

COALESCER / SEPARATOR VESSELS

Kaydon Filtration 121A and 851E series are diesel fuel/water separation and filtration vessels that employ coalescing technology to separate water from diesel fuel. This fuel-purifying technology protects today's highly sophisticated fuel injection systems, thereby keeping diesel-powered equipment in service. In addition to water removal, the coalescer provides a particulate filtration layer to remove harmful particulates, along with providing protection for the coalescing stage. Kaydon's coalescing technology enables clean fuel delivery and prevents premature replacement of expensive components and revenue loss from equipment downtime resulting from contaminated fuel.



Model 851E Series Diesel Fuel / Water Separators

The Model 851E series of fuel/water separator vessels are industrial diesel fuel #1 and #2 filter vessels that utilize Kaydon Filtration coalescing technology and particulate removal capabilities. They remove damaging water and capture destructive particulates. The 851E series has a particulate performance rating of ISO Cleanliness Code < 18/16/13¹ and water removal to less than 130 ppm².

The 851E series protects the fuel injection system and removes the burden of contamination control from the on-engine filters. They offer clean fuel delivery, preventing premature replacement of components and revenue loss from equipment downtime resulting from contaminated fuel.

The 851E series of fuel/water separator vessels can be configured with a wide array of options such as an automatic water drain, automatic air release, differential pressure gauge and pressure relief valve. Contact Kaydon technical support for more information on these available options.

Applications

Mining
Oil and Gas
Agriculture
Construction
Power Plants

Railroad
Airport Ground Equipment
Marine
Bus
Truck Terminals

Features

Engine protection

Longer lasting on-engine filters

Water removal efficiency exceeds ASTM D975 Diesel Fuel #2 Specification

Benefits

Protects fuel injection system, keeping diesel powered equipment in service; essential for Tier II, III, and IV engine technologies

Removes burden of contamination control from on-engine filters



Specifications and Details

Maximum Flow with CI-3520P Note: Not applicable for biodiesel blends greater than B20	Model #	gpm	lpm	Diesel Fuel Type	
	851E-3	60	230	Petroleum diesel to B1	
	851E-3	54	205	B2 - B9	
	851E-3	45	170	B10- B20	
	851E-5	100	380	Petroleum diesel to B1	
	851E-5	90	340	B2 - B9	
	851E-5	75	285	B10- B20	
	851E-10	200	757	Petroleum diesel to B1	
	851E-10	180	680	B2 - B9	
	851E-10	150	570	B10- B20	
	851E-16	320	1210	Petroleum diesel to B1	
	851E-16	288	1090	B2 - B9	
	851E-16	240	910	B10- B20	
	Environmental Parameters	Minimum Temperature: -20° F / -29° C Note: If below 32° F / 0° C, end user is responsible for insulation or heat tracing for water accumulation area. Maximum Temperature: 120° F / 49° C			
	Materials of Construction	Metals: Carbon Steel, Bronze, Stainless Steel Elastomers: Viton Exterior and Interior Paint: Epoxy			
	Inlet/Outlet Connection (150 lb. RF Flange, NPT is available for 851E-3 and 851E-5)	Model #	Inlet	Outlet	
		851E-3 / 851E-5	2 inches	2 inches	
		851E-10	3 inches	3 inches	
		851E-16	4 inches	4 inches	
	Maximum Operating Pressure	150 PSIG / 10.3 BAR			
Fluid Compatibility	Diesel Fuel #1 & # 2 and Biodiesel Blends up to B20 at Fuel Temperature > 50° F / 10°C				
Weight (dry - approximate) Note: Add 30 lbs. (13.6 kgs) for optional automatic water drain	Model #	lbs.	kgs.		
	851E-3	210	95		
	851E-5	330	150		
	851E-10	440	200		
	851E-16	550	250		

1. As measured with inline automatic particle monitor calibrated to ISO 11171 and influent no greater than ISO 22/19/17 (2) Total Water content (free, emulsified and dissolved) as measured by ASTM D6304-04 (Karl Fischer method)
 All design specifications are subject to change without notice.