# UK GASSHIELD TECHNOLOGY LIMITED

# **UGT-C5C** Acetylene specific sensor

# **FEATURES**

- ·Good long-term stability
- ·Excellent repeatability
- ·Superior linearity
- ·Strong vibration resistance
- ·Excellent anti-poisoning ability

# φ0.75

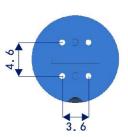
### **ELECTRICAL**

Supply Voltage DC3.0±0.1V

Working current DC175~195mA(at 3.0V)

Power consumption <600mW Zero point output  $\pm$ 25mV

Sensitivity ≥18mV / 50%LEL acetylene



**Product Dimensions** 

# **ENVIRONMENTAL**

Operating Temperature Range -40~+70℃

Operating Humidity Range Continuity 15~90%RH

Intermittent 0~99%RH

# STORAGE ENNIRONMENT

Recommended Storage Temp -20~+50℃

Relative humidity Below 95% RH (without condensation)

### **TECHNICAL SPECIFICATION**

Measurement Range $0\sim100\%$ LELGas DetectedAcetyleneAccuracy $\pm3\%$ LELZero drift $\pm2\%$ LEL

Linearity (0~100%LEL) ±5% (Calibrate at 60%LEL)

Full range deviation ±3%LEL

Response time 50%LEL T90<10s

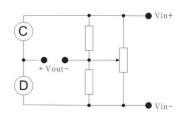
Operating Principle Catalytic combustion

Recovery time 15s

Operating life 5 years (in clean air)

Warranty period 2 years

(from the date of shipment)



Reference detection circuit

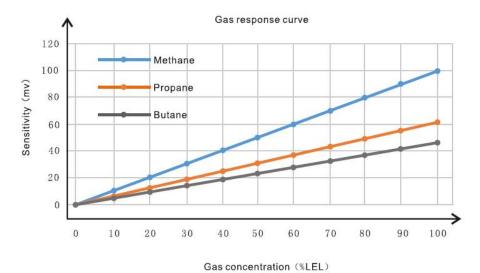
# 360°

# Orientation

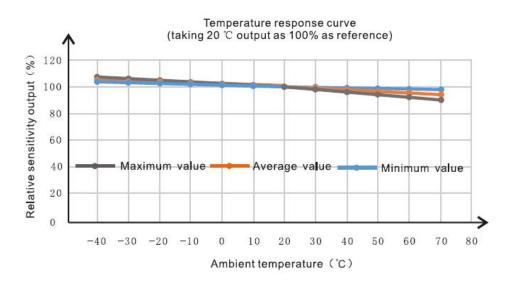
When the orientation of the sensor at the detection end and compensation end changes (the sensor rotates 360 °vertically), the change of the sensor output signal is  $\pm$  0.5% LEL

# UK GASSHIELD TECHNOLOGY LIMITED

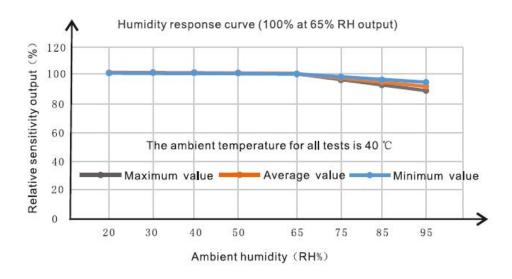
# Sensitivity characteristic



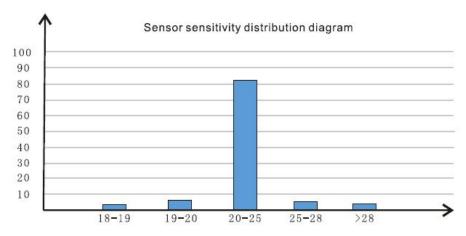
### **Temperature response characteristics**



# **Humidity response characteristics**

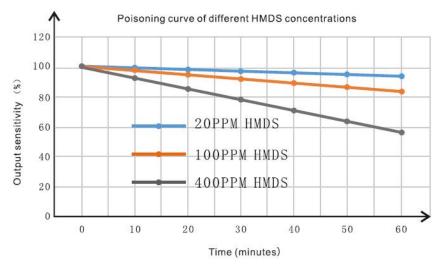


# Gas sensitivity distribution

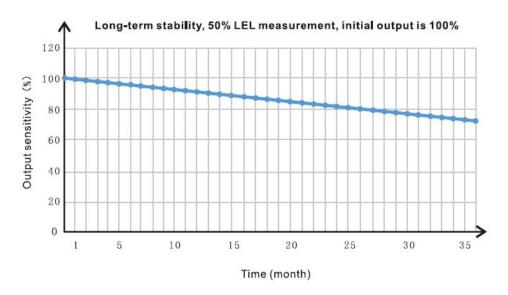


50% LEL acetylene signal output value(mV)

# **Anti-toxicity ability**



# Long-term stability



# UK GASSHIELD TECHNOLOGY LIMITED

# **Table 1 Sensitivity**

Gas/steam	Relative sensitivity%	Gas/steam	Relative sensitivity%
Acetylene	100	Butane	140
Methane	330	Isobutanol	130
Hydrogen	270	Butanone	130
Propane	200	N-pentane	110

The data contained in this document is intended for guidance only and it is the Clients' responsibility to perform any necessary tests to ensure correct performance of this product in specific application for which it is intended.

As this product may be used by the Client in circumstances outside the control of Our company, we cannot give any warranty as.

In the interest of product improvement, Our company reserve the right to alter and amend the product and its performance without notice.