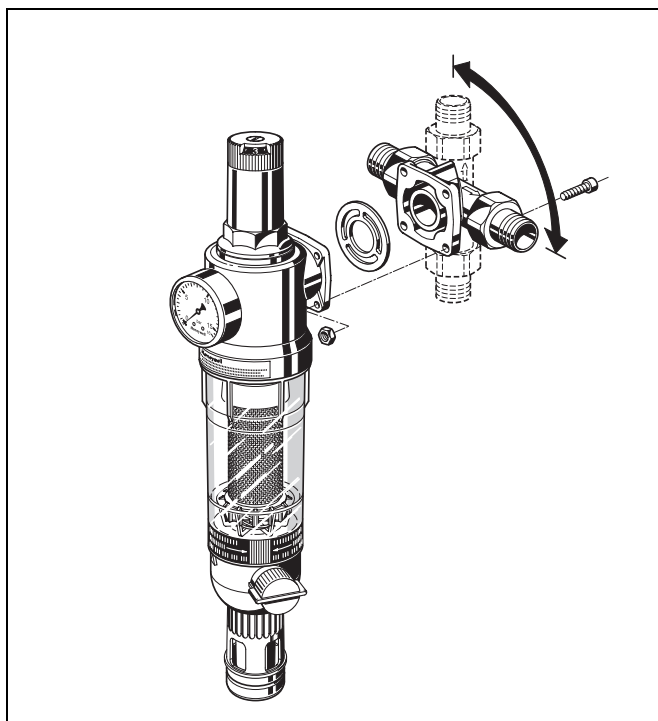


# FK76CS/FKN76CS

Reverse rinsing filter combination  
with rotatable connector flange

## Product specification sheet



### Construction

The filter combination comprises:

- Housing with pressure gauge
- Spring bonnet with adjustment knob and setting scale
- Valve insert complete with diaphragm and valve seat
- Fine filter in clear filter bowl
- Rotatable connector piece (FK76CS only)
- Threaded union connections
- Ball valve with drain connection
- Double ring wrench

### Materials

- Red bronze housing
- Red bronze connector piece
- High-quality synthetic material spring bonnet
- High-quality synthetic material valve insert
- Stainless steel fine filter
- Shock-resistant, clear transparent synthetic material filter bowl
- Fibre-reinforced NBR diaphragm
- NBR seals

### Application

The FK76CS/FKN76CS filter combinations comprise reverse rinsing filter and pressure reducing valve in one appliance. They ensure a continuous supply of filtered water. The fine filter stops the ingress of foreign bodies, for example rust particles, strands of hemp and grains of sand. The pressure reducing valve prevents 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.

### Special Features

- DVGW-approval requested
- Double Spin Technology
  - Cartridge with external rotor enabling simultaneous cleaning in lower and upper filter areas
  - Visual function check possible
- Balanced seat valve
- Filtered water supplied even during reverse rinsing
- Patented reverse rinsing system - fast and thorough cleaning of the filter with small amount of water
- Memory ring indicates when next manual reverse rinsing is due
- 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 - fluctuating inlet pressure does not influence outlet pressure
- Valve and filter inserts fully interchangeable

