



BEHRINGER®

ProBond™ Series

Resin Bonded Depth Filter Cartridges

Nominal Filtration Efficiencies For High Viscosity Fluids

Performance:

| | |
|---------------------------------------|--|
| Max Temperature: | 200° F (93° C)* |
| Max Differential Pressure: | 125 psid (8.5 bar) (Ambient temp) |
| Recommended Change Out: | 50 psid (3.55 bar) |
| Nominal Filtration: (Micron sizes) | 2, 5, 10, 25, 50, 75, 100, 125, 150 |

Media

Behringer® ProBond™ Resin Bonded filter cartridges are manufactured using phenolic resin-impregnated media made from extra-long acrylic and polyester fibers. They are an economical and disposable element. No silicone is used in the manufacturing process. The media is manufactured with a two-stage filtration design to maximize particle removal and service life in viscous fluid filtration applications. This media has an outer pre-filtration layer that catches larger particles. Then inner layer is rated at the particular micron size, and gradually becomes tighter towards the inner diameter of the cartridge. This creates a strictly regimented, rigid element, with open surfaces on the outer diameter and rated micron sizes towards the internal diameter. Because of this graded density media, Behringer ProBond™ cartridges have higher dirt-holding capacities than competitor brands, resulting in higher flow rates with minimal resistance. This yields a cartridge that is an excellent choice for high viscosity fluids, or large flow rates. We also offer a grooved design that offers a higher surface area, resulting in even higher dirt-holding capacities.

Features and Benefits

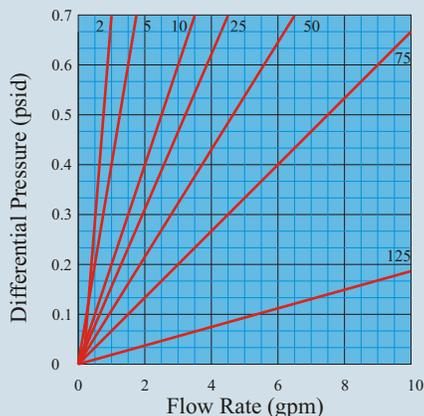
- Extra-long polytester and acrylic fibers to provide superior strength and breakage resistance
- Extremely large range of applications
- Silicone free construction
- 2-part media for higher dirt holding capacities and flow rates
- Available with multiple end configurations to ensure a proper fit into competitor vessels.
- Phenolic resin impregnated to ensure ultimate strength for use with fluid viscosities up to 15,000 SSU.
- Offered with grooves for added surface area
- Available in lengths from 9.75 in. through 60 in. To fit any vessel.
- Standard diameter is 2-5/8 in. Optional diameter is 2". Other special diameters are available on request.

Typical Applications

- Abrasives
- Adhesives
- Animal Oils
- Chemical Coatings
- Emulsions
- Organic Fluids
- Organic Solvents
- Paints
- Petroleum
- Plasticizers
- Printing Inks
- Process Water
- Resins
- Waxes

Flow vs. Pressure Information

Single 10-inch Resin Bonded Cartridge



Pressure drop calculation:

Pressure drop curves are based on fluid with viscosity of 300 SSU (65 cSt) and element length of 10 inches. P across the media is proportionally related to viscosity and element length. The formula for calculating different pressure drops is as follows: **New P = P curve x (viscosity(cSt)÷65) / # of 10" lengths**

Notes:

- 1.) Max recommended flow rate depends on application, fluid, and operating pressures. Above flow characteristics are for filters with 2-5/8 in. OD.
- 2.) Initial pressure drop should be kept as low as possible. Initial pressure drops over 5 psid may considerably decrease cartridge life.

Operating Conditions

Max Operating Temperature:
200° F (93° C)

Max Permissible p:
125 psid (8.5 bar) @ ambient temp.

Recommended Change-Out p:
50 psid (3.5 bar)

Max Recommended Flow Rate:
Depends on application and fluid

Construction

Media:

ProBond™ Resin Bonded phenolic resin-impregnated media made from extra-long acrylic and polyester fibers

End Caps:

222 O-rings, Core Extenders, SOE

Gasket / O-ring Materials:

Buna-N, Viton, Silicone, EPR,

Outside Diameter:

2-5/8 in. (66.7 mm) / 2 in. (50.8mm)
Special OD on request

Inside Diameter:

1.06 in. (27 mm)

Nominal Lengths (in):

9¾, 10, 19½, 20, 29¼, 30, 39, 40, 50, 60

Table 1 Table 2 Table 3 Table 4 Table 5 Table 6

PB

Type

Table 1

| | |
|------|------------------|
| Omit | Standard Surface |
| G | Grooved Surface |

Length

Table 2

| | |
|-------|------------|
| 9.8 | 9.75 Inch |
| 10 | 10 Inch |
| 19.5 | 19.5 Inch |
| 20 | 20 Inch |
| 29.25 | 29.25 Inch |
| 30 | 30 Inch |
| 39 | 39 Inch |
| 40 | 40 Inch |
| 50 | 50 Inch |
| 60 | 60 Inch |

Diameter

Table 3

| | |
|----|---------------------|
| AN | 2-5/8 in. (66.7 mm) |
| BN | 2 in. (50.8 mm) |

Micron Rating

Table 4

| | |
|-----------|------------|
| 2 micron | 75 micron |
| 5 micron | 100 micron |
| 10 micron | 125 micron |
| 25 micron | 150 micron |
| 50 micron | |

Adders

Table 5

| | |
|------|------------------------|
| Omit | None |
| C | Closed End Cap (1 end) |
| 222 | 222 O-ring / Closed |
| PCE | PP Core Extender |
| TCE | 304 S/S Core Extender |
| SCE | 316 S/S Core Extender |

Seals

Table 6

| | |
|------|----------|
| omit | None |
| E | EPR |
| V | Viton |
| S | Silicone |
| B | Buna-N |

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