

Rotary filter HON 906, HON 906a, HON 907



PRODUCT INFORMATION

**Serving the Gas Industry
Worldwide**

Honeywell

Rotary Filter HON 906, HON 906a, HON 907

Applications, characteristics, technical data


Applications

- Filter for commercial and industrial gas systems
- Applicable for gases accor. to DVGW worksheet G 260 and neutral, non-aggressive gases: other gases on enquiry.

Characteristics

- High filtration efficiency
- Filter insert with replaceable special paper filter with plug-fit connection in filter baskets
- Environmentally-friendly disposal of the soiled filter paper
- Re-usable filter baskets
- Special features with HON 906a:
Large dust collection chamber, optionally with magnetic insert for dust pre-separation

Technical Specifications					
Type	HON 906	HON 906a			HON 907
Max. permissible pressure PS	16 bar	16 bar	25 bar	20 bar	16 bar
Flange pressure stage	PN 16	PN 16	PN 25	Class 150 RF	PN 16
Nominal width	DN 25	DN 25	DN 25	DN 25	DN 25
	DN 50	DN 50	DN 50	DN 50	DN 50
	DN 80	DN 80	DN 80	DN 80	DN 80
	DN 100	DN 100	DN 100	DN 100	DN 100
	DN 150	–	–	–	–
Type of connection	EN flanges PN 16	EN flanges PN 16, PN 25 ANSI flanges Class 150 RF			EN flanges PN 16
Temperature range	Operating / environmental temperature –20 °C to +60 °C				
Filter paper	Pleated special paper				
Filter surface	DN 25	DN 50	DN 80	DN 100	DN 150
	0.050 m ²	0.193 m ²	0.571 m ²	0.933 m ²	2.256 m ²
Max. flow speed in the DN nominal pipeline width	20 m/s (with high dust loads, a significantly lower flow speed is recommended)				

Technical Specifications				
Filtration efficiency	Filter paper		Separated particle size in μm	Filtration efficiency in %
	Types	Version		
	1	standard	>10	99
	2	polyester-reinforced	> 4	
3	fine-pore	> 2		
Pressure loss/volume flow	see pages 8 to 10			
Guideline for new filter insert	$\Delta p \leq 50$ mbar or 20m/s in DN nominal width			
Limit for soiled filter insert	$\Delta p_{\text{max}} = 500$ mbar			
Supplemental fixtures/options	<ul style="list-style-type: none"> - with differential pressure measuring device (with electrical remote indication, differential pressure manometer with Reed contact) - Filter inserts of other manufacturers 			
Material	Body	Cast aluminium alloy (HON 906, DN 25 to DN 100; HON 907, all DN) Ductile iron (HON 906, DN 150; HON 906a)		
	Filter basket	Steel perforated plate, galvanised		
	Seals	NBR		
Function, strength and testing	DIN 3386, DVGW worksheet G 498 and DIN 30690-1			
CE mark in accordance with PED and PIN no.			<ul style="list-style-type: none"> - HON 906 CE-0085 - HON 906a CE-0085 - HON 907 CE-0085 	
Explosion protection	<p>All mechanical components of this device are without ignition sources. They are not subject to ATEX 95 (94/9/EC).</p> <p>All electronic accessories, on the other hand, meet ATEX requirements.</p>			

