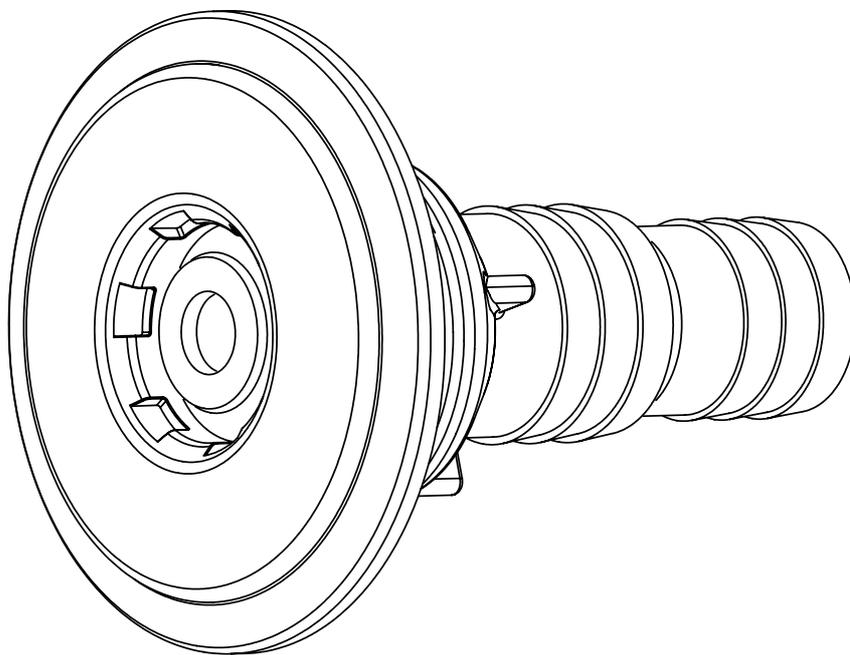


Instruction and Operation Manual

OCEAN INLET NOZZLES



Index:

Manufacturer's right.....	page 3
Preface to installation and operation manual.....	page 3
Appropriate application.....	page 3
Warranty and liability.....	page3

1 General	page 4
-----------------	--------

- 1.1 Breaking the ball nozzle in various diameters
- 1.2 Screwing and loosening of the part by using the multi purpose spanner

2 Steelwall pools	page 5
-------------------------	--------

3 Liner pools	page 7
---------------------	--------

4 Tile pools	page 8
--------------------	--------

5 Polyester pools.....	page 10
------------------------	---------

6 Miscellanoeus.....	page 12
----------------------	---------

- 6.1 Applying the sealing plug

Manufacturer's right

The operating manual contains copyright protected information belonging to Praher Kunststofftechnik GesmbH. The installation and operation manuals are intended for installers and equipment operators. The reproduction or translation of these documents in other languages, partly or completely, requires a written permission by Praher Kunststofftechnik GesmbH.

Preface to installation and operation manual

The installation and operation manual's intent is to learn about the Ocean inlet nozzles and to utilize its appropriate range of applications.

This manual contains important safety and operational information.

Your compliance with the regulations will help to,

- ✘ avoid danger
- ✘ avoid repair expenses and breakdown
- ✘ to improve the reliability and life span of the inlet nozzles.

Appropriate application

The inlet nozzles shall only be installed at the following types of pools

- ✘ steelwall-pools with liner
- ✘ polyester - pools
- ✘ concrete - pools

All other applications are not considered „appropriate“ and Praher Kunststofftechnik GesmbH can not be held liable for any claims.

Warranty and liability

All warranties shall be in conformance with European Union rights.

Any warranty or personal liability claims shall be considered as „inappropriate“, if caused by one or more of the following, reasons :

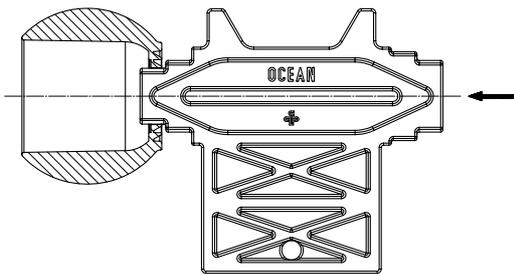
- ✘ inappropriate use of the inlet nozzles.
- ✘ unprofessional installation, operation and servicing of the inlet nozzles.
- ✘ installation, operation and maintenance of the inlet nozzles without the installation and operation manual
- ✘ unprofessional repairs of the inlet nozzles
- ✘ damages caused due to weather related forces and /or natural disasters

