

DHHB Series

DESCRIPTION

Return Filter

Connection type and size:

Threaded connection: G $\frac{1}{2}$ " G $\frac{3}{4}$ " G1" G1 $\frac{1}{4}$ " G1 $\frac{1}{2}$ "

SAE Flange connection: DN40DN50DN65

Maximum flow rate up to 850 l/min

TECHNICAL PARAMETER

Maximum working pressure: 10 bar

Bypass valve opening pressure: 3 bar

Transmitter opening pressure: 2 bar

Temperature range: -29 to +100



MATERIALS

Head: Cast aluminium

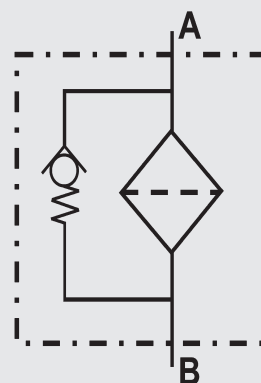
Filter bowl: Polyamide Seals:

NBR nitrile rubber (standard)

Or FKM fluororubber (customizable)

Filter element material: Fiberglass and wire mesh

Symbol for hydraulic systems



MEDIA COMPATIBILITY

Suitable for mineral oil, lubricating oil, fire-resistant oil, and rapidly biodegradable media.
(If used for water-based or special media, please consult our sales department.)

Ordering Options Table

DH H B 500 K F 10 N A 1 T

Filter type

Filter specification

90 150 75 165 185 195 330 500 661 851

Connection type and size

Type	Connection	Filter size										
		75	90	150	165	185	195	330	500	600	661	851
B	G ½	X	X	X	X	X	X					
C	G ¾	X			X	X	X					
D	G 1	●			●	●	●					
E	G 1¼									●		
F	G 1½							●	●	●		
K	SAE DN 40							●	●	●		
L	SAE DN 50									●		
M	SAE DN 65										●	●

X On request

Filter element material

F: Glass fiber

W: Stainless steel wire mesh

Filter fineness(μm)

(F): 03 05 10 20 30

(W): 05 10 20 30

Seals

N: NBR V: FKM

Differential pressure transmitter

A: Steel blanking plug in indicator port

E: Vacuum gauge indicator

BM: Visual (Automatic reset)

B: Visual (Automatic reset)

CM: Electrical indicator

C: Electrical indicator

CL: Visual and electrical indicators

Installation location of transmitter

0: Port no blockage indicator

1-4: The ports are shown in the corresponding size drawing

Note: The position of the blockage indicator

Supplementary parameters

T Belt air filter (only applicable to specifications 75-185)

Vxxx with extension tube (xxx represents the corresponding length)

