

Braukmann

FK76S-LF

Lead-free filter combination

Application

FK76S-LF filter combinations integrate a reverse rinsing fine filter and a pressure reducing 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 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 in progress
- approval for all filters with 100 µm mesh sizes

Special Features

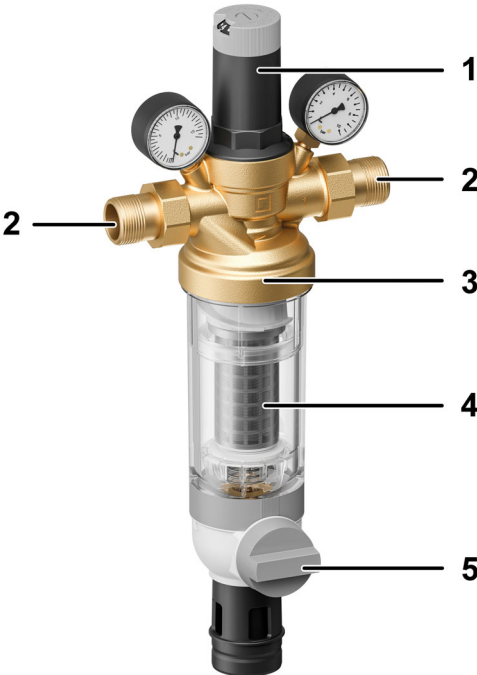
- LEAD-FREE: Pb content of all materials in contact with medium less than 0.1 %
- Double Spin Technology for connection sizes $\frac{3}{4}$ " to $1\frac{1}{4}$ "; cartridge with external rotor enabling simultaneous cleaning in lower and upper filter areas; visual function check possible
- Filtered water 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 ISO-flange connector can be retrofitted
- Large filter surface
- 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
- All materials are KTW approved
- Approved by TÜV LGA for low noise, Group 1 without limitations
- 5-year warranty



Technical Data

Medium	
Medium:	Drinking water
Connections/Sizes	
Connection size:	$\frac{1}{2}$ " - 2"
Pressure values	
Min. operating (dynamic) pressure:	1.5 bar
Max. inlet pressure with clear filter bowl:	16 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/lead free brass filter bowl):	70 °C
Specifications	
Installation position:	Horizontal with filter bowl downwards

Construction

Overview		Components	Materials
	1	Spring bonnet with adjustment knob and setting scale	High-quality synthetic material
	2	Threaded male connections	Lead-free brass
	3	Housing with inlet and outlet pressure gauges	Lead-free brass
	4	Fine filter in clear filter bowl	Stainless steel fine filter, shock-resistant, clear transparent synthetic material
	5	Ball valve with drain connection	Lead-free brass (Ball Valve body), Stainless steel (ball), Plastic-durethan (drain adapter)
Not depicted components:			
		Valve insert complete with diaphragm and valve seat	High-quality synthetic material, EPDM diaphragm
		Seals	EPDM
		Double wring wrench	Plastic

Method of Operation

The filter combination combines the reverse rinsing fine filter and a 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.

