

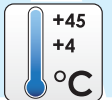
# HYDRA AUTO

AUTOMATIC  
SELF-CLEANING FILTERS  
WITH BACK-WASH



# HYDRA AUTO

## Automatic self-cleaning filters with back-wash



**HYDRA AUTO self-cleaning filters** have been designed with innovative solutions regarding the efficiency of the system for the self-cleaning of the cartridge, thanks to newly designed back-wash on counter-current which grants the highest particles removal from the cartridge. When the cartridge is to be cleaned, the cleaning operation with back-wash is simply operated by the programmer located at the filter bottom.

The automatic self-cleaning process is driven by a programmer with dual programming mode:

- set how many hours in between self-cleaning processes,

- set how many seconds the self-cleaning process will last.

Thanks to the dual programming mode HYDRA AUTO performs customized self-cleaning programs, depending on water quality.

In addition, if the cartridge should not be perfectly cleaned by the programmed process, by simply pressing the dedicated MANUAL FLUSH key it is possible to immediately start up a new self-cleaning process (the operation can be repeated any time).

That operation causes a pressure-drop which pushes the cartridge downward the housing bottom and reverses the water flow from the outer to the inner side of the cartridge. It is that counter-current back flow which washes away to the discharge the impurities trapped onto the outer side of the cartridge.

The filters perform 90 micron filter rate with stainless steel net cartridge or plastic net cartridge and 50 micron filter rate with pleated plastic net cartridge.

The HYDRA AUTO filter features a drain funnel, which is a device designed to protect potable water in water installations against pollution by backflow in accordance with European standard UNI EN 1717 November 2002. This device prevents backflow by making all elements downstream from the solenoid drain valve vent to atmosphere (protection unit symbol: DC).

### SPECIFICATIONS

Non-toxic materials, suitable for drinking water, in compliance with the UE "Directive 98/83/EC".

**Head:** reinforced polypropylene.

**Bowl:** PET.

**O-ring:** EPDM.

**Breather-valve:** body stainless steel, O-ring EPDM.

**IN/OUT threads:** CW 614 N brass inserts.

**RAH cartridge:** stainless steel net AISI 316, frame and end caps polypropylene.

**RLH cartridge:** polyester net, frame and end caps polypropylene.

**RSH cartridge:** polypropylene pleated net, frame and end caps polypropylene.

**Cartridges spring:** stainless steel AISI 316-L.

**Nipple:** nylon.

**Electrovalve:** brass, 1/2" - 24 VAC.

**Discharge hose-holder:** nylon.

**Drain funnel:** reinforced polypropylene.

**Programmer:** 230 Volt (IN) / 24 VAC (OUT) / 1 A in compliance with "EN 61558-2-6".

HYDRA AUTO filters are constructed in accordance with the following European directives:

N° 89/336/EEC - Electromagnetic compatibility.

N° 73/23/EEC - Low voltage directive.

Specifically, the following harmonised regulations were applied:

EN 50081-1, EN 55014, EN 60800-2, EN 61000-4-4, EN 61000-3-2, EN 61000-3-3, EN 55104, EN 60204-1.



Filter housings made in PET, a highly recyclable plastic, are manufactured with a proprietary procedure saving up to 60% of energy in injection molding compared with standard plastics. That is one of Atlas Filtri commitments to comply with Kyoto Treaty for the reduction of green house gas (CO<sub>2</sub>) emissions in the atmosphere.



HYDRA AUTO-RAH



HYDRA AUTO-RLH



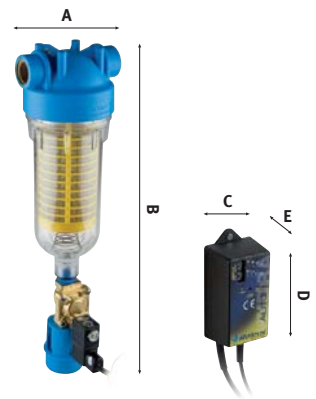
HYDRA AUTO-RSH

# BENEFITS OF HYDRA AUTO SELF-CLEANING FILTERS

Free from frequent operation of filter opening and cartridge washing, with all the related operation: water mains turn off - turn on, interruption of the water delivery, water flood when opening the filter, and get a clean filter in a while.

