

# PARTICULATE AND COALESCING FILTRATION

Kaydon designs and manufactures oil and fuel filtration vessels applicable for almost any low-pressure hydrocarbon filtration application.

The Model 980 and 981 are durable and robust inline pressure or return line (1,200 psig maximum) filter assemblies used for oil and fuel filtration applications. The Model 980/981 vessels are suitable for use with hydraulic systems used in small industrial hydraulic power units, small lube systems, and diesel fuel transfer where larger filtration assemblies are not practical. The Model 980/981 series is a substitute for spin-on type filters where extra protection and a more rugged design are desired.

The Model 111 and Model 112 oil and fuel filtration filter vessels are designed to offer a cost-effective solution for general purpose industrial oil and fuel filtration applications. The vessels are constructed of aluminum, making them lightweight and easy to install, yet rugged and durable to withstand corrosive environments. The Model 111 and Model 112 filtration vessels provide an economical solution for general purpose oil and fuel filtration applications.

The Model V-618 and V-636 oil and fuel filtration filter vessels are engineered to offer a high quality solution for industrial oil and fuel filtration applications. The V Vessels are rugged, heavy-duty, carbon steel constructed. The Model V vessels are designed to provide oil filtration or fuel filtration for a wide range of industrial applications.

The VKS Vessel family of filtration vessels are all carbon steel construction and designed to the latest edition of the ASME pressure vessel code. VKS filtration vessels are designed for in-line flow applications where a heavy-duty design, rugged construction, and long-term durability are required. Operating conditions, such as repeated shock and vibration, do not affect the filtration element or its secure seating.



## Model 980 and 981 Oil and Fuel Filter Housings

Kaydon Model 980 and 981 Oil and Fuel Filter Housings are durable and robust inline pressure or return line (1,200 psig maximum) filter assemblies used for oil and fuel filtration applications. Both the 980 and 981 are suitable for use with hydraulic systems used in mobile equipment, small industrial hydraulic power units, small lube systems, and diesel fuel transfer where larger filtration assemblies are not practical. They can be substituted for spin-on type filters where extra protection and a more rugged design are desired.

The Model 980 is rated for a maximum of 20 gpm and the Model 981 is rated for a maximum of 40 gpm, for oils and diesel fuel (check pressure drop curves to determine initial {clean} pressure drops for your flow and viscosity). The Model 980 uses the KMP 9600 series 4-inch length elements\* and the Model 981 uses the 8-inch length elements\*, with media selection of 1, 3, 6, 12 and 25 microns.

The inlet/outlet connections are 1.5-inch NPTF, reducing flow restriction, plus the internal flow path provides low pressure drop (flow resistance). A color-coded visual differential pressure indicator is provided to signal element replacement. Bowl removal is made easier with a hand grip to help twist the bowl from the filter head. A safety by-pass valve set at 50 psid ensures protection of the element and helps maintain flow before element change-out is required. Mounting is simplified with four mounting holes.

### Applications

Inline Oil Filtration

Return Line Oil Filtration

### Features

Aluminum-constructed housing with anodized bowl

Color-coded mechanical pop-up differential pressure indicator to signal when element replacement is required

### Benefits

Lightweight with anti-corrosive anodization

Easy visual reference to signal element replacement when the color changes from green to red; setting is 44 psid.



## Specifications and Details

Flow Rate (Maximum)	Model #	gpm	lpm
	980	20	76
	981	40	152
Environmental Parameters	Minimum Temperature: 32° F / 0° C Maximum Temperature: 120° F / 49° C		
Materials of Construction	Metals: Die Cast Aluminum, Anodized Die Cast Aluminum Circumferential Bowl Seal: Fluoroelastomer By-Pass Valve: Nylon Filtration Element: Tin coated carbon steel end caps and center tube. Epoxy adhesives and inert micro-fiberglass filtration media		
Inlet/Outlet Connections	11/2" NPTF		
Maximum Operating Pressure	1,200 PSIG / 83 BAR		
Static Burst Pressure	3,000 PSIG / 206 BAR		
Rated Fatigue Pressure	0—1000—0 psig for 1,000,000 cycles		
Change-Out Differential Pressure (Recommended)	25 psid / 1.7 BAR		
By-Pass Valve Rating	50 psid / 3.4 BAR		
Maximum Operating Temperature Range	≤ 250° F / ≤ 120° C		
Fluid Compatibility	Petroleum Based Fluids (maximum viscosity = ISO 320)		
Weight (approximate)	Model #	lbs.	kgs.
	980	6.6	3
	981	8.8	4
Dimensions	Model #	Inches L x D	mm L x D
	980	8.5 x 4.7	215.9 x 119.4
	981	12.1 x 4.7	307.4 x 119.4

\*Filtration elements are not included with the 980 and 981 filter assemblies and must be ordered separately. Contact Kaydon customer service for ordering information. All design specifications are subject to change without notice.

