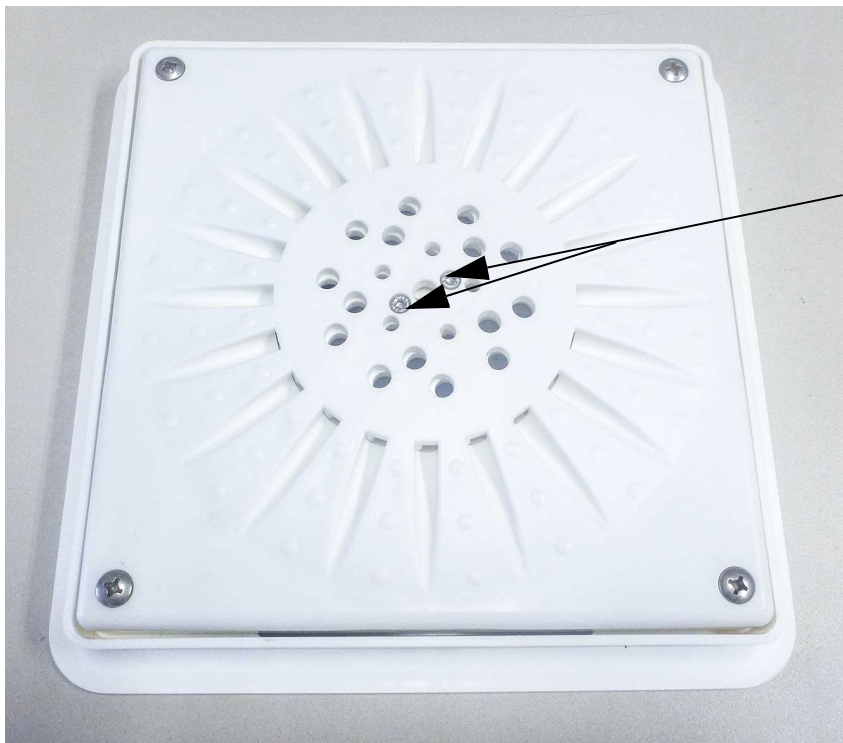


Fig. 3

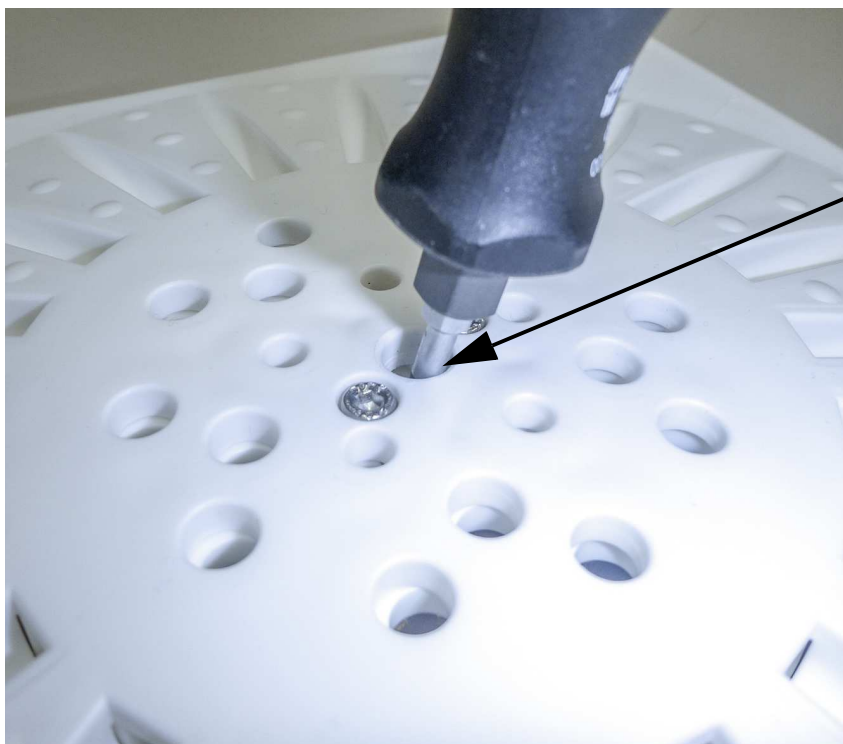


Fig. 4



Important!

