

INTELLIA- INT WH1X Water & Humidity In Oil Detector Sensor



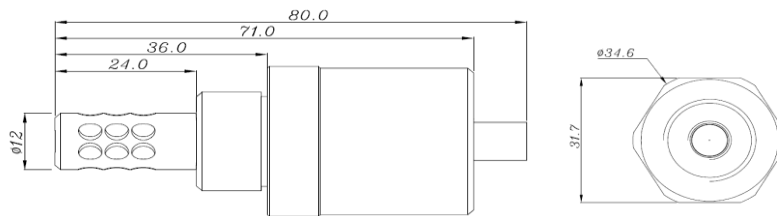
Description:

Monitoring the moisture of lubricating oil and hydraulic oil in equipment such as large continuous operation equipment and heavy machinery equipment plays an irreplaceable role in ensuring the normal operation of these key equipment. Because the presence of moisture will destroy the oil film, causing additive failure, causing corrosion of metal parts, shortening the service life of the oil, and seriously causing unplanned parking of large machinery, causing serious safety accidents and economic losses. For generator sets and transformers, moisture can damage the insulation properties of oil and pose a threat to the safety of power equipment and personnel.

INT WHX1 moisture content sensor front-end design unique moisture sensing probe can capture the electrical characteristics of oil-water mixture in real time, and compensate data through high-precision temperature probe, and obtain the moisture content of oil through optimization algorithm. The company's unique patented measurement technology can successfully achieve accurate monitoring of moisture content in multi-range oils.

Product Structure

Unit: mm



Features and Advantage:

1. Continuously and quickly detect water activity (aw) in oil.
2. Accurately measure the micro water content (ppm) in the oil.
3. Long-term stable operation in harsh environments.
4. Convenient local calibration function.
5. High oil resistance and pressure resistance.
6. Compact and easy to integrate.
7. Multiple mode signal output

Technical indicators

1. Working temperature: $-40 \sim +85^{\circ}\text{C}$.
2. Signal output: Digital signal - RS485 MODBUS RTU, (RS232 optional);
Analog signal - $4 \sim 20\text{mA}$, resistive load $< 500\Omega$. (optional)
3. Measurement interface: G1/2" ISO or 1/2" NPT.
4. Pressure range: $\leq 100\text{bar}$.
5. Probe material: 316 stainless steel.
6. Protection level: IP66.
7. Working voltage: DC 9V-36V.
8. Operating current: $< 5\text{mA}$ + load current (4 ~ 20mA output) @ 24V.
9. Transmitter weight: 200g.
10. Cable specification: M86 core.

Test items and accuracy

Water activity

Measuring range	0~1 aw
Measurement accuracy	± 0.02 aw (0 to 0.6)
	± 0.03 aw (0.6 to 0.9)
	± 0.04 aw (0.6 to 0.9)
Response time	< 3 minutes

Moisture in oil

Measuring range	0-500 ppm (optional with other ranges)
Measurement accuracy	± 10 %

Temperature

Measuring range	-40~120 °C
Measurement accuracy	± 0.2 ° C (25 ° C)