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 % *

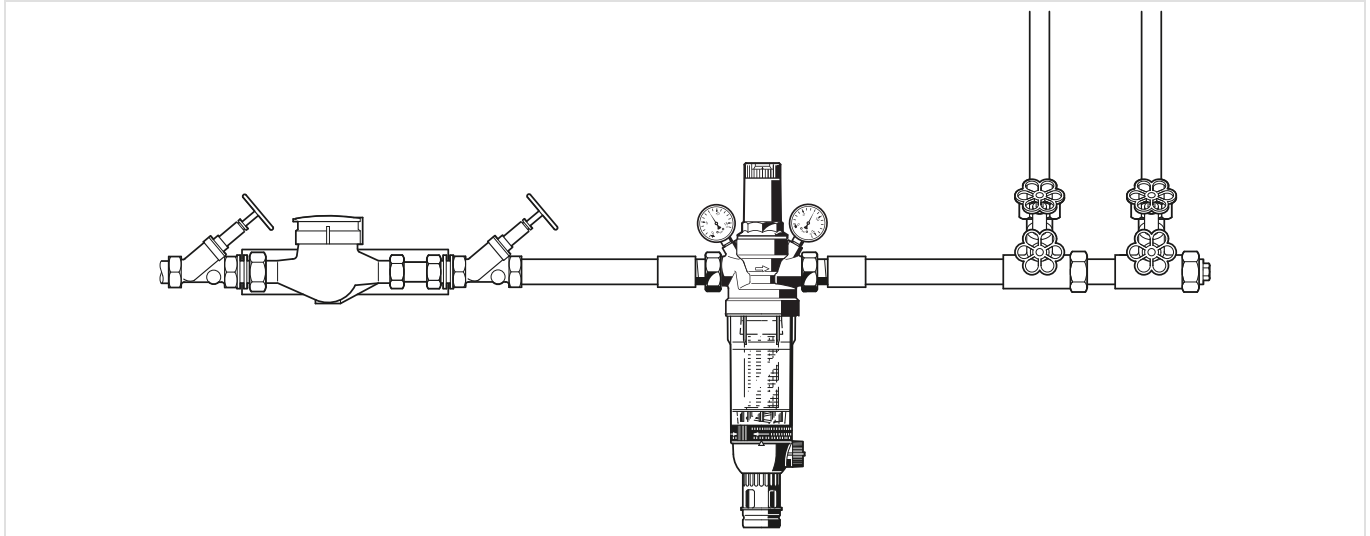
*non condensing

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 (consider EN1717 requirements)
 - Pressure gauge can be read off easily
- Degree of contamination can be easily seen with clear filter bowl
- Simplifies maintenance and inspection
- The installation location should be protected against frost
- 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



