

# R74M



Energy  
Management

## Magnetic Y-filter

Datasheet  
0875EN 02/2024



R74M si a magnetic Y-filter, inspectable, suitable for the distribution of fluids in hydronic systems.

The filter features a metallic mesh and a magnet, which was designed to prevent solid impurities from entering into the piping and, by depositing residues, reducing the width of the passage, thus increasing losses of pressure and oxidation.



### VIDEO

Frame the QR code with your smartphone or tablet to view the video tutorial.

### ➤ Versions and product codes

PRODUCT CODE	CONNECTIONS	Kv
R74MY003	G 1/2"F	3,1
R74MY004	G 3/4"F	5,6
R74MY005	G 1"F	9,7
R74MY006	G 1-1/4"F	17,0
R74MY007	G 1-1/2"F	20,8
R74MY008	G 2"F	35,9

### Spare parts

- **P74MY001:** magnetic kit for R74MY003, R74MY004 filters (length 29 mm)
- **P74MY002:** magnetic kit for R74MY005, R74MY006 filters (length 44 mm)
- **P74MY003:** magnetic kit for R74MY007, R74MY008 filters (length 55 mm)

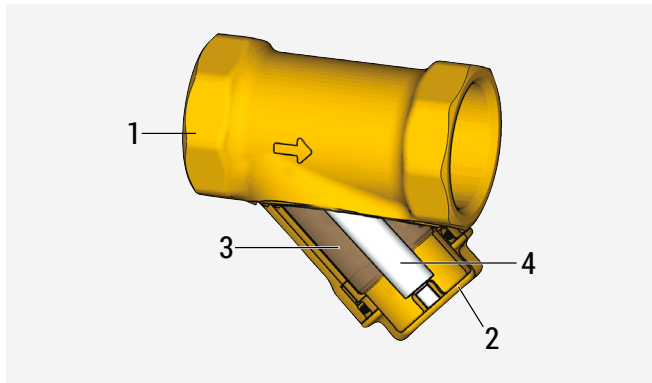
### ➤ Technical data

- Fluids of use: water and glycol solutions (max. 50 %)
- Temperature range: 5÷90 °C
- Max. working pressure: 30 bar
- Filtering capacity: 500 µm

### Materials

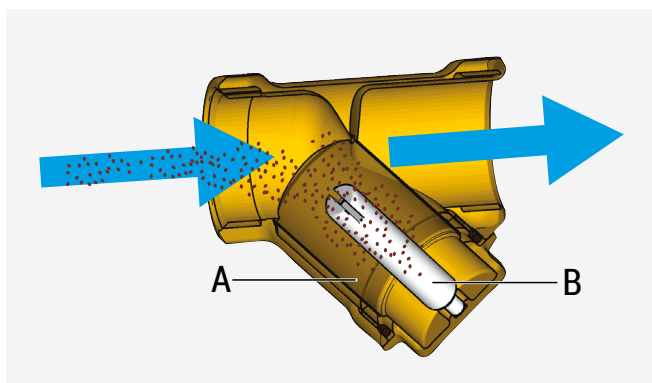
- Body and cap: UNI EN 12165 - CW617N brass
- O-Ring: EPDM
- Metallic mesh: stainless steel AISI 304
- Magnet: neodymium N35H

## Components



- |   |               |
|---|---------------|
| 1 | Filter body   |
| 2 | Cap           |
| 3 | Metallic mesh |
| 4 | Magnet        |

## Operation



The flow enters the filter and is slowed down, allowing for the separation of the solid impurities present in the fluid. The solid impurities are separated when they collide with the metal mesh (A) and ferrous particles are retained by the attraction force generated by the magnet (B). The filter body is designed to make the most of the entire filtering surface, increasing the length of time for which it is functional before the mesh becomes completely dirty.

## Installation



**⚠ WARNING.** The symbol on the filter cap indicates the presence of magnetic fields  $\mathbb{U}$ , which can cause damage to electronic devices (including pacemakers  $\heartsuit$ ) that are placed in close proximity.

