The Nowata NP Series Trapper Filter Cartridge

The Trapper, named for its superior dirt trapping ability, is made using a unique winding process which provides the Trapper with a uniform density profile throughout the cartridge. This process gives greater control of porosity from one cartridge to the next. Density is controlled radially and concentrically. The spaces between fibers become progressively smaller and more numerous approaching the discharge surface. Due to the density profile, the contaminant is trapped not only on the cartridge surface, but throughout its depth. This creates a cartridge with greater dirt holding capacity and more reliable filtration.

The Fibers and Resin used in the Trapper are chemically compatible with a wide range of fluids and gases. Typical filtration applications include:

- Fresh Water
- Salt Water
- Ethylene Glycol
- Natural Gas
- Air
- Hydraulic Fluid
- Hydrocarbons
- Paint
- Coolants
- Solvents
- Lubricating Oil
- Kerosene
- Plus a variety of other Liquids and Gases

The NP Trapper Construction Features

The Trapper is made from long fibers of Polyester which resists excessive migration. The “3NP” 29-1/4 inch and “4NP” 40 inch cartridges are made in one continuous length to eliminate the possibility of channeling at the mating cartridge faces.

Resin Binder

The long fibers are impregnated with a phenolic resin, which provides a rigid cartridge that resists channeling and fiber migration.

Core

No support core is needed to hold the filter material in place as in other style cartridges.

End Style

The most popular style cartridge is the Double Open End (DOE) type as shown. The “-OP” 222 o-ring (1.75 inch diameter) style adapter with one end closed is also available. We invite you to contact our Technical Sales Department to determine the compatibility of the Trapper cartridge with your filtration requirements.
NP Series Trapper Performance

Flow Rating

This graph represents the typical flow rate per 9-3/4” length cartridge, at various fluid viscosities and micron ratings. These values are based on an initial clean pressure drop of 2 psi. A “3NP” triple length cartridge has 3 times the flow rate per cartridge as shown by the graph. The “4NP” quadruple length cartridge has 4 times the flow rate per cartridge with a maximum flow of 24 GPM which is limited by the 1” ID restriction. These flow rates should give acceptable cartridge life when the turbidity is below 15 parts per million. If high dirt loads are expected, lower cartridge flow rates should be used for sizing purposes.

Multiply the number of cartridges in a housing times the flow rate from the graph, for the particular fluid, to determine the housing capacity.

Trapper cartridges are ideally suited for use in Nowata filter housings. Our engineering and production capabilities work together to provide filters for virtually every filtration requirement.

For specific information about Nowata housings or cartridges for your application, contact your local representative or our technical sales staff.

Cartridge Data

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<thead>
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<th>Micron Rating</th>
<th>9-3/4 inches</th>
<th>Model</th>
<th>29-1/4 inches</th>
<th>40 inches</th>
<th>Actual Opening in Inches</th>
<th>Water* GPM Cartridge</th>
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*Water at 2 psi clean pressure drop

All cartridges are 2-1/2” OD x 1” ID. Single length (1NP) cartridges are 9-3/4” long. Triple length (3NP) cartridges are 29-1/4” long. Quadruple length (4NP) cartridges are 40” long. Add-OP to the model to indicate (1.75” diameter) 222 o-ring style end seal with the other end flat closed.

Trapper Nomenclature

To identify or specify a certain micron size for a particular cartridge, note the numbers that follow the “1NP” or “3NP”. That number (or numbers) denotes the micron rating. Adding “-OP” to the model number indicates a 222 end adapter. Blank indicates double open end (DOE) configuration.

Example: 1NP75 Trapper cartridge identifies it as a 9-3/4 inch long, double open end, polyester cartridge, with a micron rating of 75.

Example: 3NP10 Trapper cartridge is a 29-1/4 inch long, DOE, polyester cartridge with a 10 micron rating.

Example: 4NP125 Trapper cartridge is a 40 inch long, DOE cartridge with a 12 micron rating.

Example: 4NP125-OP is a 40 inch long, 125 micron cartridge with one end closed and the other has a 222 o-ring adapter.

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