

Service – Hydrant piston change - Procedure for demontage Above hydrant non break away DN80/DN100

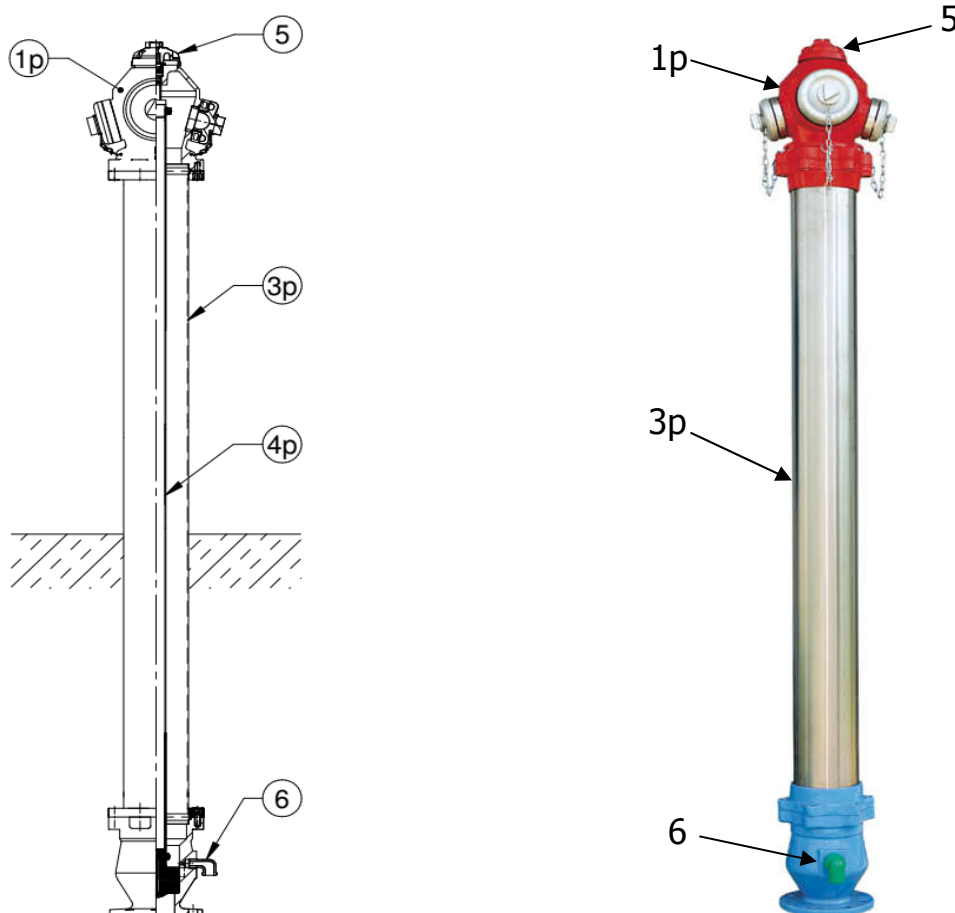
Whenever a maintenance or service is carried out, the hydrant must not be under the pressure of the fluid. For safety reasons, ensure that the entire installation is not under pressure.

It is essential that the user of the hydrants is also aware of the weight of the components and/or assemblies that must be handled and manipulated during installation and maintenance. It is the users responsibility to ensure that safe working practices are followed at all times.

Any damaged parts of the replaced product can be recycled as well as the product if it is withdrawn from use and in accordance with the prescribed national environmental protection regulations.

Whenever hydrants are installed, operated, or maintained, it is essential that the staff that undertake these operations are adequately trained. The hazards associated with pressurised liquids and gasses can be severe, and it is the responsibility of the user to ensure that trained, competent staff undertake these duties.

1. Basic hydrant parts



Pic 1.

Subassembly of the hydrant

- 1p – Subassembly of the hydrant head (for detail see page 5, pic 8)
- 3p – Subassembly of the hydrant's outside pipe with a base (for details see page 6, pic 9)
- 4p – Subassembly of the inside hydrant pipe with piston (for details see page 6, pic 9)
- 5 – Cap / wheel of an above ground hydrant
- 6 – Drainage of the above ground hydrant