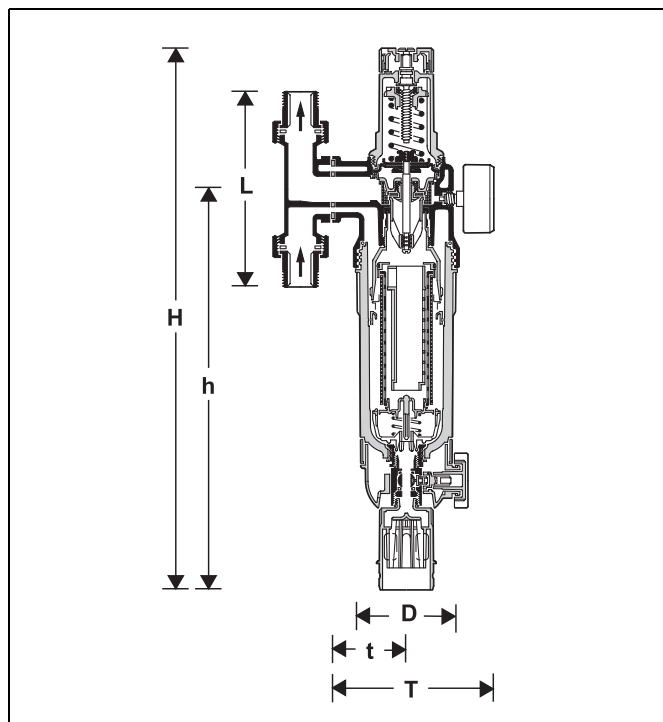
### Range of Application

|                 |                                         |
|-----------------|-----------------------------------------|
| Medium          | Water                                   |
| Inlet pressure  | Maximum 16.0 bar with clear filter bowl |
| Outlet pressure | 1.5 to 6.0 bar                          |

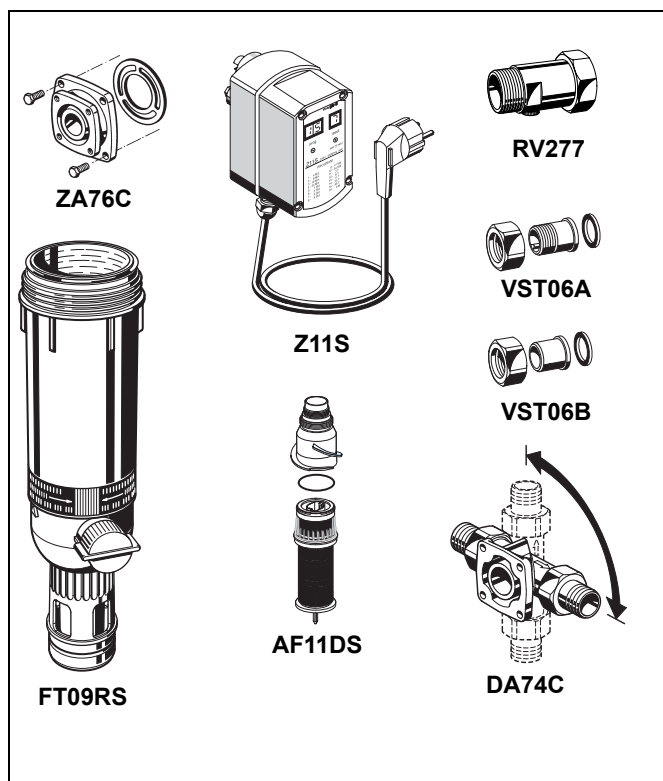
The filter is constructed for drinking water installations. In case of a process water application the filter has to be proven individually.

### Technical Data

|                       |                                                    |
|-----------------------|----------------------------------------------------|
| Installation position | Vertical or horizontal, with filter bowl downwards |
| Operating pressure    | Minimum 1.5 bar                                    |
| Operating temperature | Maximum 40 °C with transparent filter bowl         |
| Connection size       | 3/4", 1", 1 1/4"                                   |



| Connection size with DA74C | R  | 3/4"      | 1"  | 1 1/4" |
|----------------------------|----|-----------|-----|--------|
| Nominal size diameter      | DN | 20        | 25  | 32     |
| Weight                     | kg | 3.9       | 4.0 | 4.1    |
| Dimensions                 | mm |           |     |        |
|                            | L  | 158       | 179 | 197    |
|                            | T  | 177       | 177 | 181    |
|                            | t  | 95        | 95  | 99     |
|                            | H  | 493       | 493 | 493    |
|                            | h  | 363       | 363 | 363    |
|                            | D  | 97        | 97  | 97     |
| K <sub>VS</sub> -value     |    | 5.4       | 6.0 | 9.0    |
| DIN/DVGW Approval No.      |    | requested |     |        |



## Method of Operation

The filter combination combines reverse rinsing filter and pressure reducing valve in one appliance.

