# resideo Filter

# **Braukmann F78TS**

Reverse rinsing fine filter with flanges





## **APPLICATION**

F78TS flanged reverse rinsing filters are for installations with high water demand. They can be used in large residential buildings, for central water supply and in commercial or industrial applications.

F78TS flanged filters have the same highly efficient reverse rinsing filtering system as the range of household fine filters. The F78TS can be retrofitted with the Z11AS fully automatic reverse rinsing actuator and the DDS76 differential pressure switch.

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.

## **APPROVALS**

- DVGW (for connection sizes DN65-DN100 with 100  $\mu$ m mesh size)
- **WRAS**

# **SPECIAL FEATURES**

- LEAD FREE: Pb content of all materials less than 0.1 %
- Filtered water supplied even during reverse rinsing
- Filter insert fully replaceable
- Patented reverse rinsing system fast and thorough cleaning of the filter
- Fully automatic reverse rinsing with retrofittable automatic reverse rinsing actuator
- Differential pressure switch can be retrofitted
- Memory ring indicates when next manual reverse rinsing is due
- Polyamide coating gives high level of corrosion protection
- Forced flow provides optimal water exchange in the filter bowl
- ACS certified
- All materials are KTW approved
- DM174 conform
- Discharge of the reverse rinsed water according EN 1717



# **TECHNICAL DATA**

Media				
Mediu	m:	Drinking water		
Conne	ections/Sizes			
Flange	e connection	PN16 acc. to EN 1092-2		
Single	filter:	DN65 - DN100		
		DN125 with 2 extension		
		flanges EXF125-A		
2 filter	s parallel:	2 x DN80, 2 x DN100		
Pressu	ure values			
Max. operating pressure:		1.5 - 16 bar		
Nominal pressure:		PN16		
Opera	ting temperatures			
Max. o	perating temperature	30 °C		
mediu	m accord. to EN 1567:			
Max. operating temperature		65 °C (max. operating		
mediu	m:	pressure 6 bar)		
Specif	fications			
Install	ation 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.

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downwards

## CONSTRUCTION

Overview		Components	Materials	
© ① ① ② ⑤	1	2 pressure gauges (1x inlet, 1x outlet including memory indicator)	Metal	
	2	Housing with pressure gauge ports (1x inlet, 2x outlet)	Ductile cast iron (EN-GJS-400-15 EN 1563), coated with PA (polyamide)	
100000	3	Filter bowl	Ductile cast iron (EN-GJS-400-15 EN 1563), coated with PA (polyamide)	
3	4	funnel	Ball Valve body: Brass chrome-plated	
			Ball: Brass chrome-plated	
			Drain adapter: Plastic	
4	5	Extension flanges for the connection size DN125	Ductile Cast Iron	
		Not depicted components:		
		Inner parts	Stainless steel, red bronze, brass and plastic	
		Fine filter	Stainless steel	

<sup>\*</sup>Extension flanges for the connection size DN125: F78TS DN125 = 1 pcs.F78TS-100FA/FB/FC/FD + 2 pcs. EXF125-A. The extension flanges have to be ordered separately.

## **METHOD OF OPERATION**

The filter insert is divided into two parts. In the "filtering" position, only the lower, larger section is used for filtering. The small upper section does not come in contact with unfiltered water. An oscillating flap integrated in the sieve prevents the deposition of dirt particles on the upper part of the filter. When the ball valve is opened for reverse rinsing, then the whole filter insert 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 filter section, then the rotating impeller with jets and the main filter from inside to outside, i.e. the filter is reverse rinsed with filtered water. The filter automatically switches back 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 % *

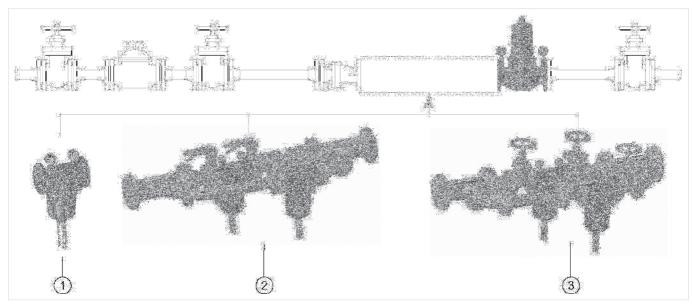
<sup>\*</sup>non condensing

## **INSTALLATION GUIDELINES**

#### **Setup requirements**

- Install in horizontal 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
  - 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**



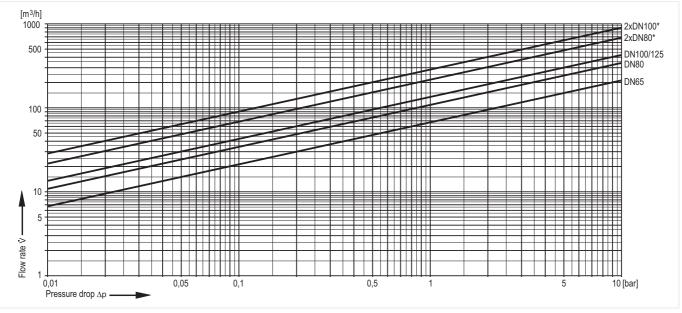
- 1 Single filter
- 2 2 filters parallel 45°
- 3 2 filters parallel 90°

