

Metric dimensions in [].



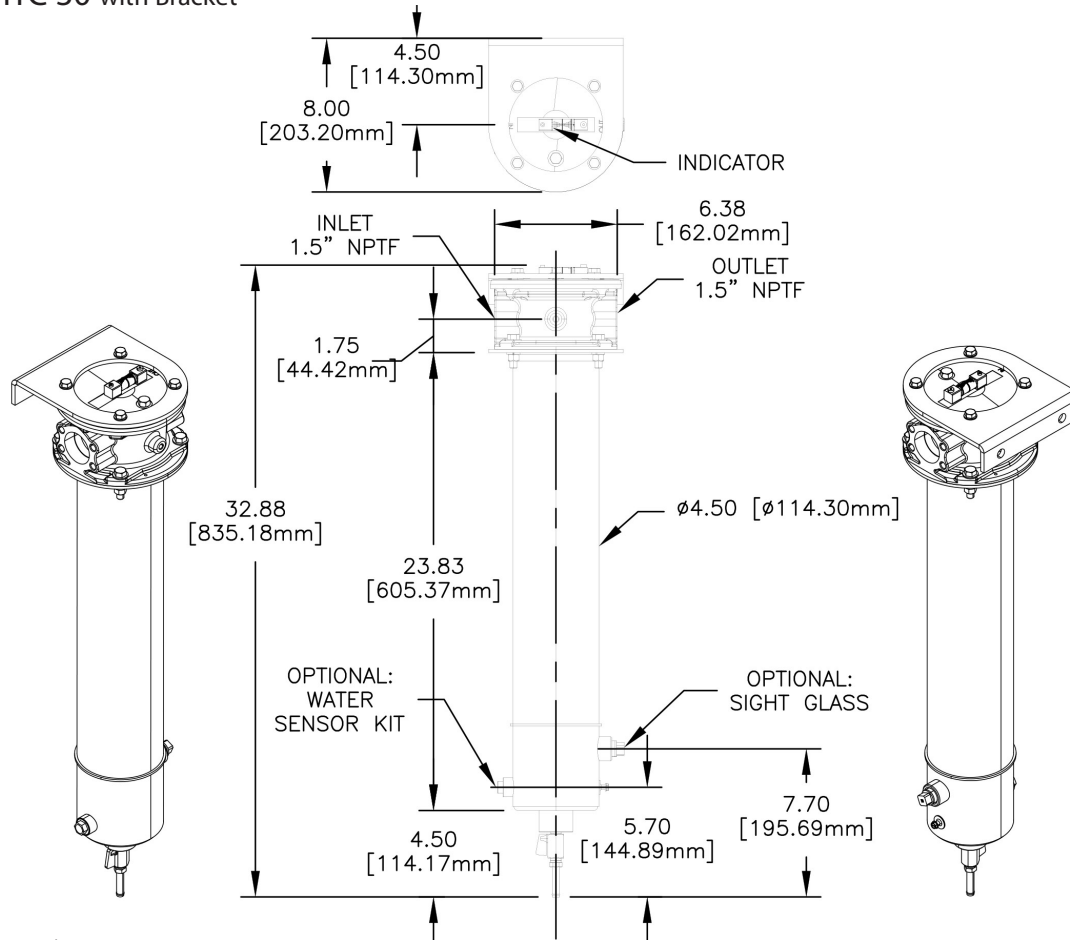
Model	GPM	LPM	Standard Micron Rating
ITC 30	30	114	5

Features and Benefits

- A revolutionary element designed for the highest single-pass water and particulate removal efficiencies in today's ultra-low sulfur diesel (ULSD) fluids
- Protects expensive Tier 3 and Tier 4 engine components against failures caused by particulate and water transferred from bulk fuel tanks
- Allows users to achieve or exceed the particulate and water removal specifications of the injection system OEMs
- Previously acceptable industry standard products no longer provide the high-efficiency separation needed in today's ULSD fluids
- 95% efficiency for removal of free and emulsified water, meeting SAE J1488 standards
- Housing design allows for field upgrade of any available option
- Pressure bypass indicator setting at 25 psi, with bypass valve cracking at 40 psi, allows for early indication before by-pass of filter for advanced time for maintenance
- Includes element change bar indicator
- 5-micron rating is standard. Optional 3-micron rating is available.

30 gpm
114 lpm
150 psi
10 bar

ITC 30 with Bracket



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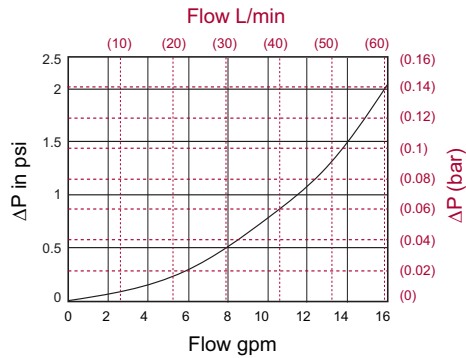
Filter Housing Specifications

