

### Water filters "Aquanova"

#### Application:

The Oventrop "Aquanova" water filters serve to guarantee the quality of potable water within domestic installations. Oventrop offers two models: a filter with replaceable filter insert and a backflush filter.

#### General note:

The water supplied by the water authority is clean and free from impurities. However, when passing through the supply pipes, before reaching the consumer, it may be polluted by rust- or dirt particles, grains of sand, chalk sediments or installation residues.

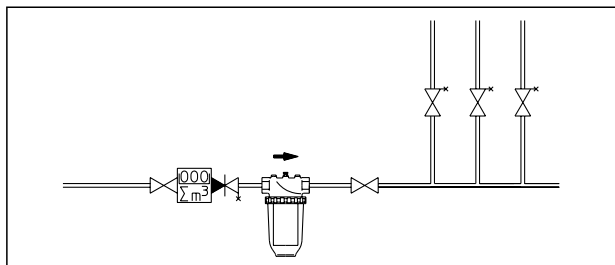
These impurities are often of microscopic size and therefore invisible to the naked eye. They deposit in the pipework and do not only cause contact corrosion within the domestic installation but also affect valves, shower heads, dish-washers, water heaters etc.

Installation of a water filter will in most cases prevent breakdown and costly repairs.

All water filter materials are suitable for use in potable water systems.

#### Installation:

The water filter is installed between two isolating valves (in the direction of flow directly after the water meter). The direction of flow is indicated on the filterhead.



#### Installation of pressure reducing valves:

If pressure reducing valves are installed, the filter generally has to be installed in the direction of flow in front of the pressure reducing valve.

#### Installation in hot water systems with copper pipes:

For use in hot water systems with copper pipes in which a cold water pipe made of galvanized steel is superposed, the installation of the water filter for the hot water section of the system is recommended in the cold water supply of the water heater in front of the safety valves.

#### Assessment of contamination:

Contamination of the different models can be assessed as follows:

1. by visual control of the filter with transparent plastic cap
2. by means of the pressure gauges for water filters with brass cup. To assess the degree of contamination by means of the pressure loss within the filter, measurement has, however, to be carried out at full flow.



Water filter "Aquanova Compact"



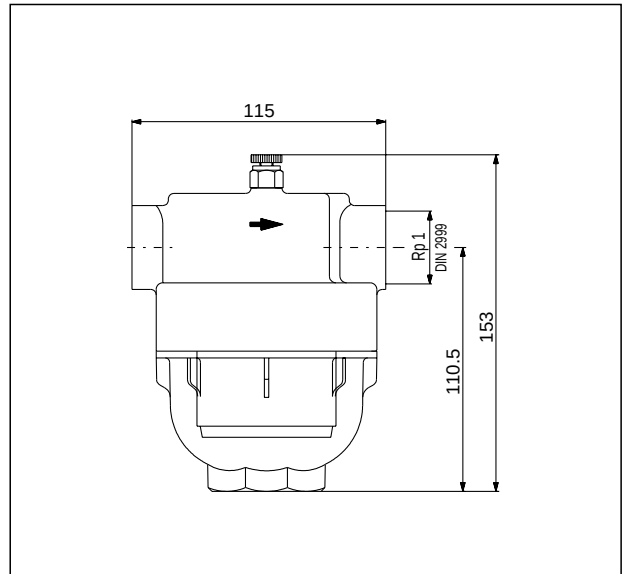
Backflush filter "Aquanova Compact RE"

**Water filter "Aquanova Compact"  
with transparent plastic filter cup (Trogamit T), PN 16:**

- DIN-DVGW tested and approved
- for horizontal installation
- bronze or brass body
- compact construction with high flow capacity
- even in case of lower flow rates, the whole filter is flushed, i.e. there is no stagnant water remaining in the filter
- mesh size 100-120 µm
- max. water temperature 30 °C
- flow rate of 4.3 m³/h with a pressure loss of 0.05 bar and a max. load on the filter surface of 0.025 m³/h · cm²

