



REDFOX in hydraulics!

 **REDFOX C**
nr. 300058

Made in Ornskoldsvik, Sweden, patented

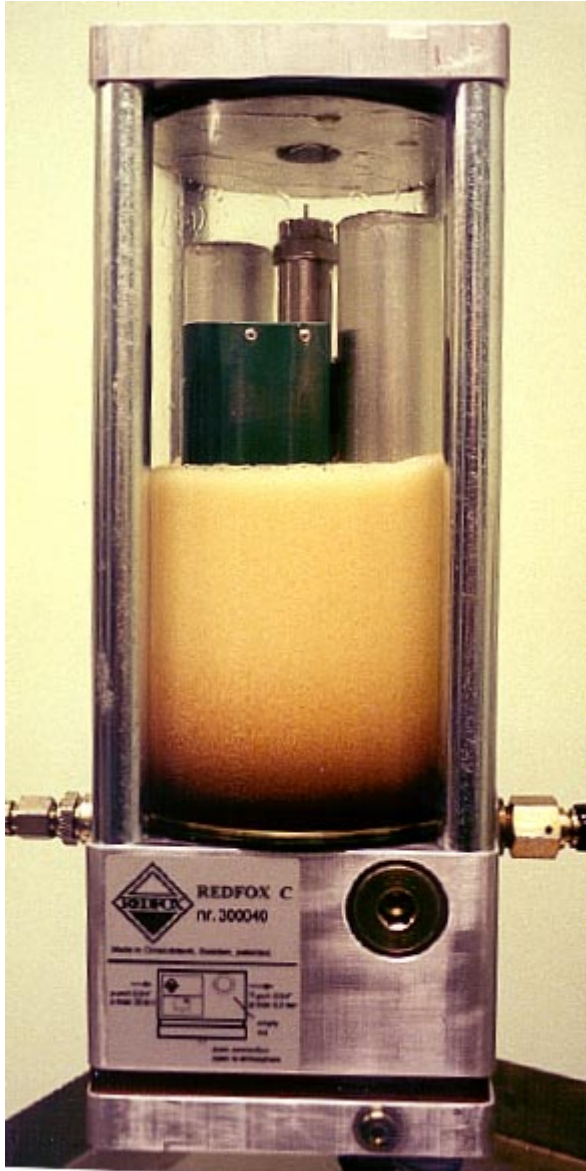




REDFOX for higher reliability and longer life!



REDFOX removes air and water from a fluid in operation



REDFOX C during operation

Hydraulic function

The REDFOX apparatus is driven by the same fluid which is conditioned. Easy to install! Only two connections, one to the reservoir and one to a feed pressure of 15-25 bar, which normally is available in the system.

REDFOX uses vacuum to release gases and water dissolved in the fluid. Oil is sucked out of the apparatus at the same time as steam and gases are pumped to the atmosphere by the built-in vacuum pump. After a period of suction a period of refilling of oil follows and then it repeats itself on and on.

Oil in direct contact with air will be contaminated with a certain amount of air as well as moisture as long as there is humidity in the atmosphere. This is an unavoidable contamination as nature always seeks balance. Dissolved gas and water in the hydraulic fluid are a dominant cause in many kinds of problems in hydraulic systems. Cavitation in pumps and motors, diesel-effects, increased temperature, short fluid lifetime are all symptoms of air and water.

Prepared for heavy duty

More than 200 units are in field operation, some with over 40 000 hours in continuous trouble-free operation, and some with over 3 years in forest machinery. This has convinced us that REDFOX now is prepared for professional use for many years.

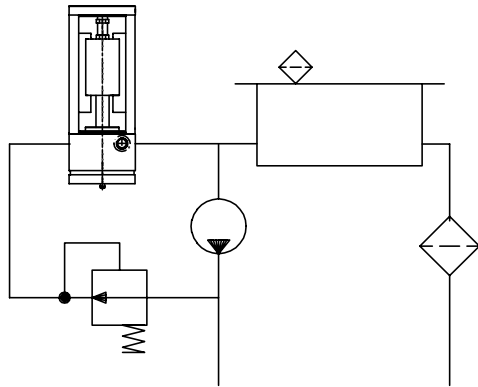
Excellent informer

The transparent glass cover makes REDFOX to a first class informer of the condition of the system. Problems with air entering the system will be discovered.

Choose REDFOX!

