## RKL-04 Capacitive Liquid Level Transmitter



The sensing part of the RKL-04 is a coaxial capacitor, when the liquid enters the condenser caused the change of the sensor shell and sensor capacitance between electrodes, the variation through the subsequent acquisition and conversion circuit and precise linear and temperature compensation, the output field required standard voltage, current, the digital signal, sampling frequency is adjustable. Food grade Teflon and 304 stainless steel material with fully welded structure, high health level, high breaking strength; Long - term stability, high reliability. Used for measuring: oil (gasoline, diesel oil, hydraulic oil, lubricating oil), water (sewage), beverage, medical treatment, chemical and other liquid media, suitable for high and low temperature, or even viscous liquid media occasions. Extremely wide measuring range: 0.03......6m, especially suitable for measuring liquid heights below 500mm.

#### **FEATURES**

- Convenient: install through thread or flange, easy to operate, good sealing performance;
- It can be recalibrated externally
- Integrated structure
- suitable for a variety of liquid level (object level) measurement
- The measurement blind area is small (≤10mm, the minimum can reach 5mm) with high precision
- Continuous measurement of liquid in various containers, especially oil level in oil tank;Will not affect the original system;



#### **APPLICATIONS**

- Logistics freight fleets, engineering vehicles, oil tankers, diesel generators etc.
- Measurement and real-time monitoring of lubricating oil and hydraulic oil of various engines, generator sets, mechanical equipment, engineering vehicles, etc.
- Chemical and medical equipment and other occasions that need to measure and monitor chemical liquids and corrosive or even strong acid-base liquids
- Monitoring water level of sewage treatment plant and water tank
- Teaching equipment, laboratory liquid level test in scientific research institutes. Especially suitable for measuring liquid level height less than 0.5m

#### **SPECIFICATIONS**

Item	Technical specifications				
Range	0-3010050070030006000mm				
Output	4-20mA,0-5V, RS485				
Supply Voltage	11-33VDC,24V typ.				
Comprehensive Accuracy	0.25%FS,0.5%FS (typ.),1.0%FS				
Long-term stability	0.2%FS				
Zero temperature drift	0.02%FS/°C				
Full temperature drift	0.03%FS/℃				
Ingress Protection	IP67				

# **RKL-04 Capacitive Liquid Level Transmitter**



Operating Temperature	-40°C~ +80°C, -70∼+260°C (optional)				
Pressure range	-0.1mpa ~ 0.5mpa				
storage temperature	-40 ~ +100℃				
Blind area detection	5mm(optional),10mm(typ.)				
Probe diameter	Ф16 mm				
Fixed thread installation	M20×1.5, G1/2, customized;Flange DN25, DN40, DN50 can be installed				
Electrical interface	interface Direct line				
Measuring the dielectric	Oil (gasoline, diesel oil, hydraulic oil, lubricating oil), water (sewage), beverage,				
	medical, chemical and other liquid media				

### PARAMETER SELECTION TABLE

Remark	Series	Supply	Output	Accuracy	Range	Cable	
						Length	
RKL							
	04						
		Α					11-33V
		Х					Other
			Α				4-20mA
			В				0-5V
			С				RS485(MODBUS-RTU)
			Х				Other
				P1			0.25%
				P2			0.5%
				P3			1.0%
					R		0—6000mm optional
						5000	5m

Example: RKL-01AAP3R3mN5000 Supply:10-30V, Output:4-20mA, Acuracy:0.5%FS, Range:3m  $H_2O$ , With out bracket, Cable Length:5m.

Complies with applicable CE directives.

Specifications subject to change without notice. Version 3.0

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