SS housings VBA

Process filtration
Compressed Air, Gases and Steam

A sanitary range of flow efficient housings from domnick hunter, 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 VBA 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.

VBA 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

» locking ring closure for extra security especially in high pressure steam

» available in a wide range of industry standard connections

Parker

ENGINEERING YOUR SUCCESS.

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 ≤ 0,8µm 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 filtration 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**
Multiple housings for higher flow rates	
Special connection types	

Filter elements specification

Filter media	pleated , PTFE-impregnated borosilicate hydrophobic micro-fibre **ZCHB**; pleated PTFE membrane **ZHFT,** stainless steel sintered **ZCSS** or pleated **ZCHS**
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 +145°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

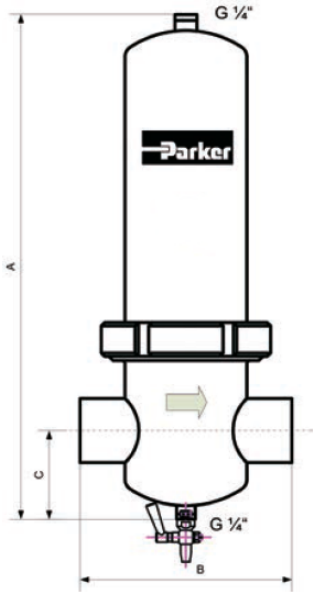
Model	Capacity *	Connection**	Dimensions (mm) height	width***	to axis	PN	Filter element
	m^3/h	" BSPP	A	B	C	barg	
VBA-2B-*E	90	1/4	220	147	55	16	2,5"
VBA-5B-*E	110	3/8	220	147	55	16	2,5"
VBA-7B-*E	150	1/2	220	151	55	16	2,5"
VBA-9B-*E	200	3/4	220	151	55	16	2,5"
VBA-11A-*E	290	1	312	188	75	16	5"
VBA-12A-*E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

All measurements are approximate.
* ... reffered to compressed air/nitrogen 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

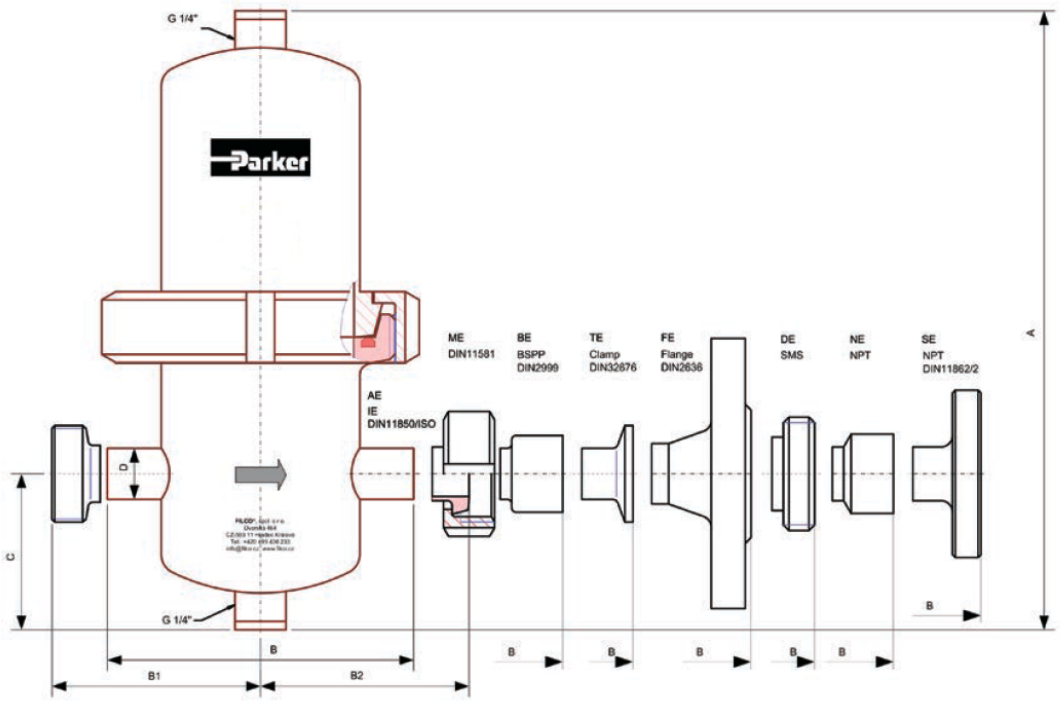
Pressure correction factor f	bar g	1	2	3	4	5	6	7	8	9	10	16
		0,4	0,5	0,65	0,75	0,85	0,95	1	1,15	1,25	1,4	2,15

To achieve the actual flow multiply the nominal air flow above factor **f**.
For exact calculation refer to the selection program or contact the partner Parker.



Filter elements

Connection types



VBA - ☐ ☐ ☐ - ☐ **E**

Code	Connection
2	1/4”
5	3/8”
7	1/2”
9	3/4”
11	1”
12	1 1/4”
13	1 1/2”
14	2”
18	2 1/2”
19	3”

Code	Lenght of filter element	
B	65 mm	2 1/2”
A	125 mm	5”
K	125 mm	5”
1	350 mm	10”
2	500 mm	20”
3	750 mm	30”

Code	Type of connection
A	Welding pipe, DIN 11850
B	Internal thread BSPP, DIN 2999
D	Fitting, SMS
F	Flange, DIN 2633
I	Welding pipe, DIN ISO
M	Fitting, DIN 11851
N	Internal thread, NPT
S	Flange, DIN 11864/2
T	Clamp, DIN 32676

Example **VBA-11A-BE**: housing VBA, connection by internal screw 1” BSPP, filter element 5”.