1. Description

The MAHLE Turbidity Sensor PiT 400 was developed to reliably identify turbidity in hydraulic fluids. Ingress of water into the hydraulic system causes turbidity in the hydraulic fluid:

Water in hydraulic fluids can harm the function of the entire system and reduce the life span of the pressure fluid and the system’s components.

Turbidity in the fluid is quickly recognised by the sensor, so that precautionary measures can be taken before a failure of the system occurs. Therefore the sensor offers great security for the entire system. The sensor should be installed in all fluid systems that are at risk of being contaminated by water, e.g. by defect coolers, broken seals or condensed water.

The sensor should preferably be installed in the return line, the tank or the bypassing oil cooling. It can be easily calibrated to the normal condition of the fluid by the push of a button.

The sensor measures the reduction of emitted IR-light caused by turbidity.

The range of applications covers all HLP-, HEES- and HETG - fluids.
2. Water solubility

Water solubility of different hydraulic fluids determined by the temperature.

\[ a = f(T) \]

\[ y = \text{water content} \%
\]

*1 VDMA-threshold

\[ x = \text{temperature } T \degree \text{C} \]

3. Dimensions

4. Specifications

Materials: CuZn, PA
Type of protection: IP 65
Connection: G 1¼
Nominal pressure: 10 bar
Operating temperature: -25 \degree C to 85 \degree C
Signal supression: < 0 \degree C
Connection plug: M12x1 plug, 4 pole
Power supply: 24 V DC 20 %
Switching outlet: PNP, 200 mA
Signal delay: 60 s

5. Order number

Type number Order number
PiT 400 76322598

Subject to technical alteration without prior notice.

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