Rotary Filter HON 906, HON 906a, HON 907

Construction and function

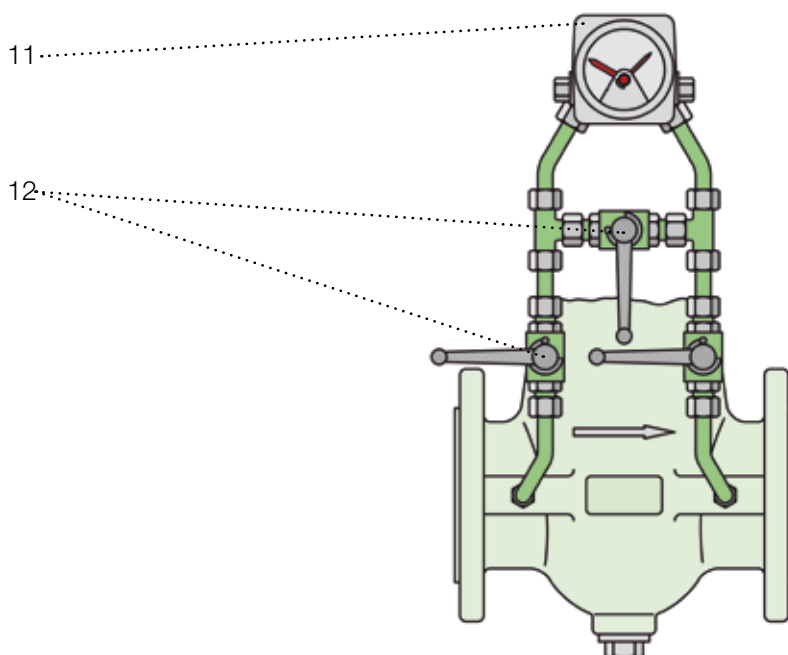
Gas rotary filters of the types HON 906, HON 906a and HON 907 are designed to separate impurities at a defined position in gas, such as dust, rust and other solid particles in gas-carrying lines, preferably in gas pressure regulating and measuring systems.

The filters essentially consist of the housing (1), the hood (2) and the filter insert (3). Easy access to the filter insert is assured by lifting off the hood. The filter insert consists of the plug-fit filter basket (4) and the filter paper with 2 rubber rings (5). The design enables easy replacement when dirty and environmentally-friendly disposal. A filter paper with the appropriate pore size must be used depending on the application and particle size to be separated. The seal of the filter insert to the housing or the hood is provided by means of two sealing rings (6) and (7).

The gas rotary filter of the type HON 906a must be configured such that dust pre-separation of larger particles can take place in the dust collecting chamber with the arrangement of an internal guide sleeve (8) in the housing, wherein the guide sleeve simultaneously serves as a means of protecting the filter insert. If necessary, it is possible to screw in a magnetic insert (10) instead of the locking screw (9) so that ferritic gas impurities, such as rust, can be pre-separated in the dust collecting chamber (adhered to the magnet).

All types can be equipped to check the degree of contamination with a differential pressure measuring device. If desired, a differential pressure manometer (11) with Reed contact is supplied if the version with electric remote indication is desired. Installation of the ball valves (12) takes place in the connection lines and/or in the connection lines and the pressure equalising line. The differential pressure measuring device can be installed on the right or left side of the filter, regardless of the flow direction.

