

# F74CS/FN74CS

## Reverse rinsing fine filter

### APPLICATION

The reverse rinsing filters 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 fine filters are used in systems where an existing pressure reducing valve is fitted or where one is not required. Both horizontal and vertical installation is possible.

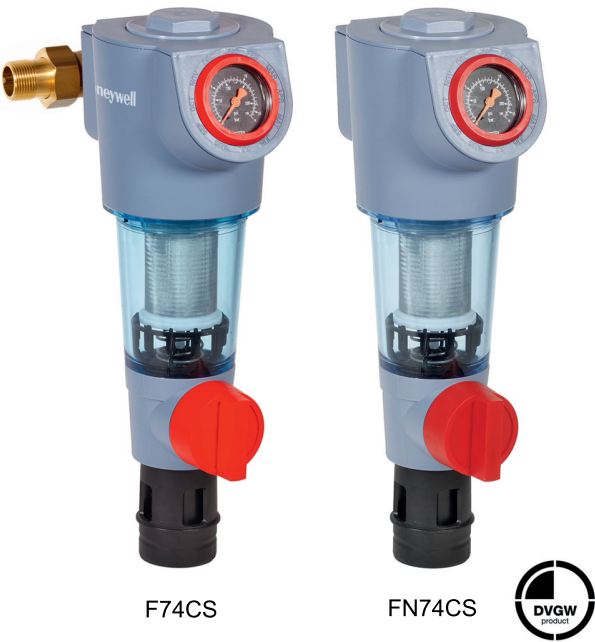
### APPROVALS

- DVGW
- SVGW

approval for all filters with 100 µm mesh sizes and with rotatable connection piece

### SPECIAL FEATURES

- 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
- Large filter surface
- Shock resistant clear synthetic material filter bowl enables easy checking of filter contamination
- Filter insert fully replaceable
- All materials are ACS approved
- 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" - 1 1/4" (with rotatable connector piece)
Pressure values	
Max. operating pressure:	1.5 - 16.0 bar
Max. inlet pressure:	16 bar (up to 12.0 bar long-term*)
Operating temperatures	
Max. operating temperature medium:	5 - 30 °C
Specifications	
Installation position:	Horizontal or vertical, with filter bowl downwards

\* For maintaining the measuring accuracy of the manometer, a continuous maximum pressure load of 12.0 bar is permitted.

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	Housing with pressure gauge	High-quality synthetic material
	2	Rotatable connector piece, flange sealing, connecting nuts and fittings (F74CS only)	Dezincification-resistant brass
	3	Clear filter bowl	Shock-resistant, clear transparent synthetic material
	4	Fine filter	Stainless steel
	5	Ball valve with drain connection	Brass (Ball Valve body), Stainless steel (ball), Plastic-durethan (drain adapter)
<b>Not depicted components</b>			
		Memory ring	Plastic
		Allen key WS6	Stainless steel
		Wrench for filter bowl and spring bonnet	Plastic
		Covers and reverse rinsing handle	Synthetic material filter mesh carrier, reverse rinsing handle and covers
		Diaphragm	Fibre-reinforced NBR
		Sealing washers	EPDM

## METHOD OF OPERATION

The filter insert comprises an upper part and a lower combination section. When in the „filtering“ position, the small upper filter is closed so that the water can only pass through the main filter from outside to inside. When the ball valve is opened for reverse rinsing, the filter is pushed downwards until the water supply to the outer side of the main filter is stopped. Simultaneously, the water flow is opened to the upper part of the filter. The water needed for cleaning the filter passes through the upper sieve, the rotating impeller and the main filter from inside to outside. By this means, the filter is fully cleaned over its whole surface area at the full inlet pressure. The filter automatically switches over to the operating position when the ball valve is closed again.

