

## **R Filter Selection By Applications**



	Page
Portable LCO Cart .....	92
Portable Coolant Filter Cart .....	94
Coolant Filter Selection Guide .....	97
Water Filter Selection Guide .....	104
Sorbent Containment Systems .....	114
Mini-Bag Filter .....	117
Vibrating Filter .....	118
Giardia Filtration System .....	122
Filter and Bulk Media Tanks .....	132

# Coolant Filter Selection Guide

For low pressure machine tool coolant applications

Rosedale Filtration Products has installed a wide variety of systems throughout the metalworking and manufacturing industries. Our high quality industrial filters prevent metal chips, fines and other debris from contaminating cutting oils and coolants. Our pre-selected systems include the housing, appropriate seals and a filter bag.

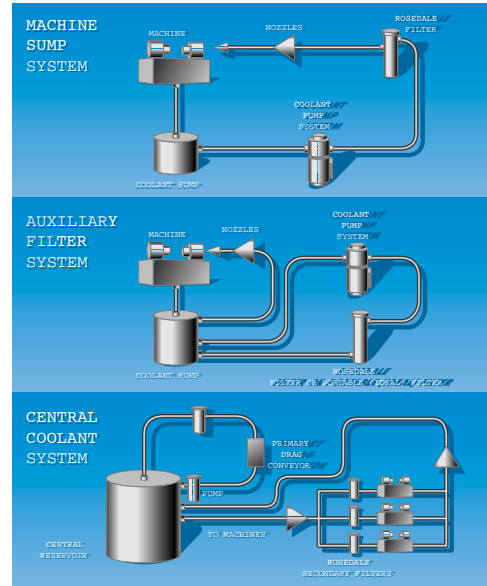
## General Requirements and Measurements

There are important factors that enter into specifying the level of coolant cleanliness that will improve the finish and extend tool life. Variables that affect coolants include: full or partial filtration, single pass or recirculating flow, dirt loading, pressure drop through all components of the filter systems, coolant temperature, flow rate, system pressure, and the presence of tramp oil.

This filtration guide is intended to provide general information about industry specifications. Use the data to compare and evaluate your specific application.

## Typical Applications

Our schematics illustrate how Rosedale filters can be easily installed in any coolant circuit. The versatile Rosedale filters can be used in all metalworking machines, including milling, boring, broaching, grinding, drilling, turning, etc.



## Methodology

Charts, schematics and other information provided or referred to throughout this guide are intended as examples only. "Nominal" filter ratings are used and monthly throughputs are calculated to include the sizing of filter elements to provide a 30 day minimum life expectancy based on a typical dirt load ingress.

Rosedale offers the widest range of filters and filter bags, including oil-adsorbing, high temperature, high-capacity bags, high-efficiency liquid filter bags, and Beta Bag® filter bags. The term Beta Ratio or Beta Rating refers to the number of particles upstream divided by the number of particles downstream in a given size. For example, if there are 100 five micron particles upstream and 50 five micron particles downstream of the filter bag, then the Beta Rating for this filter in the five micron size is 100/50, or 2. In other words, the filter bag is said to have a Beta 5 of 2. The efficiency is 50% in the five micron range.

<b>Recommended Clarity Levels Of Filtered Coolant</b> Filtered coolant shall meet or exceed the following average clarity levels.	Average Particle Size	Concentration: PPM
	<b>Ultra Fine:</b> Honing, microsizing, lapping, and polishing	larger than 8 microns between 1 to 8 microns
<b>Very Fine:</b> Grinding, gun-drilling, gun-reaming (with tool diameters of 0.125 inch or less)	larger than 8 microns between 1 to 8 microns	<b>less than 15 micron</b> 10 PPM to 15 PPM 50 PPM to 100 PPM
<b>Fine:</b> Tapping, milling, lathe, hobbing, drilling, boring, general machining	larger than 8 microns between 1 to 8 microns	<b>less than 20 micron</b> 15 PPM to 30 PPM 100 PPM to 200 PPM

