



FILTR GARD FP3/2 3/4" cat. 761533

OWNER'S GUIDE TO INSTALLATION AND USE



SPECIFICATIONS OF COMPONENTS

When the packaging is opened, the FP3/2 3/4" Prefilter must contain:

- 1 FP3/2 3/4" filter (head, housing, ring, O-ring)
- 1 Fixing Bracket
- 4 Screws for fixing the bracket to the filter body
- 1 Opening tool
- Operating limits sticker
- Instructions sheet

TECHNICAL SPECIFICATIONS

IN/OUT Fitting	FEM 3/4" in brass
Dimensions	125 x 120 x 315 mm
Weight (dry without cartridge)	0.840 kg

OPERATING LIMITS

Max. operating pressure	8 bar
Min.-max. water temperature	5-40°C
Min.-max. ambient temperature	5-50°C
Positioning	on wall with bracket or on pipeline.

Operating limits with cartridge fitted:

Monostage 001 (1 micron) Cartridge Cat. No. 744342

Recommended flow rate	: 7 l/minute
Pressure loss (•)	: 0.15 bar

Multistage 205 (5 microns) Cartridge Cat. No. 740081

Recommended flow rate	: 13.5 l/minute
Pressure loss (•)	: 0.15 bar

Multistage 405 (20 microns) Cartridge Cat. No. 740083

Recommended flow rate	: 28.5 l/minute
Pressure loss (•)	: 0.15 bar

Monostage 9060 (80 microns) Cartridge Cat. No. 744341

Recommended flow rate	: 33.5 l/minute
Pressure loss (•)	: 0.15 bar

Carbon Cartridge Cat. No. 761536

Recommended flow rate (♥)	: 3.6 l/minute
Pressure loss (•)	: 0.2 bar

Polyphosphate Cartridge Cat. No. 761537

Recommended flow rate	: 8 l/minute
Pressure loss (•)	: 0.2 bar

Max. recommended capacity: depending on the inlet water characteristics and type of use.

(•) with filter supplied with drinking water, with new cartridge, at the max. recommended flow rate, inlet pressure of 2,75 bar and temperature 20°C.

(♥) Chlorine adsorption: with inlet water with Chlorine value 1,5 ppm, residual chlorine 0,1 ppm; with inlet water Chlorine value 0,4 ppm, residual chlorine 0,0 ppm

NOTE: after start-up allow 60 minutes contact time for carbon activation

NOTE: It is absolutely necessary to read the instructions which follow before installing the FP3/2 3/4" Prefilter. Not doing so may put the safety of the installation and the user at risk, and prevent the device from operating properly.

PRELIMINARY INSPECTION

Check that the pack contains the items stated in the "Specification of Components".

Check that the components of the FP3/2 3/4" Prefilter are undamaged.

Do not use a FP3/2 3/4" Prefilter if its pack is damaged. Any anomalies must be reported: contact your Culligan after-sales service, specifying the device's code number and a description of the defect.

SAFETY

The FP3/2 3/4" Prefilter is a device complying with Italian Health Ministry Decree No. 443 dated 21/12/90.

NOTE: check carefully that the data stated in the "Technical Specifications" and the "Operating Limits" are the same as those you have considered.

GENERAL

The FP3/2 3/4" Prefilter is a multipurpose water filter constructed in inert plastic throughout.

The FP3/2 3/4" Prefilter is the right answer to the need to install "small systems" capable of filtering water to remove turbidity, dechlorinating it or adding polyphosphates by means of specific disposable cartridges. The transparent casing allows the state of the filter and cartridge inside to be checked. A treated steel support allows wall-mounting.

APPLICATIONS

The FP3/2 3/4" Prefilter is suitable for use on water intended for household use, heating and cooling systems, irrigation, etc. The FP3/2 3/4" Prefilter, for example, is able to protect the resins on CULLIGAN line water softeners from fouling due to turbidity.

Characteristics of components:

- PP prefilter head with brass IN/OUT unions.
- PP vent union with nitril rubber o-ring.
- AST thermoplastic casing.
- PP Opening tool
- Supporting bracket and screws in galvanised steel.

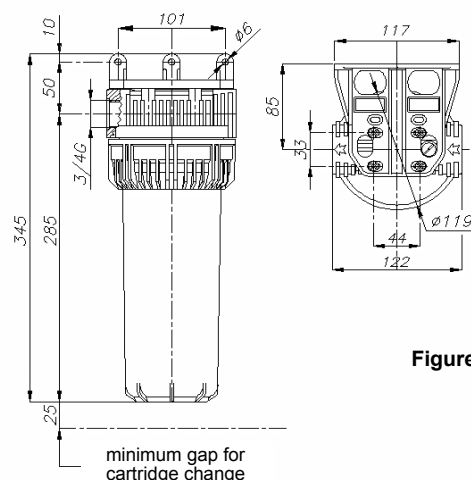


Figure No. 1

INSTALLATION (Figure No. 1, Figure No. 2)

The FP3/2 3/4" prefilter must be installed by skilled staff familiar with the correct use of the device.

Check the installation place and position: fix the supporting bracket to the FP3/2 3/4" prefilter (when necessary) as appropriate to installation requirements, using the screws supplied.

Make sure that the inlet water values are within the range stated in the "Operating Limits".