1 General

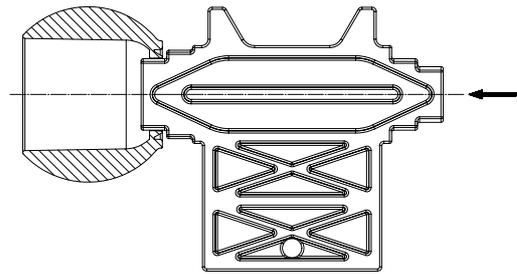
1.1 Breaking the nozzle in various diameters

The ball can be broken in 2 different diameters. The original diameter of the ball is 13mm.

diameter 17mm:

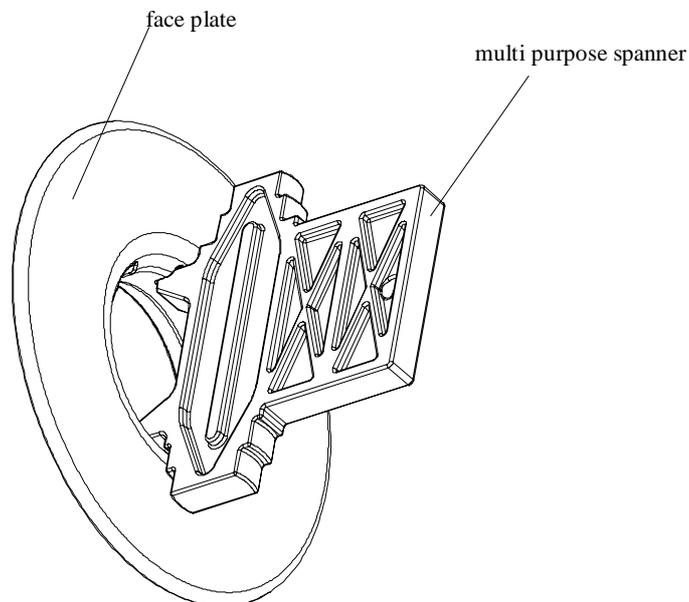


diameter 21mm:



The use of a hammer makes the breaking of the ball opening easier. However, the blow has to be carried out very carefully.

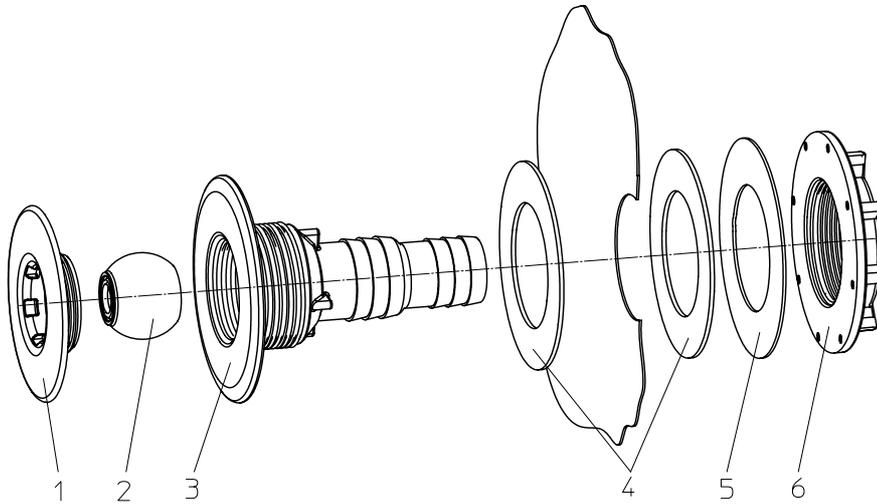
1.2 Screwing and loosening the part by using the multi purpose spanner



For screwing the ring in and out (resp. also with the sealing plug) the multi purpose spanner is used (part #: 150420)