Single-Bag Filters

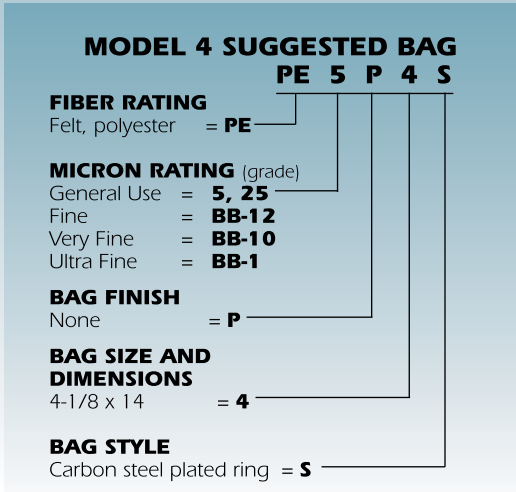
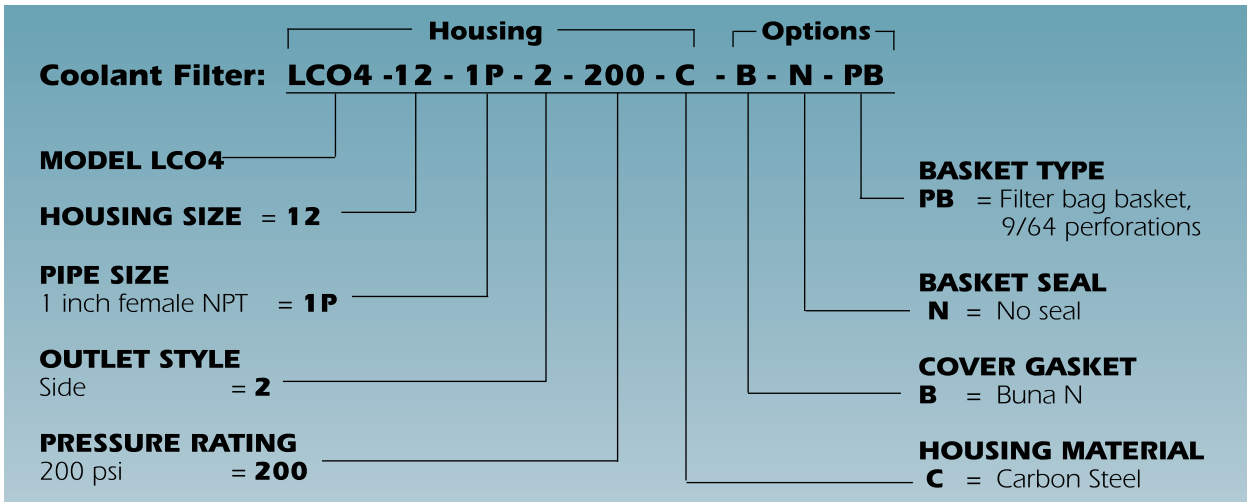
**Model 4 Coolant Filter**

For Flows to 5 gpm

Flows can be higher. These flows are selected to optimize dirt holding capacity.

(For more detail information and other specifications concerning the Model 4, please see page 4 or contact a Rosedale representative.)

These rugged and reliable bag filters are tailored to high-capacity applications yet are relatively low in cost, making these durable filtration devices one of the best values on the market. Choose from among the pre-selected ordering codes listed below for filter flows to 5 gpm with a 200 psi rated housing.



**Technical Specifications**

<b>Bag Size:</b>	Any Standard Size 4 Bag
<b>Drain connection:</b>	1" NPT
<b>Piping connections:</b>	1" NPT
<b>Construction material:</b>	Carbon steel
<b>Pressure rating:</b>	200 psi
<b>Weight:</b>	20 lbs
<b>Surface Area:</b>	1 Ft <sup>2</sup>

