

## FEATURES

- Designed for fixed gas detection systems
- Performance optimised for high temperature operation (up to 200 °C)
- Approved to ATEX and IECEx
- Designed for operation up to 100% LEL
- Rugged construction

## DESCRIPTION

The VQ700 series fitted with a catalytic pellistor such as the VQ62 is designed to detect combustible gases and vapours over the range from 0 - 100% LEL. The sensing head is designed to perform over a wide range in ambient temperatures (in non-condensing conditions) from -55 to +200 °C as an integral part of a fixed gas detection system. As such, the sensor is mounted into a junction box using the external 3/4" – 14 NPT thread. Tightening may be done using a spanner on the two front flats and the threads should be tightened until enough threads have been engaged to form a tight seal without excessive force being used.

There are no serviceable or repairable parts. Any attempt to dismantle the sensor will invalidate the sensor approval and manufacturer's guarantee.

## CERTIFICATION

⊕ II 2 G  
Ex d IIB+H2 T2  
-55 °C < Ta < +200 °C  
ATEX: SIRA06ATEX 1172X  
IECEX: SIRA06.0052X

## SENSOR PERFORMANCE WITH VQ62 PELLISTOR

Operating current.....300 ± 0.5 mA  
Typical bridge voltage ..... 4.0 - 5.5 V  
Response to methane (in a simple  
Wheatstone bridge circuit) .....>35 mV/% vol. CH<sub>4</sub>  
Zero ..... ±85 mV

## PHYSICAL CHARACTERISTICS

Length..... 60 mm  
Diameter..... 34 mm  
Weight..... 235 g  
Lead lengths..... 150 mm minimum  
Contact SGX for longer lead options.  
Lead terminations ..... wires or spade terminals



## INSTRUCTIONS

These instructions are specific to hazardous area installations (reference ATEX 100a Directive 94/9/EC Annex II, 1.0.6):

1. The head is classified as flameproof equipment and must only be used within the limits imposed by this certification and by these conditions of use.
2. The device must be installed such that the supply cables and exposed sealing compound are protected from mechanical damage by the use of metal conduit or a method providing equivalent mechanical protection. The cable must not be subjected to tension or torque either in service or as part of any installation process. If the cable is to be terminated within an explosive atmosphere, a suitably certified termination facility must be used.
3. The head must be efficiently earthed (grounded). This may be achieved by mounting it into an appropriately earthed metal junction box.
4. The head has not been assessed as a safety device (EHSR 1.5).
5. The head is designed for use in indoor locations. If installed in outdoor applications, appropriate protection is required.

## HEALTH AND SAFETY INFORMATION

The sensor enclosure and sintered head are made from stainless steel. The remainder of the construction consists mainly of epoxy resin and PTFE coated leads. The sensor is not suitable for incineration or recycling.