




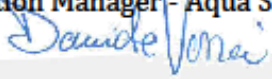





INSTALLATION USE AND INSTRUCTION MANUAL

AQUACAL 1" - 3/4"



		  	
		FILTRATION - PUMPING - DETERGENT & HYGIENE - POOL EQUIPMENT	
			
DECLARATION OF CONFORMITY			
Company:	AQUA S.p.A.		
Address:	Via T. Crotti, 1 - 42018 - San Martino in Rio (RE)		
<p>Hereby declares that the products named:</p>			
<p>• AQUACAL</p>			
<p>Responds to the principal features of the following European Directives:</p>			
<ul style="list-style-type: none"> ○ 2014/30/CE of 26/02/2014 - Harmonization of the laws of the Member States relating to electromagnetic compatibility – EMC Directive ○ 2014/35/CE of 26/02/2014 - Harmonization of the laws of the Member States relating to the making available on the market of electrical equipment designed for use within certain voltage limits – Low Voltage Directive ○ 2011/65/UE of 08/06/2011 with subsequent update 2015/863 of 31/03/2015 – ROHS III Directives ○ 2012/19/UE of 04/07/2012 - WEEE Directives for electrical and electronic waste 			
<p>This declaration is issued under the responsibility of Aqua S.p.A.</p>			
<p>San Martino in Rio (RE) - 08 settembre 2020</p>			
<p>Daide Vezzani Certification Manager - Aqua S.p.A.</p> 			
<p>AQUA S.p.A. Sede e magazzino di vendita e servizio al cliente di Pinerolo Cavourto S.p.A. - Dep. Soc. n. 10.097.488.00 - Borboneville Versello S. Martino in Rio - 42018 - Reggio Emilia - ITALIA - Sede legale: Via Crotti, 1 - Sede operativa: Via Benvenuto, 3 - Dal. Reg. n. FAV.0225190250 - Pag. Impres. di RE 0203540260 P.I. n. 025.056926 - Fax: 0522.648160 - www.aqua.it - email: info@aquaspa.it</p>			

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1. WARNINGS

This manual is intended to provide all the information necessary for the correct installation of the AQUACAL product, for its correct use and for maintenance that will allow you to obtain the best results over time.

In this regard, it is extremely important to carefully read the warnings listed below as they provide all the information necessary for safe installation, use and maintenance.

- ◆ Upon receipt of the product, ensure its integrity and all its components. In case of anomalies do not install the product.
- ◆ This manual must be kept with care for future reference.
- ◆ Do not leave the appliance exposed to atmospheric agents.
- ◆ The equipment must be operated by qualified personnel.
- ◆ It is essential for the product to work correctly to use original spare parts or accessories. The manufacturer is relieved of all responsibility for any failures due to tampering or the use of non-compliant spare parts and accessories
- ◆ The ambient temperature of use must not exceed 50 ° C.
- ◆ The product must be used on the cold water circuit. It is advisable to treat water with a temperature not exceeding 25 ° C to avoid abnormal reactions of the polyphosphate salt.

The manufacturer declines all responsibility for any intervention carried out on the equipment by unqualified personnel.

2. USE

The water commonly distributed in cold water systems contains calcium and magnesium salts which determine its hardness.

Cold water, once heated, favors a chemical reaction and the subsequent precipitation of magnesium and calcium carbonate, as well as carbon dioxide. Carbon dioxide favors the corrosion of pipes while calcium carbonate precipitates deposits of limestone.

Without actually removing the limestone, through the use of the proportional dosers of AQUACAL polyphosphate salt an adequate anti-scale and anti-corrosion treatment of the water is guaranteed, guaranteeing a longer life for the pipes, the exchangers, the tanks, etc.

It is mainly used upstream of **water systems, boilers, heat exchangers, boilers and washing machines**, ensuring compact dimensions, simple and rapid installation, low product consumption and low maintenance costs.

The installation of the polyphosphate feeder (or other food-grade chemical conditioning) is foreseen by the UNI-CTI 8065/89 in articles 6.4.1-6.4.3 and implemented by Italian DPR 59/2009 in art. 4 paragraph 14.

This appliance complies with the following standards:

Plastic material container:

- Italian DM 174 of 06 April 2004 - Concerning the materials and objects that can be used in fixed collection, treatment, adduction and distribution systems for water intended for human consumption.
- Italian DM 25 of 7 February 2012 - Technical provisions concerning equipment for the treatment of water intended for human consumption.

Polyphosphate salt:

- UNI EN 1210: 2005 standard - Chemicals used for the treatment of water intended for human consumption.
- Product not subject to the CE marking pursuant to Legislative Decree n. 52 of 02/03/97 and n. 285 of 16/07/98.
- Product classified as non-hazardous pursuant to Legislative Decree 03/14/2003 n. 65 (Directive 1999/45 / EC) and related Regulation n. 1272/2008 (CLP).

3. HYDRAULIC CONNECTION

It is advisable to connect the AQUACAL dispenser to the water system by inserting a special by-pass, in order to allow the operations of replenishing the polyphosphate salt inside the vessel.

