

# Installation Guide

X900164 11µm Diesel Fuel Filter Kit  
Suitable for flow rates up to 114lph



Micron Rating: 11µm @ 99% efficient  
Operating Temperature: -40°C to 121°C  
Operating Pressure: 80 psi / 550 kPa / 5.5 bar

## Kit contents:

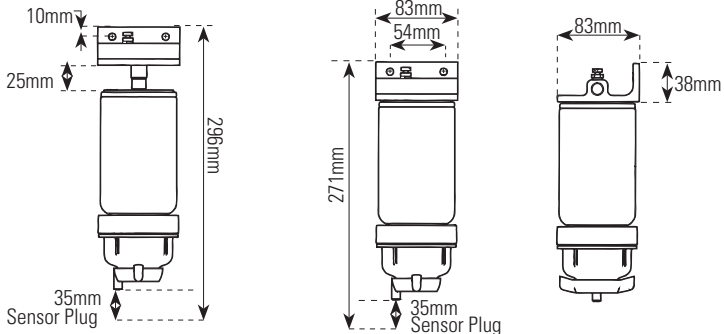
- 1x P560382 1/4" - 18 NPT
- 2x P550588 spin-on filter (one spare)
- 1x P569758 Drain Bowl (optional use)
- 2x P560653 Straight Fitting & 1x P560654 Right-Angle Fitting
- 1 x X220112 Water in Fuel Sensor Display Kit

## Installation

We recommend that additional filtration should be considered as the primary filter and installed before the factory filter, which should be retained as originally fitted. It can also be installed as a final filter. Identify a suitable location to mount the filter assembly that:

- Allows access to replace the filter
- Allows access to the twist and drain valve, to drain separated water
- Provides visibility of the clear water collection bowl
- Is located away from heat sources

### Necessary Mounting Dimensions:



- The filter head should be securely fixed vertically to a bulkhead or mounting bracket using suitable screws or bolts.
- Install the threaded fuel line fittings into the head, noting the direction of flow marked on the head assembly. Use a fuel resistant thread sealant to ensure a leak free seal. Tighten firmly with a suitable tool. Do not over tighten!
- Run the fuel supply line (from the fuel tank) and fit onto the inlet side of the filter head fuel fitting. Secure with a suitable hose clamp.
- Run the fuel feed line (to the engine) and connect to the outlet side of the filter head assembly. Secure with a suitable hose clamp.
- Check there are no tight bends or kinks in the fuel lines, and route them away from heat sources and sharp surfaces. Secure fuel lines to prevent excessive movement.

## Installation Guide



### 1. Lubricate the threads.

Lubricate threads of filter head with clean oil or fuel

**Failure to do this could result in thread galling.**



### 2. Apply thin film of clean motor oil or fuel to gasket.

Lubricate seal(s) with clean oil.

Do not use grease or rubber grease.



### 3. Align threads. Spin filter until gasket contacts.

Spin the new filter on until the top of the gasket first contacts the sealing surface.



### 4. Hand tighten the filter.

Tighten per the guidance of the icons which appear on the filter element. Do not over-tighten. Ensure the drain valve is firm hand tight.



### 5. Install water collection bowl (if applicable)

Unscrew the Twist&Drain valve from the base of the filter. Screw the water collection bowl into the base of the filter and tension firm hand tight, then refit the Twist&Drain valve into the base of the bowl and tension firm hand tight.



### 6. Install WIF sensor

If the WIF sensor kit is to be used, replace the Twist&Drain valve with the one provided in the WIF sensor kit. This valve includes the sensor probe and electrical plug. Follow separate instructions provided for installation.



### 7. Prime fuel system per manufacturer

The air bleed valve on the top of the head is only used for pressurised fuel systems to allow

excess air out of the system. It should remain closed for vacuum fuel systems.



### 8. Start engine and check for leaks

Starting may take longer than normal for the first start.



### 9. Stop engine

Stop engine and recheck for leaks



### 10. Drain water daily

1/4 twist of the Twist&Drain valve. Once any water has been drained, re-tighten the valve until firm hand tight. A tube may be pushed over the drain spigot to aid collection of drained fluid.

## Servicing Guide



1

Disconnect WIF sensor if present and reconnect after servicing



5

Apply thin film of clean motor oil to gasket



9

Prime fuel system per manufacturer



2

Unscrew and remove old filter and gasket



6

Align threads; spin filter on until gasket contact



10

Start engine and check for leaks



3

Wipe filter head with clean cloth



7

Follow icons on filter to tighten



11

Drain water daily



4

Fill with fuel on the dirty side per engine manufacturer recommendations



8

Replace water collection bowl gasket if applicable

This manual is the property of the owner. Donaldson Company reserves the right to change design and specifications without prior notice. Do not make any system modifications or adjustments that would alter the original design. Modifications may result in denial of warranty coverage. Consult your Donaldson dealer if you have questions regarding the assembly, operation, maintenance or warranty. Illustrations are for reference only as actual product may vary.