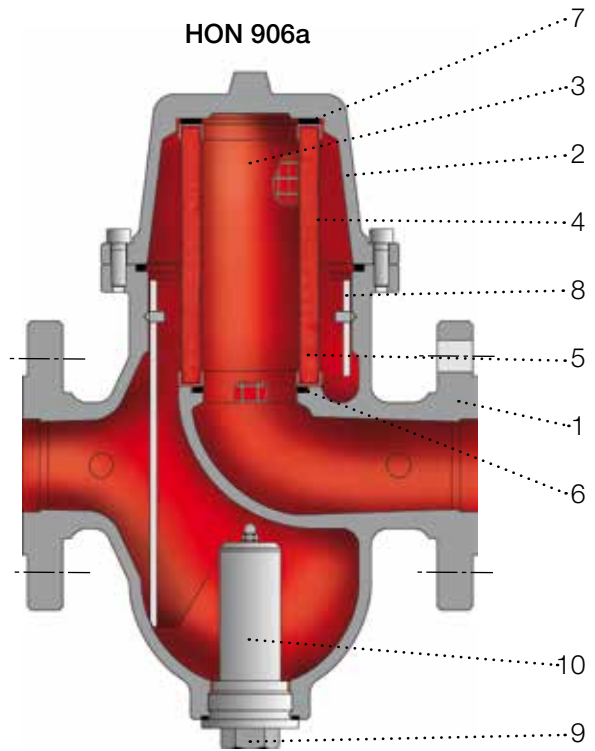
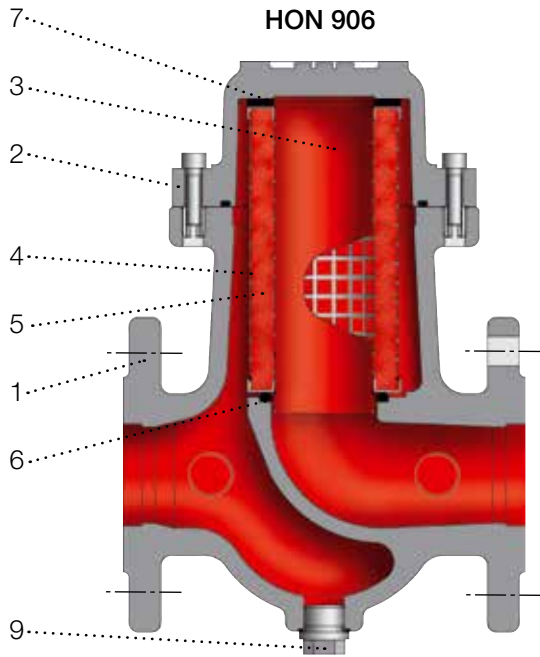
Layout of the differential pressure measuring device with ball valves



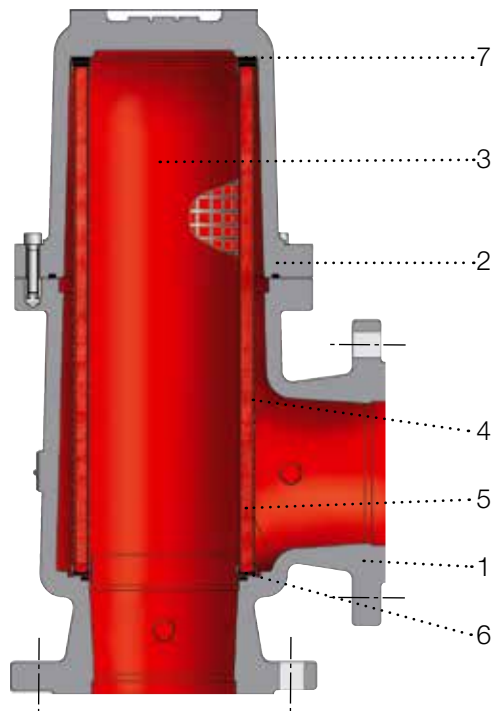
in connection lines and optionally
in the pressure equalisation line

