



Braukmann HS10S

Combination water supply unit

APPLICATION

HS10S combination water supply units integrate a check valve with test point, reverse rinsing fine filter, pressure reducing valve and shut-off valve in one appliance. They ensure a continuous supply of filtered water. The fine filter prevents the ingress of foreign bodies, for example rust particles, strands of hemp and grains of sand and thus reduces the probability of corrosion. The check valve protects the mains water system against back pressure, backflow and back syphonage of health threatening liquids. The pressure reducing valve prevents over-pressure damage and reduces water consumption.

All individual units correspond to the requirements of current DIN/DVGW specifications. Technical features of each unit also apply to the combination assembly.

APPROVALS

- DVGW
- SVGW

approval for all filters with 100 µm mesh sizes

SPECIAL FEATURES

- Double Spin Technology for connection sizes 1/2" to 1 1/4"
 - Cartridge with external rotor enabling simultaneous cleaning in lower and upper filter areas
 - Visual function check possible
- Especially compact because pressure reducing valve, fine filter, check valve and shut-off valve are combined in one unit
- Filtered water supplied even during reverse rinsing
- Patented reverse rinsing system - fast and thorough cleaning of the filter with small amount of water
- Automatic reverse rinsing actuator with bayonet connector can be retrofitted
- Shock resistant clear synthetic material filter bowl enables easy checking of filter contamination
- Inlet pressure balancing – no influence on outlet pressure by fluctuating inlet pressure
- Filter and complete filter bowl are replaceable
- The valve insert is of high-quality synthetic material and can be fully exchanged
- ACS certified
- All materials are KTW approved
- Approved by TÜV LGA for low noise, Group 1 without limitations




TECHNICAL DATA

| | |
|---|---------------------------------------|
| Media | |
| Medium: | Drinking water |
| Connections/Sizes | |
| Connection sizes: | 1/2" - 2" |
| Pressure values | |
| Operating (dynamic) pressure: | 1.5 bar |
| Max. inlet pressure with clear filter bowl: | 16 bar |
| Max. inlet pressure with red bronze filter bowl: | 25 bar |
| Outlet pressure: | 1.5 - 6 bar |
| Operating temperatures | |
| Max. operating temperature medium accord. to EN 1567: | 30 °C |
| Max. operating temperature medium (10 bar/brass filter bowl): | 70 °C |
| Specifications | |
| Installation position: | Horizontal with filter bowl downwards |

Note: The filter is constructed for drinking water installations. In case of a process water application the filter has to be proven individually.

CONSTRUCTION

| Overview | Components | Materials | |
|---|---|---|--|
|  | 1 | Spring bonnet with adjustment knob and setting scale | High-quality synthetic material |
| | 2 | Threaded male connections (Options AA and AAM) | Brass |
| | 3 | Housing with inlet and outlet pressure gauges | Dezincification-resistant brass |
| | 4 | Fine filter in clear filter bowl | Stainless steel fine filter, red bronze or shock-resistant, clear transparent synthetic material filter bowl |
| | 5 | Ball valve with drain connection | Brass (Ball Valve body), Stainless steel (ball), Plastic durethan (drain adapter) |
| Not depicted components: | | | |
| | Shut-off valve | Brass | |
| | Check valve on inlet | High-grade synthetic material | |
| | Test point for check valve | High-grade synthetic material | |
| | Valve insert complete with diaphragm and valve seat | High-quality synthetic material, fibre-reinforced NBR diaphragm | |
| | Seals | NBR | |
| | Double wring wrench | Plastic | |

METHOD OF OPERATION

The combination water supply unit combines check valve, reverse rinsing fine filter, pressure reducing valve and shut-off valve in one appliance.

Water flows first through the check valve. This causes the valve stem to push against the spring force and open the valve.

The downstream reverse rinsing fine filter holds back any dirt particles in the water. These particles are then completely flushed out by reverse rinsing.

Filters with Double Spin Technology have turbine blades which circulate the water and thereby set the rotor on the upper filter into a rotational motion. The internal impeller rinses off particles that have adhered to the upper filter at the intersecting points with the rotor.

