

Liquid Level Sensor for thin diameter pipes

LS series

- Operation LED
- Stability Indicator
- Sensitivity adjustment are equipped.



*Detects the presence
of a transparent liquid
in a thin pipe.*

Various applications
to built into medical
equipment or analyzers.

Thin pipe capable

Available for transparent pipes from 1.6 to 2.6mm in diameter. Photoelectric non-contact sensor.

Easy setting

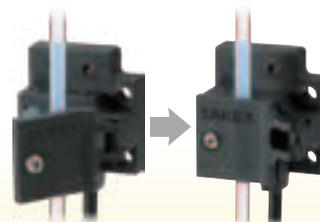
Just clamp the pipe and fix by a screw.
No additional work is required on the pipe.

Compact and saving space

23 x 21mm mounting area.

Applications

12 to 24VDC type and
5VDC type are available.



For a small tube pump
to check operation.



Compact
analyzer, etc.

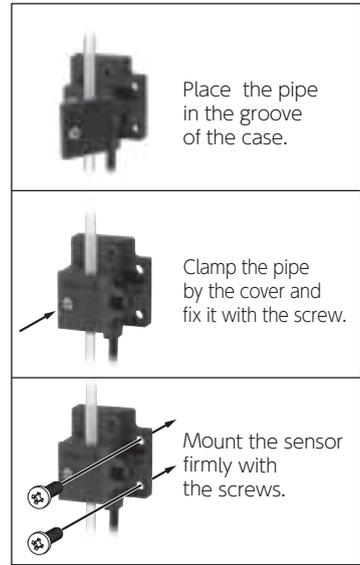


For a dispenser to
monitor a liquid level.

RATINGS / PERFORMANCE / SPECIFICATIONS

Model	LS-24L	LS-24D	LS-24LP	LS-24DP	LS-5L	LS-5D	LS-5LP	LS-5DP
Power supply	12 to 24VDC ±10% / Ripple 10% or less				5VDC ±10% / Ripple 5% or less			
Detection object	Liquid (transparent) / Colored liquid may not be detected.							
Outer diameter of mounted pipe	Transparent pipe with outer diameter of 1.6 to 2.6mm (wall thickness: 0.5mm or less)							
Consumption power	17mA or less				24mA or less			
Output mode	NPN open collector output Rating: sink current 80mA (30VDC) or less		PNP open collector output Rating: source current 80mA (30VDC) or less		NPN open collector output Rating: sink current 80mA (30VDC) or less		PNP open collector output Rating: source current 80mA (30VDC) or less	
Operation mode	Light-ON	Dark-ON	Light-ON	Dark-ON	Light-ON	Dark-ON	Light-ON	Dark-ON
Response time	0.5 ms or less							
Light source	Red LED (wave length : 647nm)							
Indicators	OPL: Operation indicator (orange LED) STB: Stability indicator (green LED)							
Volume	Sensitivity adjustment							
Material	Housing : PBT Filling : polyester							
Wiring method	Attached cable (outer diameter: 2.8mm) 0.15mm ² ×3 cores, 1m							
Weight	Approx. 20g							
Accessories	Instruction manual, screwdriver for adjustment							

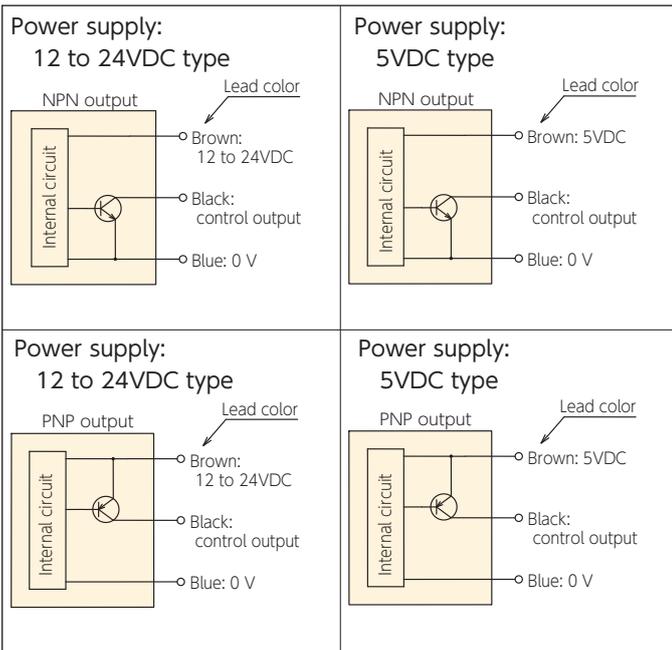
PRODUCT INSTALLATION



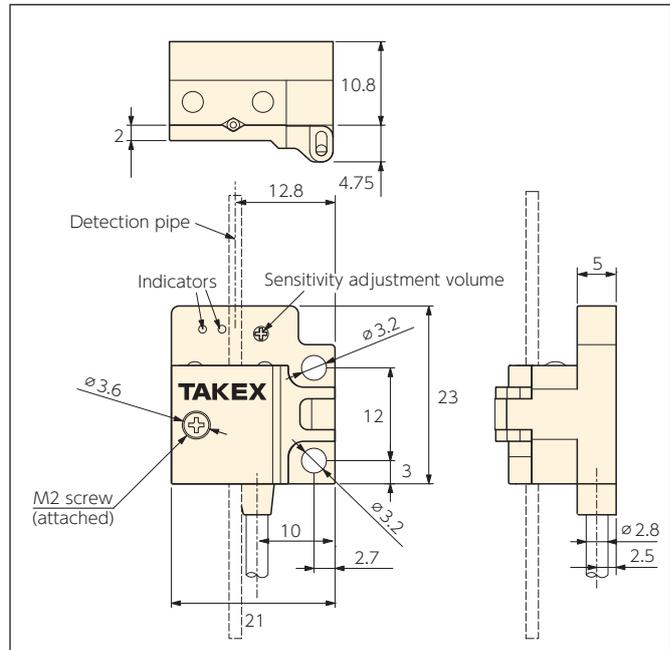
ENVIRONMENTAL SPECIFICATIONS

Ambient light	3,000 lx or less
Ambient temperature	-25 to +55°C (No freezing)
Ambient humidity	30 to 85%RH (No condensation)
Protection rating	IP50
Vibration	10-55Hz / 1.5mm double amplitude / 2 hours each in 3 directions
Dielectric tolerance	1,000VAC for 1 minute
Insulation resistance	500VDC, 20MΩ or higher

WIRING



DIMENSIONS (unit:mm)



- This product is designed for industrial applications to detect a various kinds of objects. It has no function to prevent disasters, accidents, death or injuries.
- Takex will not held responsible for any damage or loss incurred due to accidents, faulty installation, abuse, misuse, improper maintenance or acts of God including lightning surge.
- This product can't be used as a safety equipment to protect human body.
- This product is designed and manufactured for industrial use. It can't be use for usage or equipment that requires a high degree of reliability or considerable care or attention to safety.
- Read this instruction manual carefully and use the product properly according to it.
- This instruction manual including the specifications and dimensions may be subject to change without notice.



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