

## Semiconductor ammonia detection probe EV-SGS10-A EV-SGS20-A

100% MADE IN ITALY



### Technical features

The NH<sub>3</sub> Ammonia detection probes EV-SGS10-A and EV-SGS20-A are designed for use in industrial environments and any location where a leak or abnormal concentration of Ammonia could pose a danger to people and property. The onboard electronics, controlled by a microprocessor, ensure that parameters are constantly maintained at optimal levels. Periodic checks and self-regulation of measurement zero are performed. Additionally, a special supervisory circuit monitors the status of the catalytic sensor and associated electronics. In the event of a malfunction, a Fault output is activated.

The sensing element used for these probes is a semiconductor sensor. When the sensor comes into contact with the combustible gas, its electrical conductivity varies. This process generates a signal proportional to the gas concentration. The advantages of this type of sensor include high sensitivity, long life, and the ability to withstand prolonged exposure to high gas concentrations without altering the physical characteristics of the device. The probes are housed in a corrosion-resistant lightweight alloy box and are certified CESA and ATEX explosion-proof. Inside, the sensor with its related electronics is installed.

The EV-SGS10-A probe features microcontroller self-regulation and a 0-5V analog output.

The EV-SGS20-A probe features microcontroller self-regulation, a 0-5V analog output, and 2 relay outputs with 2 preset thresholds, as well as a fault output.

Optional features include a 4-20mA interface (US-420) and Digital Address (IDP-04) installable directly on the device.



# EV SGS10-20 A

## Technical Data

Power supply:	12 - 24 Vdc (+/-15%)
Max power dissipation:	1W
Measuring range:	100 - 1.000 ppm NH <sub>3</sub>
Analog output:	0 - 5V (model EV-SGS10-A)
Analog output:	0-5V and output with 2 relays associated with 2 intervention thresholds (model EV-SGS20A)
Temperature:	-10 + 50°C
Humidity:	0 - 95%
Pressure limit:	Ambient (+/-20%)
Response time:	Approx. 2 - 5 sec
Setup time:	3 min
Vibration resistance:	250 Hz/mm
Shock resistance:	100 gr
Protection:	II 2G EEx d II C T6

## Mechanical Data

Enclosure:	Flameproof in lightweight alloy
Protection index:	IP65
Dimensions:	150x100x70 mm
Weight:	600 gr

## Certification

Costruction:	EN50014 - EN50018 - EN50020 - EN50054 - EN50057 - CEI 64/2
Enclosure certification	CESI EX - 96.108 X/N
Product certification:	ATEX TUV 05 ATEX 2907 X
Inlet:	3/4" - UNI 6125 - ISO R7 - BS 21