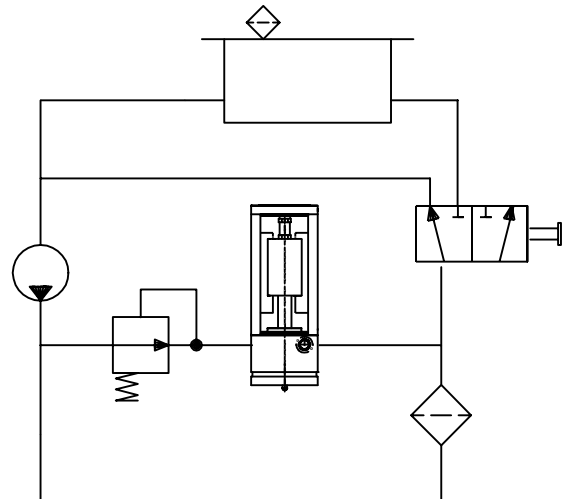
Easy installation

The REDFOX should be connected to a constant pressure of 15 - 25 bar or to a separate flow of 3 - 3,5 l/min. The apparatus has built-in relief valves, which protect it from dangerous pressures. Maximum permitted return pressure is 0,5 bar.



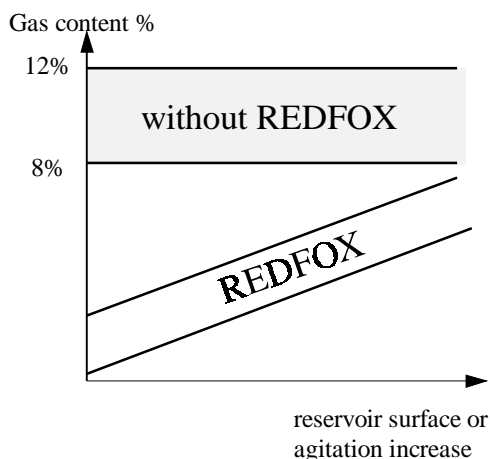
Example of installation

Industry system with 3 piston pumps and 3 low speed, high torque motors. In continuous operation since July 1996 with vegetable oil. The system has more than 25 000 working hours without any kind of problem.



Mini reservoir possible

The smaller the amount of fluid in treatment by REDFOX is, the faster the reduction of water and gas content will be. Smaller contact surface to the air results in a more efficient degassing of the oil. From these aspects a small reservoir is an advantage over a big one.



The oil dissolves air gases to about 10 % of the oil volume. Normal systems without REDFOX are saturated or slightly unsaturated with air. About 1/3 of these dissolved gases is oxygen, which initiates the fluid degradation.

	O ₂ ppm	N ₂ ppm	CO ₂ ppm	CO ppm	Total gas content %
active oil	130	6050	275	33	0,7 %
inactive oil	23800	61700	710	150	8,7%

The gas content in active oil volume compared to the inactive oil in the reservoir.

Better systems with high reliability

REDFOX gives the engineer a tool to construct better and more efficient systems. The pump has better volumetric efficiency and the cavitation risk is reduced if the oil is unsaturated with gas. The degree of unsaturation is important. Example: If the air content is reduced from 10 % to 5 %, the oil can withstand a pressure drop from atmospheric pressure to half the atmospheric pressure without air release or gaseous cavitation.

A low oxygen level reduces the oxidation rate. A reduction of 100 times can be achieved.

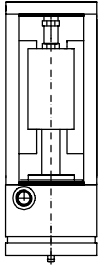
Cavitation can only be avoided if the oil is continuously degassed!



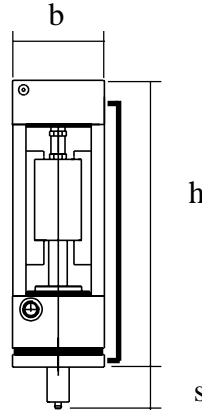
Technical data

Two models of REDFOX

The basic design is the same in the different types of REDFOX, which are available. However, the models differ depending on the wanted effectiveness in water removal from the fluid.



REDFOX C: Basic type unit with recommended use in systems, where the fluid has a high air content. Can be installed in all types of applications.



REDFOX LC: Unit with a recommended use in stationary indoor oil systems, where water removal has priority. A use of cool-flow is necessary to reach high dehydration rates.

	<u>REDFOX C</u>	<u>REDFOX LC</u>	
Weight	kg	12	15
h	mm	405	455
b x b	mm	150	150
s	mm	20	20
Supply pressure		15 - 25 bar	15 - 25 bar
Minimum temperature		- 35° C	0° C
Maximum temperature		+ 90° C	+ 90° C
Degassing capacity		15 m ³ of oil/week	15
Dehydration capacity at 50° C, 1000 ppm H ₂ O		0,08 litre/day	0,1-1 litre/day

REDFOX AB develops, manufactures and purchases own patented products for continuous degassing of oil in industrial operation. The company is situated in Örnköldsvik, Sweden. Our products are used in forestry machines, other mobile machines, in stationary hydraulic systems, lubricating systems and in transformers.

Contact us! We will assist you.

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