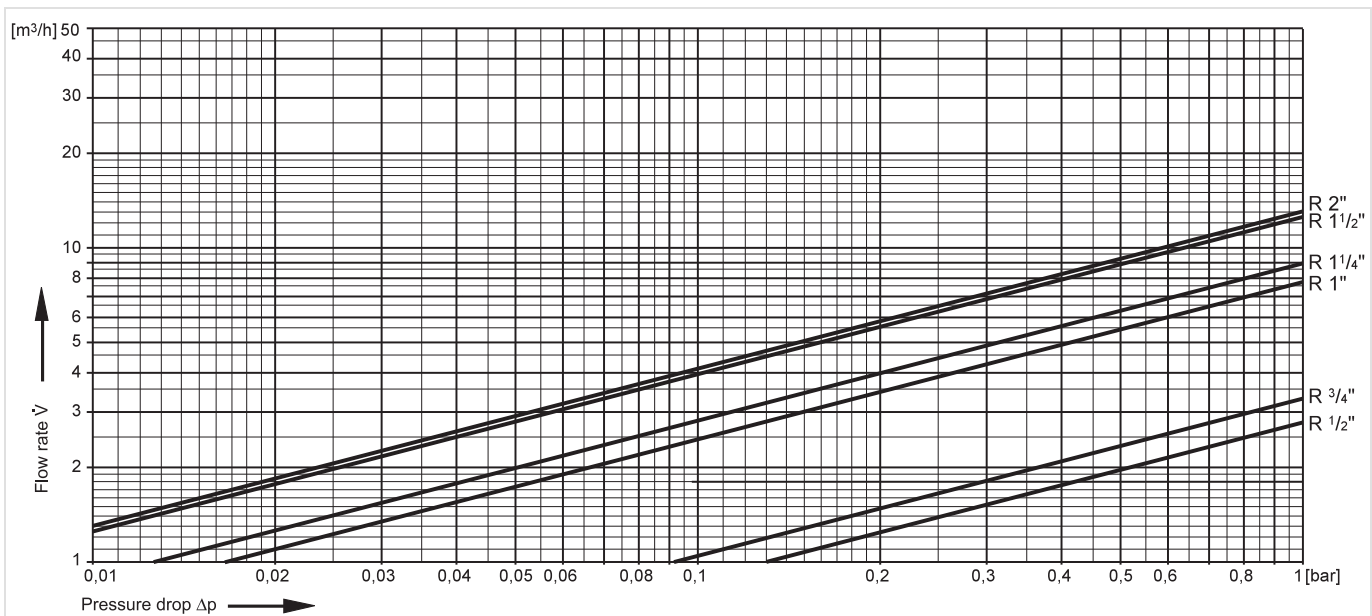
Technical Characteristics

kvs-Values

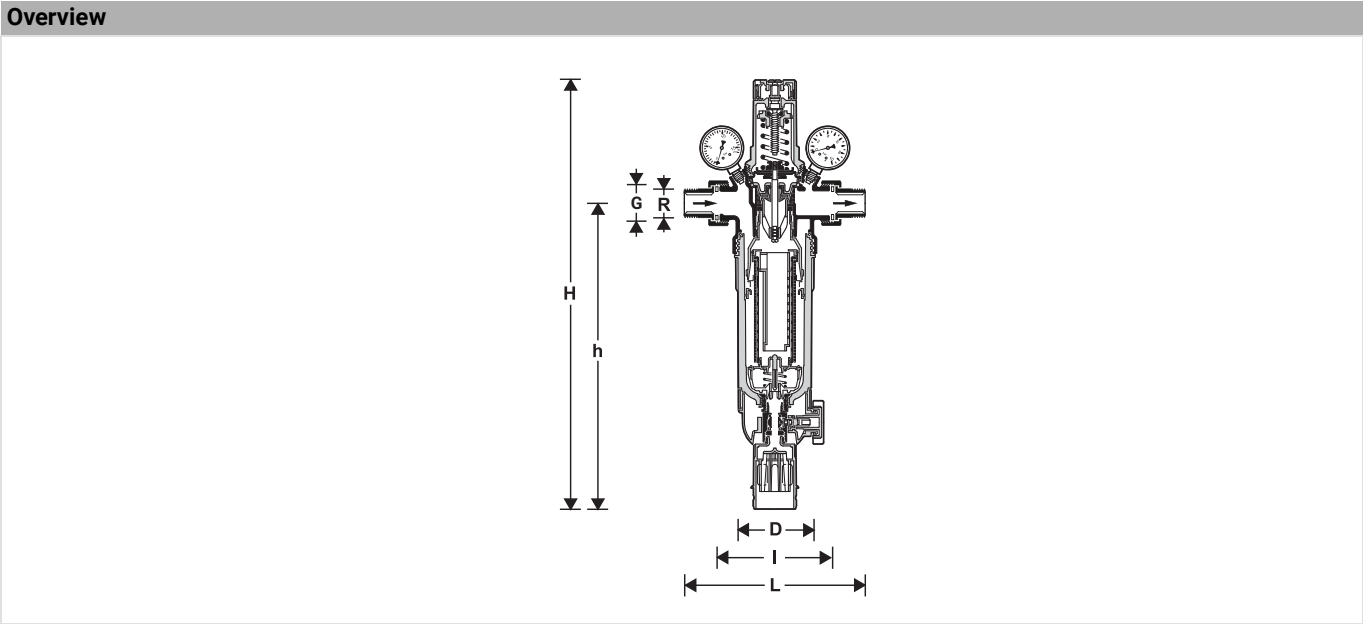
Nominal size diameter:	DN 15	DN 20	DN 25	DN 32	DN 40	DN 50
k_{VS} -value (m^3/h):	2.7	3.2	7.6	8.9	12.6	13.0
Peak flow rate at 2m/s (m^3/h):	1.3	2.3	3.6	5.8	9.1	14.0
Peak flow rate at 3m/s (m^3/h):	1.8	3.3	5.4	8.6	13.7	21.2

Note: Peak flow rate of 2m/s applies to residential buildings in accordance with DIN EN 156.
Peak flow rate of 3m/s applies to commercial systems in accordance with DIN 1988.

Pressure drop characteristics



Dimensions



Parameter		Values					
Nominal size diameter:	DN	DN 15	DN 20	DN 25	DN 32	DN 40	DN 50
Connection size:	R	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
Dimensions:	L	170	178	209	222	246	267
	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	3.5	3.6	5.0	5.6	7.2	9.1
Double Spin Technology:		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.