The integral pressure reducing valve functions on a balanced force principle whereby the force exerted by a diaphragm is balanced against the force of an adjustment spring. The inlet pressure has no influence on opening or closing of the valve. Inlet pressure fluctuation does not therefore affect the outlet pressure.

TRANSPORTATION AND STORAGE

Keep parts in their original packaging and unpack them shortly before use.

The following parameters apply during transportation and storage:

| Parameter | Value |
|---------------------------------|--------------------------|
| Environment: | clean, dry and dust free |
| Min. ambient temperature: | 5 °C |
| Max. ambient temperature: | 55 °C |
| Min. ambient relative humidity: | 25 % * |
| Max. ambient relative humidity: | 85 % * |

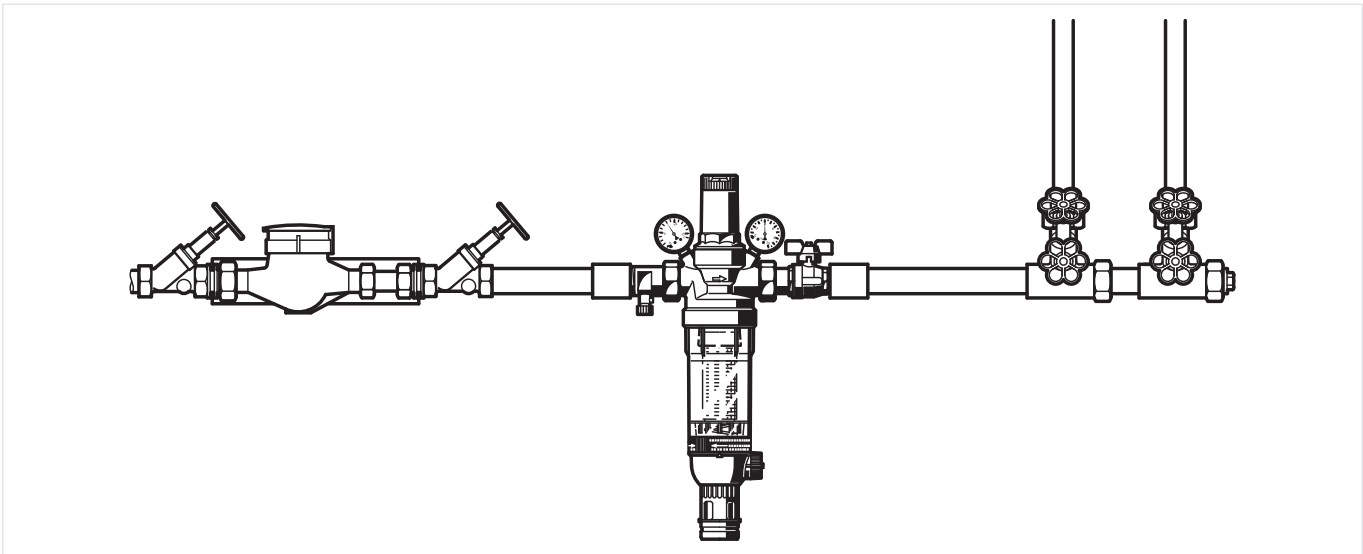
*non condensing

INSTALLATION GUIDELINES

Setup requirements

- Install in horizontal pipework with filter bowl downwards
 - This position ensures optimum filter efficiency
- Install shut-off valve at the inlet
- These filters are armatures which need to be maintained regularly
- Ensure good access
 - Pressure gauge can be read off easily
 - Degree of contamination can be easily seen with clear filter bowl
 - Simplifies maintenance and inspection
- Related to the EN 806-2 it is recommended to install the filter immediately after the water meter
- In order to avoid flooding, it is recommended to arrange a permanent, professionally dimensioned wastewater connection

