



Diesel Fuel #2 / Water Separators

851E Series

The Model 851E Series diesel fuel #2/water separator vessels are industrial diesel fuel #2 filter vessels that utilize Kaydon Filtration coalescing technology and particulate removal capabilities. The 851E removes damaging water and captures destructive particulates. The 851E series can be used for the following:

- Marine, Bus and Truck Terminals
- Mining, Agriculture, Construction
- Power Plants, Railroad, Airport Ground Equipment



automatic air release (option)

NPT Connections 851E-3 and -5 (option)

Model 851E-3

automatic water drain (option)

The 851E provide these benefits:

- o Engine Protection: Protects fuel injection system, keeping diesel powered equipment in service. Essential for Tier II, III, and IV engine technologies.
- o Clean Fuel Delivery: Prevents premature replacement of components and revenue loss from equipment downtime resulting from contaminated fuel.
- o Longer Lasting On-Engine Filters: Removes burden of contamination control from on-engine filters.

OPTIONS	
Description	Description
Automatic Water Drain	Pressure Relief Valve
Automatic Air Release	Differential Pressure Gauge
NPT Connections (851E-3 and 5)	Export Crating

FOOTNOTES

- (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)
- (3) Required for element changes.
- (4) Limit = .050 maximum water / sediment, units = % volume (free and emulsified water only) - Test Method ASTM D2709: Water and Sediment in Middle Distillate Fuels by Centrifuge

DS010412851E

SPECIFICATIONS & DETAILS

Sizing (maximum flow)	851E-3: 30 GPM (60 GPM - pleated coalescer) 851E-5: 50 GPM (100 GPM - pleated coalescer) 851E-10: 100 GPM (200 GPM - pleated coalescer)
System Pressure	150 PSIG / 10.3 BAR (maximum)
Environmental Parameters	Minimum Temperature: 32 F (0 C) Maximum Temperature: 120 F (49 C)
Materials of Construction	Metals: Carbon Steel, Bronze, Stainless Steel Elastomers: Buna-N Exterior Coating: Epoxy Interior Coating: Epoxy
Inlet/Outlet Connections	All Systems: 2 inch Optional: 851E-10: 3 inch Type: ANSI Flange (150 psig / 10.3 BAR)
Fluid Compatibility	Diesel Fuel # 2 at Fuel Temperature > 50F (10C)
Vessel Design	ASME Section VIII, Division 1, Latest Edition
Weight	851E-3: 210 lbs (95 kgs) - approximate 851E-5: 330 lbs (150 kgs) - approximate 851E-10: 440 lbs (200 kg) - approximate add 30 lbs (13.6 Kg) for automatic water drain
Dimensions	851E-3: 22 inches L x 17 inches W x 40 inches H (560 mm L x 432 mm W x 1020 mm H) 851E-5: 26 inches L x 20 inches W x 40 inches H (660 mm L x 510 mm W x 1020 mm H) 851E-10: 26 inches L x 20 inches W x 68 inches H (660 mm L x 510 mm W x 1730 mm H) add 6 inches W (152 mm W) for automatic water drain
Performance	Particulate: – ISO Cleanliness Code 18/16/13 ¹ Water: removal to less than 500 ppm ² (Meets ASTM D975 Diesel Fuel Specification ⁴)

CONSUMABLES

DESCRIPTION	QTY	PART NUMBER	PART NUMBER pleated coalescer
COALESCER ELEMENT (851E-3)	3	CI-3520	CI-3520P
SEPARATOR ELEMENT (851E-3)	3	608061	608061
COALESCER ELEMENT (851E-5)	5	CI-3520	CI-3520P
SEPARATOR ELEMENT (851E-5)	5	608061	608061
COALESCER ELEMENT (851E-10)	5	CI-3540	CI-3540
SEPARATOR ELEMENT (851E-10)	5	A910174	A910174
FILTER VESSEL SEAL (851E-3) ⁽³⁾	1	A900322-B	A900322-B
FILTER VESSEL SEAL (851E-5 and 10) ⁽³⁾	1	A628006-B	A628006-B

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