



SMOKE DETECTOR

GUARDIAN™ Fire Safety Solutions for Fume Control Systems

SMOKE DETECTOR

The smoke detector is to be installed in the filter outlet duct. When detecting smoke, it delivers a signal to the Guardian Control™ fire detection panel to activate the fire suppression system.

The smoke detector features a venturi air sampling system. The smoke detector is activated when light scattering levels in the duct are reduced (also called Tyndall effect).



APPLICATIONS:

The smoke detector is part of Lincoln Electric's GUARDIAN™ fire safety solutions for fume control systems and is recommended for applications with an increased fire risk, such as:

- Robotic welding of oily welded or stamped products
- Manual welding of oily products
- Cutting tables
- Schools/Other areas with risk of cigarette butts

SPECIFICATIONS:

- **Physical Dimensions and Properties:**
 - Housing Dimensions (H x W x D): 11 x 6.5 x 3.3 in (279 x 165 x 83 mm)
 - Housing Material: HDPE (base)/PET (cover)
 - Sensor Type: Hochiki ALG-EN
- **Technical Data:**
 - Operating Range: 24 V AC/DC +15%/±15%
 - Rated Current: 10 mA and 20 mA
 - Relay Outputs: Potential-free
 - Alarm Relay Locked: 25 mA and 60 mA
 - Protection Class: IP 54
- **Ambient Condition:**
 - Operating Temperature:
 - Minimum: -4°F [-20°C]
 - Nominal: 68°F [20°C]
 - Maximum: 104°F [40°C]
 - Relative Humidity: 95% max. (non-condensing)

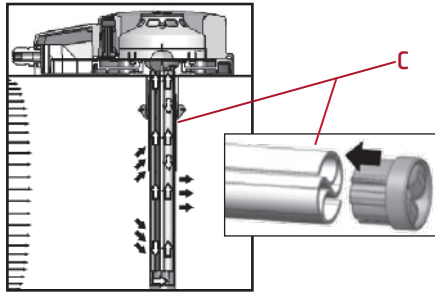
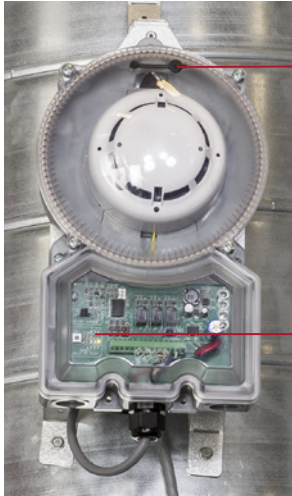




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FEATURES/INDICATORS



A. Opening for Test Spray
(Test spray is included)



B. Status LED's
Red LED - Sensor is 100% contaminated. A 100% contaminated sensor will lead to a reduced sensibility but not to a fire alarm.
Yellow LED - Sensor is 75% contaminated
Green LED - Sensor is in operation

C. Patented Multi-Chamber Air Measuring Tube

D. Alarm Delay [30 seconds] - The smoke detector enters into alarm mode when it has detected smoke for more than 30 seconds continuously. The alarm delay prevents activation of the smoke detector caused by fluctuations in filter efficiency.

WORLD-CLASS WELD FUME CONTROL EXPERTISE

Our technical sales team is trained and knowledgeable about the methodology of substitution, isolation, and ventilation. As a key partner, with a wealth of experience and knowledge of welding, welding fume and welding fume removal, we can assist you to identify the right weld fume control solution for your application. Lincoln Electric has a global network of facilities and people to provide quick response and personalized attention, no matter where your welding operations are located.

SUPPORT & TRAINING PROGRAMS

We offer support materials, training tools, free seminars and courses to enhance your welding and cutting safety program.

Our service and support programs are designed to meet your needs. For on-going preventive maintenance and support, our team can train your staff, conduct evaluations or audits and deliver the services you need to stay productive and effective.

VALUABLE CUSTOM SOLUTIONS

The Lincoln Electric weld fume control team understands and recognizes that each welding application is unique with its own set of variables; one equipment and consumable solution does not fit every application. Our team will engineer a system to efficiently and effectively remove welding fume and particulate from your metalworking operations.

Contact us today!

ORDER INFORMATION

Product Name	Product Number	Aluminum Air Sampling Tube with Rubber Bushing in. (mm)	Suitable Duct Diameter in. (mm)	Weight lb. (kg)
Smoke Detector 5K1 T600	S29287-55	23.6 [600]	<25 [630]	4.4 [2.0]
Smoke Detector 5K1 T1500	S29287-56	59.1 [1500]	>=25 [630]	5.5 [2.5]

APPROVALS/CERTIFICATES



Tested according to
VdS EN54:
Part 7 [208038]
(loose detector only)

RoHS
Compliant



The operation of welding fume control equipment is affected by various factors including proper use and positioning of the equipment, maintenance of the equipment and the specific welding procedure and application involved. Worker exposure level should be checked upon installation and periodically thereafter to be certain it is within applicable OSHA PEL and ACGIH TLV limits.

CUSTOMER ASSISTANCE POLICY

The business of The Lincoln Electric Company is manufacturing and selling high quality welding equipment, consumables, and cutting equipment. Our challenge is to meet the needs of our customers and to exceed their expectations. On occasion, purchasers may ask Lincoln Electric for information or advice about their use of our products. Our employees respond to inquiries to the best of their ability based on information provided to them by the customers and the knowledge they may have concerning the application. Our employees, however, are not in a position to verify the information provided or to evaluate the engineering requirements for the particular weldment. Accordingly, Lincoln Electric does not warrant or guarantee or assume any liability with respect to such information or advice. Moreover, the provision of such information or advice does not create, expand, or alter any warranty on our products. Any express or implied warranty that might arise from the information or advice, including any implied warranty of merchantability or any warranty of fitness for any customers' particular purpose is specifically disclaimed.

Lincoln Electric weld fume control products are highly effective at decreasing the occurrence level of thermal events, however, thermal events can still happen even if the system is operating as designed.

Lincoln Electric is a responsive manufacturer, but the selection and use of specific products sold by Lincoln Electric is solely within the control of, and remains the sole responsibility of the customer. Many variables beyond the control of Lincoln Electric affect the results obtained in applying these types of fabrication methods and service requirements.

Subject to Change – This information is accurate to the best of our knowledge at the time of printing. Please refer to www.lincolnelectric.com for any updated information.

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