R701F

Ball valve with built-in filter, full port

Energy Management

Datasheet
1041EN 09/2026



Ball valve with built-in filter, female-female threaded connections and full port.
Valve R701F is the ideal solution for hydraulic systems requiring installation of a filter and shut-off valves in limited space (for example, upstream of energy meters, circulators and/or on boilers and heat pump inlets.)
It is also possible to install a magnet inside the valve to obtain an even more effective filtering.

Versions and product codes

PRODUCT CODE	CONNECTIONS	BRASS TYPE	HANDLE TYPE	HANDLE COLOR
R701FY023	G 1/2"F x G 1/2"F	EN 12165 CW617N	T-handle	Red
R701FY024	G 3/4"F x G 3/4"F	EN 12165 CW617N	T-handle	Red
R701FY025	G 1"F x G 1"F	EN 12165 CW617N	T-handle	Red
R701FY026	G 1-1/4"F x G 1-1/4"F	EN 12165 CW617N	T-handle	Red
R701FY112	Rc 3/8" x Rc 3/8"	EN 12165 CW602N (DZR)	T-handle	Red
R701FY113	Rc 1/2" x Rc 1/2"	EN 12165 CW602N (DZR)	T-handle	Red
R701FY114	Rc 3/4" x Rc 3/4"	EN 12165 CW602N (DZR)	T-handle	Red
R701FY115	Rc 1" x Rc 1"	EN 12165 CW602N (DZR)	T-handle	Red

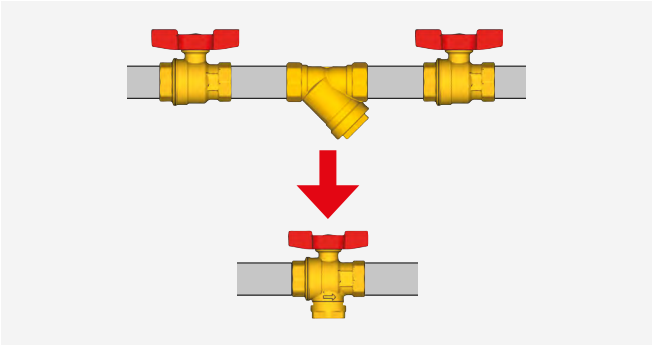
Accessories
- **P74MY011**: magnet for 3/8", 1/2" and 3/4" R701F valves
- **P74MY012**: magnet for 1" and 1-1/4" R701F valves

Spare parts
- **P36-1**: stainless steel filter available with 841, 400 or 177 µm

GIACOMINI WATER E-MOTION

Giacomini S.p.A.
Via per Alzo 39, 28017 San Maurizio d'Opaglio (NO) Italia
consulenza.prodotti@giacomini.com
+39 0322 923372 - giacomini.com

Benefits and main characteristics



- **Very reduced dimensions** as 3 hydraulic components (1 filter and 2 shut-off valves) are integrated in a single valve.
- **Minimum chance of error.** The filter includes a plastic groove that, after cleaning and maintenance, guides it into the valve in one direction only.
- **Easy to clean.** To clean the filter it is only necessary to close the ball valve, loosen the cap and manually remove the filter to clean it.

Technical data

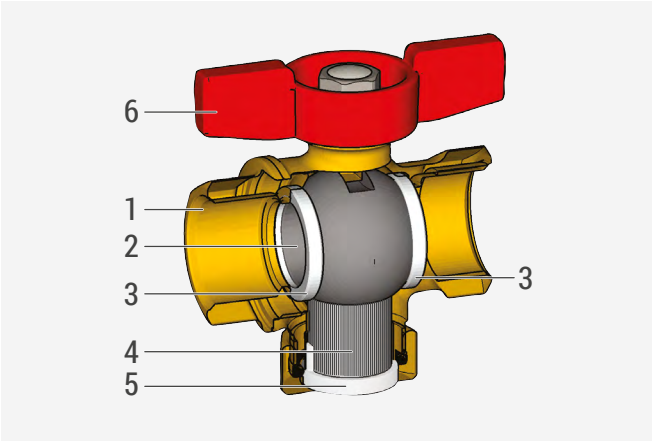
Main features and materials

- Fluids of use: water and glycol solutions for HVAC systems
- Max. glycol percentage: 50%
- Full port
- Valve made of EN 12165 CW617N brass, or EN 12165 CW602N (DZR) brass, depending on versions
- Stem with double O-Ring
- Nut with anti-corrosion coating, with guarantee seal and hologram
- Aluminium T-handle, red painted
- AISI 304 stainless steel filter
- Filtering capacity: 400 µm
- P74M-1 magnet (accessory): neodymium N35H with AISI 304 stainless steel coating