2. Dismantling the hydrant

2.1 Implementation of safety measures

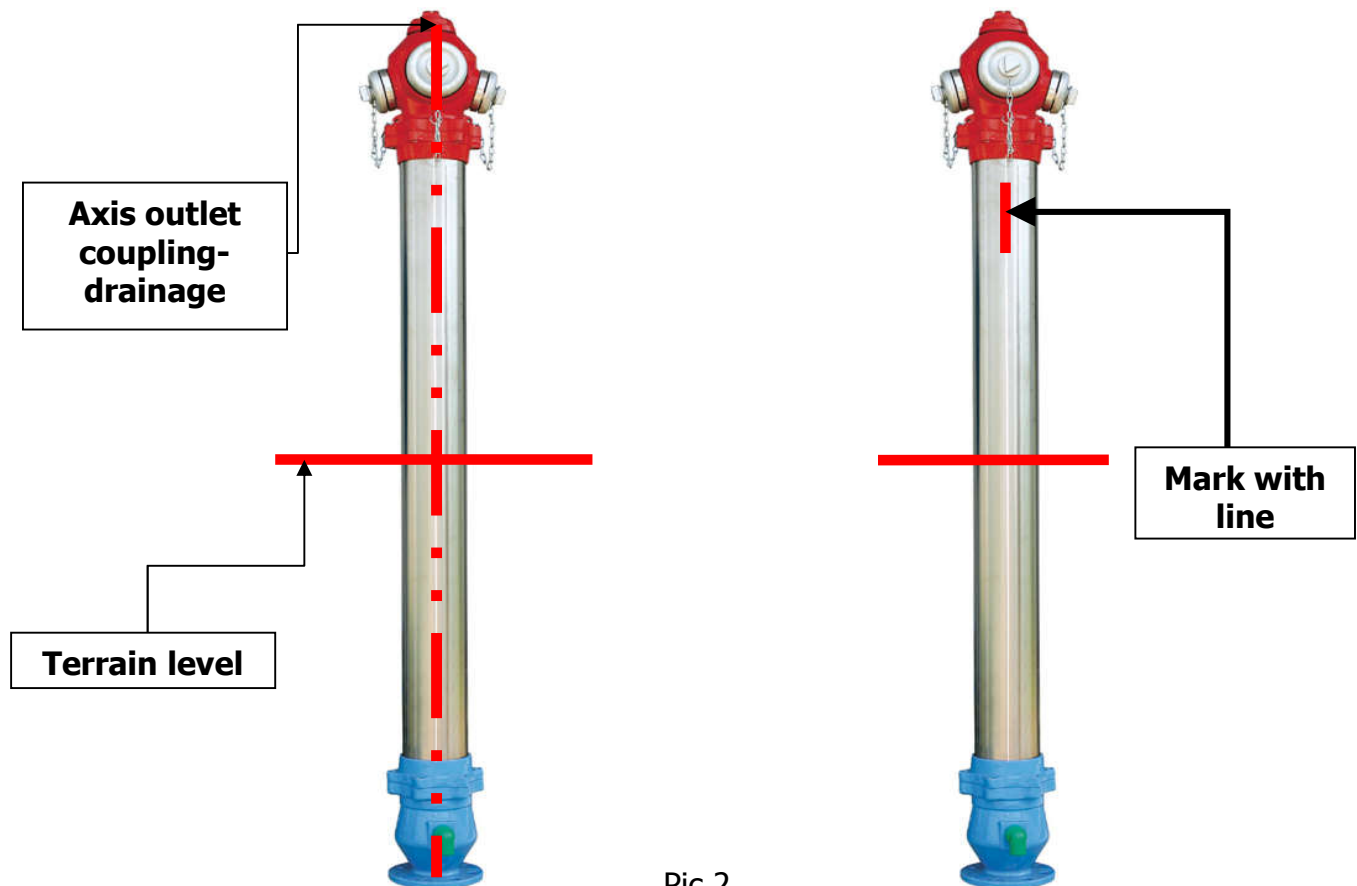
Before any manipulation, ensure that the pipeline is NOT pressurized, that there is no inlet pressure of the fluid on the piston in the hydrant base, and that the hydrant interior is not under pressure !!!!

Failure to observe this measure and other safety measures (see page 1) may cause injury to workers and / or material damage!

Remark:

