Pressure independent flow controller



## Manual



### HL2024 Inline Cartridge 3P 3/4"

Optimal flow control for high-volume flows

The HL2024 Inline Cartridge creates a constant flow through its unique property of pressure independence. Fitted into the piping, the HL2024 Inline Cartridge is optimally suitable to control flows into specified areas of any water system. As such it ensures system stabilisation, optimal user comfort and savings.

Pressure independent flow controller



### Read this manual carefully.

### Packaging contents (in case of individual packaging)

- 1 x HL2024 Inline Cartridge 3P 3/4"
- 2 x Fiber washer 24.0 x 17.0 x 2.0 mm



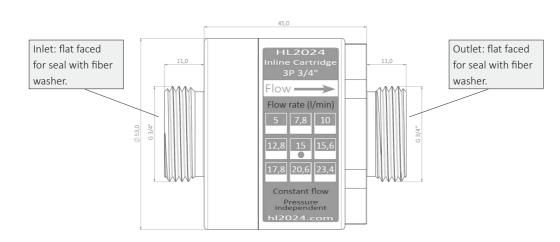


Image: HL2024 Inline Cartridge 3P 3/4" (dimensions in mm)



- 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.

Pressure independent flow controller



#### Installation

Install the product into the piping of a water installation.

- 1. Shut off the system water pressure and make sure there is no dirt in the piping.
- 2. Place one fiber washer in each side of the product and mount the product into the piping and / or to the flexible water hose. If applicable, only use suitable adapters.
- 3. Re-open the system water pressure.
- 4. 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 is properly tightened. If necessary, follow the above steps again with new and dry fiber washers.



- Do not use wrenches or other grabbing tools on the product unless this is necessary. Instead, tightening the swivels / adapters with a wrench should result in a water tight seal in most cases. If however it is necessary, only use a wrench on the hexagonal part of the product and only use a suitable 46 mm wrench
- Do not use excessive force to install the product.



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



Image: HL2024 Inline Cartridge 3P 3/4" mounted into piping

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 HL2024 products

HL2024 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 HL2024 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 first contact the sales organisation for HL2024 products: Cenergist.





For enquiries, please contact Cenergist.

Cenergist is the sales organisation for HL2024 products.

w: www.cenergist.com

e: hl2024@cenergist.com

t: +44 (0)191 261 06 04

Disclaimer: HGP International aim to provide correct and up to date information at all times. HGP International, or companies belonging to its group, are not liable for possible consequences of any incorrect information provided in this document by mistake. HGP International reserve the right to make changes.

Note: later versions of this document replace and void older versions. The general terms and conditions of HGP International are applicable. In the general terms and conditions HGP International has limited its liability. Current versions of this document and of the general terms and conditions of HGP International are available at www.hl2024.com.

# General terms and conditions of installation and use HGP International

HGP International is a trade name of HGP Exploitatie B.V., The Netherlands, registered with the Chamber of Commerce under number 56180586.

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

#### Applicability and formation of agreement

- 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 HGP International 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 HGP International, including third parties engaged by HGP International, 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 HGP International products.

#### Use of products

 The customer must at all times follow the instructions and directions regarding the use of HGP International products. Any guarantee and / or liability of HGP International 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. HGP International is not liable for any damage caused during installation, unless the damage was caused by intent or deliberate recklessness on the part of HGP International. In no case is HGP International liable for consequential damage and / or indirect damage. Without prejudice to the above, the following limitations of HGP International's liability apply.
- HGP International 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 HGP International is legally obliged to do so.
- Subject to any mandatory obligations arising from the law, HGP International 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 HGP International. In the event of loss that is not or only partially covered, HGP International'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 HGP International 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 HGP International.
- All costs, judicial and extrajudicial, related to the collection of sums owed to HGP International are fully for the account of the customer.
- 11. The legal relationship between HGP International 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.

\_ \_ .