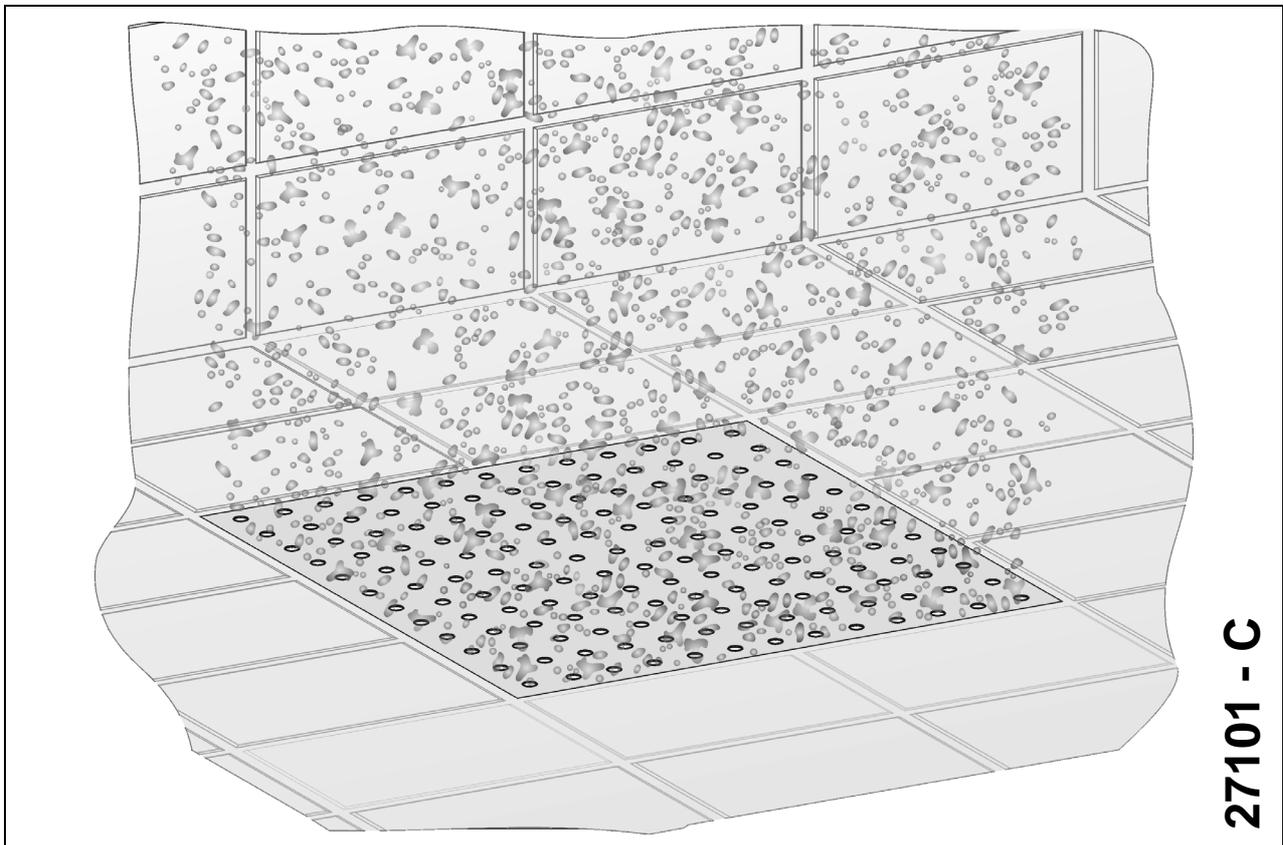


Air bubbler type 75



Operator's Manual

Translation of the original



27101 - C

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1 General / Usage Instructions

1.1 Guarantee notice

If the instructions contained in this operator's manual are not observed then any claims under guarantee shall be void.

1.2 General

All parts coming into contact with media are designed for water quality to DIN 19643.

The Air Bubbler type 75 is of state-of-the-art technology and was manufactured with great care under constant quality control conditions.

The operator's manual contains important instructions on how to use the Air Bubbler type 75, properly and economically. The instructions must be strictly adhered to in order to avoid danger and to ensure that the bubbler system has a long useful life.

This manual does not take into account local regulations, the observance of which is the responsibility of the operator – also on behalf of installation personnel that may be involved.

1.3 Usage Instructions

Neither the entire unit nor parts thereof must be used in other systems. You are expressly directed to use it only in accordance with these instructions.

Under no circumstances must the Air Bubbler type 75 be used in a way that exceeds the figures quoted in the technical specification. In case of doubt, please contact your customer service or the manufacturer.

2 Safety Instructions

Please read this operator's manual carefully before you install and operate the Air Bubbler type 75. Make sure that you have understood everything.

2.1 Safety Instructions for the Operator

1. Regardless of what nature they may be, repairs must only be carried out by qualified persons. If necessary, the pool should be emptied.
2. The operator must ensure that
 - the operator's manual is always available for users to read,
 - the instructions in the operator's manual are being observed.
3. All parts that come into contact with the medium are resistant to an absolute salt content of up to 0,75% (4500mg/l Cl⁻). If the salt concentrations are greater than this, the manufacturer must be consulted.

3 Unit Description / General Technical Data

The system complies with **VDE (Association for Electrical, Electronic & Information technologies)** regulations.

The Air Bubbler type 75 is delivered as 3 assemblies:

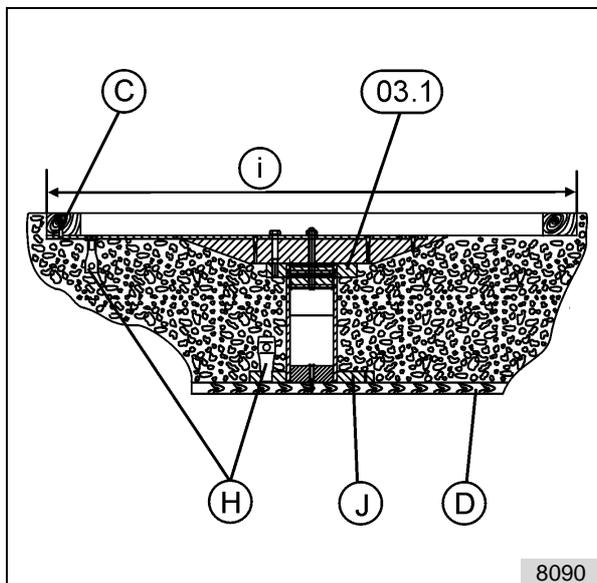
- I Installation kit
- II Assembly kit
- III Installation kit and assembly kit complete for retro-fitting

3.1 Technical Data

	Air Bubbler type 75
Dimensions	750 x 750
Air connection	DN 65 / DN 80
Air flow rate	255 m ³ /h
Operating pressure	150 mbar
Max. perm. pressure	250 mbar

4 Air bubbler type 75

4.1 Shuttering for vertical air supply / Concrete-tile pool



- i* = 940 mm
- C* Wooden dummy
- D* Floor shuttering
- H* Sheath plug
- J* Flange
- 03* Installation kit

fig. 1

Position the installation kit (03.1) precisely within the tile grid and determine the exact centre for the floor flange (J). Fasten the centralizing plate in the middle and place the assembly kit (03.1) on top. The mid-point must be determined precisely as there will be no

opportunity for making any corrections.

