AGROWTEK
Technology to Help You Grow

SXL

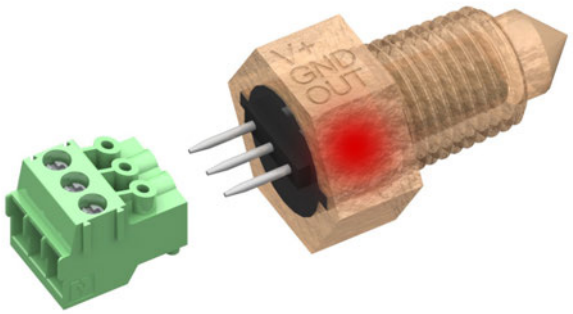
Optical Liquid Level Sensor

Specifications

Voltage Input:	5-24Vdc
Output Current:	Max 1A (sourcing)
Current Consumption:	20mA
Mounting Thread:	1/4” NPT
Hex Size:	3/4” (19mm)
Body Material:	Polysulphone
Temperature Range:	-20 to 80°C (non-freezing)
Maximum Pressure:	TBD
Wire Gauge:	26 - 16 AWG

Made in USA

Lead Free



Installation

Sensor may be installed in any orientation. Drops or moisture on tip will not cause a false reading.

Use thread sealing tape and avoid over-tightening. Do not install in direct sun light or near strong sources of infrared (IR) light.

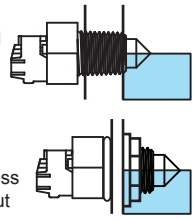
Clean with alcohol or freon based solvents. Do not use chlorinated solvents. Check chemical compatibility against body material.

Level Sensing

Tank Wall

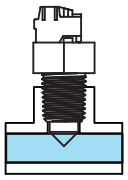
Thick Wall or Bung NPT Tap

Thin Wall 3/16” or less O-Ring/Nut



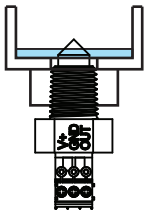
Flow Sensing

Tee

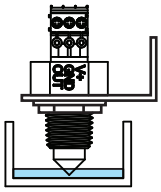


Condensate/Leak Sensing

Drip Tray



Bracket & Nut

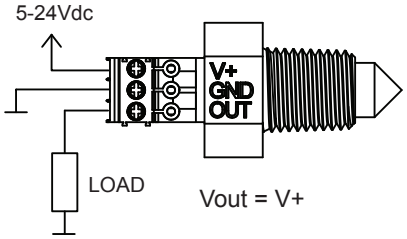


WARNING: DO NOT USE these products as safety or emergency stop devices or in any other application where failure of the product could result in personal injury. Failure to comply with these instructions could result in death or serious injury.

Wiring

The sensor accepts 5-24Vdc input for operating the sensor and output terminal. A high-current solid-state PFET reliably controls the output terminal based on the wet or dry condition of the sensor tip for PLC and MCU logic inputs, or direct operation of relays and other loads up to 1A. The pin-out is molded into the hex head for reference. Standard configurations include wet-on, dry-on, and 1kHz PWM output.

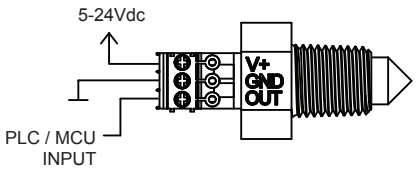
LED will flash three times on power-up, and once every 10 seconds (when output is OFF) to indicate proper sensor operation. One-shot sensors will flash the LED off briefly to indicate they are wet or dry, but in the locked condition.



Status	SXL-1* (Wet ON)	SXL-2* (Dry ON)	SXL-3 (PWM)
Dry	LED/Output OFF	LED/Output ON	LED OFF, 20%
Wet	LED/Output ON	LED/Output OFF	LED ON, 50%
IR Flooded/Error	LED Flashing / Output OFF		LED Flash, 80%

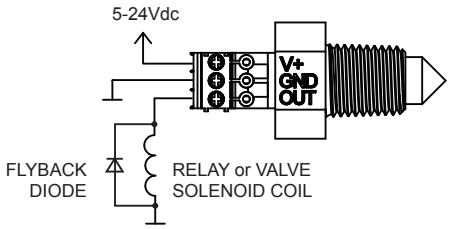
*Available “latching” mode holds output on until next power cycle when activated.

PLC / TTL WIRING



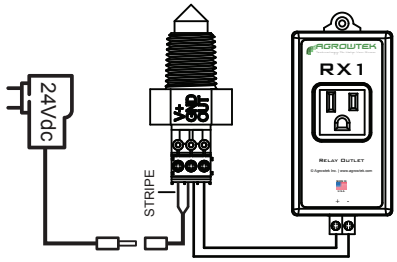
Connect OUT terminal directly to any discrete PLC input or MCU / TTL input.

RELAY & WATER VALVE WIRING



5-24Vdc relays and water solenoids can be directly operated by the sensor output. A “fly-back” protection diode is recommended on relay and irrigation solenoids to prevent damage to the sensor.

RX1 RELAY WIRING



Agrowtek’s RX1 is a CSA Listed 120Vac/12A relay outlet. The RX1 plugs into a wall outlet and can be wired directly to the SXL-1 or SXL-2 sensor to control any 120V device. A fly-back diode is built into the RX1 relay.