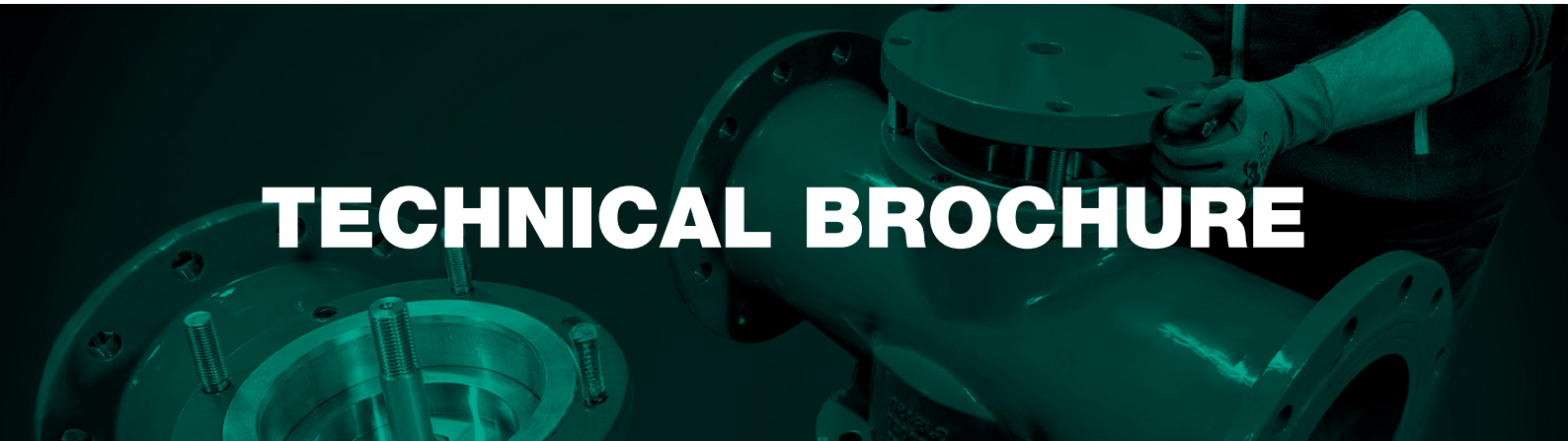
Pietro Fiorentini

WF 251

Horizontal in-line filter, with vertical extraction mesh



TECHNICAL BROCHURE

Pietro Fiorentini S.p.A.
Via E.Fermi, 8/10 | 36057 Arcugnano, Italy | +39 0444 968 511
sales@fiorentini.com

WF 251_technicalbrochure_ENG_revA

Horizontal in-line filter, with vertical extraction mesh **WF 251**

The WF 251 filter is used when effective filtration is required. Thanks to the pin shape of the body and the compact design, maintenance is quick and easy, requiring only the removal of the top cover. The shape and flat stainless steel mesh, arranged perpendicular to the flow, optimise the pressure drop compared to most similar solutions on the market. The filter can be installed in any position; however, installation with the cover facing upwards is recommended.