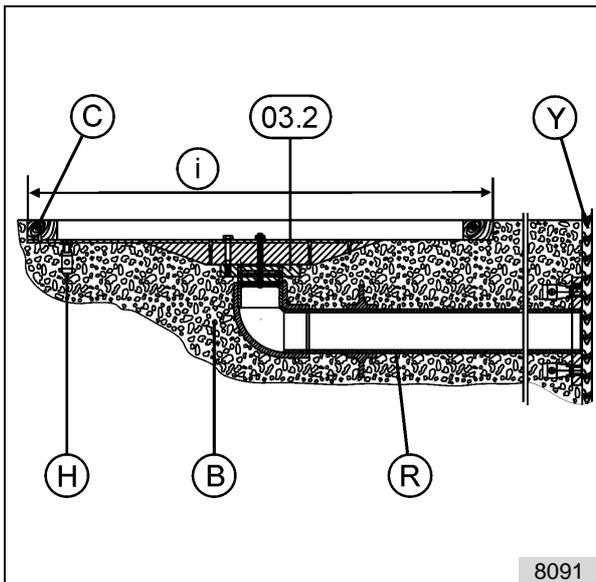


Important:

The side edges of the installation kit (03.1) must be adjusted exactly along the tile grid lines as only a fine adjustment is possible when the air pad is later installed.

Nail the flange (J) of the installation kit (03.1) to the floor shuttering (D). Then fasten the frame in this position to the concrete reinforcing bars using the 3 sheath plugs (H).

4.2 Shuttering for air supply 90° / Concrete-tile pool



- i = 940 mm*
- B Raw concrete*
- C Wooden dummy*
- H Sheath plug*
- R Pipe connection*
- Y Shuttering wall*
- 03 Installation kit*

fig. 2



Important:

Position the installation kit (03.2) precisely within the tile grid. The side edges of the installation kit (03.2) must be adjusted exactly along the tile grid lines as only a fine adjustment is possible when the air pad is later installed . A correction later is not possible.

Fasten the installation kit (03.2) in the desired position in the shuttering. To make the fastening easier, 3 sheath plugs (H) are supplied for attaching it to the concrete reinforcing bars.

Then make the pipe connection (R) to the outer shuttering wall (Y).

4.3 Shuttering removal / Concrete-tile pool

After shuttering has been removed from the pool the wooden dummy (C) must be removed from the part concreted in. Remove the 7 connecting screws for this.

The wooden dummy (C), the fitting (I) and the stopper (Z) can now be removed. It is useful, however, to leave these parts on the floor (B) until the tiling is started.

4.4 Installation for vertical air supply / Concrete-tile pool

see figs. 1, 2, 3 and 4

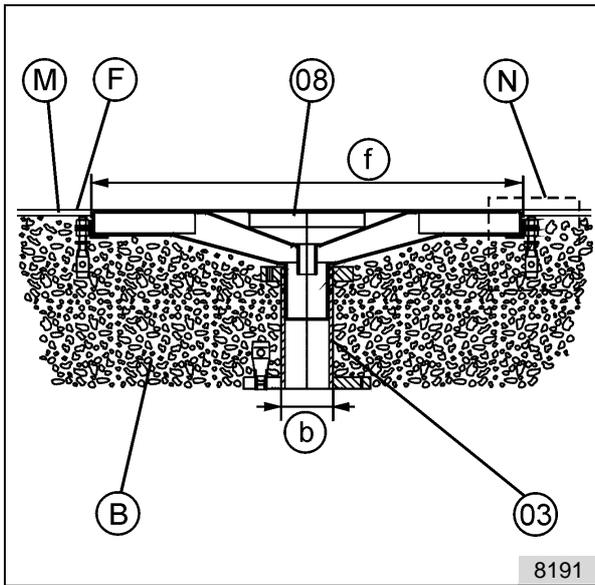


fig. 3

- $b =$ DN 65 / DN 80
 $f =$ 745 mm
 B Raw concrete
 G Stud bolt
 H Sheath plug

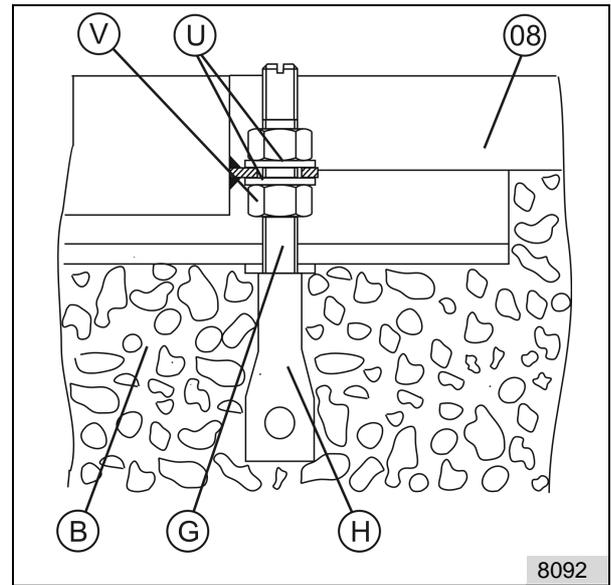


fig. 4: detail N

- M Mortar
 U Distance washer
 V Adjusting nut
 03 Installation kit
 08 Stainless steel housing

After the wooden dummy (C) has been removed from the installation kit (03), the 3 sheath plugs (H) lie exposed on the raw concrete floor (B).

Screw the stud bolts (G) supplied into the sheath plugs (H). Then screw the adjusting nut (V) and distance washer (U) onto the stud bolt (G).

Place the shackles of the stainless steel housing (08) over the stud bolts and adjust accordingly. Make sure that the sealing rings sit properly in the installation kit (03) and that they are not damaged.

By adjusting the nut (V) position the stainless steel housing (08) in such a way that its upper edge will later lie flush with the upper edge of the tiles. Please take into account the pool floor and the height of the tiles!

Finally fasten with distance washer (U) and locking nut. Apply a layer of mortar and tiles just up to the installation kit (03).

