

## 3670/ 3670CZIS07

### Y-SHAPED FILTER FOR IMPURITY



#### DESCRIPTION

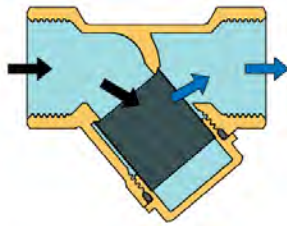
Y Tiemme filters are used for the protection of water circuits for drinking use (cold and hot domestic water), for refilling and feeding wall-mounted boilers and for supplying cooling systems.

They are applied to the cold water piping from the aqueduct (after the meter and before the pressure reducer), and generally upstream of the hydraulic circuit to be protected, so as to preserve the entire section of the system located downstream of the filter.

In order to facilitate maintenance work, it is advisable to stop the filter by means of two ball valves upstream and downstream of the filter.

#### Principle of operation:

The Y-shaped filter allows the deposit of impurities on the bottom of the cartridge holder and easy and fast maintenance thanks to the possibility of unscrewing the closing cap and remove the filter mesh.



To ensure a better filtration, it is advisable to install the Y-filter on horizontal pipes with the cap facing downwards, in any case you must always refer to the direction of the fluid indicated by the arrow printed on the filter body.

#### ADVANTAGES/ STRENGTHS

- Compact size.
- Ensures better performance of the plant resulting in reduced operating and maintenance costs.

#### PRODUCT RANGE

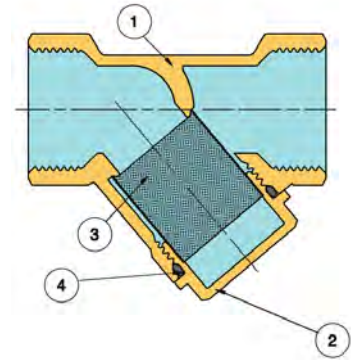
Art.	Code	Connection fittings	Degree of filtration
3670	367 0003	G 1/2" F (ISO 228/1)	350 µm
	367 0001	G 3/4" F (ISO 228/1)	350 µm
	367 0002	G 1" F (ISO 228/1)	350 µm
	367 0005	G 1"1/4 F (ISO 228/1)	500 µm
	367 0009	G 1"1/2 F (ISO 228/1)	500 µm
	367 0004	G 2" F (ISO 228/1)	500 µm
	367 0011	G 2"1/2 F (ISO 228/1)	500 µm
	367 0014	G 3" F (ISO 228/1)	600 µm
	367 0015	G 4" F (ISO 228/1)	600 µm

Art.	Code	Connection fittings	Degree of filtration
3670CZIS07	367 0012	Rp 1/2" F (ISO 7/1)	350 µm
	367 0006	Rp 3/4" F (ISO 7/1)	350 µm
	367 0008	Rp 1" F (ISO 7/1)	350 µm
	367 0013	Rp 1"1/4 F (ISO 7/1)	500 µm
	367 0010	Rp 1"1/2 F (ISO 7/1)	500 µm
	367 0007	Rp 2" F (ISO 7/1)	500 µm

**MANUFACTURING SPECIFICATIONS**

**Art. 3670**

- (1) Body: CW617N Brass
- (2) Cap: CW617N Brass
- (3) Filter: AISI 304 Stainless steel
- (4) O-ring seal: NBR
- Thread: ISO 228/1



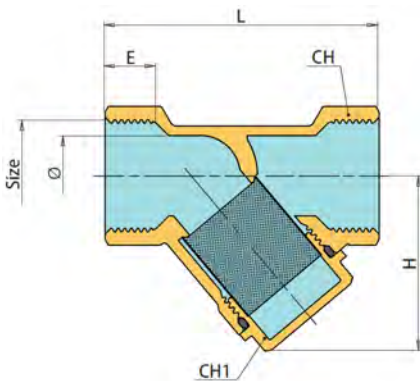
**Art. 3670CZISO7**

- (1) Body: CW602N Brass
- (2) Cap: CW602N Brass
- (3) Filter: AISI 304 Stainless steel
- (4) O-ring seal: NBR
- Thread: ISO 7/1

**TECHNICAL SPECIFICATIONS**

- Maximum operating temperature: + 100 °C
- Minimum operating temperature: - 20 °C (provided the fluid remains in the liquid phase)
- Maximum working pressure: 20 bar (1/2" ÷ 2") - 16 bar (2"1/2 ÷ 4")
- Degree of filtration: 350 µm (1/2" ÷ 1") - 500 µm (1"1/4 ÷ 2"1/2) - 600 µm (3" ÷ 4")
- Fluid compatibility: Water, water and glycol solutions (maximum 50% glycol)