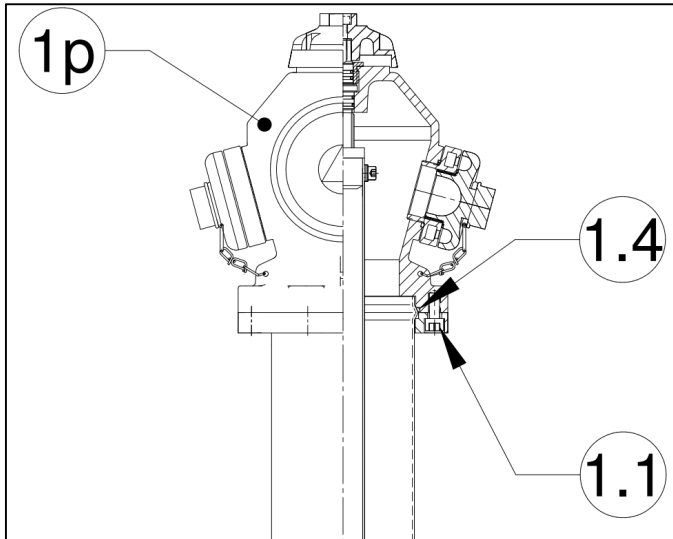
For later easier mounting of the subassembly of the inner pipe of the hydrant with the piston 4p inside in the subassembly of the hydrant's outside pipe with a base p3 in the case when the hydrant is buried, make a mark on the subassembly p3 on the part that is above the ground.

Mark the axis outlet coupling-drainage with line on the part of the available hydrant's outer pipe with the adhesive tape or pencil which could clean out.



Pic 2.

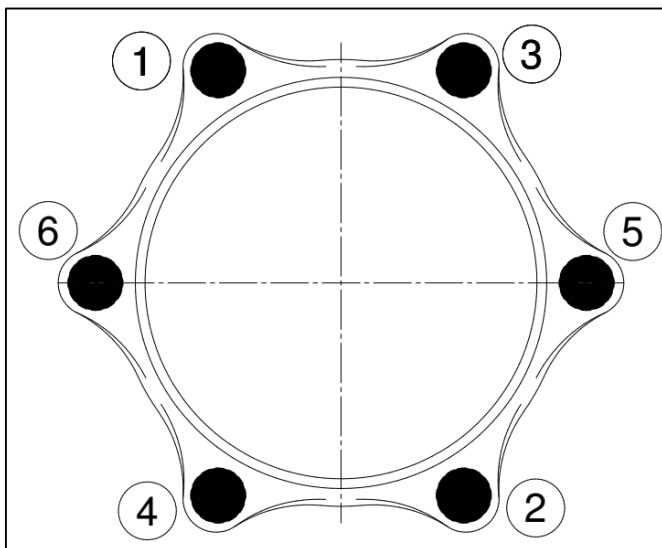
When there is no inlet pressure and when the hydrant is completely drained, open the hydrant all the way in the opposite direction of the clock.



Pic 3.



Pic 4.



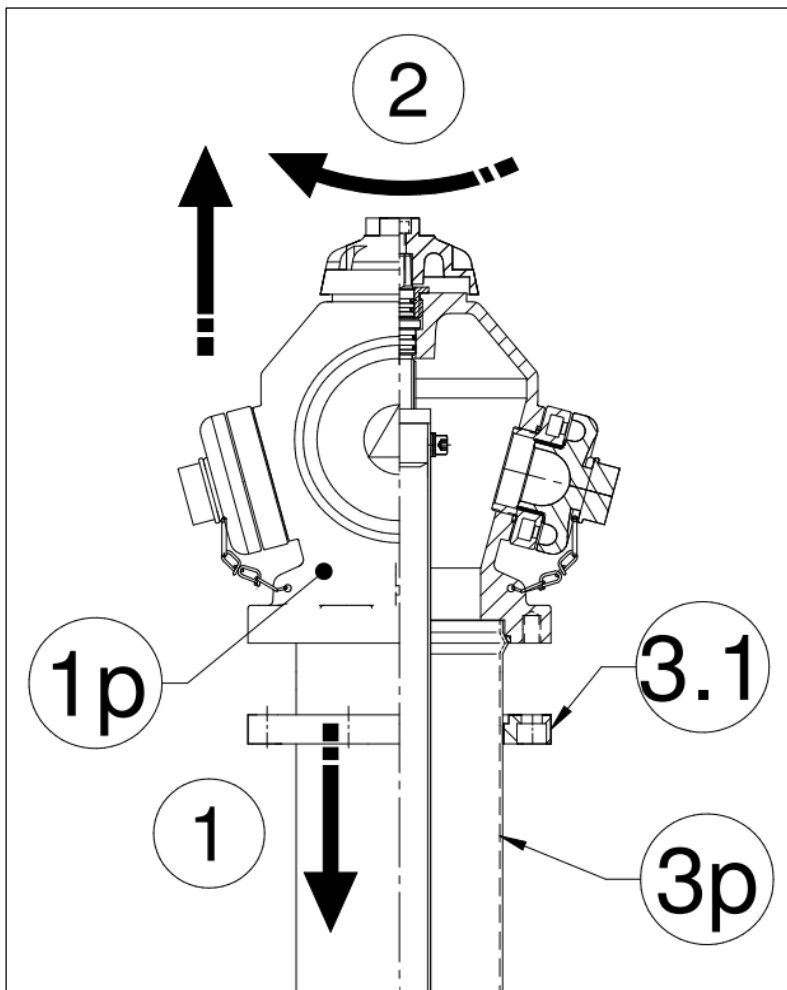
Pic 5.