**Construction:**

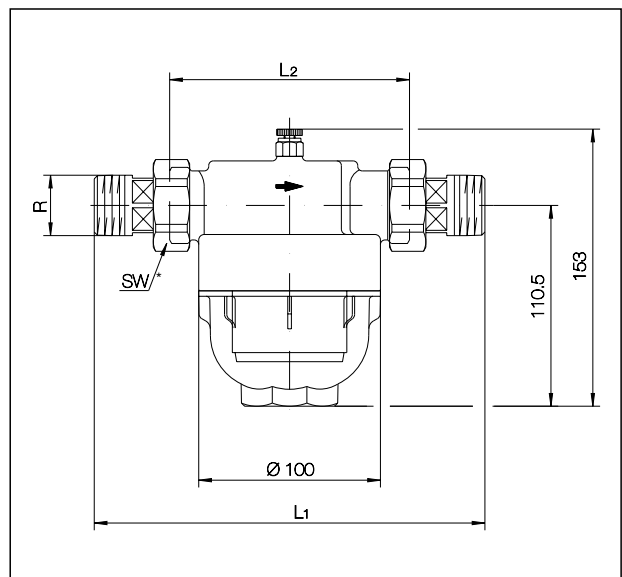
- both ports female thread 1" according to DIN 2999 (brass) or both ports male screwed tailpipes, DIN 2999 (bronze)
- filter insert: plastic body covered with nylon mesh
- brass filterhead and venting valve
- filter cup screwed into the filterhead, with O-ring seal



"Aquanova Compact"  
Item no. 612 05 08 (DN 25), brass

**"Aquanova Compact" with both ports male thread**

| DN | L <sub>1</sub> | L <sub>2</sub> | R   | SW * |
|----|----------------|----------------|-----|------|
| 20 | 216            | 132            | ¾"  | 46   |
| 25 | 216            | 132            | 1"  | 46   |
| 32 | 234            | 138            | 1¼" | 52   |



"Aquanova Compact"  
Item no's. 612 25 06-10 (DN 20 – DN 32), bronze

**Water filter „Aquanova Compact E“  
with transparent plastic filter cup (Trogamit T)  
and swivel connection piece, PN 16:**

- DIN-DVGW tested and approved
- for horizontal or vertical installation
- compact construction due to double mesh screen
- large filter surface
- mesh size 100-120 µm
- max. water temperature 30 °C
- flow rate with  $\Delta p = 0.2$  bar
 

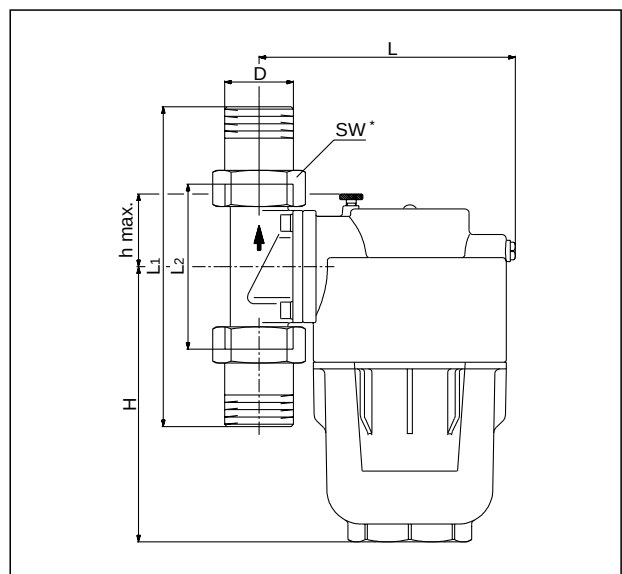
|           |     |     |      |
|-----------|-----|-----|------|
| for DN 20 | ¾"  | 4   | m³/h |
| for DN 25 | 1"  | 5   | m³/h |
| for DN 32 | 1¼" | 5.5 | m³/h |