Filter Element

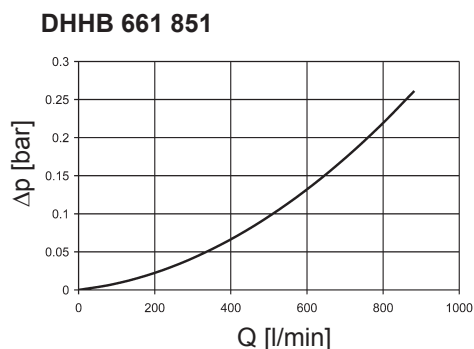
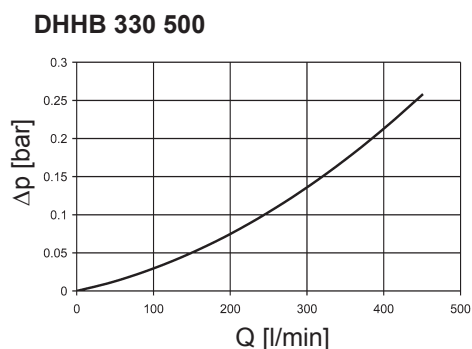
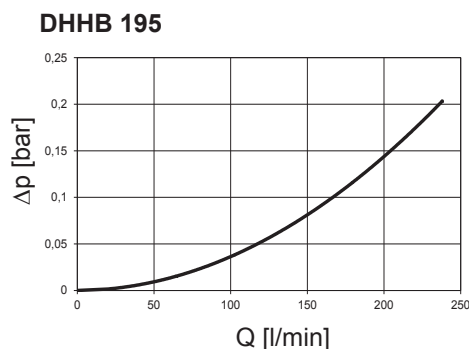
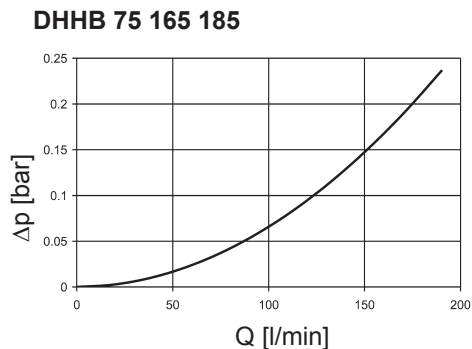
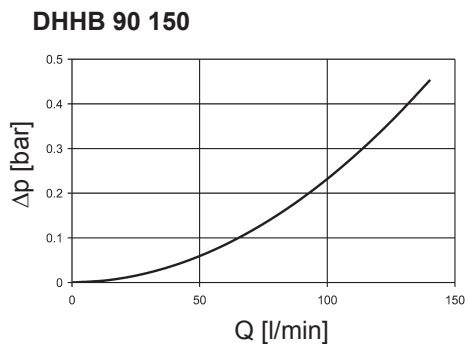
	DYHB	500	F	10	N
Filter element type					
Filter element specification					
90 150 75 165 185 195 330 500 661 851					
Filter element material					
F: Fiberglass W: Stainless steel wire mesh					
Filtration Fineness(μm)					
(F): 03 05 10 20 30 (W): 05 10 20 30					
Seals					
N: NBR V: FKM					

Maintenance Instructions

Filter housing must be grounded
 When using electric plugging, please replace the filter element.
 The system must be turned off before removing the clogging indicator light and power connector.

Δp -Q ISO 3968

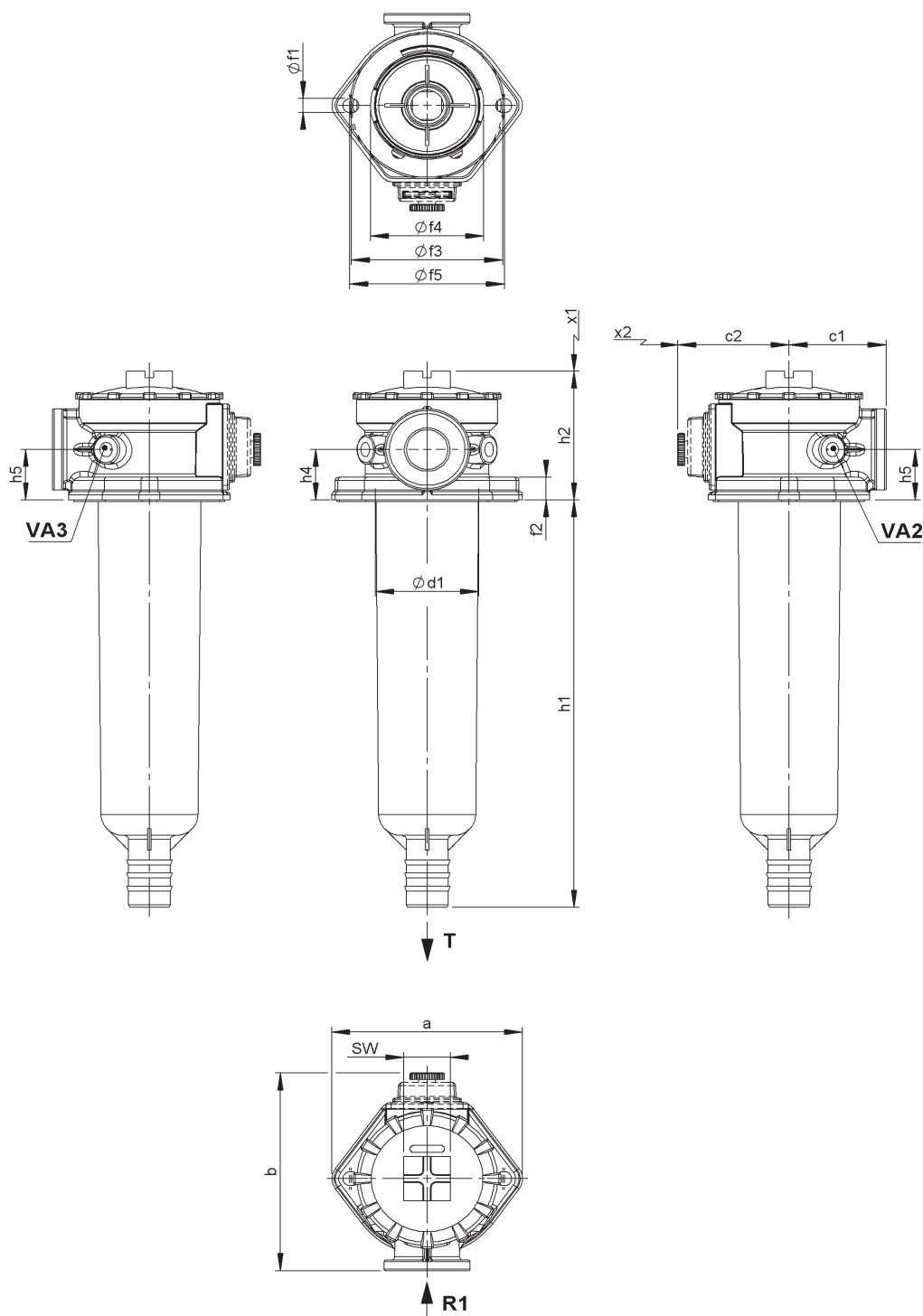
The housing curves apply to mineral oil with a density of 0.86 kg/dm³ and a kinematic viscosity of 30 mm²/s. In this case, the differential pressure changes proportionally to the density.