4.5 Installation for vertical air supply / Concrete-liner pool

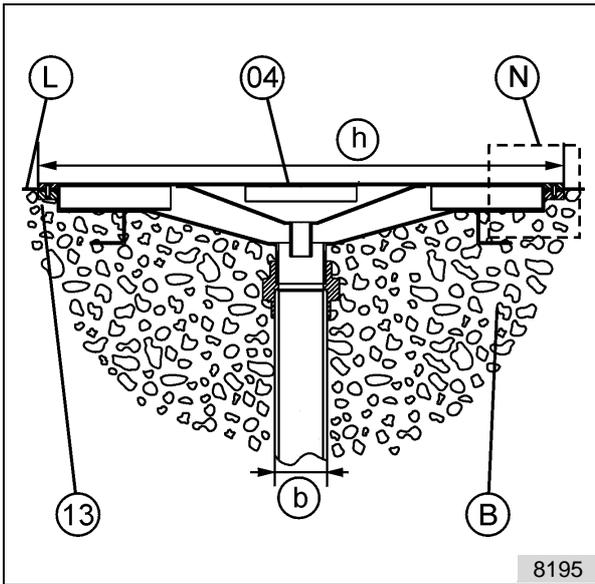


fig. 5

$b =$ DN 65 / DN 80
 $h =$ 805 mm
 B Raw concrete
 L Liner

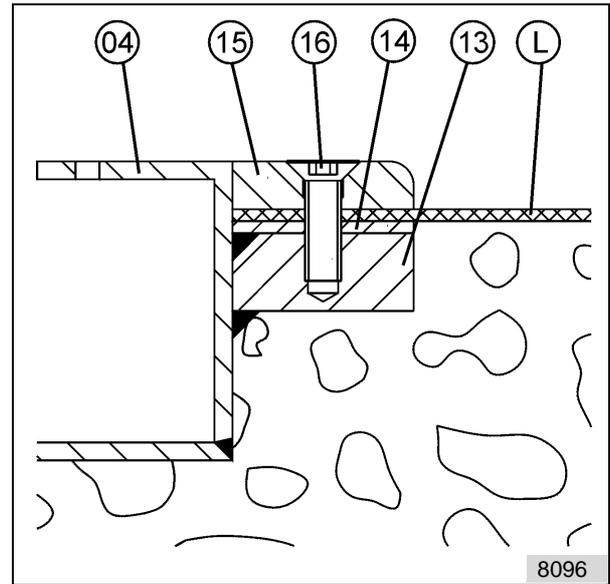


fig. 6: detail N

04 Stainless steel housing
 13 Clamp frame
 14 Clamp gasket
 15 Clamp ring
 16 Mounting screw

Determine the exact position of the air pad. Dismantle the clamp ring (15) and the clamp gasket (14) from the stainless steel housing (04).

Nail the flange from the stainless steel housing (04) to the floor shuttering in the desired position. Then fasten the frame in this position to the concrete reinforcing bars.

4.6 Installation for air supply 90° / Concrete-liner pool

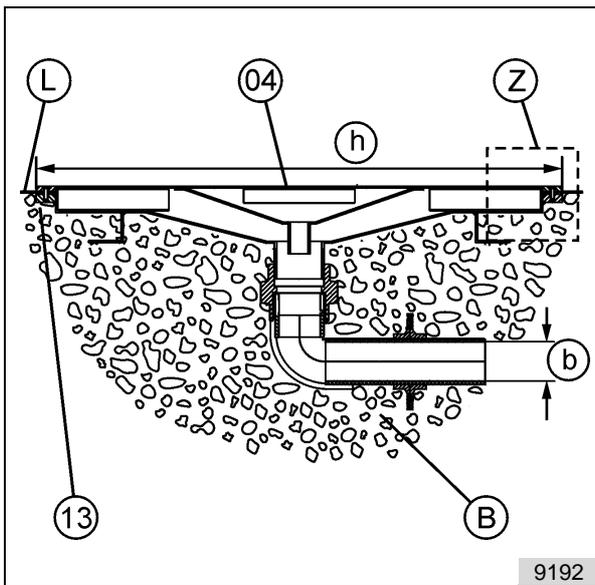


fig. 7

- b* = DN 65 / DN 80
- h* = 805 mm
- B* Raw concrete
- L* Liner

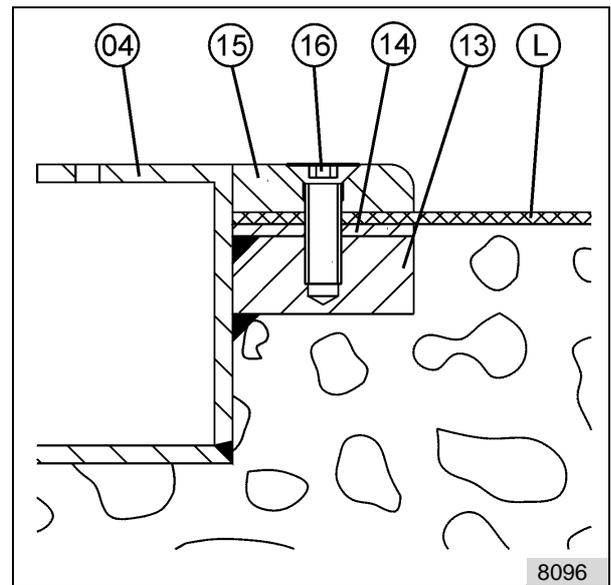


fig. 8: detail Z

- 04 Stainless steel housing
- 13 Clamp frame
- 14' Clamp gasket
- 15 Clamp ring
- 16 Mounting screw

Determine the exact position of the air pad. Dismantle the clamp ring (15) and the clamp gasket (14) from the stainless steel housing (04).

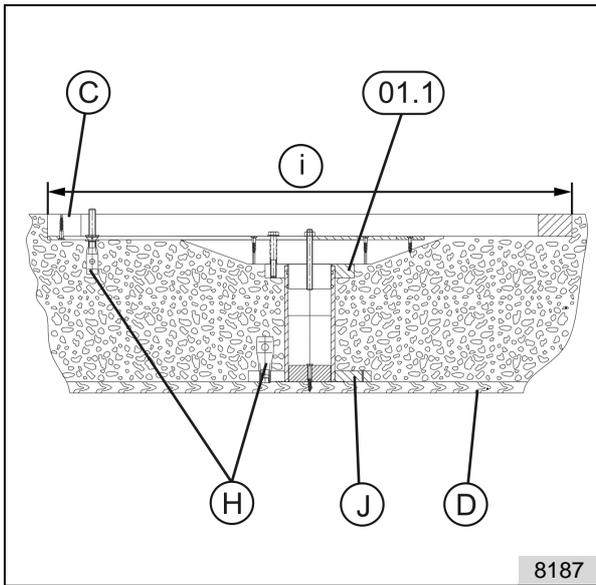
Fasten the stainless steel housing (04) in the desired position in the shuttering to the concrete reinforcing bars. Then make the pipe connection to the outer shuttering wall.

