Pressure independent flow controller



# Manual



## **MF Connect**

## Mixer optimisation

The MF Connect provides a constant flow, saves water, significantly reduces temperature fluctuations and creates optimal user comfort. The MF Connect does that by largely eliminating the influence of pressure fluctuations into thermostatic and non-thermostatic (shower) mixers.

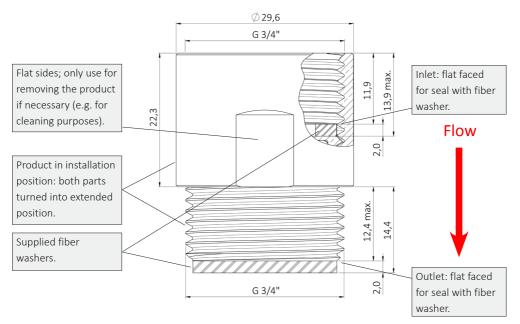


# Read this manual carefully.

# Packaging contents (in case of paired packaging)

2 x MF Connect

4 x Fiber washer 24.0 x 17.0 x 2.0 mm



*Image: MF Connect (dimensions in mm)* 



- Always use new fiber washers that meet the original specifications on the inlet and outlet of the product.
- Never use multiple washers in one seal.



- Start installation with the product in its extended position in which the inner and outer sleeve are turned away from each other until the stop.
- Preferably, do not use wrenches or other grabbing tools on the product. Instead, handtightening the product and tightening the mixer swivels with a wrench should result in a water tight seal in most cases.
- Do not use excessive force to install the product.

Pressure independent flow controller



## Installat on

Install one MF Connect on each inlet of the (shower) mixer:

- 1. Shut off the system water pressure, remove the mixer and make sure there is no dirt in the piping.
- 2. Remove old washers and any dirt present from the S-connections in the wall and from the inlets of the mixer
- 3. Place one fiber washer in each mixer swivel. Measure the remaining depth of the swivels.
- 4. Place one fiber washer in the inlet side of each MF Connect.
- 5. Install both MF Connects in their extended installation position: both parts turned apart until stop onto the S-connections and up to the rosette by hand. The flow arrow on the MF Connect indicates the flow direction. Hand-tighten the inner sleeve. For a good seal, the inner sleeve must now protrude 0.5 mm further than the measured depth from step 3.
- 6. Re-install the mixer on the outlets of the MF Connects and tighten the mixer swivels.
- 7. Re-open the system water pressure.
- 8. Let the tap run briefly so that the fiber washers get wet and seal. The products may leak slightly until the fiber washers expand and seal after about 30 seconds. If this is not the case, check that the product and the mixer swivels are properly tightened. If necessary, follow the above steps again with new and dry fiber washers.



If present, remove any existing flow limiters upstream and downstream of the product in order to guarantee the optimal performance of the product.



Image: Installed MF Connect with integrated MF Flow Controller

Pressure independent flow controller



# Maintenance and cleaning

The product is maintenance-free with the exception of the following:

Possible residue that originates from the water system and that exceeds the maximum particle size for the product (see product Data Sheet) will collect on the meshes inside of the product. This needs to be removed by removing the entire product from the piping. Hold the product upside down, submerge in clean water and shake until dirt falls out. Rinse with clean water prior to re-installation, run the water for a few seconds to allow the new fiber washers to expand for a watertight fit. Keep the product clean for optimal functionality.

#### Lime residue

In exceptional circumstances, some lime may collect on the inside of the product. This is however very rare because (1) the product is permanently submerged in water, (2) the used materials are not expected to collect lime and (3) the flow speed in the product is very high. In the unlikely case that there is some lime residue, this can best be cleaned out with a mild lime descaler.



After maintenance / cleaning, always use new fiber washers that meet the original specifications.



DO NOT in any way disassemble the product under any circumstance and do not replace parts with parts of other manufacturers. Disassembly of the product leads to product damage, loss of functionality and irrevocable loss of warranty.

# Careful use of Marine Flow products

Marine Flow products must only be used for their intended purpose and under the appropriate circumstances. To this end, the following must be observed.