Ensure the seal is correctly seated before installing the upper section of the nozzle body!

The specialist planner specifies the setting (see item 3.3 Characteristics)



Fig. 5



Important!

The tiler must apply swelling tape between the base body and tiles when grouting.

5.3 Installation process for concrete pool with brush-applied sealant

The installation of the inlet nozzle starts after the clean water piping and subsequent pool floor concreting work has been completed. The connecting pipes should protrude approx. 20 cm above the concreted pool floor (fig. 6)



Fig. 6



Important!

A basic requirement for installation in the brush-applied sealant system is the use of a PVC pipe as clean water piping!



Important!

The pipe protrusion is shortened to the final height in coordination with the tiler.

A PVC disc with a 5 cm circumferential bonding flange (also sanded with quartz sand, if required) is placed over the PVC pipe (fig. 7) and connected to the pipe at the pool floor height by means of manual welding. The brush-applied sealant can now be applied to this PVC bonding flange



Welding with clean water pipe by means of hot-gas welding. (DVS 2207)

Fig. 7



Important!

A tight, conclusive connection must be made between the pipe and PVC disc.

The tiler now inserts the basic body and, if necessary, fixes it on the subsurface using epoxy resin and fleece (fig. 8). The space between the base plate and the floor is filled using casting compound or epoxy resin so that no microbial contamination can occur under the base plate. The dimensions for the section of the clean water supply in the base plate are taken with a special centring tool (see item 4.4. The centring tool).

