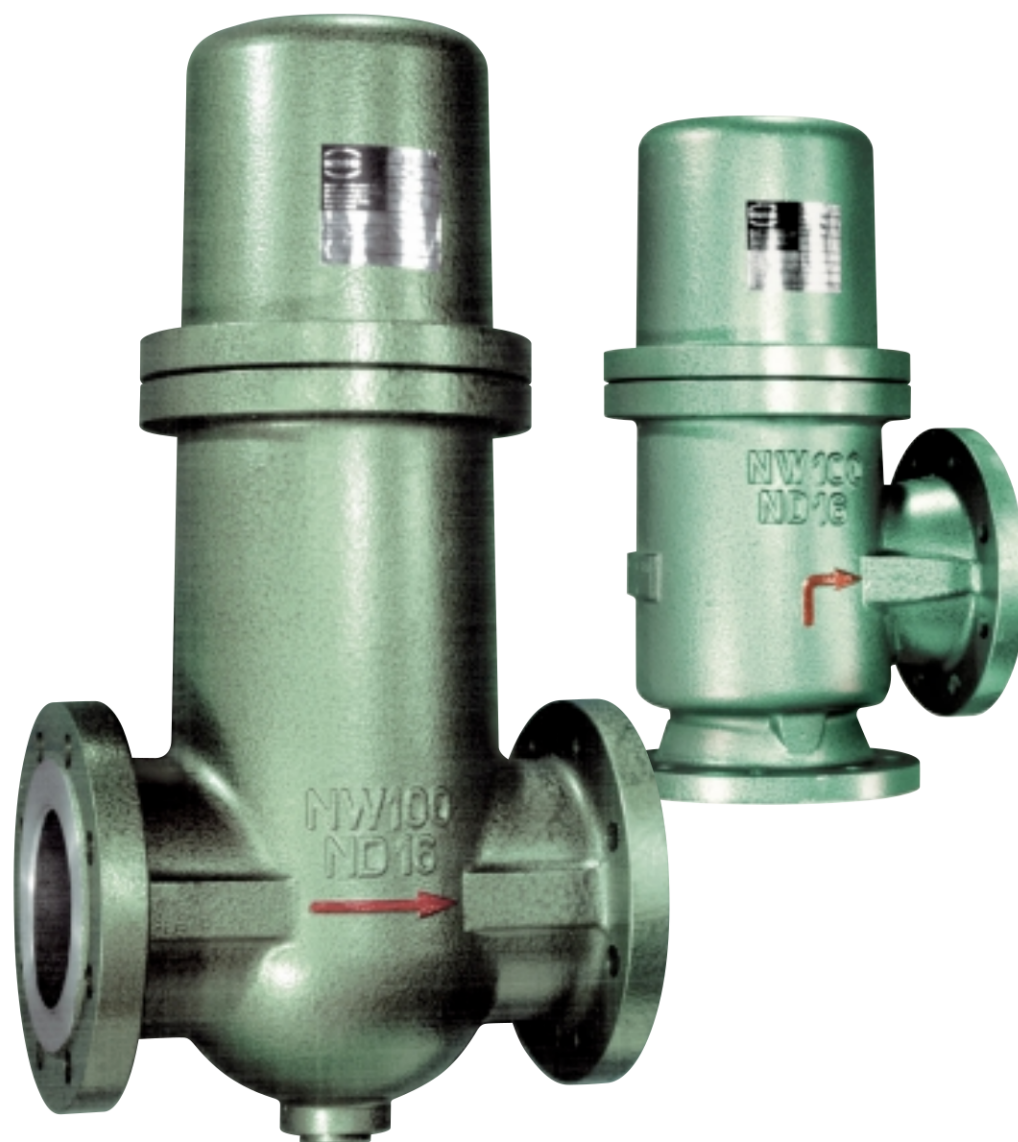


cellular filter

RMG 906, RMG 907, RMG 906a



General Description

906.00

edition 05/2000



CONTROLS SUPPLY CHAIN

VALVES ACTUATORS INSTRUMENTATIONS

Serving the Gas Industry - WORLDWIDE



cellular filter

RMG 906, RMG 907, RMG 906a

Application

- filter for municipal distribution, industrial systems, and power plants
- suitable for natural gas and all non-corrosive gaseous media