SPECIFICATIONS FOR THE TANK FLANGE

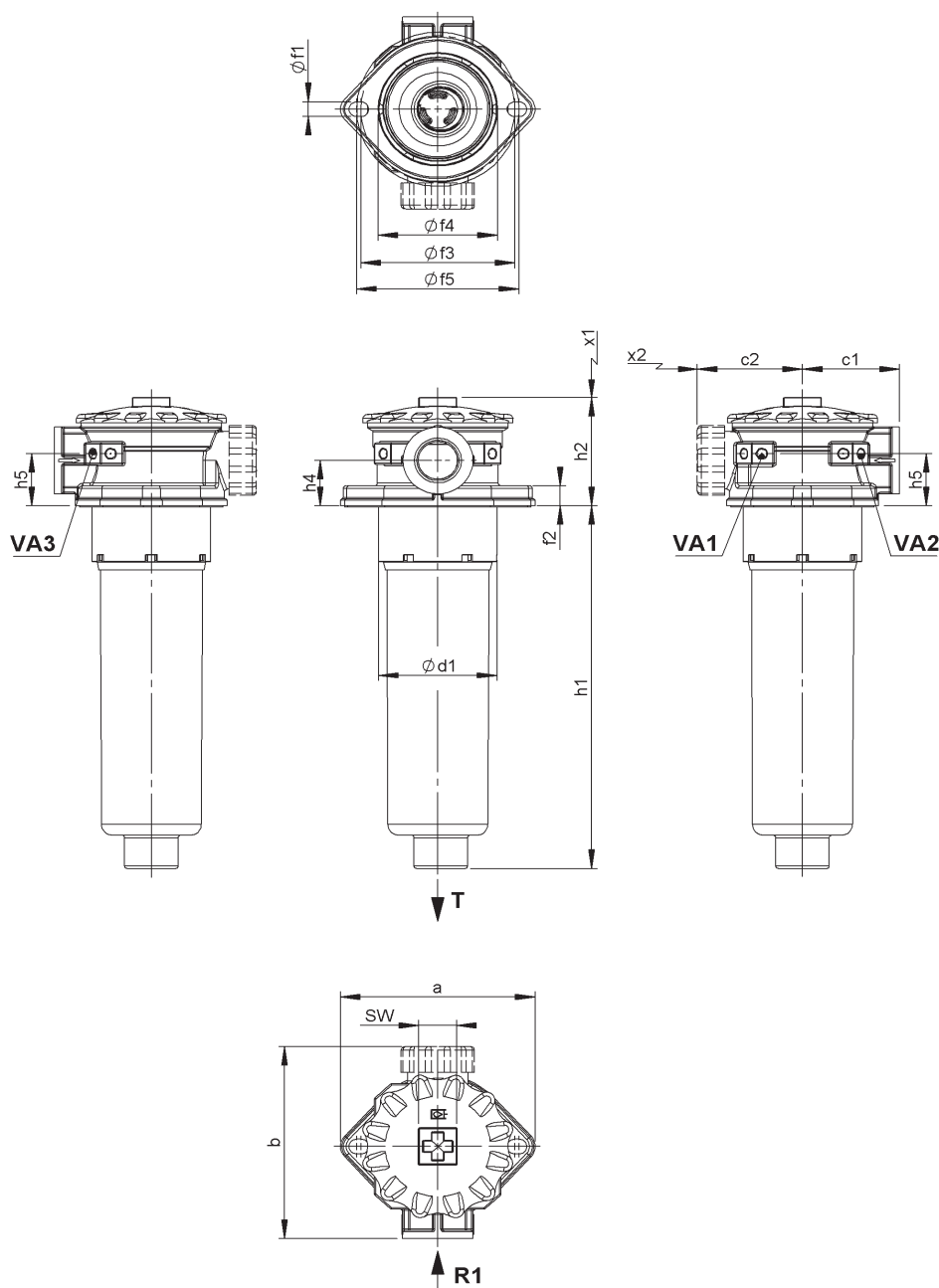
1. In the filter mounting interface, the tank flange should have a maximum flatness of 0.2 mm and a maximum roughness of Ra 3.2 μm.
2. In addition, the mounting interface should be free from damage and scratches.
3. The fixing holes of the flange must be blind, or stud bolts with threadlocker must be used to fix the filter. As an alternative, the tank flange can be continuously welded from the inside.
4. Both the tank sheet metal and the filter mounting flange must be sufficiently robust so that neither deform when the seal is compressed during tightening.

