

EPNS.P

Full metal pleated cartridge

For application in industrial processes of filtration of aggressive liquids and gases under the conditions of high temperature and flow, for removal of particles from steam



Description

EPNS.P full metal filter cartridges are designed for application in the industrial filtration process fields, where it is impossible or difficult to use polymer based filter cartridges because of high temperature, viscosity, aggressive components and other heavy duty operational conditions.

EPNS.P filter cartridges are cartridge type filters on the basis of stainless steel pleated material. The Filter Cartridge EPNS.P is full metal cartridge. The pleated structure of the cartridge provides extended area of the surface compared to cylindrical metal filter cartridges increasing thereby flow rates and lifetime of EPNS.P.

Multiple regenerated full metal EPNS.P are used to remove particles from steam, aggressive liquids (acids, solvents, etc., compatible with the cartridge materials), viscous media, technical liquids, aggressive gases, caustic (corrosive) liquids, solutions with high content of solid phase in the processes that take place under high temperatures and for other applications associated with high flow rate.

Universality of choice is ensured by various configurations of the Filter Cartridges: there are four standard heights available (250, 500, 750 and 1000 mm), micron rating from 5 to 500 μm , various configuration of end parts (can be adapted for filter housings with the seat 44,5 and 56 mm), various sealing materials for optimization of chemical and temperature compatibility.

Special hermetic sealing performed by argon arc welding makes it unnecessary to use various adhesive substances and soldering alloys that may be the source of contamination and the reason for limiting of temperature conditions and chemical compatibility.

It is easier to clean the filter because of absence of an outer body.

Features and advantages

Features	Advantages
Pleated, full metal	<ul style="list-style-type: none"> High filtration rates with low differential pressure; Mechanical strength of the element ensures multiple regenerations in any direction.
High thermochemical resistance	<ul style="list-style-type: none"> Possibility to use elements for filtration of steam and aggressive media at high temperatures (temperature is limited by the materials of seals and filter housing allowable temperature); Withstand multiple chemical regeneration in a wide pH range and in-line steam sterilization.
Reliability	<ul style="list-style-type: none"> Ability to restore their operational properties ensures long element lifetime; Produced in compliance with the Quality Management System (9000 series ISO).

Specifications

Nominal micron rating

- 5 µm
- 10 µm
- 20 µm
- 40 µm
- 70 µm
- 100 µm
- 500 µm

Nominal Dimensions and Filter Areas

Filter Cartridges

H, mm	D, mm	S, m ²
250 (10")	70	0.22
500 (20")	70	0.44
750 (30")	70	0.66
1000 (40")	70	0.88

- H** - height
- D** - diameter
- S** - filtration surface area

Materials

Filter material	304L stainless steel mesh
Draining layer	304L stainless steel mesh
Body, end parts	304L stainless steel
O-rings	Silicone (viton, EPDM, fluoroplastic available)
Assembling method	Non-consumable electrode inert gas welding

Operational parameters

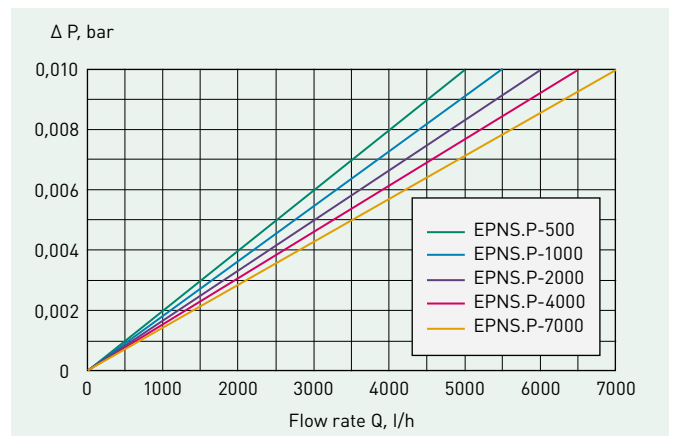
Maximal differential pressure	0.6 MPa
Maximal operational temperature	Limited by the operational temperature of the filter housing and used seals

Sterilization and washing*

Wash out	Direct and back wash with hot water, chemical reagents, CIP washing
Steam sterilization	Without limitations
Autoclaving	In a wide range

* Contact technical Specialists of Technofilter RME LLC for detailed instructions on wash out and sterilization of Filter Cartridges.

Flow Rates of EPNS.P, H = 250 mm



Filter Cartridges ordering information

EPNS.P	500	D	500
Brand	Nominal micron rating	Adapter code	Cartridge height
	Code	D	250 mm (10")
	500	B	500 mm (20")
	1000	A	750 mm (30")
	2000		1000 mm (40")
	4000		
	7000		
	10000		
	50000		