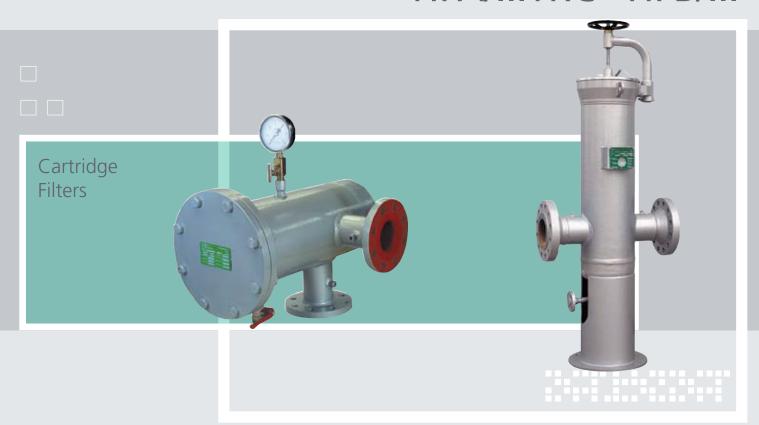


# HFA/...TRC HFB/...





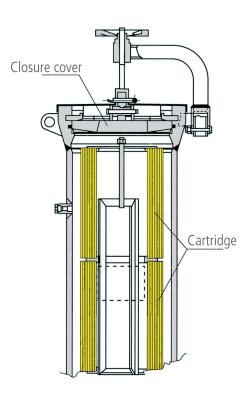




Cartridge Filters

## Introduction

In the gas pressure reduction and metering plants, it is good practice to protect the pressure regulators, thevalves, the positive displacement meters etc. from the solid particles present in the gas, if any. The filters are used to this purpose. They are manufactured in different types and sizes inorder to meet all the plants needs. They are equipped with nipples for the assembly of the several accessories usefulfor a good operation. The filters construction is stout and they may be easily installed and maintained. The filtering element is able to filter the solid particles with filtrations up to 5  $\mu$ .



HFA/...

Fig.1



## **Calculations Of Filtering Area**

$$A = \frac{Q}{P \times V \times 3600}$$

Where:

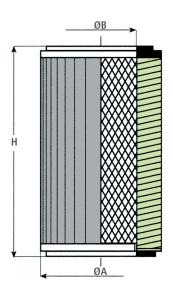
A= Filtering area in smq.

Q= Filter flow rate Stm3/h.

P= Absolute pressure in bar.

V = Speed at the filter cartridge in m/sec (suggested 0,33).

# **Filtering Cartridge Dimensions**



Туре	G 0,5	G 1	G 1,5	G 2	G 2,5	G 3	G 4	G 5	G 6
H (mm)	120	165	210	270	283	320	415	470	625
A (mm)	80	95	120	165	200	252	299	390	475
B (mm)	35	50	69	86	110	138	186	246	320
Filter Area (Sqm)	0,06	0,125	0,23	0,47	0,725	0,95	1,45	2,30	4,20

# Designed With Your Needs In Mind

- Compact Design
- Easy Maintenance
- Top Entry
- Fast Response Time
- High Turn Down Ratio
- High Accuracy
- Low Operation Cost
- Wide Range of Applications





## Cartridge Filters

#### **Main Features**

- Max working pressure: up to 17,6 bar-
- Max working temperature: up to 60 °C
- Service: natural gas, town gas, non corrosive gases.
- Colletting capacity: over 12% of total filter capacity with drain on botton part
- Flanging: ANSI 150 RF and PN 16 UNI/DIN
- Connections: in-line HFA/... or right angles HFB/..

## **Materials**

- Pipe: ASTM A 106 Gr. B - Flanged: ASTM A 105

## **Filtering Element**

- Material: Felt polyester drilled and reinforcing steel plate.
- Filtering capacity: 3 5 50  $\mu m$
- Efficiency: 98%
- Type: G0,5 G1 G1,5 G2 G2,5 G3 G4 G5 G6



HFB/...

