

ENGINEERING
TOMORROW

Danfoss

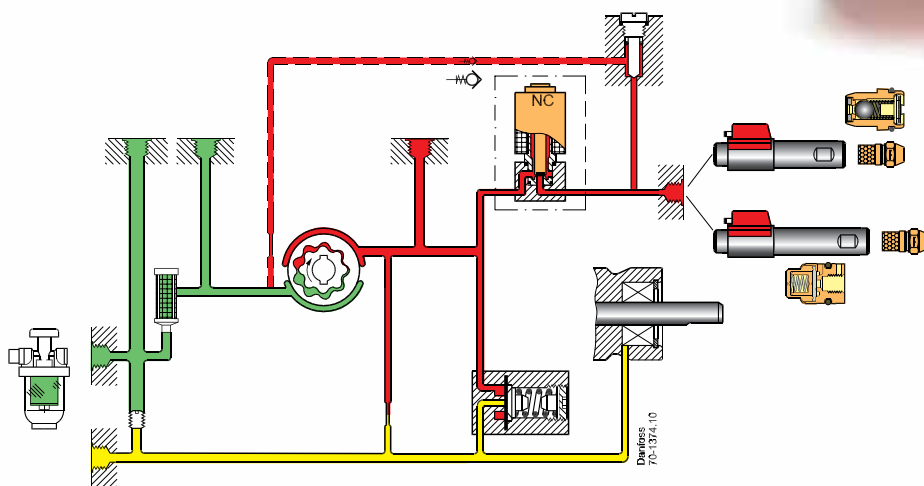
Danfoss Burner Components

LE-Systems



Danfoss LE systems

Optimized function by combination of technology



LE-system 1

– consists of a BFP 21 LE pump, a standard FPHB oil preheater and an oil nozzle type LE, with built-in closing valve.

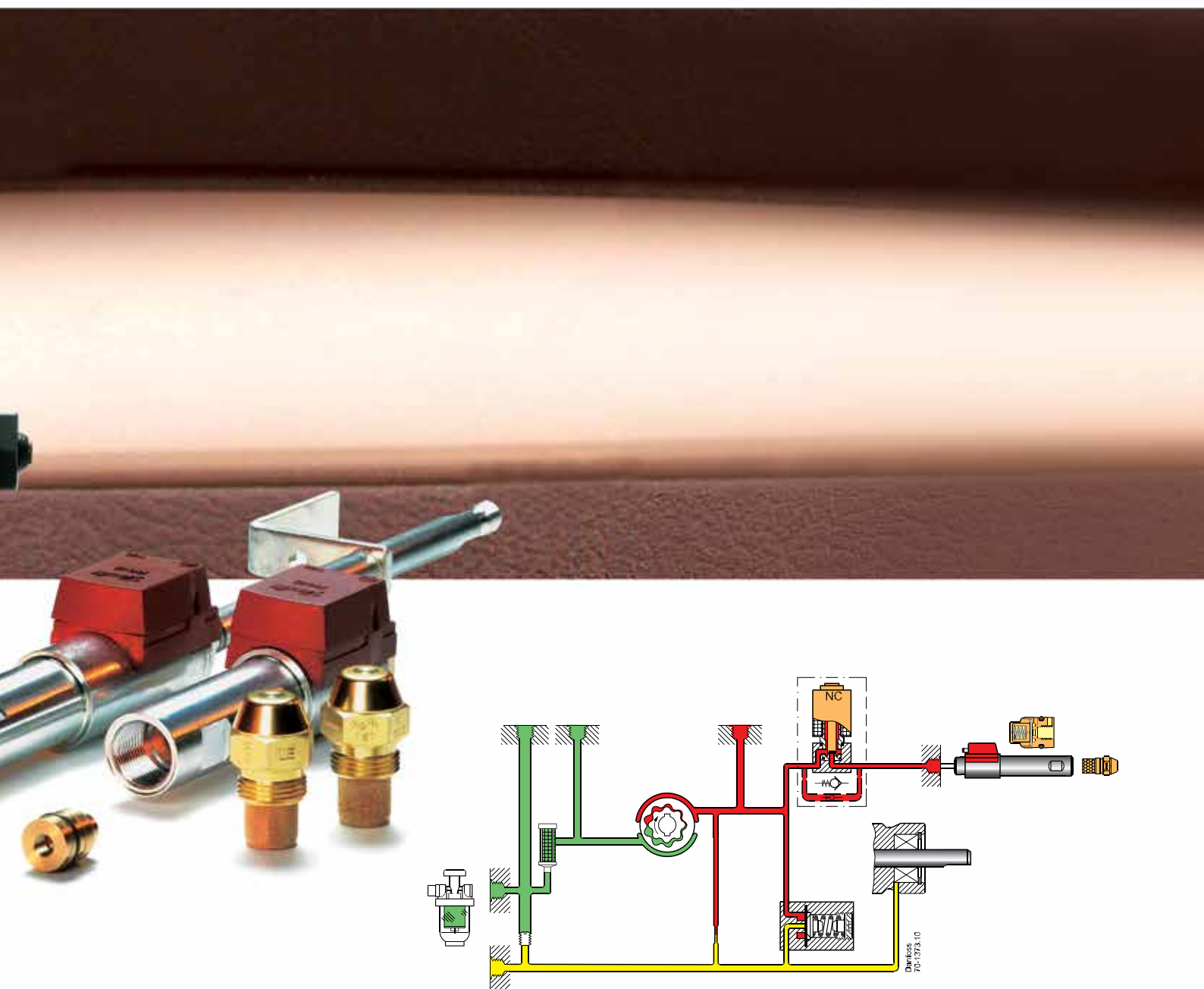
From a technical point of view, this system has been optimized so that the start/stop emissions are reduced to an absolute minimum. The closing valve in the LE nozzle is located as close as possible to the outlet bore and the LE function of the pump is active both during standstill, prepurge and while the pump motor is winding down when the burner stops. The closing valve in the LE nozzle gives extra security against leaking oil when using overlying tank. The LE-pump can be used as a standard pump as the LE-function can be blanked off.