Parts on the pictures
 Subassembly 1p
 1.1 - M16 allen bolt
 1.4 - Upper Oring
 (for more details see page 4, pic 7)

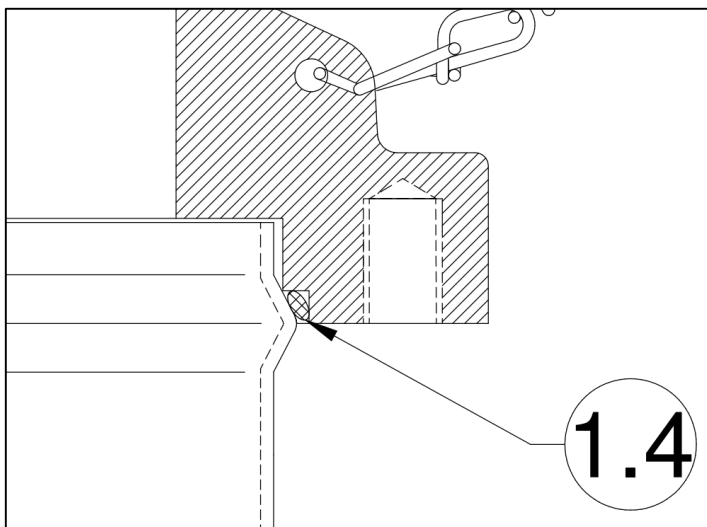
Unscrew evenly the allen bolts (pos 1.1) accordance to Pic 5.

Step 1. When you have removed all the elements of all 4 allen screws before unscrew the sub-assemblies 1p, pay attention to the upper Oring (pic. 7, pos. 1.4) to not lose / damage it when removing it. Move down lower hydrant coupling (item 3.1).

Step 2. Unscrew subassembly of the hydrant head 1p in the clockwise direction, whole subassembly unscrew and goes upwards.



Pic 6. Unscrew subassembly of the hydrant head 1p.