Flow Rating:	Up to 30 gpm (114 L/min) for ULSD15
Inlet/Outlet Connection:	1-½ NPTF Standard
Max. Operating Pressure:	150 psi (10 bar)
Min. Yield Pressure:	450 psi (31 bar)
Rated Fatigue Pressure:	90 psi (6 bar), per NFPA T2.6.1-2005
Temp. Range:	-20°F to 165°F (-29°C to 74°C) standard version (AWD option = 32°F (0°C) min. temp)
Bypass Indication:	25 psi (1.7 bar)
Bypass Valve Cracking:	40 psi (2.8 bar)
Porting Head/Cap: Element Bowl:	Steel - Epoxy Paint w/ High-phos Electroless Nickel Plating (Standard)
Filter Housing Weight:	15 lbs (6.8 kg) - Base unit without options or element
Standard Element Model:	E-DCE-5
Element Change Clearance:	With mounting bracket - 18" (457.2 mm) - Access from top (remove cap)
Housing Sump:	32 oz. (0.95 L)
Options:	Sight Glass, Water Sensor, Heater, and Auto Water Drain with 5 or 20 gallon sump tank

Pressure Drop Information Based on Flow Rate and Viscosity

$\Delta P_{\text{housing}}$

ITC 30 $\Delta P_{\text{housing}}$ for fluids with sp gr= 0.86



sp gr = specific gravity

$\Delta P_{\text{element}}$

$$\Delta P_{\text{element}} = \text{flow} \times \text{element } \Delta P \text{ factor} \times \text{viscosity factor}$$

El. ΔP factors @ 37 SUS (3 cSt).

E-DCE-3 = 0.2

E-DCE-5 = 0.2

If working in units of bars & L/min, divide above factor by 54.9.

Viscosity factor: Divide viscosity by 37 SUS (3 cSt).

$$\Delta P_{\text{filter}} = \Delta P_{\text{housing}} + \Delta P_{\text{element}}$$

Exercise: Determine ΔP at 30 gpm (114 L/min) for ITC 30

Solution:

$$\Delta P_{\text{housing}} = 2.05 \text{ psi [0.14 bar]}$$

$$\Delta P_{\text{coalescing element}} = 30 \times 0.2 = 6 \text{ psi [0.41 bar]}$$

$$\Delta P_{\text{total}} = 2.05 + 6 = 8.05 \text{ psi [0.56 bar]}$$

Element Part Number

Coalescing Element	Pressure Side Coalescing	
	Max Flow	Single Pass Water Removal Efficiency
E-DCE-3	30 gpm	≥ 99.5%
E-DCE-5	30 gpm	≥ 99.5%

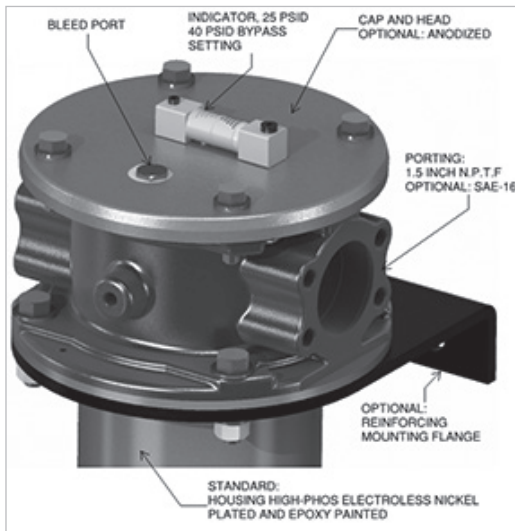
Flow Direction: Inside Out

Element Nominal Dimensions: 4.0" (102 mm) O.D. x 18.5" (470 mm) long

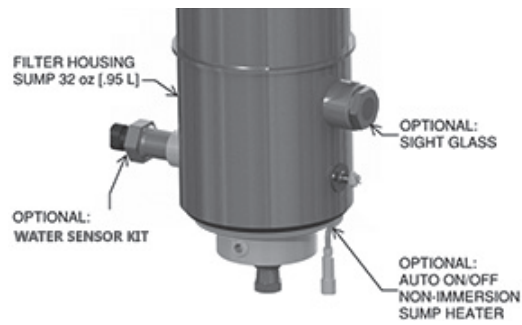
*NOTE: Efficiency based on ULSD15 with 27 Dynes/cm surface tension and 0.25% (2500 ppm) water injection. Discharge water concentration of <100 ppm free and emulsified water.

Available Options

Filter Cap Assembly

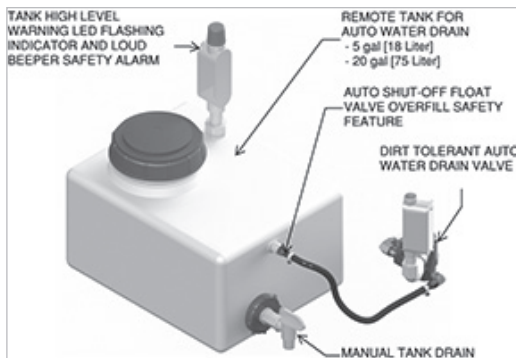


Heater, Sight Glass and Water Sensor Kit



Shown w/ Automatic Sump

(Manual Remote Sump is Optional but tank is the same)



NOTES: Remote Tank dimension:

5 Gallon Tank: 22"W x 9.25" L x 7.125" H
(558.80 W x 234.95 L x 180.97 H)

20 Gallon Tank: 15"W x 11" L x 31" H
(381 W x 279.40 L x 787.40 H)

Power supply for tank high level LED light: 9 VDC (battery included) Supplied w/ 9 VDC terminal for customer wiring provided.

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