

The installation of the sensor does not exempt from ...

... Following all the rules regarding the characteristics, installation and use of gas equipment; ventilation and discharging of combustion products described in UNI standard Art. 3 Rule 1083/71 and by the local laws.

Useful Information.

Be sure of the SG895 integrity after having taken it from its box .
When you do an electrical connection follow the drawing carefully.
Every different use of the device from what it has been projected is to be considered improper; DUOMO doesn't assume any responsibility for probable damages caused to people, animals or things.
Never clean the device with chemical products. If necessary, after having turned off the power wash with a humid cloth.
Always installation and maintenance to be done by specialised and/or authorised technicians who are able to guaranty original spare parts in case of failure.

In Case Of An Alarm

Put out any flames
Close the manual isolation gas valve supplying the protected area.
Do not turn any lights or electrical devices on or off.
Open all windows and doors to increase ventilation.
If the alarm stops it is necessary to find the cause of the alarm. This must only be carried out by a responsible, qualified person. **I**f the alarm continues and the cause is not evident or possible to eliminate leave the room immediately and call your gas provider emergency line. They will advise accordingly, Firemen, competent authority etc.

GUARANTY

The device is warranted for a period of 3 Years from fabrication date, according to following described condition. Free of charge components recognised defective will be changed. **With exclusion and substitution** of aluminium or plastic boxes, bags, packages, probable batteries and technical cards. The device must arrive at DUOMO free port. From guaranty breakdowns due to tampering from staff not authorised are excluded., and also wrong installations or negligence derived from extraneous phenomena to normal working of device. The BDUOMO company is not reliable for direct or indirect damages caused to people, animals or things, for breakdown of product or forced use suspension of it.

INSURANCE

This device is insured by the SOCIETA' REALE MUTUA for a maximum of EURO 1.500.000,00 against damages caused by the device not functioning.

DUOMO has the responsibility of producing its best to assure maximum quality. This due to "The DUOMO Quality System", a strict and exclusive system which guarantees all the production and testing phases by means of accurate and sophisticated tests.



UNIT 5, JUDGE COURT, NORTH BANK
 BERRY HILL INDUSTRIAL ESTATE,
 DROITWICH, WORCESTERSHIRE WR 9AU
 ENGLAND
 TEL. +44 (0) 1905 797989

TO BE COMPLETED AFTER INSTALLATION

Date of installation _____
 Serial number _____
 Place of installation _____
 Stamp and signature _____

Stamp and signature of Retailer

Following a continuous improvement policy DUOMO reserves all rights to modify its products without previous notice. *Lo styling è della b & b design*

BUILT ACCORDING TO THE RULES

EN 50194 for Explosive Gas
Norm references EN 61779-1/4
Probe SG895

Sensor to Technologi PELLISTOR
Measurement range 0-100% of LEL
Data reading in memory
Protection External EExd IIC T5
Protection of the Sensor DPE CESI 01 ATEX

Serial Number Probe 10006043
Serial Number Sensor CESI A0075/1

Guarantee 3Years

The probe SG895 is a PELLISTOR gas sensing unit with protection grade **EEX ATEX**, connected to a DUOMO's station of industrial type. It allow to individuate presence of: **EXPLOSIVE GASES** detected as: Methane, LPG, and other types of gases according to request. The probe is managed by a microprocessor that besides to furnish the central to which is connected with an alarm signal, allows to make an auto-diagnosis and then an **AUTOMATIC CALIBRATION**, to have constantly during time maximum sensing precision. The auto-calibration permit the probe to adapt in difficult ambience and at variable temperature, avoiding false alarms due to anomalous events.

Through a display created for the event, and issued to technicians, it is possible to see how many calibration corrections has executed, to read gas concentration sensed, and control how many times the probe went in alarm, to control how many times the tension has cleared and see the date of out of service. Besides having on issue a serial transmission it is possible to print the control relation and installation verification done, **auto-certifying your own work.**

In the probe is present a linear exit $0 \div 20\%$ of L.E.L. , functioning with standard $4 \div 20$ mA
 Besides you can mount an electronic card **OP100** for a possible distance connection through some Open Collectors in negative, with maximum load of 150mA for each channel.

There are three Open Collectors available: **one** for gas Pre-alarm control, **one** for general alarm control and **one** for fault control. The card is quick connection through clutch jumper.

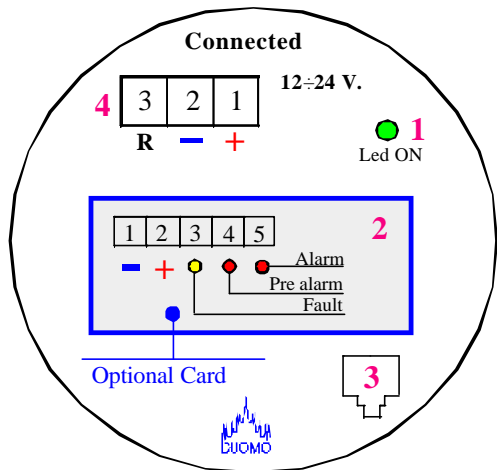
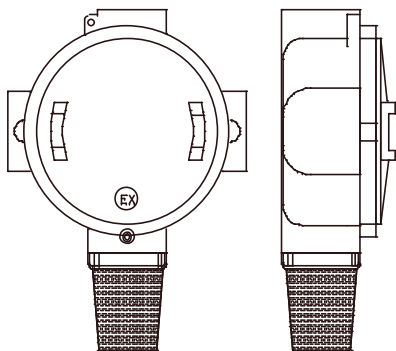
Technical characteristics SG895