Installation Example

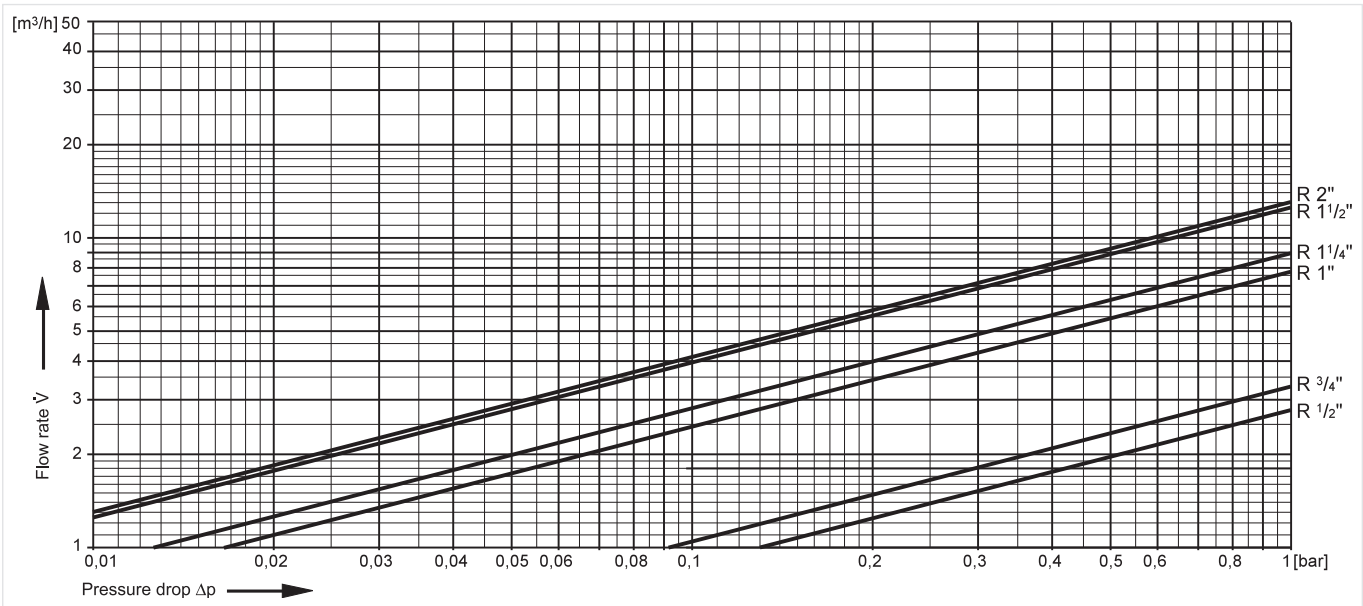


TECHNICAL CHARACTERISTICS

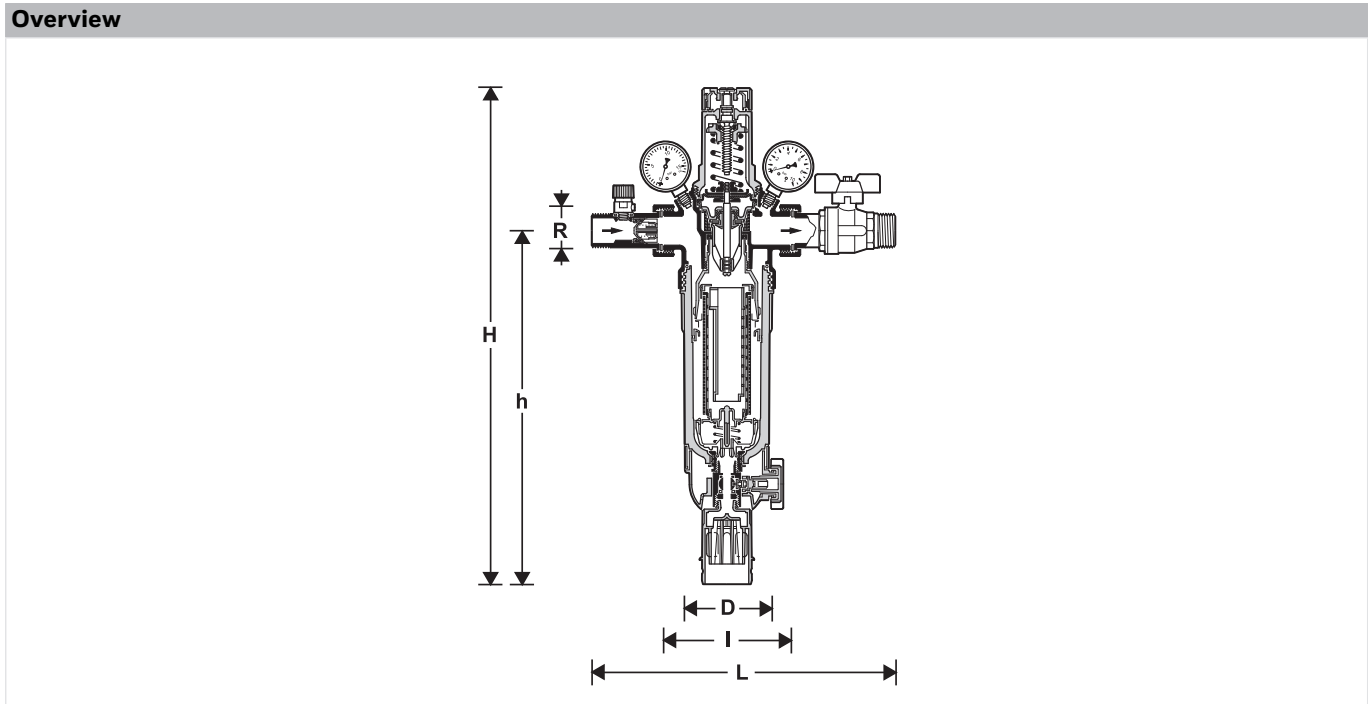
kvs-Values

| Connection sizes: | 15 | 20 | 25 | 32 | 40 | 50 |
|--------------------------------------|-----|-----|-----|-----|------|------|
| k_{VS} -value (m ³ /h): | 2.7 | 3.2 | 7.6 | 8.9 | 12.6 | 13.0 |

Pressure drop characteristics



DIMENSIONS



| Parameter | Values | | | | | | |
|---------------------------|-----------------|------|------|-----|--------|--------|-----|
| Connection sizes: | R | 1/2" | 3/4" | 1" | 1 1/4" | 1 1/2" | 2" |
| Nominal size diameter: | DN | 15 | 20 | 25 | 32 | 40 | 50 |
| Dimensions: | L | 255 | 268 | 305 | 327 | 370 | 408 |
| | I | 110 | 110 | 130 | 130 | 150 | 150 |
| | H | 439 | 439 | 493 | 493 | 590 | 590 |
| | h | 350 | 350 | 353 | 353 | 417 | 417 |
| | D | 97 | 97 | 97 | 97 | 120 | 120 |
| Weight: | kg | 4.0 | 4.1 | 5.7 | 6.3 | 8.1 | 10 |
| DVGW registration number: | DW-9321 AT 2318 | | | | | | |
| Double Spin Technology: | Yes | Yes | Yes | Yes | Yes | No | No |

Note: All dimensions in mm unless stated otherwise.

ORDERING INFORMATION

The following tables contain all the information you need to make an order of an item of your choice. When ordering, please always state the type, the ordering or the part number.

Options

The water station is available in the following sizes: 1/2", 3/4", 1", 1 1/4" 1 1/2" and "2.

