

**DREXELBROOK**<sup>®</sup>**VeriGAP™ 504-1000 Series****Line Powered Ultrasonic Gap Switch****Guaranteed Safety**

Verify™ circuitry checks that the complete system (crystals, crystal bonding, electronics and relay) is functioning correctly.

**No Calibration Required**

No opportunity for error in calibration or adjustments in gain controls.

**Local Control**

This line-powered version of the 504 Series gap switch has its 5A DPDT relay where you need it...built into the unit and close to pumps, valves, horns and other final control elements.

**Wide Range of Applications**

Performance is unaffected by changes in liquid density, pressure, or electrical properties.

**Major Breakthrough**

The VeriGAP level switch is the only safe gap switch available for high level alarming or indication. All other gap switches are inherently low level fail safe only. With most low-level fail-safe devices, either an absence of material or a component failure will indicate a low level alarm. With most high level fail-safe devices, the presence of material will only trigger an alarm if the system is functioning properly. A component failure, such as separation of the crystals, will cause the device to indicate an absence of material. This will result in a normal condition, even if the tank is over filling.

**Outperforms Generic Gap Switches**

VeriGAP overcomes the problems inherent in generic gap switches by testing the entire system (crystals, crystal bonding, electronics and relay) on demand, eliminating the possibility of a spill. Unlike other gap switches with so-called self-testing features, the VeriGAP requires no calibration. This eliminates the potential for error or spills during installation and setup.

**Ideal for Liquid Measurement**

The VeriGAP is ideal for high and low point level measurements in liquids. It is not affected by variations in viscosity, density, pressure, temperature, or electrical properties.

# VeriGAP™ 504-1000 Series

## Specifications

### Electronics Model # 404-1000-9

**Input Power:**

120Vac +/- 20% (240Vac or 24Vdc +/-6V opt.)

**Level Output:**

DPDT relay

**Contact Ratings:**

120Vac: 6A resistive, 4.4A inductive, 1/6HP  
240Vac: 6A resistive, 4.9A inductive, 1/3HP  
30Vdc: 6A resistive  
Min. Rating 100mA / 12VDC

**Max. Cont. Carrying Current**

7A

**Operating Temperature\*:**

-40°F to 160°F (-40°C to 70°C)

**Fail-Safe:**

High or low level (field-selectable)

**Repeatability:**

1/16 inch (1.59 mm)

**Response Time:**

2 seconds

**Housing:**

Nema 1-4X, 5 and 12

**Area Classifications:**

Groups A,B,C,D, Class I, Div. 1 or 2. Groups E,F,G, Class II, Div. 1 or 2

**RFI Effect:**

No effect on operating point from a 5 watt field @ 27, 150, or 450 MHz

**Sensor Model # 705-1-1****Material:**

316 SS

**Mounting:**

3/4 inch NPT

**Process Temperature:**

Standard: -40°F to 250°F (-40°C to 121°C)  
Optional: -40°F to 350°F (-40°C to 177°C)

**Process Pressure:**

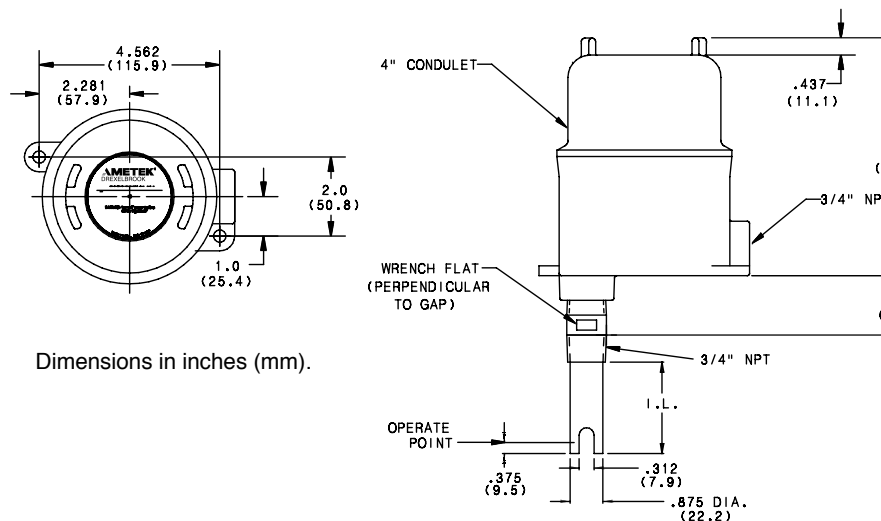
1000 psi (69 BAR)

**Operating Point:**

3/8 inch (9.523 mm) from tip

**Approvals:**

## Mounting Dimensions



EDO#3-28-03-251

Phone: +1 215-674-1234 • Fax: +1 215-674-2731

E-mail: [drexelbrook.info@ametek.com](mailto:drexelbrook.info@ametek.com)

205 Keith Valley Road | Horsham PA 19044 U.S.A.

**AMETEK**<sup>®</sup>  
DREXELBROOK

[www.Drexelbrook.com](http://www.Drexelbrook.com)