Input through external device **12÷24 V. dc** ± 10% from detector
 Electrical input 80 mA Max @ 13,8V
 Sensor Type Pellistor
 Out put signal $4 \div 20$ mA
 Measurement Range 0 - 100% of LEL or different in ppm
 Device precision 1% FS
 Response time < 2"
 Calibrated using SIAD Test gases
 Memory EEPROM 128 Byte
 Command centre compatibility BX444,BX400,GS100, GS180, GS150, GS300,SL200C
 Maximum distance between probes and station 150 mt
 Interconnecting cable size 1mm CSA
 Working temperature $-10^{\circ} C^{\circ} \div + 45^{\circ} C^{\circ}$
 Sensor protection DPE - CESI 01ATEX
 Electromagnetic Compatibility " CE " Norm of references EN 50270 N. 040028
 External Protection Rating IP55
 Dimensions 100 mm
 Guarantee 3 years

CAUTION!

Carefully read the following instructions prior to installation of this device. Always keep this pamphlet for future reference.





External description

- 1) Led ON of Alimentation Signal connected (on).
- 2) **OPTIONAL** card for a probable distance connection. An electronic card is furnished with some open collectors in negative at your disposal with capacity 150mA. The leds signal when transistor closes. The positive and the negative at card edge are on service.
- 3) Quick connection plug of **DIGITECH** of control probe working.
- 4) Connecting terminal. 1 Positive 2 Negative 3 Return signal 4-20mA

Besides from **DIGITECH** you can read all probe events occurred, for instance:
The serial number.

The present working state, WARM UP-FAULT-ALARM.

How many times has been disconnected the power grid.

How many times it went on alarm.

How many days of working remain before periodical revision.

How many times made the correction.

The present calibration state.

The **DIGITECH** is useful for printer connection. auto-certification ticket emission of test executed by the technician.

WARNING and functional Characteristics Of Gas Sensing Capsules

The installation of the sensing probe, art. SG895, its ordinary and extraordinary maintenance, and its out of service when working period warranted by the builder is due must be done by authorised or specialised staff.

We must remind you that the **PELLISTOR** sensor has a duration that can vary from 5 to 6 years. Moreover, the probe, with any technology, must not be installed in ambience with temperatures that go from **-10 to +40°C**.

CAREFUL!

The probe with Catalytic technology doesn't stand a gas sensing over the **100% of the L.E.L.** that causes the natural death of the sensor.

Every instantaneous whiff of gas over the **100% of L.E.L.** takes away months of life from the sensor. You must do a test of the probe, by simulating a gas presence, emitting it from a pre-calibrated little test bomb, a common lighter next to the sensor doesn't warrant a perfect working state.

Positioning of Gas Probe SG895

The positioning of the probe is a factor of determinant importance for correct working of a gas sensing station.

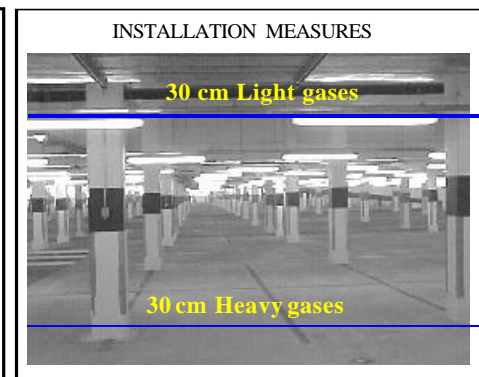
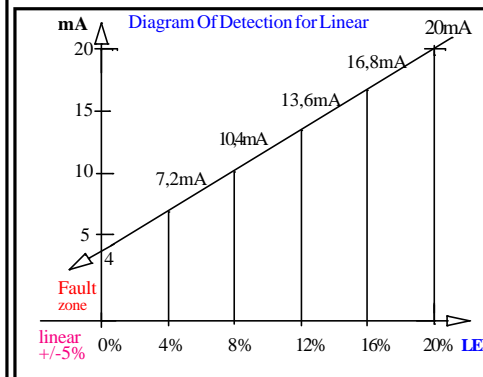
To obtain maximum results from a device and to minimize chances of false alarm presence, we advise you to follow the following scheme and to remember the following general rules.

The distance probe must be positioned at different heights according to the type of gas to sense. These heights are:

- **30cm** from ceiling highest point to sense Light gases (Methane etc.)
- **30cm** from floor lowest point to sense Heavy gases (G.P.L. etc.)

The probe must not be placed on the device to control (boiler, burner, industrial cooking, etc.), but on the opposite wall.

The probe must not be invested by smoke, vapours, etc, that can false sensing, and it must be positioned away from heat and away from aspirators or fans.



Testing SG895

Type of gas to use :

- Air 0
- Methane within il 20% del L.I.E.
- LPG within il 20% del L.I.E.

For other gases use proper little bombs