The upper edge of the clamp frame (13) must later be flush with the upper edge of the concrete (B). So please take into account the pool floor or insulation.

After inserting the stainless steel kit (04) position the liner (L) so that it covers the clamp frame and reaches up to the stainless steel housing (04).

Then insert the clamp gasket (14) and clamp ring (15) and fasten with the screws (16).

4.7 Shuttering for vertical air supply / Concrete pool with brush-applied sealant



- i* = 940 mm
- C* Wooden dummy
- D* Floor shuttering
- H* Sheath plug
- J* Flange
- 01.1* Installation kit

fig. 9

Position the installation kit (01.1) precisely within the tile grid and determine the exact centre for the floor flange (J). Fasten the centralizing plate in the middle and place the assembly kit (01.1) on top. The mid-point must be determined precisely as there will be no opportunity for making any corrections.



Attention:

The side edges of the installation kit (03.1) must be adjusted exactly along the tile grid lines as only a fine adjustment is possible when the air pad is later installed.

Nail the flange (J) of the installation kit (01.1) to the floor shuttering (D). Then fasten the frame in this position to the concrete reinforcing bars using the 3 sheath plugs (H).

4.8 Shuttering for air supply 90° / Concrete pool with brush-applied sealant

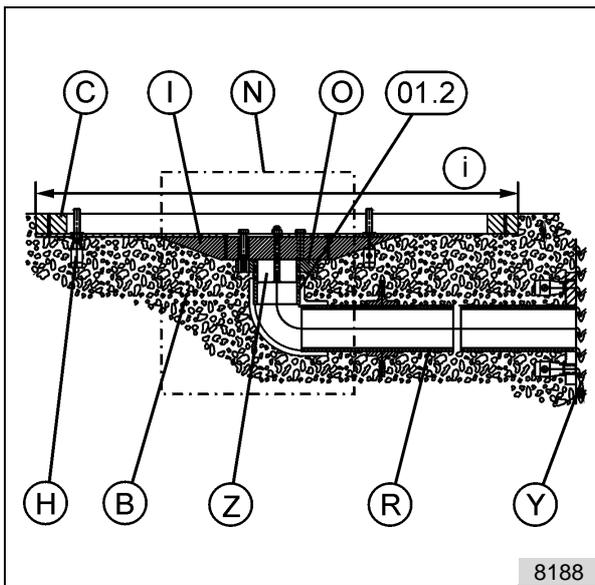


fig. 10

- i* = 940 mm
B Raw concrete
C Wooden dummy
H Sheath plug

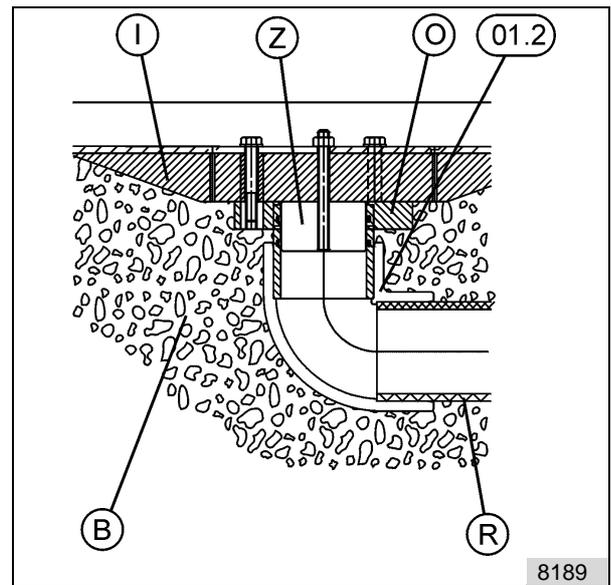


fig. 11: detail N

- O* Flange
R Pipe connection
Y Shuttering wall
 01.2 Installation kit



Important:

Position the installation kit (01.2) precisely within the tile grid. The side edges of the installation kit (01.2) must be adjusted exactly along the tile grid lines as only a fine adjustment is possible when the air pad is later installed. A correction later is not possible.

Fasten the installation kit (01.2) in the desired position in the shuttering. To make the fastening easier, 3 sheath plugs (H) are supplied for attaching it to the concrete reinforcing bars.

Then make the pipe connection (R) to the outer shuttering wall (Y).

4.9 Shuttering removal / Concrete pool with brush-applied sealant

After shuttering has been removed from the pool the wooden dummy (C) must be removed from the part concreted in. Remove the 7 connecting screws for this.

The wooden dummy (C), the fitting (I) and the stopper (Z) can now be removed. It is useful, however, to leave these parts on the floor (B) until the sealing work is started.

4.10 Installation for vertical air supply / Concrete pool with brush-applied sealant

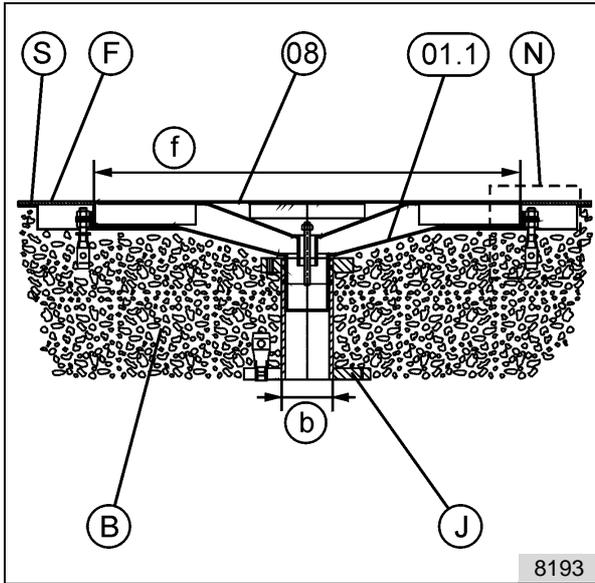


fig. 12

- $b =$ DN 65 / DN 80
 $f =$ 745 mm
B Raw concrete
F Tiles
G Stud bolt
H Sheath plug

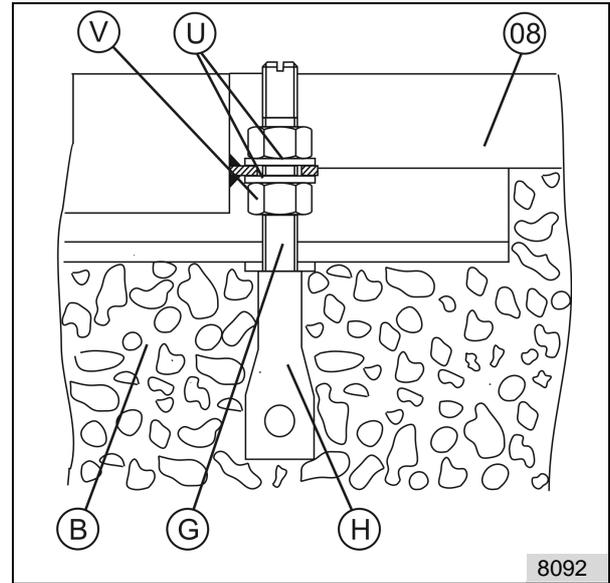


fig. 13: detail N

- J* Flange
S Brush-applied sealant
U Distance washer
V Adjusting nut
01.1 Installation kit
08 Stainless steel housing

After the wooden dummy (C) has been removed from the installation kit (01), the 3 sheath plugs (H) lie exposed on the raw concrete floor (B).