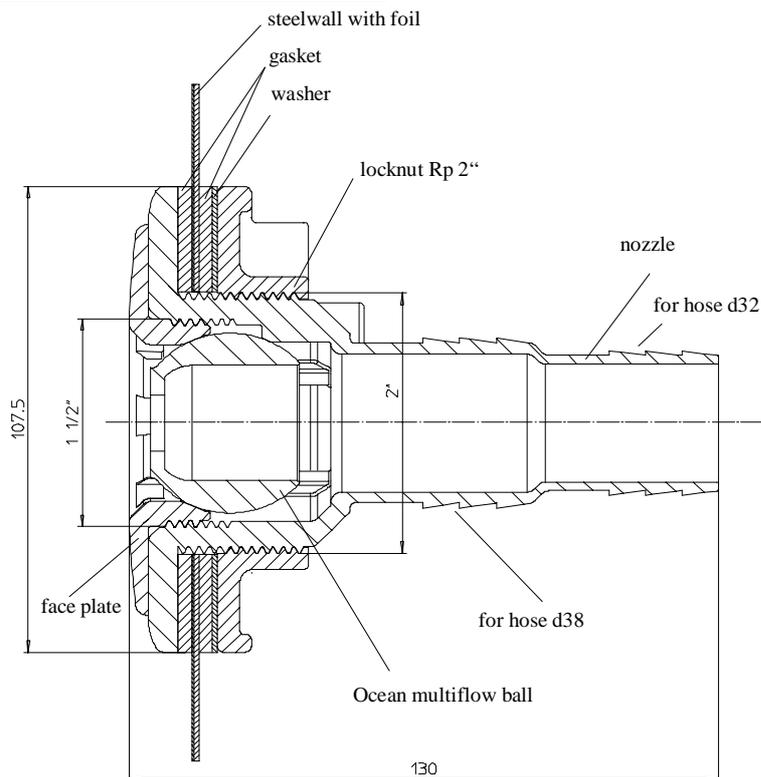
2 Steelwall pools (part #: 170628)

Individual parts:



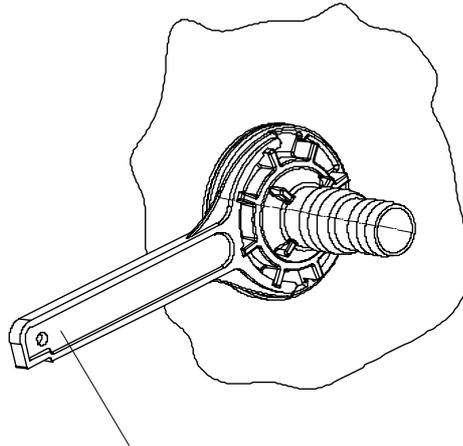
- 1) face plate
- 2) Ocean multiflow ball (part #: 150501)
- 3) nozzle
- 4) 2 x gasket
- 5) washer
- 6) locknut Rp 2"

Installation of the nozzle in the pool wall



Assembly instructions:

- 1) Put the gasket on the nozzle and push it through the already punched hole in the steelwall with foil.
- 2) One gasket and one washer have to be put onto the nozzle.
- 3) Screw the locknut Rp 2" on to the nozzle so tight, that the gasket get slightly squeezed.
The screwing easier if the flexfit spanner is used. (part #: 71635)



Flexfit spanner



Caution : During installation of the nozzle make sure that the procedure is done stress free.

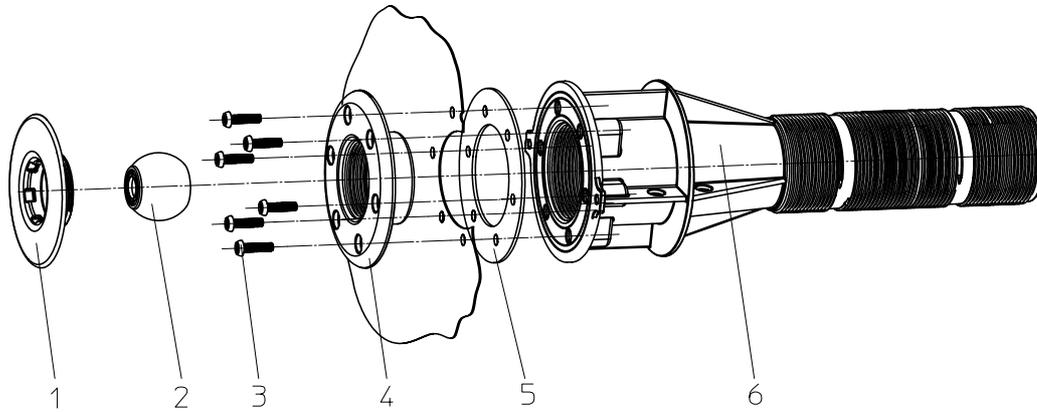
- 4) If necessary, break the ball with a larger diameter (cf page 4, item 1.1). Put the ball in the housing and screw the face plate together with the housing by using the multi purpose spanner (cf 1.2)
Discharge angle resp. -direction of the ball opening are individually adjustable. The ball is fixed with the face plate.