## 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 % *

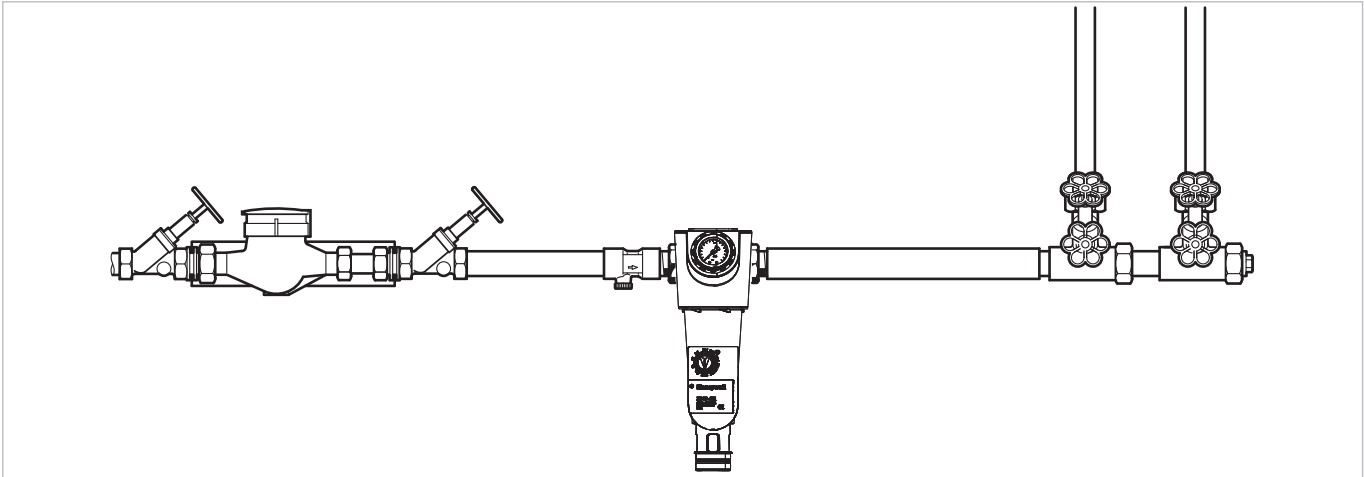
\*non condensing

## INSTALLATION GUIDELINES

### Setup requirements

- The installation site has to be frost-proof and the protection of the device from chemicals, paints, detergents, solvents and their vapours and environmental influences must be guaranteed
- Install in horizontal or vertical pipework with filter bowl downwards
  - This position ensures optimum filter efficiency
- Install shut-off valves
- 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
- It is recommended that a straight section of pipework at least five times the nominal valve size is provided after the filter (according to DIN EN 806-2)
- Fit immediately after water meter
- 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

