



*A product from*

**Wennstrom** 

Environment Safeguard 

## Site

### Ventilation solutions

#### SITE products

- Dispensers
- Filling elbows
- Flame arresters
- Gauges
- Refuelling sites
- Security solutions
- System solutions
- Valves
- Vapour recovery adaptors
- Ventilation solutions
- Other products

## Torkel™ – Atmospheric protection for biodiesel

### Renewable fuels

In order to decrease the carbon footprint the general use of renewable fuels is on the increase. To get a quick effect it is important that the fuel can be used in existing vehicles and for this reason the blending of renewable fuels with mineral oil products has increased.

### Biodiesel

Biodiesel is a vegetable oil- or animal fat-based diesel fuel that is often used blended with petrodiesel. Biodiesel is, like ethanol, hygroscopic which can cause problems since water accelerates the growth of microbe colonies which can clog up filters.

### Keep water out

One of the main challenges when it comes to storing biodiesel is to keep water out of the tank. There are a number of openings that have to be taken into consideration. The dip tube is one of these which can be dealt with using our Outlock.

### Ventilation pipe

Another potential source of water is the ventilation pipe. Every time product is dispensed from the tank, air is sucked in via the ventilation pipe. During periods of high humidity this also means that water is introduced into the tank and since biodiesel is hygroscopic there is a risk that the water will mix with diesel. This will accelerate bacterial growth that can result in expensive consequences.

### Naturally closed

With Torkel™ the tank will be naturally closed. This will stop the normal "passive" exchange of air due to temperature changes. This air with water content may otherwise condense on the inside of the ventilation pipes and tank, collecting and trickling down into the diesel.

### Dry air

By leading air that is sucked into the tank during normal refuelling at the dispenser through a filter, Torkel™ will effectively dry the air that must be allowed into the tank. When the tank is being filled up the air pushed out will also help take moisture from the filter thereby prolonging its' lifespan.

### Clean Air

Another important function of Torkel™ is to reduce the amount of particles that are drawn into the tank during normal "breathing". Anything larger than 3µm will be stopped. This gives cleaner fuel which in its turn extends the lifespan of the engines running on the fuel. It also means cleaner tanks decreasing the need for maintenance.



### Material

- Hood:** Aluminium SS4244-4
- Housing:** Aluminium SS4244-4
- Pressure disc:** Chemically nickel-plated bronze "Rg5"
- Vacuum disc:** Anodized aluminium

### Dimensions

- Height:** 470 mm
- Diameter:** Ø 175
- Weight:** 5,5 kg

Versions of the Torkel™	Item no.
Atmospheric protection – biodiesel	ES4081L

Options for the Torkel™	Item no.
Torkel™ filter	ES5060