

## GAS FILTERS HUF SERIES

### INSTRUCTION SHEET



#### APPLICATION

To filter fuel gas and combustion air supply to all gas consuming appliances.

Applicable types of fuel:

- manufactured gases (town gas)
- natural gases (group H - methane)
- liquefied petroleum gas (LPG)
- non-aggressive gases
- air

The filter complies with the requirements of DIN 3386.

#### SPECIFICATIONS

##### Product range

Model HUF (pipe sizes 1/2" up to DN150)

##### Dimensions

See dimensional drawings and table on page 2

##### Pipe size

1/2" up to 2" inlet and outlet internal pipe thread according to ISO 7-1

DN25 up to DN150 inlet and outlet flange connections according to DIN 2633-UNI 2229-PN16

##### Maximum inlet pressure

Threaded version: 10 bar

Flanged version: 10 bar

##### Ambient temperature range

Between: -15....80 °C

##### Connections

Threaded version: Rp 1/4" connections for inlet or outlet pressure taps

Flanged version: Rp 1/4" connections for inlet or outlet pressure taps

##### Capacity

See capacity curves on page 5.

##### Torsion and bending stress

Pipe connections meet group 2, according to EN161 requirements.

##### Seals and gaskets

Hydrocarbon resistant NBR rubber type, DIN 3535/1

##### Body material

Aluminium ally die cast, UNI 5076/3051

##### Filter

Self-extinguishing synthetic fibre for gases, conform to DVGW-G260/1.

Galvanized electro welded mesh.

##### Standards and Approvals

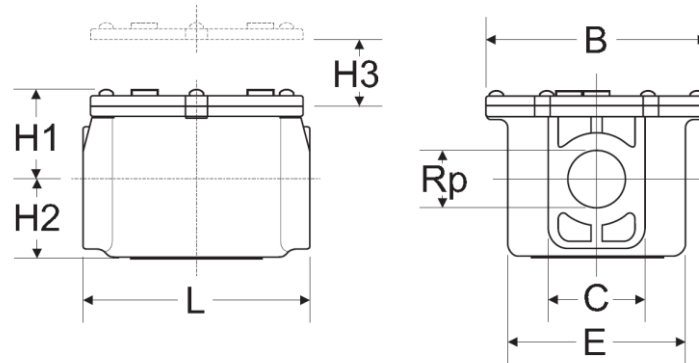
The HUF Series gas filters comply with the following EC directives:

- Gas Appliance Directive (90/396/EWG)

PIN: CE-0085A50222

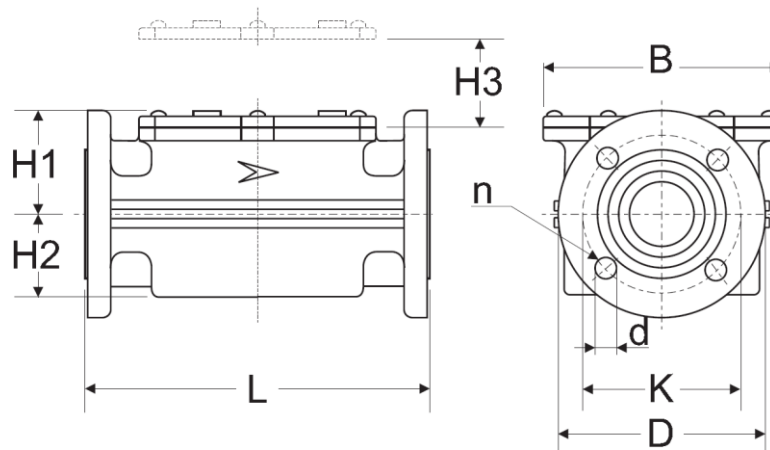
## OVERALL DIMENSIONS HUF SERIES

### a. (THREADED CONNECTIONS)



Model	Connection (Rp)	Max. Operating Pressure	Overall Dimensions (mm)							Weight (kg)
			(ISO 7-1)	(mbar)	L	B	H1	H2	H3	
HUF015B160	1/2"	10	114	124	56	48	100	88	48	0.82
HUF020B160	3/4"	10	114	124	56	48	100	88	48	0.81
HUF025B160	1"	10	114	124	56	48	100	88	48	0.80
HUF032B160	1 1/4"	10	150	154	62	56	110	123	68	1.36
HUF040B160	1 1/2"	10	150	154	62	56	110	123	68	1.28
HUF050B160	2"	10	182	187	80	65	140	150	80	2.17