Parts on the pictures

Subassembly 1p

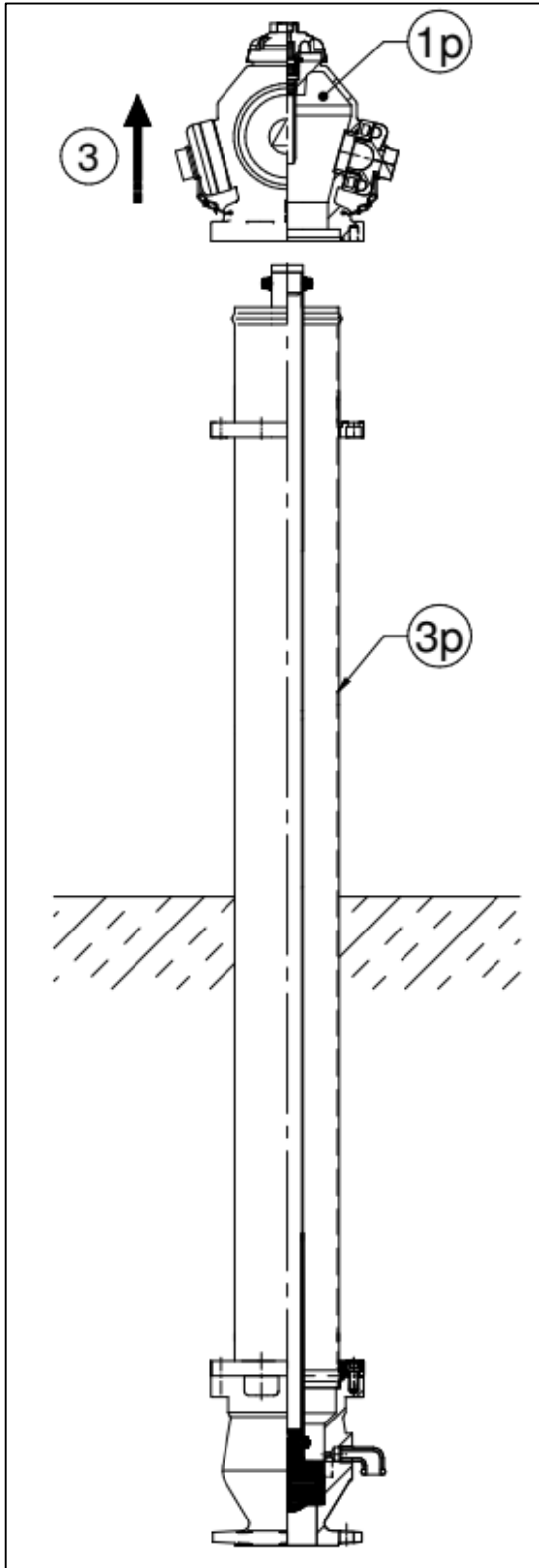
Subassembly 3p

1.4 - Upper Oring

3.1 – Upper hydrant's coupling

Pic 7. Detail position of Upper Oring item 1.4 in hydrant head.

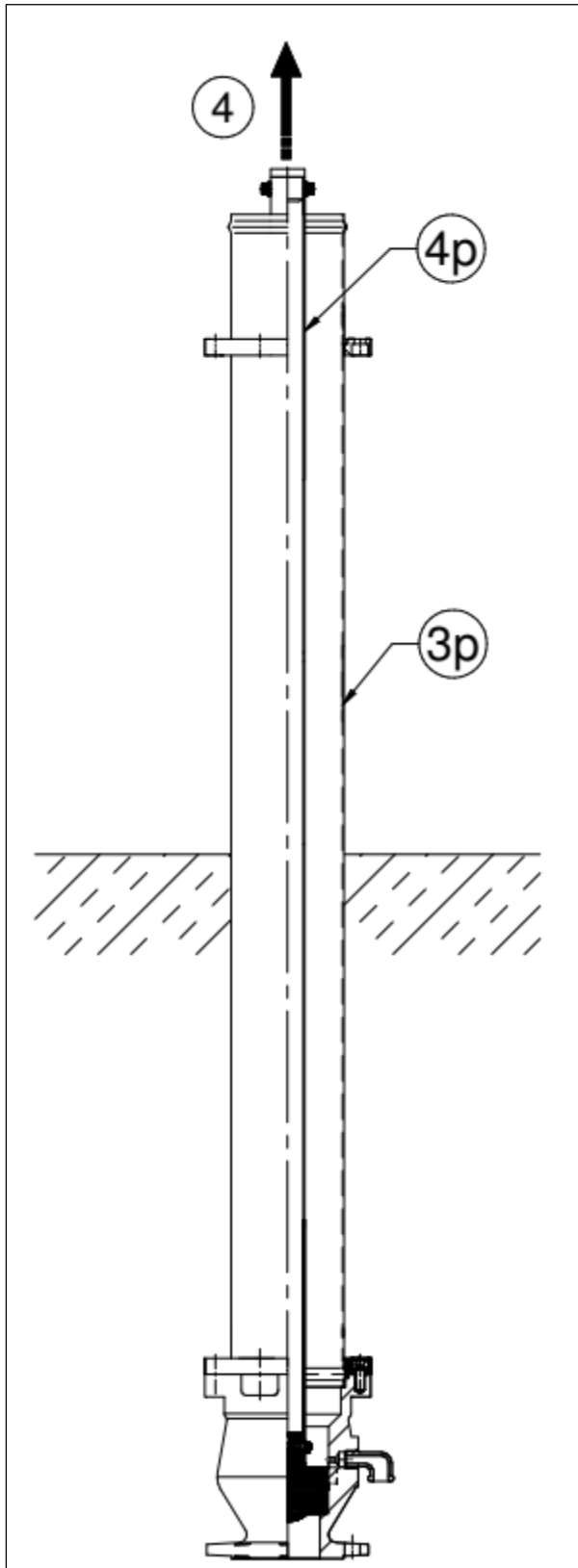
Step 3. Lift the entieres subassmebly hydrant head 1p.



Parts on the pictures
Subassembly 1p
Subassembly 3p

Pic 8.

STEP 4. Pull the subassembly of the inside hydrant pipe with the piston p4 from the subassembly of the hydrant's outside pipe with a base p3 upwards.



Parts on the pictures
Subassembly 3p
Subassembly 4p

Pic 9.