Screw the stud bolts (G) supplied into the sheath plugs (H). Then screw the adjusting nut (V) and distance washer (U) onto the stud bolt (G).

The swimming pool can be lined with brush-applied sealant (S) up to the inner contour of the flange (O).

Fill the holes in the flange (O) with sealing compound.

Place the shackles of the stainless steel housing (08) over the stud bolts and adjust accordingly. Make sure that the sealing rings sit properly in the installation kit (01) and that they are not damaged.

By adjusting the nut (V) position the stainless steel housing (08) in such a way that its upper edge will later lie flush with the upper edge of the tiles. Please take into account the pool floor and the height of the tiles!

Finally fasten with distance washer (U) and locking nut. If required, apply a layer of mortar and tiles just up to the installation kit (01).

4.11 Installation / Retro-fitting

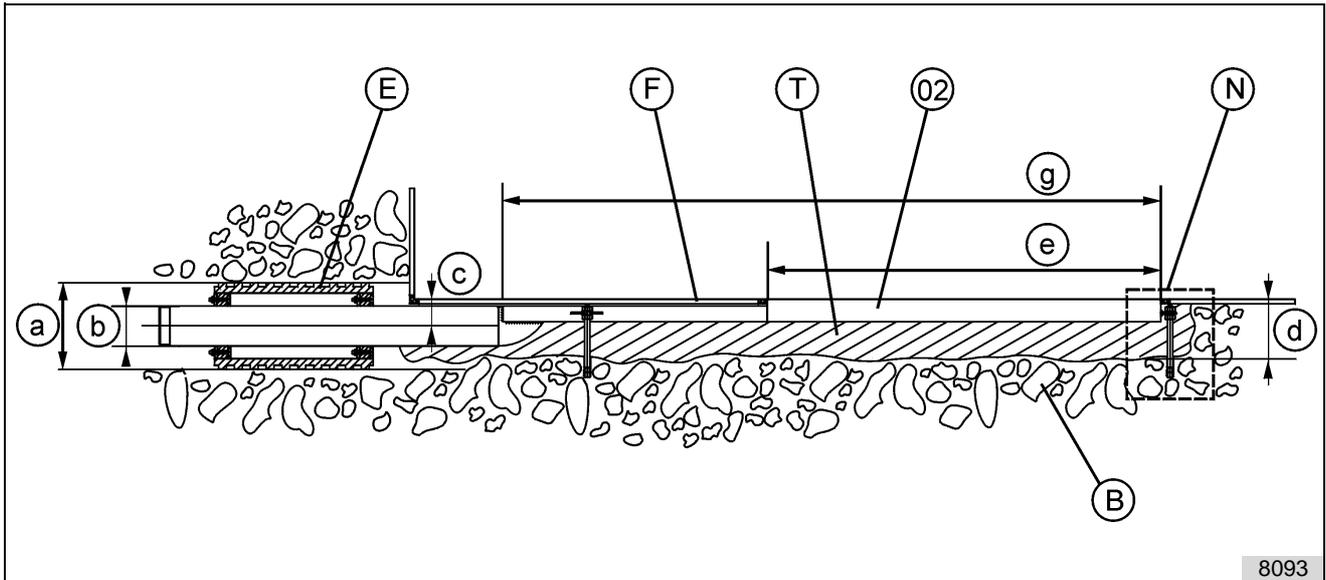


fig. 14

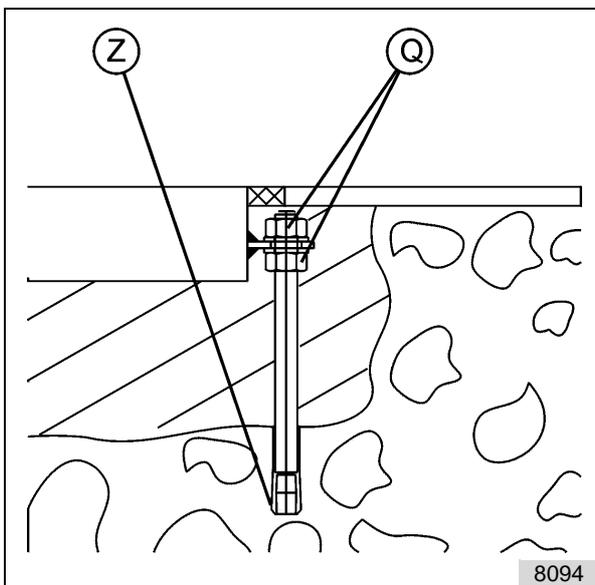


fig. 15

- a = \varnothing 160 mm
- b = DN 65 / DN 80
- c = 50 mm
- d = 110 mm
- e = 750 mm
- g = 1,250 mm

- B Concrete
- E PVC sleeve
- F Tiles
- Q Adjusting nut
- T Epoxy resin
- Z Anchor

- 02 Stainless steel housing

Determine the exact position of the air pad for retro-fitting (02) taking into account the modular dimensions of the tiles. Remove the tiles (F) at the desired place and chisel out the concrete floor (B). The depth of the hole cut out must be 110 mm measured from the upper edge of the tiles.

Drill a 160 mm diameter hole in the pool edge, insert the stainless steel housing (02) with the PVC sleeve (E) and fasten to the floor with anchors (Z).



Attention!

Make sure that the positioning corresponds precisely to the tile grid as a correction later is no longer possible.

Set the upper edge of the stainless steel housing (02) to be flush with the upper edge of the tiles by using the adjusting nuts (Q) of the anchors (Z).

Once the stainless steel housing (02) is precisely positioned, fill the installation hole with epoxy resin (T).