Options

Connection size	Filter mesh size*)	Temperature	Filter bowl	Item No.
1/2"	100 µm	30 °C	Transparent	FK76S-1/2LFAA
3/4"	100 µm	30 °C	Transparent	FK76S-3/4LFAA
1"	100 µm	30 °C	Transparent	FK76S-1LFAA
1 1/4"	100 µm	30 °C	Transparent	FK76S-11/4LFAA
1 1/2"	100 µm	30 °C	Transparent	FK76S-11/2LFAA
2"	100 µm	30 °C	Transparent	FK76S-2LFAA

*) for other mesh sizes than 100 µm please see under spare parts

Accessories

	Description	Dimension	Item No.
	RR11S	Automatic reverse rinsing actuator	
		For automatic filter cleaning at presettable intervals	
		230 V, 50/60 Hz, with BMS connection; wall power adaptor EU	RR11S-A
		230 V, 50/60 Hz, with BMS connection; wall power adaptor UK	RR11S-AGB
	URS	Retrofit kit F76S/HS10S	
		for filter Bowl up to May 2025 with backwash actuator RR11S	1/2" - 1 1/4"
		for filter Bowl up to May 2025 with backwash actuator RR11S	1 1/2" - 2"
		for filter Bowl from June 2025 on with backwash actuator Z11S	1/2" - 1 1/4"
		for filter Bowl from June 2025 on with backwash actuator Z11S	1 1/2" - 2"
	VST06B	Connection set	
		Solder connections	
			1/2"
			3/4"
			1"
			1 1/4"
			1 1/2"
	ZR10K	Double ring wrench for removing the filter bowl	
			1/2" + 3/4"
			1" + 1 1/4"
			1 1/2" + 2"

