



Product characteristics

- All metal housing design
- Color crystal display
- Button design and user-friendly menu make the product easier to use.
- A variety of connection methods can fully meet the specific installation needs.
- The display head with 330° rotation guarantees optimum performance in different mounting modes
- High viscosity medium, strong anti-fouling ability

Product application

- Mainly used for high viscosity media

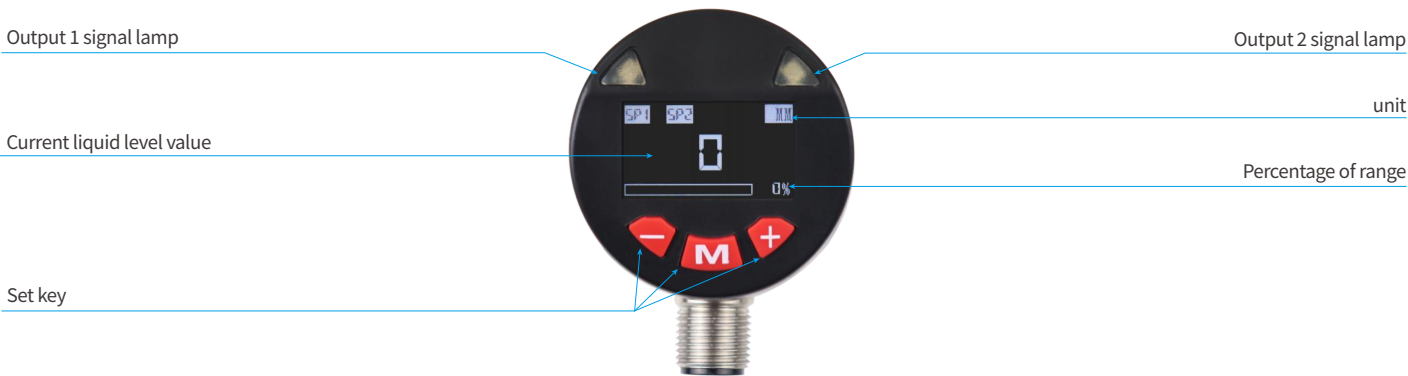
Product principle

LS380 series adopts capacitive principle sensor for liquid level measurement, and the signal is converted into standard industrial electrical signal output and display after processing by the rear processing circuit.
Capacitive sensor built-in electrode and metal tank or box to produce capacitance value, capacitance value with the increase and decrease of the medium in the cavity changes, so as to determine the liquid level of the medium.

Technical parameter

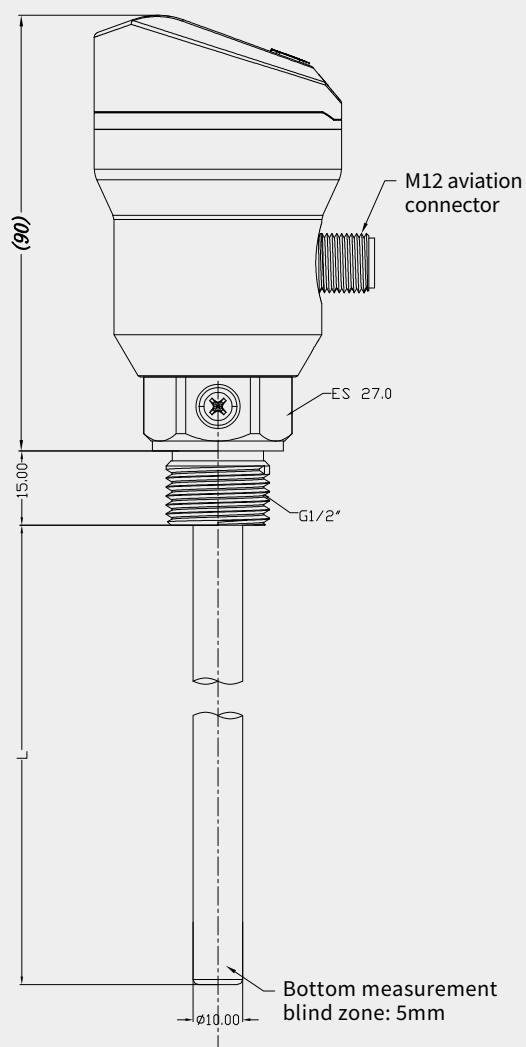
◇ Measuring range (guide rod length L) : 100... 1000mm (bottom dead zone < 10mm)	◇ Load RA: RA > 10Kohm
◇ Measuring medium: liquid	◇ Linearity: $\leq \pm 1.5\%$ range
◇ Pressure: 10bar	◇ Wiring protection: reverse phase, overload, short circuit protection
◇ Medium density: $\geq 0.3\text{g/cm}$	◇ Display: color crystal display
◇ Supply voltage: 16... 28Vdc	◇ Temperature
◇ No-load current consumption: $\leq 30\text{mA}$, at 24Vdc power supply	◇ Operating temperature: -20... 80 °C
◇ Switch output	◇ Medium temperature: -20... 100°C (High temperature type: -50... 200°C, higher temperature can be customized)
◇ Output type: PNP/NPN Optional normally open normally closed can be set	◇ Storage temperature: -30... 80 °C
◇ Output current: < 500mA	◇ Materials
◇ Voltage drop: < 1V	◇ Housing: stainless steel 304
◇ Current type analog output	◇ Probe rod: stainless steel 304 (PTFE lining)
◇ Output type: 3-wire 0... 20mA/4... 20mA can be configured	◇ Protection grade: IP67
◇ Load RA: RA $\leq 500\text{ohm}$	◇ Outlet mode: M12×1 connector directly attached to the cable
◇ Linearity: $\leq \pm 1.5\%$ range	
◇ Voltage type analog output	
◇ Output type: 3-wire 0... 5V/1... 5V can be set	