4.12 Pipework Diagram

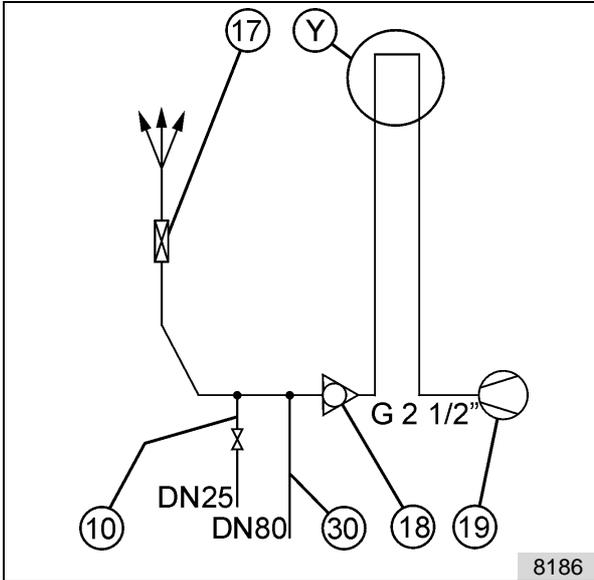


fig. 16: Suggestion for air pad
750mm x 750mm
Delivery rate per connection:
255 m³/h

- 10 Drain pipe
- 17 Shut-off unit
- 18 Non-return valve
- 19 Blower, P = 2.9 kW
- 30 Fresh water pipe
- Y Air loop
(this must be placed a minimum of
0.5m above the surface of the wa-
ter)

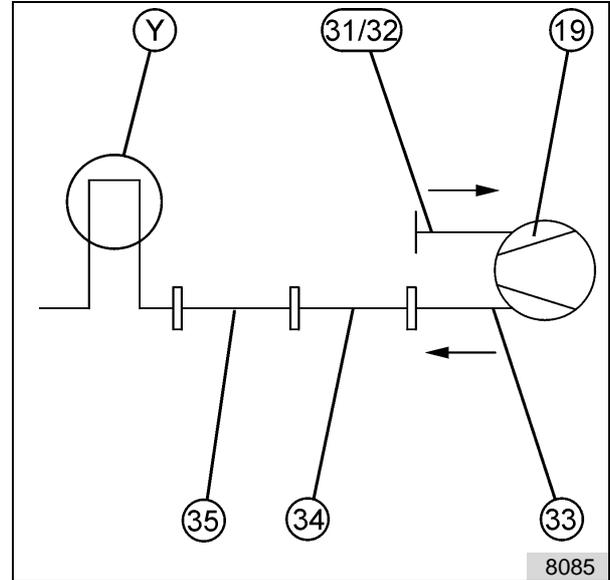


fig. 17: When blower accessories are
fitted (schematic diagram)

- 19 Blower
- 31/32 Fine filter / muffler
- 33 Heat-resistant pipe
- 34 Intermediate piece (only for instal-
lation of 31/32)
- 35 Pressure control valve
- Y Air loop
(this must be placed a minimum of
0.5m above the surface of the wa-
ter).



Important:

The suggested pipework diagram takes no account of actual local conditions.



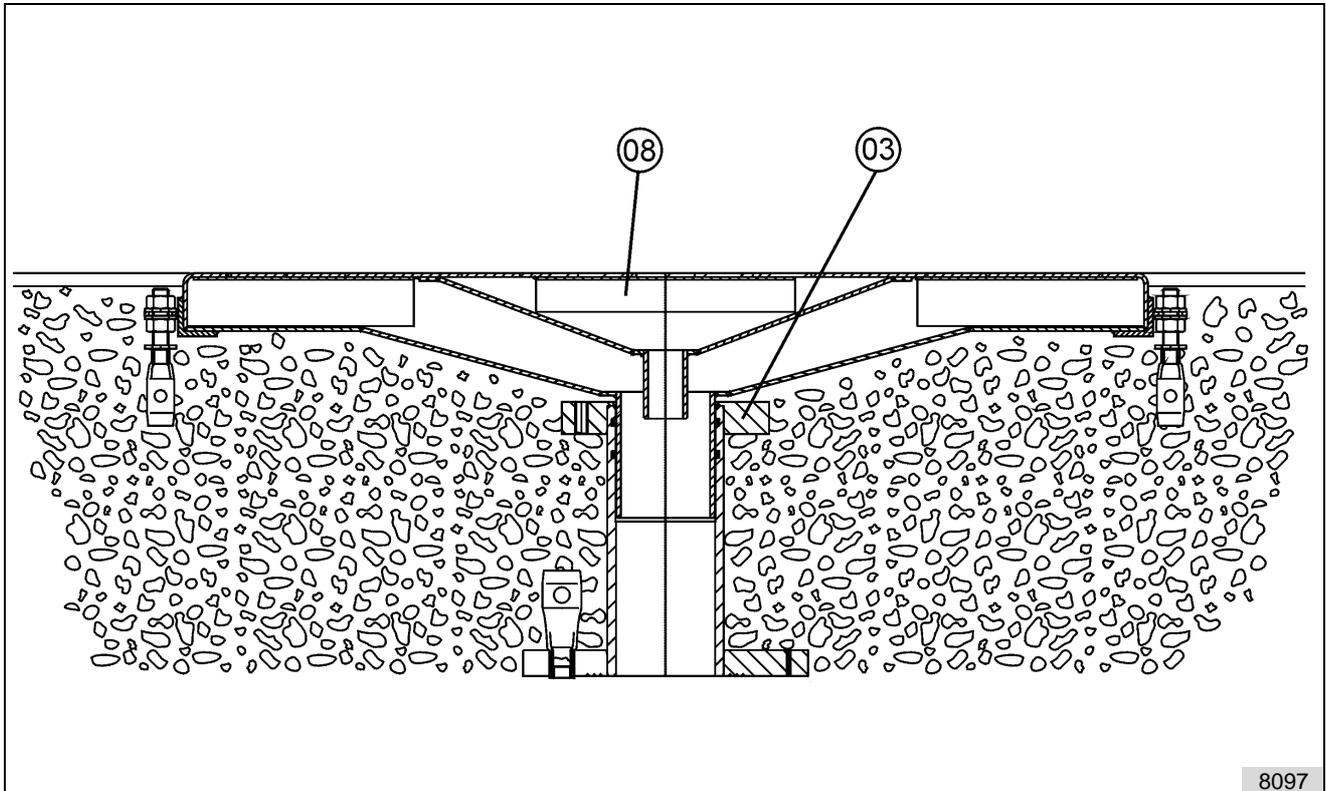
Attention!

To determine the exact dimensions of the pipes all elements that contribute to the flow must be taken into consideration.

Most importantly no 90° T-pieces or angles must be employed. Furthermore all shut-off devices such as flaps or sliders as well as measuring detectors etc. must be included in the flow reduction calculation.

