

## **PBTG** Series

MELT-BLOWN CARTRIDGES
GAS FILTRATION
DIAMETER 4.5" (116 mm)

## MAIN APPLICATIONS:

- PETROCHEMICAL
- OIL & GAS
- POWER GENERATION
- STEEL MILL
- GENERAL INDUSTRY

## **CHARACTERISTICS:**

- Specifically designed for gas filtration
- Ideal solution for critical application such as:
  - Black powder removal from pipelines
  - Catalyst or activated carbon fines removal downstream mercury guard bed
  - Molecular sieves fines removal from gas treatment units
  - Pre-filtration (liquids agglomeration) for filter gas separators
- Large diameter to permit high flow-rate
- Depth filtration
- 100% pure polyester filter media
- Polyester inner perforated core with stainless steel spring
- Graded density filtration matrix to maximize the dirt holding capacity even in presence of micronic or submicronic particles
- High dirt holding capacity
- Resistant to contamination unloading even at high Delta-P
- Filtration direction out to in
- Seven filtration rating available
- Wide range chemical compatibility
- Polymerics or stainless steel end caps available



## ASCO Filtri S.p.A.

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## **TECHNICAL DATA**

MAX. WORKING TEMPERATURE 120 °C max.

#### DIFFERENTIAL PRESSURE

Cartridge replacement: 2.0 bar @ 25 °C (SOE style) 0.8 bar @ 25 °C (C style)

Max. allowable:

3.5 bar @ 25 °C (SOE style) 1.5 bar @ 25 °C (C style)

#### **CONSTRUCTION MATERIAL**

Filter media: Polyester

Inner core:

Polyester + SS spring (SOE style)
Polyester (C style)

#### **End caps:**

Polyester

Nylon + 30% fiberglass

304-SS 316-SS

Gaskets:

Buna-N Viton

## **DIMENSIONS**

OD 116 - ID 70 mm (SOE style)
OD 116 - ID 76 mm (C style)

Length:

20"

36" 40"

## FILTERING AREA

20" 0.17 m<sup>2</sup> 36" 0.31 m<sup>2</sup> 40" 0.35 m<sup>2</sup>

#### Characteristics:

The PBTG series cartridges are specifically designed for the filtration of dry or wet gases as pre-filters to protect from premature clogging the most expensive cartridges installed in gas/liquid coalescer filters, or for the preliminary liquids agglomeration in gas separators.

The large diameter construction provides high gas flow rates with consequent reduction of the filter dimensions.

The PBTG series cartridges are fabricated with pure polyester melt-blown with controlled graded density filter matrix to enhance dirt holding capacity even in the presence of very fine particles.

In addition, the melt-blown fabrication technology allows to obtain a very stable thermo welding of the microfibres at the contact points which results in a high filtration precision and stability of the filter matrix which allows to obtain better performance in solids retention and eliminate the risk that the collected solids can be released with the differential pressure increasing during the operation.

The cartridges are supported by a perforated polyester core and an additional internal stainless steel spring to increase resistance to differential pressure is provided for the SOE style.

## Flow-rate / Delta-P:

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Filtration rating	Delta-P					
	0.02 bar	0.04 bar	0.06 bar	0.08 bar	0.10 bar	
0.3	75	140	190	220	240	
0.5	85	160	230	260	280	
001	100	190	280	300	320	
003	150	230	300	310	320	
005	250	280	320	340	360	
010	270	300	340	360	360	
025	300	320	350	360	360	

Natural gas flow-rate (Am3/h) with viscosity 0.01 cP and molecular weight 19.87; valid for 40" cartridge. For different gas DP = Delta-P x gas viscosity / 0.01 cP.

Flow-rate valid only for clean gas, reduce the flow-rate according to the application.

#### Max. working temperature:

End caps material	Continuous	Short period	Water presence	
Polyester	115 °C	140 °C	80 °C	
Nylon + 30% GF	120 °C	140 °C	80 °C	
Stainless steel	120 °C	140 °C	120 °C	

## Contact us for any further information.

We reserve the right to change the data of this specification without notice.

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