## **TECHNICAL CHARACTERISTICS**

## kvs-Values

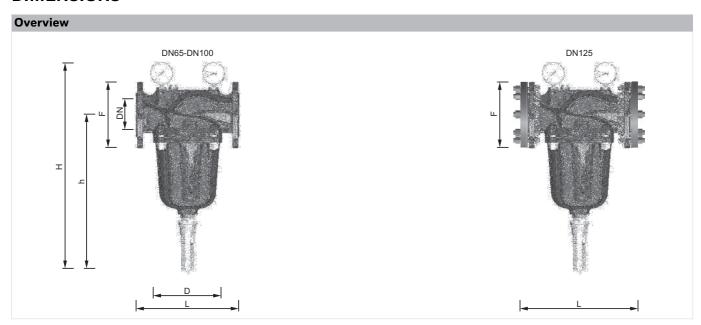
		Single	2 filters parallel			
Connection sizes:	65	80	100	125	80	100
k <sub>vs</sub> -value (m <sup>3</sup> /h):	69	113	145	145	226	290

## **Pressure drop characteristics**



<sup>\* 2</sup> filters parallel

# **DIMENSIONS**



Parameter		Values						
		Single filter*				2 filters	parallel	
Nominal sizes:	DN	65	80	100	125	80	100	
Weight:	kg	25	35	43	65	n.a	n.a	
Dimensions DN65-DN100:	L	290	310	350	420	n.a	n.a	
	Н	581	665	767	767	n.a	n.a	
	h	434	508	610	610	n.a	n.a	
	D	193	230	247	247	n.a	n.a	
	F	185	200	220	250	n.a	n.a	
Flow value at $\Delta p$ =0.2 bar:	m <sup>3</sup> /h	30	48	60	60	96	120	
Flow value at $\Delta p$ =0.5 bar:	m <sup>3</sup> /h	48	78	100	100	156	200	
DVGW registration number:		NW-9301CR0186			-	-	-	

Note: All dimensions in mm unless stated otherwise.

 $<sup>^{\</sup>star}$  DN125 with 2 pcs. extension flanges (2 x EXF125-A to be ordered separately)

## **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 filter is available in the following sizes: DN65, DN80 and DN100.

- standard
- not available

		F78TSFA	F78TSFB	F78TSFC	F78TSFD
Connection type:	Filter mesh size 100 µm	•	-	-	-
	Filter mesh size 20 µm	-	•	-	-
	Filter mesh size 50 µm	-	-	•	-
	Filter mesh size 200 µm	-	-	-	•

Note: ... = space holder for connection size

Note: Ordering number example for DN65 and type FA valve: F78TS-65FA

Note: Filters with other mesh widths available on request

#### **Accessories**

	Description	1	Dimension	Part No.		
<b>98</b> 1	Z11AS					
		For automatic reverse rinsing of the filter at prese				
8 S		230V, 50/60Hz, 10W with moulded Schuko electrons and the schuko electrons are supported by the scholar	Z11AS-1A			
		24 V, 50/60 Hz, 10 W without electrical plug	Z11AS-1B			
J		230 V, 50/60 Hz, 10 W with moulded Type 12 elections Switzerland	Z11AS-1Z			
	DDS76	Differential pressure switch				
DUS T			DN65/80/100	DDS76-1		
	EXF125-A	Extension flange DN125				
		Adapter flanges DN100 to DN125				
		Ductile iron, PN16 acc. ISO 7005-2 and EN 1092-2.				
11 11 11 11		Overall length with adapter flanges (without bolts)				
		DN125 L=416mm, DVGW approved, including bolts, nuts and the seal disc.				
Colo				EXF125-A		

## **Spare Parts**

F78TS Fine Filters with Flanges from 2015 onwards

Overview		Description	Dimension	Part No.
	1	Filter insert complet	e	
Consideration of the Constitution of the Const		Filter mesh 100 µm	DN65	AF78TS-065A
		Filter mesh 100 µm	DN80	AF78TS-080A
		Filter mesh 100 µm	DN100	AF78TS-100A
		Filter mesh 50 µm	DN65	AF78TS-065C
		Filter mesh 50 µm	DN80	AF78TS-080C
		Filter mesh 50 µm	DN100	AF78TS-100C
		Filter mesh 200 µm	DN65	AF78TS-065D
		Filter mesh 200 µm	DN80	AF78TS-080D
		Filter mesh 200 µm	DN100	AF78TS-100D
	2	Replacement sieve		
		Filter mesh 100 µm	DN65	ES78TS-065A
		Filter mesh 100 µm	DN80	ES78TS-080A
		Filter mesh 100 µm	DN100	ES78TS-100A
		Filter mesh 20 µm	DN65	ES78TS-065B
		Filter mesh 20 µm	DN80	ES78TS-080B
		Filter mesh 20 µm	DN100	ES78TS-100B
		Filter mesh 50 µm	DN65	ES78TS-065C
		Filter mesh 50 µm	DN80	ES78TS-080C
		Filter mesh 50 µm	DN100	ES78TS-100C
		Filter mesh 200 µm	DN65	ES78TS-065D
		Filter mesh 200 µm	DN80	ES78TS-080D
		Filter mesh 200 µm	DN100	ES78TS-100D
		Filter mesh 500 µm	DN65	ES78TS-065F
		Filter mesh 500 µm	DN80	ES78TS-080F
		Filter mesh 500 µm	DN100	ES78TS-100F
	3	Pressure gauge		
			0 - 16 bar, G <sup>1</sup> / <sub>4</sub> "	M78M-A16
			0 - 16 bar, G <sup>1</sup> / <sub>4</sub> " with memory indicator	M78M-A16MR
	4	Seal set complete		
			DN65	SOS78TS-065
			DN80	SOS78TS-080
			DN100	SOS78TS-100
	5	Ball valve		
				5622100