Prepare the fixing point of the FP3/2 3/4" Prefilter (on the wall or as required) bearing in mind that:

- Provision of a by-pass, which allows the FP3/2 3/4" Prefilter to be cut off during cartridge replacement or in case of malfunction, is recommended.
- In the case of installation to protect a CULLIGAN line softener, the FP3/2 3/4" Prefilter must be placed on the softener's water supply line, i.e. upstream of the softener itself.
- When in operation, the FP3/2 3/4" Prefilter must be perpendicular to the ground.
- The vent valve on the filter head must be easily accessible for opening.
- Enough room must be left around the FP3/2 3/4" Prefilter to allow the cartridge to be inserted and removed.
- A gap of at least 25 mm must be left underneath the FP3/2 3/4" Prefilter casing to allow it to be fitted and removed.
- Use only fixtures with 3/4" male cylindrical GAS thread at least 10 mm long on the head of the FP3/2 3/4" Prefilter.

Cut off the relative water supply.

Prepare the point for connection of the FP3/2 3/4" Prefilter to the water supply line (by-pass, valves, unions, connections, etc.).

Connect the 3/4" cylindrical fixtures to the IN/OUT unions of the head of the FP3/2 3/4" Prefilter: use threaded connections for easier installation on the water line.

Connect the F 40 Prefilter to the relative water line.

Fit the chosen prefilter cartridge into the casing (see "Changing the Prefilter Cartridge").

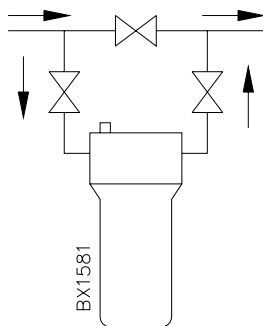


Figure No. 2

START-UP

Protect the zone underneath the FP3/2 3/4" Prefilter from the water which will be spilt during the operations which follow.

Unscrew and open the vent valve on the head of the FP3/2 3/4" Prefilter.

Supply water to the FP3/2 3/4" Prefilter.

Set a water flow (e.g. turn on a tap downstream of the FP3/2 3/4" Prefilter). When water comes out of the vent valve, shut it by screwing it back down.

Shut off the take-off point and check that there are no leaks in the installation area. Allow the water to flow from the take-off point for a few minutes.

OPERATION

The raw water enters the FP3/2 3/4" Prefilter and flows through the cartridge from outside to in (filtering model) and upward from the bottom (carbon and polyphosphate model). It then flows out, having undergone the treatment provided by the prefilter cartridge installed.

Prefilter cartridge operating characteristics:

Filtering model: traps the suspended solids larger in size than the number of microns specified for the cartridge used (1, 5, 20 or 80 microns). Over time, the trapped turbidity changes the colour of the cartridge from white to dark brown or black, depending on the type of water being treated.

The colour of the outside of the cartridge changes first, after

which the innermost coils are gradually coloured: at this point, the cartridge must be changed.

Note: a fouled filter cartridge leads to drops in performance of the FP3/2 3/4" Prefilter in terms of an increase in the headloss value until water is unable to flow through it, or some of the turbidity trapped earlier is shed into the output water.

It is therefore important to remember to check the condition of the prefilter cartridge regularly, especially if it is installed upstream of CULLIGAN line softeners. Failure to do so may seriously impair operation of the softener itself and the efficiency of the FP3/2 3/4" Prefilter.

Carbon model: removes Chlorine and unpleasant odours and tastes from the water by an "adsorption" action. This is the main feature of the activated carbon in the cartridge and is assisted by its large exposed surface area per unit of weight, a factor further increased by the tiny size of its pores.

The carbon cartridge will have to be replaced when Chlorine or unpleasant smells and tastes are noted in the water leaving the FP3/2 3/4" Prefilter.

Polyphosphate model: the dissolving of the polyphosphate crystals in the polyphosphate cartridge provides protection for pipelines, boilers, heating coils and the components of a water circuit in general. Use of the polyphosphate cartridge is recommended in case of acid water with low mineral content, since the gradual dissolving of the polyphosphate crystals modifies the chemical characteristics of the water in order to prevent corrosion phenomena due to its aggressive nature.

The working life of a polyphosphate cartridge is strictly dependent on the pH characteristics of the water entering the FP3/2 3/4" Prefilter.

Note: in order to ensure that the FP3/2 3/4" Prefilter remains in good working order, consider that the cartridge (filtering, carbon or polyphosphate) should be changed every 6 months, or bear in mind the above guidelines.

CHANGING THE PREFILTER CARTRIDGE

Cut off the supply of water upstream and downstream of the FP3/2 3/4" Prefilter.

Protect the zone underneath the FP3/2 3/4" Prefilter from the water which will be spilt during the operations which follow. Open the vent valve on the head by unscrewing it. Remove the transparent housing by unscrewing it from the prefilter head, turning it clockwise. Use the opening tool.

Change the prefilter cartridge, placing the new one inside the casing, taking care to fit it into the seat correctly.

Clean the O-ring seal between the housing and the prefilter head.

Lubricate the threads connecting the casing to the prefilter head and their O-ring seals with a suitable lubricant.

Put the housing back on the Prefilter head, screwing down tightly, turning anti-clockwise.

Restore the water supply upstream and downstream of the FP3/2 3/4" Prefilter. Set a water flow (e.g. turn on a tap downstream of the FP3/2 3/4" Prefilter).

When water comes out of the vent valve, shut it by screwing it back down. Shut off the take-off point and check that there are no leaks in the installation area.

Allow the water to flow from the take-off point for a few minutes.

MAINTENANCE

No maintenance has to be planned on the FP3/2 3/4" Prefilter. You need only change the cartridges periodically as they become spent (see "Prefilter cartridge operating characteristics").

WARRANTY

The FP3/2 3/4" Prefilter has a warranty of 24 months from the date when it is put into operation, indicated on the Culligan warranty certificate/request form.

The warranty becomes null and void if the FP3/2 3/4" is tampered with or subjected to operating conditions which do not comply with the guidelines provided in this instruction sheet.