### b. (FLANGED CONNECTIONS)



Model	Connection	Max. Operating Pressure	Overall Dimensions (mm)									Weight (kg)
			(PN16)	(mbar)	L	B	H1	H2	H3	D	K	
HUF040B360	DN40	10	269	154	62	56	110	150	110	18	4	2.98
HUF050B360	DN40	10	298	187	80	65	140	165	125	18	4	4.23
HUF065B360	DN65	10	354	247	117	111	220	185	145	18	4	6.90
HUF080B360	DN80	10	354	247	117	111	220	200	160	18	8	7.50
HUF100B360	DN100	10	354	247	117	111	220	210	180	18	8	10.75
HUF150B360	DN150	10	474	380	180	145	300	285	240	23	8	22.50

## INSTALLATION

### Important

1. Read these instructions carefully. Failure to follow the instructions could damage the product or cause a hazardous condition.
2. The installation has to be carried out by qualified personnel only.
3. Carry out a thorough checkout when installation is completed.



### Warning

- Turn off gas supply before installation.
- Do not remove the seal over filter inlet and outlet, until ready to connect piping.
- The filter must be installed so that the arrow on the regulator points in the direction of the gas flow.

### Mounting position

No restrictions, make sure that the filter is assembled in such way, that the cover can be removed easily for inspection or cleaning.

The filter can be installed in different positions provided there is sufficient room above the cover to remove the filter cartridge. Check that the filter body is at least 30 mm from any hot wall.

### Threaded version

- Take care that dirt cannot enter the gas filter during handling.
- Ensure the gas flow in the same direction as the arrow on the housing of the gas filter.
- Use a sound taper fitting with thread according to ISO 7-1 (BS21, DIN 2999) or a piece of new, properly reamed pipe, free from swarf.
- Do not thread or tighten the pipe or pipe fitting too far, otherwise filter distortion and malfunction could result.
- Apply a moderate amount of good quality thread compound to the pipe or fitting only, leaving the two end threads bare.
- PTFE tape may be used as an alternative.
- In order to tighten the pipe in the filter, use a suitable wrench operating on the wrench bosses.

### Flanged version

- Take care that dirt cannot enter the gas filter during handling.
- Ensure the gas flow in the same direction as the arrow on the housing of the gas filter.
- Ensure that inlet and outlet flanges are in line and separated from each other enough to allow the filter to be mounted between them without damaging the gasket.
- Place gasket. If necessary grease it slightly to keep it in place.
- Mount gas filter between flanges using the bolts for each flange.

## MAINTENANCE

Change the filter element when  $\Delta p$  between the pressure taps connections exceeds 10 mbars; it is recommended to replace the filter element at least once a year.

### Replacing filter element

See page 5 for an overview of replacement part numbers.

To replace the filter element you need to:

1. Turn off gas supply before replacing.
2. Unscrew the screw and remove the cover; making sure there is no pressure inside the filter.
3. Remove the cartridge and thoroughly clean the filter housing.
4. Replace the old filter element by a new one.
5. Seat the new cartridge inside the body making sure that it adheres perfectly to the side ribs, bearing in mind that inlet stamp on the concave part of the cartridge must be placed at the filter inlet. Tighten the screws.
6. Slowly open the inlet valve and check for any gas leakage from the filter cover.



### Warning

#### Tightness test after installation

- Spray all pipe connections and gaskets with a good quality gas leak detection spray.
- Start the appliance and check for bubbles. If a leak is found in a pipe connection, remake the joint.  
A gasket leak can usually be stopped by tightening the mounting screws. Otherwise replace the gas filter.

## CAPACITY CURVES

### Important

When reading the diagram you must apply operating cubic meters. The pressure loss  $\Delta p$  then read must be multiplied with the absolute pressure in bar (excess pressure +1), this is to take the density fluctuations into consideration. This pressure loss must not exceed 10 mbar.

