



Desorber/Filter Combi Unit, D10

Water, salt and particle removal from lube oils, emulsified oils and Environmentally Acceptable Lubricants (EALs) / Biodegradable Oils

Product Sheet

APPLICATION

CJC® Desorber/Filter Combi Unit, D10, a combined product used for maintenance of oils. The unit **removes large amounts of water, salt and particles** from a wide range of lubricants including emulsified oils and **EAL's (Environmentally Acceptable Lubricants) / biodegradable lubricants** in applications such as:

Marine applications:

- thrusters
- stern tubes
- rudders
- stabiliser fins
- controllable pitch propeller
- hydraulic applications

EAL's / biodegradable oils:

- Esters
- PAG'S
- PAO'S
- emulsified oils

CUSTOMER BENEFITS

The CJC® Desorber/Filter Combi Unit, D10 is one unit solving problems with both water, salt and particles. One inlet and one outlet, plug-and-play type easy to install, has a small footprint area and ready to work in less than 30 minutes.

- Removal of large amounts of water - even from emulsified lubricants, preventing formation of acid and microbial growth
- Removal of particles
- Removal of salt (seawater)
- Reduced corrosion and wear/tear of rubber made sealings
- Extended lifetime of both oil and components by a factor 3 to 4
- Prevents uncontrolled shutdowns and reduces maintenance costs
- Compact in size
- Environmentally friendly solution

FUNCTION

The water separation ability of the CJC® Desorber/Filter Combi Unit, D10 is unaffected by viscosity and additive package. The Desorber treats mineral oils as well as synthetic fluids, even the new kind of EAL's (Environmentally Acceptable Lubricants) / biodegradable lubricants and is able to break stable emulsions. The CJC® Desorber/Filter Combi Unit, D10 is able to maintain the water and salt content within systems to very low levels. Furthermore, particles are continuously removed from the oil system by passing through the CJC® Oil Filter placed on top of the CJC® Desorber. The filter has a filtration rating at 3 micron absolute and 0.8 micron nominally. The unit is equipped with a pressure switch function to notify when the CJC® Filter Insert needs a replacement. The frame is made of stainless steel. Furthermore, the unit delivers external signals, such as: a running alarm and a common alarm.

DESORBER PRINCIPLES

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 using a drainpipe.

FILTRATION PRINCIPLES

The filtration process is performed by the separate pump drawing oil from the main system and passing it through the fine filter, exiting from the filter base and back to the main system.



The CJC® Desorber/Filter Combi Unit, D10

FACTS

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.

DNV-GL

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".

TECHNICAL DATA

Voltage	V/Hz	1x208		1x230		3x400		3x440-480	
Frequency		60		50	60	50		60	
Power consump.	kW	2.7		2.9		3.2			
Current	A	15.5		12.5		5.1			
Flow inlet	L/h	55	45	55	45	55		55	
	gal/h	14.5	11,9	14.5	11,9	14.5		14.5	
Viscosity range		ISO VG 32-150							
Ambient operation temperature, max	°C					5-45			
	°F					41-113			
Design Temperature	°C					60			
	°F					140			
Dimensions WxDxH	mm					570 x 570 x 1635			
	in					22.4 x 22.4 x 64.4			
Weight	kg/lb					170 / 375			
System pressure	bar psi	0.5 (PV) or 3.5 (PVM) inlet pressure, max		7 (PV) or 51 (PVM) inlet pressure, max					
Applicable Filter Insert		BLA 27/27							
Article no.		FA9601328							
		FA9601339							



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