3. Inspection

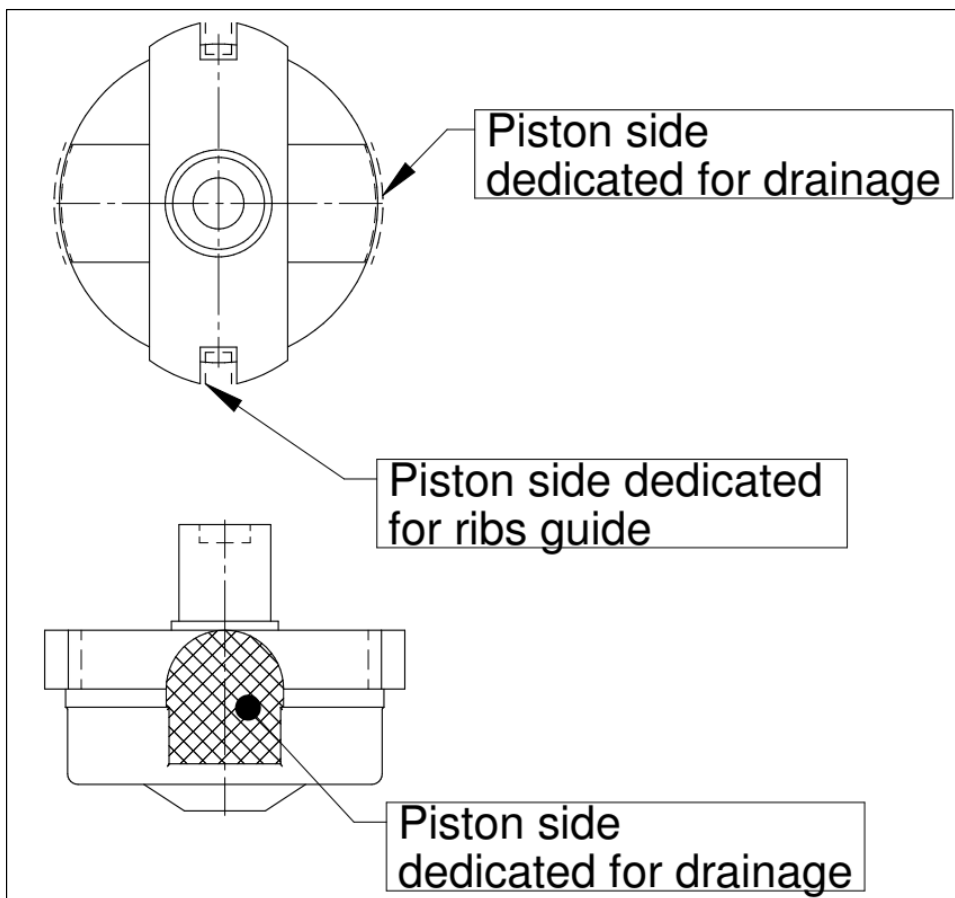
After dismantling according to the instructions, visually examine all subassemblies and parts if there are no mechanical damage and residual cleanliness due to exploitation and environmental impact. Cleaning the parts can be done with a clean potable water.

When you find physically damaged parts and / or sub-assemblies, you can observe Valman's technical support.

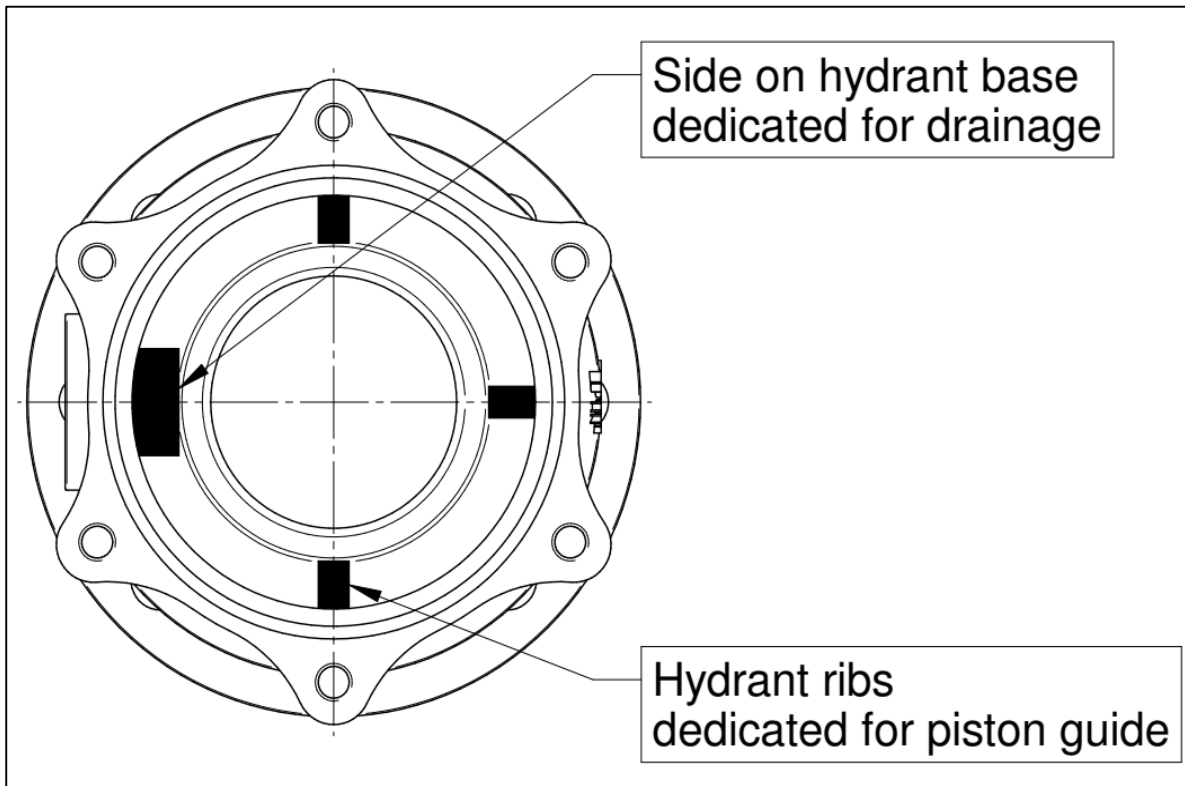
Use the user manual to use the product properly and to avoid damages that are not subject to warranty (eg excessive use of force, unsafe pipes, improper installation ...)