Characteristics

- high degree of filtration
- filter insert with exchangeable filter mesh and plug-together filter basket
- environment-friendly disposal of soiled filter mesh
- re-usable filter baskets
- special feature for RMG 906a:
big dust-collecting chamber, optional with magnetic insert for pre-filtration of rust and metallic materials

1. Technical data

type	RMG 906	RMG 907	RMG 906a		
max. service pressure p_{max}	16 bar	16 bar	16 bar	25 bar	20 bar
pressure rating *) enquire for higher pressure ratings	PN 16	PN 16	PN 16	PN 25*	ANSI 150 RF*
sizes	DN 25 DN 50 DN 80 DN 100 DN 150	DN 25 DN 50 DN 80 DN 100	DN 25 DN 50 DN 80 DN 100	DN 25 DN 50 DN 80 DN 100	DN 25 DN 50 DN 80 DN 100
connections	flanged to DIN PN 16		flanged to DIN PN 16, PN 25 and to ANSI 150 RF measurements for connections acc. to DIN 2501 or to ANSI B 16.5 resp.		
temperature range	-20°C to +60°C				
filter mesh	special plated paper				
filter area	DN 25 0.050 m ²	DN 50 0.193 m ²	DN 80 0.571 m ²	DN 100 0.933 m ²	DN 150 2.256 m ²
max. flow velocity in the pipe	20 m/s (a much lower flow velocity is recommended when high dust pollution is to be expected)				