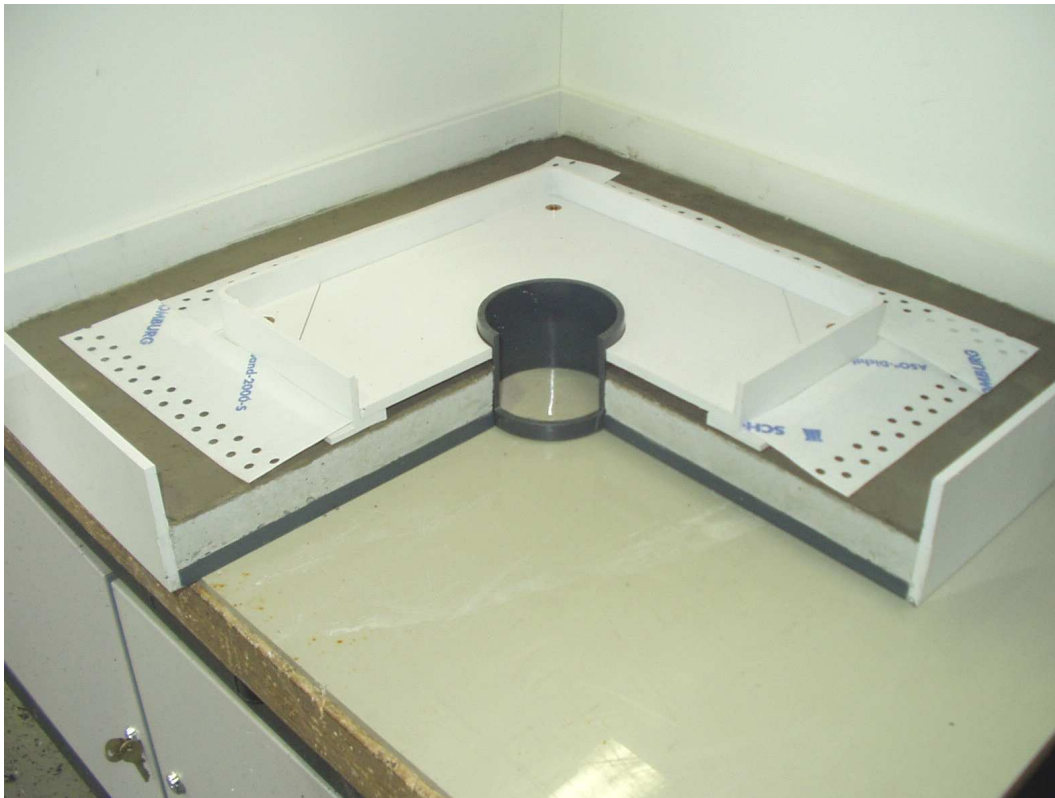


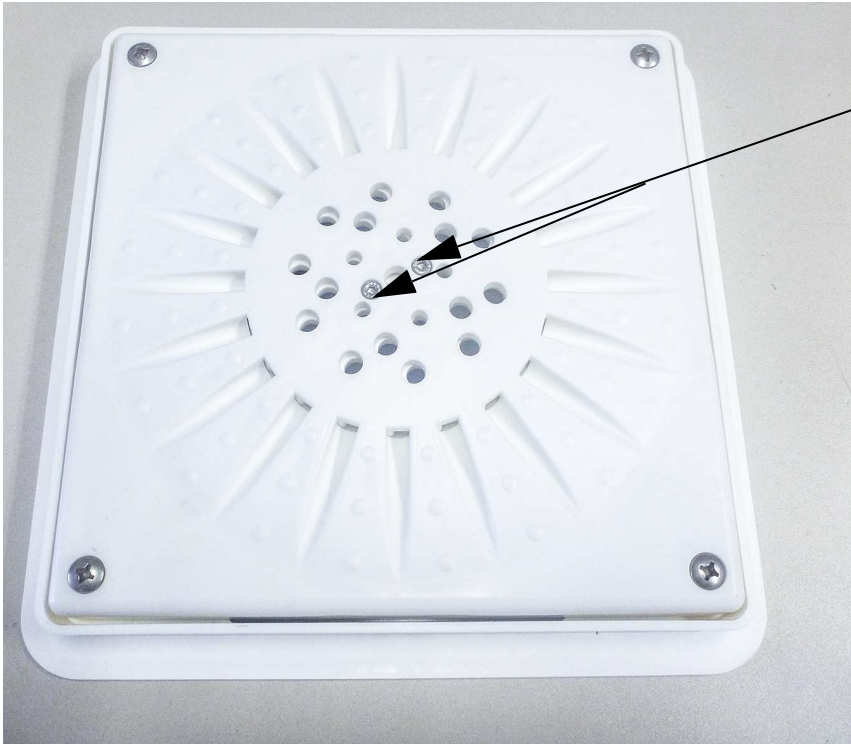
Fig. 8



Important!

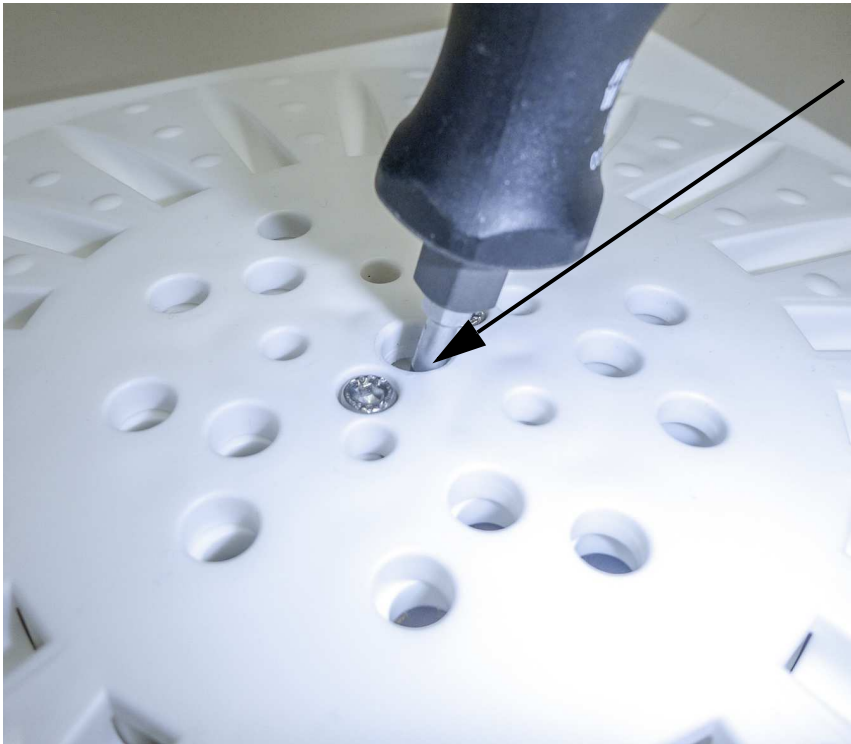
The tiler determines the installation height and inserts the base body.