**Note:** If your application requires options other than those listed, please turn to page 4.

Single-Bag Filters

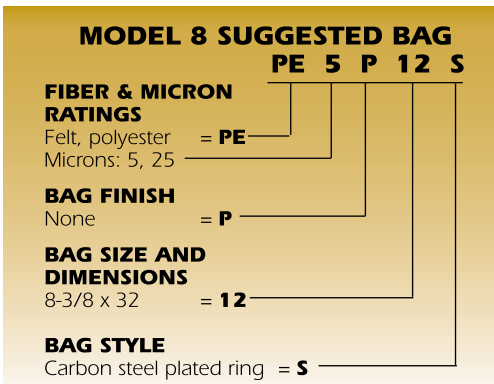
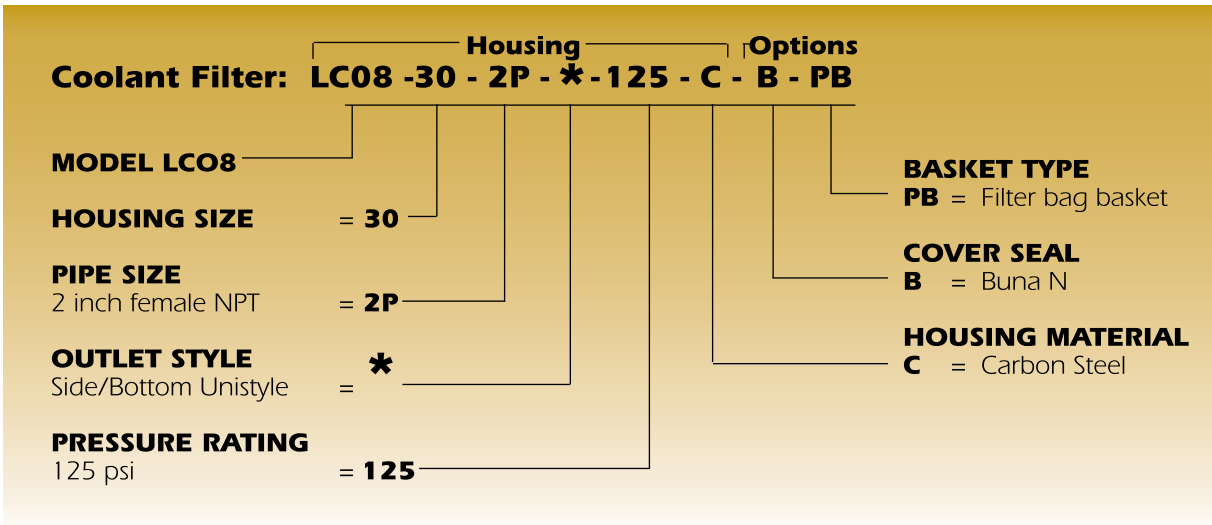
**Model 8 Coolant Filter**

For Flows to 25 gpm

Flows can be higher. These flows are selected to optimize dirt holding capacity.

(For more detail information and other specifications concerning the LCO Model 8, please see page 17 or contact a Rosedale representative.)

These rugged and reliable bag filters are tailored to high-capacity applications yet are relatively low in cost, making these durable filtration devices one of the best values on the market. Choose from among the pre-selected ordering codes listed below for filter flows to 25 gpm with a 125 psi rated housing.