Rotary Filter HON 906, HON 906a, HON 907

Construction and function



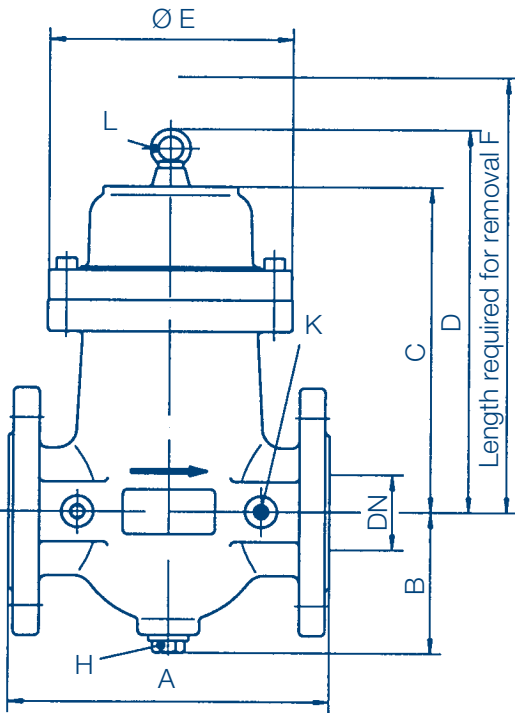
HON 907



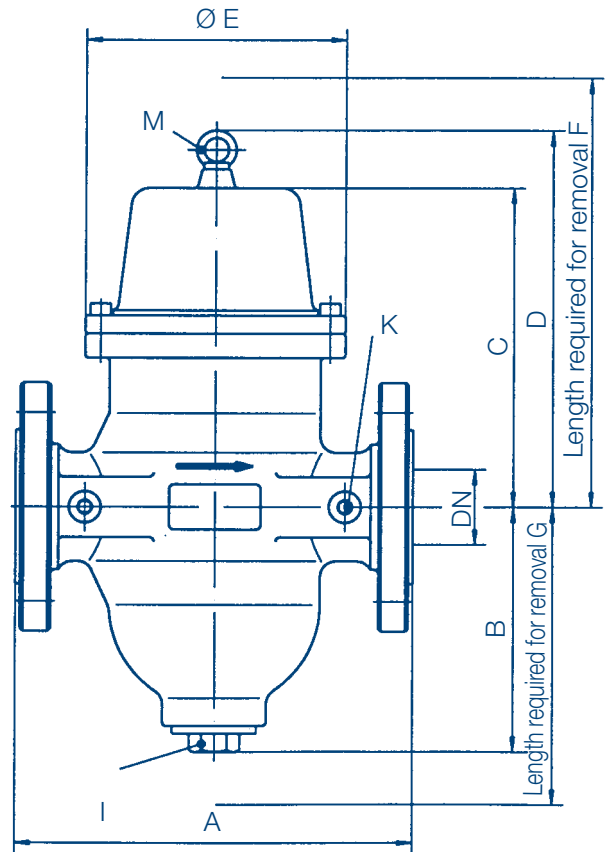
Rotary Filter HON 906, HON 906a, HON 907

Dimensions, connections, weights

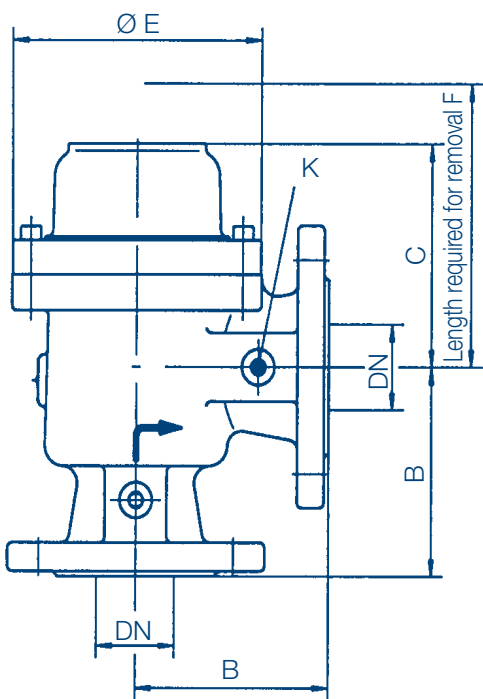
HON 906



HON 906a



HON 907



H Plug for condensate drainage
 G 1/2 (DN 25, DN 50)
 G 1 (DN 80 bis DN 150)

I Plug for condensate drainage
 M 36 x 1.5 (DN 25)
 G 1 1/2 (DN 50 to DN 100)

K Connection for differential pressure measuring device
 M 12 x 1.5 (DN 25)
 M 16 x 1.5 (\geq DN 50)