Panel diagram

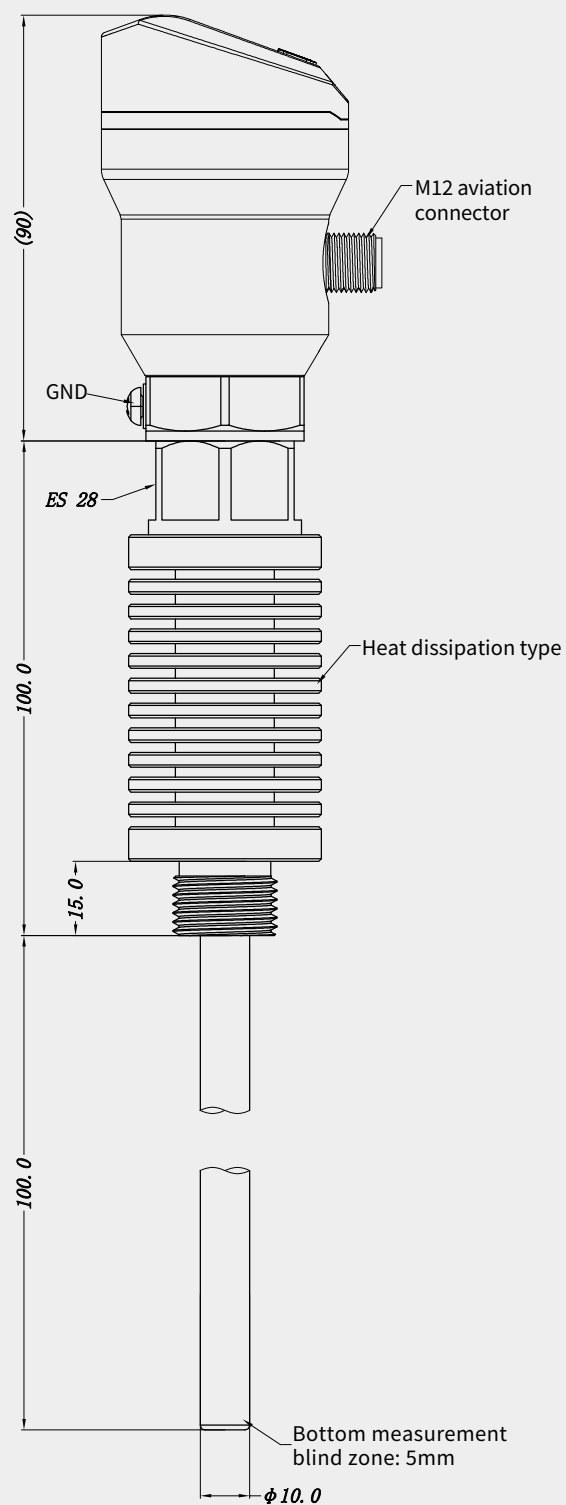


Size drawing (mm)