- standard
- not available





| | | HS10S-...AA | HS10S-...AAM |
|------------------|--|-------------|--------------|
| Connection type: | Threaded male connections, filter mesh size 100 µm | • | - |
| | Red bronze filter bowl, threaded male connections, filter mesh size 100 µm | - | • |

Note: ... = space holder for connection size

Note: Ordering number example for 1" and type AA valve: HS10S-1AA

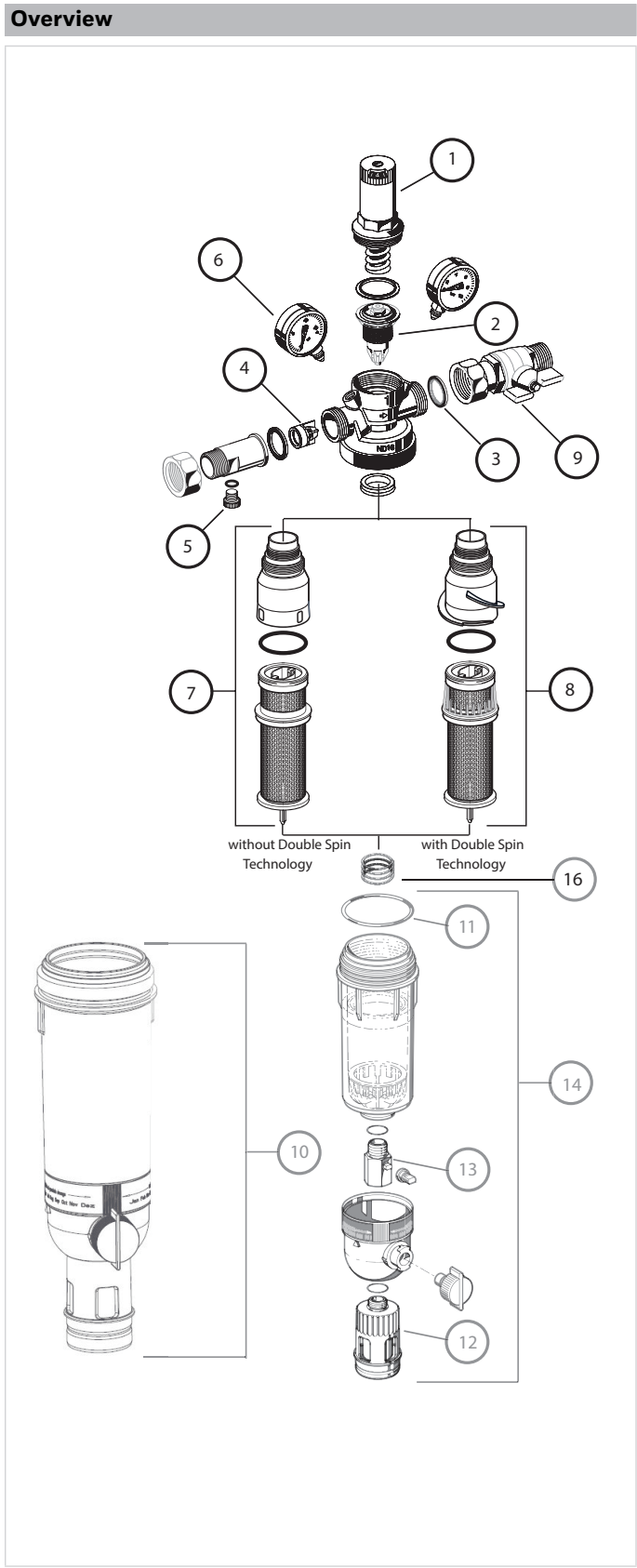
Note: Filters with other mesh widths available on request

Accessories

| | Description | Dimension | Part No. |
|---|--|-------------|-------------|
|  | Z11S Automatic reverse rinsing actuator | | |
| | For automatic filter cleaning at presettable intervals | | |
| | 230 V, 50/60 Hz, 10 with moulded Schuko electrical plug | | Z11S-A |
| | 24 V, 50/60 Hz, 10 without electrical plug | | Z11S-B |
| | 230 V, 50/60 Hz, 10 with moulded Type 12 electrical plug for Switzerland | | Z11S-Z |
|  | VST06B Connection set | | |
| | Solder connections | | |
| | | 1/2" | VST06-1/2B |
| | | 3/4" | VST06-3/4B |
| | | 1" | VST06-1B |
| | | 1 1/4" | VST06-11/4B |
| | | 1 1/2" | VST06-11/2B |
| | 2" | VST06-2B | |
|  | DDS76 Differential pressure switch | | |
| | | 1/2" + 3/4" | DDS76-1/2 |
| | | 1" + 1 1/4" | DDS76-1 |
| | | 1 1/2" + 2" | DDS76-1 1/2 |
|  | ZR10K Double ring wrench for removing the filter bowl | | |
| | | 1/2" + 3/4" | ZR10K-3/4 |
| | | 1" + 1 1/4" | ZR10K-1 |
| | | 1 1/2" + 2" | ZR10K-11/2 |

