

APPLICATION

This kind of filter separators are most commonly used in gas reduction stations in the function of separation of solid and liquid particles from the gas. Using the kinetic energy of the gas flow where the velocity increases towards the middle, resulting a reduction of speed of the gas and centrifugal forces at the wall of filter body in this filter separator gas flow prevents particles from accumulating on the walls of the body. Gravity force cancels pressure difference force, which causes particles to fall to the bottom of the filter separator. Filter cartridge can be easily replaced which makes it

DESIGN FEATURES

These filter separators are vertical type, with straight (PFK) and angled (PFK-K) gas connection inlet and outlet. It is a welded steel construction designed and produced acc. to pressure-vessel directive 97/23/CE as well as ASME requirements. Most commonly it is delivered with differential manometer on which it can be monitored filter cartridge soiling. Filter cartridge can stop particles $\leq 5\mu\text{m}$ and is very easy to replace, which makes it ideal for almost continuous working.

Drainage, condensate separation connection can be threaded with ball valve or flange connection, depending on customer request.

ON REQUEST:

- Differential manometer
- ASME certification

APPLIED STANDARDS, CODES & DIRECTIVES

EN 13445 „Unfired pressure vessels“
 97/23 EC (PED) “Pressure equipment directive”

DN	1" – 14" (25 – 350)
PN	16
ANSI	150 lb
p_{max}	16 bar
medium	natural gas, LPG
connections	ANSI B.16.5, EN1092

PFK-K

PFK

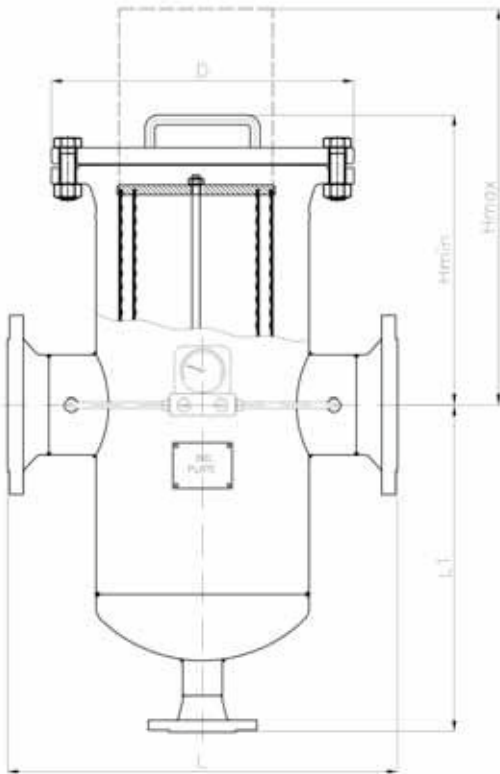
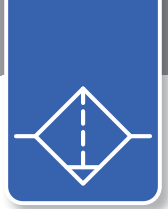
CODE	DN	DN1	dimensions (mm)					flow (m ³ /h)	p _{max} (bar)*	WEIGHT (kg)
			L	L ₁	H _{min}	H _{max}	D			
020301	25 (1")	15 (1/2")	220	163	240	350	220	25	16	32
020302	32 (1 1/4")	15 (1/2")	220	176	250	375	220	25	16	37
020303	40 (1 1/2")	15 (1/2")	260	197	290	420	220	50	16	40
020304	50 (2")	20 (3/4")	295	217	320	510	285	75	16	46
020305	65 (2 1/2")	20 (3/4")	310	220	330	600	285	75	16	57
020306	80 (3")	20 (3/4")	310	250	380	610	285	120	16	62
020307	100 (4")	25 (1")	350	300	430	690	340	200	10	77
020308	125 (5")	25 (1")	400	350	480	780	405	300	6	87
020309	150 (6")	25 (1")	480	400	530	830	460	450	4	120
020310	200 (8")	25 (1")	600	500	630	1030	460	500	3	135
020311	250 (10")									
020312	300 (12")									
020313	350 (14")									
020314	25 (1")									
020315	50 (2")									

