

Turbidity Sensor PiT 400

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 the 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. Ingress of water is registered immediately so that precautionary measures can be taken before the damage of the system becomes out of hand. Therefore the sensor offers great security for the entire system. The sensor should be built into all fluid-technical 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 cooling circulation.

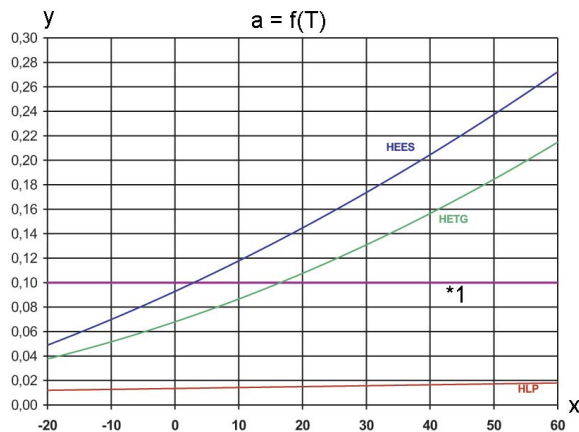
It is easily calibrated to the normal condition of the fluid by the push of a button.

The fading transmission of the IR - Light measures the turbidity in the fluid.

The applications for the sensor range from all HLP-, HEES- and HETG - fluids.



2. Water solubility



Water solubility of different hydraulic fluids determined by the temperature.

*1 VDMA-threshold

x = temperature T [°C]

y = water content [%]

4. Specifications

Materials:	CuZn, PA
Type of protection:	IP 65
Connection:	G 1 ¼
Nominal pressure:	10 bar
Operating temperature:	-25 °C to 85 °C
Signal suppression:	< 0 °C
Connection plug:	M12x1 plug, 4 pole
Power supply:	24 V DC 20 %
Switching outlet:	PNP, 200 mA
Signal delay:	60s

Connector Pin Assignment:

Pin	Assignment
①	+ 24 V DC
③	0 V (GND)
②	Signal ready
④	Signal turbid

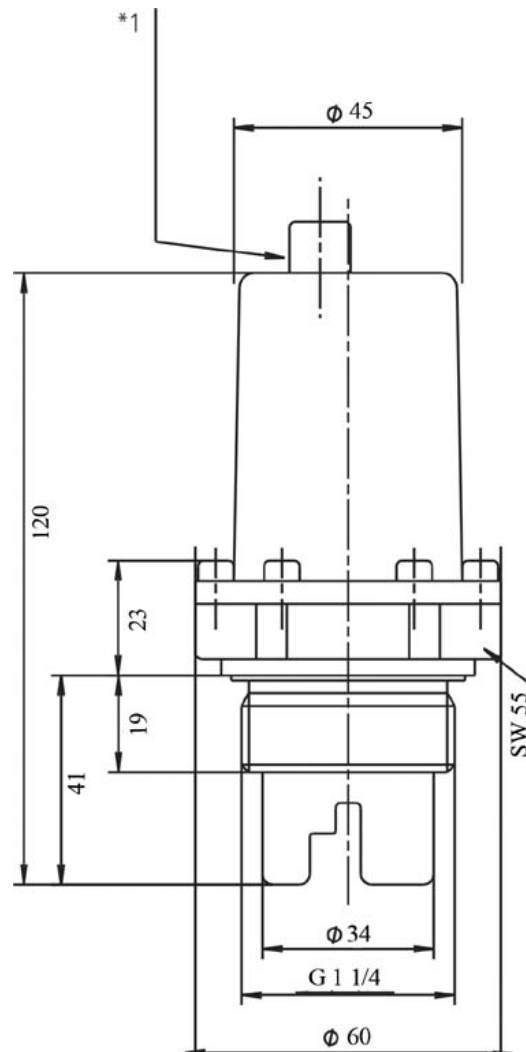
5. Order number

Type number	Order number
PiT 400	76322598

Subject to technical alterations without prior notice!

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3. Dimensions



*1 M12x1 plug, 4 pole

