For detection of Methane (CH$_4$), Propane (C$_3$H$_8$), Butane (C$_4$H$_{10}$), Hydrogen (H$_2$) 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 communication 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.

The 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 explosion proof. The enclosure of the sensor-transmitter is a explosion proof enclosure.

The 40-ST series employs a diffusion-type catalytic bead (pellistor) sensor capable of detecting a broad range of combustible gases. It provides instantaneous detection of these compounds 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: -4ºF to 120ºF (-20ºC to +50ºC)*
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)

* Extended temperature range available.

Ordering Information

<table>
<thead>
<tr>
<th>MODEL NUMBER</th>
<th>GAS DETECTED</th>
<th>RANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>CH4-ST-XP-X*</td>
<td>Methane</td>
<td>0-40% LEL</td>
</tr>
<tr>
<td>C3H8-ST-XP-X*</td>
<td>Propane</td>
<td>0-40% LEL</td>
</tr>
<tr>
<td>H2-ST-XP-X*</td>
<td>Hydrogen</td>
<td>0-40% LEL</td>
</tr>
<tr>
<td>C4H10-ST-XP-X*</td>
<td>Butane</td>
<td>0-40% LEL</td>
</tr>
<tr>
<td>CH4O-ST-XP-X*</td>
<td>Methanol</td>
<td>0-40% LEL</td>
</tr>
</tbody>
</table>

Output Signal and other Options

<table>
<thead>
<tr>
<th>*X</th>
<th>OUTPUT SIGNAL</th>
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</thead>
<tbody>
<tr>
<td>420</td>
<td>4-20mA, 2-wire loop-powered, 500Ω max</td>
</tr>
<tr>
<td>001</td>
<td>0-1V DC, 10KΩ min</td>
</tr>
<tr>
<td>005</td>
<td>0-5V DC, 10KΩ min</td>
</tr>
<tr>
<td>010</td>
<td>0-10V DC, 10KΩ min</td>
</tr>
<tr>
<td>485</td>
<td>RS-485 for CEL systems only</td>
</tr>
</tbody>
</table>

Explosion Proof mounting arrangements

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REPRESENTED BY:

The information provided by this bulletin is a general description of ACME UNITS. All specifications are subject to change without notice.
Installation, maintenance and other instructions provided with the equipment shall be closely followed by installers, owners and users.