## **Available Accessory**

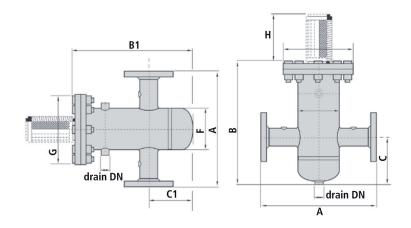
- Single or double drain ball valve
- Clogging indicator
- Loss of pressure indicator with remote switch (reed contact)
- 3 valves 5 ways carbon or stainless steel manifold forloss of pressure indicator by-pass
- Pressure gauge
- Differential pressure switch
- Level gauge switch

TYPE Available nozzle DN							Drain DN	Cartridge type	Cartridge Q.ty	Weight Kg.	Total vol. (liters)
HFA/05	HFB/0,5	25	32	40	50	-	1/2"	G0,5	1	30	3
HFA/1	HFB/1	25**	32	40	50	-	1/2"	G1	1	30	5
HFA/1,5	HFB/1,5	40*	50	65	80	-	1/2"	G1,5	1	42	10
HFA/2	HFB/2	40	50	65	80	100	1/2"	G2	1	70	20
HFA/2,5	HFB/2,5	80	100	125	-	-	1/2"	G2,5	1	85	40
HFA/3	HFB/3	100	125	150	200*	-	1/2"	G3	1	130	60
HFA/4	HFB/4	150	200	-	-	-	1"	G4	1	250	180
HFA/5	HFB/5	200	250	-	-	-	1"	G5	1	395	215
HFA/6		300*	350*	-	-	-	1"	G6	1	750	420

<sup>\*</sup> only HFA/.. filters

<sup>\*\*</sup> only HFB/.. filters



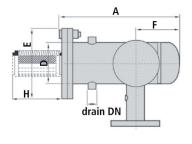


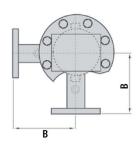
## HFA/...

## Overall dimensions in mm

Туре	0,5	1	1,5	2	2,5	3	4	5	6*
Α	300	400	450	500	600	650	800	900	1100
В	368	443	528	642	744	852	1032	1192	-
B1	350	426	512	624	726	835	1010	1172	-
C	156	178	207	233	271	310	360	444	537
C1	138	161	191	215	253	293	338	424	513
F	114,3	141,3	168,3	219,1	273	323,8	406,4	508	609
G	220	250	285	340	405	460	580	715	812
Н	120	165	210	270	283	320	415	470	625

 $<sup>\</sup>ensuremath{^{\star}}$  Skirt and cover lifting device included on filter

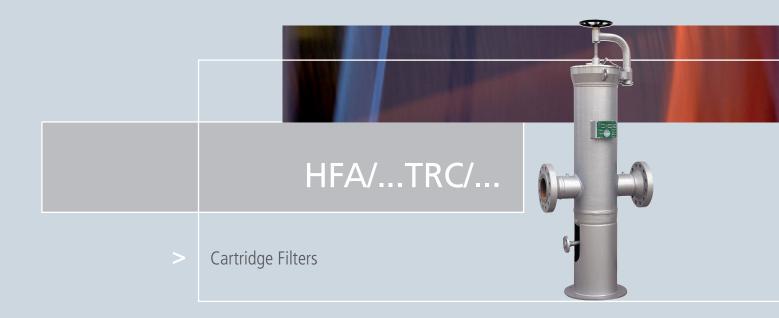




## HFB/...

## Overall dimensions in mm

Type	0,5	1	1,5	2	2,5	3	4	5	
A	360	425	512	625	746	840	1078	1210	
В	150	200	230	250	300	350	400	450	
D	114,3	141,3	168,3	219,1	273	323,8	406,4	508	
Е	220	250	285	340	405	460	580	715	
F	138	159	190	220	254	293	336	425	
Н	120	165	210	270	283	320	415	470	



#### **Main Features**

- Max design pressure: up to 102 bar
- Max working temperature: up to 100 °C
- Service: natural gas, town gas, non corrosive gases.
- Quick opening closure
- Colletting capacity: over 12% of total filter capacity with drain on botton part
- Flanging: ANSI 150/300/600 RF o RJ
- Connections: in-line

#### Materials

Standards Materials:

- Pipe: ASTM A 106 Gr. B
- Flanged: ASTM A 105

Other materials available on request.

