

# RKL-01 Submersible Liquid Level Transmitter



RKL-01 Submersible Liquid Level Transmitter is with stainless steel isolation diaphragm diffusion silicon pressure core body, the pressure core body adopts the process of laser trimming resistor for a wide temperature range of zero and sensitivity temperature compensation. Special cable for air-venting conduit and waterproof technology ensures water tightness, and ventilation between inside and outside , so as to acquire accurate and stable measuring data.

## FEATURES

- High accuracy,high sensitivity
- Fast response
- Good stability
- Strong resistance to interference
- Anti-corrosion material optional
- Low temperature drift
- Wide Temperature Range Compensation



## APPLICATIONS

- Agricultural irrigation
- Petroleum
- Chemical
- Power generation plant
- Urban water drainage
- Hydrographic survey
- Environmental protection

## SPECIFICATIONS

Item	Technical specifications
Range	0 ~ 0.5m...200mH <sub>2</sub> O or 0 ~ 5KPa...2MPa
Output	4-20mA,0-5V,0-10V,RS485
Supply Voltage	10-30VDC,24V typ.
Over Pressure	2×FS
Measuring Medium	The liquid(not sticky ) compatible with 316 stainless steel
Total Accuracy	0.1%FS,0.3%FS(0.25%FS),0.5%FS
Long-term Stability	0.1%FS/year typ.,0.2%FS/year max.
Ingress Protection	IP68
Operating Temperature	-40℃~ +80℃
Compensating Temperature	-10℃~ 70℃
Temperature Drifting	0.03%FS/℃ typ.,0.05%FS/℃
Cycle Life	1*10 <sup>8</sup> @25℃
Main Material	Sensor:316L,housing:304SS(316L is optional)
Cable	Outer material: PUR,Atmospheric pressure compensation cable, Polymer waterproof plug at cable end

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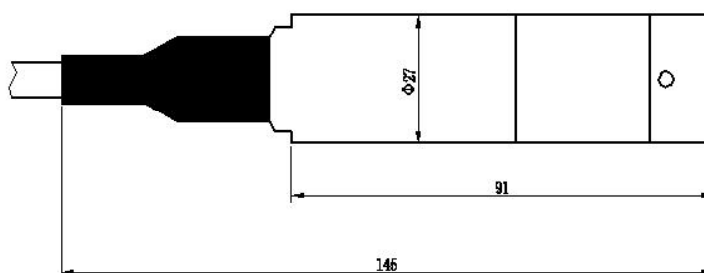


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Power Consumption	Current output:(U*0.02)W, Voltage output:(U*0.008)W, Digital output:(U*0.015)W
Load Capacity	Current output: $\leq (U-7)/0.02\Omega$ , Voltage output: $\geq 100k\Omega$
Weight(probe unpacked)	Approx. 230g
Storage Condition	10°C-50°C@20%-90%RH

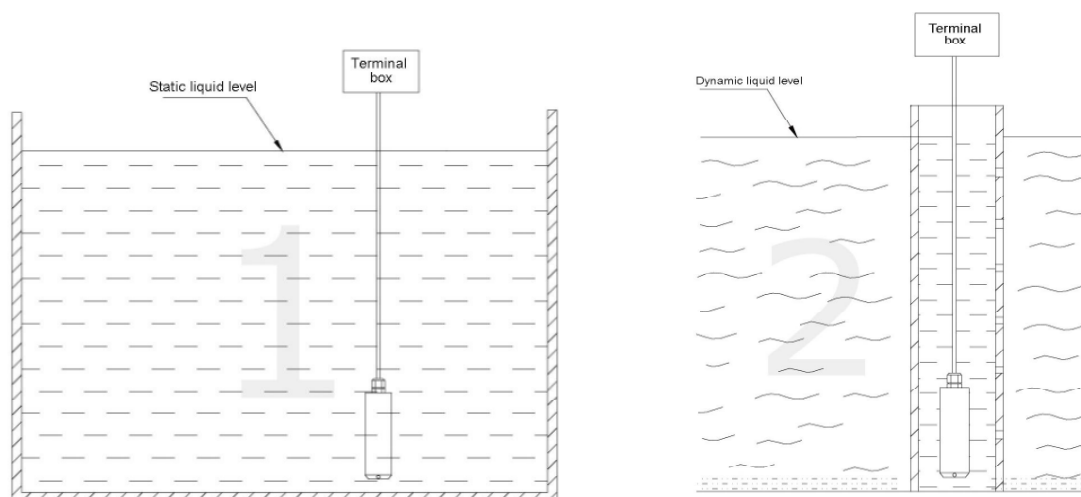
## Dimension

Unit:mm



The default diameter is 27 mm. 19 mm or 13 mm external diameter is customizable.