LE-system 2

– consists of a BFP 21 LE-pump, an FPHB-LE preheater with built-in closing valve and a standard oil nozzle type OD.

From a technical point of view, this system has been optimized so that the start/stop emissions are minimized. Here the fact has been taken into consideration that the oil nozzle is replaced once a year in connection with a service.

Therefore, the LE-closing valve is located in the oil preheater, but still close to the outlet bore of the oil nozzle. The preheater is designed in such a way that the valve will always abut on the nozzle filter. Therefore, the oil volume between the valve and the oil nozzles is minimized. Start/stop emissions are reduced to almost the same level as for system 1.



LE-system 3

– consists of a BFP LE-S pump, an FPHB LE preheater and a standard oil nozzle type OD.

From a technical point of view, this system has been optimized so that the start/stop emissions are minimized. Here the fact has been taken into consideration that the system can be offered on all BFP pumps with a solenoid valve. The emissions are minimized as the system prevents pre-dripping before the burner starts and after-dripping when the burner stops.

The LE-S-function in the pump is located in connection with the solenoid valve of the pump. The pump designated LE-S can be used as a standard pump, i.e. the LE-S function is only active if a closing function is built into the preheater or the nozzle.

The variety of solutions to the start/stop emission shows that Danfoss cares about the environment but never forgets the economic aspects involved.

Pumps, nozzles and preheaters are optimized products and Danfoss knows how to combine these products to improve function and to minimize emission.

The reduction of unburned hydro-carbons can be up to 85% and the clean start/stop of the burner reduces the risk of deposits on the nozzle, thereby maintaining a perfect atomization for a significantly longer time.



Danfoss is a leading global manufacturer of components for combustible liquid burners used in domestic, commercial and industrial applications. This position has been achieved by exceeding the expectations of our customers; responding quickly to their requirements; providing high quality in all respects and offering competitive prices – all with due consideration for the environment.

Our product range for oil burners and boilers comprises: oil pumps, oil nozzles, preheaters, ignition units, burner controls and thermostats.