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.

## Options

FK76CS-...AA = Filter mesh size 100 µm, incl. rotatable connector piece DA74C with threaded male connections

Connection size

FKN76CS-1A = Filter mesh size 100 µm; rotatable connector piece DA74C has to be ordered separately - see accessories

## Accessories

### Z11S Automatic reverse rinsing actuator

For automatic filter cleaning at presettable intervals

### FT09RS Red-bronze filter bowl

For temperatures up to 70°C and operating pressures up to 25.0 bar

### ZA76C Connector piece

For conversion of the fine filters with rotatable connector pieces (1 1/4" and 1 1/2") into retrofit filter combinations (Converts 63 mm hole centres to 45 mm hole centres)

### RV277 Inlet check valve

Available in sizes R<sup>1/2</sup>" - 2"

### VST06 Connection set

Connection set

A = Threaded male connection;

B = Solder union connection

### AF11DS Filter insert complete

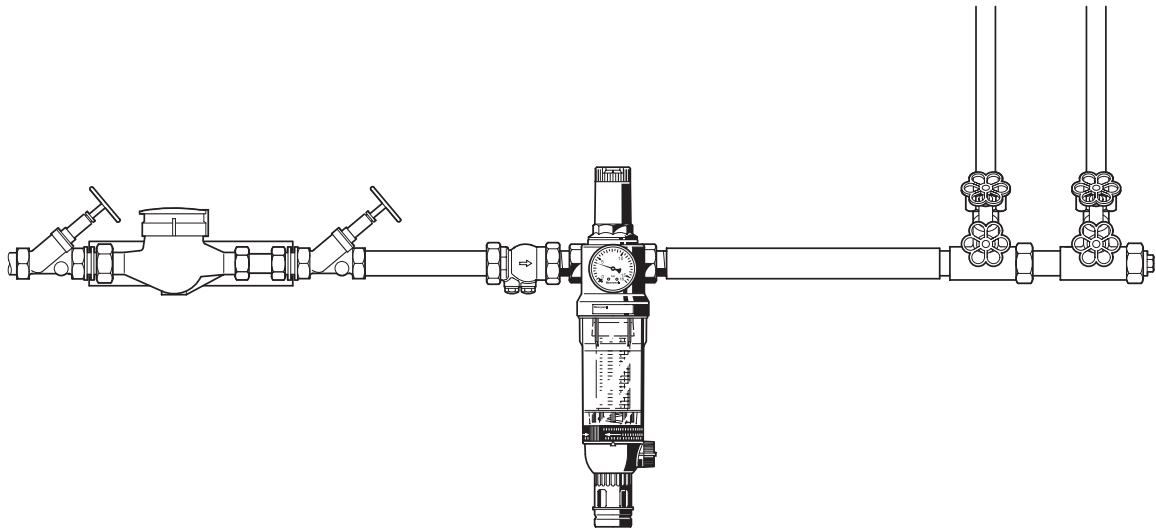
Available with filter meshes 20 µm, 50 µm, 100 µm, 200 µm, 300 µm, 500 µm (for filters with Double Spin Technology)

### DA74C Rotatable connector piece

For connection of retrofit filters and filter combinations

\* 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!"

### Installation Example



### Installation Guidelines

- Install in horizontal or vertical pipework with filter bowl downwards
  - This position ensures optimum filter efficiency
- Install shutoff valves
  - Pressure gauge can be read off easily
  - Degree of contamination can be seen with clear filter bowl
  - Simplifies maintenance and inspection
- The installation location should be protected against frost
- Fit immediately after water meter
  - Corresponds to DIN 1988, Part 2