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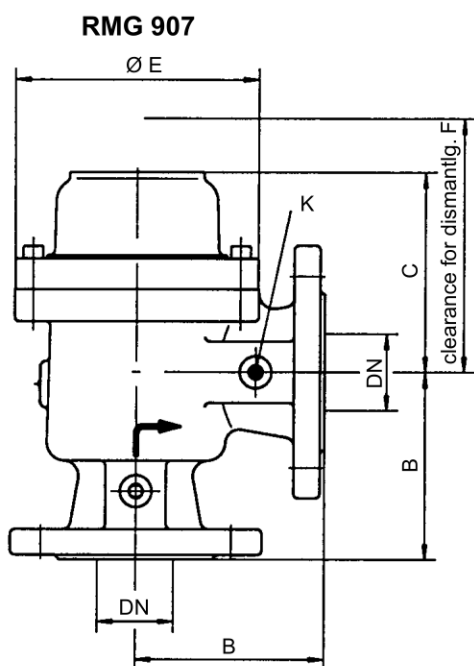
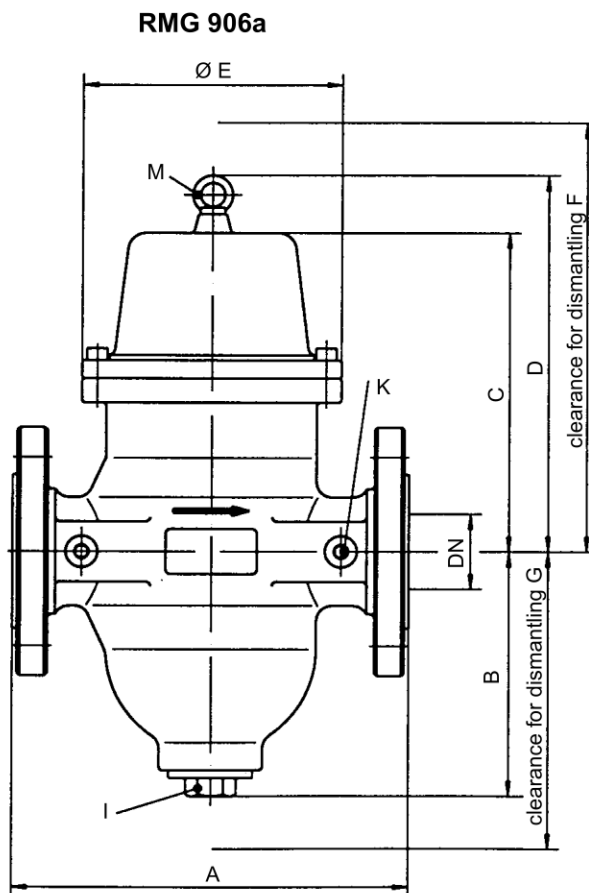
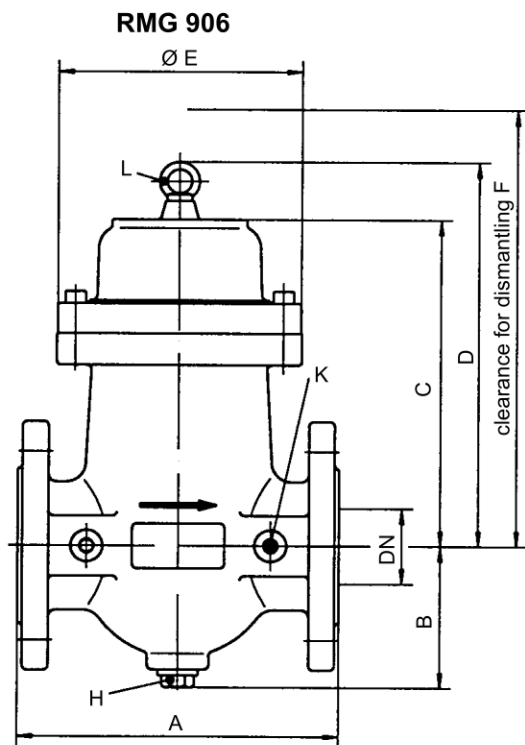
retaining degree	filter mesh		retained grain size (μm)	retaining degree (%)
	type	version		
	1	standard	> 10	99
	2	polyester enforced	> 4	
	3	fine filtering	> 2	
pressure drop / flowrate	see pages 8 to 10			
standard value for new insert	$\varnothing < 0.05$ bar			
limit for soiled insert	$\varnothing_{\text{max}} = 0.5$ bar			
materials	body	Aluminiumguß (RMG 906, DN 25 bis DN 100; RMG 907) Gußeisen mit Kugelgraphit (RMG 906, DN 150; RMG 906a)		
	filter basket	Stahl-Lochblech, verzinkt		
	sealings	NBR (rubber-like plastic material)		
testing	production and testing acc. to DIN 30690 and acc. to DVGW worksheet G 498, documentation of the testing results together with works certificate acc. to EN 10204			
DVGW registration no.	RMG 906, RMG 906a:	G95c063		
	RMG 907:	G95c064		
optional version	<ul style="list-style-type: none"> - with differential pressure measurement (additional remote indication with Reed signalling at pressure gauge possible) - with magnetic insert for RMG 906a - RMG 906a in HTB version for "high temperature resistance" for max. 4 bar service pressure - with filter insert coming from other manufacturers 			



cellular filter

RMG 906, RMG 907, RMG 906a

2. measurements



- H** screw plug for condensate bleed
G 1/2 (DN 25, DN 50)
G 1 (DN 80 bis DN 150)
- I** screw plug for condensate bleed
M 36 x 1,5 (DN 25)
G 1 1/2 (DN 25 bis DN 100)
- K** connection for measuring line for differential pressure
M 12 x 1,5 (DN 25)
M 16 x 1,5 (≥ DN 50)
- L** ring screw for DN 150
- M** ring screw for DN 80, DN 100



cellular filter

RMG 906, RMG 907, RMG 906a

dimensions

type	DN	A	B	C	D	E	F	G	housing volume (in litres)	weight (in kg)
RMG 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
RMG 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
RMG 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 measurements in mm (if not stated differently)

Note

For installation, for taking into operation, and for maintenance the following leaflets should be observed:

- RMG-leaflet "General Operating Instructions for Gas Pressure Regulators and Safety Devices"
- RMG-leaflet "Operation and Maintenance, Spare Parts 906.20"

The cellular filters RMG 906, RMG 906a and RMG 907 should be mounted horizontally with an upright position of the filter insert. An Arrow on the body of all filters indicates the flow direction.