4. Montage

Hydrant piston

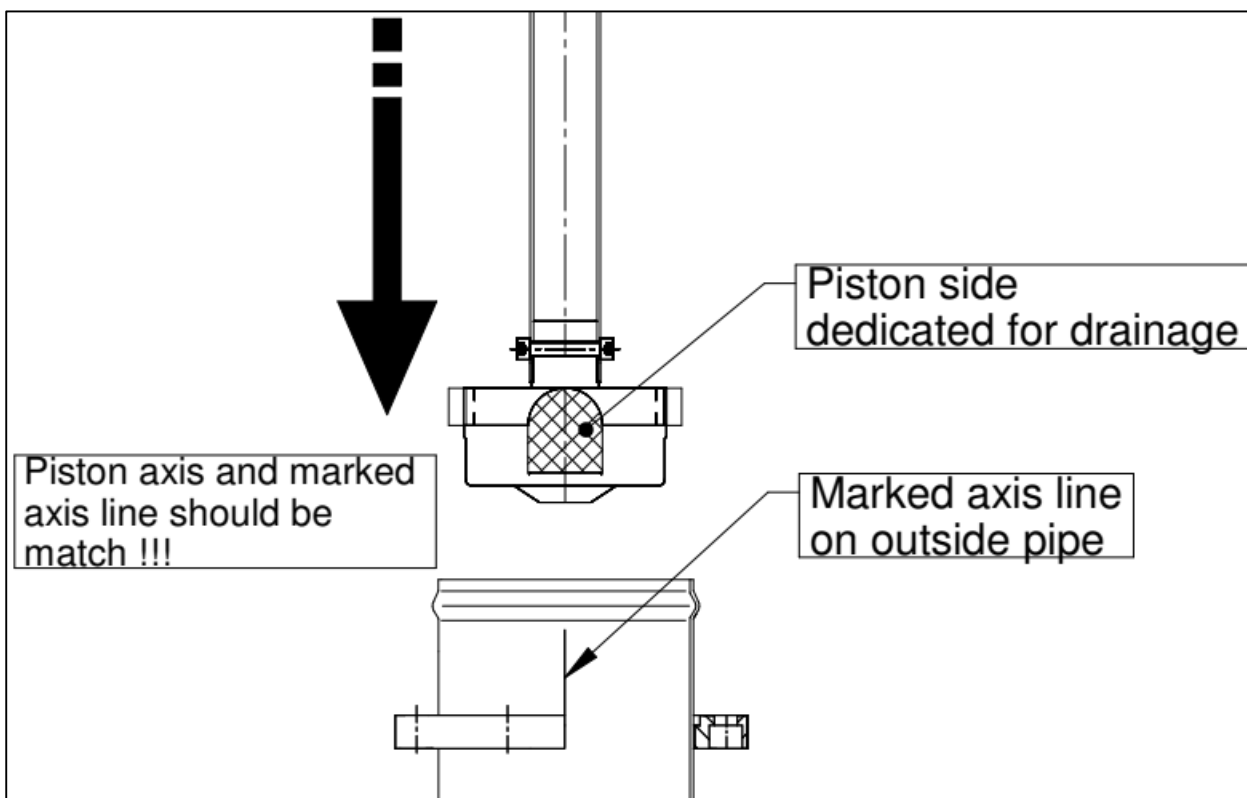


Pic 10. Use piston on appropriate side, piston is symmetrical.