Caution: The ball must not be mounted laterally reversed. The small opening is always the discharge opening (cf drawing page 5).

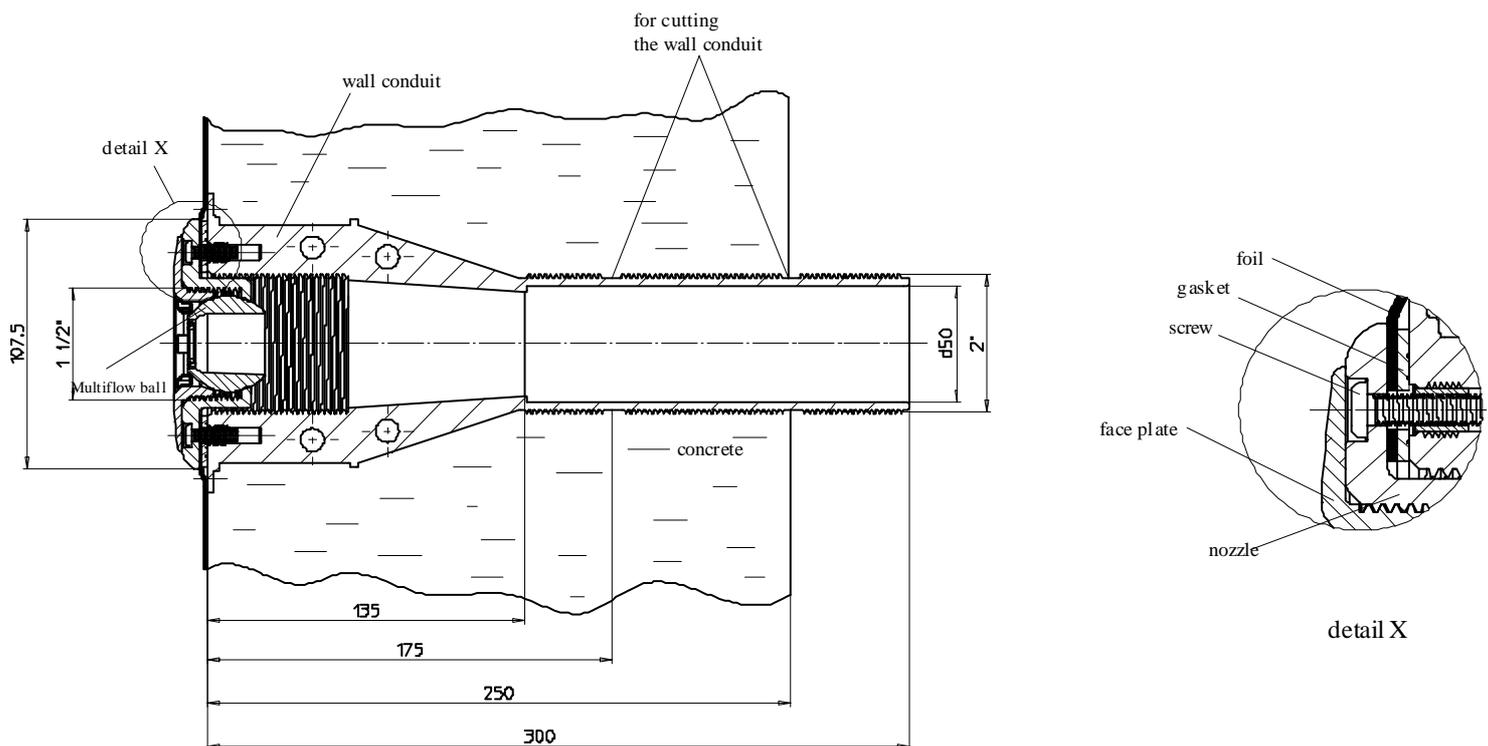
3 Liner Pools (part #: 170625a)