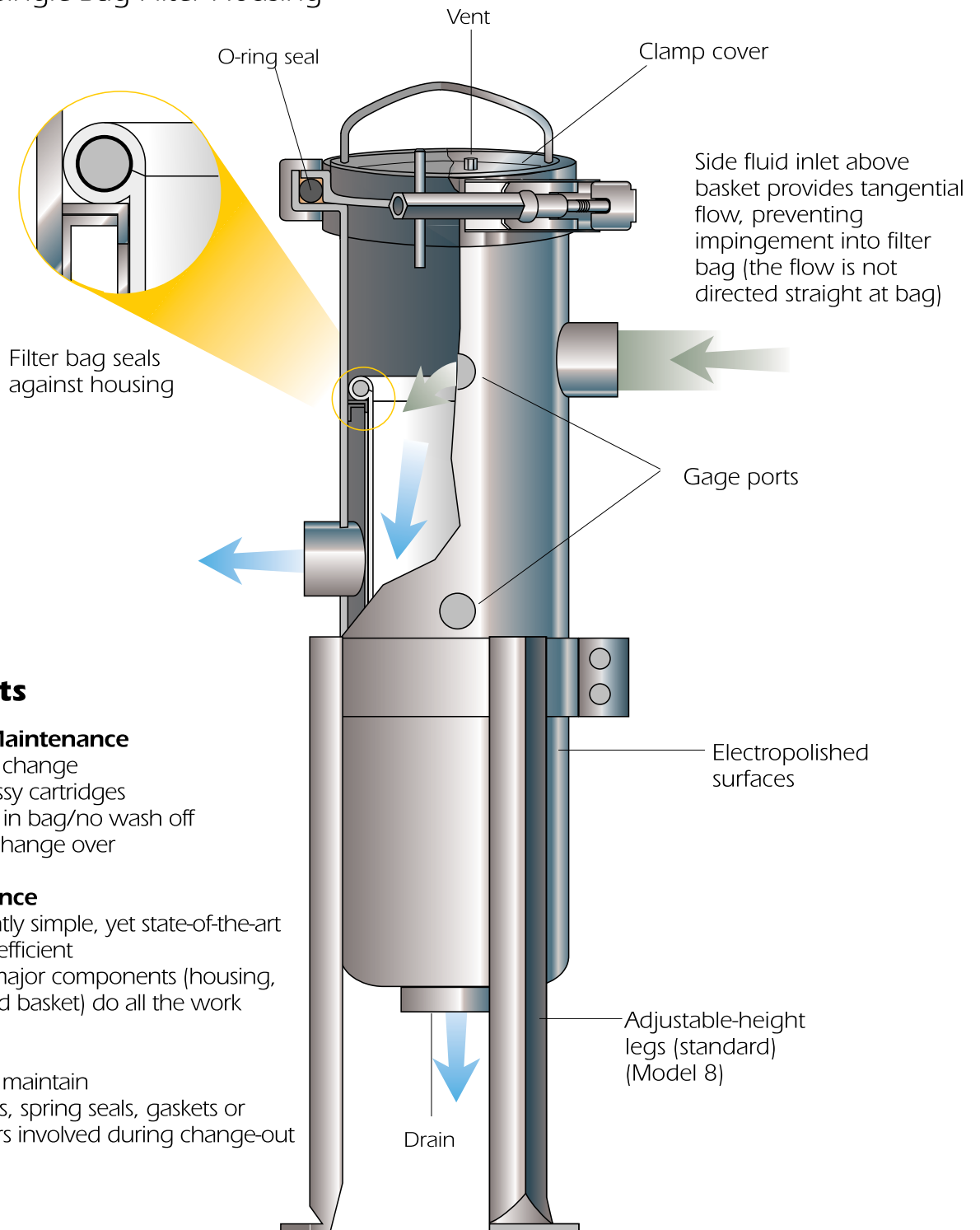
**Technical Specifications**

<b>Bag Size:</b>	Any Standard Size 12 bag
<b>Drain connection:</b>	2" NPT
<b>Piping connections:</b>	2" NPT
<b>Construction Material:</b>	Carbon steel
<b>Pressure rating:</b>	125 psi
<b>Weight:</b>	70 lb
<b>Surface Area:</b>	5.6 Ft. <sup>2</sup>

**Note:** If your application requires options other than those listed, please turn to page 17.

## Features

### Typical Single-Bag Filter Housing



### Benefits

#### Ease of Maintenance

- Easy to change
- No messy cartridges
- Dirt left in bag/no wash off
- Quick change over

#### Performance

- Inherently simple, yet state-of-the-art
- Highly efficient
- Three major components (housing, bag and basket) do all the work

#### Service

- Easy to maintain
- No caps, spring seals, gaskets or adapters involved during change-out

## Multi-Bag Filters

These multi-bag filters offer the widest range of flow capacities and contaminant holding capabilities. With anywhere from 2–23 perforated stainless-steel baskets specially fitted to hold disposable or cleanable filter bags, these high-capacity multi-bag filtration devices are extremely versatile. Bag sizes meet industry-wide standards: conventional 3-inch baskets take bag size 2 while optional 15-inch basket take bag size 1. The standard pressure rating for all models is 150 psi and all housing units can be supplied with a ASME code stamp, if required.

Choose from among the pre-selected ordering codes listed below. If you need assistance determining the size or type of product that suits your application, call a Rosedale representative today for assistance and information.