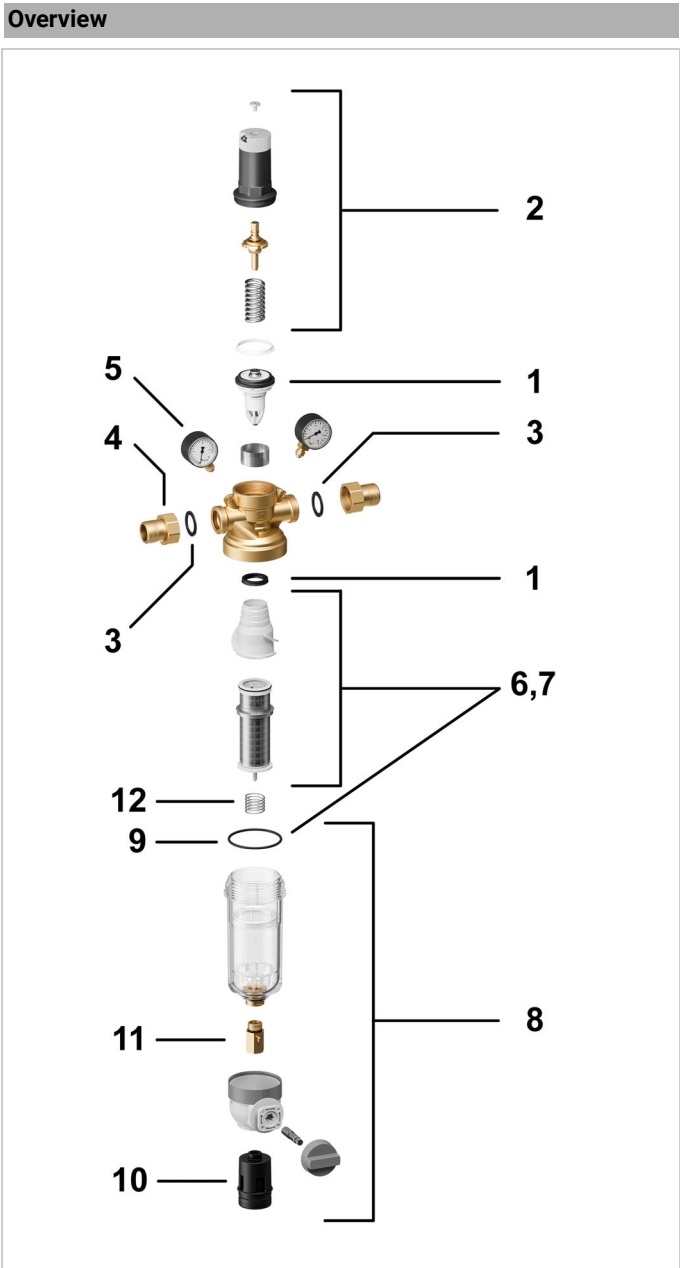
Spare Parts

FK76S-LF Filter Combinations from 2025 onwards

Overview	Description	Dimension	Item No.
	1 Valve insert complete (without filter)		
		1/2" + 3/4"	D06FA-1/2
		1" + 1/4"	D06FA-1A
		1 1/2" + 2"	D06FA-11/2
	2 Spring bonnet complete with setting scale		
		1/2" + 3/4"	0902002
		1" + 1 1/4"	0902003
		1 1/2" + 2"	0902004
	3 Union seal washer (10 pcs.)		
		1/2" + 3/4"	0901444
		1"	0901445
		1 1/4"	0901446
		1 1/2"	0901447
		2"	0901448
	4 Connection set threaded connection		
	Lead-free brass	1/2"	VST06-1/2LFA
	Lead-free brass	3/4"	VST06-3/4LFA
	Lead-free brass	1"	VST06-1LFA
	Lead-free brass	1 1/4"	VST06-11/4LFA
	Lead-free brass	1 1/2"	VST06-11/2LFA
	Lead-free brass	2"	VST06-2LFA
	5 Pressure gauge		
		0 - 10 bar	M38K-LFA10
		0 - 16 bar	M38K-LFA16
		0 - 25 bar	M38K-LFA25
	6 Filter insert complete*		
	Filter mesh size: 100 µm	1/2" - 3/4"	AF11S-1/2A
	Filter mesh size: 100 µm	1" - 1 1/4"	AF11S-1A
	Filter mesh size: 100 µm	1 1/2" - 2"	AF11S-11/2A
	Filter mesh size: 20 µm	1/2" - 3/4"	AF11S-1/2B
	Filter mesh size: 20 µm	1" - 1 1/4"	AF11S-1B
	Filter mesh size: 20 µm	1 1/2" - 2"	AF11S-11/2B
	Filter mesh size: 50 µm	1/2" - 3/4"	AF11S-1/2C
	Filter mesh size: 50 µm	1" - 1 1/4"	AF11S-1C
	Filter mesh size: 50 µm	1 1/2" - 2"	AF11S-11/2C
	Filter mesh size: 200 µm	1/2" - 3/4"	AF11S-1/2D
	Filter mesh size: 200 µm	1" - 1 1/4"	AF11S-1D
	Filter mesh size: 200 µm	1 1/2" - 2"	AF11S-11/2D
	Filter mesh size: 300 µm	1/2" - 3/4"	AF11S-1/2E
	Filter mesh size: 300 µm	1" - 1 1/4"	AF11S-1E
	Filter mesh size: 300 µm	1 1/2" - 2"	AF11S-11/2E
	Filter mesh size: 500 µm	1/2" - 3/4"	AF11S-1/2F
	Filter mesh size: 500 µm	1" - 1 1/4"	AF11S-1F
	Filter mesh size: 500 µm	1 1/2" - 2"	AF11S-11/2F

*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: approvals only for filter mesh sizes 100 µm



Description	Dimension	Item No.
7 Filter insert complete*, for filters with Double Spin Technology		
Filter mesh size: 100 µm	1/2" - 3/4"	AF11DS-1/2A
Filter mesh size: 100 µm	1" - 1 1/4"	AF11DS-1A
Filter mesh size: 20 µm	1/2" - 3/4"	AF11DS-1/2B
Filter mesh size: 20 µm	1" - 1 1/4"	AF11DS-1B
Filter mesh size: 50 µm	1/2" - 3/4"	AF11DS-1/2C
Filter mesh size: 50 µm	1" - 1 1/4"	AF11DS-1C
Filter mesh size: 200 µm	1/2" - 3/4"	AF11DS-1/2D
Filter mesh size: 200 µm	1" - 1 1/4"	AF11DS-1D
Filter mesh size: 300 µm	1/2" - 3/4"	AF11DS-1/2E
Filter mesh size: 300 µm	1" - 1 1/4"	AF11DS-1E
Filter mesh size: 500 µm	1/2" - 3/4"	AF11DS-1/2F
Filter mesh size: 500 µm	1" - 1 1/4"	AF11DS-1F
8 Clear filter bowl		
	1/2" - 1 1/4"	KF11S-1LFA
	1 1/2" - 2"	KF11S-11/2LFA
9 O-ring set (10 pcs.)		
	1/2" - 1 1/4"	0900747
	1 1/2" - 2"	0900748
10 Drain connector		
	1/2" - 2"	AA76-1/2A
11 Ball valve complete		
lead-free	1/2" - 2"	KH11S-1LFA
12 Spring		
	1/2" - 1 1/4"	2074900
	1 1/2" - 2"	2159400

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