

Room Setpoint Sensor 0 ... 1 kOhm

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

ATEX compliant

Type SGR-2G

APPLICATION

SGR-2G setpoint sensors. In combination with EEx-i transducer Type EXL-IMU-1 with intrinsic safe circuit the sensors may be used in hazardous areas zones 1, 2. The passiv 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

Type	SGR-2G
Supply	by EEx 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 ²
Enclosure	Plastic, IP 30, for wall and flush monting
Dimension and weight	79 x 81 x 26 mm, 90 g
Protection class	II2G EEx ia IIC T6, nach EN 50014/ EN 50020 simple apparatus
CE	94/9/EC (ATEX)
Included in price	SGR-2G
Installation area	Hazardous locations in zone 1, 2

**II2G EEx ia IIC T6
Zone 1, 2
acc. to ATEX**



EEx-i CIRCUITS - TABLE 1

Operation values maximum at terminal

Voltage	Ui	30 VDC
Current	Ii	5 mA
Power	Pi	10 mW
Capacity	Ci	0 µF
Inductivity	Li	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.

MOUNTING AND INSTALLATION

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

Particularly with regard to:

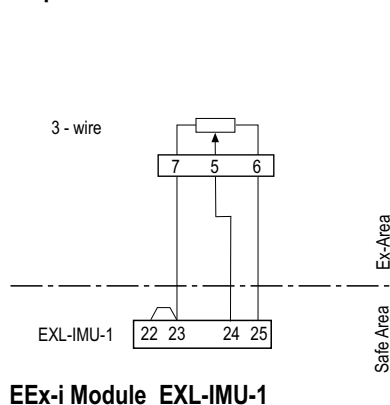
- Comply with the EMC directive
- Avoid parallel wiring of power cable this cause measurement errors.
- Recommendation: Use shielded cable. Connect shield at PLC or control room area, sensor side is open

RECOMMENDED TRANSDUCER

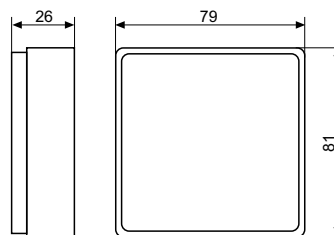
- Transducer Mfr. Schischek Type EXL-IMU-1.
- In combination with transducer EXL-IMU-1 is intrinsic safety proof for simple circuits given.
- Manufacturer declaration zone 1 and 2.

ELECTRICAL CONNECTION

Setpoint Sensor SGR-2G



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