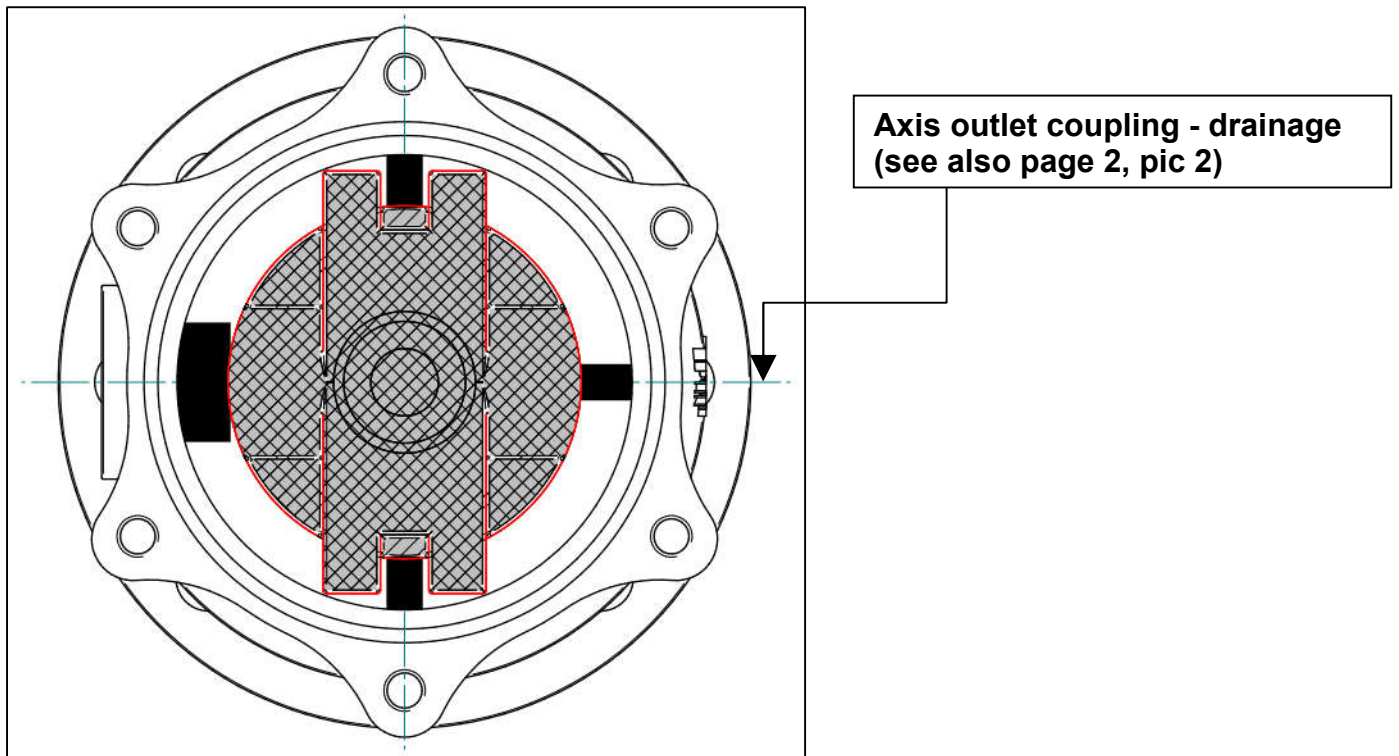


Pic 11. Hydrant's base view up side.

When inserting a subassembly of the inner pipe with a piston 4p back to the hydrant's base it is important that the piston occupies the correct position in the base. Push it as far as possible into the hydrant's base, the piston must enter the ribs intended to guide the piston in the base. If the piston does not enter the stop, gently rotate it to the left to find it in position and move down.



Pic 12. Inserting a subassembly of the inner pipe with a piston 4p.



Pic 13. The correct position for subassembly of the inner pipe with the piston p4 in hydrant base.

The hydrant montage is in reverse order of dismantling.

Pay attention to the correct position of the upper Oring (page 4, pic 7) which is inside in the hydrant head. Check out for oring correct position.

After installation, close the hydrant to the end and let the pipeline under pressure. Check that the output aluminum couplings are tightly closed. Slowly open the hydrant to the full flow and visually check if there is leakage on the available hydrant connections and the sub-assembly of the intermediate. Gently close the hydrant and wait for the water to drainage out of it completely.