**Construction:**

- both ports male screwed tailpipes according to DIN 2999
- filter insert: plastic body covered with nylon mesh
- with brass swivel connection piece
- brass filterhead
- brass venting valve with O-ring seal
- filter cup screwed into the filterhead, with O-ring seal

| DN | H   | h max. | L     | L <sub>1</sub> | L <sub>2</sub> | SW * | D DIN 2999 |
|----|-----|--------|-------|----------------|----------------|------|------------|
| 20 | 167 | 49     | 155.5 | 174            | 100            | 46   | ¾"         |
| 25 | 167 | 49     | 155.5 | 182            | 100            | 46   | 1"         |
| 32 | 167 | 49     | 155.5 | 194            | 100            | 52   | 1¼"        |

\* SW = spanner size



"Aquanova Compact E"  
Item no's. 612 07 06-10 (DN 20 – DN 32)

**Water filter "Aquanova Magnum"  
with transparent plastic filter cup (Trogamit T), PN 16:**

- DIN-DVGW tested and approved
- SVGW tested and approved
- for horizontal installation
- large filter surface
- mesh size 95–140 µm
- max. water temperature 30 °C
- flow rate according to DVGW test with  $\Delta p = 0.2$  bar
  - for DN 20  $\frac{3}{4}$ " 5.5 m³/h
  - for DN 25 1" 8 m³/h
  - for DN 32 1¼" 10 m³/h
  - for DN 40 1½" 11 m³/h
  - for DN 50 2" 11 m³/h

**Construction:**

- filter insert: plastic body covered with mesh
- filterhead with venting valve made of brass
- filter cup with collar nut and O-ring seal

| DN | H   | h  | L   | L <sub>1</sub> | L <sub>2</sub> | D<br>DIN 2999   | t    | t <sub>1</sub> | SW* | SW <sub>1</sub> * |
|----|-----|----|-----|----------------|----------------|-----------------|------|----------------|-----|-------------------|
| 20 | 268 | 41 | –   | 125            | 192            | $\frac{3}{4}$ " | –    | 14.5           | –   | 37                |
| 25 | 268 | 41 | 130 | 130            | 223            | 1"              | 19.1 | 16.8           | 46  | 46                |
| 32 | 268 | 41 | 135 | 135            | 253            | 1¼"             | 21.4 | 19.1           | 46  | 52                |
| 40 | 278 | 45 | 150 | –              | –              | 1½"             | 21.4 | –              | 55  | –                 |
| 50 | 284 | 52 | 160 | –              | –              | 2"              | 25.7 | –              | 68  | –                 |