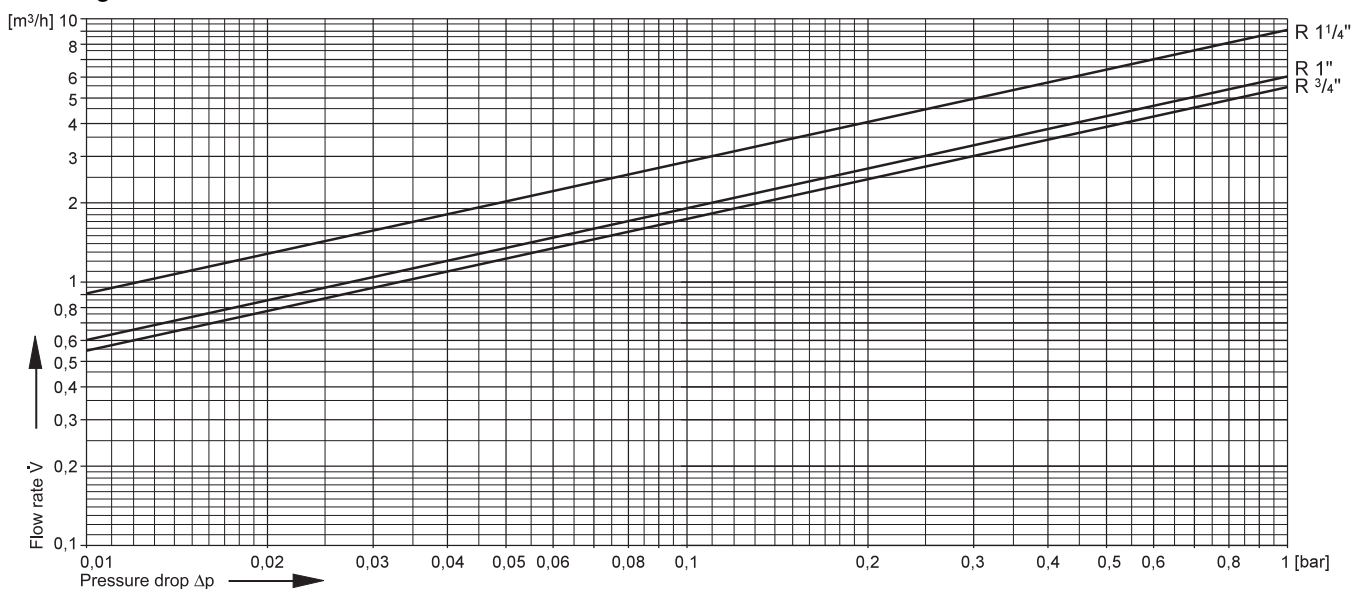
### Typical Applications

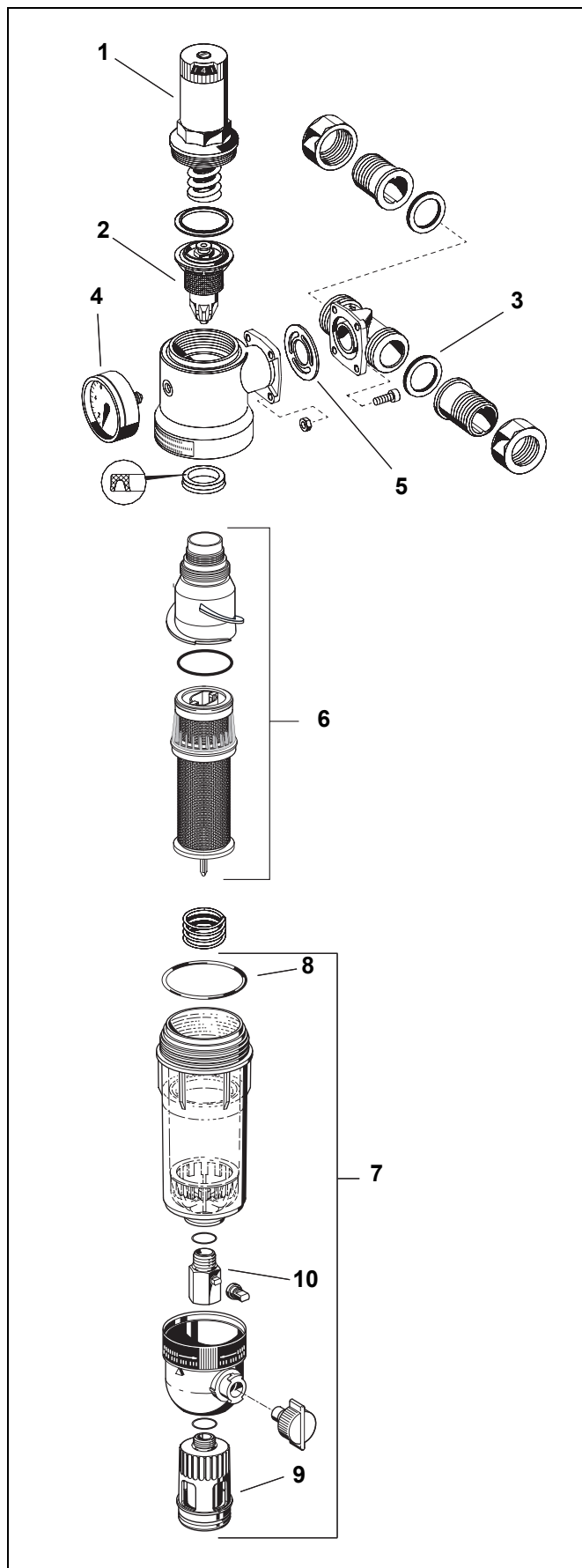
Filter combinations of this type are suitable for all types of household installations. They can also be used for commercial and industrial applications within the limits of their specifications.