The R74M filter must always be fitted upstream of all of system components which could become damaged or less effective due to the presence of impurities. It is recommended to install shut-off valves upstream and downstream of the filter, to facilitate periodic maintenance. It is usually installed at the entrance to the water supply system before the check valve, preventers and pressure reducers. It can also be used in closed heating circuits at the entrance to the heat generator to protect the exchanger from any impurities originating from the system. For increased efficiency with regard to filtering and deposit of solid impurities, it is advisable to install the filter body on the horizontal piping with the filter cap facing downwards. For correct installation, please check the flow direction indicated by the arrow stamped on the filter body.

**⚠ WARNING.** It is recommended that, before installing the filter, the operating conditions of the system are checked, including pressure and temperature, in order to ensure that these are included in the operating range. It is important that the filter is accessible so that any necessary maintenance can be carried out.

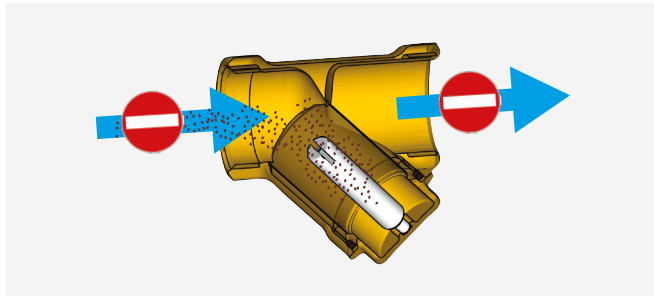
## ➤ Maintenance

Filter maintenance must be carried out as often as necessary, according to the level of impurities in the fluid being used.

Anyway, it is recommended that the filter is cleaned at least once a year to avoid excessive reductions in flow rate as well as the formation of irreversible build-up which necessitates the replacement of the filter mesh.

To carry out the cleaning of the metallic mesh and the magnet, proceed as described below:

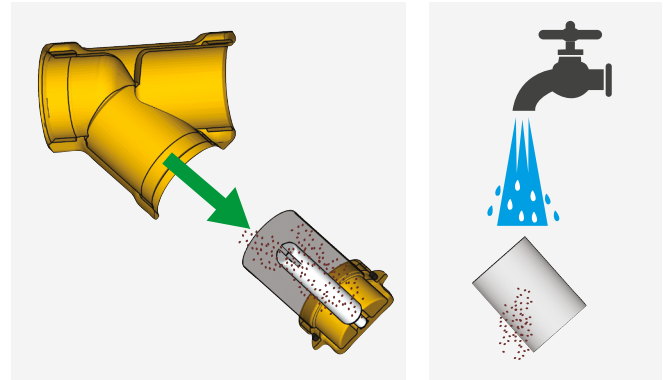
**1)** Close the shut-off valves upstream and downstream the filter.



**2)** Unscrew the cap and remove the magnet and the metal mesh mounted on it.

**▲ WARNING.** After the system filling phase is complete, the filter should be cleaned for the first time after a week of operation, to remove any obstruction from installation residue (metal shavings, sealing elements etc).

**3)** Clean the metallic mesh under running water, using a plastic bristle brush. For easier cleaning, you can temporarily remove both the metal mesh and the magnet from the cap. Check that the surface of the filter is completely clean (where irreversible obstructions are present, or where the filter is broken, it will need to be replaced).



**4)** Replace the magnet and the metal mesh on the cap and screw it on the filter body.


**5)** Open the shut-off valves upstream and downstream the filter.

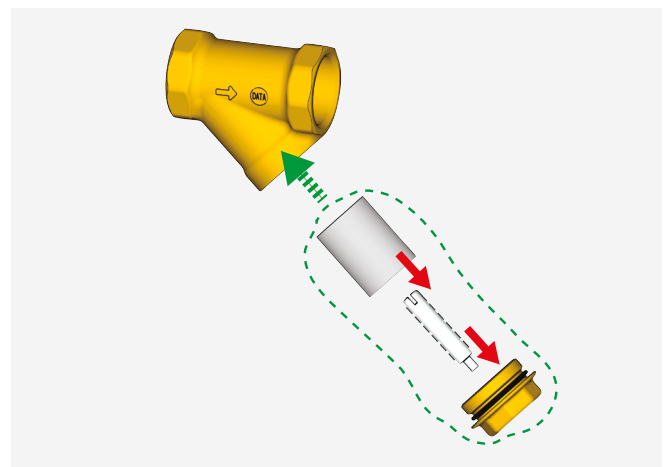
## ➤ Conversion of R74A filters to R74M magnetic filters

Filters from the R74A series can be transformed into magnetic filters, through the installation of the P74M kit.