#### Calculation example (see diagram on page 4)

##### Excess gas pressure:

4 bar

##### Operating flow rate:

150m<sup>3</sup>/h natural gas

##### Filter chosen from the diagram:

HUF DN65 (flanged version)

##### Pressure loss read:

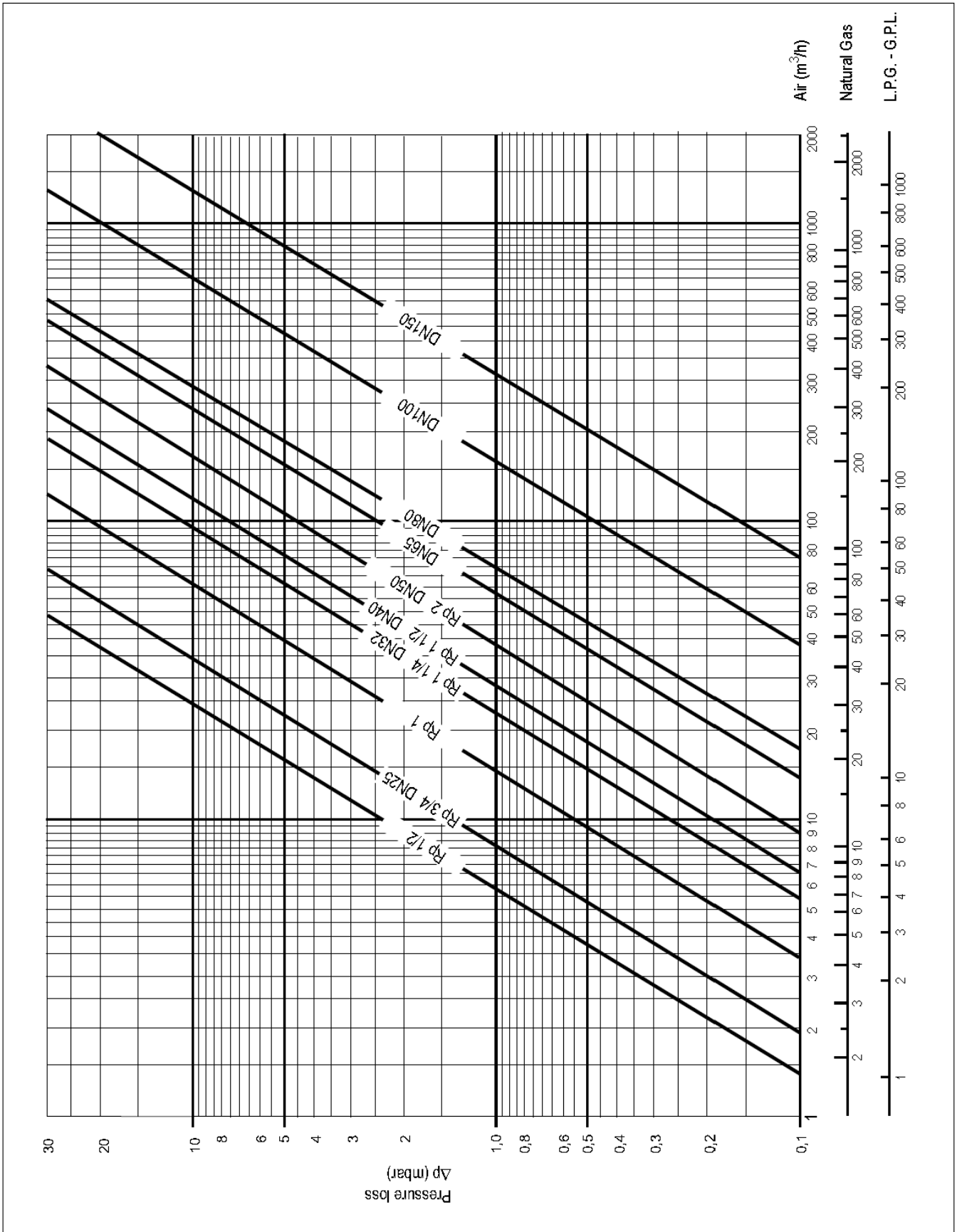
1,7 mbar

##### Real pressure loss:

$\Delta p = 5(\text{excess pressure} + 1) \times 1,7 \text{ mbar} = 8,5 \text{ mbar}$

The real pressure loss is less than 10 mbar, therefore, the correct filter size has been chosen.