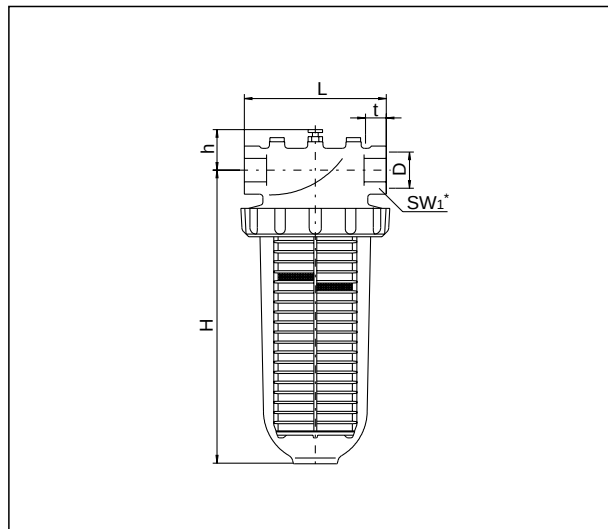
\* SW = spanner size

**Oventrop water filters "Aquanova"  
with replaceable filter insert:**

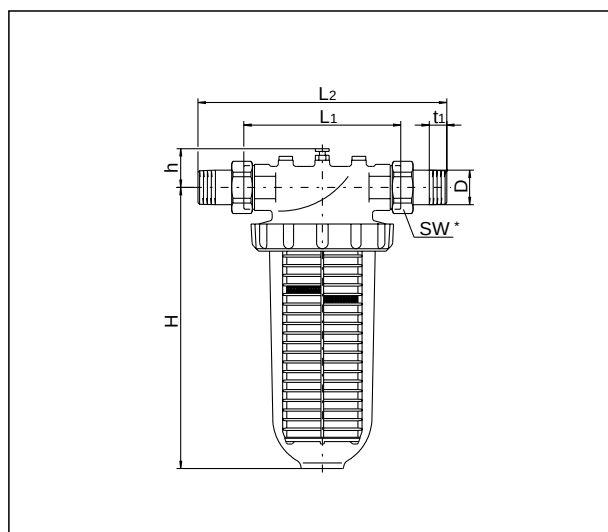
Regular maintenance is the way to ensure a troublefree operation of the filter. The replacement frequency of the filter inserts depends on the pollution of the water. For hygienic reasons, a replacement of the filter insert is prescribed at least every 6 months. If no bypass exists, water supply will be interrupted during maintenance.

**Advantages:**

- high pressure resistance PN 16
- high function security due to rugged construction
- all water filters are tested and approved by the DVGW
- easy installation, handling and maintenance, i.e. time- and cost-saving
- easy control of the degree of contamination by means of transparent filter cup or pressure gauges
- most materials may be recycled



Item no's. 612 00 08-16 (DN 25 - DN 50)



Item no's. 612 20 06-10 (DN 20 - DN 32)

## Oventrop backflush filters „Aquanova”:

### Frequency of maintenance:

Regular maintenance is the way to ensure a troublefree operation of the filter. The backflushing frequency depends on the pollution of the water. For hygienic reasons, the filter should be backflushed at least once a month.

To do so, turn the handwheel 10 complete turns to the left (first of all, the coarse impurities are flushed out of the filter and afterwards the filter insert is backflushed part by part). Now turn the handwheel back to the right until stop. The flushed water now has to be discharged via the draining port (the instruction manual delivered with each filter has to be observed).

**Important:** During the backflushing operation, filtered water is always available. Dirt particles may not enter the pipe.

### Backflush filter "Aquanova Compact RE" with transparent plastic filter cup (Trogamit T) and swivel connection piece, PN 16:

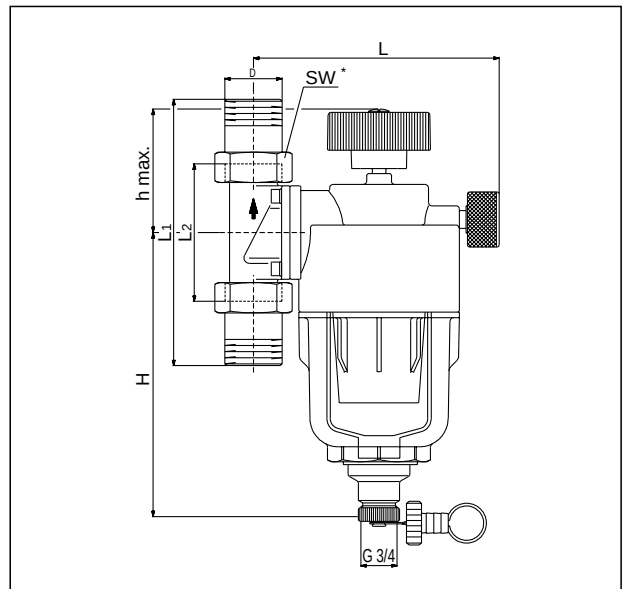
- DIN-DVGW tested and approved
- for horizontal or vertical installation
- compact construction due to double mesh screen
- large filter surface
- mesh size 100–140 µm
- max. water temperature 30 °C
- flow rate with  $\Delta p = 0.2$  bar
 

|           |        |     |      |
|-----------|--------|-----|------|
| for DN 20 | 3/4"   | 4   | m³/h |
| for DN 25 | 1"     | 5   | m³/h |
| for DN 32 | 1 1/4" | 5.5 | m³/h |