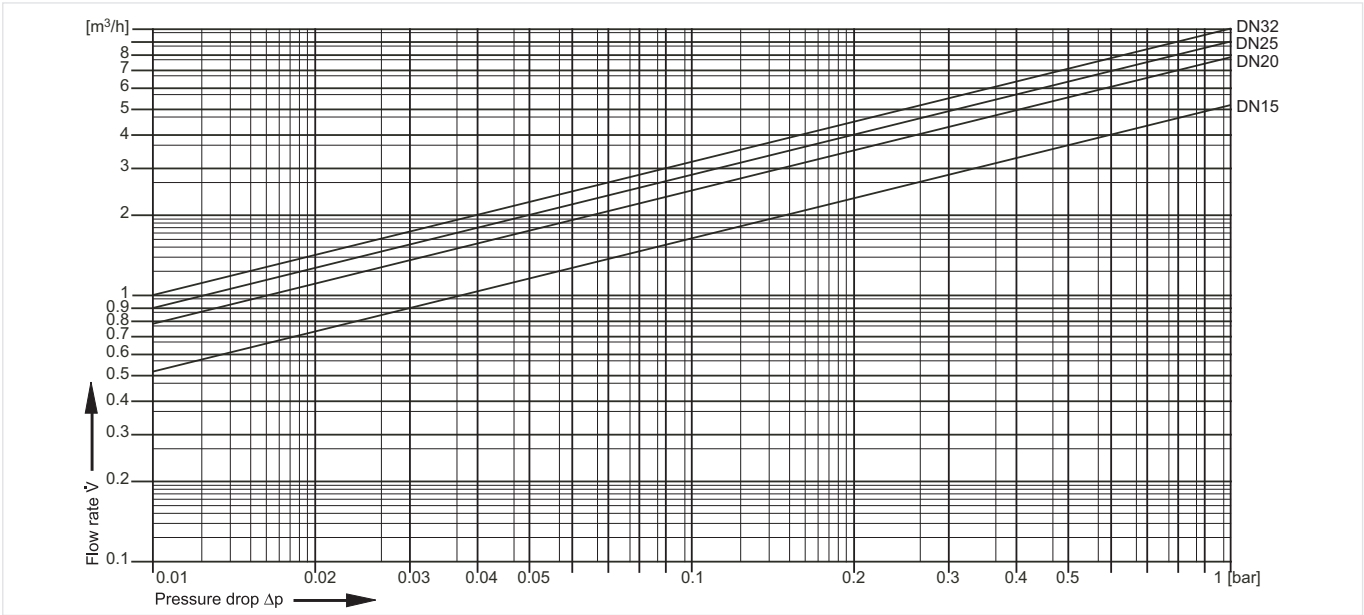


TECHNICAL CHARACTERISTICS

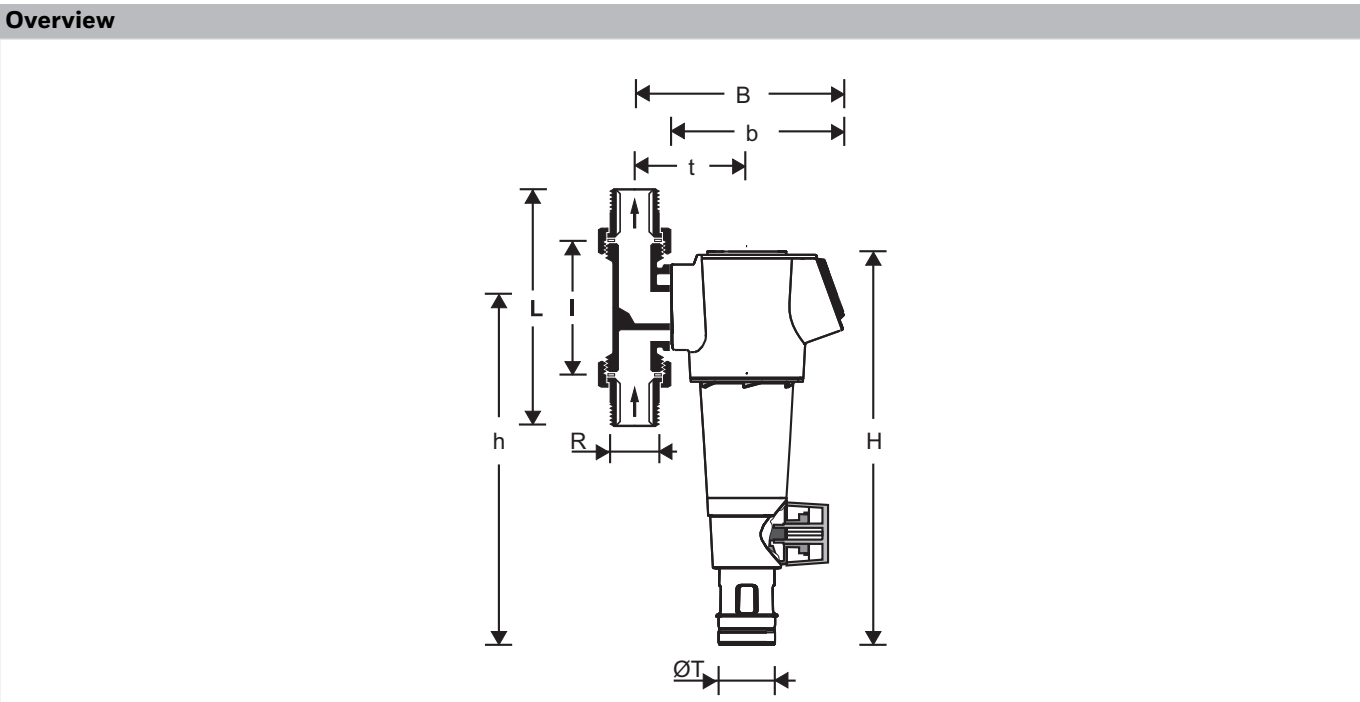
kvs-Values

Connection sizes:	15	20	25	32
k <sub>VS</sub> -value (m <sup>3</sup> /h):	5.3	7.9	9.0	10.0

Pressure drop characteristics



DIMENSIONS



Parameter		Values			
Connection sizes:	R	1/2"	3/4"	1"	1 1/4"
Nominal sizes:	DN	15	20	25	32
Weight:	kg	2.1	2.1	2.3	2.6
Dimensions:	H	353	353	353	353
	h	298	298	298	298
	L	150	158	179	197
	l	90	90	100	105
	B	178	178	178	182
	b	150	150	150	150
	t	92	92	92	96
	ØT	50	50	50	50
Flow value at Δp=0.2 bar	m <sup>3</sup> /h	2.4	3.4	3.9	4.4
Flow value at Δp=0.5 bar:	m <sup>3</sup> /h	3.8	5.5	6.2	7.0
DVGW registration number:		NW-9301 CL 0456			

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

- standard
- not available

		F74CS-...AA	F74CS-AC	F74CS-...AD	FN74CS-1A
Connection type:	With rotatable connector piece, filter mesh size 100 µm	•	-	-	-
	With rotatable connector piece, filter mesh size 50 µm	-	•	-	-
	With rotatable connector piece, filter mesh size 200 µm	-	-	•	-
	Retrofit version without rotatable connector piece, filter mesh size 100 µm	-	-	-	•