cellular filter

RMG 906, RMG 907, RMG 906a

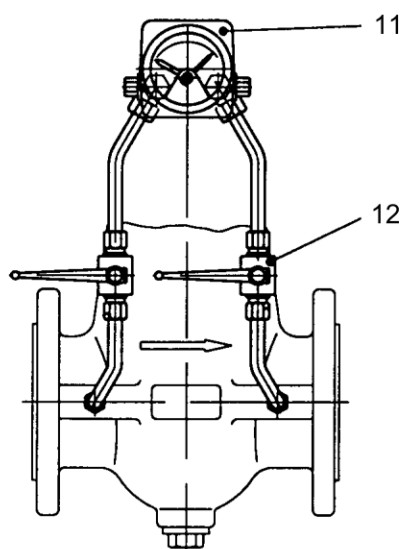
3. Design

The cellular filters of the types RMG 906, RMG 906a and RMG 907 are constructed to retain gas impurities such as dust, rust, and other solid particles moving within gas transporting lines, especially in front of gas pressure regulating and flow metering lines.

The filters consist mainly of the body (1), the lid (2), and the filter insert (3). The filter cartridge is accessed easily by removing the lid. The filter insert, which consists of the plug-together filter basket (4), and the filter mesh with 2 rubber rings (5), enables easy exchange of the soiled mesh and environment-friendly disposal. Depending on the filtering task and the grain size to be filtered, different mesh material can be used. The filter insert is sealed off towards the body and the lid resp. by two O-rings (6 and 7).

The cellular filters of the type 906a is constructed in such a way, that a halfpipe (8) in the body enables a pre-extraction of larger particles which can fall into the dust pouch. The halfpipe also offers protection for the filter insert. If desired, the sealing screw (9) can be removed, and a magnetic insert may be mounted to enable a pre-filtration of rust and metallic materials.

All cellular filters can be equipped with differential pressure measurement. An optional version for electric remote signalling includes a differential pressure gauge (11) with Reed switch. The ball valves (12) are mounted in the connecting lines or the pressure balance lines. The differential pressure measurement is independent of the flow direction and can be mounted on either side of the filter.

