BOISWOOD
GAS AND LIQUID CONTROL TECHNOLOGIES
Pressure & Vacuum
Flow
Level & Temperature
Tube & Fittings
HVACR
Custom Services

CAP-150 Series – Capacitive Level Sensor

All-Valox® Body

Ni-Plated Brass Body

▶ For non-metallic containers
▶ Non-intrusive level sensing
▶ Optional Sight Glass Bracket
▶ Potentiometer for sensitivity adjustment

The CAP-150 series offers a unique level sensing solution for a wide variety of bottle types including plastic, glass and fiberglass. The non-contact sensor is ideally suited for medical applications such as waste, reagent or diluent liquids as well as dark, sticky or viscous fluids. The easy-to-calibrate sensor is available in both aqueous and non-aqueous versions and can be delivered with factory preset sensitivity for quick installation for OEM orders. The CAP-150 may also be used as a proximity sensor to detect the presence of solids such as pulp & paper.

Specifications

Performance

Nominal Sensing Distance, Sn	0.2″ (5mm)
Repeat Accuracy - (% of Sn)	<2%
Hysteresis - (% of Sn)	<20%

Mechanical

Enclosure Ratings	IP67, NEMA 1,3,4,6,13
Operating Temperature Range	-13°F to +158°F (-25°C to +70°C)
LED Signal Indicator	Yellow
Power On LED Indicator	Green
Potentiometer	Yes
Termination	78.74″ (2 meter), 3 Wire PVC
Shock	30g, 11ms

Electrical

Supply Voltage	5-48 VDC
Continuous Switching Current	300 mA
Voltage Drop	<2 VDC
Current Consumption	<10 mA
Switching Frequency	100 Hz, maximum
Overload Protection	No
Short Circuit	Yes
Reverse Polarity Protection	Yes
Approvals	CE

How To Order

Select a Part Number based on Fluid Properties and Sink State.

Fluid Properties	Sensor Material	Flush Mountable	Sensing Range	Shielded	Sink/ Source		Logic	Part Number
Aqueous, Conductive (Unshielded Sensor)	Valox®	No	2-8mm	No	Sink		Wet	**239890**
							Dry	**239891**
					Source		Wet	**241366**
							Dry	**241367**
Non-Aqueous, Non-Conductive (Shielded Sensor)	Ni-Plated Brass Barrel Valox® Sensor Face	Yes	1-5mm	Yes	Sink		Wet	**240607**
							Dry	**240612**
					Source		Wet	**241368**
							Dry	**241369**

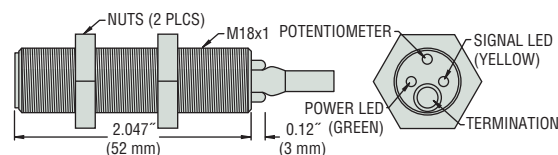## Typical Applications

Fluid Monitoring:
• Waste
• Reagents
• Diluent
• Detergent/Wash
• Coolant
• Printing Ink

Dimensions

NUTS (2 PLCS) M18x1 POTENTIOMETER SIGNAL LED (YELLOW)
2.047″ (52 mm) 0.12″ (3 mm) POWER LED (GREEN) TERMINATION

Wiring Diagram

Wet Sink

5-48VDC
BRN
300mA max
LOAD
BLK
BLU

Dry Sink

5-48VDC
BRN
300mA max
LOAD
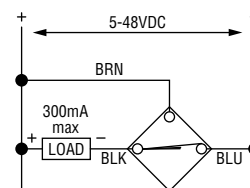BLK
BLU
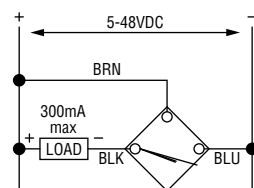
Convert Simple Sight Glass into Switch Actuation Device

• For glass tubing 1/4″ to 1″ Dia.

Use this easy-to-install clamp with the CAP-150 to provide liquid level sensing and switch actuation along the length of sight glasses 1/4″ to 1″ in diameter.

Part Number: 240836

SIGHT GLASS INSTALLATION AREA
CLAMP
CAP-150 PORT