Perform self-cleaning with back-wash operation and ensure the best removal of particles from the cartridge surface with the counter-current flow, which pushes the particles to the discharge.

Water is delivered even during the self-cleaning operation, with no interruption of the water supply.



model	IN/OUT connections	cartridge type	filtration micron	maximum flow rate l/h @ 3 BAR	pressure drop BAR @ maximum flow rate	A	B	C	D	E
HYDRA AUTO 1/2 - RAH 90 mcr	1/2"	stainless steel net	90	3800	0,41	120	420	70	140	50
HYDRA AUTO 3/4 - RAH 90 mcr	3/4"	stainless steel net	90	5300	0,41	120	420	70	140	50
HYDRA AUTO 1 - RAH 90 mcr	1"	stainless steel net	90	6000	0,41	120	420	70	140	50
HYDRA AUTO 1 1/4 - RAH 90 mcr	1" 1/4	stainless steel net	90	8000	0,41	120	445	70	140	50
HYDRA AUTO 1 1/2 - RAH 90 mcr	1" 1/2	stainless steel net	90	10000	0,41	120	445	70	140	50
HYDRA AUTO 1/2 - RLH 90 mcr	1/2"	polyester net	90	3800	0,44	120	420	70	140	50
HYDRA AUTO 3/4 - RLH 90 mcr	3/4"	polyester net	90	5300	0,44	120	420	70	140	50
HYDRA AUTO 1 - RLH 90 mcr	1"	polyester net	90	6000	0,44	120	420	70	140	50
HYDRA AUTO 1 1/4 - RLH 90 mcr	1" 1/4	polyester net	90	8000	0,44	120	445	70	140	50
HYDRA AUTO 1 1/2 - RLH 90 mcr	1" 1/2	polyester net	90	10000	0,44	120	445	70	140	50
HYDRA AUTO 1/2 - RSH 50 mcr	1/2"	pleated polypropylene net	50	3800	0,43	120	420	70	140	50
HYDRA AUTO 3/4 - RSH 50 mcr	3/4"	pleated polypropylene net	50	5300	0,43	120	420	70	140	50
HYDRA AUTO 1 - RSH 50 mcr	1"	pleated polypropylene net	50	6000	0,43	120	420	70	140	50
HYDRA AUTO 1 1/4 - RSH 50 mcr	1" 1/4	pleated polypropylene net	50	8000	0,43	120	445	70	140	50
HYDRA AUTO 1 1/2 - RSH 50 mcr	1" 1/2	pleated polypropylene net	50	10000	0,43	120	445	70	140	50

**Remark:** maximum flow rate values are experimentally obtained at Atlas Filtri testing laboratory with specific testing devices, using new, clean filters, under the following testing conditions:

- inlet pressure: 3 BAR    - inlet water temperature: 10°C    - room temperature: 20°C    - raw water: potable water from municipal supply