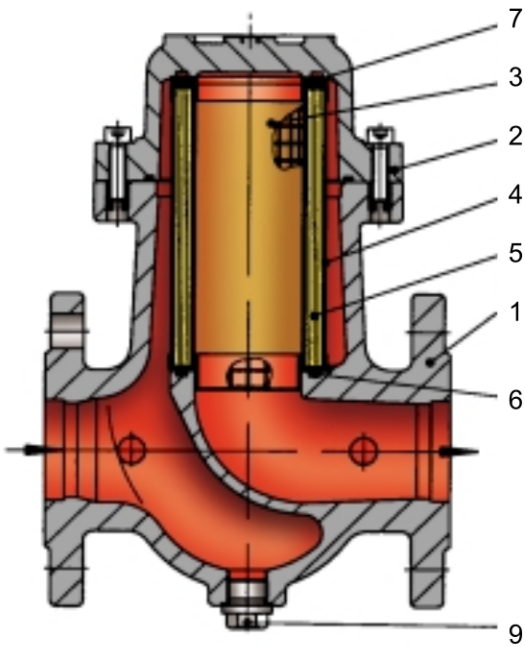


scheme of the differential pressure measurement

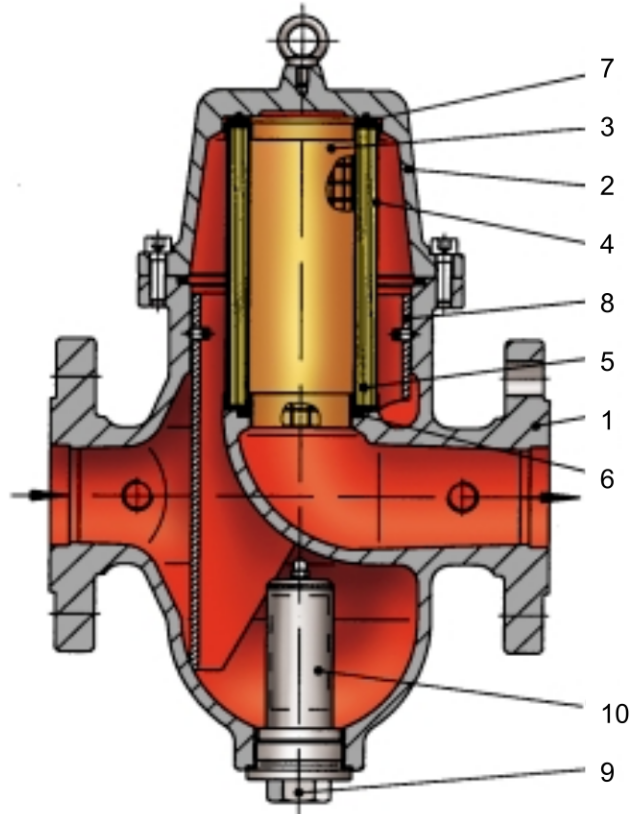


cellular filter

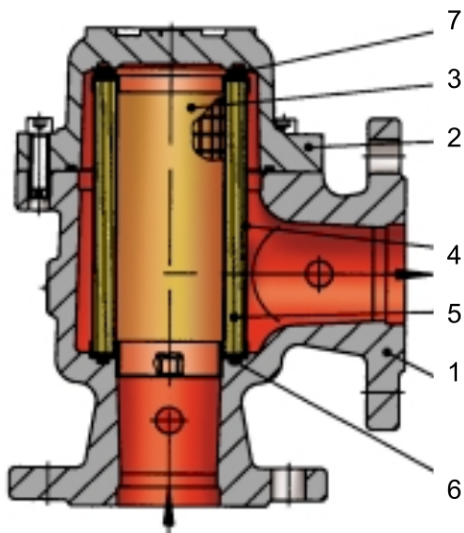
RMG 906, RMG 907, RMG 906a



RMG 906



RMG 906a



RMG 907



cellular filter

