

HONSBERG

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Flow monitor for maritime hydraulics



Flow monitor HD2K



BENEFITS.

- reliable viscosity stabilisation up to 330 mm²/s
- large range of available variants for electrical or electronic evaluation
- high-pressure version 500 bar
- The risk of friction damage on the drive shaft is significantly reduced. Expensive material damage is prevented.

Flow monitor HD2K

The requirement for us

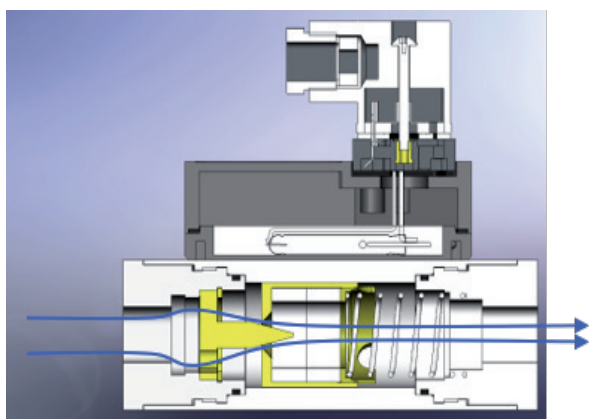
Massive drive shafts are installed between the engines and drive propellers in large ships such as cruise ships and container ships. Due to their length, these drive shafts are fixed with multiple shaft bearings. Hydraulic units provide the oil supply of these shaft bearings in order to prevent damage from friction. In the process, a reliable oil quantity monitor is needed to guarantee the minimum quantity of lubricant even when oil viscosities fluctuate.

In the present case, problems arose for the hydraulic system manufacturer in this connection. The necessary lubricant quantities were not provided due to unstable flow indicators for the pump control. The resulting friction arising in the shaft bearings caused a temperature increase with the consequence of a malfunction message.

Monitoring and control of the oil supply for drive shafts in maritime applications



Representation of a drive shaft



Schematic diagram of the flow mechanism

Our solution

The **HD2K** flow monitor has a viscosity-stable flow mechanism that practically compensates for fluctuating oil viscosities of up to 330 mm²/s in regard to changes in the switching point and pressure loss. An additional optical indicator on the side, also with viscosity stability, enables constant visual checks by the machinist.

An important aspect for inspection rounds in the machine room.

The benefits

- reliable viscosity stabilisation up to 330 mm²/s
- large range of available variants for electrical or electronic evaluation
- optional additional functions, such as optical display units, integrated temperature checks, signal diodes as switching status displays, etc.
- **high-pressure version 500 bar**

Focus on the customer – purchase decision

- By using the **HD2K** flow monitor, the risk of friction damage on the drive shaft is significantly reduced.
Expensive material damage is prevented.
- fault notification avoids service costs
- improved functionality for checking by service personnel