



TOXIC GAS SENSOR/TRANSMITTER

Gas Detection For Life

S2 Toxic Series



Features

- Explosion proof housing, Class I, Div. 2 rating
- Available for NH₃, CL₂, SO₂ and others
- Long life sensors (2 + years typical)
- Competitively priced
- Utilize new ESM-01 toxic sensors

Applications

- Petrochemical Plants
- Refineries
- Gas Plants
- Water & wastewater treatment plants
- Pulp & paper mills
- Manufacturing facilities
- Automotive
- Semiconductor plants
- Chemical plants
- Chemical storage buildings
- Battery charging (H₂)

The RKI S2 series toxic gas sensor/transmitters are highly reliable and cost effective basic 4-20 mA transmitters for the detection of toxic gas hazards. The S2 series transmitters are available for NH₃, Cl₂, and SO₂ and other gases. The electronics are encased inside a potted package to avoid damage from mechanical abuse or corrosion, and this assembly is installed inside an explosion-proof enclosure. Sensor construction is rated for Class I, Div. 2 locations.

The only tools required to calibrate the S2 series are a voltmeter, screwdriver, and cal gas. The zero and calibration functions are performed by adjusting potentiometers on the amplifiers. The amplifier has test jacks for connecting to a voltmeter for calibration purposes, and the sensor response is viewed on the voltmeter as a 100 mV to 500 mV signal. Field calibration can be performed easily and quickly by one person.

The S2 series transmitters can be used either indoors or outdoors.

The transmitter operates from 24 VDC, and provides a 4-20mA signal which can be connected to a wide variety of controllers.

S2 Toxic Series

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|------------------------------|-----------------------------------------------------------------------------------------------------------|
| Outputs | |
| Analog | Linear 4-20 mA signal, max impedance: 19-24V, 250 ohms / 24-30V, 500 ohms corresponding to 0 - full scale |
| Physical | |
| Dimensions | Height: 8.5" (215 mm), Width: 5.2" (132 mm), Depth: 4.5" (114 mm) |
| Sensor Rating | Designed for Class I, Div. 2 use |
| Enclosure Rating | Watertight, cast aluminum with o-ring seal |
| Controls | |
| Zero | Sets transmitter output to 4 mA with zero(fresh air) output from sensor |
| Span | Sets transmitter output to 20 mA with full scale output from sensor |
| Operating Environment | |
| Operating Temperature | 14°F to 104°F (-10°C to 40°C) |
| Relative Humidity | 5 - 95% RH non-condensing |
| Location | Indoor or outdoor Class I, Div. 2 |
| Operating Voltage | 19 VDC - 30 VDC |
| Warranty | One year |

| Ordering Information | | |
|----------------------|--------------------------|--------------|
| Part Number | Gas | Range |
| 65-2340RK-NH3 | Ammonia (NH3) | 0 - 75 ppm |
| 65-2340RK-AsH3 | Arsine (AsH3) | 0 - 1.50 ppm |
| 65-2340RK-CL2 | Chlorine (CL2) | 0 - 3.00 ppm |
| 65-2340RK-B2H6 | Diborane (B2H6) | 0 - 15.0 ppm |
| 65-2340RK-Si2H6 | Disilane (Si2H6) | 0 - 15.0 ppm |
| 65-2340RK-GeH4 | Germane (GeH4) | 0 - 1.50 ppm |
| 65-2340RK-HCN | Hydrogen Cyanide (HCN) | 0 - 30 ppm |
| 65-2340RK-H2Se | Hydrogen Selenide (H2Se) | 0 - 5.00 ppm |
| 65-2340RK-PH3 | Phosphine (PH3) | 0 - 1.00 ppm |
| 65-2340RK-SiH4 | Silane (SiH4) | 0 - 15.0 ppm |
| 65-2340RK-SO2 | Sulfur Dioxide (SO2) | 0 - 6.00 ppm |

Specifications subject to change without notice.

Made in the USA



A9812



ISO 9001:2000

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