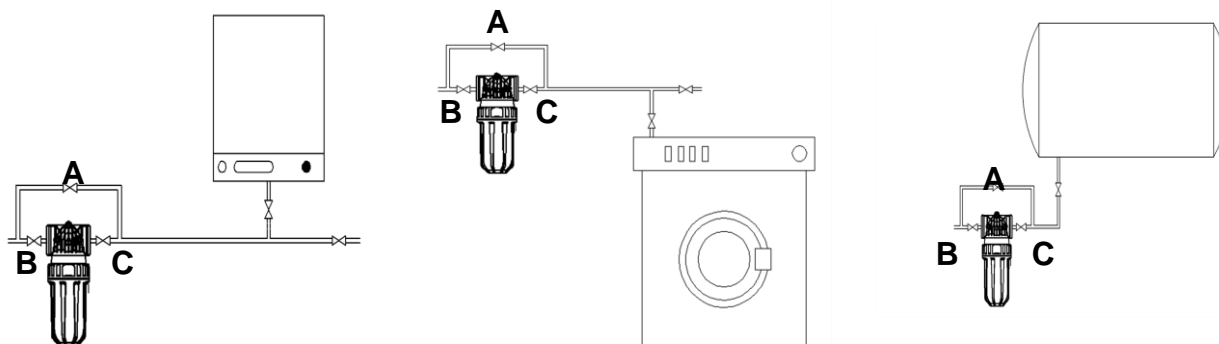
By using the AQUACAL-R dispenser, on the other hand, it is not necessary to carry out the by-pass since the reintegration of polyphosphate salt can be carried out simply by positioning the black levers horizontally. The same, in fact, have by-pass functionality.

All models can be mounted both in systems with vertical and horizontal pipes, changing the orientation of the connection nipple.

To change the orientation of the nipple follow the instructions below:

- 1) Unscrew the connecting screws.
- 2) Rotate the nipple 180 °.
- 3) Screw the connection screws, being careful not to pinch or damage the sealing O-rings.

Example of positioning – FIG.A



Example of rotation of the coupling nipple -FIG.B



4. MAINTENANCE

The AQUACAL can be used in water whose temperature does not exceed 50 ° C.

When the bellows inside the jar is completely relaxed it is necessary to replenish the polyphosphate by performing the following operations:

AQUACAL

- 1) open the tap A - FIG.A
- 2) close the BC taps - FIG.A
- 3) depressurize the vessel using the vent screw
- 4) unscrew the jar - FIG. C
- 5) replenish the polyphosphate
- 6) contract the bellows
- 7) screw the jar paying attention to the correct O-Ring positioning. - FIG. E
- 8) tighten the vent screw - FIG. C
- 9) open the taps BC - FIG. A
- 10) close the tap A - FIG. A

AQUACAL - R

- 1) lift the levers - FIG. D
- 2) depressurize the vessel using the vent screw
- 3) unscrew the jar - FIG.C
- 4) replenish the polyphosphate
- 5) contract the bellows
- 6) screw the jar paying attention to the correct positioning of the O-Ring. - FIG.E
- 7) tighten the vent screw - FIG.C
- 8) lower the levers - FIG. D

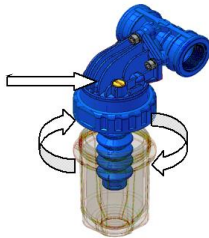


FIG. C



FIG. D

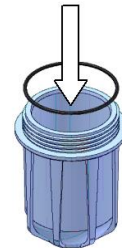


FIG. E

5. SALT INTEGRATION

In the AQUACAL is possible to use dissolved polyphosphate salt or tablets.

If using powdered dissolved polyphosphate salt, follow the steps below:

- After closing the by-pass, remove the jar from the dispenser, wash it and rinse it to remove any impurities;
- Pour the powdered salt into the jar, taking care to fill it about halfway.
- Pour 20cc of water into the jar.
- Mix a little to mix water and dust.
- Let it rest for about 30 minutes, until the mixture solidifies.
- Reassemble the vessel taking care not to damage the ORing.
- Reopen the by-pass and let water flow in order to fill the jar. At the same time, let the air out of the jar.

If using polyphosphate salt dissolved in flakes follow the previous steps, without the need to add water and without waiting for solidification.

If polyphosphate salt is used in tablets, follow the previous steps, introducing the tablet after having removed at least the plastic cap, without the need to add water and without waiting for the solidification as the cartridge is already solid.

The tablet is contained by a plastic casing with hood. When inserting the tablet in the dispenser it is always necessary to remove at least the cap. If the casing is also removed, the tablet will dissolve faster as the water touches a greater surface of salt.

6. CAUTIONS IN THE USE OF SALT



The polyphosphate salt does not eliminate limestone.

It acts by creating a film that protects the pipes, the exchangers and the tanks from the gripping action of the limestone which therefore does not cling to the surfaces and flows with the water coming out of the taps.

It is therefore normal that the water coming out of a polyphosphate salts dispenser seems a little "gelatinous". This is precisely its peculiarity.