L Ring screw for DN 150

M Ring screw for DN 80, DN 100

Rotary Filter HON 906, HON 906a, HON 907

Dimensions, connections, weights

Dimensions										
Type	DN	A	B	C	D	E	F	G	Volume of the pressure chamber in l	Weight in kg
HON 906	25	140	65	130	–	104	250	–	0.45	2.5
	50	210	95	215	–	159	350	–	1.6	7
	80	268	125	380	–	179	600	–	5.1	13
	100	318	160	470	–	214	710	–	11.5	22
	150	400	190	680	760	289	1000	–	34	128
HON 906a	25	190	110	130	–	120	180	200	0.8	8
	50	260	165	220	–	170	320	280	3.5	20
	80	330	210	390	455	225	640	360	11	44
	100	380	245	470	535	265	760	420	20	64
HON 907	25	–	78	87	–	104	195	–	0.3	2
	50	–	123	132	–	159	260	–	1.4	6
	80	–	134	266	–	179	500	–	4.1	11
	100	–	159	331	–	214	570	–	7.5	16

All dimensions in mm unless otherwise specified

Note

Compliance with the following documents is required for installation, commissioning and maintenance:

- DVGW worksheets G 495 and G 498
- Honeywell 'Operating and maintenance instructions, spare parts 906.20'

The HON 906, HON 906a and HON 907 rotary filters should be preferentially installed in a horizontal position with vertical arrangement of the filter insert in the pipeline. The flow direction must be marked for all types with an arrow on the housing.