DHHB 90 150



VA = connection for clogging indicator
T = tank
R = tank connection

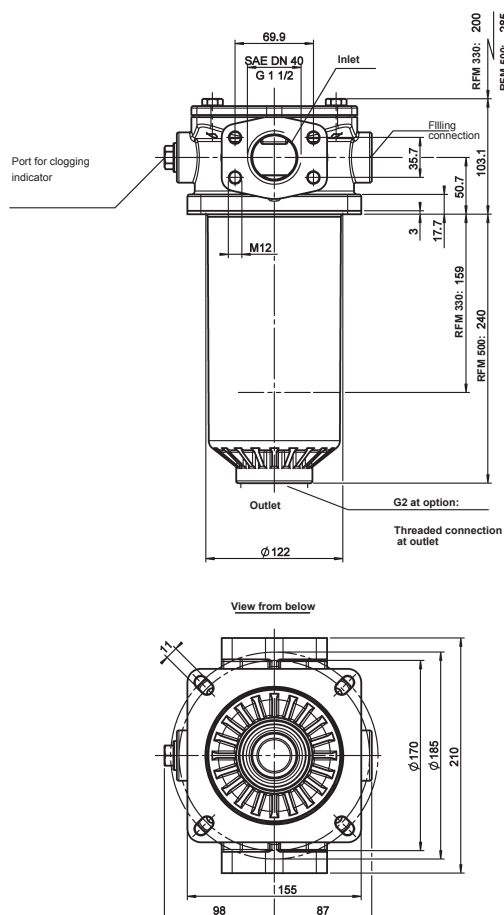
Size	a	b	c1	c2	Ød1	Øf1	f2	Øf3	Øf4	Øf5	h1	h2	h4	h5	x1	x2	SW	Weight incl. element [kg]	Vol. of pressure chamber [l]
90	111	121.5	56.5	65	60	8.5	14	88	66	90	167	79	31	31	215	20	27	[kg]	[l]
150											250				300			0.54	0.60
																		0.75	0.80

