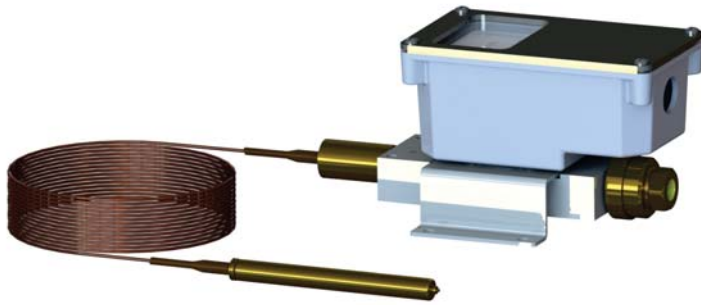




# MODEL SERIES 2TCB SF<sub>6</sub> Gas Density Switch Bulb Design

- Temperature range -40°F-140°F
- NEMA 4X (IP65) housing
- Up to four SPDT contacts
- Bulb design temperature sensor



*\*Shown with integral gauge face*

## GENERAL DESCRIPTION

- Designed to measure SF<sub>6</sub> gas density in all high-voltage circuit breaker applications
- Cast-aluminum housing
- Bulb design senses temperature change; indicating loss of gas
- Low-maintenance
- Accommodates a wide temperature range
- Phosphor bronze bellows
- Available with optional integral gauge, which features clear, visual indication of the gas density

## SPECIFICATIONS

### Switching

2, 3, or 4 SPDT snap acting switches

### Electrical Connection

Screw terminal block (3mm / #6 ring terminal)

### Switch Contact Ratings

2A; 125, 250 VAC

### Setpoint Adjustment

Factory set per customer specifications

### Temperature Range

-40°F to 140°F Ambient Standard  
(Wider ranges are available)

### Accuracy (Standard)

± 1.5 PSI at 70°F

± 2 PSI at temperature extremes 140°F to -40°F

### Deadband (Switch Differential)

Fixed; 1-6 PSI Typical

### Pressure Sensing Element

Phosphor Bronze or Stainless Steel Bellows - 100% leak inspected with Helium mass spectrometry to  $6 \times 10^{-8}$  cc/sec.

### Pressure Adjustment Range

5-100 psi

Maximum pressure 150 psi

### Pressure Port

¼ NPTF or 7/16-20 SAE are standard; Other port options are available.

### Enclosure (Optional)

Diecast aluminum

### Weight

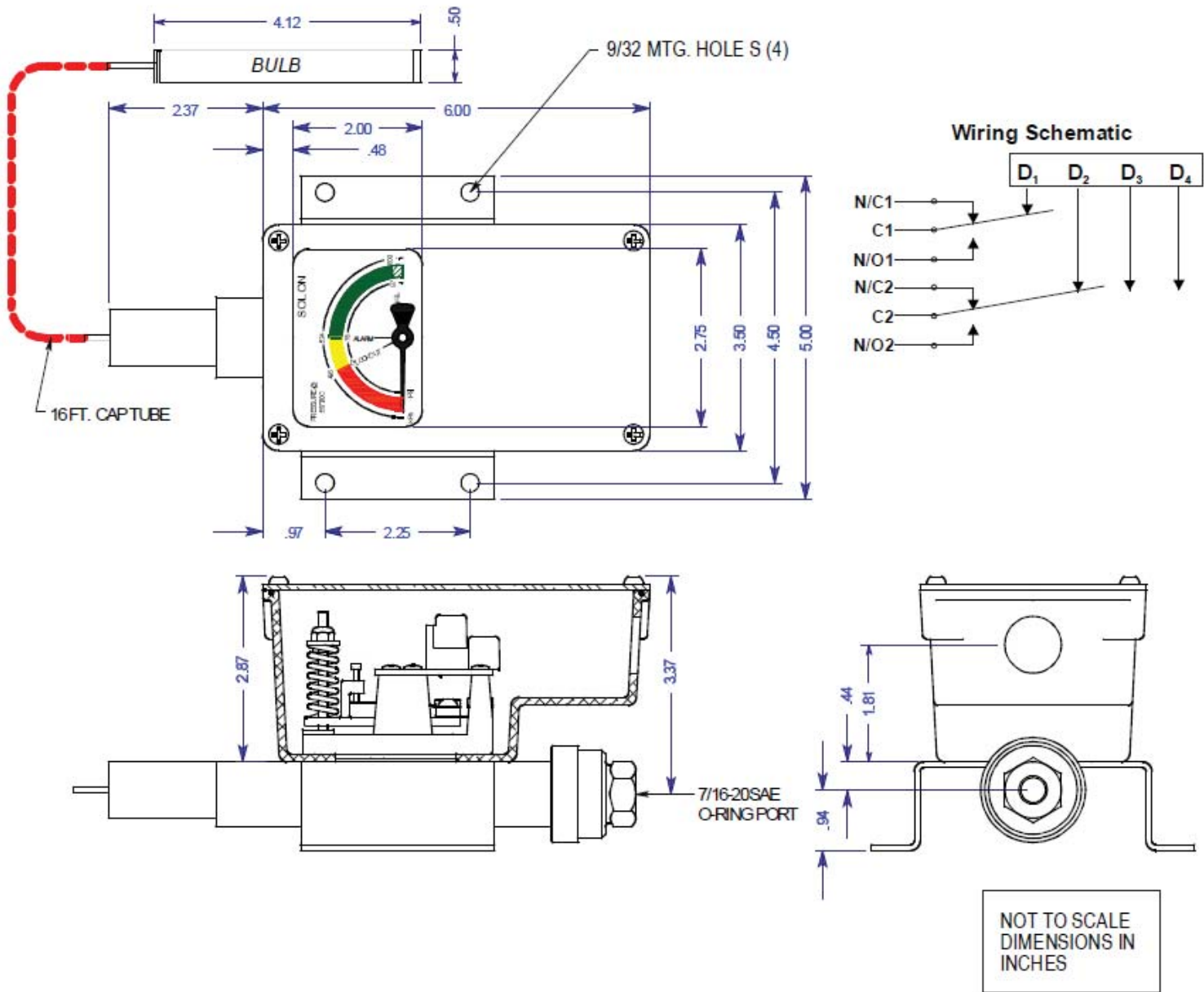
Approximately 5 lbs. (2.27 kg)

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## SWITCH DIMENSIONS

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## SPECIFYING A SWITCH

1. Specify the set points for each switch. Set points should be given at room temperature (68F) and at either of the temperature extremes.
2. Designate the pressure port fitting.
3. Choose the type of electrical connection;
  - \* Screw terminals or,
  - \* Prewired - Color coded 18 GA. MTW, 18" Lg.
4. Describe other requirements such as special testing, labeling, tagging, packaging, etc.
5. Once a switch is specified and an order is placed, Solon Mfg. Co. will assign a "slant number" (2TC/XXX) to the switch. This ensures that the fit, form, and function of the device will not change.

## INSTALLATION NOTES

- Orientation** - The 2TC will operate satisfactorily in any position.
- Location** - The bulb should be installed where it will follow the temperature of the SF<sub>6</sub> gas (out of direct sunlight.) The location of the switch housing does not effect performance.
- Wiring** - Switches may be wired to 'normally open' or 'normally closed' terminals of the switch contacts.
- Adjustment** - Factory setting to customer specifications is standard. Consult factory for field calibration instructions.