Rotary Filter HON 906, HON 906a, HON 907

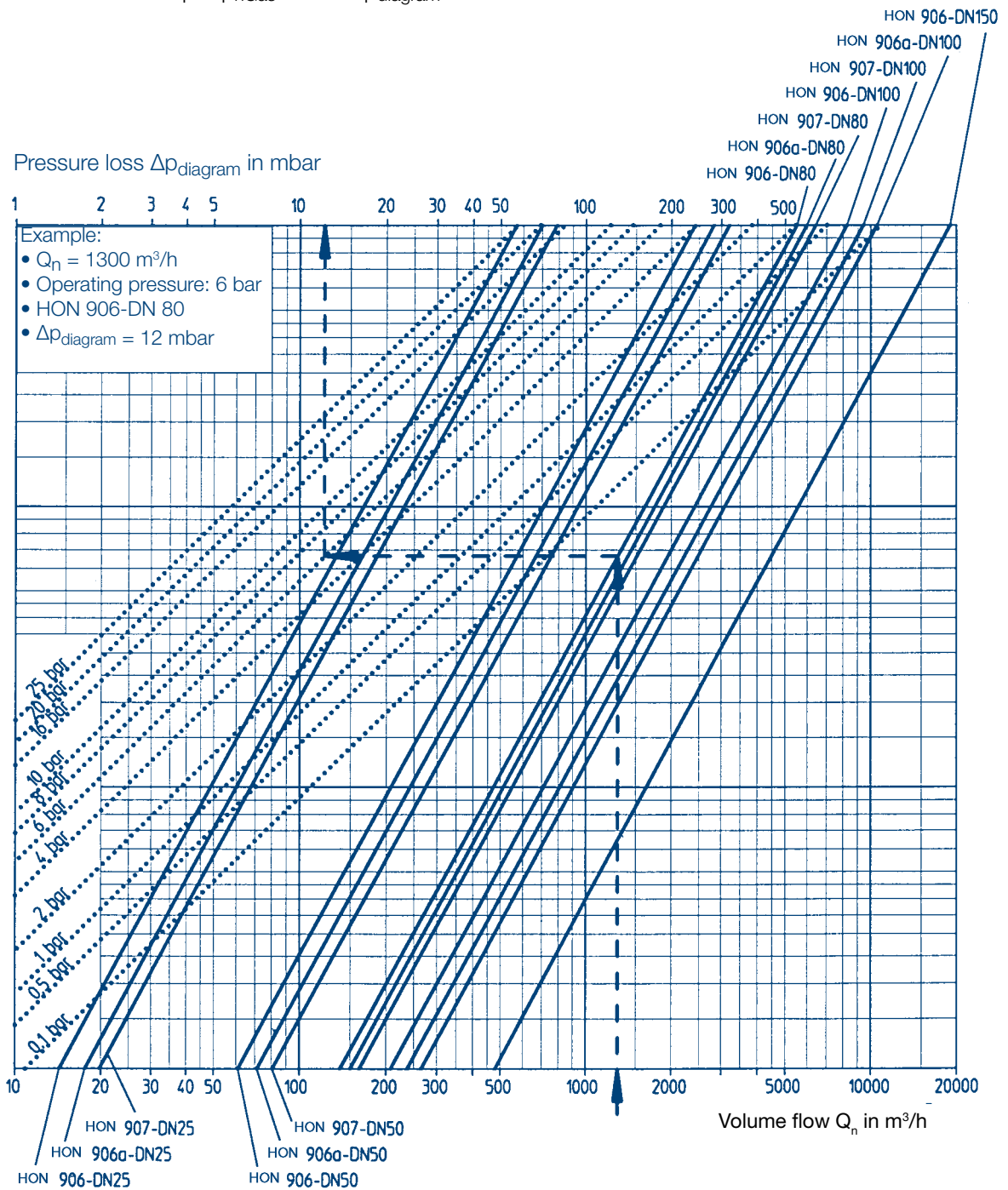
Specification

Pressure loss in new condition of the filter insert

Filter insert type 1 (standard version)

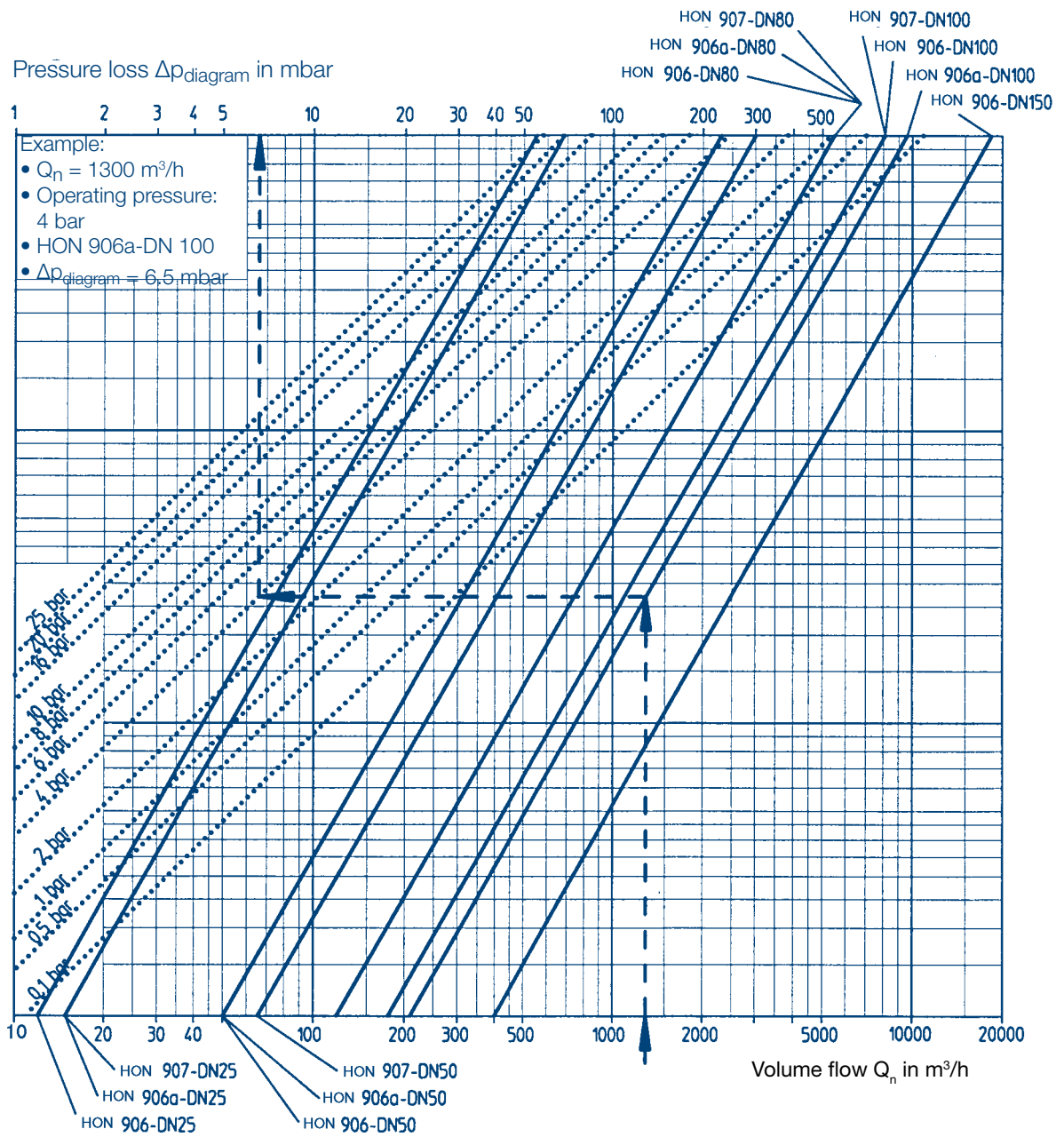
- Note:
- The values apply for natural gas with $p_n = 0.83 \text{ kg/m}^3$ and $t = 15 \text{ }^\circ\text{C}$
 - With use of other gas types, the pressure loss is calculated as $\Delta p = p_{n\text{Gas}}/0.83 \times \Delta p_{\text{diagram}}$