Field of applications

- Temperature range: 5÷110 °C
  (also with P74M-1 magnet installed)
- Max. working pressure at 20 °C with water:
  3,2 MPa (32 bar) for 3/8", 1/2", 3/4", 1"
  2,8 MPa (28 bar) for 1-1/4"

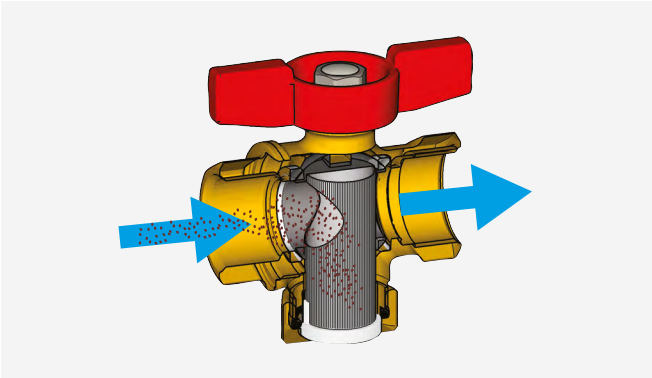
Components



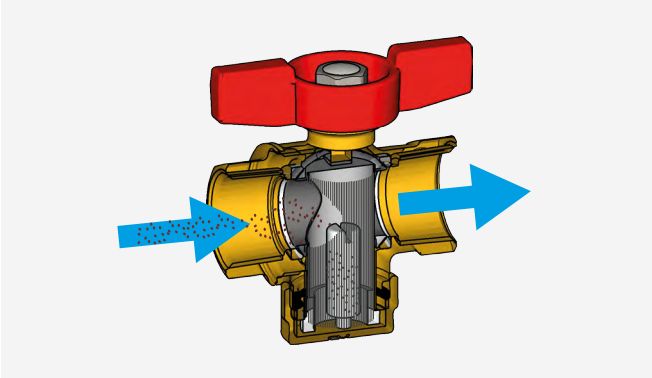
1	Valve body
2	Ball
3	Gasket
4	Metallic filter
5	Cap
6	T-handle

Giacomini S.p.A.
Via per Alzo 39, 28017 San Maurizio d'Opaglio (NO) Italia
consulenza.prodotti@giacomini.com
+39 0322 923372 - giacomini.com

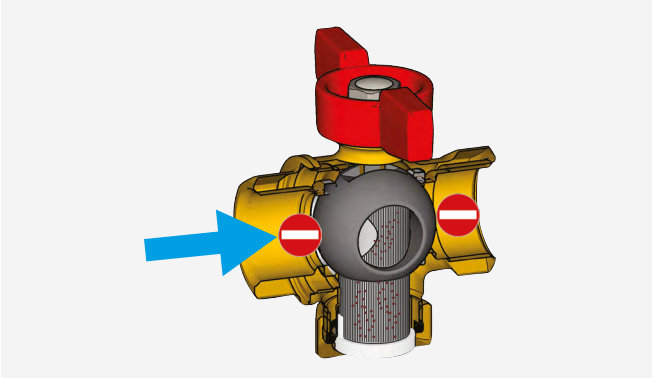
Operation



When the valve is open the heat transfer fluid flows through the filter, then it slows down to enable the separation of solid debris.
Impurities are filtered when colliding with the metallic mesh and fall on the bottom of the cap.
The special structure of the valve body enables to exploit the entire filtering surface, extending the operation time before the mesh is completely filled with dirt.