Filter combinations of this type are installed:

- Where there is existing metal or plastics pipework
- For installation in horizontal or vertical pipework
- As replacement for an existing filter
- Where space is limited
- For protection against noise when the static pressure at take off points exceeds 5.0 bar (DIN 4109)
- If the static pressure exceeds the maximum permissible operating pressure of an installation
- If pressure fluctuations in the downstream system must be avoided

### Flow Diagram





### Spare Parts

#### FK76CS/FKN76CS Filter Combinations (From 1997 onwards)

| No. | Description                                                                               | Dimension                                 | Part No.                      |
|-----|-------------------------------------------------------------------------------------------|-------------------------------------------|-------------------------------|
| 1   | Spring bonnet complete (with setting scale)                                               | $\frac{3}{4}$ " - $1\frac{1}{4}$ "        | 0901517                       |
| 2   | Valve insert complete (without sieve)                                                     | $\frac{3}{4}$ " - $1\frac{1}{4}$ "        | D06FA-1A                      |
| 3   | Seal ring set (Pack of 10)                                                                | $\frac{3}{4}$ "<br>1"<br>$1\frac{1}{4}$ " | 0901444<br>0901445<br>0901446 |
| 4   | Pressure gauge (0 - 16 bar)                                                               |                                           | M07M-A16                      |
| 5   | Flange seal                                                                               | $\frac{3}{4}$ " - $1\frac{1}{4}$ "        | 5536400                       |
| 6   | Filter insert complete for filters with Double Spin Technology<br>Filter mesh 100 $\mu$ m | $\frac{3}{4}$ " - $1\frac{1}{4}$ "        | AF11DS-1A                     |
| 7   | Clear filter bowl complete                                                                | $\frac{3}{4}$ " - $1\frac{1}{4}$ "        | KF11S-1A                      |
| 8   | O-ring set (Pack of 10)                                                                   | $\frac{3}{4}$ " - $1\frac{1}{4}$ "        | 0900747                       |
| 9   | Drain connection                                                                          | $\frac{3}{4}$ " - $1\frac{1}{4}$ "        | AA76-1/2A                     |
| 10  | Ball valve complete                                                                       | $\frac{3}{4}$ " - $1\frac{1}{4}$ "        | KH11S-1A                      |
| 11  | Double ring wrench<br>For removing the filter bowl (no fig.)                              | $\frac{3}{4}$ " - $1\frac{1}{4}$ "        | ZR10K-1                       |

\* 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  $1\frac{1}{2}$ " up to  $1\frac{1}{4}$ "!

# Honeywell