## cartridges assortment

## accessories included



RAH cartridge 90 micron stainless steel net AISI 316



RLH cartridge 90 micron polyester net



RSH cartridge 50 micron pleated polypropylene net



-X- Spanner



-S- wall bracket    wall bracket screws

## spare parts

## variant

## variant available on minimum quantity



Stainless steel AISI 316-L spring for cartridges RAH, RLH, RSH



housing O-ring



electrovalve 1/2" - 24 VAC



1/2" nipple with O-ring



Plastic hose-holder



Drain funnel



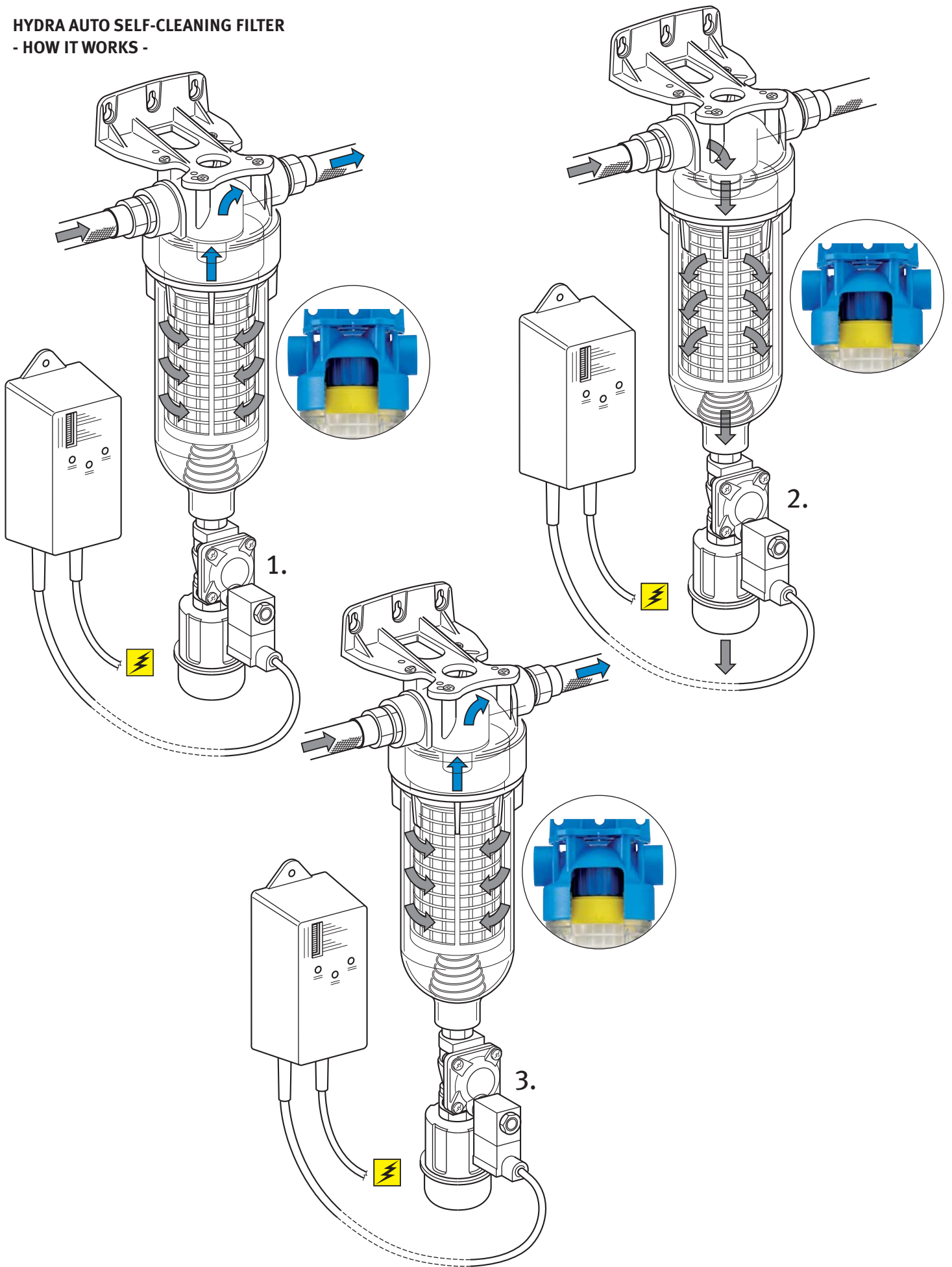
Brass hose-holder



IN female plastic in/out threads 1/2", 3/4", 1", 1 1/4", 1 1/2



**HYDRA AUTO SELF-CLEANING FILTER**  
**- HOW IT WORKS -**



R03-11/10. Subject to change without notice