Individual parts:



- 1) face plate
- 2) Ocean multiflow ball (part #: 150501)
- 3) 6 x TORX - screws
- 4) nozzle
- 5) gasket
- 6) wall conduit

Installation of the nozzle in the liner pool:



Assembly instructions:

- 1) Stick on the protective film for construction
- 2) Bring the wall conduit in the requested position

Note: Chemical resistance data to ABS are only to be used as a guideline, as changes in the composition of the medium(i.g.e: premixed concrete, concrete, silicon, foam,..) and operating conditions may cause variations. Always perform a compatibility test if you are not certain about the materials. No warranty claims based on the published chemical resistance chart will be accepted. The data are up to date and we reserve the right to changes based on new information.

- 3) Prior to laying the pool foil, remove the protection film for construction.
- 4) Put the flat gasket between wall conduit and pool foil.
- 5) Nozzle and wall conduit are screwed together with the TORX M5 screws, that are included in the scope of delivery.
- 6) Adjust the parts and finish screwing them together.



CAUTION when using an AKKU-screwdriver
Recommended rpm = max. 500 rpm
Force = max. 2Nm

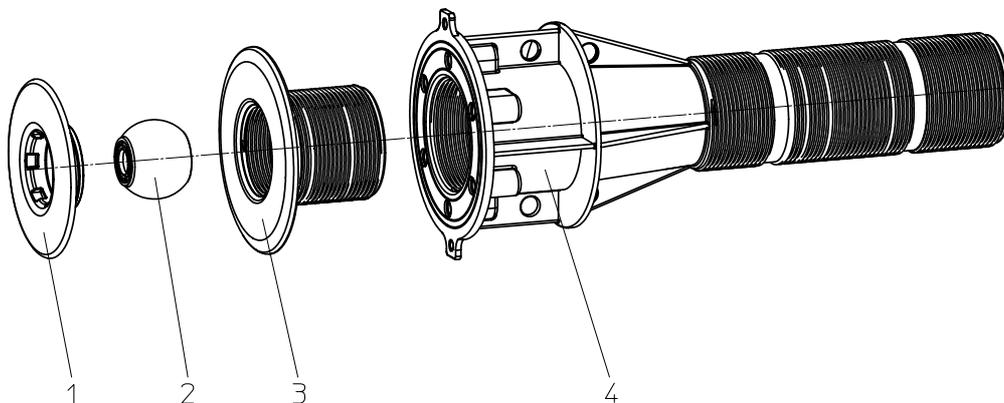
- 7) If necessary, break the ball with a larger diameter (cf page 4, item 1.1). Put the ball in the housing and screw the face plate together with the housing by using the multi purpose spanner (cf 1.2). Discharge angle resp. -direction of the ball opening are individually adjustable. The ball is fixed with the face plate.



Caution: The ball must not be mounted laterally reversed. The small opening is always the discharge opening (cf drawing page7).