8



Filter insert type 2 (polyester-reinforced version)

- Note:
- The values apply for natural gas with $p_n = 0.83 \text{ kg/m}^3$ and $t = 15 \text{ }^\circ\text{C}$
 - With use of other gas types, the pressure loss is calculated as $\Delta p = p_{n\text{Gas}}/0.83 \times \Delta p_{\text{diagram}}$

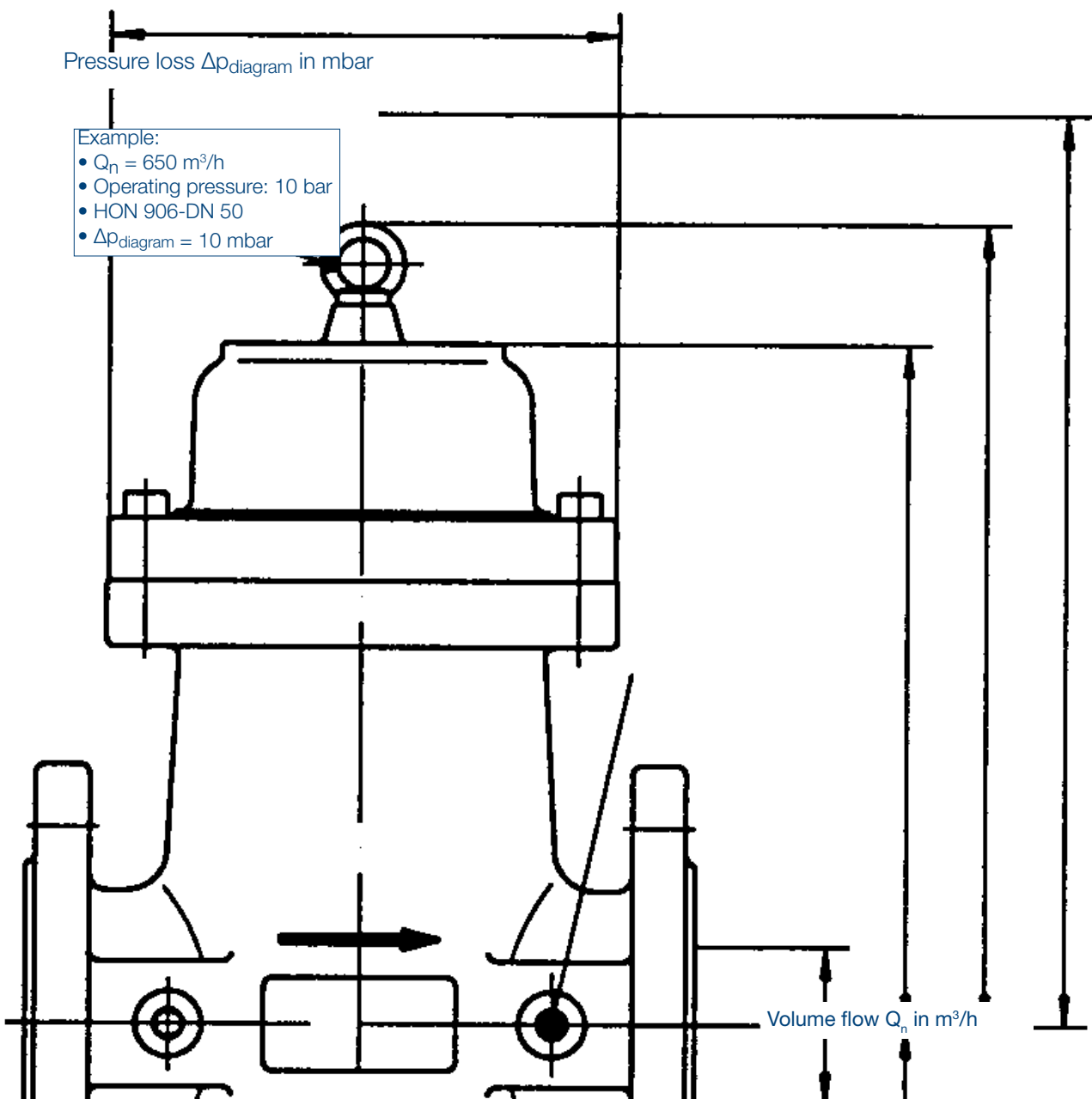


Rotary Filter HON 906, HON 906a, HON 907

Specification

Filter insert type 3 (fine-pore version)

- Note:
- The values apply for natural gas with $\rho_n = 0.83 \text{ kg/m}^3$ and $t = 15 \text{ }^\circ\text{C}$
 - With use of other gas types, the pressure loss is calculated as $\Delta p = \rho_{n\text{Gas}} / 0.83 \times \Delta p_{\text{diagram}}$



Example:

HON 906a - 80 - 25 - 2 - 1 - 1 / 1 / 1 - So

Type		Type	
HON 906	906	Nominal width	
HON 906a	906a	DN 25	25
HON 907	907	DN 50	50
		DN 80	80
		DN 100	100
		DN 150 (only HON 906)	150
		Pressure stage	
		PN 16	16
		PN 25 (only HON 906a)	25
		ANSI 150 (only HON 906a)	150
		Filter paper	
		Standard	1
		Polyester-reinforced	2
		Fine-pore	3
		Magnet insert	
		Without magnet insert	0
		With magnet insert	1
		Differential pressure measuring device	
		Without differential measuring device	0
		With differential pressure measuring device for flow direction left-right	1
		With differential pressure measuring device for flow direction right-left	2
		Differential pressure manometer	
		Differential pressure manometer without Reed contact	0
		Differential pressure manometer with Reed contact	1
		Differential pressure manometer blockable with ball valve	
		Without ball valve	0
		With ball valve in the connection lines	1
		With ball valve in the connection lines and in the pressure equalisation line	2
		Special design (must be explained in more detail)	
		Special design	So

Subject to technical changes!

For More Information

To learn more about Honeywell's
Advanced Gas Solutions, visit
www.honeywellprocess.com or contact
your Honeywell account manager

GERMANY**Honeywell Process Solutions**

Honeywell Gas Technologies GmbH
Osterholzstrasse 45
34123 Kassel, Germany
Phone: +49 (0) 561 5007-0
Fax: +49 (0) 561 5007-107

HON 906, HON 906a, HON 907
2017-01
© 2017 Honeywell International Inc.

Honeywell