#### Construction:

- both ports with male screwed tailpipes according to DIN 2999
- filter insert: plastic body covered with mesh
- equipped with two backflush arms
- with brass swivel connection piece
- filterhead made of brass
- gauge for pressure at the outlet port with adjustable nominal value indicator
- filter cup screwed into the filterhead, with O-ring seal

| DN | H   | h max. | L   | L <sub>1</sub> | L <sub>2</sub> | SW* | D DIN 2999 |
|----|-----|--------|-----|----------------|----------------|-----|------------|
| 20 | 215 | 90     | 185 | 174            | 100            | 46  | 3/4"       |
| 25 | 215 | 90     | 185 | 182            | 100            | 46  | 1"         |
| 32 | 215 | 90     | 185 | 194            | 100            | 52  | 1 1/4"     |



"Aquanova Compact RE"  
Item no's. 620 05 06-10 (DN 20 – DN 32)

### Backflush filter "Aquanova Compact R" with transparent plastic filter cup (Trogamit T) and two pressure gauges, PN 16:

- DIN-DVGW geprüft tested and approved
- for horizontal installation
- larger filter surface
- mesh size 100–140 µm
- max. water temperature 30 °C
- flow rate with  $\Delta p = 0.2$  bar
 

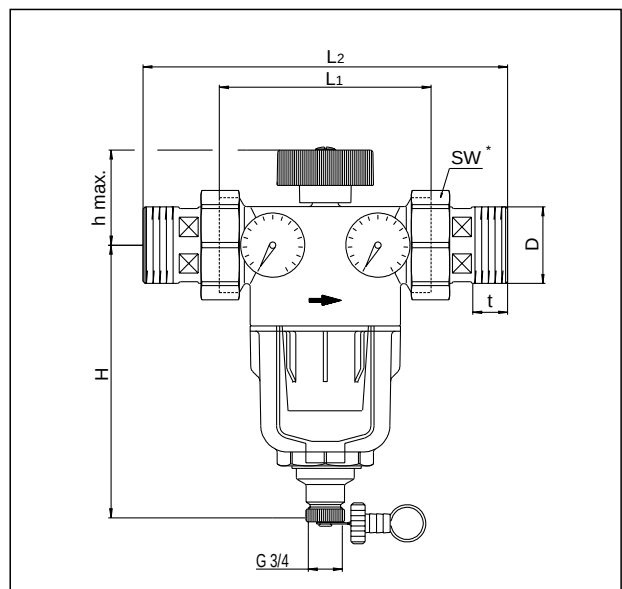
|           |        |      |      |
|-----------|--------|------|------|
| for DN 40 | 1 1/2" | 14.5 | m³/h |
| for DN 50 | 2"     | 18   | m³/h |

#### Construction:

- both ports with male screwed tailpipes according to DIN 2999
- filter insert: plastic body covered with mesh
- equipped with two backflush arms
- filter cup screwed into the filterhead, with O-ring seal

| DN | H   | h max. | L <sub>1</sub> | L <sub>2</sub> | D DIN 2999 | t    | SW* |
|----|-----|--------|----------------|----------------|------------|------|-----|
| 40 | 220 | 85     | 165            | 300            | 1 1/2"     | 21.5 | 66  |
| 50 | 220 | 85     | 165            | 284            | 2"         | 26   | 80  |

\* SW = spanner size



"Aquanova Compact R"  
Item no's. 620 36 12-16 (DN 40 – DN 50)

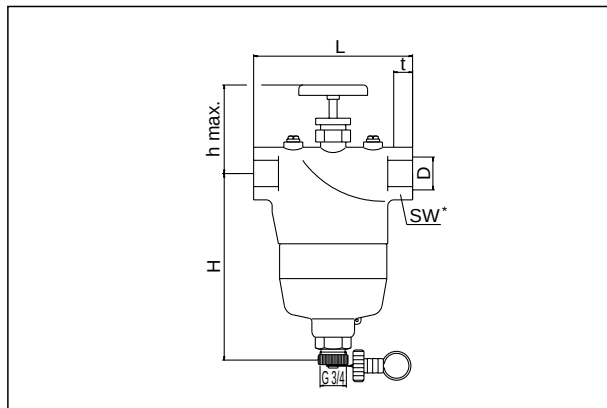
**Backflush filter "Aquanova Meta R"  
with brass filter cup and female threads, PN 16:**