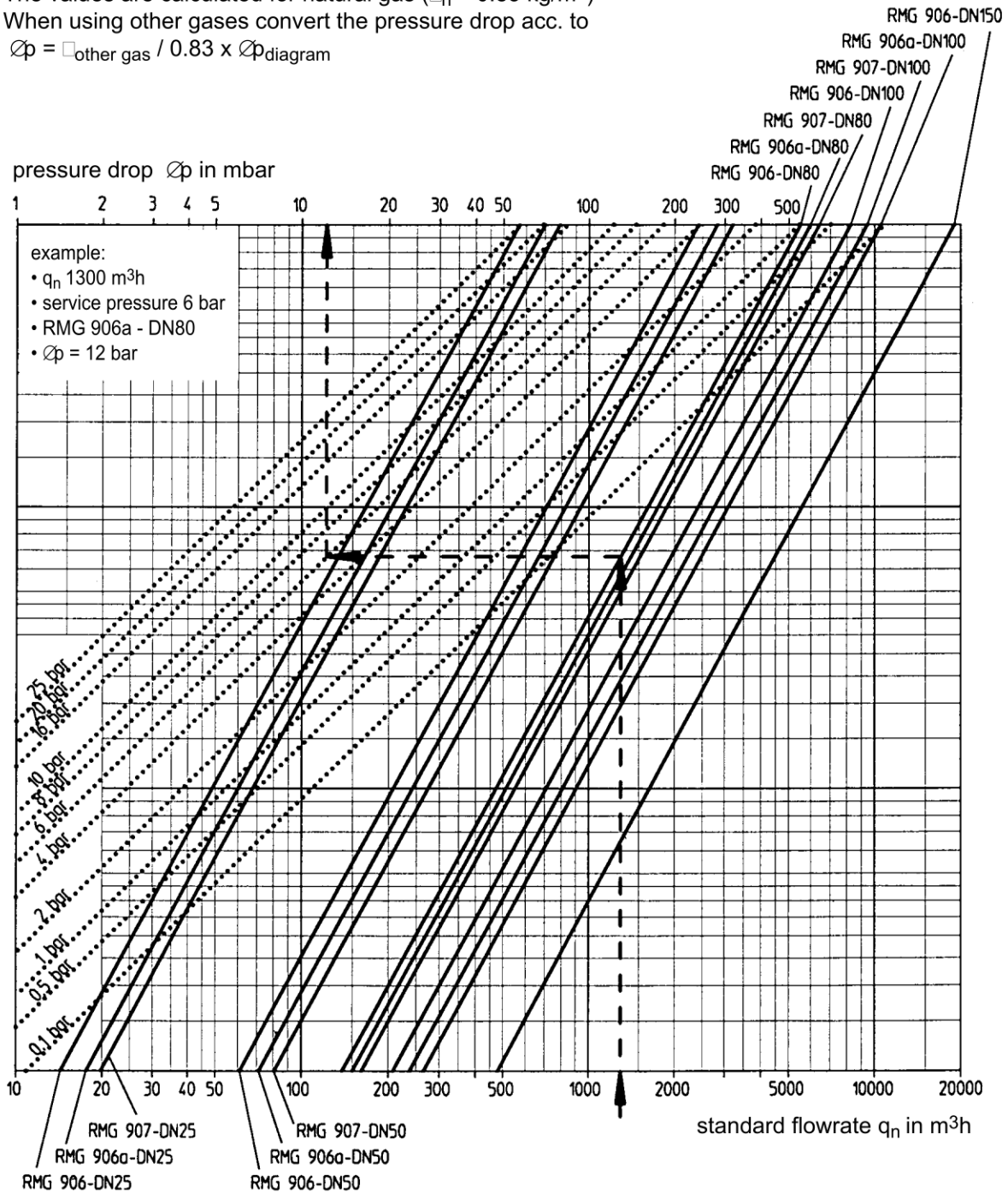
RMG 906, RMG 907, RMG 906a

4. pressure drop with new filter inserts

filter mesh type 1 (standard version)

Note: The values are calculated for natural gas ($\rho_n = 0.83 \text{ kg/m}^3$)
When using other gases convert the pressure drop acc. to

