

COMBUSTIBLE GAS SENSORS-TRANSMITTERS

40-XP Series September 2011

For detection of Methane (CH₄), Propane (C₃H₈), Butane (C₄H₁₀), Hydrogen (H₂) and other Combustible Gases

Features

- High-accuracy Catalytic Bead (Pellistor) explosion proof sensor.
- Explosion Proof enclosure
- 4-20mA analog output or optional 0-1V DC, 0-5V DC or 0-10V DC analog outputs.
- Remote sensor-transmitter on a RS-485 comunication network compatible with Acme's popular CEL-Series centralized multipoint/multigas detection and control systems.

Applications

- Energy savings through the intermittent operation of ventilation equipment in enclosed areas.
- Commercial or industrial locations where a sudden build-up of combustible gases may occur.
- Underground parking, boiler rooms, landfills, storage rooms, etc.
- Stand-alone with standard analog outputs for direct connection to the existing Building Management System (BMS) or DDCS.



he Acme Combustible gas sensor-transmitter measures the concentration of the target gas in an enclosed area and produces a proportional analog output signal.

The Acme 40-ST Combustible Gas sensor is explosin proof. The enclosure of the sensor-transmitter is a explosion proof enclosure.

The 40-ST series employs a diffusiontype catalytic bead (pellistor) sensor capable of detecting a broad range of combustible gases. It provides instantaneous detection of these coumponds and has long term reliability and trouble free operation.

Designed to act as fixed in-situ safety monitors, the 40-ST sensor-transmitter automatically operates the mechanical ventilation system of a facility upon detection of combustible gases, thereby protecting occupants, personnel and gas-sensitive goods and products.

With the increased use of gas detection in maintenance and industrial facilities, the 40-ST allows installers and users to meet code requirements in an economical fashion using commercial-grade gas detection equipment.

The 40-ST contains all the well-known standard features of ACME's gas detection line; a robust enclosure, the latest sensor technology and state-of-the-art electronics. For more versatile gas detection options, consult the **ACME** binder or website.

Standard unit specifications

GASES DETECTED: Methane, Propane, Hydrogen, etc.

SENSOR TECHNOLOGY: Catalytic Bead (Pellistor) type.

SENSING METHOD: Diffusion.

POWER REQUIREMENTS: 24V AC 50/60Hz.

OUTPUTS AVAILABLE: 4-20mA

0-1V DC 0-5V DC 0-10V DC RS-485

OPERATING TEMP:: -4°F to 120°F (-20°C to +50°C)*

HUMIDITY RANGE: 10-95% RH

ACCURACY: +/- 5% of calibrated value

REPEATABILITY: 2% of signal

RESPONSE TIME (T90%): < 30 seconds

EXPECTED LIFETIME: 3 years

ENCLOSURE: Explosion Proof - Class 1

DIMENSIONS: 11" (L)x Φ4"(D)x 3"(D)

(279mm x 101mm x 75mm)

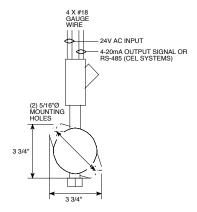
Ordering Information

| MODEL NUMBER | GAS DETECTED | RANGE |
|----------------|--------------|-----------|
| CH4-ST-XP-X* | Methane | 0-40% LEL |
| C3H8-ST-XP-X* | Propane | 0-40% LEL |
| H2-ST-XP-X* | Hydrogen | 0-40% LEL |
| C4H10-ST-XP-X* | Butane | 0-40% LEL |
| CH4O-ST-XP-X* | Methanol | 0-40% LEL |

Output Signal and other Options

| *X | OUTPUT SIGNAL |
|-----|--|
| 420 | 4-20mA, 2-wire loop-powered, 500Ω max |
| 001 | 0-1V DC, 10KΩ min |
| 005 | 0-5V DC, 10KΩ min |
| 010 | 0-10V DC, 10KΩ min |
| 485 | RS-485 for CEL systems only |

Explosion Proof mounting arrangements



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REPRESENTED BY:

^{*} Extended temperature range available.