

## KT-200 Moisture in Oil Transmitter

### Product profile

KT-200 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. KT-200 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 aw
	0.6 ... 1      ± 0.03 aw
Resolution	0.001 aw
Response time (typical)	< 1 min

#### Water in oil

Measurement range	0...100ppm, 500ppm, 1000ppm, 2000ppm or customized
Accuracy	±10% or 10ppm (choose the higher one)

#### 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

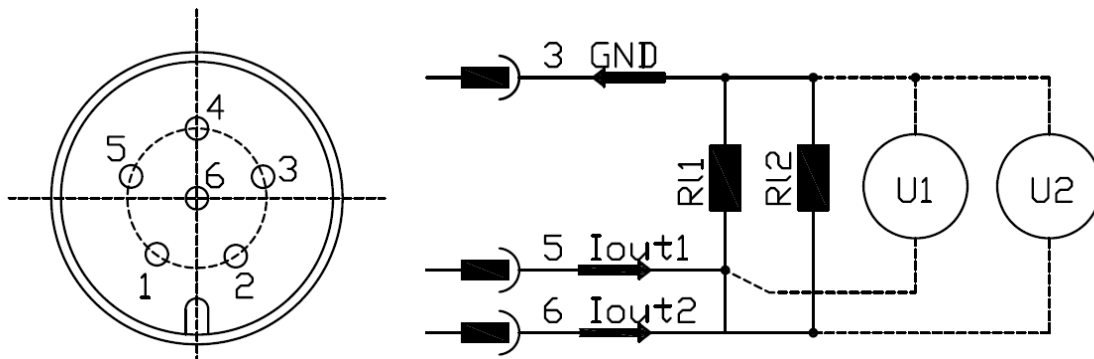
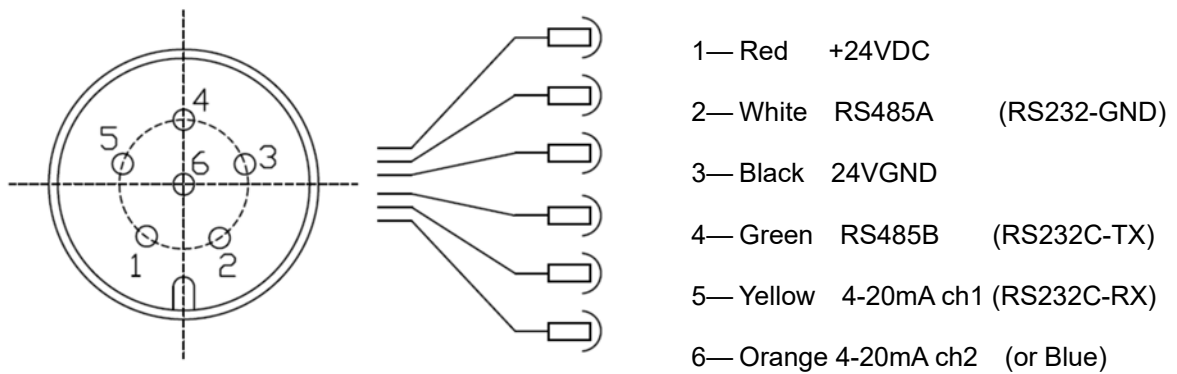
Digital signal	RS485 MODBUS RTU, RS232 (optional)
Analog signal	4~20mA, resistive load 200...500Ω

#### Others

Housing material	316 & 304 stainless steel
Weight	200g (transmitter), 270g(package)
Package size	172×117×53 mm carton
Ingress Protection	IP65

Mechanical connections	G 1/2" ISO or 1/2" NPT
Pressure range	Max 20 bar (confirm with Kongter for other ranges)
Resistance load	200 ... 500 $\Omega$
Supply voltage	DC 9V-36V(RS485 communication), DC15V-36V(@4-20mA)
Supply current	<5mA+load current
Cable specification	M8*1, 6 pin
Cable length	2 m
Standard applied	CE certified, EN61326-1, EN61000-3, EN61010 class B

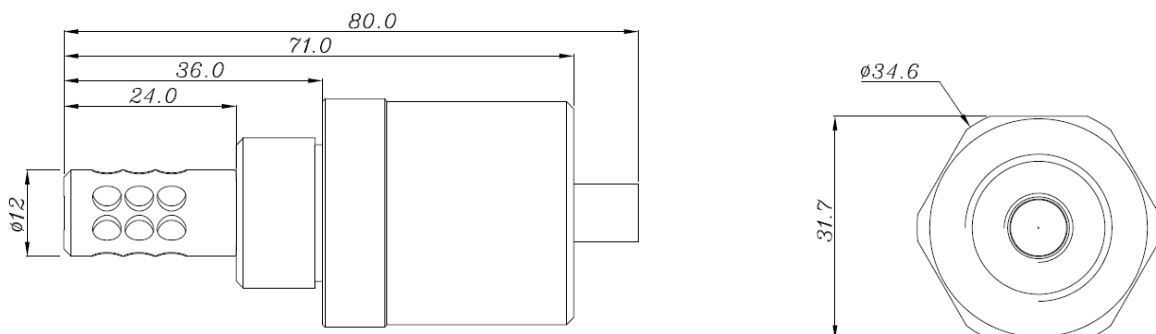
## Connector Definition



### Note:

For 4-20mA output connection, we will recommend load resistance of 250 $\Omega$  or 500 $\Omega$  (better 500 $\Omega$ ) for RL1 & RL2. If you need higher than 500 $\Omega$  or lower than 100 $\Omega$ , please confirm with Kongter upon order.

## Structure Dimension (mm)



## Option & Parts

Stainless steel filter  
 USB-RS485 converter  
 USB-RS232 converter  
 Seal washer: ISO G1/2"  
 Connecting cable: 2m, M8 screw thread, 90° bend angle  
                           3m, M8 screw thread, 90° bend angle  
 PC software: OV600  
 Display and control unit: KT-200D (optional)



## Order info

Moisture in Oil and Temperature Transmitter		KT-200				
Measurement range	0...1 aw + -40...120°C	A				
	0...100 ppm + -40...120°C <sup>1)</sup>	B				
	0...__ppm + -40...120°C	C				
Measurement parameters	aw + T		1			
	ppm + T		2			
Signal Output	RS485 modbus RTU			6		
	RS485+4-20mA			7		
	RS232			8		
4-20mA Ch 1	No				A	
	T -40 ...120°C				B	
	Others ___ ... ___ °C				C	
4-20mA Ch 2	No					A
	aw 0 ...1					B
	ppm 0 ... __ppm					C
Mechanical connection	G 1/2" ISO pipe thread					A
	1/2" NPT taper thread					B

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: KT-200 B27BCA

Measurement range: 0...100 ppm + -40...120°C

Measurement parameters: ppm + T

Output: RS485+4-20mA

4-20mA Ch 1: T -40 ...120°C

4-20mA Ch 2: ppm 0 ...100 ppm

T range: -40 ... 120°C

Mechanical connections: G1/2" ISO

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