DHHB 75 165 185 195


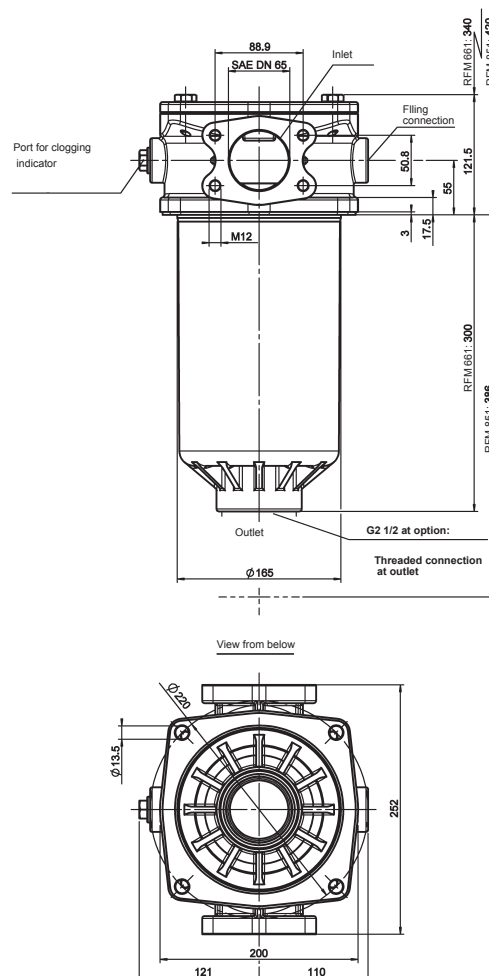
VA = connection for clogging indicator
 T = tank
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Size	a	b	c1	c2	Ød1	Øf1	f2	Øf3	Øf4	Øf5	h1	h2	h4	h5	x1	x2	SW	Weight incl. element [kg]	Vol. of pressure chamber [l]
																		[kg]	[l]
75	138.5	144	69	75	84.3	11	15	109.5	85	115.5	128	81	34	39	165	40	27	0.90	0.70
165											212				245			1.10	1.00
185											278				315			1.14	1.20
195											369				405			1.30	1.60

DHHB 330 500



DHHB 661 851



GRADIENT COEFFICIENTS (SK) FOR FILTER ELEMENTS

ts in mbar/(l/min)

Apply to mineral oils with a kinematic viscosity of 30 mm²/s. The pressure drop changes proportionally to the change in viscosity

DHHB	Weight incl. element [kg]	Vol. of pressure chamber [l]
330	3.90	2.00
500	4.50	3.00
661	9.00	7.20
851	10.50	8.50

DHHB	F					
	1 µm	3 µm	5 µm	10 µm	15 µm	20 µm
75	25.6	19.4	13.4	7.31	4.80	4.40
90	22.5	13.1	9.49	6.07	4.30	3.21
150	13.4	7.80	5.65	3.61	2.55	1.91
165	14.1	9.44	7.37	4.02	2.25	2.42
185	10.4	7.44	5.74	2.93	1.65	1.41
195	7.66	5.48	4.22	2.16	1.22	1.04
330	8.09	3.72	2.73	1.48	1.28	1.02
500	5.27	2.60	1.90	1.09	0.84	0.69
660	3.57	1.69	1.21	0.67	0.57	0.45
850	2.77	1.31	1.00	0.58	0.44	0.36

DHHB	W				-
	3 µm	5 µm	10 µm	20 µm	
75	22.0	14.2	8.1	4.4	0.362
90	14.9	10.1	6.7	3.2	0.312
150	8.9	6.0	4.0	1.9	0.185
165	11.2	7.8	4.5	2.4	0.199
185	8.9	6.1	3.3	1.8	0.907
195	6.6	4.5	2.4	1.3	0.668
330	4.2	2.7	1.7	1.2	0.195
500	3.0	1.9	1.3	0.8	0.128
660	1.9	1.2	0.8	0.5	0.067
850	1.5	1.0	0.7	0.4	0.052

Annotate:

All information in this manual relates to the described working environment and application conditions.

For applications and working conditions that are not described, please contact the relevant technical department. Technical modifications are possible.