For this reason, equipment with polyphosphate salt must be applied on flowing water circuits.

The stagnant water, in fact, or the excess temperature of the treated water can lead to dissolve more substance than necessary, which accumulates (in the absence of water flow) in the doser vessel, which can appear as in the image in side.

In these cases it is necessary to empty the jar from its contents and replace the salt or wash it thoroughly so that all the gelatinous fluid is expelled, otherwise, when the water circuit is reactivated, the excess gelatine could obstruct nozzles or exchangers, making maintenance operations necessary. .

Keep the spare polyphosphate salt away from moisture.

If the salt absorbs moisture when it is first used, it will emit gelatinous substance in an amount higher than normal, even if over time it will tend to stabilize.

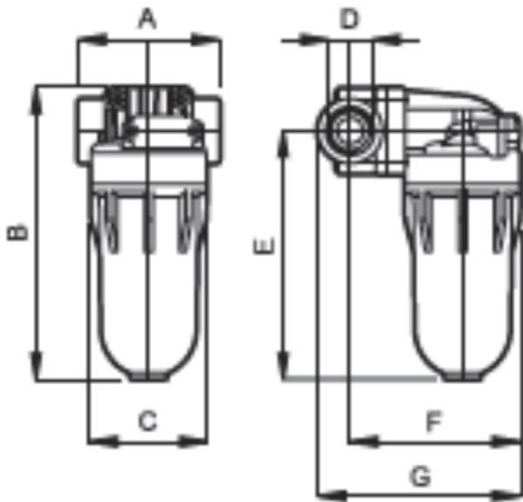
If this happens, make sure the system has running water.



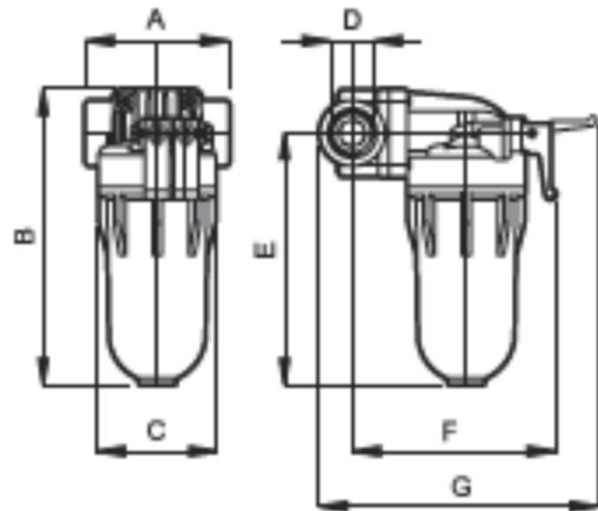
7. DIMENSIONI / DIMENSION

Tipo	In-Out	Dimensioni (mm) AxBxCxDxExFxG
Type	In-Out	Dimensions (mm) AxBxCxDxExFxG
AQUACAL 1/2"	1/2"F	70x144x56x1/2"Fx122,5x84x100
AQUACAL-R 1/2"	1/2"F	70x144x56x1/2"Fx122,5x115x133,5
AQUACAL 3/4"	3/4"F	91x202x3/4"Fx106x130x170x195
AQUACAL 1"	1"F	91x202x1"Fx106x130x170x196

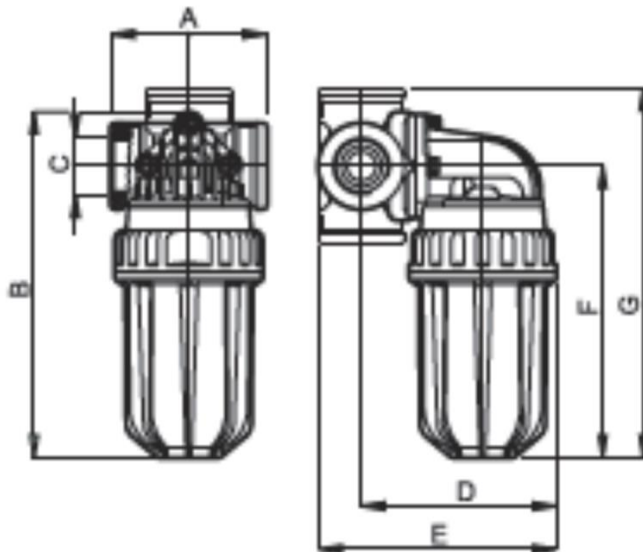
AQUACAL 1/2"



AQUACAL-R 1/2"



AQUACAL 3/4" - 1"



8. CARATTERISTICHE TECNICHE / TECHNICAL FEATURES

DATI TECNICI/TECHNICAL DATA	
Testa/Head	PP
Attacco/Connection	Ottone/Brass
Vaso/Sump	SAN
Soffietto/Bellow	EPDM
Oring/Oring	EPDM
Pressione max. esercizio/Max working pressure	6 bar
Pressione max. scoppio/Max. burst pressure	25 bar
Temp. Acqua: max. consigliata/ Max. operating temp. Water	25°C
Dosaggio/Feeding	2/4 ppm



AQUACAL 1”- 3/4”