## CAPACITY CURVES OF HUF SERIES (capacity m<sup>3</sup>/h natural gas at 1013 mbar, 15°C)



## FILTER CARTRIDGES

### IMPORTANT

To select the correct part number of the filter cartridge, checking the production date code that is printed on the product label is crucial.



Location of production date code on the label

The date code has the following format: F1ydddy, where yy is the year and ddd the day.

Example: F103379 (see picture) indicates a HUF gas filter (F1) and it was produced on the 33<sup>th</sup> day in 2009.

Model and date codes	Filter Cartridge
HUF015Bx/20Bx/25B1 (current)	KTFL1-1200A
<i>HUF025B1 (before F102405) and for HUF025B3 (current)</i>	<i>KTFL1-1300A</i>
HUF32/40/50Bx (current)	KTFL1-1800A
<i>HUF050Bx (before F103507)</i>	<i>KTFL1-1400A</i>
<i>HUF065Bx (before F101778) and for HUF080Bx (before F101358)</i>	<i>KTFL1-1500A</i>
<i>HUF065Bx (between F101788 and F101319) and for HUF080Bx (between F101368 and F1011319)</i>	<i>KTFL1-1900A</i>
HUF065Bx/080Bx (current)	KTFL1-2000A
<i>HUF100Bx (before F102608)</i>	<i>KTFL1-1600A</i>
HUF150Bx (current)	KTFL1-1700A

# Sales Affiliates ECC OEM EMEA

## Germany, Austria, Switzerland, Liechtenstein

Honeywell GmbH - Hardhofweg - 74821 Mosbach - GERMANY

Ph.: (+49) 6261 81 0 - Fax: (+49) 6261 81 461 - OEM-SalesCentralEurope@Honeywell.com - [www.honeywell.com/sites/de](http://www.honeywell.com/sites/de)

## France

Honeywell SA - Parc Technologique de St. Aubin - Bâtiment Mercury BP87 - 91193 Gif-Sur-Yvette Cedex - FRANCE

Ph.: (+33) 1 60 19 80 00 - Fax: (+33) 1 60 19 81 81 - OEM-SalesWestEurope@Honeywell.com - [www.honeywell.com/sites/fr](http://www.honeywell.com/sites/fr)

## Italy

Honeywell srl - Via Philips n.12 - 20052 Monza - ITALY

Ph.: (+39) 0 39 21 65 1 - Fax: (+39) 0 39 21 65 402 - OEM-SalesSouthEurope@Honeywell.com - [www.honeywell.it](http://www.honeywell.it)

## Spain, Portugal

Honeywell S.A. - Josefa Valcárcel 24 - 28027 Madrid - SPAIN

Ph.: (+34) 9 13 13 61 00 - Fax: (+34) 9 13 13 61 27 - OEM-SalesSouthEurope@Honeywell.com - [www.honeywell.com/sites/es](http://www.honeywell.com/sites/es)

## United Kingdom

Honeywell Control System Ltd. - Unit 2 President Buildings, Savile Street East - S Yorks S4 7UQ - SHEFFIELD - UNITED KINGDOM

Ph.: (+44) 114 286 0920 - OEM-SalesUK@Honeywell.com - [www.honeywell.com/sites/uk](http://www.honeywell.com/sites/uk)

## Netherlands, Scandinavia

Honeywell B.V. - Laarderhoogtweg 18-20 - 1101 EA Amsterdam Z.O. - THE NETHERLANDS

Ph.: (+31) 2 05 65 69 11 - Fax: (+31) 2 05 65 66 00 - OEM-SalesWestEurope@Honeywell.com - [www.honeywell.com/sites/nl](http://www.honeywell.com/sites/nl)

