

# Product Data Sheet

## Filter Housings FWP300 - FWP500

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### Field of application

Type FWP300 to FWP500 filter housings are designed as compressed air filter housings for high compressed air volume flows in the pressure level up to 8 bar (50°C) or 5.7 bar (150°C).

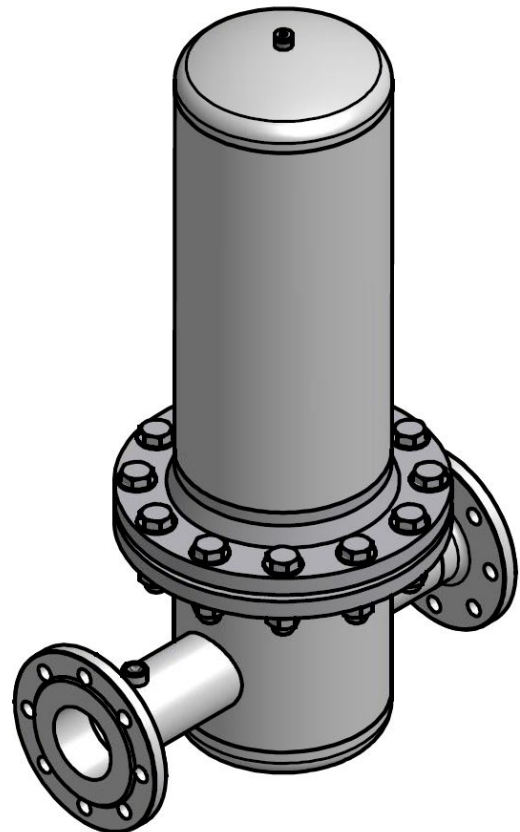
### Features

Type FWP filter housings are made from stainless steel, manufactured in a deep drawing process with final assembling by welding processes. For surface finishing purposes the filter housing are electro polished inside and outside, additionally mechanically polishing is provided on the outer side.

Type FWP300 filter housing is designed for three filter elements of type EFSTP180 (20") to be inserted, type FWP500 filter housings for 5 filter elements. Connection and sealing between filter element and filter housing is provided by a double O-ring bayonet coupling.

The housings are provided with a flange inlet and outlet connection (DIN 2633) while many other connection types are available on request. Additionally each filter housing offers a threaded G 1/4 connection with the filter head and bowl for venting purposes, as standard plug screws are fitted. On request additional connections for differential pressure indication are available.

The filter housings comply with the requirements of the Pressure Equipment Directive 2014/68/EU, and some (depending on the model) have the CE marking of this European directive.



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Specifications subject to change without notice

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### Basic data

Model	Nominal volume flow (VN)*1	Max. operating pressure	Min./Max. operating temperature
FWP300	2,500 m <sup>3</sup> /h (DN 80) 3,400 m <sup>3</sup> /h (DN 100) 4,500 m <sup>3</sup> /h (DN 125)	8 bar (50°C) 5.7 bar (150°C)	-10°C - +134°C
FWP500	3,300 m <sup>3</sup> /h (DN 80) 4,500 m <sup>3</sup> /h (DN 100) 6,000 m <sup>3</sup> /h (DN 125)		

\*1 - refers to 1 bar(a) and 20°C at 7 bar operating pressure

### Volume flow conversion factors

#### Compressed air

##### «F1» - Pressure (in bar)

0	0.5	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
0.125	0.19	0.25	0.31	0.38	0.44	0.50	0.56	0.63	0.69	0.75	0.81	0.88	0.94	1.00	1.06	1.13

##### «F2» - Temperature (in °C)

-10	0	10	20	30	40	50	60	70	80	90	100	110	120	134
1.11	1.07	1.04	1.00	0.97	0.94	0.91	0.88	0.85	0.83	0.81	0.79	0.77	0.75	0.72

#### Calculation of the converted volume flow

Converted volume flow VK	Nominal required volume flow VN <sub>min</sub>
$VK = VN \times F1 \times F2$	$VN_{min} = VK / F1 / F2$

VK : Converted volume flow calculated for the operating conditions

VN<sub>min</sub>: Nominal required volume flow calculated for the operating conditions, based on the volume flow at operating conditions

### Maintenance rules

All models	<ul style="list-style-type: none"> <li>■ In the course of filter element replacement or cleaning: checking for serious corrosion</li> <li>■ Checking and replacement of filter housing gasket if required</li> </ul>
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### Materials