5 Ersatzteilliste Luftsprudelanlage Typ 75 / Liste des pièces detachées Bain bouillonnant type 75 / Spare parts list Air bubbler type 75

5.1 Betonbecken gefliest / Bassin béton-carrelage / Concrete-tile pool



8097

Abb. 18

Pos.	Best. Nr. No. de réf. Order No.	Bezeichnung	Désignation	Description	Stck. Nbre. Qty.	Bemerkung Remarque Remark
03.1	92963	Einbausatz komplett	Pièce à sceller compl.	Installation kit complete	1	senkrecht / vertical / vertical
03.2	92964	Einbausatz komplett	Pièce à sceller compl.	Installation kit complete	1	90°
08	58964	Edelstahlgehäuse 750x750	Carter en inox 750x750	Stainless steel housing 750x750	1	
	91640	Fertigmontage kom- plett 750 x 750	Kit de montage complet 750 x 750	Assembly kit complete 750x750	1	

5.2 Betonbecken mit Folie / Bassin béton-liner / Concrete-liner pool

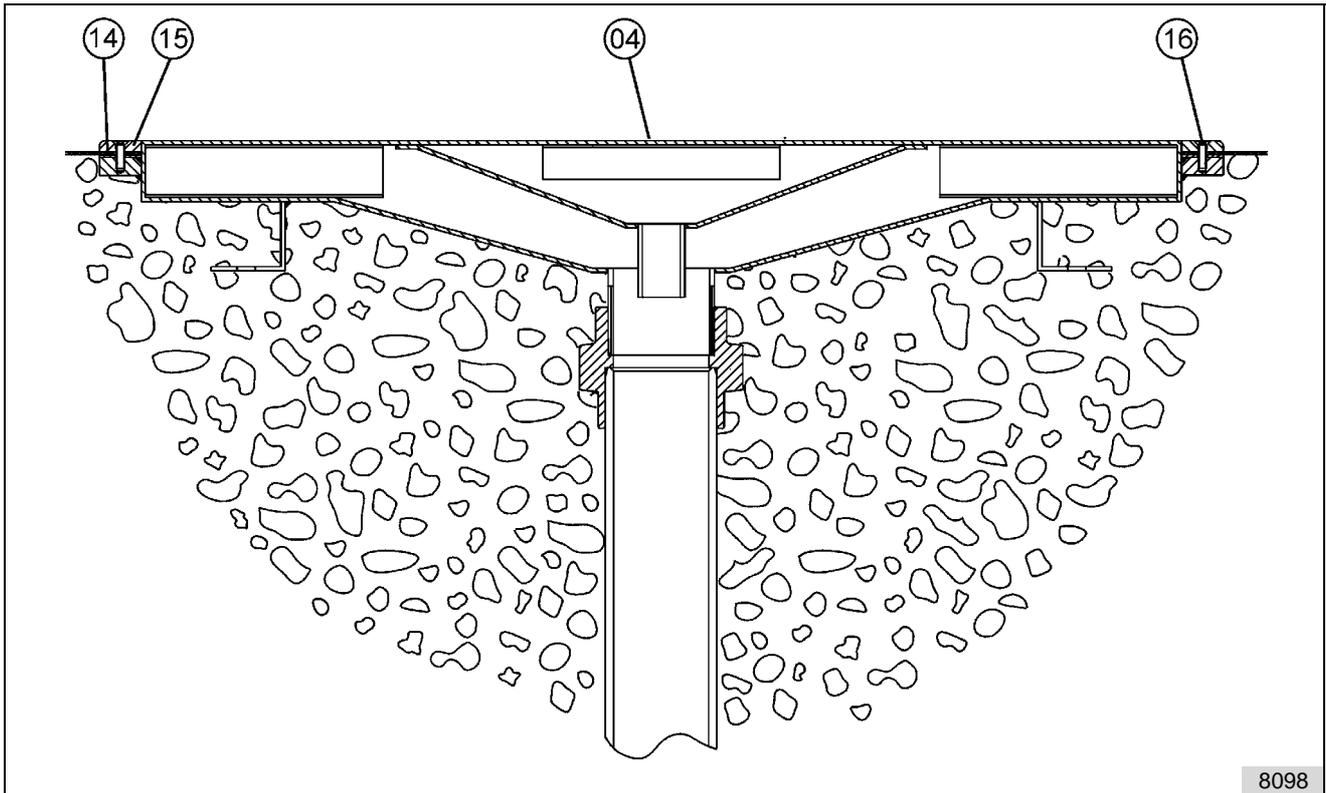


Abb. 19

Pos.	Best. Nr. No. de réf. Order No.	Bezeichnung	Désignation	Description	Stck. Nbre. Qty.	Bemerkung Remarque Remark
04	55973	Edelstahlgehäuse 750x750	Carter en inox 750x750	Stainless steel housing 750x750	1	
14	22172	Flachdichtung	Joint plat	Clamp gasket	1	
15	55974	Klemmring	Bague de serrage	Clamp ring	1	
16	10156	Befestigungsschraube	Vis de fixation	Mounting screw	56	M6x16
	93667	Luftsprudelanlage komplett	Bain bouillonnant complet	Air bubbler complete	1	senkrecht / vertical / vertical
	93668	Luftsprudelanlage komplett	Bain bouillonnant complet	Air bubbler complete	1	90°

