# **BorsoSpun Absolute** & Nominal



Polypropylene Depth Cartridge Filters

BorsoSpun Absolute & Nominal is a high flow, graded depth filter with high contaminant capacity for long life. Constructed from FDA approved polypropylene with excellent performance characteristics, it is an economic choice for a wide range of application.

BorsoSpun Absolute & Nominal is available in a range of industrial standard lengths as either absolute or nominal rated cartridges. Also available in Nylon construction for solvent filtration.

# **Applications**

BorsoSpun Absolute & Nominal cartridges provide absolute and nominal filtration where the cost of filtration is critical. Suitable for the filtration of aqueous and organic liquids, BorsoSpun Absolute & Nominal cartridges can be used as prefilters or final filters in the following applications:



- Food and beverag
   Process water, polishing lines and clarification.
- Pharmaceutical
   Prefiltration and clarification.
- Fine chemicals and solvent Process streams.
- Coatings
   Coating lines, solvents, inks and dye
- Photographic chemical Emulsions and process water.
- Metal finishing electroplating Paint and resin production.
- Water treatment prior to reverse osmosis
   Resin traps and potable water.
- Cosmetics product filling
   Water lines and batch filtration.







## **Features and Benefits**

## BorsoSpun Absolute & Nominal cartridges

Extensive research and selection of the latest and most advanced polypropylene meltblown filter media, results in improved performance, leading to extended filter life at a given efficiency.

## · Graded depth media

The graded structure of the media provides prefiltration of the process fluid prior to the absolute rated final layer. This combination provides economy of use and a smaller process footprint

# High degree of chemical compatability

Constructed entirely of polypropylene and/or nylon.

## Absolute and nominal removal rating

BorsoSpun Absolute and Nominal cartridges are validated using recognised industry standard test methods.

### Suitable for steam and hot water sanitisation

BorsoSpun Absolute and Nominal cartridges are resistant to repeat steam sterilisation and hot water cycles.

## **Environmentally friendly**

BorsoSpun Absolute and Nominal filters environmentally friendly, all spent cartridges can be readily incinerated to trace ash.

# **Cartridge Construction**

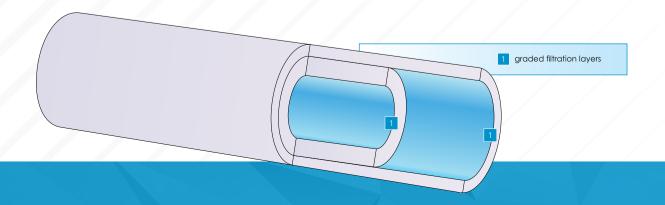
The high quality robust polypropylene and / or nylon construction of BorsoSpun Absolute & Nominal cartridges, allows for excellent chemical compatibility with a wide range of fluids.

The meltblown polypropylene and nylon media provides a bonded matrix thus eliminating fibre migration.

The inherent structural stability of the BorsoSpun Absolute & Nominal, prevents 'channelling' and avoids the risk of particle unloading even under impulse conditions.

The BorsoSpun Absolute & Nominal fusion bonded construction ensures cartridge integrity. No surfactants or bonding agents are used, minimising extractables.

Table 1	Particle Retention Rating			
Code	Pore Rating (microns)	Absolute Rating 99.98% Beta 5000 (microns)	Nominal Rating 99.90% Beta 1000 (microns)	Nominal Rating 90.00% Beta 10 (microns)
BS	1	0.9	0.35	<0.3
BS	3	1.8	1.2	1
BS	5	2.6	1	3
BS	10	8	7	5
BS	25	20	13	10
BS	50	43	35	20
BS	75	70	55	50
BS	100	95	84	70



# **Specification**

#### **Materials of Manufacture**

Filter media : Polypropylene/nylon
End fittings : Polypropylene

## **Cartridge Dimensions (Nominal)**

Diameter : 63mm (2.5") Length : 254mm (10"),

> 508mm (20") 762mm (30"), 1016mm (40"

## **Gaskets and O-Rings**

Ethylene Propylene, FEP encapsulated, Silicone, Viton®, Nitrile or Polypropylene felt available for non crush-fit end adapters.

### **Maximum Differential Pressure**

#### Normal flow direction at:

20°C (68°F) : 3.5 bar (50psi) 60°C (140°F) : 1.0 bar (15psi) 80°C (176°F) : 0.5 bar (7psi)

# **Operating Temperature**

Maximum continuous : 80°C (176°F)

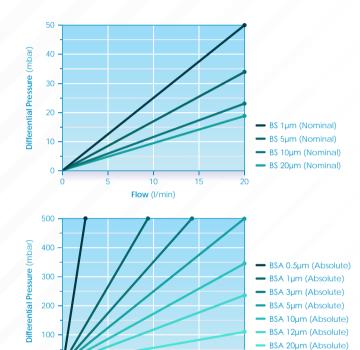
#### **Extractables**

Minimum total extractables.

#### **Clean Water Flow Rates**

- Typical clean water flow rate
   A 254mm (10") BorsoSpun Absolute & Nominal single cartridge exhibits the flow-ΔP characteristics indicated below, for solutions with a viscosity of 1 centipoise.
- Other solutions

For solutions with a viscosity of greater than 1 centipoise, multiply the indicated differential pressure by the viscosity in centipoise.



Flow (I/min)

3

BSA 90µm (Absolute)

# Range

Suitable for use in Van Borselen Filters and as direct replacements for existing cartridges, BorsoSpun Absolute & Nominal cartridges can be supplied with end fittings to suit most hardware installations without modification. They are available in lengths of 10, 20, 30 and 40 inches, and in a choice of removal ratings from 1 to 100 micron.

# **Material Conformity and Validation**

The bio-safety of all materials used in the manufacture of BorsoSpun Absolute & Nominal cartridges is assured by FDA approval to Title 21CFR.177.

Registered to ISO 9001, Van Borselen Filters procedures are subject to high standards of quality assurance as demonstrated through its Drug Master File status.

# **Chemical Compatibility**

The BorsoSpun Absolute & Nominal materials of construction are compatible with a wide range of chemicals and solvents, however care must be taken to select the appropriate seal material. Advice on chemical compatibility is available. Since operating conditions vary considerably between applications, verification by the end user is recommended.

# **Filter Housings**

Please contact a Van Borselen Filters representative for further information on our range of filter housings.

#### **Van Borselen Filters**

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