

ALSI Bubbler Liquid Level Controller

The ALSI Bubbler Liquid Level Controller is virtually maintenance free and can be used to control tank liquid levels for a variety of ambient temperature or heated liquids. Typical liquids include, but are not limited to, the following: water, oils, dilute acids, alkaline solutions, fuels, syrups, inks, paints, alcohols, coolants, solvents, sludge, slurries, etc. Specific applications should be reviewed prior to use.

The unit shown to the right includes the following options: On/Off Selector Switch, High Limit Alarm Light and Low Limit Alarm Light.

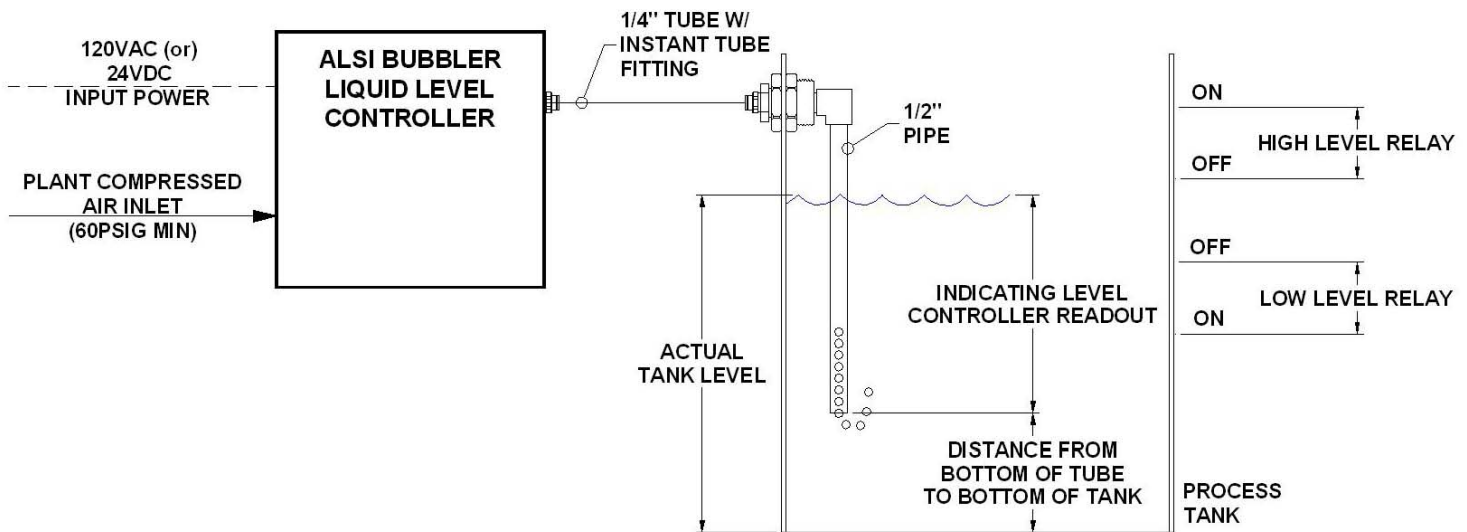


The ALSI Bubbler Liquid Level Controller has a differential pressure controller with two SPDT control relays with adjustable dead bands along with a scalable 4-20mA process output. The Series BLJ provides flexibility in power usage allowing 120/220 VAC or 24 VDC power.

Programming is easy using the menu key, with digital display, allowing access to five simplified menus which provide control to:

- Security level
- Selection of engineering units (in/ft wc, mm/cm wc, psi, etc.)
- Set point control or set point and alarm operation
- Alarm operation as high, low or high/low alarm
- Automatic or manual alarm reset
- Alarm Delay
- View peak and valley process readings
- Digital dampening for smoothing erratic process applications
- Scaling the 4-20mA process output to fit your application's range
- Modbus[®] communications
- Field calibration

SAMPLE FLOW DIAGRAM



SPECIFICATIONS

Accuracy: $\pm 0.5\%$ at 77°F (25°C) including hysteresis and repeatability

Stability: $< \pm 1\%$ per year

Pressure Limits: Ranges ≤ 2.5 in. w.c. = 2 psi; 5": 5 psi; 10": 10 psi; 50": 5 psi; 100": 9 psi

Temperature Limits: 32 to 140°F (0 to 60°C)

Compensated Temperature Limits: 32 to 140°F (0 to 60°C)

Thermal Effects: 0.020%/°F (0.036/°C) from 77°F (25°C)

Power Requirements: High Voltage Power = 100 to 240 VAC, 50 to 400 Hz or 132 to 240 VDC. Low Voltage Power = 24 VDC $\pm 20\%$

Power Consumption: Low Voltage Power = 24 VDC-130 mA max; High Voltage Power = 100 to 240 VAC, 132 to 240 VDC-7VA max

Compressed Air Consumption: 1.0 SCFH (An optional air supply package can be provided if plant air is not available)

Output Signal: 4-20 mA DC into 900 ohms max

Zero & Span Adjustments: Accessible via menus

Response Time: 250 ms

Display: 4 digit LCD 0.4" height; LED indicators for set point and alarm status

Electrical Connections: Screw terminals[®]

Serial Communications: Modbus RTU, RS485, 9600 Baud

Switch Specifications

Switch Type: 2 SPDT relays

Electrical Rating: 8 Amps at 240 VAC resistive

Set Point Adjustment: Adjustable via keypad on face

OPTIONS

- Power On/Off Selector Switch
- High Limit Alarm Light
- Low Limit Alarm Light