## Belgium, Luxembourg

Honeywell NV - Hermes Plaza Hermeslaan, 1H - 1831 Diegem - BELGIUM

Ph.: (+32) 2 728 27 11 - Fax: (+32) 2 728 24 68 - OEM-SalesWestEurope@honeywell.com - [www.honeywell.be](http://www.honeywell.be)

## Turkey

Honeywell A.S. - Cayiriyolu Sok. No:7 - Ucggen Plaza, Kat:7 - Icerenkoy 34752 Istanbul - TURKEY

Ph.: (+90) 216 578 7120 - Fax: (+90) 216 575 6637 - OEM-SalesSouthEurope@Honeywell.com - [www.honeywell.com/sites/tr](http://www.honeywell.com/sites/tr)

## Slovakia

Honeywell s.r.o. - Mlynske Nivy 71 - PO Box 75 - 82007 Bratislava 27 - SLOVAKIA

Ph.: (+421) 2 322 622 11 - Fax: (+421) 2 322 622 55 (54) - OEM-SalesEasternEurope@Honeywell.com - [www.honeywell.sk](http://www.honeywell.sk)

## Czech Republic

Honeywell spol. s.r.o. - V parku 2326/18 - 14800 Prague - CZECH REPUBLIC

Ph.: (+420) 242 442 111 (255) - Fax: (+420) 242 442 181 - OEM-SalesEasternEurope@Honeywell.com - [www.honeywell.com/sites/cz](http://www.honeywell.com/sites/cz)

## Kazakhstan

Honeywell Automation Controls - 42, Timiryazev Str. - 050057 Almaty - KAZAKHSTAN

Ph.: (+7) 727 2747 747 - Fax: (+7) 727 2752 252 - OEM-SalesEasternEurope@Honeywell.com - [www51.honeywell.com/ru](http://www51.honeywell.com/ru)

## Ukraine

IP Honeywell Ukraine - Silver Centre - 4, Ivana Lipse ave. - 03680 Kiev - UKRAINE

Ph.: (+380) 44 351-15-50 (52) - Fax: (+380) 44 351-15-51 (53) - OEM-SalesEasternEurope@Honeywell.com - [www51.honeywell.com/ru](http://www51.honeywell.com/ru)

## Russia

ZAO Honeywell - Luzhniki 24 - 119048 Moscow - RUSSIA

Ph.: (+7) 495 796 9800 (35) - Fax: (+7) 495 796 9894 (797 9370) - OEM-SalesEasternEurope@Honeywell.com - [www51.honeywell.com/ru](http://www51.honeywell.com/ru)

## Hungary

Honeywell Kft. - Petnehazy U. 2-4 - 1139 Budapest - HUNGARY

Ph.: (+36) 1 451 4300 (46) - Fax: (+36) 1 451 4343 - OEM-SalesEasternEurope@Honeywell.com - [www51.honeywell.com/hungary](http://www51.honeywell.com/hungary)

## Poland

Honeywell Sp.z.o.o. - Domaniewska 39b - 02672 Warsaw - POLAND

Ph.: (+48) 22 60 60900 (50) - Fax: (+48) 22 60 60983 - OEM-SalesEasternEurope@Honeywell.com - [www.honeywell.com/sites/pl](http://www.honeywell.com/sites/pl)

## Romania

Honeywell Romania SRL - Calea Floreasca 169A - 014462 Bucharest - ROMANIA

Ph.: (+40) 312 24 3000 (3) - Fax: (+40) 212 31 6439 - OEM-SalesEasternEurope@Honeywell.com - [www.honeywell.com/sites/romania](http://www.honeywell.com/sites/romania)

● **Honeywell Technologies Srl**  
**ACS – ECC EMEA**  
**Z.A. La Piece 16**  
**CH-1180 Rolle**  
**Switzerland**  
**Ph.: (+41) 21 695 3000**  
**Fax: (+41) 21 695 3030**  
**<http://ecc.emea.honeywell.com>**  
**[www.honeywell.com](http://www.honeywell.com)**

**Combustion Controls EMEA**

**Honeywell**