### Benefits

#### Ease of Maintenance

- Easy to change
- No messy cartridges
- Dirt left in bag/no wash off
- Quick change over

#### Performance

- Inherently simple
- Three major components (housing, bag and basket) do all the work

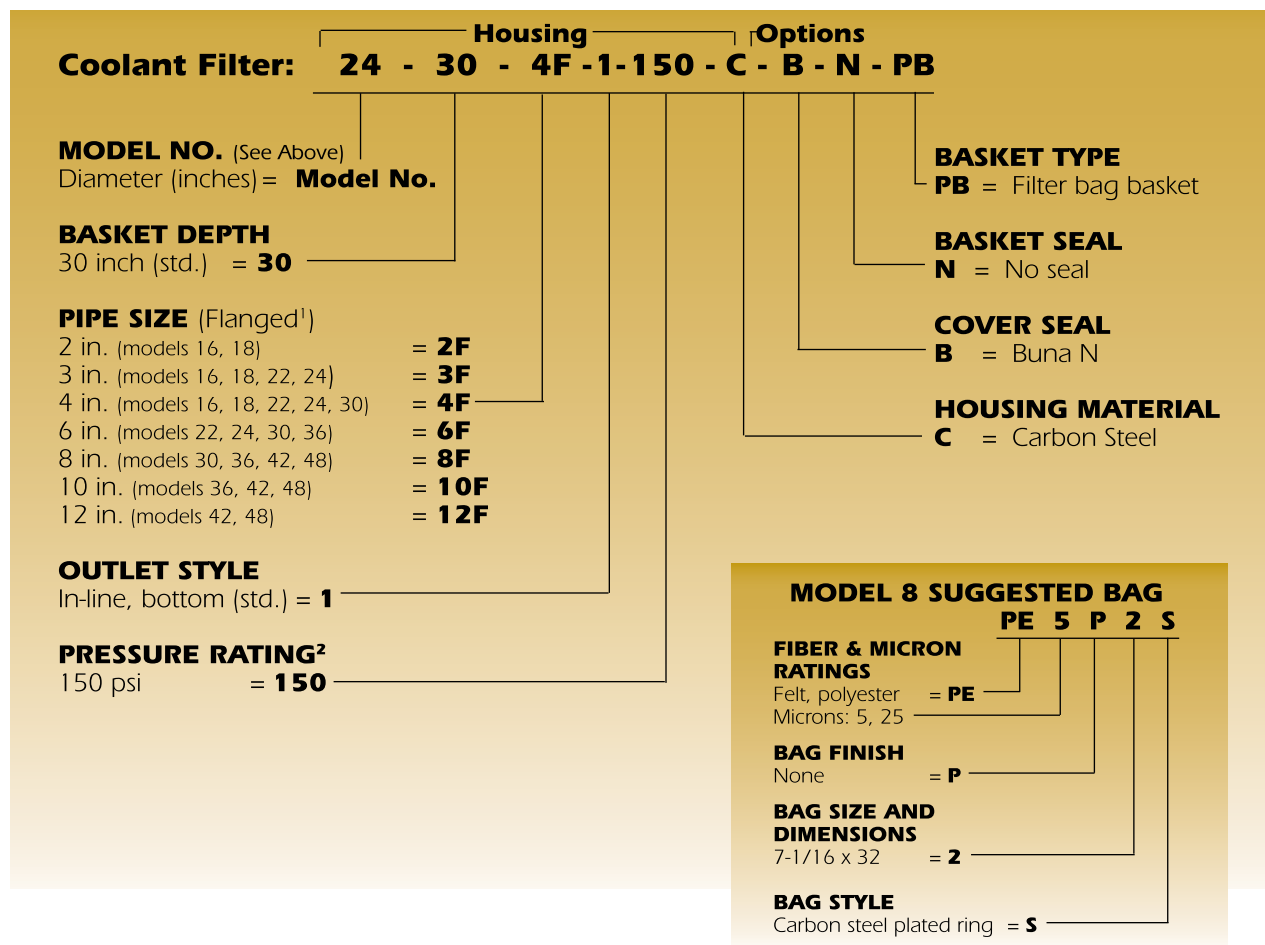
#### Service

- Easy to maintain
- No caps, spring seals, gaskets or adapters involved during change-out



**Model Selection** (30-inch deep baskets)

Model No. (and diameter in inches)	Number of Baskets	Straining, Filtering Area (ft <sup>2</sup> )	Standard Pipe Sizes Avail. (in.)	Suggested Flow Rate <sup>3</sup> (gpm)
16	2	8.8	2	50
18	3	13.2	2	75
22	4	17.6	2,3	100
24	6	26.4	3	150
30	8	35.2	4	200
36	12	52.8	4	300
42	17	74.8	6	425
48	23	101.2	6	575



## Features

### Typical Multi-Bag Filter Housing

