

# TECHKO, spol. s r.o., Průmyslová 368, 679 21 Bořitov Projection and production of technological equipment for the gas industry

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# **GAS FILTER type PFM**

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#### 1. APPLICATION

The filter is designed for the separation of solid mechanical impurities from the flowing gaseous working fluid. The filter is intended for gas pressure regulating stations according to EN 12186, and EN 12279 and gas measuring stations according to EN 1776. The working fluid can be natural gas, the gaseous phase of propane, butane, and propane-butane.

The filter meets technical requirements for gas filtration according to EN 12186 and EN 12279.

The filter is not pressure equipment within the meaning of Directive 2014/68/EU of the European Parliament and the Council.

The design calculation is according to ČSN 69 0010.

#### 2. DESCRIPTION

The filter consists of a body with a square cross-section. On the body's bottom are openings for the gas inlet and gas outlet on the side.

The body is adapted for installation between two flanges of the technological line. In the upper part, a lid is sealed with an Oring, allowing inspection and replacement of the filter element inside the body. The filter element is attached to the lid with bolts. The filter is supplied without equipment for measuring the pressure loss but is equipped with relevant outlets with plugs for blinding.



#### 3. TECHNICAL PARAMETERS

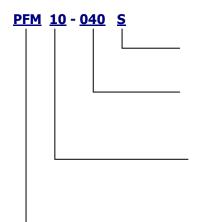
Working temperature (°C) -20 to +60 Filter element metal filter element

Fractional separability 96,0 % for particles  $\geq$  5  $\mu m$  Allowable pressure loss (bar) 1,5

### Basic technical parameters - GAS FILTER PFM .. PN 40, PN 100

PFM		10 - 040	10 - 100
Nominal pressure	PN	40	100
Maximum allowable pressure	bar	40	100
Test pressure for strength	bar	60	150
Test pressure for leakage	bar	50	125
Inlet and outlet flange	DN	25	25
Nominal flow rate	m³/h	10	10
Max. flow rate	m³/h	12	12
Max. input speed	m/s	7	7
Weight	kg	14,8	25,4

# The type number is determined as follows:



Special version: it is given only in cases of different version than standard

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# Nominal gas pressure:

**040** – for max. allowable pressure 40 bar **100** - for max. allowable pressure 100 bar

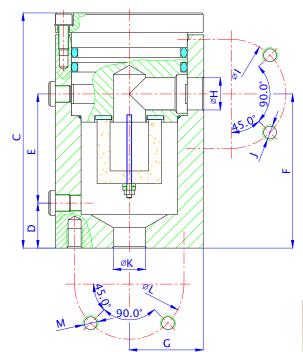
# Nominal gas flow rate:

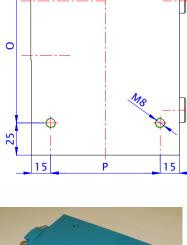
**10** -  $10 \text{ m}^3/\text{h}$ 

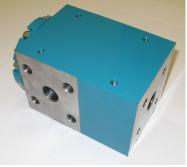
# **Basic type designation**











PFM	10 - 040	10 - 100
Α	115,5	141
В	115	140
С	183	196
D	35	35
E	85	85
F	120	120
G	58	71
φН	25	25
φI	85	100
J	M 12	M 16
φK	25	25
φL	85	100
М	M 12	M 16
0	120	125
Р	85	110
Weight (kg)	14,8	25,4
Max. flow (m³/ h)	12	12

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Inlet and outlet connection to the pipework:

PFM 10 – 040: DN 25, PN 40

EN 1092-1, type B1

ČSN 13 1160.0 flange type 11

**DIN 2635** 

PFM 10 – 100: DN 25, PN 100

EN 1092-1, type B2

ČSN 13 1160.5 flange type 11

DIN 2636

The gasket used must correspond to the appropriate pressure rating.