$$\Delta p = \rho_{\text{other gas}} / 0.83 \times \Delta p_{\text{diagram}}$$

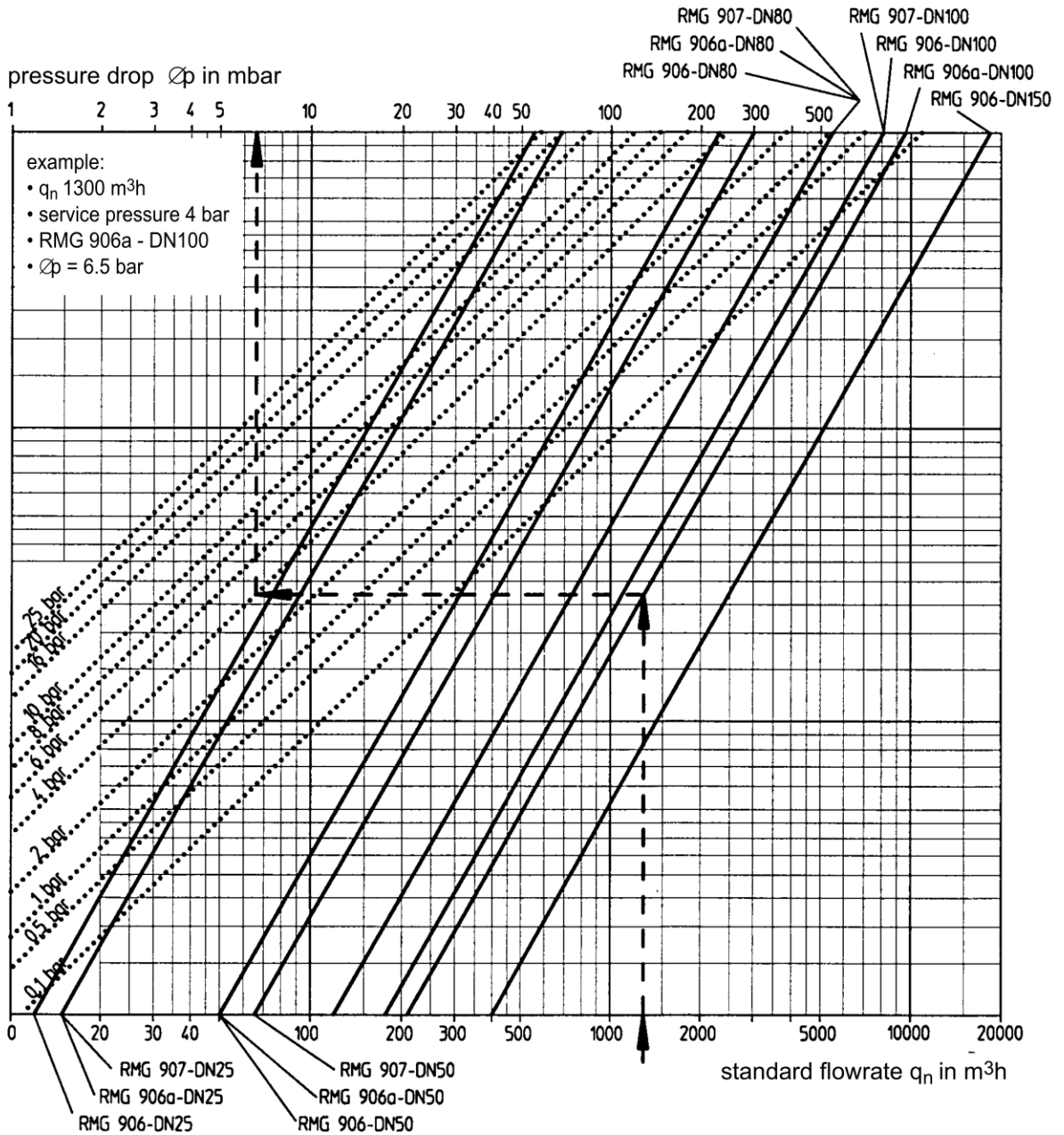


cellular filter

RMG 906, RMG 907, RMG 906a

filter mesh type 2 (polyester-enforced version)

Note: The values are calculated for natural gas ($\rho_n = 0.83 \text{ kg/m}^3$)
When using other gases convert the pressure drop acc. to
 $\Delta p = \rho_{\text{other gas}} / 0.83 \times \Delta p_{\text{diagram}}$