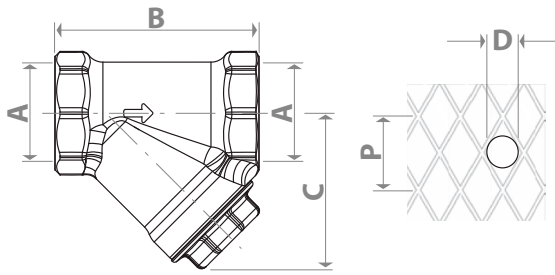
R74A CODE	P74M CONVERSION KIT	R74M CODE
R74AY103	+ P74MY001 =	R74MY003
R74AY104		R74MY004
R74AY105	+ P74MY002 =	R74MY005
R74AY106		R74MY006
R74AY107	+ P74MY003 =	R74MY007
R74AY108		R74MY008

### Installation of P74M kit on R74A filters

- 1)** Unscrew the filter cap and metallic mesh mounted on it.
- 2)** Screw the P74M magnet to the cap by means of the magnet male threaded screw and the female threaded connection situated inside the cap.
- 3)** Screw the cap, equipped with metal mesh and magnet, on the filter body.
- 4)** Apply the adhesive with the identification of the presence of magnet (provided with P74M kit) on the cap .



## ➤ Dimensions



PRODUCT CODE	A [mm]	B [mm]	C [mm]	P [mm]	D [μm]	N
R74MY003	G 1/2°F	48	35			
R74MY004	G 3/4°F	57	42			
R74MY005	G 1°F	68	52			
R74MY006	G 1-1/4°F	82	65	1	500	70
R74MY007	G 1-1/2°F	90	72			
R74MY008	G 2°F	108	88			

P: passage of holes  
D: diameter of hole inscribed  
N: number of holes per cm<sup>2</sup>

## ➤ Product specifications

### R74M

Inspectable Y-filter, with metal mesh and internal magnet. Female threaded connections ISO 228. Body and cap made of UNI EN 12165 CW617N brass. EPDM O-Ring. AISI 304 stainless steel mesh. Magnet made of neodymium N35H. Fluids of use: water and glycol solutions (max. 50 %). Temperature range: 5+90 °C. Max. working pressure: 30 bar. Filtering capacity: 500 μm.

### P74M

N35H neodymium magnet with male threaded fixing screw.

For installation in R701F valves with filter, in R74A magnetizable filters or spare part for R74M magnetic filters.

### NOTE. EUROPEAN DIRECTIVE 2014/68/UE.

The product illustrated in this technical specification satisfies the requirements of Directive 2014/68/UE and is exempt from CE marking, according to Article 4.3.

**⚠ Safety Warning.** Installation, commissioning and periodical maintenance of the product must be carried out by qualified operators in compliance with national regulations and/or local standards. A qualified installer must take all required measures, including use of Individual Protection Devices, for his and others' safety. An improper installation may damage people, animals or objects towards which Giacomini S.p.A. may not be held liable.

**♻ Package Disposal.** Carton boxes: paper recycling. Plastic bags and bubble wrap: plastic recycling.

**ℹ Additional information.** For more information, go to [giacomini.com](http://giacomini.com) or contact our technical assistance service. This document provides only general indications. Giacomini S.p.A. may change at any time, without notice and for technical or commercial reasons, the items included herewith. The information included in this technical sheet do not exempt the user from strictly complying with the rules and good practice standards in force.

**♻ Product Disposal.** Do not dispose of product as municipal waste at the end of its life cycle. Dispose of product at a special recycling platform managed by local authorities or at retailers providing this type of service.