Spare Parts

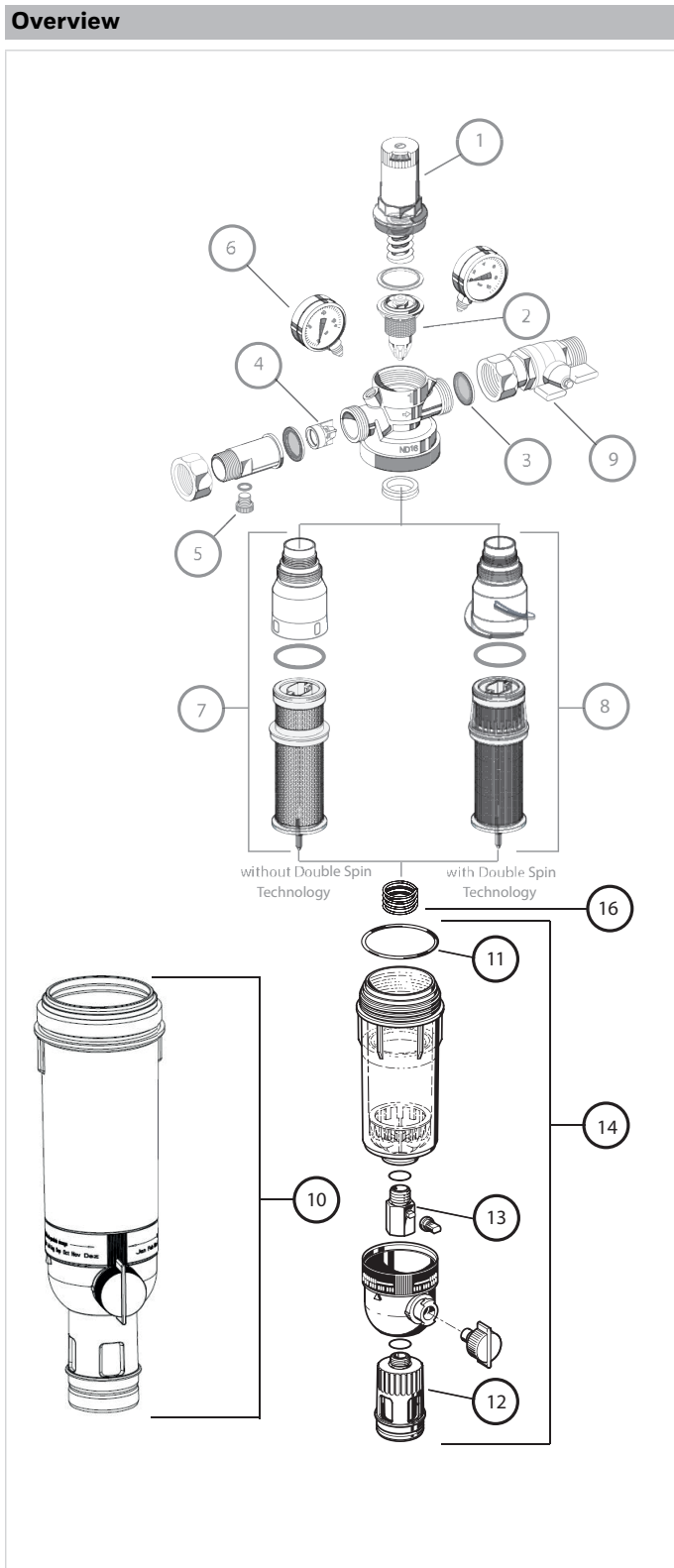
HS10S Filter Combinations from 2007 onwards