- DIN-DVGW tested and approved
- for horizontal installation
- mesh size 100–140 µm
- max. water temperature 30 °C
- flow rate according to DVGW test with  $\Delta p = 0.2$  bar
  - for DN 25 1" 6 m³/h
  - for DN 32 1¼" 9 m³/h

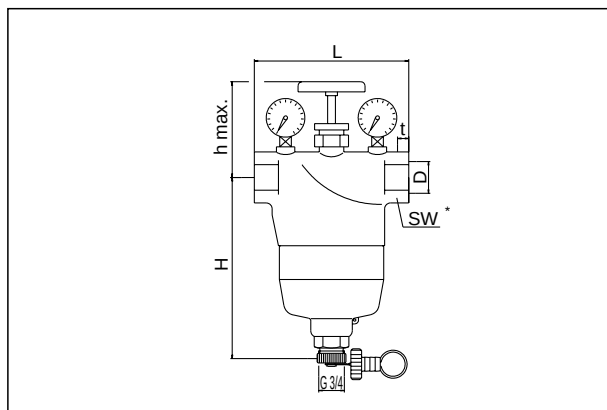
**Construction:**

- both ports female thread according to DIN 2999.
- filter insert: body reinforced by perforated plate and covered with stainless steel mesh
- equipped with one backflush arm
- brass filterhead
- filter cup screwed into filterhead, with O-ring seal
- item no. 620 00 without pressure gauges
- item no. 620 21 with two pressure gauges

| DN | H   | h max. | L   | D DIN 2999 | t    | SW* |
|----|-----|--------|-----|------------|------|-----|
| 25 | 188 | 112    | 160 | 1"         | 19.1 | 46  |
| 32 | 192 | 108    | 160 | 1¼"        | 21.4 | 48  |



"Aquanova Meta R"  
Item no's. 620 00 08-10 (DN 25 - DN 32)



"Aquanova Meta R"  
Item no's. 620 21 08-10 (DN 25 - DN 32)

**Backflush filter "Aquanova Meta R"  
with brass filter cup and male screwed tailpipes according to DIN 2999, PN 16:**

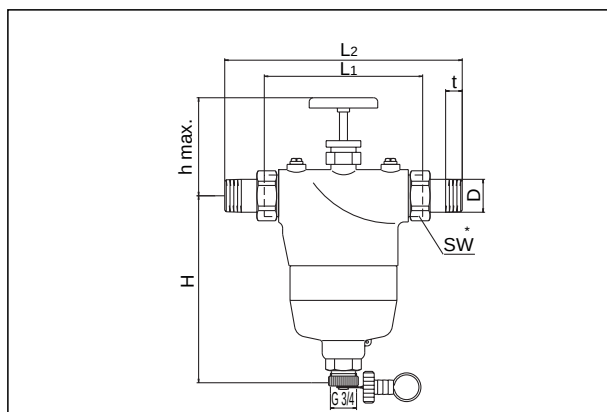
- DIN-DVGW tested and approved
- for horizontal installation
- mesh size 100–140 µm
- max. water temperature 30 °C
- flow rate according to DVGW test with  $\Delta p = 0.2$  bar
  - for DN 20 ¾" 6 m³/h
  - for DN 25 1" 6 m³/h
  - for DN 32 1¼" 9 m³/h

