

- Built to Customer Specifications
- Temperatures from -60F to 180F
- NEMA 4X (IP65) Housing
- Four SPDT Snap Acting Switches
- Integral Density Gauge
- Compact Size



GENERAL DESCRIPTION

Series 2TC density switches are compact temperature compensated pressure switches available with two, three or four SPDT electric switches. This compact unit is designed for use in all high voltage circuit breakers applications. It is particularly useful when monitoring individual phases in order to reduce plumbing connections and consequently reducing the number of potential leak points. Bi-metal components provide temperature compensation to the switching and gauge mechanisms over a wide temperature range. The unit has few moving parts which adds to its accuracy and reliability.

The 2TC is available with an optional integral density gauge. This feature provides clear, visual indication of the gas density relative to the breaker fill pressure and set points. The compact size of the unit allows easy and convenient mounting in any orientation. All intrinsic temperature compensated switches must be mounted so that they change temperature at approximately the same rate as the gas.

The modular design of the 2TC series allows Solon to work with customer's applications to achieve a reliable and economical solution to density monitoring. Solon's engineers are always available to help customers with a flexible approach toward new applications.

SPECIFICATIONS

Switching

2, 3, or 4 S.P.D.T. 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

-60°F to 180°F Ambient

Accuracy

± 1.5 PSI at 70°F

± 2 PSI at temperature extremes 180°F to -60°F

Deadband (Switch Differential)

Fixed; 1-6 PSI

Pressure Sensing Element

Phosphor Bronze Bellows - 100% leak inspected with Helium mass spectrometry to 6×10^{-8} cc/sec.

Pressure Adjustment Range

5-100 psi

Maximum pressure 150 psi

Pressure Port

$1/4$ NPTF and $7/16$ -20 SAE are standard options, others can be incorporated upon request

Enclosure (Optional)

Diecast aluminum

Weight

Approximately 4 lb. (0.9 kg).

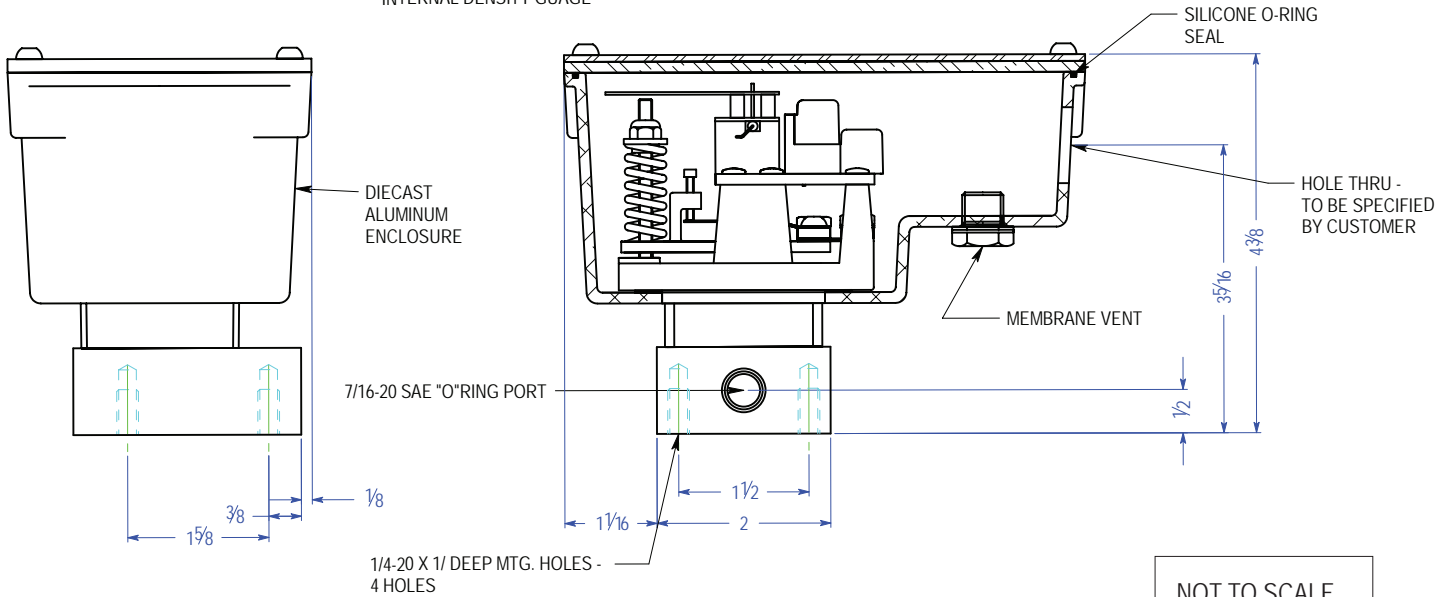
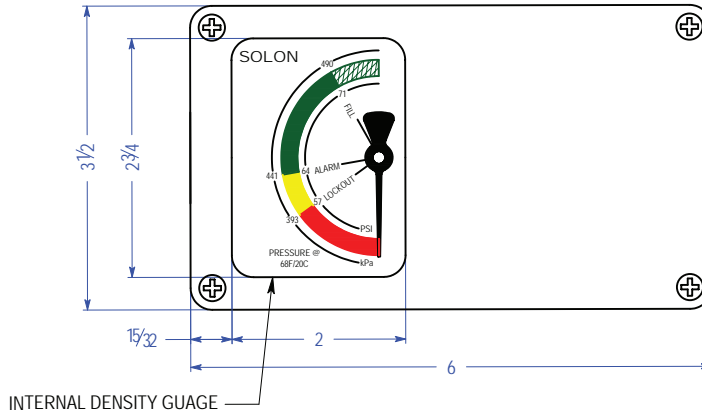
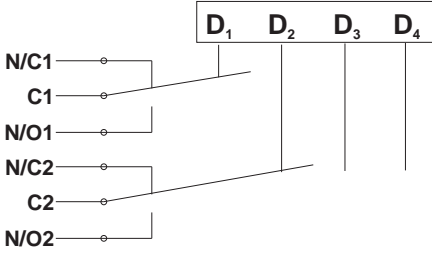
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SWITCH DIMENSIONS

2TC SF Gas Density Switch Intrinsic Gauge Design

Wiring Schematic



NOT TO SCALE
DIMENSIONS IN
INCHES

SPECIFYING A SWITCH

1. Specify the fill pressure and 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.
4. Indicate NEMA 4 or NEMA 1 housing.
5. Describe other requirements such as special testing, labeling, tagging, packaging, etc.
6. 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.
- Wiring** - Factory pre-wiring available.
- Adjustment** - Factory setting to customer specifications is standard. Unit is not field adjustable.