



### Product Description

The Indufil LCF filter series helps to prevent water related problems by effectively removing water from liquid fuels. Free and emulsified water will be separated from fuels in a single pass. John Crane's patent-pending dual stage coalescing elements merge the fine water droplets to larger sizes. These larger droplets are flowing to the bottom of the filter unit where the water easily can be drained. Additionally, the filter allows the removal of fine particles from the fuel.

### Design Benefits

- Water removal efficiency exceeds 99.9% in a single pass\*
- Particle filtration efficiency down to 4 µm with an efficiency of 99.9%\*\*
- Multi-stage element design to prevent re-entrainment of water droplets
- Bolted construction allowing high flexibility in connections
- Compliance with ASME, PED and many other standards and regulations
- Easy to integrate in fuel delivery systems

### Design Features

- Can easily handle fuels with water content of 2,000 ppm(v)
- Higher water contents can be handled depending on application requirements
- Combines coalescing and particle filtration functionality
- Vertical setup to minimize footprint

### Fuel Specifications

Media:	Liquid fuels like diesel, kerosene, gasoline, LPG, biodiesel
Viscosity range:	1 to 10 cSt (@40°C)
Flow rate:	Up to 250 lpm/65 gpm (Higher flow on request)
Interfacial tension:	Commonly 25-35 mN/m for liquid fuels (Our elements can separate water from fuels with IFT down to 10 mN/m)

### Operating Parameters/Design Conditions

Water removal efficiency:	> 99.9%*
Particulate removal efficiency:	Beta 4>1000**
Maximum pressure:	14 barg/203 psig (Higher pressures on request)
Temperature range:	-40° to 150°C/-40° to 302°F
Element replacement DP:	1.0 bar/14.5 psi
Drain reservoir capacity:	3.2 liters/0.85 gallons (Larger sizes on request)
Available certifications	U-stamp, AS1210, CRN, TR-CU, etc.ATEX, IECEx, UL, CSA, CUL, TR-CU, UKCA
Options:	Level indicator Automatic water drain

\* According to ISO 14332

\*\* According to ISO 16889

**TABLE 1. Product Range**

Model	Max Flow Rate (diesel at 20°C/68°F)	Number of Coalescer Elements	Vessel Height	Vessel Diameter
LCF-100	90 lpm/24 gpm	One	90 cm/36"	245 mm/9.6"
LCF-200	130 lpm/35 gpm		101 cm/40"	
LCF-300	170 lpm/45 gpm		112 cm/44"	
LCF-400	250 lpm/65 gpm		132 cm/52"	

### Materials of Construction

COMPONENTS	MATERIALS
Inlet/Outlet connections	ASME B16.5 Class 150# RF Flanges or end user specification
Vessel design	ASME Section VIII, Div 1, others on request
Filter housing	Low alloy carbon steel (SA106B), others on request
Seals	FKM, others on request
Element materials	Stainless steel
Element media	Glass fiber, Polyolefin barrier layer



**North America**  
United States of America  
Tel: 1-847-967-2400

**Europe**  
United Kingdom  
Tel: 44-1753-224000

**Latin America**  
Brazil  
Tel: 55-11-3371-2500

**Middle East & Africa**  
United Arab Emirates  
Tel: 971-481-27800

**Asia Pacific**  
Singapore  
Tel: 65-6518-1800

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