* - other pressure range on request

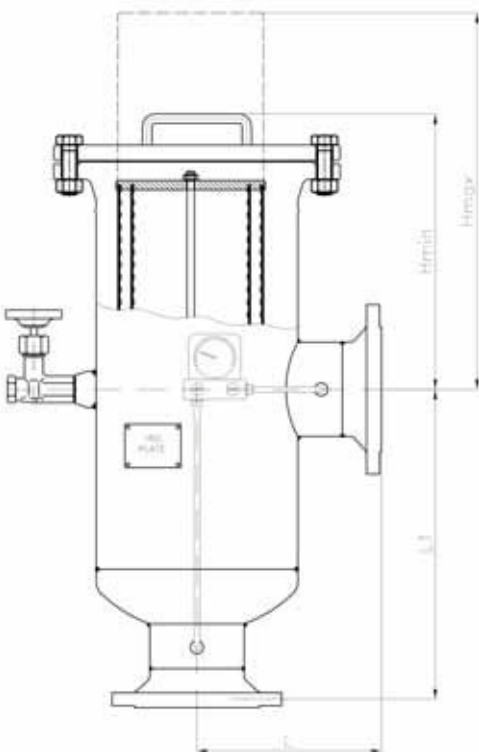
PFK-K

CODE	DN	DN1	dimensions (mm)					flow (m ³ /h)	p _{max} (bar)*	WEIGHT (kg)
			L	L ₁	H _{min}	H _{max}	D			
020401	50 (2")	20 (3/4")	148	240	330	460	285	75	16	46
020402	65 (2 1/2")	20 (3/4")	155	240	330	460	285	75	16	57
020403	80 (3")	20 (3/4")	155	250	385	565	285	120	16	62
020404	100 (4")	25 (1")	185	300	428	638	340	200	12	77
020405	125 (5")	25 (1")	200	350	478	728	405	300	7	87
020406	150 (6")	32 (1 1/4")	240	400	528	728	460	450	5	120
020407	50 (2")									

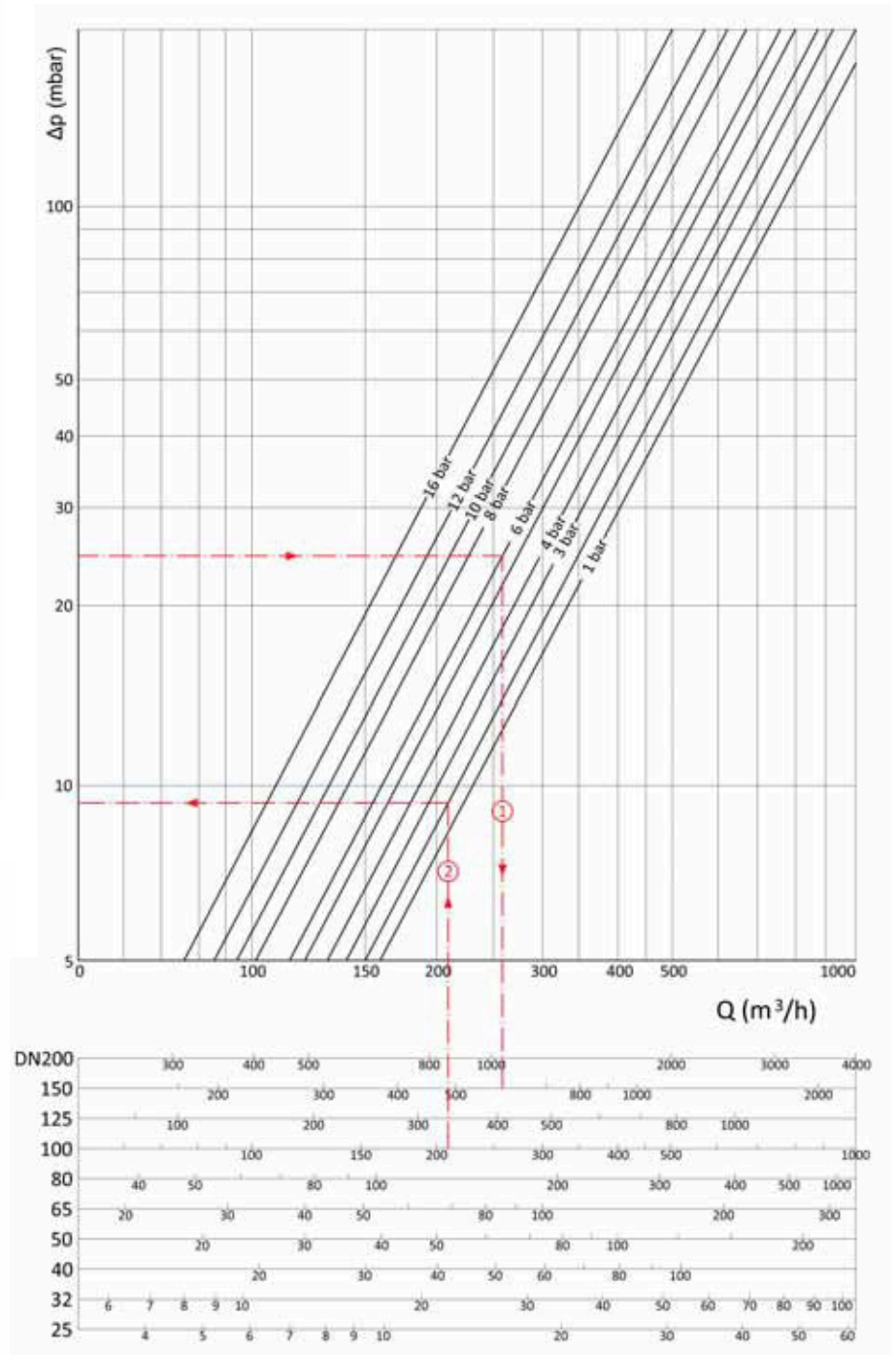
* - other pressure range on request



PFK



PFK-K



Example:

1. Known values: $\Delta p=25$ mbar, $p=6$ bar

Selected filter dimension is DN150 with $Q=600$ m³/h

2. Known values $Q=210$ m³/h, $p=2$ bar

Selected filter dimension is DN100 with pressure drop $\Delta p=9,5$ mbar