VISCOSITY SENSOR

24/7 Viscosity Monitoring

Viscosity is an important parameter for assessing the condition of lubricating and hydraulic oils. As the continuous monitoring allows to constantly verify whether its value corresponds to the required operating standards or not, it is possible to ensure effective functioning of engines. For this purpose, the VISCOSITY SENSOR was developed as a screw-in and immersion sensor for determination of viscosity, relative dielectric number and temperature.

Technical Features:

- Measuring range:
  - SAW-dynamic viscosity: 8 – 400 mm^2/s
  - Rel. dielectric number: 1 – 7
  - Temperature: -20°C to +85°C
- Accuracy:
  - SAW-dynamic viscosity: +/- 5 mm^2/s
  - Rel. dielectric number: +/- 0.02
  - Temperature: +/- 0.5 K
- Voltage: 9 - 33 VDC
- Max. fluid pressure: 50 bar
- Protection class: IP 67
- Interface: RS 232/ CAN; 4- 20 mA
- Fluid compatibility: mineral and ester fluids, polyalphaolefins

Once the VISCOSITY SENSOR is installed, it goes through the so-called learning phase when the SAW-dynamic viscosity and relative dielectric number are continuously measured at current temperature. In addition, after a learning phase the values are also automatically converted to reference temperature of 40 °C and displayed on the special display unit DATALOGGER.
As the measured parameters are continuously processed and stored, it is easy to evaluate the relevant indicators and recognize any potentially occurring deviations from standard specifications. This allows taking proper corrective actions if required, on the one hand, and to possibly extend maintenance and oil change intervals if the values are appropriate, on the other hand. Therefore, the VISCOSITY SENSOR helps to remain confident about the condition of oil all the time.

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