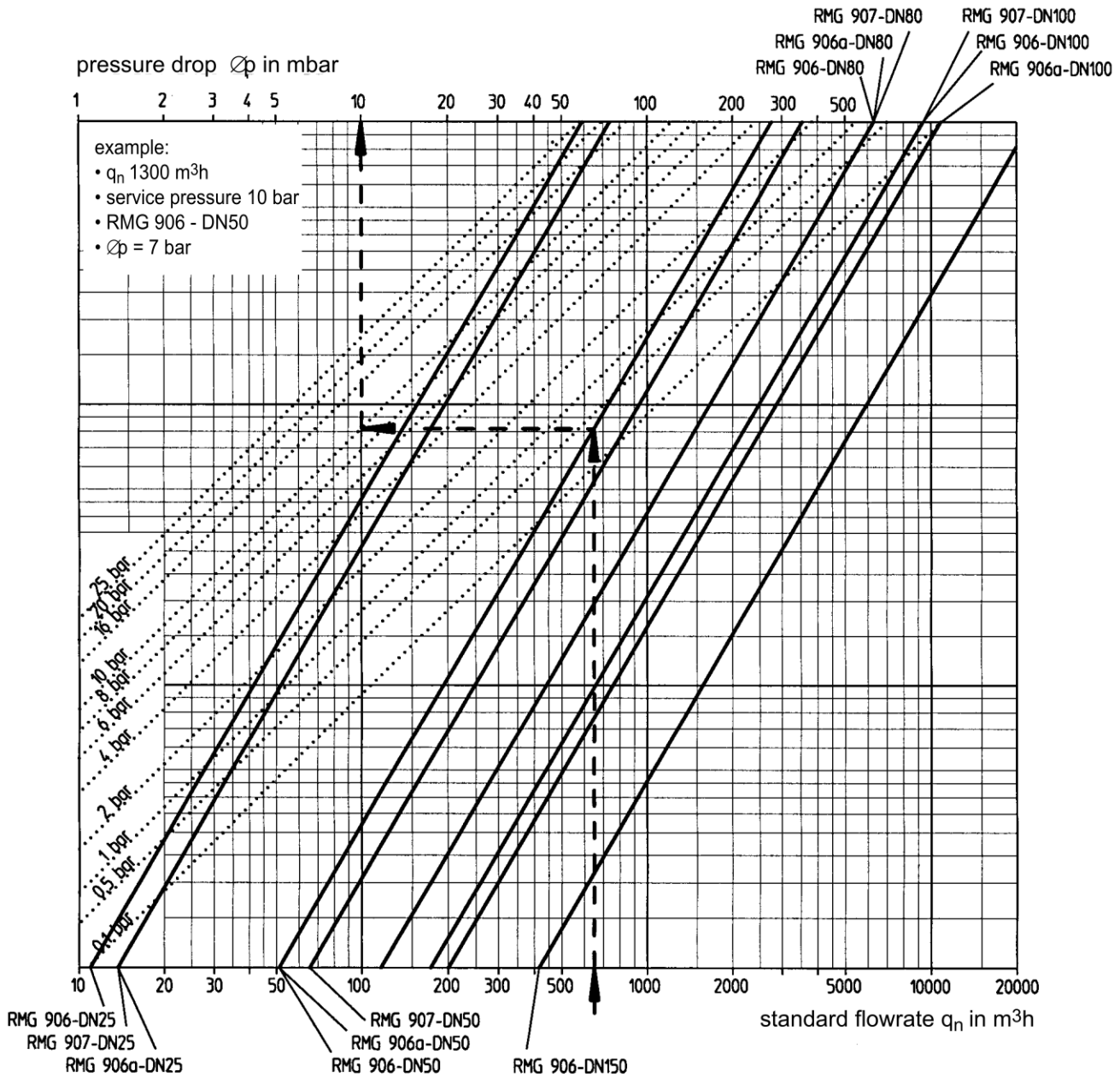


cellular filter

RMG 906, RMG 907, RMG 906a

filter mesh type 3 (fine-filtering version)

Note: The values are calculated for natural gas ($\rho_n = 0.83 \text{ kg/m}^3$)
When using other gases convert the pressure drop acc. to
 $\Delta p = \rho_{\text{other gas}} / 0.83 \times \Delta p_{\text{diagram}}$





cellular filter

RMG 906, RMG 907, RMG 906a

5. filter designation (example)

RMG 906a - 80 / 25 / 3 / 1 / 1 - 1 - 2 / So



ΧΡΥΣΑΦΙΔΗΣ Α.Ε.

type

RMG 906	906
RMG 907	907
RMG 906a	906a

size

DN 25	25
DN 50	50
DN 80	80
DN 100	100
DN 150 (only RMG 906)	150

pressure rating

PN 16	16
PN 25 (only RMG 906a)	25
ANSI 150 (only RMG 906a)	150

filter mesh

standard	1
polyester-enforced	2
fine-filtering	3

magnetic insert for RMG 906a

without magnetic insert	0
with magnetic insert	1

differential pressure measurement

without differential pressure measurement	0
with differential pressure measurement for direction of flow left to right	1
with differential pressure measurement for direction of flow right to left	2

differential pressure gauge

differential pressure gauge without Reed switch	0
differential pressure gauge with Reed switch	1

differential pressure gauge with ball valve for shutting off

without ball valve	0
with ball valve in the connecting lines	1
with ball valve in the connecting lines and in the pressure compensating line	2

special version (to be described)

example: closing screws and hook screws made of stainless steel, open-air version, HTB-version, etc. So

type
size DN
service pressure
filter mesh
magnetic insert
differential pressure measurement
differential pressure gauge
ball valve
special version

Reserving the right for technical changes!