The connection between the base plate and the clean water supply line is made by means of hot-gas welding (DVS 2207). The upper section of the inlet nozzle is then installed. This is inserted in the base body and fastened with 4 screws. Adjust the setting beforehand using the control screen. To do this, loosen the centrally located middle screws (fig.9) so that the control screen can be turned accordingly (fig.10). Tighten the screws afterwards.




Loosen screws

Fig. 9



Select the required setting by turning the control screen and tighten the middle screws.

Fig. 10

 **Important!**
Ensure the seal is correctly seated before installing the upper section!

The specialist planner specifies the setting (see item 3.3 Characteristics)



Fig. 11



Important!

The tiler must apply swelling tape between the base body and tiles when grouting.

6 The centring tool

The centring tool (fig.12) is a special tool for cutting out the pipe opening from the base plate. The fixed frame on the pool floor is the basis for use.

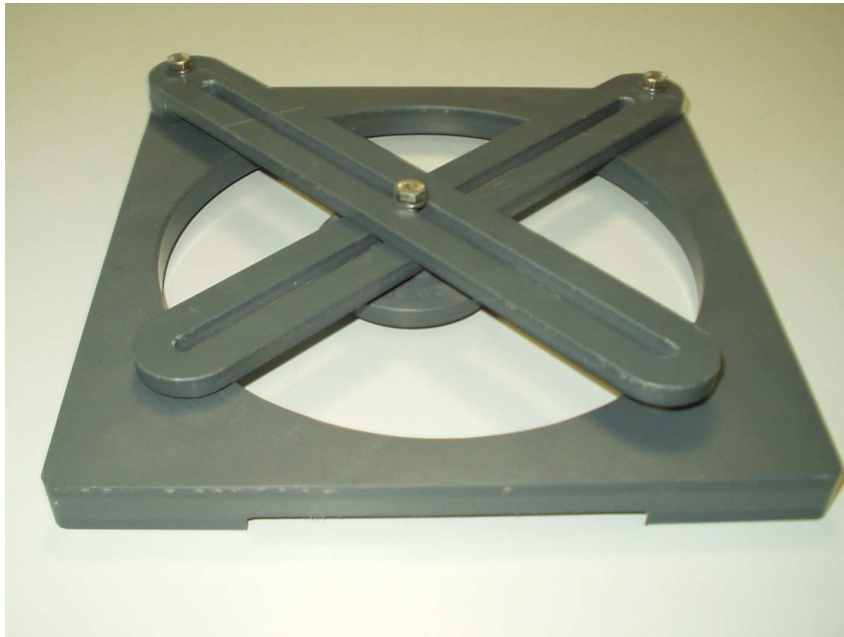
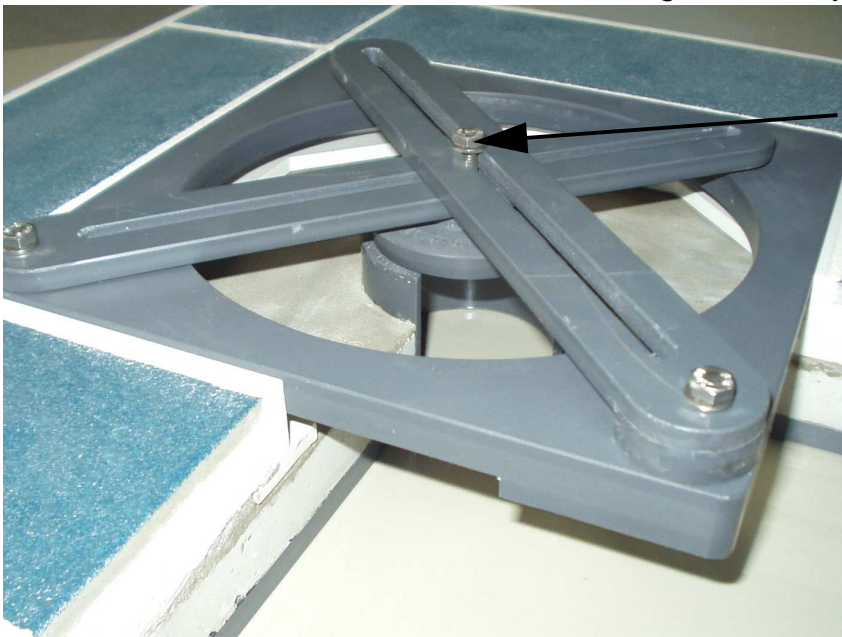