- 1. The products are used with care. In this context, careful use means:
- a. The product is only used for the application for which it is intended;
- b. The product is installed and treated with care;
- c. The product is maintained and cleaned when necessary;
- d. The product is only used under conditions that (drinking) water installations must legally comply with;
- e. The product is used according to the instructions in this manual and according to the product specifications and criteria as set out in the product Data Sheet.

## Pressure independent flow controller



Careful use of Marine Flow products - continued

2. The products are not exposed for a prolonged period, that is to say within a permanent or semi-permanent installation setting, to a water pressure of 500 kPa (dyn) or more in combination with a temperature of 60 °C or more. This does not include brief and incidental higher pressures and higher temperatures within the product's allowed operating conditions.

For (desired) application within a permanent or semi-permanent installation setting with a water pressure of 500 kPa (dyn) or more in combination with a temperature of 60 °C or more, please contact Marine Flow at info@marine-flow.com

Disclaimer: Marine Flow aim to provide correct and up to date information at all times. Marine Flow, or companies belonging to its group, are not liable for possible consequences of any

incorrect information provided in this document by mistake. Marine Flow reserve the right to make changes.

Note: later versions of this document replace and void older versions. The general terms and conditions of Marine Flow are applicable. In the general terms and conditions Marine Flow has

limited its liability. Current versions of this document and of the general terms and conditions of Marine Flow are available at www.marine-flow.com

# General terms and conditions of installation and use Marine Flow

Marine Flow is a trade name of MIT Investments BV., The Netherlands, registered with the Chamber of Commerce under number 84229691.

These terms and conditions have been filed with the Chamber of Commerce.

#### Applicability and formation of agreement

- 1. These General terms and conditions of installation and use apply, with the exclusion of customer's terms and conditions, to the installation and use of all Marine Flow products.
- 2. In addition to and without prejudice to the General terms and conditions of sale and delivery, these General terms and conditions of installation and use apply to the legal relationship between Marine Flow, including third parties engaged by Marine Flow, on the one hand, and one or more customers and / or users on the other hand, in the context of the installation and use of Marine Flow products.

#### Use of products

 The customer must at all times follow the instructions and directions regarding the use of Marine Flow products. Any guarantee and / or liability of Marine Flow will be null and void if the instructions and directions have not been fully followed.

#### **Exonerations**

- 4. Installation is entirely at the risk of the customer. Marine Flow is not liable for any damage caused during installation, unless the damage was caused by intent or deliberate recklessness on the part of Marine Flow. In no case is Marine Flow liable for consequential damage and / or indirect damage. Without prejudice to the above, the following limitations of Marine Flow's liability apply.
- 5. Marine Flow offers a guarantee with respect to the products if and insofar this has been agreed in writing between the parties upon conclusion of the agreement or insofar as Marine Flow is legally obliged to do so.
- 6. Subject to any mandatory obligations arising from the law, Marine Flow is never obliged to compensate any loss, except in the event of intent or willful recklessness.
- 7. Any liability for consequential loss or loss of profits, indirect loss, lost profits and loss owing to stoppage of the customer and/or the customer's customers is explicitly excluded under all circumstances. Liability is always limited to the amount insured or paid by Marine Flow. In the event of loss that is not or only partially covered, Marine Flow's liability is always limited to the invoice amount of the specific delivery or partial delivery.

#### Other

- 8. Should any provisions of these General terms and conditions of installation and use be null and void, be annulled, or be unenforceable, this will not have any consequences for the validity of all other provisions or the agreement.
- 9. If and insofar Marine Flow cannot invoke any provision of these General terms and conditions of installation and use or the agreement, then said provision will be construed as having a content and purport that is as much as possible in accordance with the original provision, allowing it to be invoked by Marine Flow.
- All costs, judicial and extrajudicial, related to the collection of sums owed to Marine Flow are fully for the account of the customer.
- 11. The legal relationship between Marine Flow and the customer will be governed by Dutch law, under exclusion of the Vienna Sales Convention, and all disputes will be settled exclusively by the competent court in the District of Amsterdam, The Netherlands.