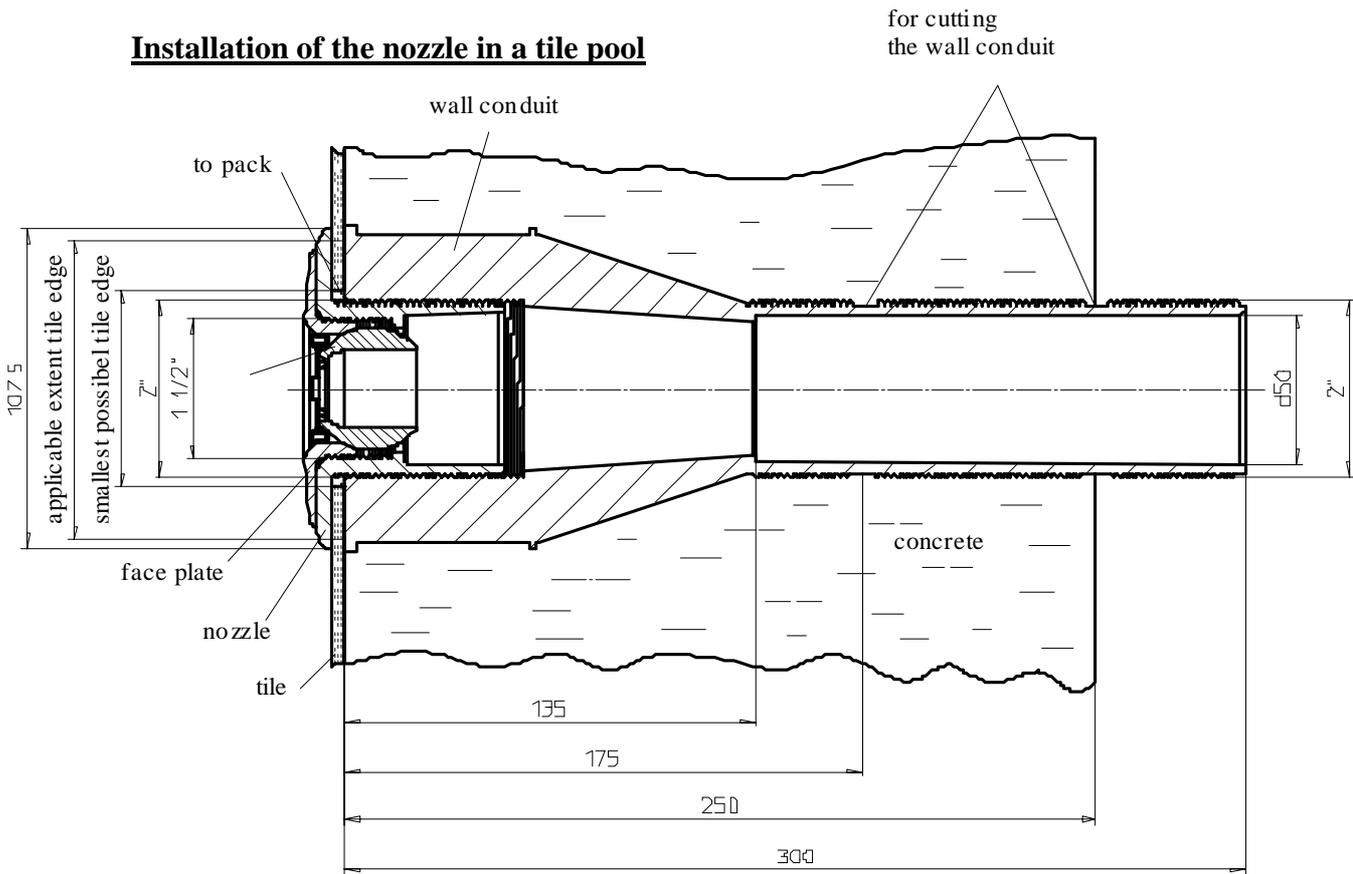
4 Tile Pools (part #: 170626A)

Individual parts:



- 1) face plate
- 2) Ocean multiflow ball (part #: 150501)
- 3) nozzle for tile pools
- 4) wall conduit

Installation of the nozzle in a tile pool



Assembly instructions:

- 1) Stick on the protective film for construction
- 2) Bring the wall conduit in the requested position

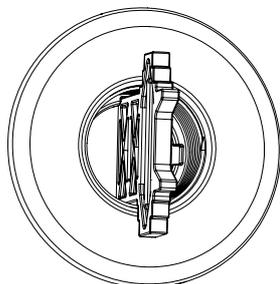
Note: Chemical resistance data to ABS are only to be used as a guideline, as changes in the composition of the medium(i.g.e: premixed concrete, concrete, silicon, foam,..) and operating conditions may cause variations. Always perform a compatibility test if you are not certain about the materials. No warranty claims based on the published chemical resistance chart will be accepted. The data are up to date and we reserve the right to changes based on new information.

- 3) After concreting remove the protection film for construction.



Caution: When gluing the tiles, take care that the inside thread of the wall conduit does not get contaminated.