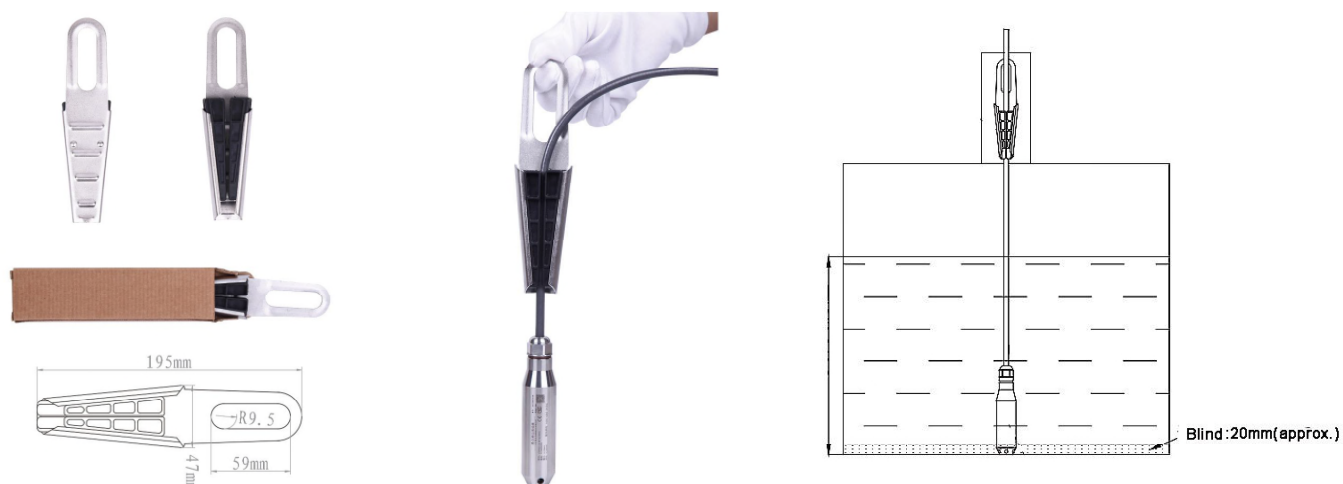
## MOUNTING



As shown in picture 1,when the sensor is installed in static water such as in pools,water towers,probe is immersed into the bottom and should be as far as possible away from the pump or valves.The terminal box should keep above water surface and prevent water penetrating into cables.Please make sure the airway not be blocked.

As shown in picture 2,when the sensor is installed in dynamic water such as dams or rivers,probe should be inserted into a steel pipe(inner dia is around 45mm),burrowing several holes at different height on the pipe side wall which is opposite to the water flow direction.The terminal box should keep above water surface and prevent water penetrating into cables.Please make sure the airway not be blocked.

## FIXED BRACKET(OPTIONAL)



## PARAMETER SELECTION TABLE

Remark	Series	Supply	Output	Accuracy	Range	Fixed bracket	Cable Length	
RKL								
	01							
		A						10-30V
		X						Other
			A					4-20mA
			B					0-5V
			C					0-10V(Supply>15VDC)
			D					RS485(MODBUS-RTU)
			X					X
				P1				0.1%
				P2				0.3%(0.25%)
				P3				0.5%
					R(0-200m)			0-200m optional
						A		With bracket
						N		Without bracket
							5000	5m
							...	...

Example: RKL-01AAP3R3mN5000 Supply:10-30V, Output:4-20mA, Accuracy:0.5%FS, Range:3m H<sub>2</sub>O, With out bracket, Cable Length:5m.

**CE** Complies with applicable CE directives.

Specifications subject to change without notice. Version 3.0  
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