Fig. 12

6.1 Work steps

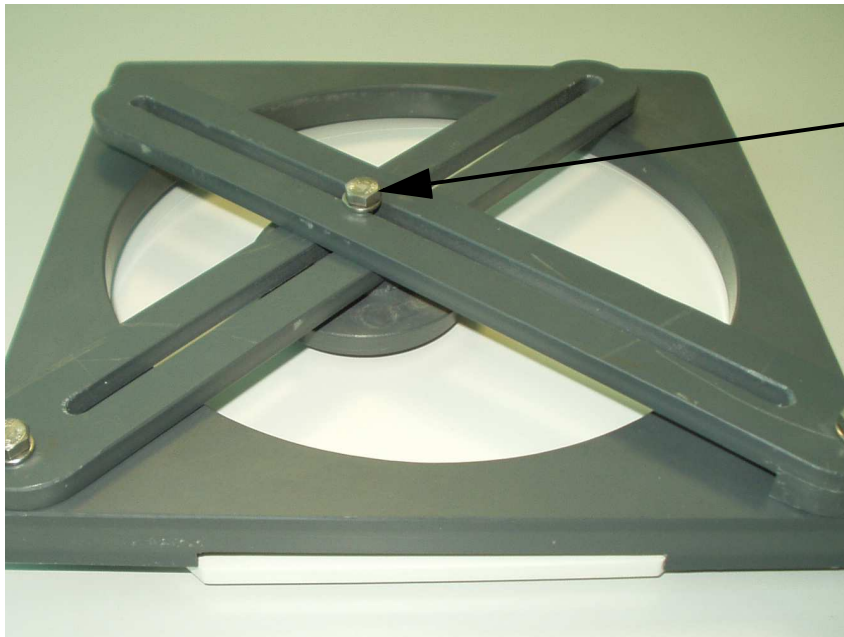
1. Check the slotted arms for ease of movement and adjustability. Insert the relevant centring cone depending on the existing clean water supply line.
2. Insert the centring tool in the base body fixed on the pool floor (fig.13). In doing so, the cone is fixed in the clean water feedthrough and firmly turned using the centring screw.



Tighten the centring screw after fixing the cone in the pipe opening

Fig. 13

3. Remove the centring tool. The base plate to be cut out is now inserted in the rear side (fig.14). A notch is produced on the cone (mandrel on lower section) with a light tap of the hammer.



A light tap of the hammer on the screw of the cone marks the position on the base plate for the subsequent procedure.

Fig. 14

4. The section for the pipe opening is cut out using a curve cutter. In doing so, the bore diameter is the same as the pipe external diameter.



Importer:
Certikin International Ltd
4 Tungsten Park
Colletts Way
Witney
Oxfordshire, OX29 0AZ
United Kingdom
www.certikin.co.uk

Manufacturer:

schmalenberger
strömungstechnologie

Im Schelmen 9 – 11
D-72072 Tübingen / Germany



+49 (0)7071 70 08 – 0
+49 (0)7071 70 08 - 10 (Fax)
www.fluvo.de
info@schmalenberger.de

© 2022 Schmalenberger GmbH & Co. KG; All rights reserved
Manual is subject to changes

InStreamer
Version 27141-A