## **Filtering Element**

- Material: Felt polyester drilled and reinforcing steel plate.
- Filtering capacity: 3 5 50  $\mu m$
- Efficiency: 98%
- Type: G1 G1,5 G2 G2,5 G3 G4 G5 G6



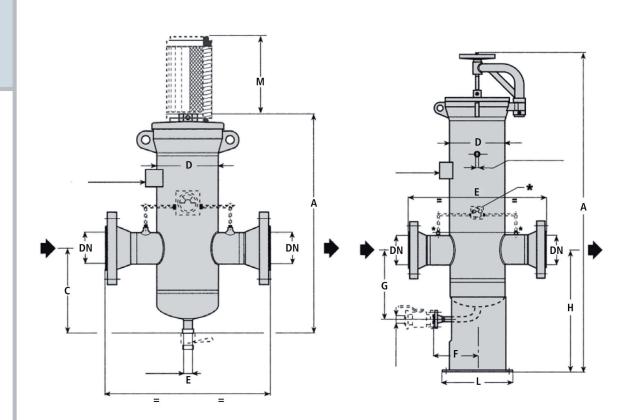
**HFA/1-15 TRC** 

## **Available Accessory**

- Single or double drain ball valve
- Clogging indicator
- Loss of pressure indicator with remote switch (reed contact)
- 3 valves 5 ways carbon or stainless steel manifold for loss of pressure indicator by-pass
- Pressure gauge
- Differential pressure switch
- Level gauge switch

ТҮРЕ	Available nozzle DN					Drain DN	Cartridge type	Cartridge Q.ty	Weight Kg.	Total vol. (liters)
HFA/1 TRC	1"1/2	2"	2"1/2	3"	/	1/2"	G1	1	55	6
HFA/1,5 TRC	-	2"-	2"1/2	3"	/	1/2"	G1,5	1	60	10
HFA/2 TRC	-	2"1/2	3"	4"	/	1/2"	G2	1	110	21
HFA/10 TRC	1"1/2	2"-	2"1/2	3"	/	1/2"	G 2	2	65	10
HFA/15 TRC	2"	2"1/2	3"	4"	/	1/2"	G1,5	2	75	15
HFA/20 TRC	-	2"1/2	3"	4"	/	1"	G 2	2	170	30
HFA/25 TRC	3"	4"	5"	6"	/	1"	G 2,5	2	320	50
HFA/30 TRC	-	-	5"	6"	/	1"	G3	2	370	85
HFA/40 TRC	-	-	6"	8"	/	1"	G4	2	690	170
HFA/50 TRC	-	6"	8"	10"	/	1"1/2	G5	2	1400	320
HFA/60 TRC	8"	10"	12"	14"	16"	1"1/2	G6	2	2000	550





From HFA/1 - TRC to HFA/15 - TRC

From HFA/20 - TRC to HFA/60 - TRC

#### Overall dimensions in mm

Type	1	1,5	2	10	15	20	25	30	40	50	60
Α	530	613	750	706	860	1560	1600	2031	2435	2694	3209
C	187	209	268	187	230	-	-	-	-	-	-
D	141,3	168,3	219,1	141,3	168,3	219,1	273	323,8	406,4	508	610
E	500	550	650	500	550	650	750	800	1000	1100	1200
F	-	-	-	+	=	200	200	250	320	350	400
G	i.e.	-	- e	-	-	330	365	420	550	660	750
Н	-	-	-	-	-	800	800	800	900	1000	1100
L	-	-	-	-	-	400	425	475	520	640	640
M	165	210	270	165	210	270	283	320	415	470	625



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