

RKL-03 Ultrasonic Liquid Level Transmitter



Overview

RKL-03 Ultrasonic Level Transmitter is a non-contact, high-reliability, and cost-effective liquid level measurement device, designed for easy installation and low maintenance. Operating without direct contact with the medium, it is suitable for most liquid level measurement applications. The device calculates the distance from the transducer to the liquid surface using the Time-of-Flight (TOF) principle—where the interval between transmitted and received ultrasonic pulses is proportional to the measured distance.

This transmitter is compatible with the RK600 Data Logger and can also be integrated with universal data logging systems.

Features

Range of up to 30 meters
Level or material measurement
Good stability
Response speed is adjustable
With LCD display, menu settings
Easy Installation

Applications

River water level measurement
Lake water level measurement
Shallow water level measurement
Hydrographic survey
Material level measurement
Environmental protection

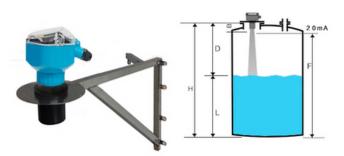
Technical Parameter

Item	Technical Specification					
Range	5m,10m,15m,20m,30m					
Output	4-20mA(2wires),4-20mA(4wires),RS485(4wires)					
Supply voltage	24VDC,220VAC, 12VDC(RS485 output only)					
Accuracy	0.5%-1%					
Resolution	±3mm or 0.1%FS(take the maximum value)					
Display	LCD with English					
Control	Relay AC250V/8A or 30V/5A					
Power consumption	4-wire,without relay:1.9W 4-wire,with relay:3.6W 2-wire,without relay:0.48W					
Ingress protection	Probe:IP68,Display unit:IP66					
Operating	Probe:-20°C~ +80°C, Display unit:-20°C~ +60°C					
Housing material	Anti-aging corrosion resistant engineering plastics, Cast aluminum shell (explosion-proof)					
Process connection	Range=0-10m:G2 Range=0-20m: M78*2 Range>20m:M108*2					
Menu setting	Reference zero point, maximum of measuring range, minimum of measuring range, alarm point, Return difference setting, working mode, response time, parameter correction, communication setting etc.					
Storage Condition	10°C-50°C@20%-90%RH					



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Mounting



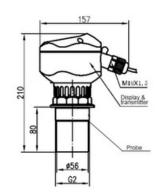
Range	Default blind zone	Customized min. blind zone	
0-5m	300mm	200mm	
0-10m	400mm	250mm	
0-20m	500mm	400mm	
>30m	700mm	600mm	

H:mounting height, B:Blind zone, L:liquid/material level height, F:range height

Dimension

Unit:mm





Parameter Selection Table

Remark	Series	Supply	Output	Blind	Range	
RKL						
	03					
		Α				24VDC
		В				220VAC
		X				Other
			Α			2-wire 4-20mA, Without relay
			В			4-wire 4-20mA, Without relay
			С			4-wire 4-20mA,With relay
			D			4-wire RS485,Without relay
			E			4-wire RS485,With relay
			X			Other
				D		Default
				Х		Customized
					xx m	5m,10m,15m,20m,30m,40m,50m,60m

Example: RKL-03AAD5m Supply: 24VDC, Output:2-wire 4-20mA, Without relay,Blind: default, Range:5m.

Revision time	Reviser	Current Version	Remarks
20250516	Lee	V5.0	

