



# Desorber-Filter-Combi-Unit

Removal of Water, Particles and Oil Degradation Products from Emulsified Oils and Environmentally Acceptable Lubricants (EAL) / Biodegradable Oils

## Product Sheet

### APPLICATION

**CJC™ Desorber-Filter-Combi-Unit** is a combined product used for maintenance of oils. The unit **removes large amounts of water** and particles as well as oil degradation products from a wide range of lubricants including emulsified oils and **EAL (Environmentally Acceptable Lubricants) / biodegradable lubricants** in applications such as:

#### Marine Applications:

- Thrusters
- Stern tubes
- Rudders
- Stabiliser fins
- Controllable pitch propeller
- etc.

#### EAL / Biodegradable Oils:

- Esters
- PAG
- PAO
- Emulsified oils

### CHALLENGE

*Water in oil leads to change in viscosity, reduced filter ability, reduced lubricity, formation of rust and bacterial growth and increased degradation of the oil - all factors that lead to reduced lifetime of both system components and the oil. \**

### CUSTOMER BENEFITS

The CJC™ Desorber-Filter-Combi-Unit is easy to install with one inlet and one outlet, has a small footprint area and is ready to work in less than 30 minutes - plug-and-play.

- Removal of large amounts of water - even from emulsified lubricants - preventing formation of acid and microbial growth
- Removal of particles and sodium
- Removal of oil degradation products
- Reduced corrosion and wear / tear of rubber made sealings
- Extended lifetime of both oil and components
- Prevents uncontrolled shut downs and reduces maintenance costs
- Compact and environment-friendly

The advantages of the CJC™ Desorber-Filter-Combi-Unit are that the water separation ability is unaffected by viscosity and additive package. The unit treats mineral oils as well as synthetic fluids, even the new kind of EAL (Environmentally Acceptable Lubricants) / biodegradable lubricants and is able to break stable emulsions. The water content within the system can be reduced to very low levels. Simultaneously, particles, sodium and oil degradation products are continuously removed from the oil system by the integrated fine filter unit.

### FUNCTION

#### Desorber:

The desorption process is based on the principle that heated air can effectively hold large quantities of water. In the Desorber the oil is preheated to 60°C and met by a counter flow of cold dry air. The air is heated rapidly by the hot oil and absorbs any water present in the oil, until the air is saturated. The warm, moist air is then chilled to condense the water out.

#### Fine Filter unit:

The filtration process is performed by the separate pump drawing oil from the main system and passing it through the depth filter insert. The cleaned oil is returned back to the main system.



*The CJC™ Desorber-Filter-Combi-Unit*

### TECHNICAL DATA

Desorber-Filter-Combi-Unit	
Height	1.635 mm
Length	649 mm
Width	570 mm
Weight	145 kg
Water removal, max.	0.2 l / Std.
Dirt holding capacity, approx.	2 kg
Voltage	1 x 230 V
Frequency	50 or 60 Hz
Power Consumption	2.9 kW
Current	12.6 A
Flow, Desorber inlet, nominal	55 l / Std.
Flow, Desorber outlet, nominal	75 l / Std.
Flow, Fine Filter, nominal	145 l / Std.
Fine Filter insert, quantity	1 pc.
Fine Filter insert, type	BLA 27/27
Filtration degree, absolute / nominal	3 / 1 Micron
Viscosity range	ISO VG 32 - 150 cSt.

### \* ) FACTS

The Classification Society, DNV-GL, in their Technical e-Newsletter of June 12th 2013 has stated that, for their Clean Design Class Notification:

*"If a biodegradable oil is used, an arrangement shall be in place to keep the water content of the oil under control".*

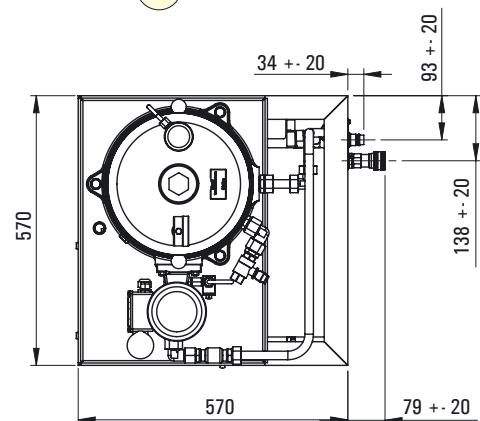
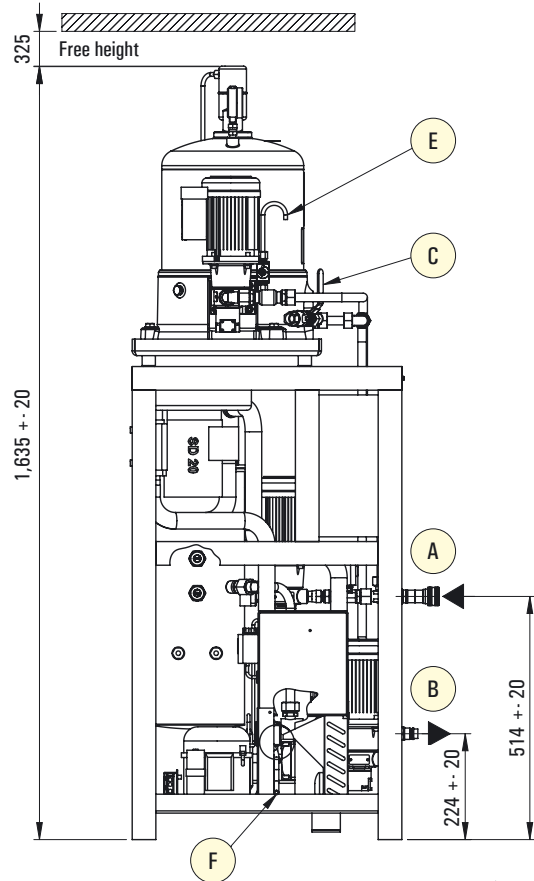
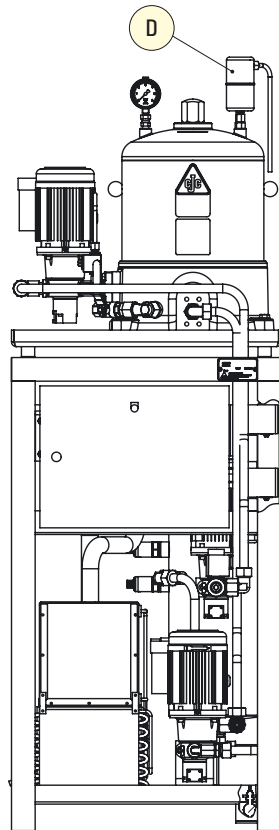


# Desorber-Filter-Combi-Unit

Removal of Water, Particles and Oil Degradation Products from Emulsified Oils and Environmentally Acceptable Lubricants (EAL) / Biodegradable Oils

## Product Sheet

### DIMENSIONS



Item	Part
A	Oil inlet: Quick release coupling 1/2", female
B	Oil outlet: Quick release coupling 1/2", male
C	Drain valve, oil
D	Automatic venting and bleeding valve
E	Sampling point
F	Water drain

**CJC™ Desorber-Filter-Combi-Unit**  
Dimensions in mm