

# Room Setpoint Sensor 0 ... 1 kOhm

**Room setpoint sensor, 0 ... 1 kOhm  
passive sensor in hazardous locations zone 1, 2**

**Type SGR-2G  
ATEX compliant**

## APPLICATION

**SGR-2G** setpoint sensors. In combination with Ex-i transducer Type EXL-IMU-1 with intrinsic safe circuit the sensors may be used in hazardous areas zones 1, 2. The passive resistor output of 0 ... 1 kOhm sensor is changed into an active signal of 0(2)... 10 V- and/or 0(4)... 20 mA. Application area is non condense, aggressive air in living, work and office rooms as well as industrial areas.

## TECHNICAL DATAS

<b>Type</b>	<b>SGR-2G</b>
Supply	by Ex i transducer
Sensor	Potentiometer 0 ... 1 kOhm
Sensor current	< 2 mA
Ambient temperature	-20...+60 °C
Storage temperature	-40...+70 °C
Connection	screw clamps, 0,14 - 1,5 mm <sup>2</sup>
Enclosure	Plastic, IP 30, for wall and flush mounting
Dimension and weight	79 x 81 x 26 mm, 90 g
Protection class	simple apparatus, acc. to EN 60079-11
CE	94/9/EC (ATEX)
Included in price	SGR-2G
Installation area	Hazardous locations in zone 1, 2

## MOUNTING AND INSTALLATION

Notes to mechanical installation. The installation must comply with relevant directives and standards

Particularly with regard to:

- Comply with the EMC directive
- Avoid parallel wiring of power cable this cause measurement errors.
- Recommendation: Use shielded cable. Connect shield at PLC or control room area, sensor side is open

suitable for  
Zone 1, 2  
acc. to ATEX



## Ex-i CIRCUITS - TABLE 1

### Operation values maximum at terminal

Simple apparatus suitable for Zone 1, 2

Only for connecting to intrinsically safe circuits with max values

Voltage	U <sub>o</sub>	9 VDC
Current	I <sub>o</sub>	5 mA
Power	P <sub>o</sub>	10 mW
Capacity	C <sub>i</sub>	0 µF
Inductivity	L <sub>i</sub>	0 mH

### The maximum values must not be exceeded!

Please check your external capacities and inductivities in acc. to the length of the cable and the methode of installation.

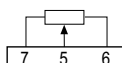
## RECOMMENDED TRANSDUCER

- Transducer Mfr. Schischek Type EXL-IMU-1.
- In combination with transducer EXL-IMU-1 is intrinsic safety proof for simple circuits given.
- Manufacturer declaration zone 1 and 2.

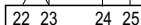
## ELECTRICAL CONNECTION

### Setpoint Sensor SGR-2G

3 - wire



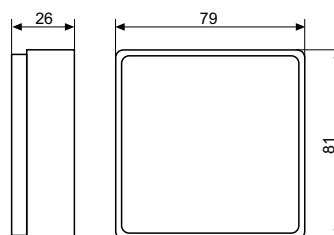
EXL-IMU-1



**Ex-i Module EXL-IMU-1**

Ex-Area  
Safe Area

## DIMENSIONS



## ATTENTION!

- For installation, use and maintenance the official standards and rules must be applied.
- The energy of intrinsically safe circuits are below the level to start an explosion in case of a spark..
- Intrinsic safe circuits must be installed with light blue coloured and separate from non intrinsic safe circuits.
- The sensor is passiv and potential free for use in hazardous locations in zone 1, 2.
- Pay attention to the max values for wiring , listed in table 1.
- Avoid electrostatic discharge.
- Only wet cleaning.

Subject to change