# **SS housings FLC**

#### Process filtration Compressed Air, Gases and Steam



A sanitary range of flow efficient housings from Filco, designed to complement the latest generation of compressed air and gas sterile filter cartridges and steam filter elements.

Specifically designed for dairy, brewery and food processing applications FLC housings ensure optimal flow perfomance and low pressure drops which perfectly match domnick hunter flow efficient filter cartridges. Long service life and cost effective operation is therefore assured.

FLC housings also incorporate a locking ring design which facilitates use in high pressure compressed air and steam processes. Housings come in a full range of connection options for ease of installation.





#### Features:

- » plenum base ensures collection of condensate hence minimising the chance of filter blinding / high differential pressure in both gas & steam applications
- » designed to minimise pressure drop
- » available in a wide range of industry standard connections



### **Technical Specification**

Filter housing	AISI 304, 1.4301				
Drain / venting	1/4" BSPP internal thread with grommet				
	1/4" NPT for connection types A, N, T				
Sealing	EPDM				
Surface treatment	Internal surface: electrochemically polished $Ra \le 0.8 \mu m$				
	External surface: mechanically polished				
Design pressure and temperature	16 (resp. 12) barg & 200°C				
Approval	PED, resp. ASME VIII. Div.1				
Filter elements	VBA filter housings are compatible with a wide range of				
	filter elements Parker   Domnick Hunter,				
	Parker   Zander, intended to sterilize compressed				
	air, gas High Flow BIO-X (ZCHB) and also for the filtra-				
	tion of steam.				
	Housings with length "B" and "A" have a connecting				
	adapter type TrueSeal, the others have have a				
	connection adapter type "C".				

#### Housings modifications, option

Housing material	AISI 316L, 1.4404
Operating pressure	PN 25 - PN 64
Suitable for other filter elements	range High Flow Tetpor II (ZHFT), ZCSS and ZCHS
	and other compatible
Multiple housings for higher flow rates	

### **Specification of suitable filter elements**

Filter media	pleated , PTFE-impregnated borosilicate hydrophobic micro-fibre <b>ZCHB</b> ; pleated PTFE membrane <b>ZHFT</b> , stainless steel sintered <b>ZCSS</b> or pleated <b>ZCHS</b>
Outer core	ZCHB + ZHFT: heat stabilised PP
Inner core	ZCHB + ZHFT: 2,5" a 5": heat stabilised PP 10", 20" a 30": stainless steel 1.4404
Retention rating	ZCHB + ZHFT: 0.01µm & 99.99999% ZCSS + ZCHS: absolute rating related to pore size
Operating temperature	ZCHB + ZHFT: +80°C ZCSS + ZCHS: +200°C
Sterilisability	up to +142°C, repeatedly 150x (ZCHB) and 225x (ZHFT)
Biological security	in accordance with current UPS plastcis and BS 5736
Validation	"aerosol bacteria challenge" test

#### **Technical data**

	Dimensions (mm)								
Model	Capacity *	Connection**	height	width***	to axis	PN	Filter element		
m³/h	" BSPP	А	В	С	barg	cicinent			
FLC-2B-**E	90	1/4	220	147	55	16	2,5"		
FLC-5B-**E	110	3/8	220	147	55	16	2,5"		
FLC-7B-**E	150	1/2	220	151	55	16	2,5"		
FLC-9B-**E	200	3/4	220	151	55	16	2,5"		
FLC-11A-**E	290	1	312	188	75	16	5"		
FLC-12A-**E	380	1 1/4	312	198	75	16	5"		
FLC-13A-**E	450	1 1/2	312	198	75	16	5"		
FLC-141-**E	780	2	486	233	80	16	10"		
FLC-142-**E	1150	2	792	233	80	16	20"		
FLC-182-**E	1450	2 1/2	792	275	110	12	20"		
FLC-193-**E	1950	3	1056	289	110	12	30"		

All measurements are approximate.

\* ... reffered to compressed air/hitrogen flowrate, at 1 bar abs., +20°C & 7 barg. \*\* ... available alternative connection types, see last page. \*\*\* ... valid for BSPP connection, for other types ask for details

#### Flow correction factors according to pressure

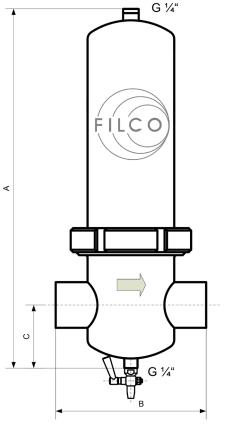
Pressure	bar g	1	2	3	4	5	6	7	8	9	10	16	
correction factor f		0,4	0,5	0,65	0,75	0,85	0,95	1	1,15	1,25	1,4	2,15	

To achieve the actual flow multiply the nominal air flow above factor  ${\bf f}.$ 

For exact calculation refer to the selection program or contact the partner Parker.

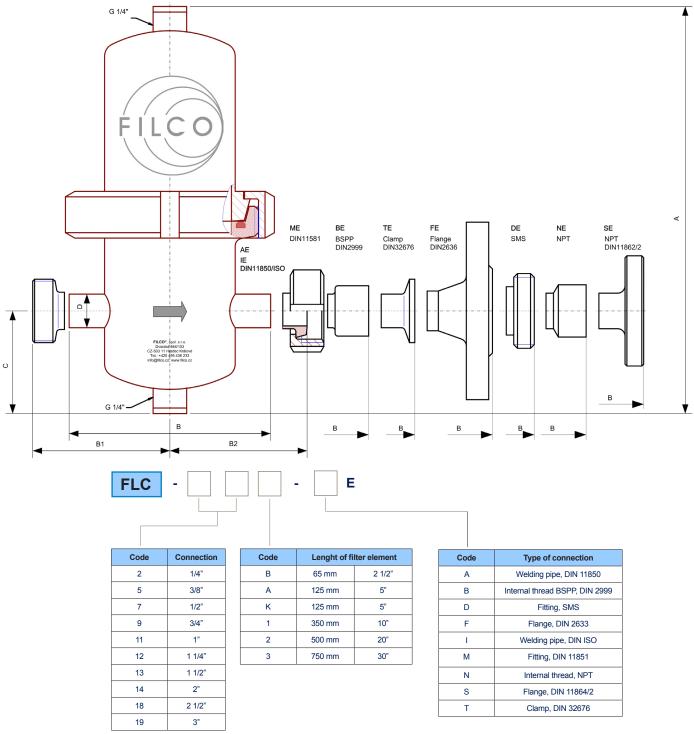






Filter elements

## **Connection types**



Example FLC-11A-BE: housing FLC, connection by internal screw 1" BSPP, filter element 5".



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