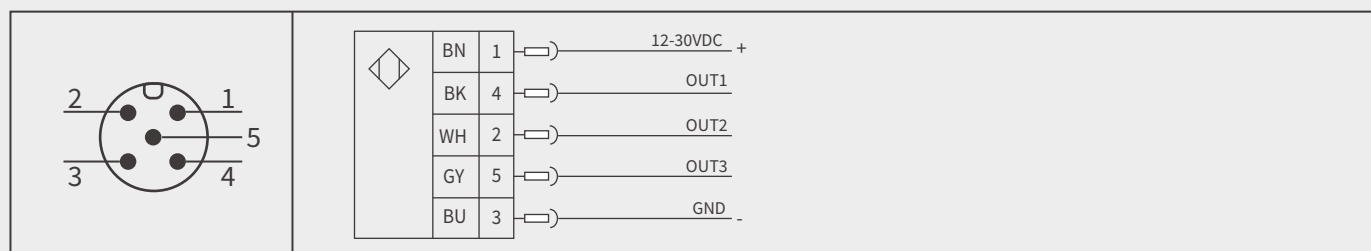
■ standard type



■ High temperature type



Wiring diagram



A3: Two switches + one analog (4-20mA)

colour	stitch	instructions	Colour	stitch	instructions	Colour	stitch	instructions
BN	1	power supply (+)	BU	3	power supply (-)	GY	5 (OUT3)	Level: 4-20mA (factory default)
BK	4 (OUT1)	Level switch PNP (Factory default) Level switch NPN	WH	2 (OUT2)	Level switch PNP (Factory default) Level switch NPN			

V5: Two switches + one analog (1-5V)

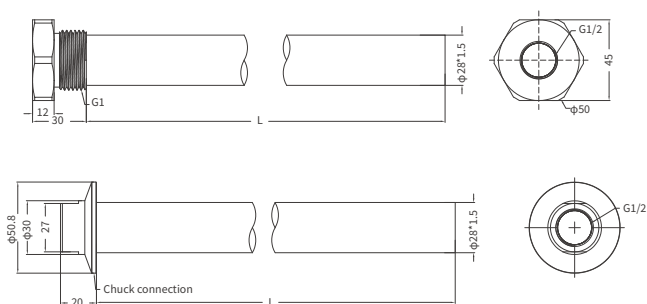
colour	stitch	instructions	Colour	stitch	instructions	Colour	stitch	instructions
BN	1	power supply (+)	BU	3	power supply (-)	GY	5 (OUT3)	Level: 1-5V
BK	4 (OUT1)	Level switch PNP (Factory default) Level switch NPN	WH	2 (OUT2)	Level switch PNP (Factory default) Level switch NPN			

Selection list

LS380-	A3	G34M	100	-	-	expatiate
LS380-						LS380 capacitive liquid level sensor
	A3					Output signal: two switch output + analog output (4... 20mA)
	V5					Output signal: two switch output + analog output (1... 5V)
		G34M				G3/4 external thread
		G1M				G1 external thread
		G12M				G12 external thread
			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
				-		Normal form
				-G		High temperature type
					-	Measured medium: Water (factory default)
					PV	Measured medium: Polyvinyl alcohol (glue)
					PA	Measured medium: Gear oil (ISO VG220)

* Special requirements can be customized

Protective case (for water or oil media) * Note that the sensor must select G1/2 connection mode



L H T -	G 1 M	-	detail
LHT-			Protective sleeve
	G 1 M		G1 external thread connection
	H		Chuck connection
		-L	Length of probe rod: Lxx(mm)

Optional accessories - Electrical accessories (M12-5Pin: Factory default ZL05-PC02G)

name	Outline drawing/dimension drawing (unit:mm)	material	Model number	Shielded wire	M12*1-5Pin self-connector/Dimensions (Unit:mm)	Model number
M12*1-5Pin (2m cable)		PUR	ZL05-PU02G	-P		GL05 (4 Pin connector)
M12*1-5Pin (5m cable)			ZL05-PU05G			
M12*1-5Pin (10m cable)			ZL05-PU010G			
M12*1-5Pin (2m cable)		PVC	ZL05-PC02G			WL05 (5 Pin connector)
M12*1-5Pin (5m cable)			ZL05-PC05G			
M12*1-5Pin (10m cable)			ZL05-PC010G			
M12*1-5Pin (2m cable)		PUR	ZL05-PU02W			
M12*1-5Pin (5m cable)			ZL05-PU05W			
M12*1-5Pin (10m cable)			ZL05-PU010W			
		PVC	ZL05-PC02W			
			ZL05-PC05W			
			ZL05-PC010W			

Optional accessories - Protective cover

Color crystal screen series (switch) sensor



Order number:KTYLLC42177