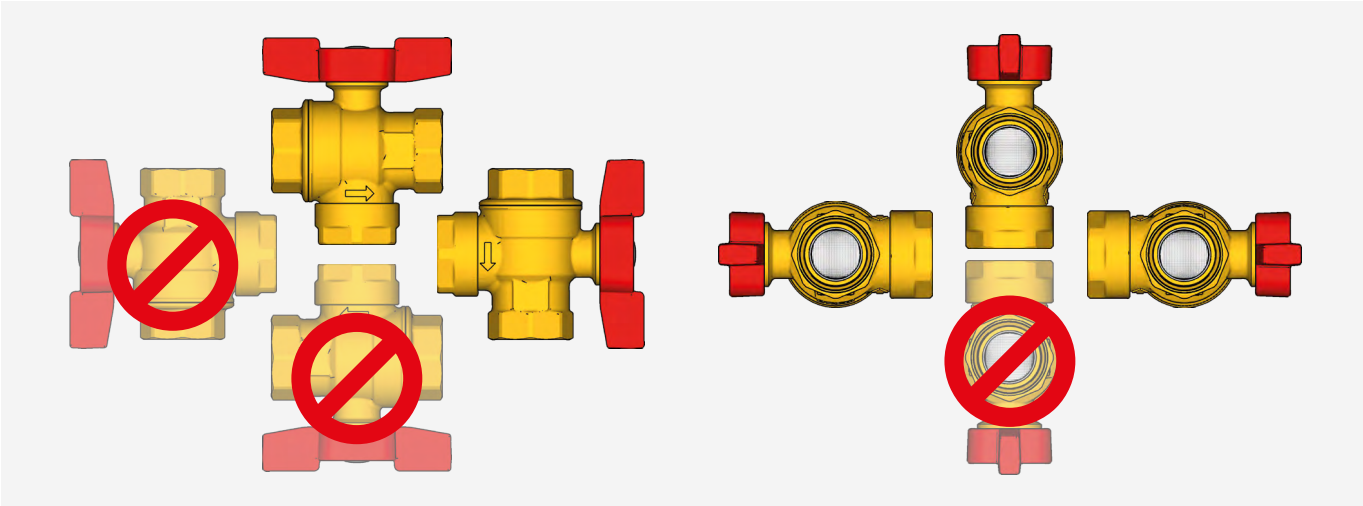
It is also possible to install the **P74M-1 magnet** inside the valve to obtain an even more effective filtering.
When the valve is open the heat transfer fluid flows through the filter, then it slows down to enable the separation of solid debris.
Impurities are filtered when colliding with the metallic mesh and fall on the bottom of the cap; ferrous impurities are retained by the attraction force generated by the magnet.



When the valve is closed the heat transfer fluid cannot flow through the filter as this is isolated from the rest of the hydraulic circuit.
In this position, one can loosen the bottom cap and remove the filter to rinse it with clean water and recover the filtering surface.

Giacomini S.p.A.
Via per Alzo 39, 28017 San Maurizio d'Opaglio (NO) Italia
consulenza.prodotti@giacomini.com
+39 0322 923372 - giacomini.com