- 4) The tiles can be glued so tight to the wall conduit, that the nozzle can still be screwed into the wall conduit and that the nozzle overlaps the tile edge (cf above drawing)
The space between tiles and wall conduit (resp. wall) has to be sealed appropriately.
 Nozzle has to be screwed into the wall conduit by using the multi purpose spanner (cf above drawing)



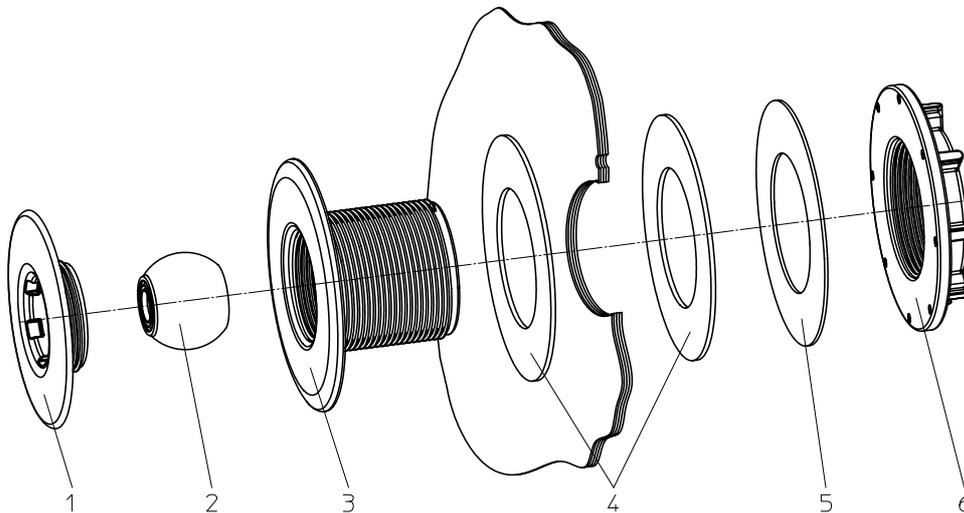
- 5) If necessary, break the ball with a larger diameter (cf page 4, item 1.1). Put the ball in the housing and screw the face plate together with the housing by using the multi purpose spanner (cf 1.2). Discharge angle resp. -direction of the ball opening are individually adjustable. The ball is fixed with the face plate.



Caution: *The ball must not be mounted laterally reversed. The small opening is always the discharge opening (cf drawing page9).*

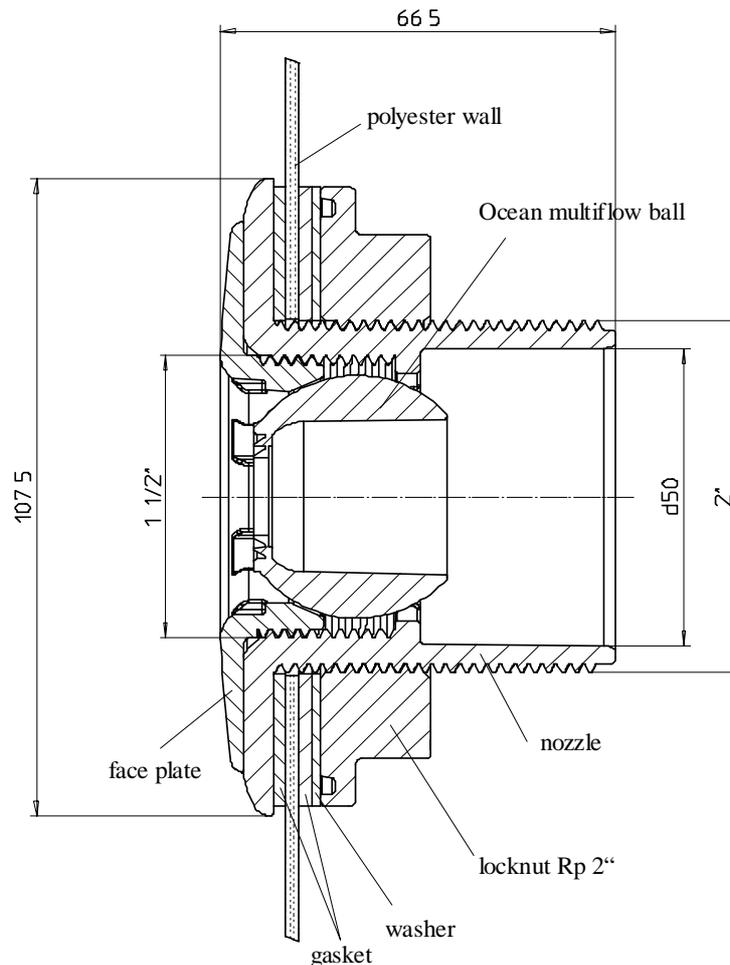
5 Polyester pools (part #: 170627a)

