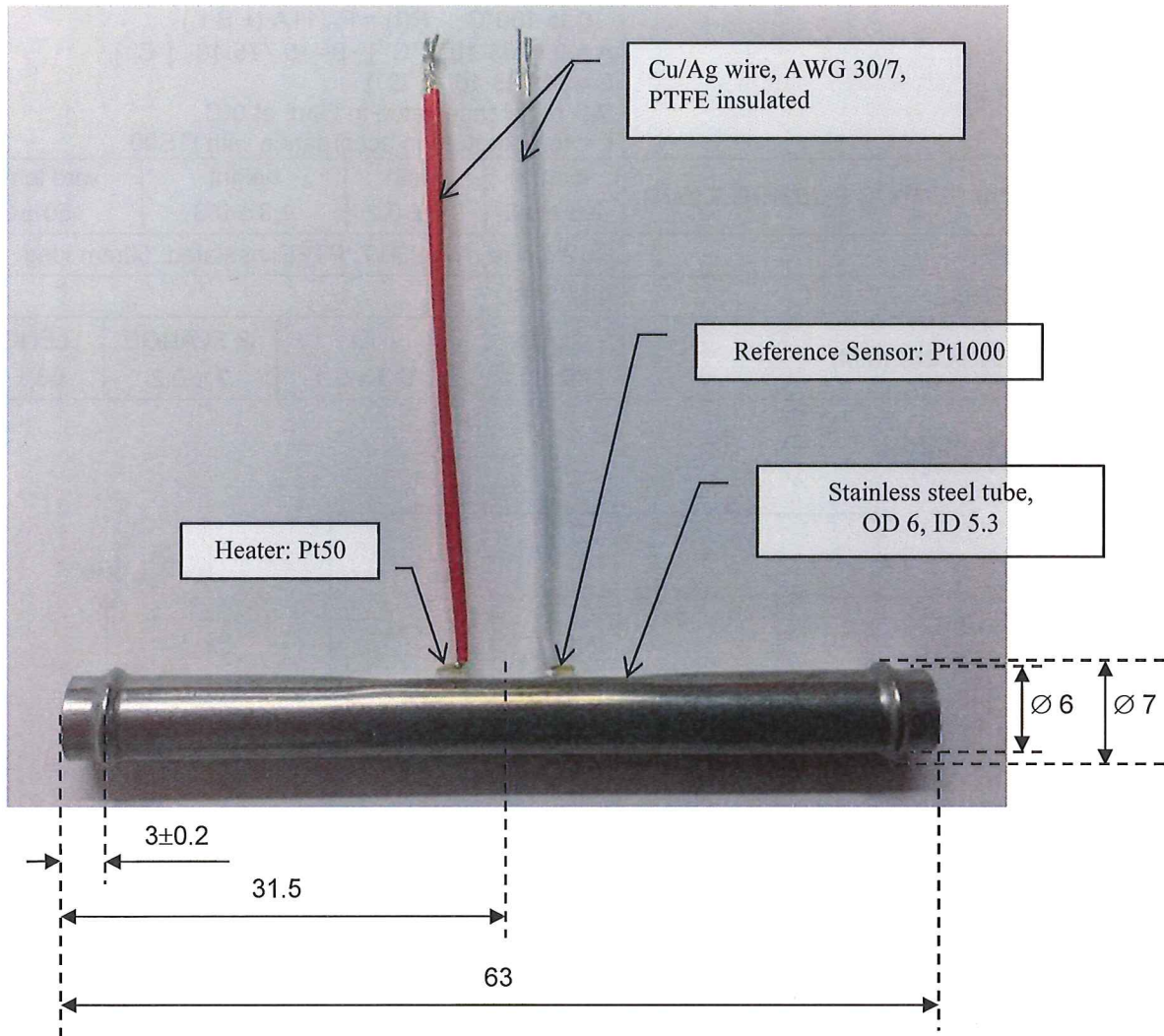




Preliminary

IST AG	Out of Liquid Sensor			
Drawing No.	Sensor Type	Rev.	Date	Page
Z1298.14.03 en	P1K0/050.232.2K.C.050.M.U.S Order no.: 310.00605	-	05.03.2014	1/2

Dimensions [mm]:



	Title	Name	Signature	Date
DRAWN	R&D	F. Klammsteiner		17.03.2014
APPROVED	R&D Manager	F. Krogmann		17.03.2014
QS	QS Manager	A. Polakova		17.03.2014