**Construction:**

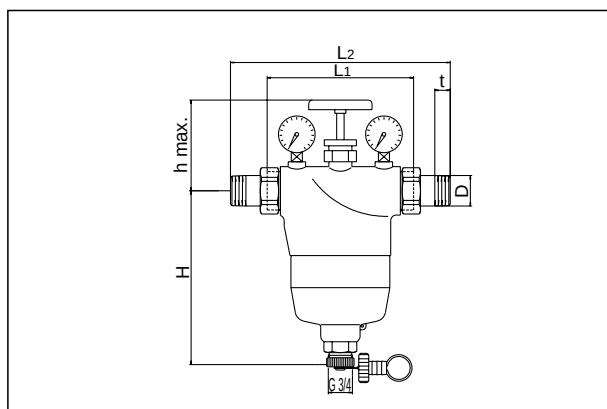
- both ports with male screwed tailpipes according to DIN 2999.
- filter insert: body reinforced by perforated plate and covered with stainless steel mesh
- equipped with one backflush arm
- brass filterhead
- filter cup screwed into filterhead, with O-ring seal
- item no. 620 31 without pressure gauges
- item no. 620 35 with two pressure gauges

| DN | H   | h max. | L <sub>1</sub> | L <sub>2</sub> | D DIN 2999 | t    | SW* |
|----|-----|--------|----------------|----------------|------------|------|-----|
| 20 | 188 | 112    | 160            | 242            | ¾"         | 14.5 | 46  |
| 25 | 188 | 112    | 160            | 242            | 1"         | 16.8 | 46  |
| 32 | 192 | 108    | 165            | 259            | 1¼"        | 19.1 | 52  |

\* SW = spanner size



"Aquanova Meta R"  
Item no's. 620 31 06-10 (DN 20 - DN 32)



"Aquanova Meta R"  
Item no's. 620 35 06-10 (DN 20 - DN 32)

## Accessories:

### Water filters "Aquanova Compact" item no.'s 612 05 08 and 612 25 06/08/10:

|                                             |           |
|---------------------------------------------|-----------|
| Venting screw<br>DN 6 1/8"                  | 110 90 01 |
| Filter insert 100–120 µm<br>DIN-DVGW tested | 612 05 91 |
| Filter cup made of Trogamit T               | 612 05 81 |
| O-ring for filter cup                       | 612 05 95 |
| Special key to loosen filter cup            | 612 41 00 |

### Water filters "Aquanova Magnum" item no.'s 612 00 and 612 20:

|                                                                                   |           |
|-----------------------------------------------------------------------------------|-----------|
| Venting screw<br>DN 6 1/8"                                                        | 110 90 01 |
| Special key                                                                       | 612 40 00 |
| Collar nut                                                                        | 612 50 00 |
| Filter insert 95–140 µm<br>one piece, DIN-DVGW tested                             | 612 51 01 |
| Filter insert 95–140 µm<br>multi piece (body, collar and mesh)<br>DIN-DVGW tested | 612 51 00 |
| Mesh 95–140 µm<br>DIN-DVGW tested                                                 | 612 53 00 |
| Body                                                                              | 612 52 00 |
| Mesh 250–350 µm                                                                   | 612 53 61 |
| Mesh 650–800 µm                                                                   | 612 53 63 |
| Filter cup made of Trogamit T                                                     | 612 54 00 |
| Filter cup made of brass                                                          | 612 55 00 |
| O-ring for filter cup                                                             | 612 60 00 |
| Pressure gauge for all sizes<br>DN 6 1/8"                                         | 612 70 00 |
| Ring gasket for pressure gauge                                                    | 612 71 00 |
| Bling plug with ring gasket<br>DN 6 1/8"                                          | 612 72 00 |

### Water filters "Aquanova Compact E" item no.'s 612 07 06/08/10:

|                                                       |           |
|-------------------------------------------------------|-----------|
| Filter insert 100–120 µm<br>applied for DIN-DVGW test | 620 05 91 |
| Filter cup made of Trogamit T                         | 612 07 81 |
| O-ring for filter cup                                 | 620 05 95 |
| Bling plug with ring gasket<br>DN 6 1/8"              | 612 72 00 |
| Special key to loosen filter cup                      | 612 42 00 |

### Backflush filters "Aquanova Compact RE" item no.'s 620 05 and 620 36:

|                                                       |           |
|-------------------------------------------------------|-----------|
| Filter insert 100–140 µm<br>applied for DIN-DVGW test | 620 36 91 |
| Filter cup made of Trogamit T                         | 620 05 81 |
| O-ring for filter cup                                 | 620 05 95 |
| Ring gasket for pressure gauge                        | 612 71 00 |
| Special key to loosen collar nut                      | 612 42 00 |