Component	
Filter housing	Stainless steel 1.4307 / 1.4541 / 1.4404 (AISI 304L / 321 / 316L)
Mounting parts, fittings	Stainless steel 1.4307 / 1.4541 / 1.4404 (AISI 304L / 321 / 316L)
Sealing materials	EPDM, option for Silicon
Surfaces	Surface finish inside : Ra < 0,8μ - electro polished Surface finish outside : electro polished / mechanically polished

### Connections, dimensions and weight

Model	Connection	Vent connection	Height	Width	Depth	Weight
FWP300	DN 80	2 x R 1/4	860 mm	472 mm	340 mm	44 kg
	DN 100	2 x R 1/4	870 mm	476 mm	340 mm	44 kg
	DN 125	2 x R 1/4	880 mm	476 mm	340 mm	45 kg
FWP500	DN 80	2 x R 1/4	890 mm	505 mm	405 mm	54 kg
	DN 100	2 x R 1/4	890 mm	509 mm	405 mm	54 kg
	DN 125	2 x R 1/4	890 mm	509 mm	405 mm	55 kg

### Classification according to Pressure Equipment Directive 2014/68/EU for group 2 fluids

Model	Volume	Category
FWP300	26 litres	I (5.7 bar) II (8 bar)
FWP500	46 litres	II

### Other directives

Model	
All models	---

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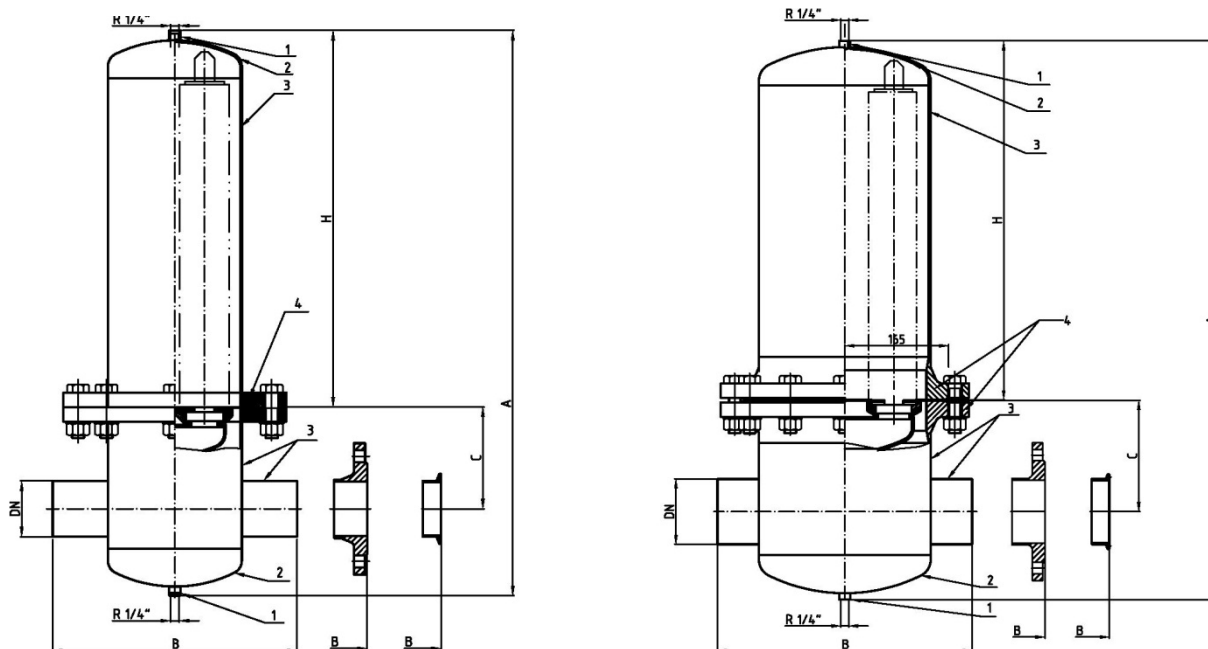
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### Dimensions



#### FWP300

	A	B	C	H
DN 80	860 mm	472 mm	155 mm	572 mm
DN 100	870 mm	476 mm	165 mm	572 mm
DN 125	880 mm	476 mm	165 mm	572 mm

#### FWP500

	A	B	C	H
DN 80	890 mm	405 mm	169 mm	572 mm
DN 100	890 mm	405 mm	177 mm	572 mm
DN 125	890 mm	405 mm	169 mm	572 mm