

KT200 Moisture in Oil Transmitter

Product profile

KT200 is a fast, reliable and accurate online detector for water activity (aw) in oil and temperature (T). It is very suitable for integration in OEM application with its rugged housing and excellent performance. KT200 is ideal for online monitoring of moisture in lubrication, hydraulic or insulation oil, which is significant for the long-term performance and preventive maintenance of plant and machinery.

Major features

- ◆ Continuous measurement of water activity in oil and temperature
- ◆ Professional calculation of moisture content in ppm for transformer oil
- ◆ Accurate and reliable, robust design under hostile environments
- ◆ Convenient local & remote calibration
- ◆ Excellent pollution & pressure tolerance
- ◆ Compact, easy for integration
- ◆ Analog and Digital Signals Output



Technical Parameters

Water activity

Measurement range	0 ... 1 aw	
Accuracy	0 ... 0.6	± 0.02
	0.6 ... 1	± 0.03
Response time (typical)	< 1 min	

Water in oil

Measurement range ¹⁾	0 ... 100 ppm (suitable for Mineral transformer oil)
Accuracy	±10% or 10ppm max

Temperature

Measurement range	-40 ... 120 °C
Accuracy (at +25 °C)	± 0.3 °C
Working temperature	-40 ... +80 °C
Storage temperature	-40 ... +80 °C
Oil temperature permitted	-40 ... +120 °C

Output

Digital signal	RS485 MODBUS, RS232 (optional)
Analog signal	4~20mA, resistive load=500Ω

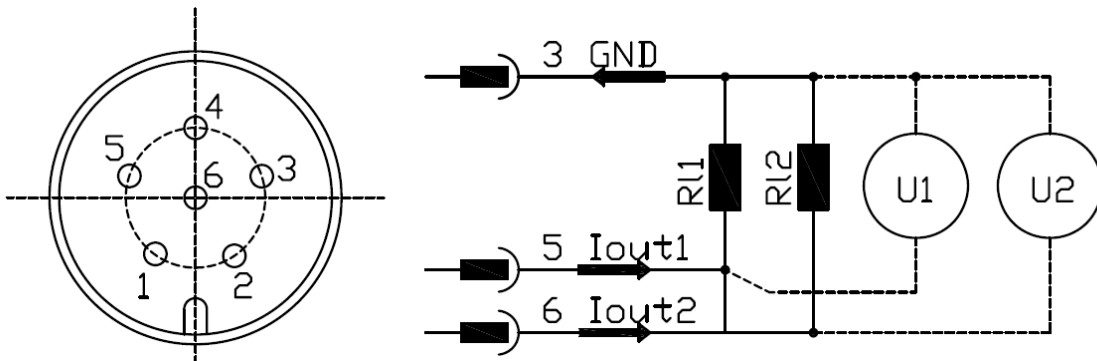
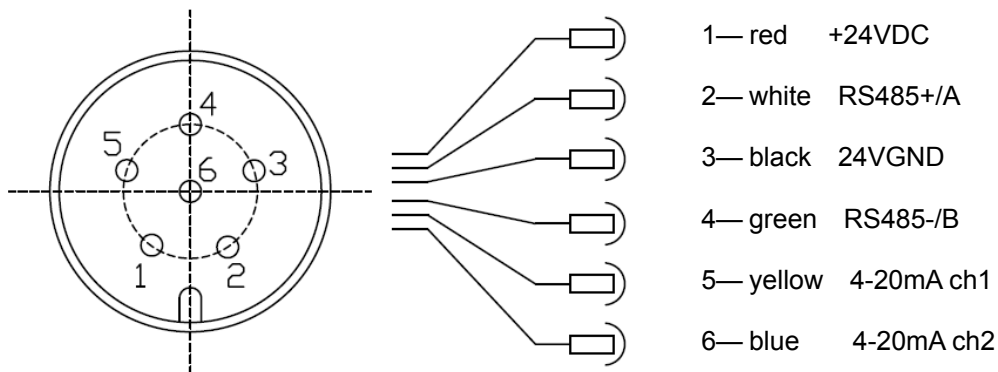
Others

Housing material	304 stainless steel
Weight	220g (transmitter), 270g(package)
Package size	172×117×53 mm carton
Ingress Protection	IP66
Mechanical connections	G 1/2" ISO or 1/2" NPT
Pressure range	Max 100 bar
Resistance load	250 ... 500 Ω
Supply voltage	DC 9V-36V, >DC15V (use 4-20mA)

Cable specification	M8 6 pin
Cable length	2 m
Standard applied	CE certified, EN61326-1 EN61326-2-3 standard ICES-003 B

¹⁾ other measurement range is optional

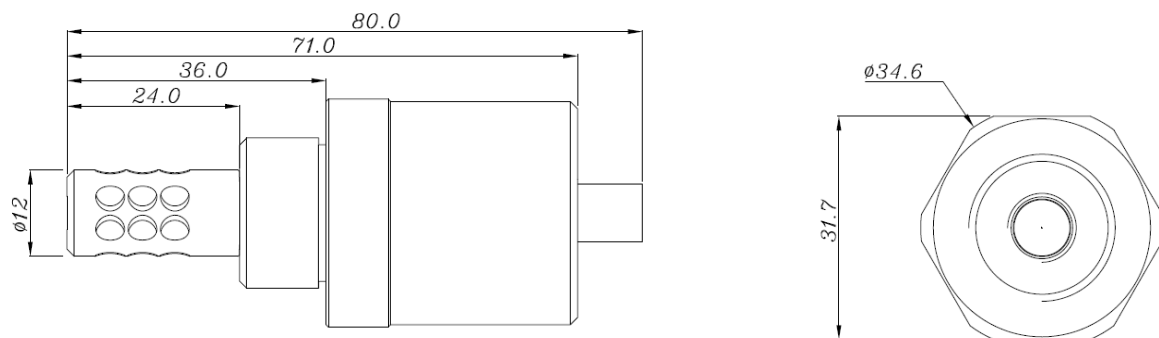
Connector Definition



Note:

For 4-20mA output connection, we will recommend load resistance RL1 & RL2 of 250Ω or 500Ω.

Structure Dimension (mm)



Option & Parts

Stainless steel filter
 USB-RS485 converter
 USB-RS232 converter
 Seal washer: ISO G1/2"
 Connecting cable: 5m, M8 screw thread, 90° bend angle
 10m, M8 screw thread, 90° bend angle
 2m, M8 screw thread, with LED
 PC software: OW600
 Display and control unit: KT200D (optional)



Order info

Moisture in Oil and Temperature Transmitter		KT200	
Measurement parameters	aw + T	A	
	ppm + T ¹⁾	B	
	aw + ppm + T ¹⁾	C	
Output	4-20mA + RS485	1	
	RS232	2	
Analog output Ch 1	T -40 ... 120°C	3	
	Others ___ ... ___ °C	4	
Analog output Ch 2	aw 0 ... 1	D	
	WCO 0 ... 100 ppm	E	
	WCO 0 ... ___ ppm	F	
Mechanical connections	G 1/2" ISO	G	
	1/2" NPT	H	
Cable length	2m	5	
	3m	6	

1) ppm is only applicable to mineral transformer oil. If you need to measure ppm value in other oil, please contact us.

Example for order: KT200 C13EG5

Measurement parameters: aw + ppm + T

Output: 4-20mA* 2 channel and RS485 1 channel

ppm range: 0 ... 100 ppm

T range: -40 ... 120°C

Mechanical connections: G1/2" ISO

Cable length: 2m