### Backflush filters "Aquanova Meta R" item no.'s 620 00, 620 21, 620 31 and 620 35:

|                                                       |           |
|-------------------------------------------------------|-----------|
| Filter insert 100–140 µm<br>applied for DIN-DVGW test | 620 51 00 |
| Filter cup made of brass                              | 620 55 00 |
| O-ring for filter cup                                 | 620 60 00 |
| Set of gaskets for 1" and 1 1/4"                      | 620 00 90 |
| Pressure gauge for all sizes<br>DN 6 1/8"             | 612 70 00 |
| Ring gasket for pressure gauge                        | 612 71 00 |

Subject to technical modification without notice.

Product range 13  
ti 96-1/10/8.2001/MW

Printed on paper free from  
chlorine bleaching.

OVENTROP UK LTD.  
Unit I – The Loddon Centre  
Wade Road  
Basingstoke, Hampshire RG24 8FL  
Telephone (01256) 330441  
Telefax (Sales) (01256) 330525  
Telefax (General) (01256) 470970  
E-Mail sales@oventrop.co.uk

F. W. OVENTROP GmbH & Co. KG  
Paul-Oventrop-Straße 1  
D-59939 Olsberg  
Telephone (02962) 82-0  
Telefax (02962) 82405  
Internet <http://www.oventrop.de>  
eMail mail@oventrop.de

#### Tender specification:

Domestic water station, DIN-DVGW tested, sound absorbing product group 1, consisting of backflush filter, balanced pressure reducer, pressure gauge indicating the pressure at the station outlet, draining connection with venting holes according to DIN 1988 TL 4, swivel connection piece with male threaded couplings made of bronze for horizontal and vertical installation, body and transparent cup made of plastic, filter insert with stainless steel screen, use in potable water installations, PN 16, water temperature up to 30°C, minimum pressure at the station inlet 1.5 bar, max. pressure 16 bar, pressure at the station outlet adjustable between 1.5 and 6 bar, factory preset to 4 bar. Memory ring with fortnightly setting. Automatic backflushing when opening the ball valve.

#### Application:

The domestic water station is installed between two isolating valves (in the direction of flow after the water meter) in potable water installations according to DIN 1988. The local rules, technical regulations as well as the installation instructions have to be observed. The direction of flow is indicated on the connection piece supplied with the water station. A frost-free and well accessible siting of the water station must be ensured. The filters may not be installed at locations exposed to UV-rays (e.g. sunlight) or solvent vapours.

#### Description and function:

The pressure reducer integrated in the water station protects the subsequent potable water system from too high a pressure. The pressure behind the station (nominal value) which may be set at the handwheel is maintained almost constant even with transient pressures in front of the water station. It can be read off the pressure gauge.

Backflushing is set off automatically when the ball valve is opened. During this, a rotating nozzle (impeller) producing a concentrated water jet is actuated with the latter cleaning the filter screen with high pressure from the inside to the outside. All dirt particles are thus removed reliably and are completely flushed via the draining connection.

#### Technical data:

|                                             |                                       |
|---------------------------------------------|---------------------------------------|
| Pressure at the station inlet:              | min. 1.5 bar<br>max. 16 bar           |
| Pressure at the station outlet (adjustable) | 1,5 - 6 bar (factory preset at 4 bar) |
| Water temperature:                          | max. 30 °C                            |
| Mesh size:                                  | 95 - 110 µm                           |
| Kvs value, DN 20:                           | 5.5 m³/h (1.528 l/s)                  |
| Kvs value, DN 25:                           | 6.0 m³/h (1.667 l/s)                  |
| Kvs value, DN 32:                           | 6.5 m³/h (1.805 l/s)                  |
| DIN-DVGW tested                             |                                       |
| Sound absorbing, product group I            |                                       |

