

1ST FUSE

UL913 CERTIFIED



Sealed Fuse to Prevent Ignition in Hazardous Environments

First fuse certified under UL913 standard
for operation of electrical equipment within
potentially explosive surroundings

The PICO® 259-UL913 Series offers a range of encapsulated fuses ideal for 125V applications in the oil, gas, mining, chemical, pharmaceutical, and food/beverage processing industries. Its encapsulated design prevents heat and sparks from being exposed to potentially explosive gases or dust in the environment, and is intrinsically safe for voltages not exceeding 125Vrms (190V peak).



Applications

- Testing, measuring or processing equipment
- Motor controllers
- Lighting
- Communication handsets
- Flow meters
- Process control and automation
- Sensors
- Automation control systems (PLCs)



Datasheet



Resources



Samples

The first intrinsically safe fuse certified under the UL913 standard for use in electronic equipment in hazardous working environments

Features



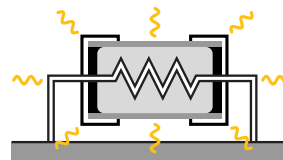
- Sealed and encapsulated fuse design compliant with UL913 standard
- No need for additional potting, epoxy, or encapsulation processes
- Suitable for use in intrinsically safe apparatus for applications with voltages up to 125Vrms (190V peak)
- Current rating options from 62mA to 5A

Benefits

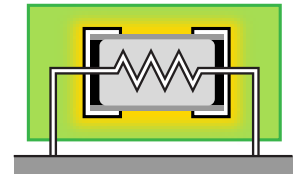
- Prevents heat and sparks from a fuse from being exposed to potentially explosive gases or dust in the environment; keeps dust out of the fuse body
- Eliminates extra process steps, which saves time and money, reducing total product cost
- Increases overall safety of a variety of production and maintenance apparatus, enhancing the protection of human life in hazardous working environments
- Wide range of ratings means intrinsically safe fuses can be designed into a broad variety of apparatus



Intrinsically safe apparatus, including motor controllers, flow meters, process control and automation, sensors and many others, have been developed for use in hazardous environments. Like all other electronic devices, these apparatus require circuit protection, and regular fuses can pose a risk of ignition as a result of internal sparks from components such as motor brushes, switch contacts, and connectors.

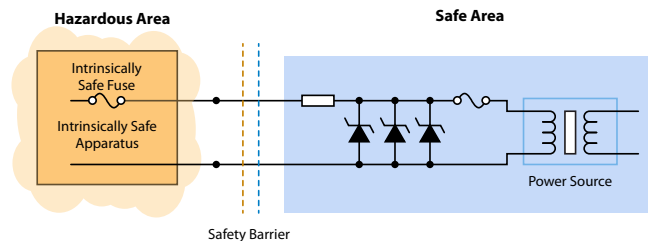


Normal Fuse
(used in non-hazardous environments)



PICO 259-UL913
Intrinsically Safe Fuse
with Encapsulant

The PICO 259-UL913 Series Fuse's encapsulation creates a seal that prevents high temperatures from reaching the device's outer surface during normal operation. This seal also prevents hazardous gases and dust from entering the fuse body and potentially igniting if the fuse opens. These features make the PICO 259-UL913 Series Fuse ideal for use in intrinsically safe applications for hazardous environments.



Example of a Fuse used in an intrinsically safe application

The PICO 259-UL913 Series Fuse is the first and only fuse to be certified under the latest revision of the UL913 Safety Standard for Intrinsically Safe Apparatus and Associated Apparatus for Use in Class I, II, and III, Division 1, Hazardous (Classified) Locations.

Prior to the introduction of Littelfuse's PICO 259-UL913 Series Fuse, manufacturers of intrinsically safe apparatus were forced to pot or spray their devices' circuit boards with an insulating coating to meet the UL913 standard. When a device's only potential source of ignition is the fuse, this new design eliminates the need for these expensive, time-consuming processes. It also dramatically simplifies testing to certify the application under UL913 because all testing related to fuse safety can be waived, reducing cost and development time.



Example of potting for
UL913 compliance