

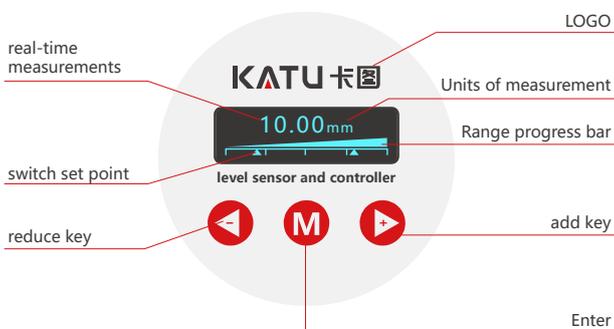


Product principle

LS380 series adopts capacitive principle sensor for liquid level measurement. The signal is processed by the rear processing circuit and converted into standard industrial electrical signal for output and display.

The built-in electrode of the capacitive sensor generates a capacitance value with the metal tank or box, and the capacitance value changes with the increase and decrease of the medium in the cavity, thereby determining the liquid level value of the medium.

Panel Schematic



Features

- All metal shell design
- The use of high-brightness OLED liquid crystal display enables this series of products to be used in various industrial occasions.
- Double-button design and user-friendly menu make the product more convenient to use.
- A variety of connection methods can fully meet various specific installation needs.
- The 330° rotatable display head guarantees the best results in different installations
- High viscosity medium, strong anti-fouling ability

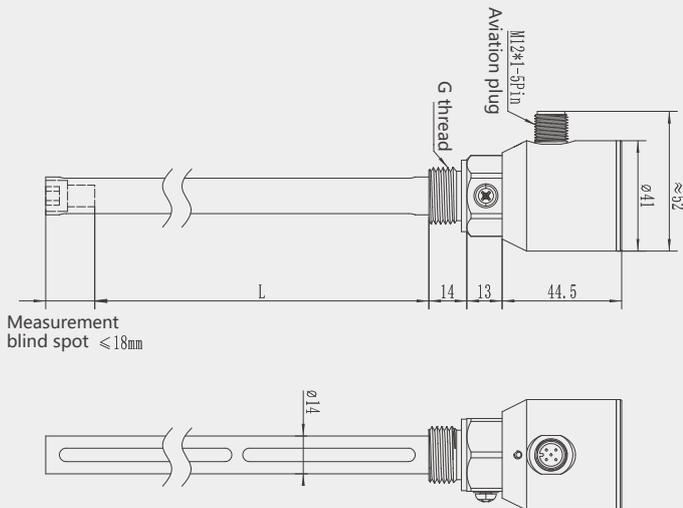
Applications

- Water, water as the base medium
- Oils, oil-based media, cooling lubricants
- powder

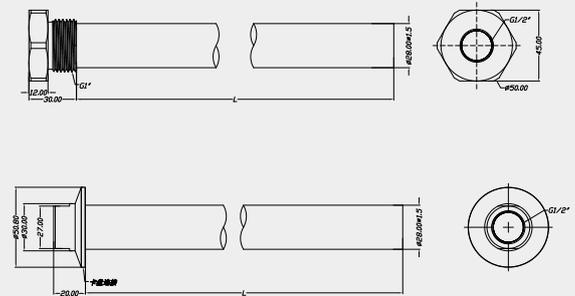
technical parameter

- ◊Measurement range (guide rod length L):
100...1000mm (bottom dead zone≤20mm)
- ◊Measuring medium: liquid
- ◊Pressure resistance: 10bar
- ◊Media density: ≥0.3g/cm
- ◊Power supply voltage: 16...28Vdc
- ◊No-load current consumption: ≤30mA, when powered by 24Vdc
- ◊Switch output
- ◊Output type: PNP / NPN optional normally open normally closed can be set
- ◊Output current: <500mA
- ◊Voltage drop: <1V
- ◊Current type analog output
- ◊Output type: three-wire 0...20mA/4...20mA can be set
- ◊Load RA: RA≤500ohm
- ◊Linearity: ≤±1.5% of range
- ◊Voltage type analog output
- ◊Output type: three-wire 0...5V/1...5V can be set
- ◊Load RA: RA > 10Kohm
- ◊Linearity: ≤±1.5% of range
- ◊Wiring protection: reverse phase, overload, short circuit protection
- ◊Display: OLED liquid crystal display
- ◊Temperature
- ◊Working temperature: -20...80°C
- ◊Medium temperature: -20...100°C
(high temperature type: -50...200°C, higher temperature can be customized)
- ◊Storage temperature: -30...80°C
- ◊Material
- ◊Shell: stainless steel 304
- ◊Probe rod: PTFE
- ◊Protection class: IP67
- ◊Outlet method: M12×1 connector directly attached

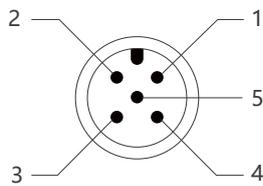
Dimensions (mm)



protective case Dimensions (mm)



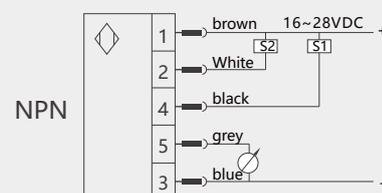
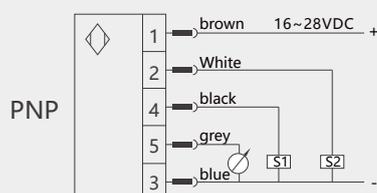
Wiring diagram



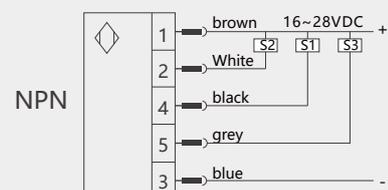
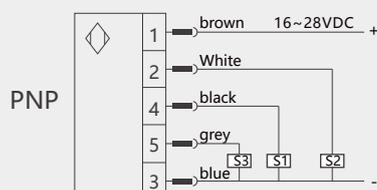
M12 connector

Signal	pin	cable
Power is positive	1	brown
negative power supply	3	Blue
Switch output S1	4	black
Switch output S2	2	White
Analog output (voltage or current)	5	grey

Two switch output + analog output



Three switching outputs



Selection table

LS380-	A3	G34M	M	100	P	detail
LS380-						LS380 Capacitive Liquid Level Sensor
	A3					Two switching outputs + analog output (0...20/4...20mA)
	V5					Two switching outputs + analog output (0...5/1...5V)
	V10					Two switching outputs + analog output (0...10/1...10V)
	S3					Three switching outputs
		G34M				G3/4 male thread
		G1M				G1 external thread
		G12M				G12 external thread
			M			M12*1 five-pin plug
				100		Measuring range: 100mm
				150		Measuring range: 150mm
				200		Measuring range: 200mm
				250		Measuring range: 250mm
				300		Measuring range: 300mm
				350		Measuring range: 350mm
				400		Measuring range: 400mm
				450		Measuring range: 450mm
				500		Measuring range: 500mm
				550		Measuring range: 550mm
				600		Measuring range: 600mm
				650		Measuring range: 650mm
				700		Measuring range: 700mm
				750		Measuring range: 750mm
				800		Measuring range: 800mm
				850		Measuring range: 850mm
				900		Measuring range: 900mm
				950		Measuring range: 950mm
				1000		Measuring range: 1000mm
					P	PNP output
					N	NPN output

*Special requirements can be customized

protective case Selection table

LHT -	G1M	-	detail
LHT-			protective case
	G1M		G1 male thread connection
	H		Chuck connection
		-L	Probe length: Lxx(mm)