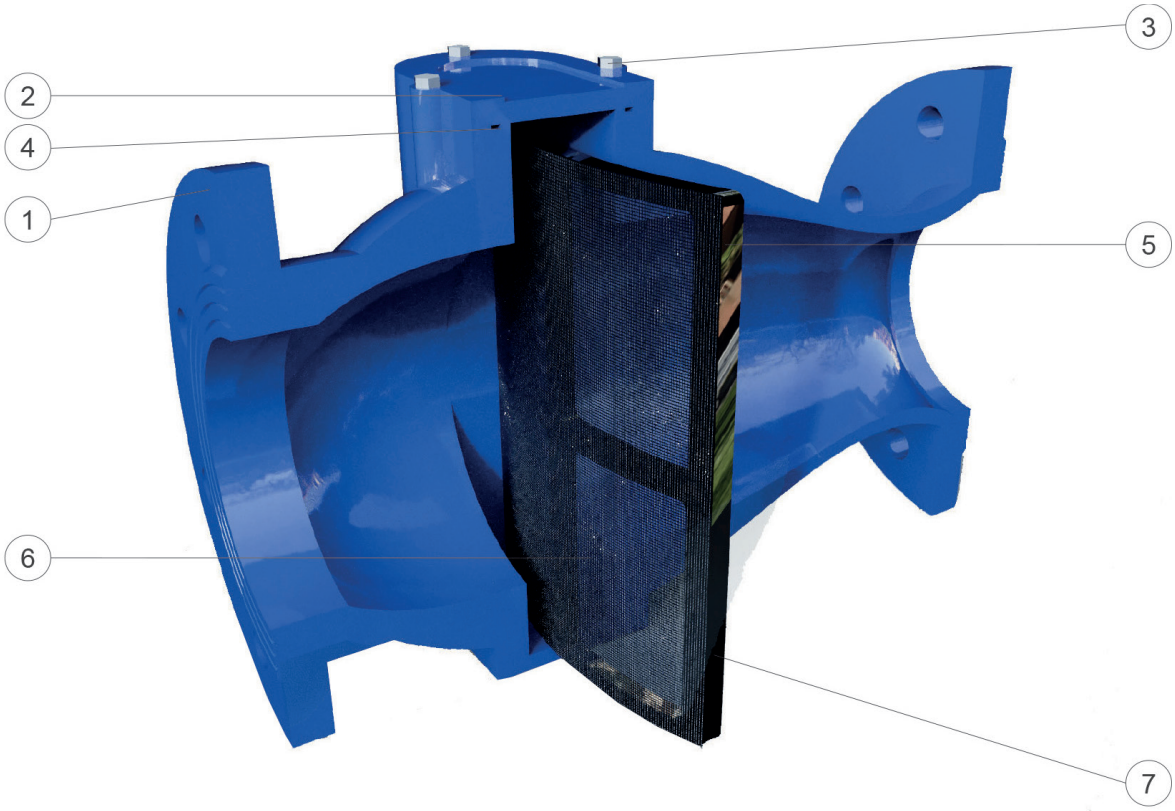
Technical features and advantages

- Flanged version DN 50-300 mm.
- Compact version to allow installation in small spaces and directly on the floor.
- Spheroidal cast iron body and lid, stainless steel mesh and drain valve.
- Innovative self-cleaning filtration with reinforced support to prevent mesh deformation.
- Innovative pin-shaped body design to reduce noise and achieve a high Kv value.
- Drain at the bottom of the filter for easy maintenance.
- Large expansion chamber to reduce noise and offer excellent cavitation resistance and low pressure drop.
- Epoxy powder coating applied with FBT technology.

Applications

- Water distribution systems
- Buildings and civil installations
- Irrigation
- Cooling systems
- In general, upstream of regulating/reducing valves

Construction details



No.	Component	Standard material	Optional
1	Body	ductile cast iron GJS 450-10	
2	Cap	ductile cast iron GJS 450-10	
3	Nuts	AISI 304 stainless steel	stainless steelAISI 316
4	Gasket	EPDM	
5	Support	ductile cast iron GJS 450-10	
6	Mesh	AISI 304 stainless steel	
7	Drain plug	AISI 316 stainless steel	

The table of materials and components is subject to change without notice.

Installation diagram

This installation example shows a WF 251 filter inserted into a standard PRV chamber layout. The system is equipped with an externally piloted H-VAL 310/410 control valve and WAVE 3S-CSF water hammer air valves, installed upstream and downstream of the PRV. Downstream, there is also a WR/AM pressure relief, designed to relieve any pressure build-up and protect the system.

Technical data

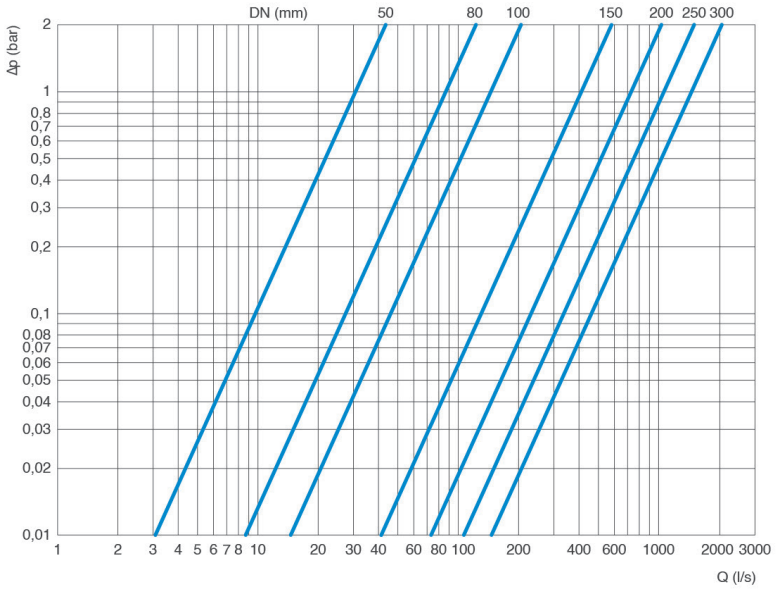
Pressure drop coefficient

The Kv coefficient represents the flow rate through the fully open valve, generating a pressure drop of 1 bar.

DN (mm)	50	80	100	150	200	250	300
Kv (m^3/h)/bar	112	310	565	1482	2634	4109	5722

Pressure drops chart

The graph shows the pressure drop of the WF 251 filter, fully open, as a function of the flow rate in l/s.



Standard

- Certified and tested in accordance with EN 1074/5
- Flanges according to EN 1092/2 - ANSI 150, others on request
- Epoxy paint applied using fluidised bed technology, colour RAL 5005 blue
- Flange modifications and paint available on request

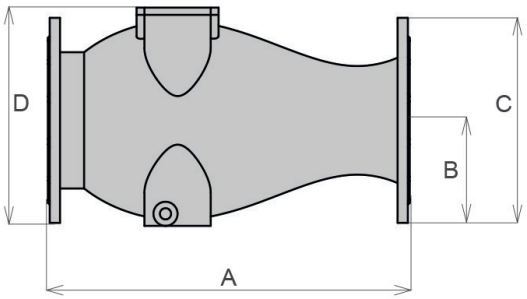
Operating conditions

Filtered treated water	Maximum temperature 70°C
Maximum upstream (inlet) pressure	25 bar

Weights and dimensions

DN mm	A mm	B mm	C mm	D mm	Weight Kg
50	230	82,8	165	170,5	12
80	310	100	200	216	22
100	350	100	220	222	32
150	480	150	300	322	72
200	600	170	340	362	104
250	730	212,25	425	427	206
300	850	242,5	485	497	285

Approximate values, more details on request.



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