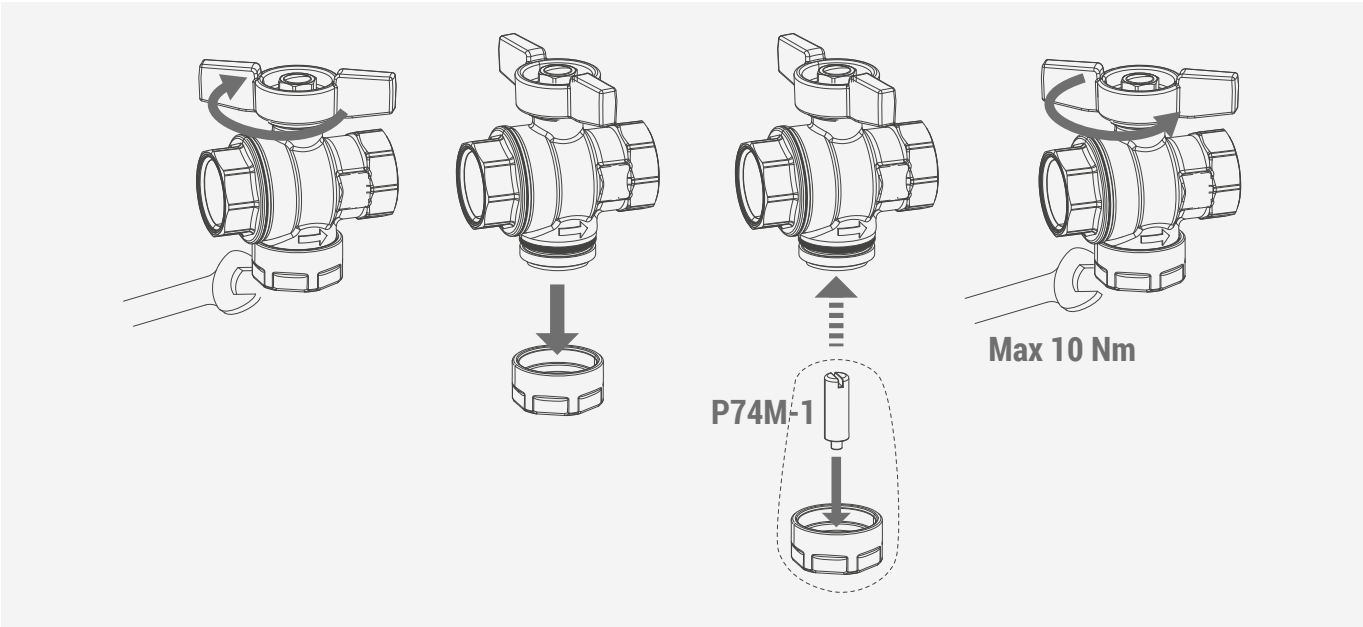
Installation



⚠ **WARNING.** Before installing the filter, we recommend checking the system working conditions, such as pressure and temperature, to make sure they are set within the operational range. Access to the filter must be free from obstacles for maintenance purposes.

Installation of P74M-1 magnet (accessory)

- Close the valve ball turning the T-handle.
- Loosen the octagonal cap using a proper wrench (see paragraph "Dimensions").
- Screw the P74M-1 magnet to the cap using the magnet screw and the female threaded connection inside the cap.
- Screw the cap fitted with the magnet as far as it will go (max. 10 Nm) and open the valve by turning the T-handle.
- Apply the adhesive on the cap (supplied with the P74M-1 manget) identifying the presence of the magnet.



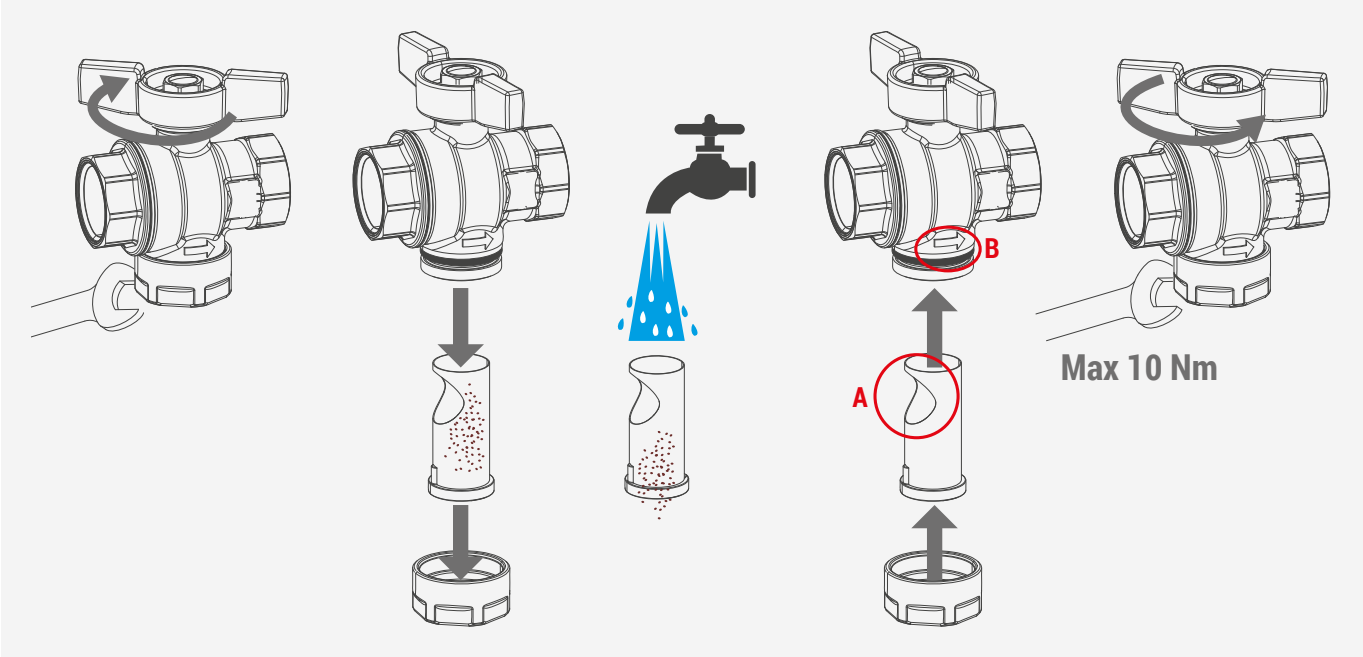
⚠ **WARNING.** The symbol on the cap indicates the presence of magnetic fields, which can cause damage to electronic devices (including pacemakers) that are placed in close proximity.