| Description | Dimension | Part No. |
|---|-------------|-------------|
| 1 Spring bonnet complete with setting scale | | |
| | 1/2" + 3/4" | 0901515 |
| | 1" + 1 1/4" | 0901516 |
| | 1 1/2" + 2" | 0901518 |
| 2 Valve insert complete (without filter) | | |
| | 1/2" + 3/4" | D06FA-1/2 |
| | 1" + 1 1/4" | D06FA-1A |
| | 1 1/2" + 2" | D06FA-11/2 |
| 3 Union seal washer (10 pcs.) | | |
| | 1/2" + 3/4" | 0901444 |
| | 1" | 0901445 |
| | 1 1/4" | 0901446 |
| | 1 1/2" | 0901447 |
| | 2" | 0901448 |
| 4 Check valve cartridge | | |
| | 1/2" | 2166200 |
| | 3/4" | 2110200 |
| | 1" | 2164400 |
| | 1 1/4" | 2164500 |
| | 1 1/2" | 2164600 |
| | 2" | 2164700 |
| 5 Test valve | | |
| | 1/2" - 2" | 2421100 |
| 6 Pressure gauge | | |
| | 0 - 10 bar | M38K-A10 |
| | 0 - 16 bar | M38K-A16 |
| | 0 - 25 bar | M38K-A25 |
| 7 Filter insert complete*, filter mesh 100 µm | | |
| | 1/2" - 3/4" | AF11S-1/2A |
| | 1" - 1 1/4" | AF11S-1A |
| | 1 1/2" - 2" | AF11S-11/2A |
| 8 Filter insert complete*, for filters with Double Spin Technology, Filter mesh 100 µm | | |
| | 1/2" - 3/4" | AF11DS-1/2A |
| | 1" - 1 1/4" | AF11DS-1A |
| 9 Shut-off valve (not included in HS10S-ZS) | | |
| | 1/2" | 2192900 |
| | 3/4" | 2193100 |
| | 1" | 2193200 |
| | 1 1/4" | 2193300 |
| | 1 1/2" | 2193400 |
| | 2" | 2193500 |

*The filter guide (either with double spin or without double spin feature) is included in the packaging of the replacement filter inserts (AF11DS and AF11S) only for the sizes 1/2" up to 1 1/4"!

Note: 10 - 16 see on page 7



| Description | Dimension | Part No. |
|---|---------------|--------------|
| 10 Red bronze filter bowl | | |
| | 1/2" - 1 1/4" | FT09RS-1A |
| | 1 1/2" - 2" | FT09RS-11/2A |
| 11 O-ring set (10 pcs.) | | |
| | 1/2" + 1 1/4" | 0900747 |
| | 1 1/2" + 2" | 0900748 |
| 12 Drain connector | | |
| | 1/2" - 2" | AA76-1/2A |
| 13 Ball valve complete | | |
| | 1/2" - 2" | KH11S-1A |
| 14 Clear filter bowl | | |
| | 1/2" - 1 1/4" | KF11S-1A |
| | 1 1/2" - 2" | KF11S-11/2A |
| 15 Double ring wrench for removing the filter bowl (no fig.) | | |
| | 1/2" - 3/4" | ZR10K-3/4 |
| | 1" - 1 1/4" | ZR10K-1 |
| | 1 1/2" - 2" | ZR10K-11/2 |
| 16 Spring | | |
| | 1/2" - 1 1/4" | 2074900 |
| | 1 1/2" - 2" | 2159400 |

Note: 1 - 9 see on page 6



Manufactured for and on behalf of
 Pittway Sàrl, Z.A., La Pièce 4,
 1180 Rolle, Switzerland
 by its authorised representative
 Ademco 1 GmbH

For more information
homecomfort.resideo.com/europe
 Ademco 1 GmbH, Hardhofweg 40,
 74821 MOSBACH, GERMANY
 Phone: +49 6261 810
 Fax: +49 6261 81309