Note: ... = space holder for connection size

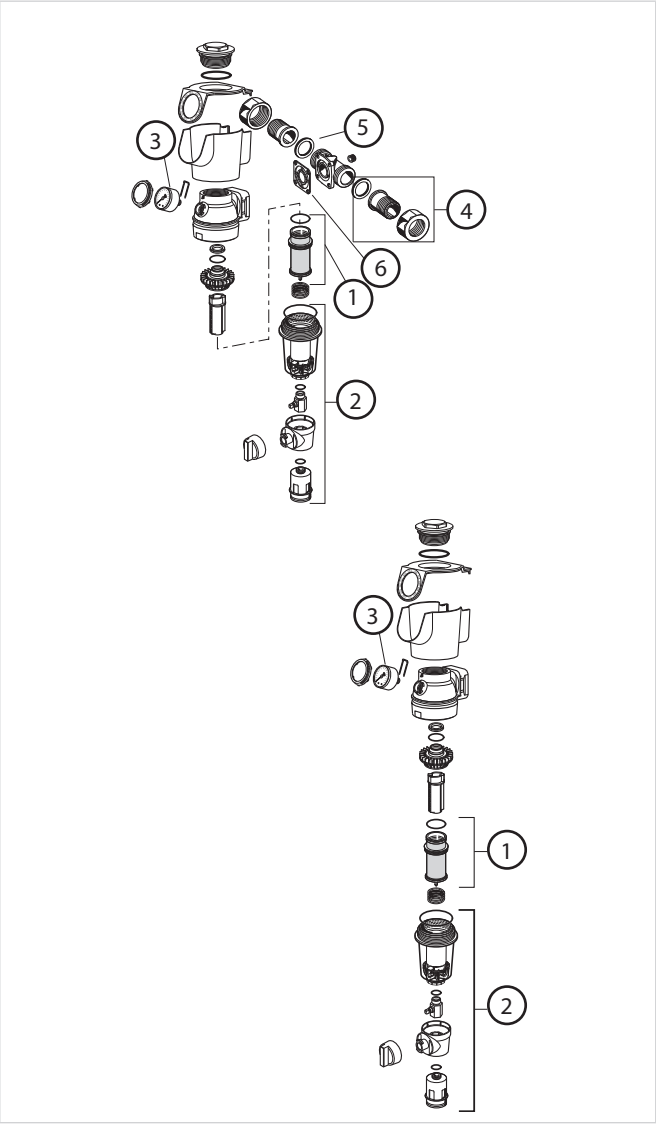
Accessories

	Description		Dimension	Part No.
	<b>DA74</b>	<b>Rotatable connector piece</b>		
		For connection of retrofit filters and filter combinations		
		D74CS	1/2"	DA74CS-1/2A
		D74C	3/4"	DA74C-3/4A
		D74C	1"	DA74C-1A
		D74C	1 1/4"	DA74C-1 1/4A
	<b>Z74S-AN</b>	<b>Automatic reverse rinsing actuator</b>		
		For automatic filter cleaning at presettable intervals		
				Z74S-AN
	<b>D06FR</b>	<b>Retrofit pressure reducing valve insert set</b>		
		For retrofitting to upgrade to a filter combination		
				D06FR
	<b>ZR74CS</b>	<b>Double ring wrench for removing the filter bowl</b>		
			1/2" + 1 1/4"	ZR74CS

Spare Parts

F74CS/FN74CS Fine filters from 2010 onwards

Overview



Description	Dimension	Part No.
<b>1 Filter insert complete</b>		
100 µm	1/2" - 1 1/4"	AF74-1A
50 µm	1/2" - 1 1/4"	AF74-1C
200 µm	1/2" - 1 1/4"	AF74-1D
<b>2 Clear filter bowl</b>		
	1/2" - 1 1/4"	KF74CS-1A
<b>3 Pressure gauge rear connection thread G1/4"</b>		
	0 - 16 bar	M74CS-A16
<b>4 Connection set threaded connection</b>		
	3/4"	VST06-3/4A
	1"	VST06-1A
	1 1/4"	VST06-11/4A
<b>5 Union seal washer (10 pcs.)</b>		
	3/4"	0901444
	1"	0901445
	1 1/4"	0901446
<b>6 Flange seal</b>		
	3/4" - 1 1/4"	5975900

Environmental & Energy Solutions

Honeywell GmbH  
Hardhofweg  
74821 MOSBACH  
GERMANY  
Phone: (49) 6261 810  
Fax: (49) 6261 81309  
<http://ecc.emea.honeywell.com>

Manufactured for and on behalf of the  
Environmental and Combustion Controls  
Division of Honeywell Technologies Sàrl, Z.A.  
La Pièce 16, 1180 Rolle, Switzerland  
by its Authorised Representative Honeywell GmbH  
ENOH-1157GE23 R0117  
Subject to change  
© 2017 Honeywell GmbH