Giacomini S.p.A.
Via per Alzo 39, 28017 San Maurizio d'Opaglio (NO) Italia
consulenza.prodotti@giacomini.com
+39 0322 923372 - giacomini.com

Maintenance

Perform maintenance of the valve with filter based on the quantity of impurities present in the fluid used.
We recommend cleaning the filter at least once a year to prevent, in addition to an excessive reduction of the system flow rates, irreversible scales that may require the replacement of the filtering mesh.
Follow the steps below to clean the metallic mesh:

- Close the valve ball turning the T-handle.
- Loosen the cap using a proper wrench (see paragraph “Dimensions”).
- Remove the filter and rinse it under running water and using a plastic bristle brush.
  Make sure the filtering surface is fully recovered (replace the filter in case of irreversible obstructions or breaks).
- Reinstall the filter in the valve making sure the filter hole (ref. "A") is pointing in the direction opposite to the flow, shown by an arrow on the valve body (ref. “B”)
- Manually close the cap (max 10 Nm) and open the valve by turning the T-handle.

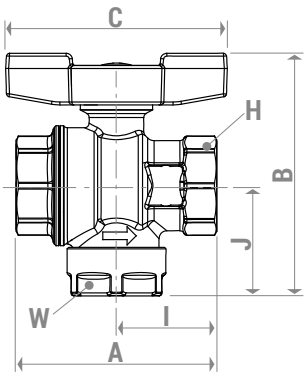


⚠ **WARNING.** After filling the system, we recommend cleaning the filter for the first time after a week of use to remove any obstruction caused by installation residues (metallic chips, seal elements.)

Giacomini S.p.A.
Via per Alzo 39, 28017 San Maurizio d'Opaglio (NO) Italia
consulenza.prodotti@giacomini.com
+39 0322 923372 - giacomini.com

Dimensions and Kv

PRODUCT CODE	CONNECTIONS	DN	A [mm]	I [mm]	B [mm]	J [mm]	C [mm]	H [mm]	W [mm]	Kv
R701FY023	G 1/2"F x G 1/2"F	15	59	30	69	31	63	wr.25	wr.27	2,5
R701FY024	G 3/4"F x G 3/4"F	20	66	33	80	36	73	wr.31	wr.30	4,6
R701FY025	G 1"F x G 1"F	25	79	40	94	46	73	wr.38	wr.40	10,0
R701FY026	G 1-1/4"F x G 1-1/4"F	32	91	45	105	52	73	wr.47	wr.47	19,0
R701FY112	Rc 3/8" x Rc 3/8"	10	59	30	69	31	63	wr.25	wr.27	2,0
R701FY113	Rc 1/2" x Rc 1/2"	15	59	30	69	31	63	wr.25	wr.27	2,5
R701FY114	Rc 3/4" x Rc 3/4"	20	66	33	80	36	73	wr.31	wr.30	4,6
R701FY115	Rc 1" x Rc 1"	25	79	40	94	46	73	wr.38	wr.40	10,0



Product specifications

R701F
Ball valve with built-in filter, female-female connections. Available in size 3/8", 1"/2", 3/4", 1", 1-1/4". Fluids of use: water and glycol solutions for HVAC systems. Max. glycol percentage: 50%. Valve made of EN 12165 CW617N brass or EN 12165 CW602N (DZR) brass, depending on versions. Full port. Aluminium T-handle, red painted. Stem with double O-Ring. Nut with anti-corrosion coating, warranty seal and hologram. AISI 304 stainless steel filter. Filtering capacity: 400 µm. Temperature range: 5÷110 °C (also with P74M-1 magnet installed). Max. working pressure at 20 °C with water: 3,2 MPa (32 bar) for 3/8", 1"/2", 3/4", 1"; 2,8 MPa (28 bar) for 1-1/4".

P74M-1
N35H neodymium magnet with AISI 304 stainless steel inox with male threaded fixing screw. Max. working temperature: 110 °C. For installation in R701F valves with filter, in R74A magnetizable filters or spare part for R74M filters.

P36-1
Stainless steel filter. Filtering capacity: 841, 400 or 177 µm depending on the version.

⚠ 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.

ⓘ Additional information. For more information, go to 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.

Giacomini S.p.A.
Via per Alzo 39, 28017 San Maurizio d'Opaglio (NO) Italia
consulenza.prodotti@giacomini.com
+39 0322 923372 - giacomini.com