Individual parts:



- 1) face plate
- 2) Ocean multiflow ball (part #: 150501)
- 3) nozzle for polyester pools
- 4) gasket
- 5) washer
- 6) locknut Rp 2''

Installation of the nozzle in a polyester pool



Assembly instructions:

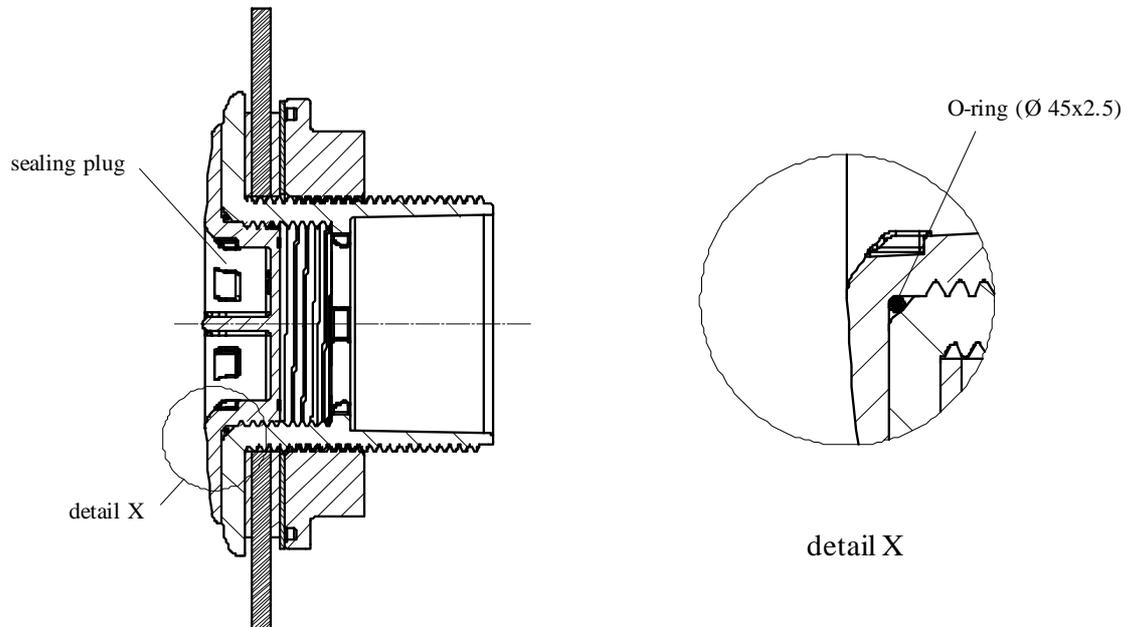
- 1) Put the nozzle with already slid on gasket through the already cut hole in the polyester pool wall.
- 2) Slide one gasket and one washer onto the nozzle.
- 3) Screw the locknut Rp2" on to the nozzle and screw so tight, that the gasket gets slightly squeezed. Using the Flexfit spanner (part #: 71635) makes this process easier (cf page 6)
- 4) Glue in the pipe and leave it for approx. 1 hour.
- 5) If necessary, break the ball with a larger diameter (cf page 4, item 1.1). Put the ball in the housing and screw the face plate together with the housing by using the multi purpose spanner (cf 1.2). Discharge angle resp. -direction of the ball opening are individually adjustable. The ball is fixed with the face plate.



Caution: Caution: The ball must not be mounted laterally reversed. The small opening is always the discharge opening (see above drawing).

6 Miscellaneous

6.1 Applying the sealing plug



*) Sealing plug with O-ring (Ø 45x2.5) (part #: 100224)

Using the sealing plug:

- *) Sealing the nozzle during wintertime
- *) If a nozzle is planned, but not yet put into operation

In order to keep the sealing plug water proof the O-ring (Ø 45x2.5)