5.3 Betonbecken mit Streichfolie / Bassin béton avec étanchéité souple / Concrete pool with brush-applied sealant

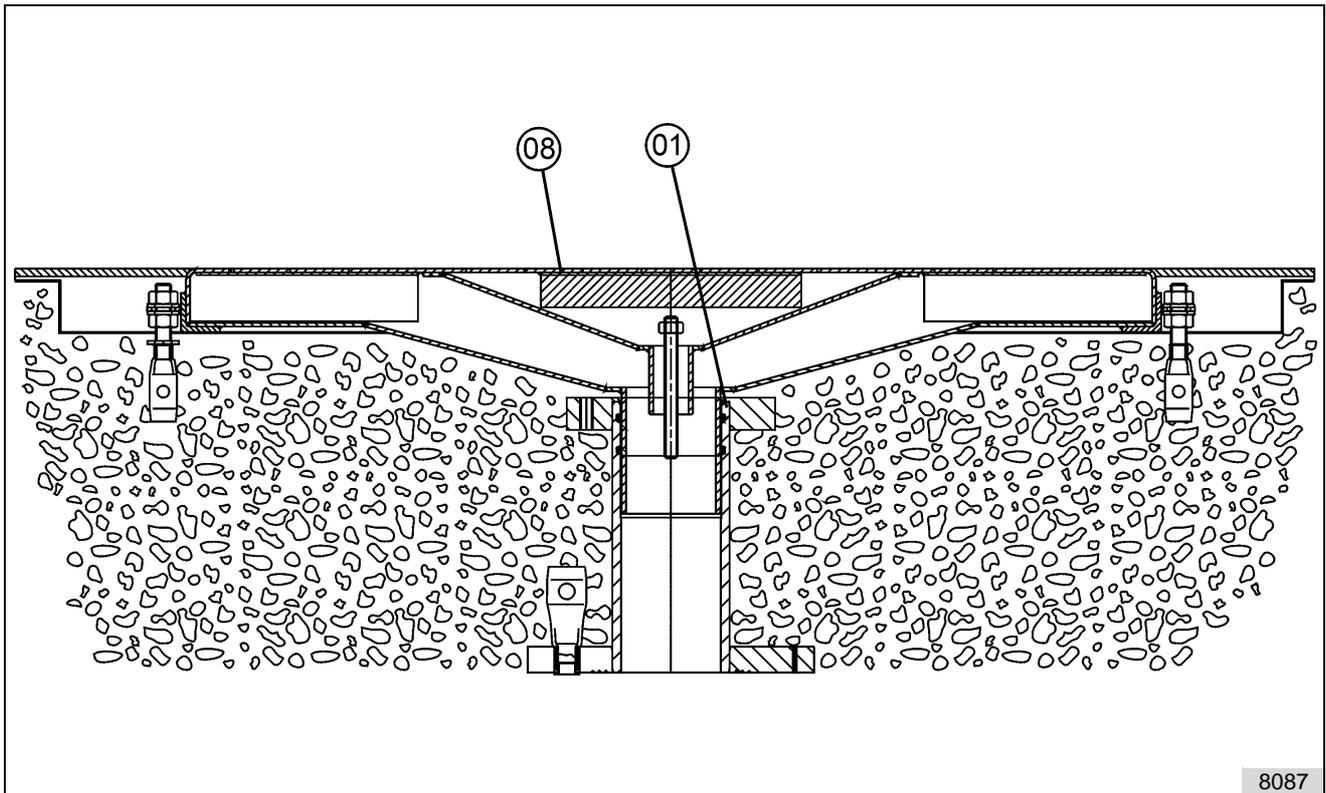


Abb. 20

Pos.	Best. Nr. No. de réf. Order No.	Bezeichnung	Désignation	Description	Stck. Nbre. Qty.	Bemerkung Remarque Remark
01.1	92354	Einbausatz komplett	Pièce à sceller compl.	Installation kit complete	1	senkrecht / vertical / vertical
01.1	92370	Einbausatz komplett	Pièce à sceller compl.	Installation kit complete	1	90°
08	58964	Edelstahlgehäuse 750 x 750	Carter en inox 750 x 750	Stainless steel housing 750 x 750	1	
	91640	Fertigmontage kom- plett 750 x 750	Kit de montage complet 750 x 750	Assembly kit complete 750x750		

5.4 Nachträglicher Einbau / Bassin existant / Retro fitting

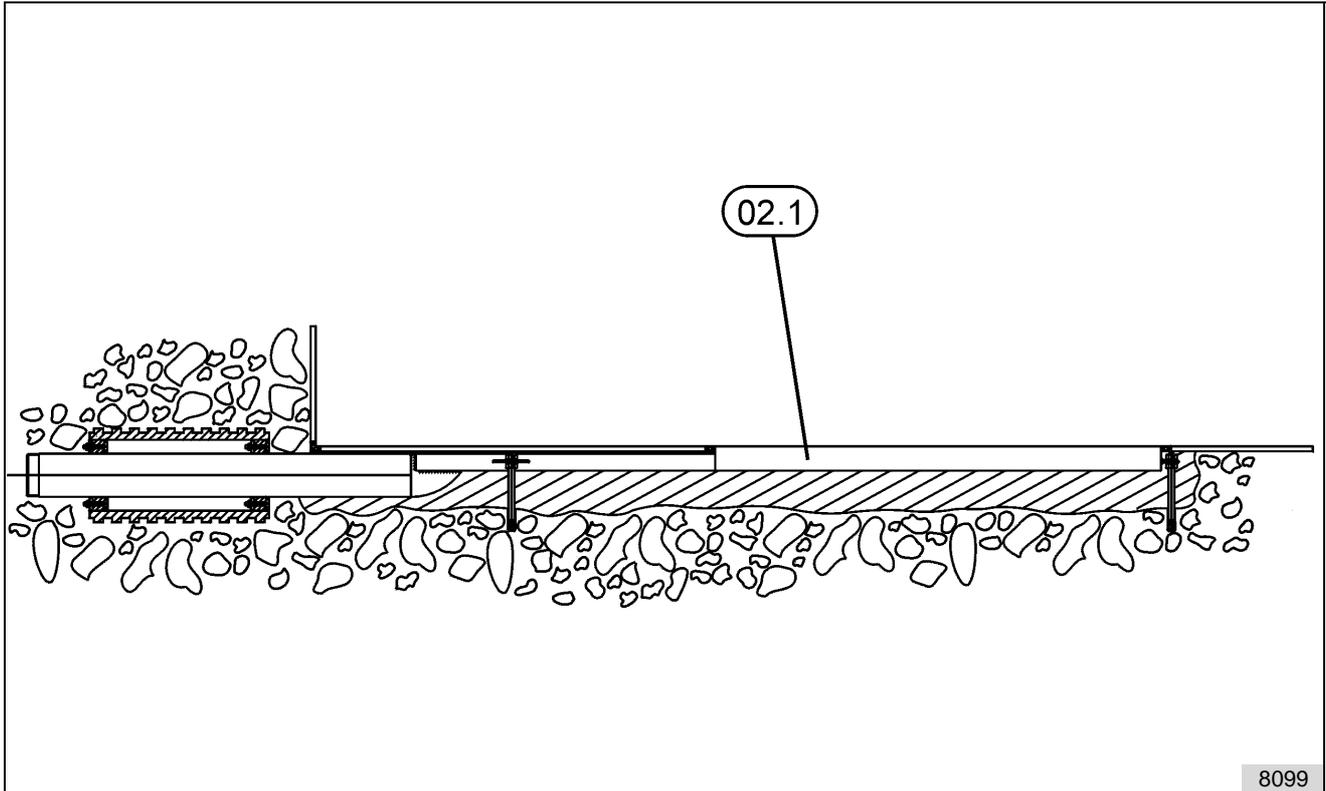


Abb. 21

Pos.	Best. Nr. No. de réf. Order No.	Bezeichnung	Désignation	Description	Stck. Nbre. Qty.	Bemerkung Remarque Remark
02.1	92798	Edelstahlgehäuse 750x750	Carter en inox 750x750	Stainless steel housing 750x750	1	90°
02.2	93310	Edelstahlgehäuse 750x750 (ohne Abbildung)	Carter en inox 750x750 (sans figure)	Stainless steel housing 750x750 (not shown)	1	senkrecht / vertical / vertical



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Air bubbler type 75
Version: 27101 - C