**DIMENSIONAL SPECIFICATIONS**

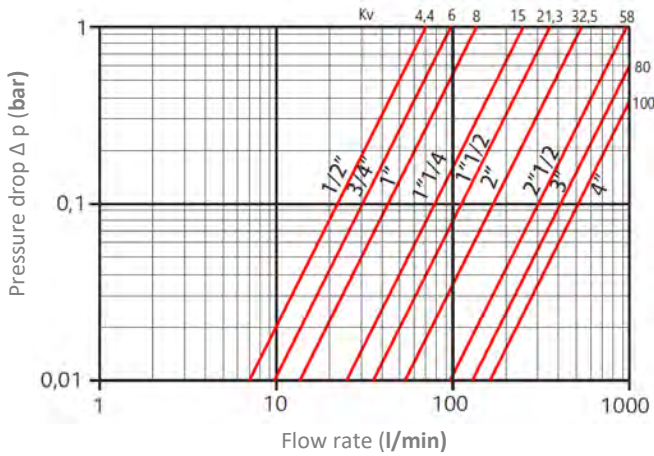


Art.	Code	Size	Ø (DN)	L	H	E	CH	CH1
3670	367 0003	G 1/2" F	15	57	34	12	25	21
	367 0001	G 3/4" F	20	66	42	14	31	24.5
	367 0002	G 1" F	25	80	51	15	38	30
	367 0005	G 1"1/4 F	32	87	61	15	47	24.5
	367 0009	G 1"1/2 F	40	98	69.5	16	54	34
	367 0004	G 2" F	50	118	85	17.5	67	40
	367 0011	G 2"1/2 F	65	150	100.5	20.5	85	49
	367 0014	G 3" F	80	170	118.5	23.5	99	59
	367 0015	G 4" F	100	218	157.5	25.5	122.5	70

Art.	Code	Size	Ø (DN)	L	H	E	CH	CH1
3670CZISO7	367 0012	Rp 1/2" F	15	64	36	16.5	25	21
	367 0006	Rp 3/4" F	20	73	43.5	18	31	24.5
	367 0008	Rp 1" F	25	89	52.5	20.5	38	30
	367 0013	Rp 1"1/4 F	32	104	62	23.5	47	24.5
	367 0010	Rp 1"1/2 F	40	113	70.5	23.5	54	34
	367 0007	Rp 2" F	50	139	86	28	67	40

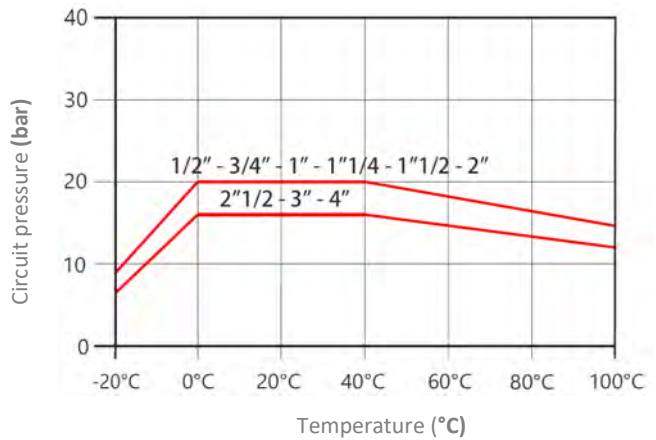
**HYDRAULIC SPECIFICATIONS**

Diagram 1: Flow rate/Pressure drop



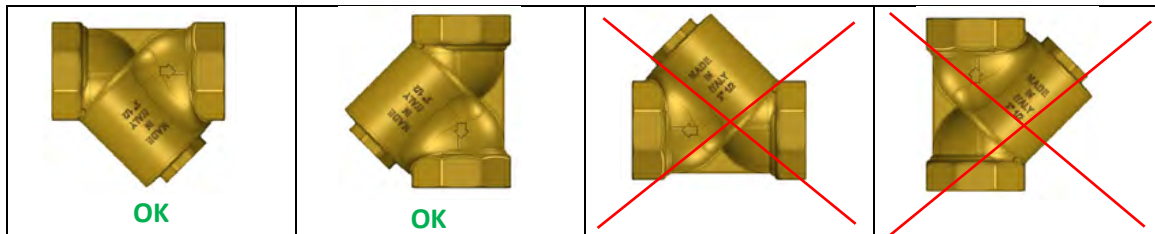
Measure	Kv (m³/h)
1/2"	4.40
3/4"	6.00
1"	8.00
1"1/4	15.00
1"1/2	21.30
2"	32.50
2"1/2	58.00
3"	80.00
4"	100.00

Diagram 2: Temperature/pressure



**INSTALLATION/ WARNINGS**

- For a better filtration efficiency and to promote the deposit of impurities it is advisable to install the filter on horizontal pipes with the cap facing down or on vertical pipes with the flow downwards.



- For correct installation, refer to the direction of flow indicated by the arrow stamped on the filter body.