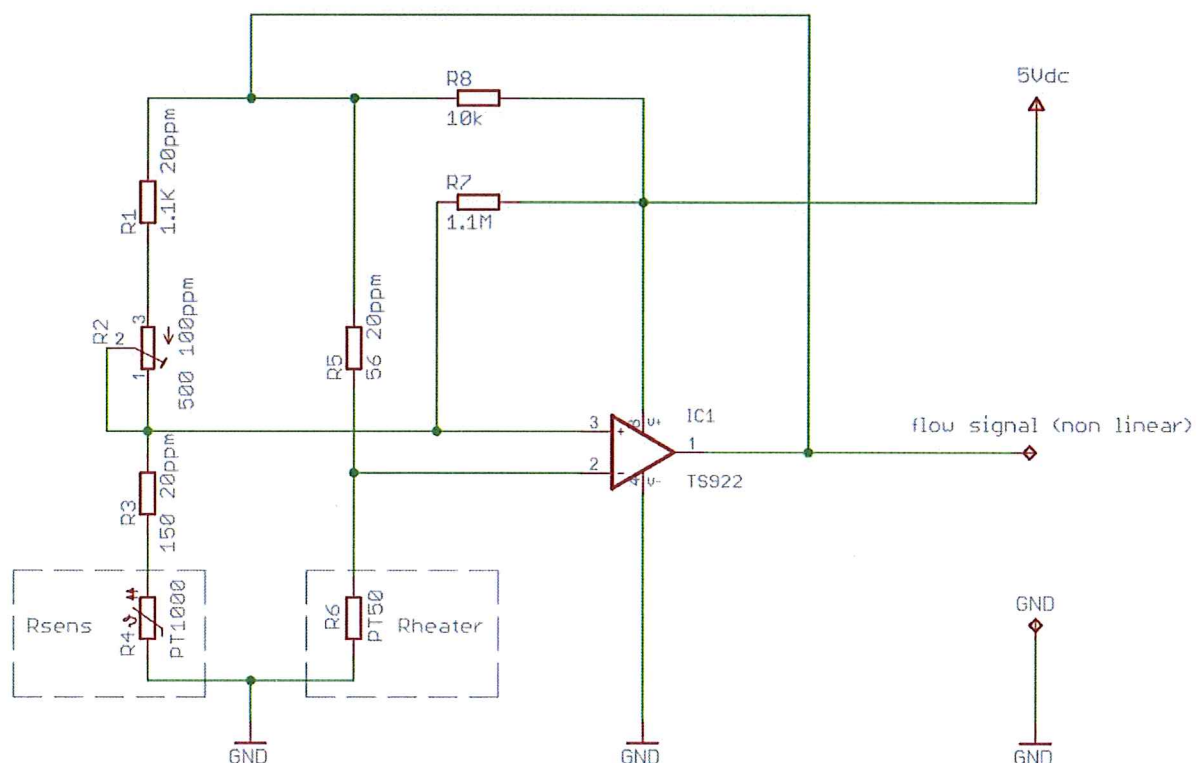


GENERAL SPECIFICATIONS:

Preliminary

NOMINAL RESISTANCE:	Heater: 50 Ohm @ 0°C (red wires) Reference Sensor: 1000 Ohm @ 0°C (white wires)			
TEMPERATURE COEFFICIENT:	3850 ppm/K			
TOLERANCE:	DIN EN 60751 F 0,6 (class C)			
TEMPERATURE RANGE:	-50 to 180°C			
TEMPERATURE DEPENDENCE OF RESISTIVITY:	according to DIN EN 60751: -50 to 0°C $R(t) = R_0(1 + A \cdot t + B \cdot t^2 + C \cdot [t-100]t^3)$ 0 to 180°C $R(t) = R_0(1 + A \cdot t + B \cdot t^2)$ $A = 3.9083 \cdot 10^{-3} [^{\circ}\text{C}^{-1}]$, $B = -5.775 \cdot 10^{-7} [^{\circ}\text{C}^{-2}]$, $C = -4.183 \cdot 10^{-12} [^{\circ}\text{C}^{-4}]$ R_0 = resistance value in Ohm at 0°C t = temperature in accordance with ITS90			
DIMENSIONS SENSOR ELEMENTS (MM):	length 2.3 ± 0.2	width 2.0 ± 0.2	height 1.3 ± 0.3	wire length 50 ± 3
LEAD WIRES:	Cu/Ag wire, AWG30/7, PTFE insulated, 50mm long			
TUBE MATERIAL	AISI 316L			
TUBE DIMENSIONS (MM)	OD 6 ± 0.1	ID 5.3 ± 0.1	Ø FLANGE 7 ± 0.2	LENGTH 63 ± 0.5

Example circuitry



Note: The output signal is depending on the media and needs to be calibrated for the application in use. The required tolerance affects the effort for calibration (quantity of calibration points, calibration flow speed range, temperature range, etc.).

	Title	Name	Signature	Date
DRAWN	R&D	F. Klammsteiner		17.03.2014
APPROVED	R&D Manager	F. Krogmann		17.03.2014
QS	QS Manager	A. Polakova		17.03.2014