- The system must be designed and constructed in such a way as to avoid stresses which could damage the filter and prevent its proper sealing and good operation.
- The connection operations between the filter and the connecting piece to the system must be carried out with suitable equipment. The torque must be such that it ensures proper sealing without damaging the filter or the fittings.
- After installation, it is necessary to carry out the seal verification according to the technical regulations and/or laws in force in the country of use.
- It is not recommended to install in uninspected and frost-prone locations.

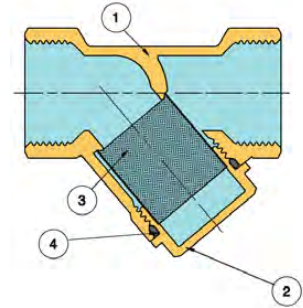
*TIEMME RACCORDERIE S.p.A. declines all liability in the event of failures and/or accidents resulting from non-compliance with these instructions and improper use of the system. The information provided does not exempt the user from following scrupulously the regulations and good technical rules in force.*

## MAINTENANCE

To ensure the correct operation of the system, it is recommended that the filter is cleaned periodically. The frequency of the operation must be increased with increasing presence of impurities in the treated fluid. It is recommended, in any case, to carry out the scheduled maintenance at least every **6 months**. In the case of new systems, it is recommended to carry out the first cleaning of the filter after **1 month of operation**.

### Procedure:

- Close off the shut-off valves upstream and downstream of the filter;
- Unscrew the filter cap (2);
- Remove the cartridge (3) and clean under running water, or, if necessary, proceed with the insertion of the new cartridge (spare part **Art. H9270**);
- Check that the O-ring seal (4) is not damaged;
- Insert the filter (3) into the cap (2) and screw the cap on the body (1);
- Open the shut-off valves.



## SPARE PARTS



Measure	1/2"	3/4"	1"	1"1/4	1"1/2	2"	2"1/2	3"	4"
Code	040 0092	040 0093	040 0094	040 0204	040 0205	040 0206	040 0240	040 0099	040 0237
Degree of filtration	350 µm	350 µm	350 µm	500 µm	500 µm	500 µm	500 µm	600 µm	600 µm

### Art. H9270

Filter in AISI 304 stainless steel.

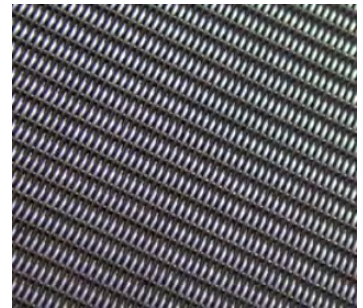
## TIEMME INFORMS

The filter mesh in AISI 304 stainless steel is the most important part of the filter, washable and possibly replaceable.

The degree of filtration depends on the number of meshes per cm<sup>2</sup> and is a key factor in the correct choice of filter. The tighter the filter meshes, the greater the filtering capacity.

Each filter cartridge is characterised by a number expressed in microns which expresses its filtering capacity (1 µm = 0,001 mm).

This value expresses the minimum diameter of the blocked particle, giving an indication of the filtering power of the filter itself. The higher the value expressed in microns, the wider the filter mesh will be, the smaller the mesh per cm<sup>2</sup> and therefore the lower the filtering capacity. The choice of the most suitable degree of filtration to be adopted is at the discretion of the user, depending on the type of application and the degree of impurities present in suspension in the fluid to be treated.



## ITEM SPECIFICATIONS

### Art. 3670

Y-shaped filter for impurity, made of: CW617N brass body, CW617N brass cap, AISI 304 stainless steel filter, NBR O-ring seal, ISO 228/1 threads. Maximum operating temperature + 100 °C. Minimum operating temperature - 20 °C (provided the fluid remains in liquid phase). Maximum operating pressure 20 bar (1/2" ÷ 2") - 16 bar (2"1/2 ÷ 4"). Filtration degree 350 µm (1/2" ÷ 1") - 500 µm (1"1/4 ÷ 2"1/2) - 600 µm (3" ÷ 4"). Compatibility of water, water and glycol solutions (maximum glycol content 50%). Available sizes 1/2" ÷ 4".

### Art. 3670CZIS07

Y-shaped filter for impurity, made of: CW602N brass body, CW602N brass cap, AISI 304 stainless steel filter, NBR O-ring seal, ISO 7/1 threads. Maximum operating temperature + 100 °C. Minimum operating temperature - 20 °C (provided the fluid remains in liquid phase). Maximum operating pressure 20 bar. Filtration degree 350 µm (1/2" ÷ 1") - 500 µm (1"1/4 ÷ 2"1/2). Compatibility of water, water and glycol solutions (maximum glycol content 50%). Available sizes 1/2" ÷ 2".

**CERTIFICATION**

Art. 3670



Art. 3670CZISO7

